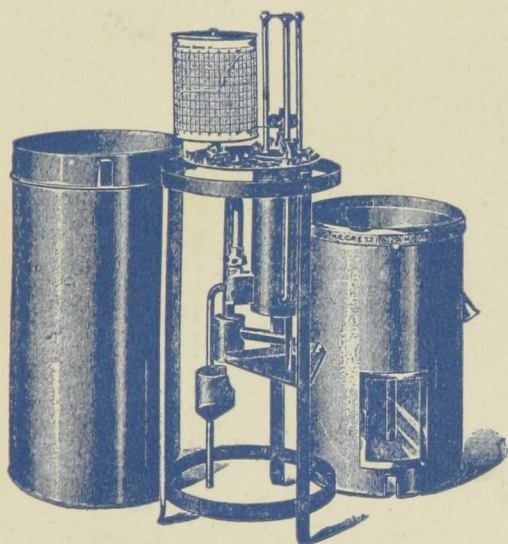


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1914.
PER CENT. OF AVERAGE.

SCALE OF ENGLISH MILES

SCALE OF TINTS

140 130 120 110 100 90 80%

BRITISH RAINFALL 1914

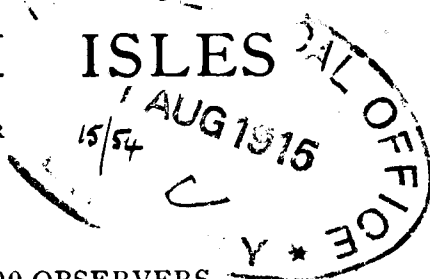
BRITISH RAINFALL, 1914.]

{ *Frontispiece.*

BRITISH RAINFALL, 1914.

ON THE DISTRIBUTION OF RAIN

IN SPACE AND TIME OVER
THE BRITISH ISLES
DURING THE YEAR
1914



AS RECORDED BY ABOUT 5,500 OBSERVERS
IN GREAT BRITAIN AND IRELAND
AND DISCUSSED

WITH ARTICLES UPON VARIOUS BRANCHES OF RAINFALL WORK

BY

HUGH ROBERT MILL

DIRECTOR

AND

CARLE SALTER

ASSISTANT DIRECTOR

OF THE BRITISH RAINFALL ORGANIZATION

THE FIFTY-FOURTH ANNUAL VOLUME

WITH MAPS AND ILLUSTRATIONS

LONDON
EDWARD STANFORD, LTD., 12, 13 & 14, LONG ACRE, W.C.
1915.

ERRATUM IN BRITISH RAINFALL, 1910.

p. [220], line 14, Sussex **5**, Hastings, *delete the record*.

ERRATUM IN BRITISH RAINFALL, 1911.

p. [255], line 20 from bottom, Sussex **5**, Hastings, *delete the record*.

ERRATUM IN BRITISH RAINFALL, 1912.

p. [224], line 6 from bottom, Sussex **5**, Hastings, *delete the record*.

ERRATA IN BRITISH RAINFALL, 1913.

p. 65, Harrogate, Harlow Moor, *delete the record*.

p. [209], line 5, *for* British Isles *read* England and Wales.

p. [233], Sussex **3**, *for* Hove (Town Hall) *read* Hove (Marine Park).

p. [240], Berks **3**, *for* Wokingham (Staverton) *read* Wokingham (Field-house).

p. [249], Oxfordshire **4**, Great Haseley School, *delete the record*.

*p. [298], Depth of rain *for* feet *read* inches.

†p. [309], Yorkshire, W. Riding **8**, *for* Todmorden W. W. (Ramsden Res.)
read Walsden (Ramsden Res.)

p. [342], Berwick **3**, Coldstream (The Hirsell), *for* 19·94 *read* 20·38.

p. [356], Fife **2**, Colinsburgh (Lathallan), height above sea, *for* 55 *read* 505.

*This correction should be made also in *British Rainfall*, 1909–1912 inclusive.

†This correction should be made throughout back volumes.

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into river-divisions	<i>In Part III.</i>

PREFACE.

APART from proof-reading I have been able to take a full share in the Editorship of the present volume. Mr. Carle Salter is entirely responsible for the statistics, including the whole of Part III., and it is to the assiduity which he has shown that the fifty-fourth annual volume is finished four days earlier than the fifty-third, and earlier than any other volume since the forty-third, that for 1903.

Mr. H. E. Carter, the Chief Computer, joined the army after completing his part of the work for the year, and in his absence Mr. R. C. Mossman has assisted in the final revision of the proof-sheets.

The volume appears in a new form, the page being widened by half an inch to admit of an extra column in the Tables of Part III., so that the total annual rainfall for each station may be given in millimetres as well as in inches.

Full particulars of the work of the BRITISH RAINFALL ORGANIZATION for the year, including the effects of the War, will be found in the Director's Report to the Trustees on pp. 9-17, and to this reviewers are referred.

Special attention may be called to the very full treatment of the thunderstorms of June 14th, 1914, which throws new light on the origin and movements of such storms.

H.R.M.

62, CAMDEN SQUARE,
LONDON, N.W.
21st July, 1915.

TWO VIEWS.

I.

The rain and the wind, the wind and the rain—
They are with us like a disease.
They worry the heart, they work the brain,
As they shoulder and clutch at the shrieking pane,
And savage the helpless trees.

What does it profit a man to know
These tattered and tumbling skies
A million stately stars will show,
And the ruining grace of the after-glow
And the rush of the wild sunrise?

Ever the rain—the rain and the wind !
Come, hunch with me over the fire,
Dream of the dreams that leered and grinned,
Ere the blood of the year got chilled and thinned,
And the death came on desire !

W. E. Henley.

II.

Not a blink shall burn to-night
In my chamber of sordid light ;
Nought will I have, not a window-pane,
'Twixt me and the air and the great good rain,
Which ever shall sing me sharp lullabies.

Leigh Hunt.

FIFTH ANNUAL REPORT OF THE DIRECTOR TO THE TRUSTEES OF THE BRITISH RAINFALL ORGANIZATION.

Adopted at the Meeting of Trustees held at 62, Camden Square, London,
on July 21st, 1915.

Effects of the War.—The year has brought much anxiety and many difficulties arising directly and indirectly from the war; but so far these have resulted in but little restriction in the amount of work we have had to do, and I can see my way to carrying the work of the year to its natural conclusion. There was practically no neglect of rainfall observations in the British Isles during the later months of 1914, and the statistics for the year show the usual steady progress. The income has dropped considerably and the available time of the staff has been reduced materially by service as special constables or employment in various patriotic or charitable schemes, for which I offered every facility. After working as a special constable since September, Mr. Carter felt it to be his duty to enter the army in June, and his position is being held open for his return. Considerations of health or age have made it impossible for other members of the staff to follow an example which all admire.

A great effort has been made to keep the expenses near the income, and the publications have been kept down as much as possible while all reasonable economy has been exercised in the establishment. I am aware that the real stress will come next year, and while I shall endeavour to give any assistance in my power to any public service which can be furthered by the resources of the Organization, I cannot forget that for the future of the country it is essential that the voluntary rainfall observations should not be allowed to lapse, and it is plain that this Organization is the only agency which can maintain the continuity of observations through a time of unprecedented crisis. In the circumstances of the time it seems fitting to make this Report as brief as possible, and to omit a large part of the routine summary of the year's work.

Application to the Development Fund.—An important communication has been received from the Secretary of the Development Commission, describing the action taken by that Commission with regard to the application by the Trustees of the Organization for a grant. The application was referred to the Board of Agriculture, the Geological Survey and the Meteorological Office in turn. As the Treasury decided that in the circumstances no action could be taken at present, it is unnecessary to go into the remarks and suggestions made by the bodies consulted by the Commission. It is evident that, for the present, the Organization must depend upon its own resources, and bearing in mind that its freedom from restrictions of a formal character has hitherto been found to promote efficiency and economy, the decision of the Government may, in the long run, prove not disadvantageous.

Office Work.—The usual routine of observations, and the collection, checking, correction and printing of data from Observers in all parts of the country has been carried on under my personal supervision by Mr. Salter (who is responsible for its accuracy), and the various members of the Staff. I cannot praise too highly the manner in which all have worked throughout the year. Some re-arrangement of rooms has been made by which the map-drawing department is now accommodated on the ground floor beside the Library. In October a junior draughtsman was engaged to assist the Cartographer, whose work has increased in amount, and has become so technical that a temporary absence would derange the whole routine if no substitute were available.

I have to record with much regret the retirement, through ill-health, of the housekeeper, Mrs. Garnett, who was obliged to leave in October, after having filled her position for more than eight years. During that time she looked after the premises with zealous and conscientious care and her kindly attention to the members of the staff and to all visitors has left a pleasant memory of her faithful service. Mrs. Byford was engaged as housekeeper in November, and has proved capable and trustworthy.

Observers and Special Services.—I feel sure that the many Observers who are kind enough to add to their own records the collection and superintendence of the work of others, will in the special circumstances of this year, excuse the omission of the usual detailed reference

to their services. These services have been rendered as freely and heartily as ever before, and I wish to acknowledge them all together. One little group of Observers must be mentioned by name; the survivors of *British Rainfall, 1860-61*. These now number seven; the name of Mr. Doncaster disappearing; but this name ought to have been deleted previously. He had long ceased to correspond with the Organization and we have recently been informed that he died in October, 1912. Colonel Ward, despite the fact that he is 89 years of age, was held as a prisoner of war in his own house at Partenkirchen, in Bavaria, for many months, but was released in May and returned safely to England.

R. BURRELL, Esq.
W. S. CLARK, Esq.
Dr. W. C. LAKE.
Rev. C. B. MOUNT.

LORD PECKOVER OF WISBECH.
Col. Michael Foster Ward.
J. G. Wood, Esq.

This is, perhaps, the best place to call attention to a change in the system of acknowledging those rainfall returns which are received indirectly. Hitherto such returns have been printed in the name of the individual or institution which collected and sent them in. Now, at the suggestion of the Meteorological Office, those records only which are maintained by the Meteorological Office are credited to it, while the records of voluntary Observers which reach us through the Meteorological Office only are credited to the Observers themselves, with the explanation "*per M.O.*," to indicate the channel through which we received them. This includes the records formerly received through the Royal Meteorological Society. A similar course has been taken with regard to the Scottish Meteorological Society. It is perhaps advisable to repeat the rule that has always been followed and is still followed in inviting Observers to forward Observations to the British Rainfall Organization. Paid Observers are never approached, except through the authority which makes the payment, and their records are published solely on that authority. All voluntary Observers known to us are invited in the last week of the year to send a copy of their records for publication in *British Rainfall*. If they respond the record is printed in their own name, and any error or discrepancy discovered is discussed with the Observer direct. It is held that any Observer who sends his record for *British Rainfall* is entitled to make any other use of it he pleases and to send it for publication in any other manner he likes. If it should be sent to any other publication or collector of statistics, we make it a rule to

compare the record so sent with that sent to us, in order to secure uniformity of publication, and by this comparison errors are often detected which would not have been suspected had only one copy of the record been available.

Metric Units.—The Meteorological Office, under the direction of Sir Napier Shaw, has introduced a new system of units for the official records of British meteorology based on absolute measures and the metric system. So far as the British Rainfall Organization is concerned the only change involved is the use of the millimetre as the unit for measuring the depth of rain instead of the inch. I have a strong belief that the prosperity of a great voluntary system like that for collecting rainfall depends on all its results being readily understood by the people who collect them, and therefore I hold that units familiar in ordinary life ought to be employed. While the inch continues to be more familiar than the millimetre I prefer to use the inch; as soon as the inch becomes less familiar I would abandon it. On the other hand long experience has convinced me as it had previously convinced Mr. Symons, that the actual readings made by Observers should always be used in order to avoid errors in conversion, which are apt to be more numerous than errors of observation, and are often more difficult to detect. Hence I would print observations measured in millimetres in millimetres, and those measured in inches, in inches. But this cannot well be done in the same column, so I resolved in *British Rainfall, 1914*, to devote one column of the general Table to the total annual rainfall in millimetres for gauges provided with a millimetre measuring glass, and another column for the annual total of rainfall in inches for those records measured with the glass in common use. But the millimetre column would be blank save for one entry, in 1914, and would probably be very sparsely occupied in most pages for many years to come..

As the Meteorological Office is making a strong effort to introduce the metric system for rain measurement, and as that system is in general use in the non-English speaking world, it could obviously do no harm to fill the blank columns with a translation of the inches into millimetres for every station, and this has been done. The annual total is given to the nearest millimetre, *i.e.*, $\cdot 04$ in. A difficulty which will arise later has been postponed to next year, that is the definition of a rain day and the counting of the number of rain-days for millimetre records.

I should not have felt justified this year in undertaking the expense of converting over 5000 values from inches to millimetres (an operation which had to be done twice over to ensure accuracy), and of altering the *format* of the volume by widening the page to admit the additional column; but on explaining the position to Sir Napier Shaw I had the satisfaction of finding that the Meteorological Office was prepared to assist by bearing the estimated cost of the change, which amounted to £30.

Inspection of Rain Gauges.—The circumstances of the year have prevented the number of inspections being as large as last year. Every member of the staff has made use of all opportunities to visit rain gauges and make the acquaintance of Observers.

I have myself been able to inspect 3 stations in Dorset, 3 in Surrey, 2 in Sussex, 4 in Yorkshire, 2 in Lancashire, 1 in Monmouth, 14 in Brecon, a total of 29.

Mr. Carle Salter has inspected 64 stations: 3 in Kent, 14 in Sussex, 2 in Hampshire, 4 in Middlesex, 1 in Essex, 11 in Devonshire, 6 in Somerset, 19 in Yorkshire, and 4 in Northumberland; Mr. Carter, 8; 1 in London and 7 in Sussex; and Mr. D. S. Salter, 8; 1 in Middlesex, 3 in Hertfordshire, and 4 in Gloucestershire.

The kindness of the Water Engineers of Brighton, Blackburn, Bolton, Huddersfield and Batley in facilitating visits to the rain gauges kept by their Corporations must be specially mentioned.

The Publications.—*British Rainfall*, 1914, appears in a new form, being half an inch wider in the page than its predecessors, but by retaining the same height there will be no perceptible difference in a shelf. The thinness of the volume is partly accounted for by its greater breadth of page, each page of ordinary print now containing 500 words instead of 470 as formerly; but the increase in the cost of production has led me to keep the space devoted to each section as small as is compatible with the full treatment of the data. I have to thank Mr. R. C. Mossman for generously assisting in completing the data for publication on the departure of Mr. Carter to join the army.

In Part I. the essential portion of a paper on Isomeric Rainfall Maps of the British Isles, prepared by Mr. Salter and myself, for the Royal Meteorological Society, is reproduced, and I have to thank the Council

of that Society for kindly lending the blocks of maps and diagrams used in the paper. Mr. Fairgrieve, whose discussion of the rain-fields of the Derby Day thunderstorm of 1911 will be remembered, has very kindly communicated the result of his labours on the rain-fields of the severe South London thunderstorm of June 14th, 1914, in a paper which seems to me to be of great value and full of suggestions for future work.

Part II. is practically unchanged in plan, but the Extremes of Rainfall formerly occupying the last page have been treated in a new way, so as to avoid giving rise to misleading inferences. Part III. is altered only by the introduction of a supplementary column giving the total annual rainfall to the nearest millimetre ($\cdot 04$ in.). This column is placed before that giving the rainfall in inches, because it seemed right to leave the latter beside the column devoted to the number of days which is based on the actual observations to $\cdot 01$ in.

Mr. Salter is responsible for the whole compilation of Parts II. and III., and he wrote most of the articles contained in Part II. The section on Seasonal Rainfall was prepared by Mr. Mossman, and the Observers' Remarks on the Days and on the Year were collected and put in shape by Mr. Carter. I revised the whole volume in MS, with the exception of the statistical tables.

Mr. Mossman remained as temporary editor of *Symons's Meteorological Magazine* until August, 1914, when I resumed the editorship, and I have continued to take sole charge of this part of the work. The outbreak of war has made it necessary to postpone the plan of enlarging the Magazine, and the necessity for economy has compelled me most reluctantly to reduce the monthly issue, except on rare occasions, to 16 pages. The cause is purely financial, for the amount of material available for each number has only caused embarrassment by its abundance and good quality. The fiftieth annual volume will be completed in January, 1916.

Opportunity was taken during the year to go through the whole stock of the publications. A large number of copies of the issues for a few years was found and as space was lacking for storing books that would never be wanted, I reduced the number kept to a maximum likely to meet all future demands, and rather than follow the old custom of destroying the surplus stock, I offered a choice of the publications to the members of our own Staff and to those of the Meteorological Office, and of the Royal Meteorological Society, as well as to certain rainfall Observers,

who took a special interest in meteorology, but were not in a position to buy many books. The opportunity was eagerly taken advantage of and practically the whole of the jettisoned stock found appreciative owners.

Scientific Work and Advice.—It has been found possible to continue as in earlier years to help rainfall Observers, members of the public and various institutions with advice on many subjects more or less closely connected with the work of the Organization; and this help is always rendered gratuitously, except when the purpose for which it is required is not purely scientific or personal, and justifies the charging of a fee. It is impossible to recount all the services of this kind which have been rendered during the year. Many letters have been written to enquirers as to places which offer particular climatic conditions desired for a residence, many lost records of rainfall have been made good from the copies preserved by the Organization; assistance has been given by means of data or advice to investigators of various phenomena, the study of which involves rainfall, and still more regarding the degree of credence to be given to constantly recurring popular fallacies as to the influence on rainfall of the moon, the firing of guns and the like. In several cases help has been given to rainfall Observers and others in the preparation of papers to be read to local scientific societies. Two parties from local societies or schools have been received at Camden Square and shown the methods of work carried on there, and several Observers from distant parts of the country have been welcome callers on visiting London. Advice as to the placing of new rain gauges has been given informally to the responsible engineers of several Corporations, and I have also been consulted by the Astronomer Royal as to the re-arrangement of the rain gauges at the Royal Observatory, Greenwich.

A scheme for a Rainfall volume of the Climatological Atlas of the British Isles, now being compiled by a joint Committee of the Royal Meteorological Society and the Meteorological Office, has been under discussion, and I have put forward a proposal by which I should undertake the work of compiling such a volume on behalf of the British Rainfall Organization, if the expenses incurred are met by the Joint Committee. The question is still under consideration.

Annual Maps.—Progress with these maps has been maintained. Mr. Salter has completed the revision of the isohyetal lines on the maps

of Ireland, and has revised the lines in the north of England back to 1894. The evaluation of the Irish maps is also completed, and the values have been tabulated back to 1876. As the year 1914 completes the fifty years for which the averages are to be taken the calculation of the averages in decades has been commenced for the map of Scotland by Mr. R. C. Mossman.

Scientific Papers.—In collaboration with Mr. Salter I contributed a paper on Isomeric Rainfall Maps to the Royal Meteorological Society in December, 1914, and in collaboration with Mr. H. E. Carter a paper on the Wet English Winter of 1914-15, to the same Society in May, 1915. The maps on which both papers were based were compiled by Mr. D. S. Salter. I also contributed a paper on Recording Rain Gauges to *Nature* of May 6th, 1915, and the usual annual Summary of the past year's rainfall, with Mr. Salter's assistance, to *The Times* of January 19th, 1915.

The Royal Geographical Society has recognized the value of the work of the Organization by awarding the Victoria Medal for Geographical Research to the Director, largely on account of the results of his application of cartographical methods to rainfall investigations.

Professional Work of the Director.—Under Clause 25 of the Trust Deed I have continued to act as Rainfall Expert to the Metropolitan Water Board, reporting monthly on the rainfall of the gathering grounds of the Thames and Lee. I have also continued to act as Referee under the Abertillery and District Joint Water Board Act, 1910. Reports on the rainfall for 1914 on the Birmingham Corporation's gathering grounds in the Elan and Claerwen Valleys in Mid-Wales, and on the Birkenhead Corporation's new works in the Alwen Valley, North Wales, have been supplied to the respective authorities.

I have given evidence in support of the Barnoldswick and Ashington Water Bills of 1915 in the House of Commons, and I have also prepared evidence in connection with the Weardale and Consett Bill before Parliament, in which my estimates of rainfall were accepted without evidence being taken. I have also reported on the rainfall of various areas in the north of England, the west of Scotland and in Ireland, in connection with new schemes for water engineering. Other items of professional work include supplying monthly reports of rainfall to the Thames Conservancy. In all this work Mr. Salter has rendered essential assistance, which I most cordially acknowledge.

The General Fund.—While under no obligation to submit accounts of the General Fund, for the collection and disposal of which I am responsible, and the sufficiency of which to meet all expenses of the Organization I personally guarantee, I again have pleasure in submitting, in a form comparable with the statements of previous years, a summary of the income and expenditure. It will be observed that the income from Subscriptions was £45 less than in 1913, and this is entirely due to the state of public feeling immediately after the declaration of war, the sales of *British Rainfall, 1913*, to Observers who had not subscribed in advance, having dropped by about 100 volumes. The expenses were £16 greater than in 1913, as till August the work of the Organization had been carried on on the assumption that the income would exceed that of the previous year. The deficit was consequently much heavier than had been anticipated. The Subscription Book, the ledger, and all other account books are laid before the Trustees, and I shall be glad to show them to any subscriber who calls at the Office for that purpose.

Receipts on Account of British Rainfall Organization, 1914.

	£	s.	d.
Subscriptions... ..	1125	4	9
Sales to Public	74	3	2
Advertisements	52	6	2
Certificates	17	2	0
Supplying Rainfall Data	5	1	0
Maps and Literary Work	27	2	0
Interest on Endowment Fund and Bank Account	68	6	6
TOTAL	£1369	5	7

Expenditure on Account of British Rainfall Organization, 1914.

	£	s.	d.
<i>British Rainfall and Meteorological Magazine</i> (including Postage)	501	19	10
Observers and Instruments	33	11	3
Salaries and Assistance	688	5	0
Printing, Stationery and Establishment Expenses	210	7	10
Extra Postage, Telephone, Petty Cash and Miscellaneous Expenses	51	6	9
TOTAL	£1485	10	8
DEFICIT, met by Director ..	£116	5	1

HUGH ROBERT MILL.

62, CAMDEN SQUARE,
LONDON, N.W.

TREASURER'S REPORT ON ENDOWMENT FUND.

STATEMENT FOR THE YEAR 1914.

The following sums have been received :—

	£	s.	d.
Balance from 1913	4	4	5
J. W. Woods, Esq. (2nd Don.)	2	2	0
R. Cooke, Esq. (5th Don.)	4	5	0
Sums under £2	3	11	6
	<u>£14</u>	<u>2</u>	<u>11</u>

No expenditure has been made during the year.

On July 21st, 1915, the Trustees held as the Endowment Fund, £2,151 11s. 3d. North British Railway 3% Debenture Stock, £123 5s. 0d. New South Wales 3% Inscribed Stock, and £41 9s. 11d. cash.

Between the end of 1914 and July 21st, 1915, the following further donations have been received :—

	£	s.	d.
R. Cooke, Esq. (6th Don.)	4	5	0
Miss F. Rouse Boughton (2nd Don.)	10	0	0
A. F. Sharman-Crawford, Esq. (5th Don.)	10	0	0
Miss Agnes Fry	2	2	0
Under £2	1	0	0
	<u>£27</u>	<u>7</u>	<u>0</u>

THE PRINCIPAL DONATIONS TO THE ENDOWMENT FUND RECEIVED

UP TO JULY 22ND, 1914, WERE AS FOLLOWS :—

Boughton, Miss F. H. Rouse	£110
Brook, Charles L., Esq.	£500
Druce, Francis, Esq.	£200
Freshfield, D. W., Esq.	£200
Mellish, Lt.-Col. H.	£200
Morrison, W., Esq.	£215
Murray, the late Sir John, K.C.B., F.R.S.	£100

FRANCIS DRUCE,

Treasurer, Endowment Fund.

THE BRITISH RAINFALL ORGANIZATION.



Trustees.

HUGH ROBERT MILL, D.Sc., LL.D., Past President of the Royal Meteorological Society, *Chairman*.

R. M. BARRINGTON, M.A., LL.B., Bray, Co. Wicklow.

SIR ALEXANDER R. BINNIE, Past President of the Institution of Civil Engineers.

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Cheques should be crossed "National Bank, a/c British Rainfall Organization, General Fund," and sent to DR. H. R. MILL, 62, Camden Square, London, N.W.

ISOMERIC RAINFALL MAPS OF THE BRITISH ISLES.

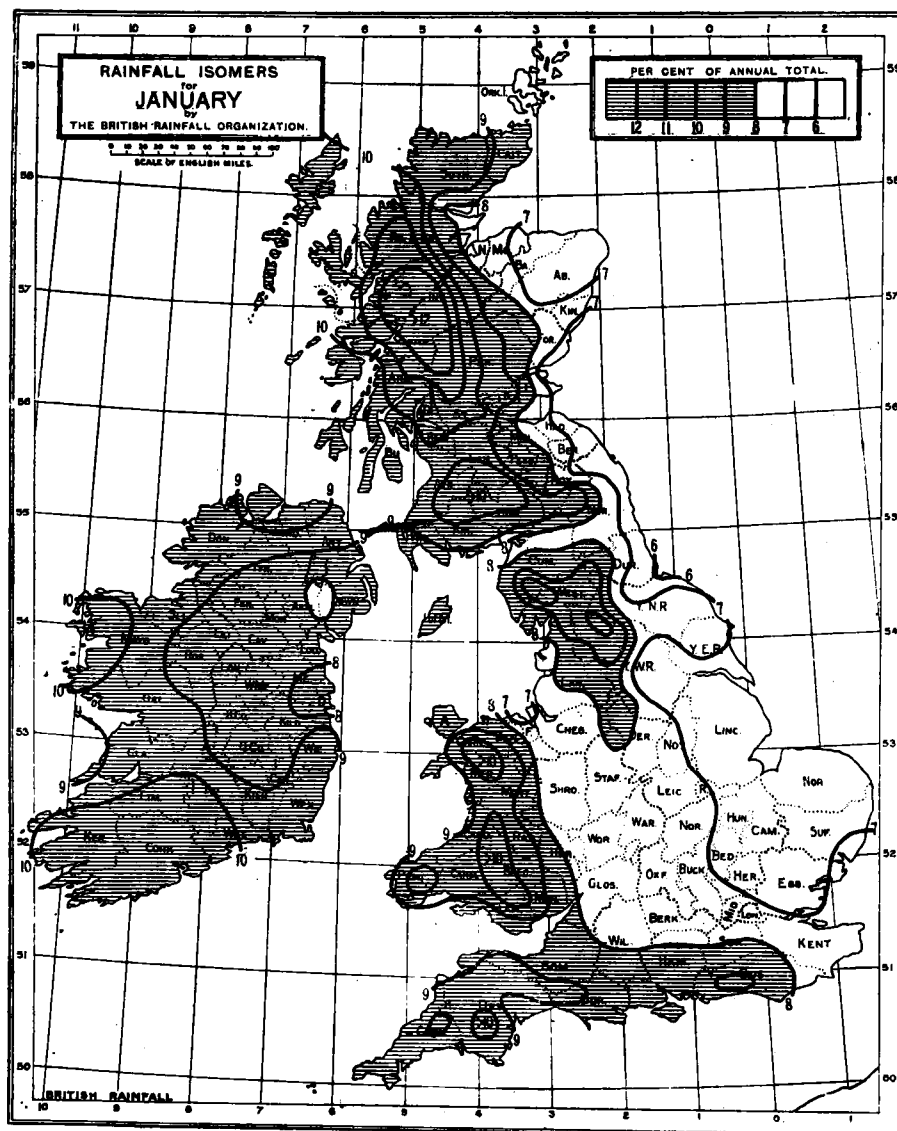
IN *British Rainfall, 1910*, reference was made to a set of preliminary maps showing the proportion of the average annual rainfall, for 1875-1909, which fell in each month in different parts of the British Isles. These maps were constructed from about 100 points, and in succeeding years, whenever occasion arose for calculating monthly averages, the results were added to the maps. The great interest of the geographical distribution of monthly rainfall brought out by these maps led to a complete revision of the data in 1914, when a new series of maps was drawn on a large scale from about 283 points, and the whole subject was discussed by Dr. Mill and Mr. Salter in a paper read to the Royal Meteorological Society on November 18th, 1914. and published in the *Quarterly Journal* of that Society, Vol. 41, pp. 1-44.

The percentage which the average rainfall of a particular month formed of the average rainfall of the whole year at the same station was plotted on the map of the month in question. Lines were then drawn passing through points where the percentage values were found to be equal. The lines thus join together places which, in the month in question, received the same proportion of the annual rainfall, and the term "Rainfall Isomer," or line of equal proportion of rainfall, has been adopted as convenient for signifying such lines.

For full details the reader is referred to the paper already cited, but we place on record here the twelve monthly maps which formed the basis of the discussion, and give an abstract of the description of the individual maps and of the general conclusions drawn from them.

January.—The smallest proportion of the year's rainfall is found over a narrow strip bordering the North Sea where less than 7 per cent. falls in this month. The south-west of England, Wales, the Pennines, the centre and west of Scotland, and the whole of Ireland, except a small part in the east, receive more than 8 per cent., and the percentage in-

creases to more than 10 per cent. in the regions of highest annual rainfall. The only area with more than 11 per cent. coincides roughly with the western Highlands, and more than 12 per cent. falls over the central and rainiest part of this region, where January is the wettest month of the year. In Ireland the range is smaller, being only 3 per cent. between the highest values in the south-west and the lowest round Dublin. The



distribution of percentage values during this month is roughly similar to the distribution of total annual rainfall, but the percentages are apparently higher in the west of Scotland than in the equally wet districts of England and Wales.

February.—The distribution is somewhat similar to that of January,

RAINFALL ISOMERS
for
FEBRUARY
by
THE BRITISH RAINFALL ORGANIZATION

0 10 20 30 40 50 60 70 80 90 100
SCALE OF ENGLISH MILES

PER CENT OF ANNUAL TOTAL

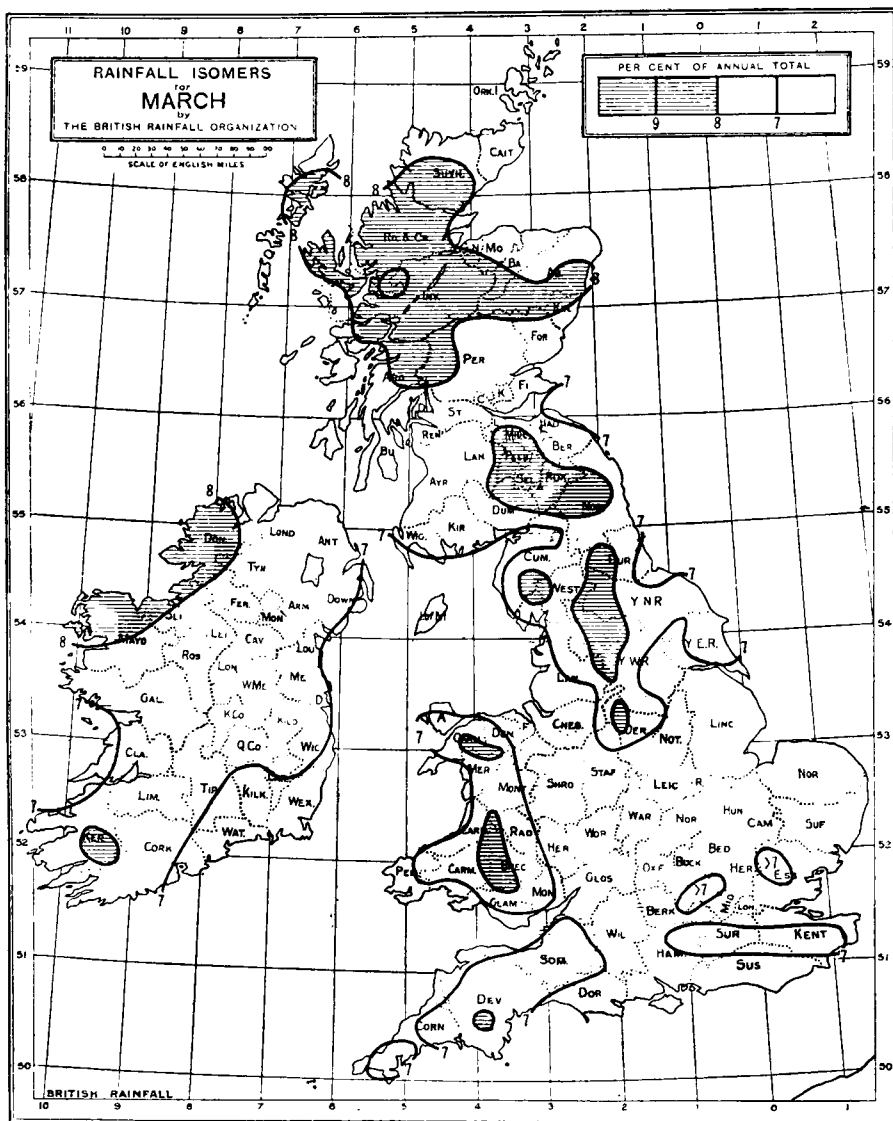
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BRITISH RAINFALL

March.—The percentages are again small, and the total range less than 3 per cent. In this month the transition from the winter to the

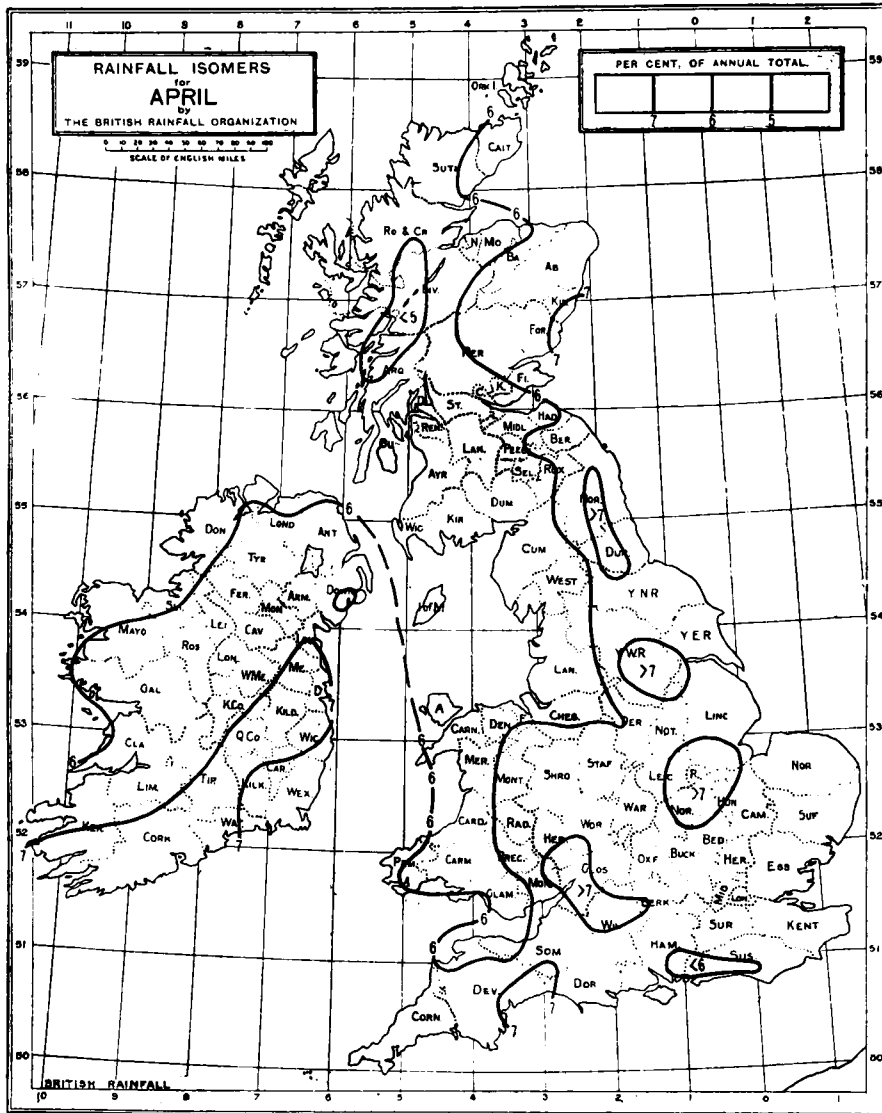
summer type first becomes apparent, and the slightly marked maxima are further east than in January, though they still tend to be proper to the regions of higher rather than to those of lower annual rainfall. March is the driest month of the year only in part of the English Midlands.

April.—Again a dry month, the driest of the year over about half the area of the British Isles, and with a very slight percentage range from



place to place. The shifting of the maxima eastward is now carried a stage further, the transition to the summer type being by this time fairly established, and less than 6 per cent. occurs over most of the western districts, falling to less than 5 per cent. in the west Highlands, while the highest values, in no case reaching 8 per cent., are found in a band

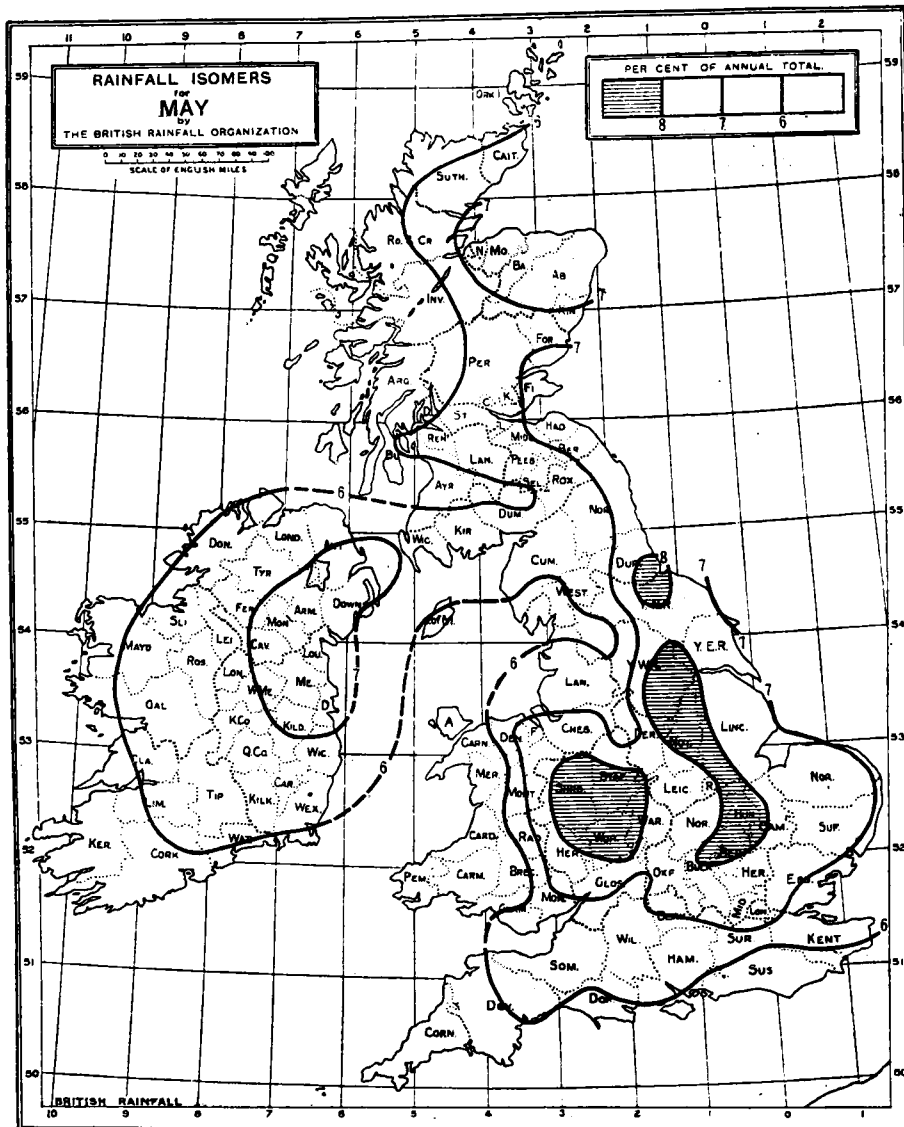
stretching from south-west to north-east across the centre of Ireland and in a series of areas stretching in line from Devonshire to Kincardineshire. The tendency during this month, clearly characteristic of the spring months, is for the isomeric lines to be parallel with the coast, the maxima lying inland and the minima on the periphery, though the western minima are the more pronounced.



May.—The summer maximum in the east of Ireland and Scotland and in the Midlands of England is more strongly marked than in April, but barely reaches 8·5 per cent. in England, and 7·5 per cent. in Scotland and Ireland. Less than 6 per cent. again falls in the western districts and along the south of both Ireland and England, and less than 7 per cent. in

the east of England. The percentage range in Ireland is less than 2, and in Scotland only about 2.5. May is the driest month of the year in the south and west of Ireland, the south of England, and part of the west of Wales and of Scotland.

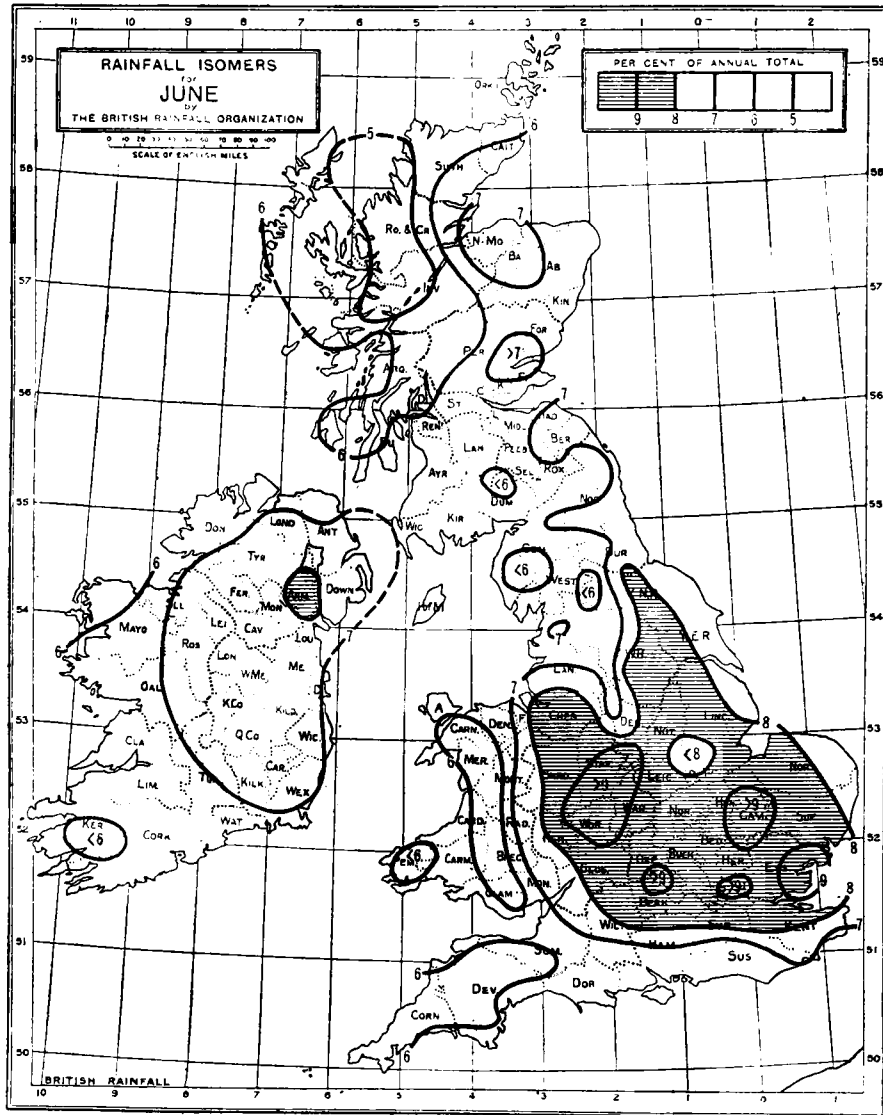
June.—A strongly marked minimum with less than 5 per cent. is found in the north-west of Scotland, and the maximum in the east of



Scotland is only slightly above 7 per cent., but the English Midlands almost to the east coast, have more than 8 per cent., and in parts more than 9 per cent. The elevated districts, such as Devon and Cornwall, Wales and the Pennines, now exhibit definite minima of less than 6 per cent. The eastern half of Ireland has more than 7 per cent., but the

range is again small. June is the driest month of the year in the north-west of Scotland, and in several rainy districts elsewhere.

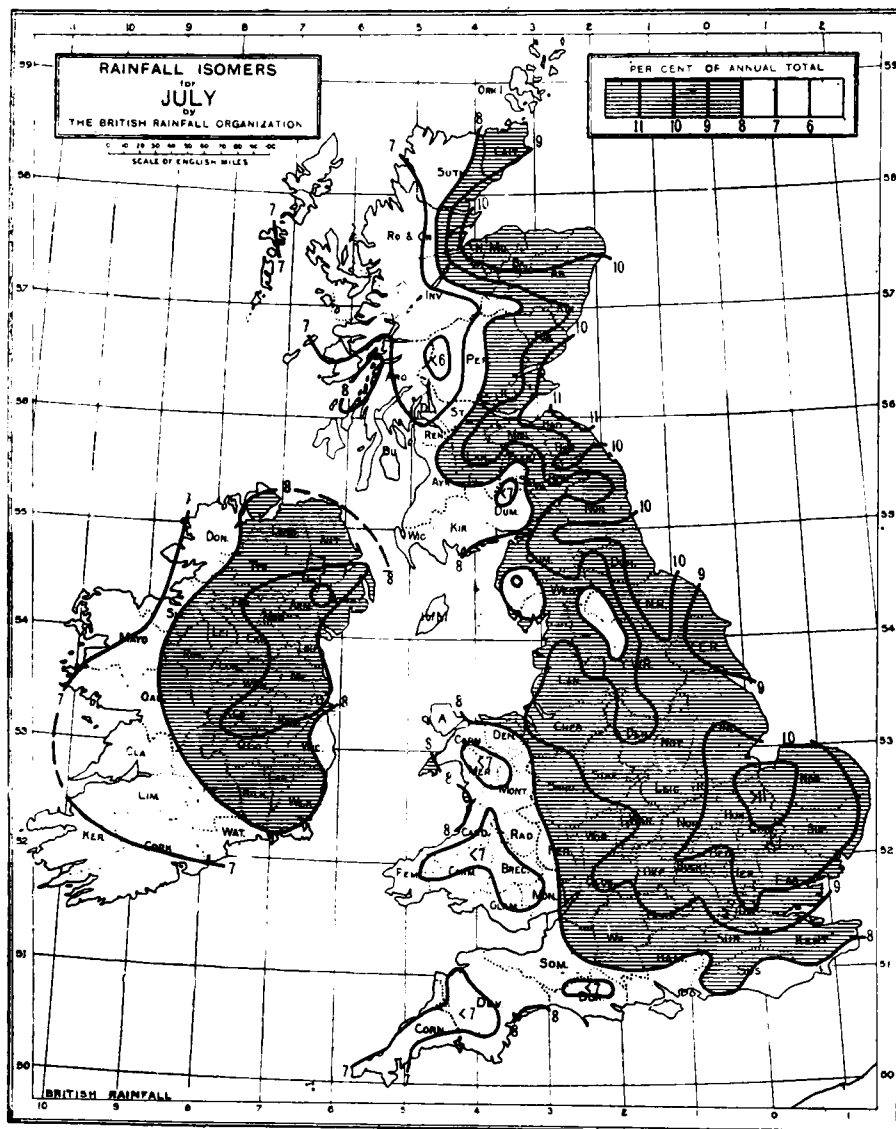
July.—In July the summer type of distribution is fully developed, and the run of the isomeric lines closely resembles that in January, but with a complete reversal, the regions which had the lowest percentage in January having now the highest, and *vice versa*. The minima in all cases



are now definitely situated in the normally rainy regions, less than 7 per cent. falling in the north-west of Scotland, the west and south of Ireland, and the uplands of Wales and England. The area with over 10 per cent. stretches along almost the whole of the east coast, reaching a maximum of over 11 per cent. in the Fen district, the only place in which July is

wetter than any other month of the year. In Ireland July is relatively drier, and the percentage reaches 9 only in the eastern counties. The percentage range over the whole of the British Isles is about 5, or 1 less than that in January.

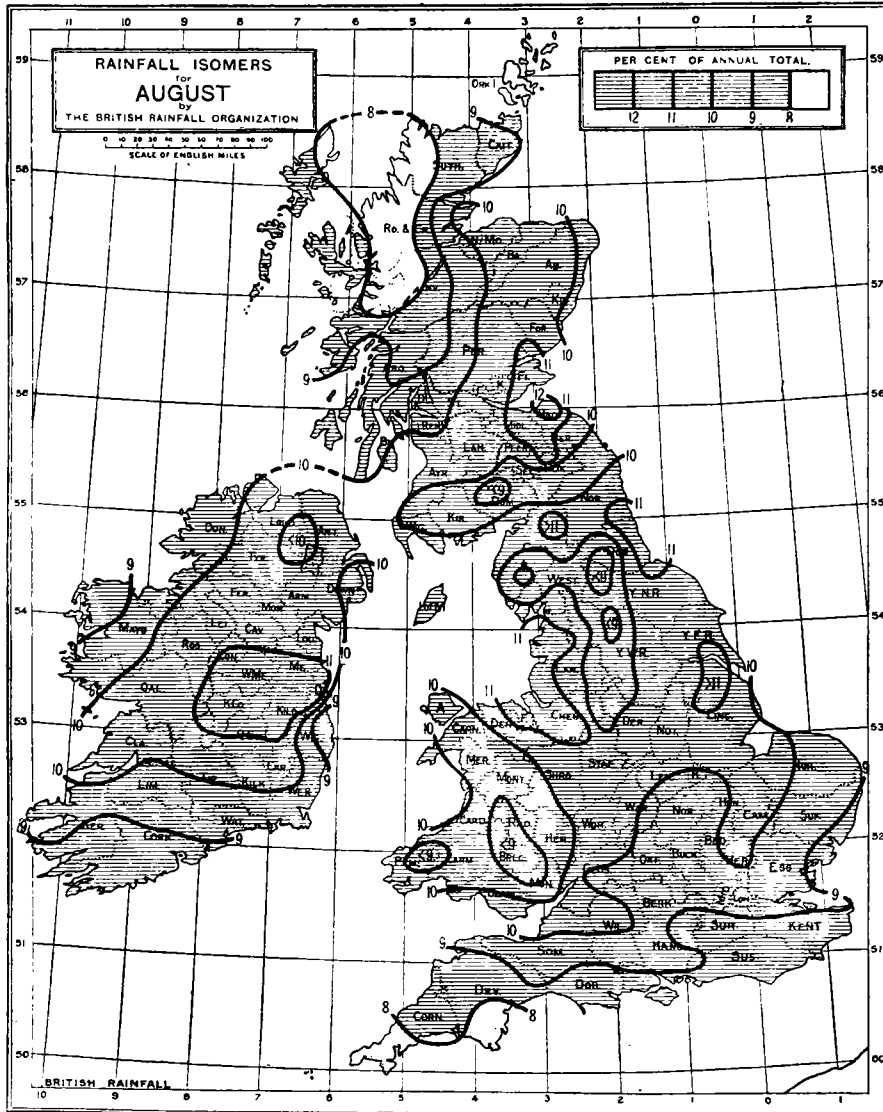
August.—The summer type of distribution prevails, but it is less clearly marked than in July. The maxima are, as a rule, slightly higher



than in that month, and the minima notably higher, the month being distinctly wetter. Less than 8 per cent. is confined to the north-west of Scotland and the south of Devon and Cornwall. The east midlands of Ireland, and limited areas in the east of England and Scotland, have more than 11 per cent., but less than 10 per cent. occurs over the whole of the

south of England, and less than 9 per cent. on the south coast and in the south-west of Ireland. August is the wettest month of the year in the drier parts of the east of Scotland and of the north-west of England.

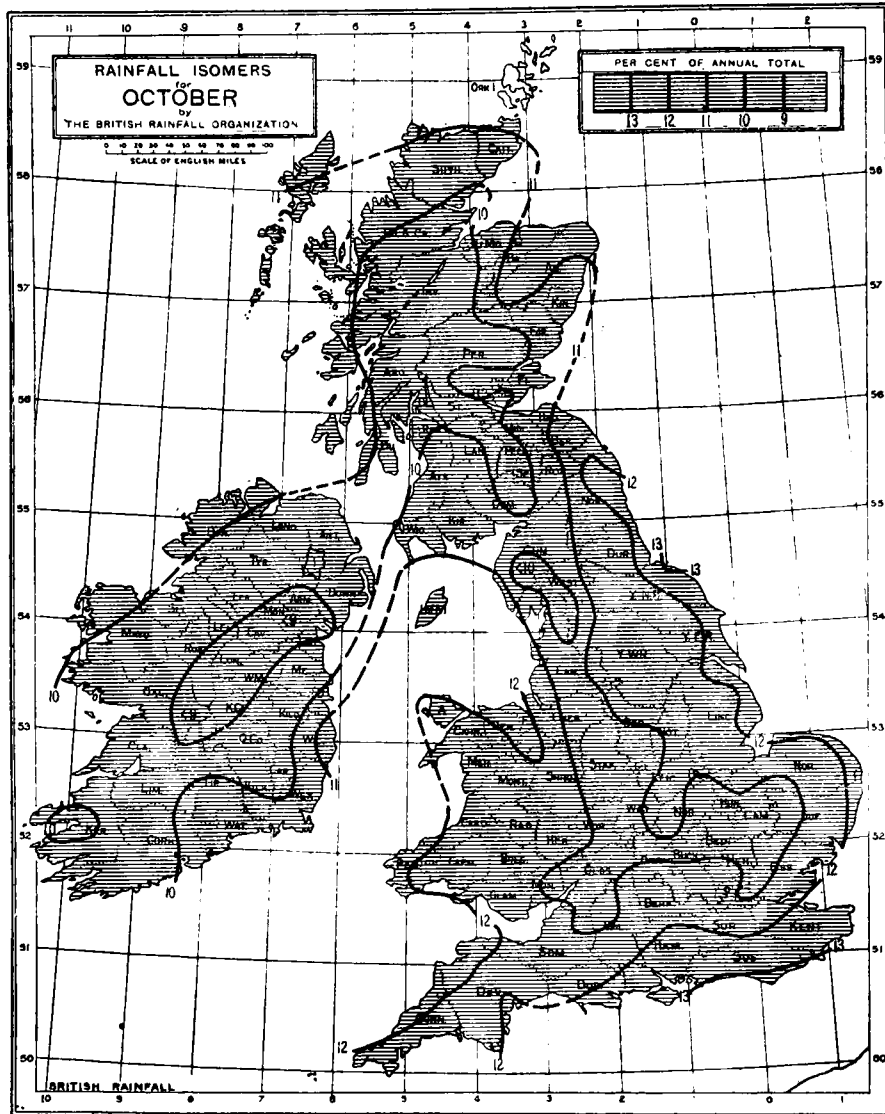
September.—There is comparatively little range, and the character of the distribution has almost lost the summer type in England and Wales, and has entirely lost it in Ireland and Scotland, this month showing the



commencement of the transition to winter conditions. The maximum nowhere reaches 10 per cent., and September shares with November alone the distinction of being neither the wettest nor driest month in any part of the British Isles for the period under consideration.

October.—October is on the whole the wettest month of the year,

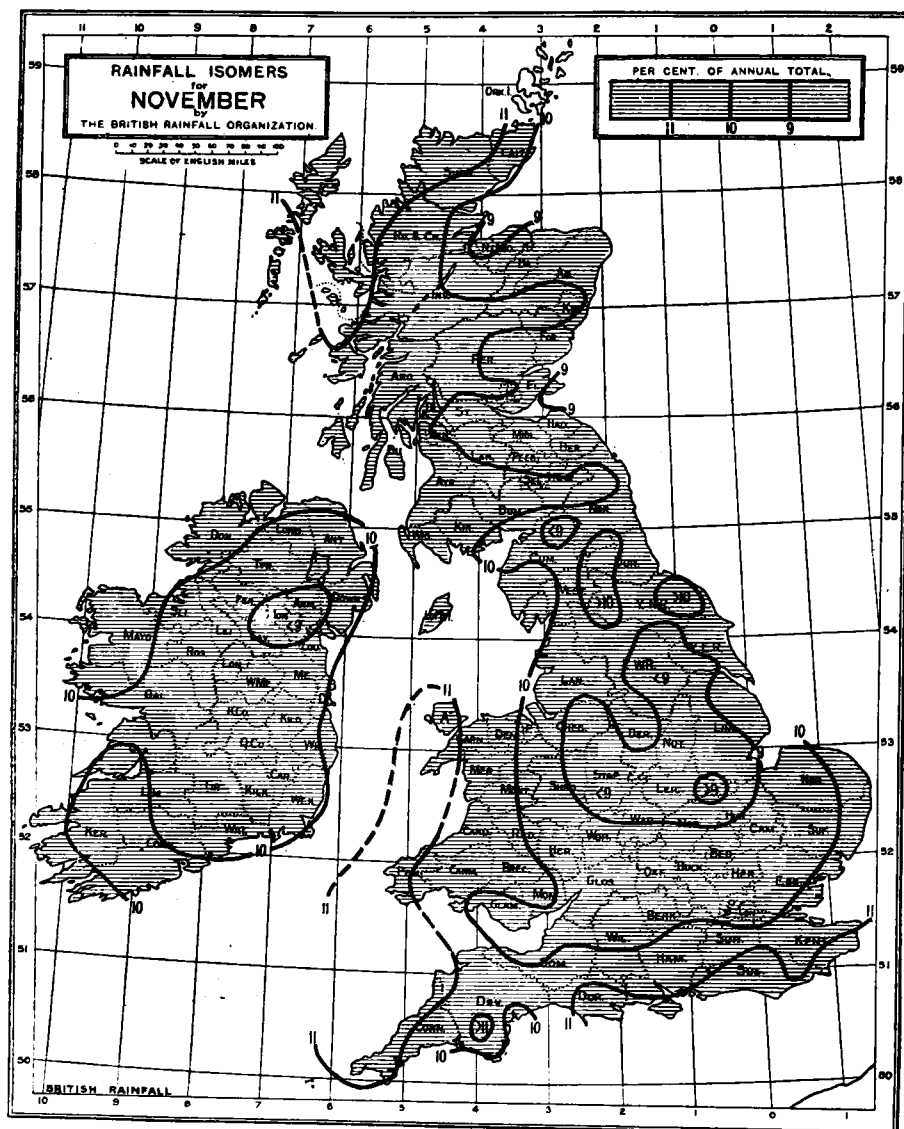
Pennines, and the Midlands have nearly 11 per cent. The 12 per cent. isomer passes almost unbroken round the coast of England and Wales, and the 13 per cent. line falls outside it in the extreme south-east. The change from point to point is, as in the spring months, more gradual than in summer or winter. The isomers show an even closer parallelism with the coast than in April, and one map is nearly the reverse of the



other, the inland regions in April having the higher percentage of the annual fall and in October the lower. In October the maximum along the east coast is higher than that along the west coast both in Great Britain and Ireland.

November.—Whilst the winter type is not yet quite fully re-established,

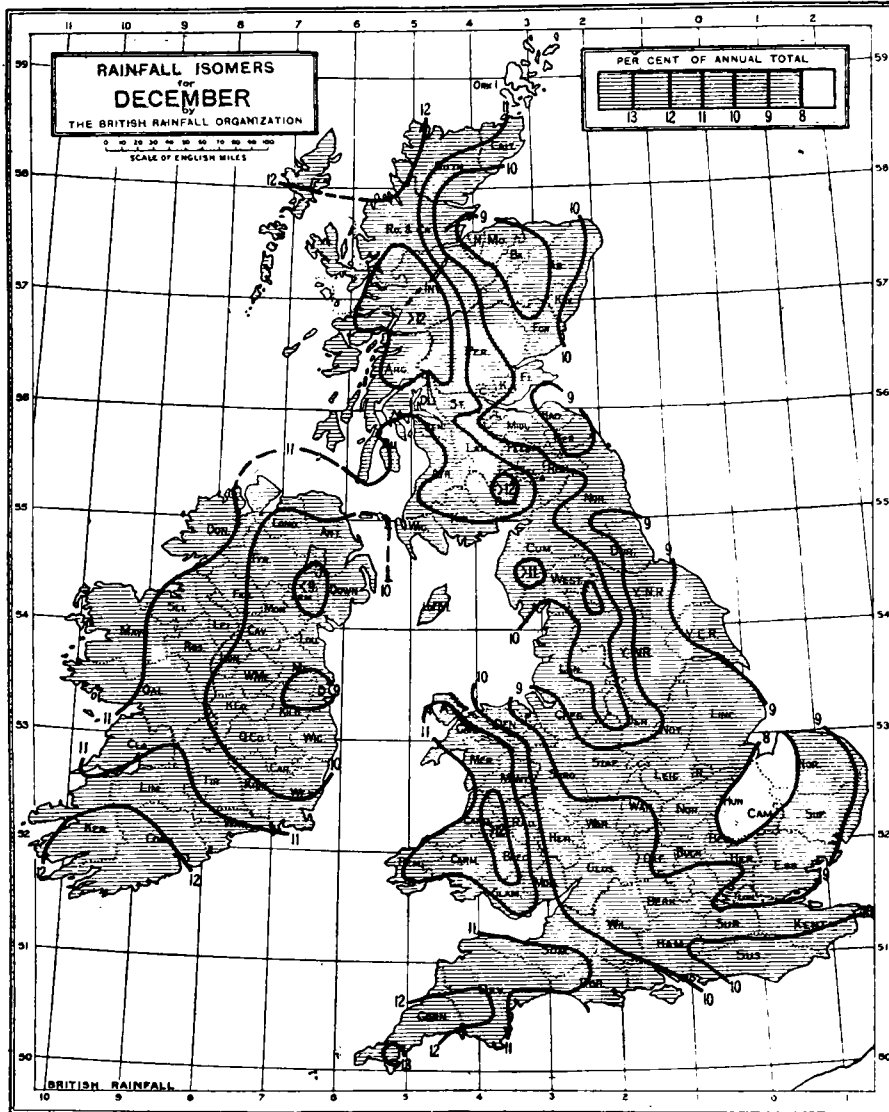
the minima, rather below 9 per cent., are to be found in the north-east midlands of England and the dry east coast estuaries of Scotland. The fall exceeds 10 per cent. everywhere in the west, and reaches 11 per cent. in the extreme west of Wales and Cornwall, and the north-west of Scotland. In Ireland the extreme range is less than 2 per cent., and the coast is again relatively wetter than the interior.



December.—The distribution is similar to that of January, but the month is practically everywhere wetter. More than 12 per cent. occurs over small areas in the south-west, and more than 10 per cent. over all western districts, both in Great Britain and Ireland, whilst less than 9 per cent. occurs only in places of low annual rainfall, falling to less than

8 per cent. in the districts of lowest annual rainfall, such as the neighbourhood of the Wash. December is the month of greatest rainfall in the west of Scotland and Ireland, the south of Ireland, and the rainy parts of England and Wales.

Taking the whole country, the months from February to June, inclusive, are each respectively the driest in one place or another, whilst



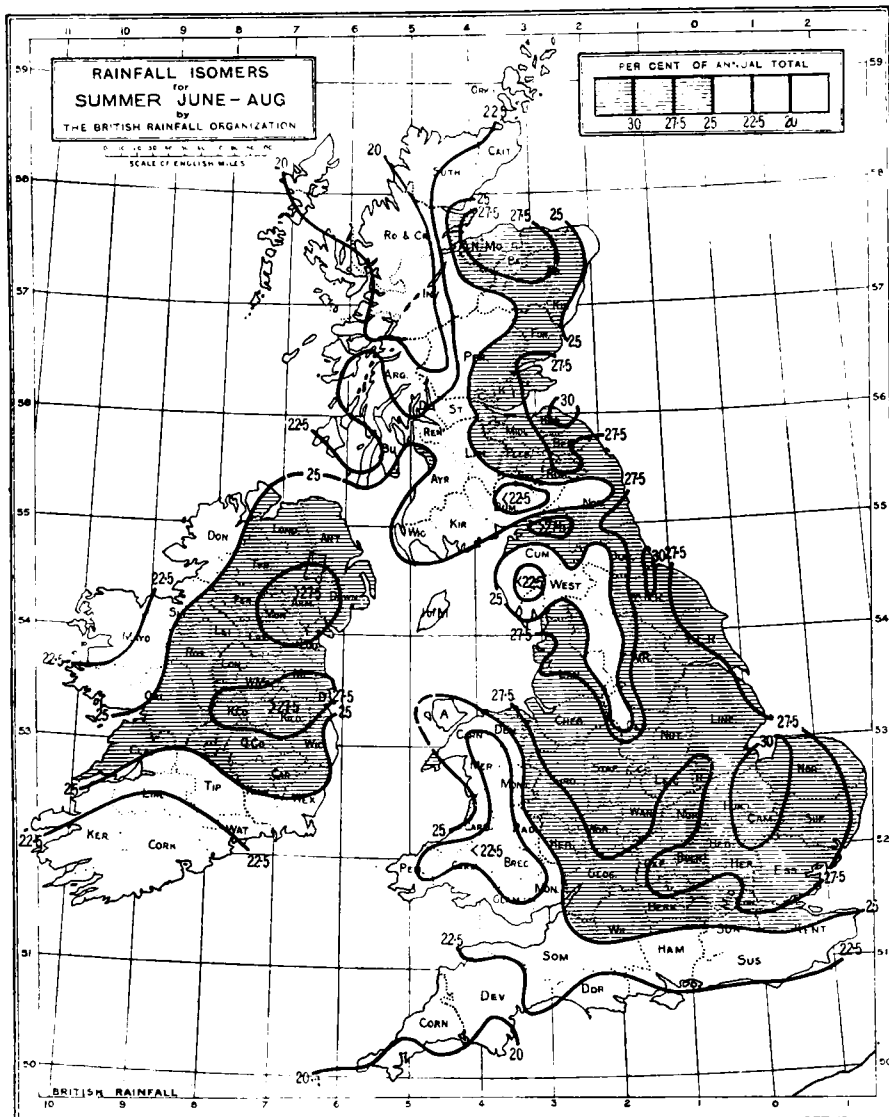
from July to January each month, except September and November, is the wettest in some part. Neither September nor November is the extreme month in any part of the country, and no month is wettest in one part and driest in another. It must be remembered that this discussion refers exclusively to the 35 years' average, 1875-1909.

Speaking broadly, the parts of the country with high rainfall have the greatest proportion of their rainfall in winter, and the parts with low rainfall in summer; in other words, the oceanic influence, of which the rain-condensing function of the high ground is an index, is most active in winter, probably on account of the greater strength and frequency of the rain-bearing south-westerly winds, and during that season the



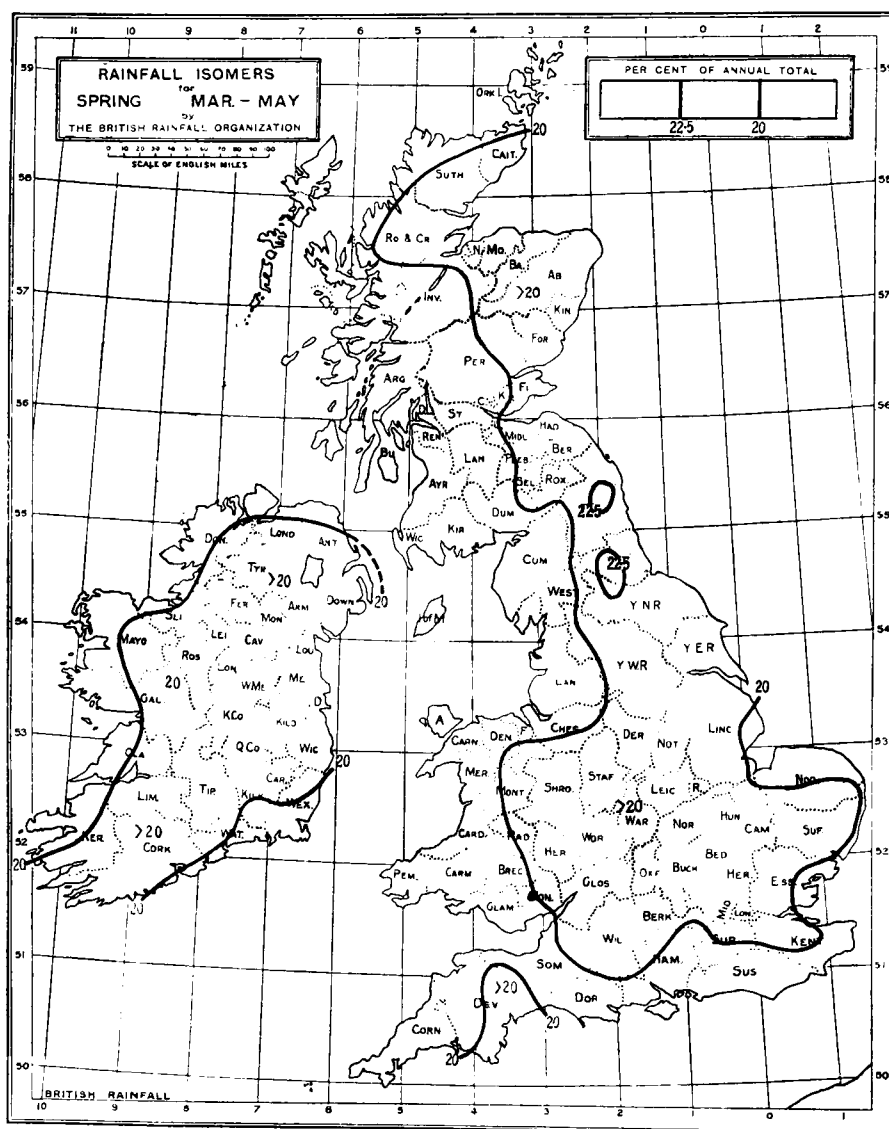
excess of rainfall in the western and central uplands over that in the lowlands is greatly accentuated. The winter phase is most marked in January, and the combined isomeric map for December, January, and February shows the winter distribution as a whole. On the seasonal maps the isomers are drawn at intervals of 2.5 per cent. The

maximum percentage in the winter, rather more than 33 per cent., or one-third of the year's rainfall, occurs in the west Highlands. More than 30 per cent. is found over the north-west of Scotland, the south-west of Ireland, and the uplands of Wales. The driest part of the country is the east of Great Britain, and less than 22.5 per cent. occurs over the greater part of this district. The standard value for this period of 90 $\frac{1}{4}$



days is 24.7 per cent. Similarly the typical summer distribution appears in the map for July, and that for June, July, and August combined exhibits the characteristics of the whole summer. Here we have an almost complete reversal of the winter map. In the Fens and one or two spots on the east coast the proportion of the rainfall of this

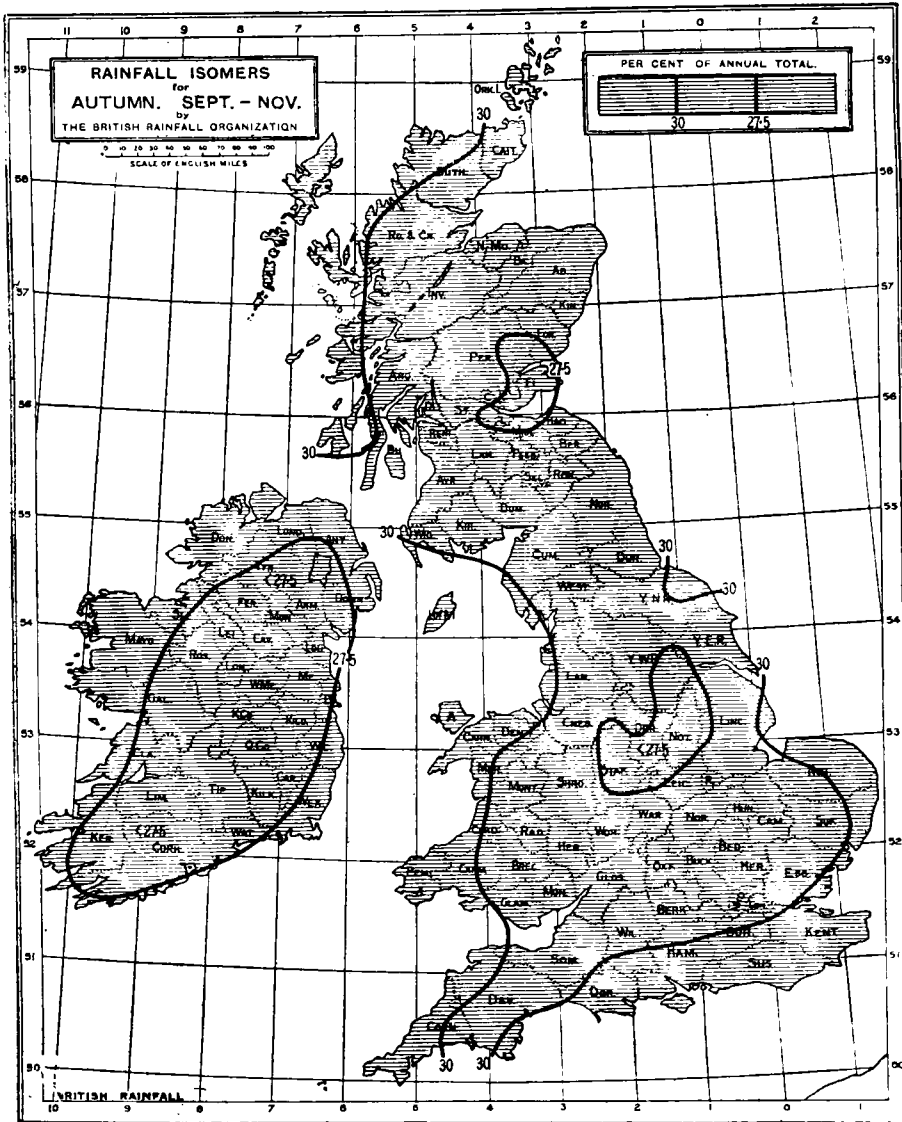
period reaches 30 per cent. of the annual, and less than 22·5 per cent. is shown over large areas in the west of Scotland and other wet districts. The standard value for this period of 92 days is 25·2 per cent. The spring and autumn three-monthly periods, March—May and September—November, are transitional in type, and thus show a smaller range, but the autumn



months are everywhere much wetter than the spring months. These two maps are just as much the reverse of each other as are those of the summer and winter seasons. Thus in the spring the maximum is central and the minimum peripheral, whilst in the autumn the reverse is the case. With the exception of two very small patches in the north-east of England,

where more than 22·5 per cent. occurs, the only isomer that appears on the spring map is that for 20 per cent. The standard value for the period is 25·2 per cent. In autumn also only two isomers appear, those of 27·5 and of 30 per cent. The standard value is 24·9 per cent.

What does not appear so obviously from the maps is the general pro-



portion of the rainfall which falls on the country as a whole in each month. That can be made apparent by taking the mean of a large number of uniformly distributed stations apportioned amongst the great divisions of the British Isles, and this is done in the following table, for which 103 records were utilized.

Average Monthly Rainfall, 1875-1909, as a percentage of Annual Fall.

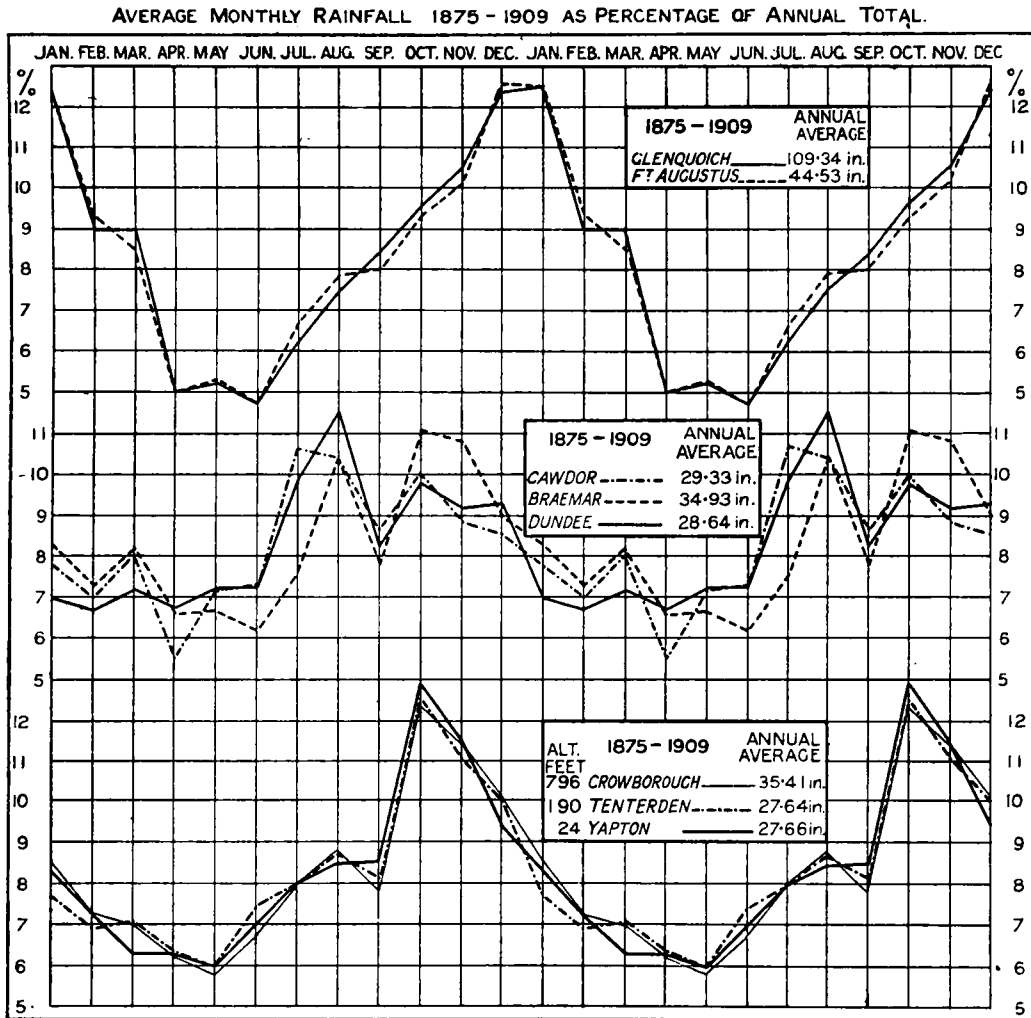
MONTH.	England. Mean of 45 Stations.	Wales. Mean of 8 Stations.	Scotland. Mean of 27 Stations.	Ireland. Mean of 22 Stations.	British Isles. Mean of 103 Stations.	Standard Value.
January	8·2	9·4	9·9	9·2	9·1	8·5
February	7·1	7·7	8·0	7·6	7·5	7·7
March	7·1	7·4	8·0	7·4	7·5	8·5
April... ..	6·4	5·9	5·6	6·5	6·1	8·2
May.....	6·7	5·9	6·0	6·4	6·3	8·5
June	7·2	6·0	5·8	6·9	6·6	8·2
July	8·5	7·4	7·6	7·8	8·0	8·5
August.....	9·5	9·5	9·2	10·0	9·5	8·5
September ...	8·1	7·8	8·5	8·3	8·2	8·2
October.....	11·3	11·4	10·1	9·6	10·6	8·5
November.....	9·9	10·4	10·3	9·8	10·0	8·2
December	10·0	11·2	11·0	10·5	10·6	8·5
Year	100·0	100·0	100·0	100·0	100·0	100·0

If the rainfall were uniformly distributed throughout the year, 7·7 per cent. would fall in the shortest month, February; 8·2 per cent. in the months with 30 days, April, June, September, and November; and 8·5 per cent. in each of the remaining months of 31 days. These figures, which may be called the standard values for the month, are given in the last column, and they are so near to 8 per cent. that the isomer of 8 per cent. on the maps may be taken as an approximate representation of the standard value, showing the places where it occurs on each map on which it appears. Without going into detail with regard to the various divisions, we may point out that for the British Isles as a whole the months from February to July are all below the standard, the driest being April, while the months from August to January are above the standard, except September, which is exactly equal to it. October and December are the only months in which the rainfall exceeds 10 per cent. for the British Isles, and both are equally wet.

The isomer of standard value appears on all the maps except those for April, May, and October, thus indicating that in all other months some parts of the British Isles have more, and some parts have less, rain than accords with a uniform monthly distribution throughout the year.

Whilst it is undoubtedly true that the stations with the greatest annual rainfall, and at the greatest altitude, have generally the most pronounced winter maximum, the relation of the two conditions is not a simple one. For example, a comparison of the seasonal curves for Ben Nevis Observatory and Fort William Observatory for the 19 years over which the two records ran together shows that, although the

rainfall at the summit was more than twice that at the foot of the mountain, the percentage values for the months were almost identical. Similarly in inland mountainous areas, although there is a considerable diversity from place to place in annual rainfall, the variation in the character of the seasonal curves is only slight. Thus the difference between the percentage values for the months at Glenquoich with an



annual fall of 109 inches, and those at Fort Augustus, with an annual fall of 45 inches, situated 25 miles north-east but in the same mountain region, is only trifling, whereas between Fort Augustus and Cawdor, with 29 inches of annual fall, situated 40 miles north-east but lying in a different geographical region, we find a difference amounting practically to a complete reversal. Cawdor will, however, be seen to have a curve

similar in type to that for Dundee, also on the east coast and about 90 miles south-east, whilst that for Braemar, at an altitude of 1114 feet, halfway between the two, and about 40 miles from the east coast, is of an intermediate type (see diagram on p. 43). The curves at the bottom of the diagram show the close agreement between the values obtained at Crowborough, at an altitude of 796 feet, Tenterden, 20 miles east, at 190 feet, and Yapton, 40 miles west-south-west, at 24 feet. Such facts point to the isomeric distribution as depending upon geographical position more than upon mere total rainfall or height above sea level. This is further borne out by the extraordinarily smooth nature of the isomeric lines, which exhibit few minute sinuosities even though drawn through a large number of figures, and by their general parallelism with the coast line.

The Isomeric Rainfall Maps can thus be utilized for the preparation of maps of total monthly average rainfall from a map of the total annual average rainfall, and this is extremely important in those parts of the country where rainfall stations are widely scattered, as here the annual isohyets can be drawn with confidence from the known relation between the configuration of the land and annual rainfall, while considerable difficulty would be encountered in drawing monthly isohyets from similar data.

It is necessary to bear in mind that the maps here reproduced, and the reasoning based upon them, apply to the period of 35 years, 1875-1909. There is undoubtedly a great difference in the isomeric lines referring to different periods, and preliminary investigations have suggested that there is a progressive and probably cyclical change in the proportion of annual rainfall which occurs in each month. For example, in 1900, Col. H. Mellish read a paper to the Royal Meteorological Society, in which he produced four seasonal isomeric maps (thus anticipating our method), referring to the 25 years 1866-1890, and he has been kind enough to let us see the monthly isomeric maps for that period, on which his seasonal maps were based. These show that the month of September, which for the period 1875-1909 was nowhere the wettest month of the year, was so in the earlier period over a considerable part of England. Equally remarkable changes appeared in provisional maps which we drew for the decades 1870-79, 1880-89, 1890-99, and 1900-09, but this question awaits fuller discussion.

THE THUNDERSTORM OF JUNE 14th, 1914.

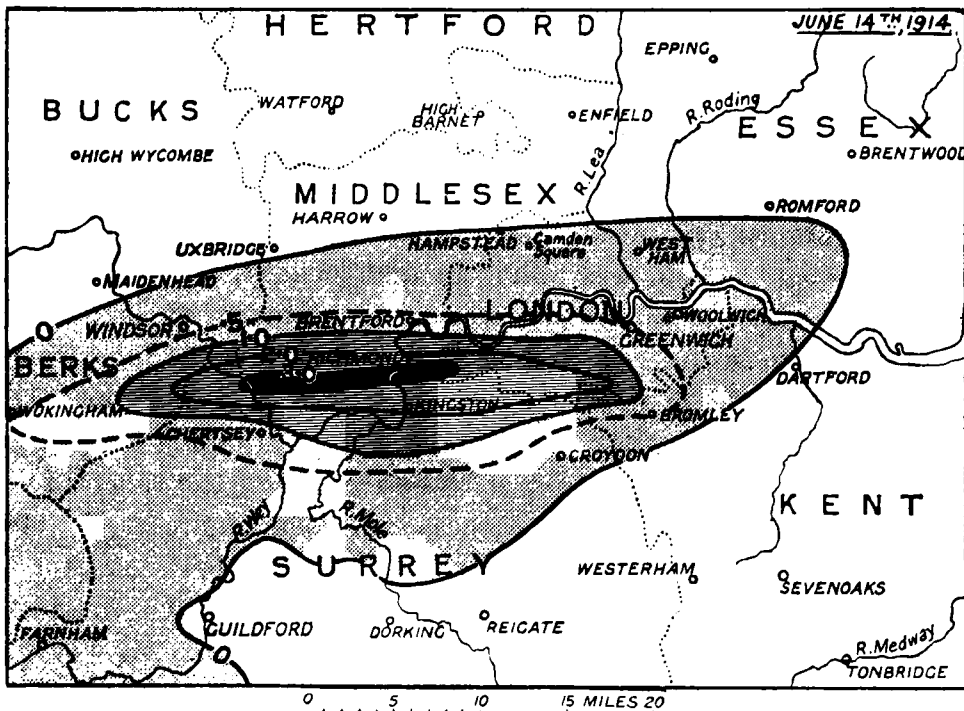
THE severe thunderstorm of June 14th, 1914, developed with extraordinary intensity in the south-west of London, and is memorable for the fatal accidents produced by the lightning. The Observer's Remarks on pp. [10]-[12] of Part II. should be read in conjunction with this article. They include a graphic description of the storm at Richmond by Sir Frederick Treves, and notes by Mr. W. Marriott, of the Royal Meteorological Society, and other experienced Observers.

The storm was remarkable, even amongst summer thunderstorms, for the narrowness of the tract where its effects were produced, and we were much impressed by watching from the slopes of the Chilterns, east of High Wycombe, the dense blackness of the clouds lying over the Thames Valley, although no rain was falling in that locality, and the day passed without a shower. It will be observed from the map (Fig. 1) that the line of no rain lay, on the average, 5 miles north of the line of 1 inch, which was $1\frac{1}{2}$ mile north of the line of 2 inches, and this in turn was about $1\frac{1}{2}$ mile north of the 3 inch line. On the southern side the falling off of the rain from the centre was equally abrupt. On account of the remarkable concentration of the rainfall we give a map of the London area, but the storm was by no means confined to this district, and rain fell along the whole of the south coast of England, except possibly between Brighton and Littlehampton. The areas with as much as half-an-inch were, however, comparatively limited, the largest stretching from the south-eastern borders of Exmoor to the Isle of Wight. The grouping of the various rain areas was characterized by the linear arrangement so frequently observed in thunderstorm rains, the splashes occurring in three parallel bands running from east to west. (A.) The most northerly band included the London rain area of which the portion with over .50 in. stretched for 39 miles in an east and west direction, from Sydenham to Wokingham, and practically the whole of this lay to the east of the half-inch areas of the central and southern bands. There was also a very slight rainfall around Bath, lying in the line of the London storm. (B.) To the south

of this line a second parallel band included a small rain area round Selborne, in Hampshire, in which rather more than an inch fell, a small half-inch splash lying to the east of Shaftesbury, and a continuous wet strip stretching from Sherborne to Dulverton. Within the latter more than an inch fell round Wellington and nearly 2 inches to the north of Crewkerne. (c.) The third and longest parallel band had its heaviest rain, as did the most northerly band, at its eastern extremity. More than half an inch fell over an area bounded by Chichester, Petersfield, Fareham and Ryde, and in the northern half the rainfall exceeded an

(Fig. 1).

RAINFALL, JUNE 14TH, 1914, IN THE LONDON AREA.



inch, rising to 2 inches in the Bere Forest district. Less than half an inch fell immediately round the Solent, but more than that amount between Lymington and Bridport, between Lyme Regis and Sidmouth, and further west on Dartmoor and Bodmin Moor. More than an inch fell in three small patches in the New Forest, and round Poole and Seaton respectively. It is probable that the appearance of slight rainfall on the south-east coast between Brighton and Dover may be regarded as indicating a continuation eastward of the most southerly parallel band.

Probably a portion of the rain area of the storm lay over the English Channel, and the occurrence of a violent thunderstorm in Paris on the same day suggests that the region affected may have been even wider.

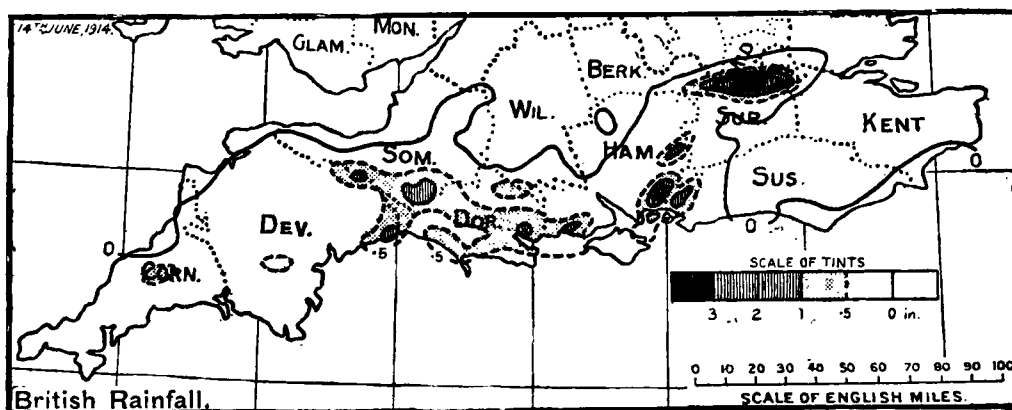
The area over which rain fell during the twenty-four hours ending at 9 a.m. on June 15th, has been measured, with the following results :—

	Area, square miles.	General Rainfall, inches.	Volume of Rain, sq. miles x inches.
More than 3 inches	18	3·22	58
2—3 inches	83	2·46	204
1—2 „	289	1·30	376
·50—1 inch	1,437	·71	1,016
Less than ·50 inch ..	7,335	·18	1,357
Total area with rain.....	9,162		3,011

The general rainfall of the area with rain was ·33 in.

(Fig. 2).

RAINFALL, JUNE 14TH, 1914.



We are anxious not to be led by the appearance of parallel bands on the map into forcing a hypothetical explanation on data which are not altogether unequivocal. It might be suggested by the examination of the map that the arrangement of rain splashes corresponds rather to two diverging lines with the Isle of Wight as a centre, one line running north-eastward to London, and containing all the areas with more than 2 inches of rain, the other stretching westward with no splashes in which much more than an inch of rain fell. The reason which leads us to mention the parallel banding of the storm first as the most probable structure, is the development of the rain-fields worked out by Mr. J. Fairgrieve in the valuable paper which we publish on pp. 48-56.

THE RAIN-FIELDS OF THE THUNDERSTORM OF
JUNE 14th, 1914.

By James Fairgrieve, M.A., F.R.G.S.

THE thunderstorm of June 14th, 1914, achieved a certain amount of temporary notoriety. It was quite a bad storm in the London district and received extra attention, as did that of May 31st, 1911, which was previously studied, because of the fatalities which occurred. The study of the storm was almost forced on the author of the paper. While it occurred he deliberately, in a northern suburb, turned his back on it and took no notes of happenings. He had much to do, and any note of events would at once have made irresistible the temptation to spend what he knew from experience would be much time, which he could not afford, on the investigation. Even so, the accounts which reached him next day themselves proved too much for his firmness of purpose, and the investigation of the rain-fields, or areas on which rain was falling at a given time, of the storm, was undertaken. The method was that already described (*British Rainfall, 1911*, p. 33; *Quart. Journ. R. Met. Soc., April, 1912*), and consisted of ascertaining the places at which rain was falling at each quarter of an hour during the progress of the storm. Information was collected from all and sundry, including many Observers who contribute to *British Rainfall*. The records at the Meteorological Office and Camden Square were also placed at the disposal of the author. He takes this opportunity to thank most cordially all who helped him, for their co-operation.

Though the storm happened on a Sunday, when the average Londoner or Briton does not work so closely "to time" as on the other days of the week, the data obtained were remarkably accurate. The human element comes into rainfall observing as into all else. Ladies could tell when it rained because they remembered they did not change their dresses for church as it "looked threatening." At one place lunch was taken in from the garden, at another tea was not set out. Children were sent away from afternoon Sunday school. In the evening audiences were small or congregations trooped home. Even on a Sunday, train times

were helpful in fixing times of rainfall; the Londoner's inveterate habit of travelling was of considerable service.

The reports received varied greatly in value. Altogether some 600 were used, excluding those which gave only the amount of rain or said there was none. These reports referred to places very widely distributed. At first information was sought only as to facts in the London area, but it soon became evident that the investigation would be of much more value could it be extended to include, though in less detail, phenomena which occurred over the whole of the south of England.

Maps were made to show the distribution of rainfall in the Metropolitan area, for each quarter of an hour during the storm. Reductions of every alternate map are reproduced herewith, thus giving the rain-field for each half hour (pp. 50-51). They are probably quite accurate on the scale adopted (14 miles to an inch). Outside the London area the maps, also made for every quarter of an hour, are not quite so accurate, but they show in a general way the succession of events. Only those for the hours from 1 p.m. to 6 p.m. are here reproduced. The areas where rain is known to have been falling at those hours is shown in black, and the area over which rain was probably falling is distinguished by a lighter tint. Where the actual boundary of the rain-field is fairly certain it is shown as a continuous line, otherwise by a broken line. It should be said that the line probably includes some areas where rain was not falling as it is fairly certain that the outlines of the rain areas of a thunderstorm at any given time are much more irregular than is indicated. That is to say the actual rain areas at any one time are probably smaller than is shown at that time.

The London Storm.—Summarising what the maps show, it may be said that (i.) Over London for some two hours, from 10.15 a.m. to 0.15 p.m., small isolated falls of rain occurred, first in one place and then in another. (ii.) From 0.15 p.m. to 0.45 p.m. these rain areas increased in size and number, and by 1 p.m. were taking the form of an irregular band stretching east and west roughly parallel to the Thames, and on the whole south of it, in the Metropolitan area, though the isolated rains had been fairly evenly distributed north and south. On the 1 p.m. map (p. 52) the band seems crossed by other bands roughly from north-east to south-west; an extension to the west in the direction of the axis was evident on the 1.15 p.m. map. (iii.) This westward extension continued for some hours so that by 4 p.m. the rain area stretched from Lewisham on the

RAIN-FIELDS, JUNE 14TH, 1914. LONDON AREA.

Fig.

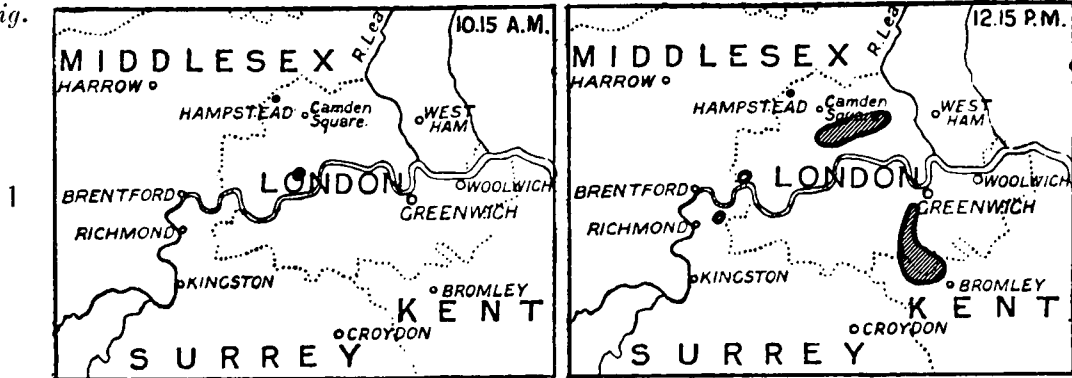
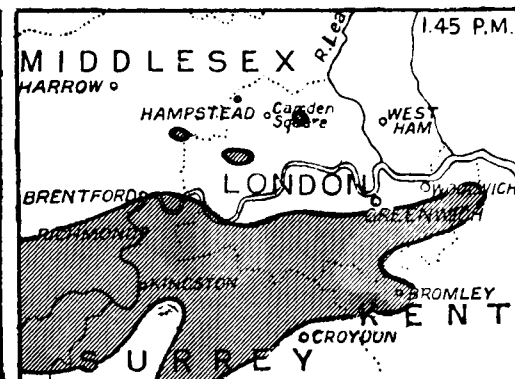
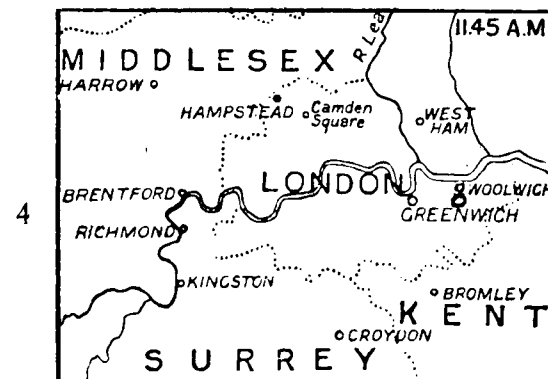
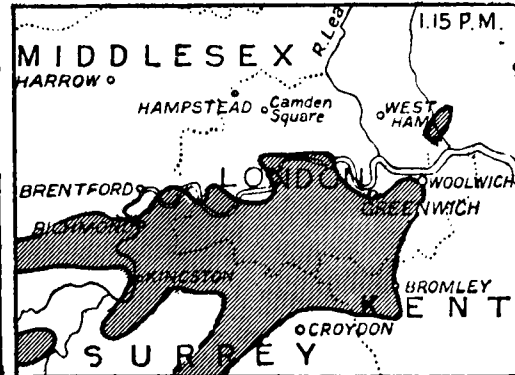
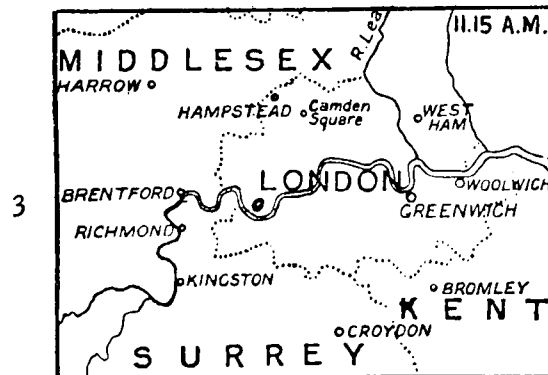
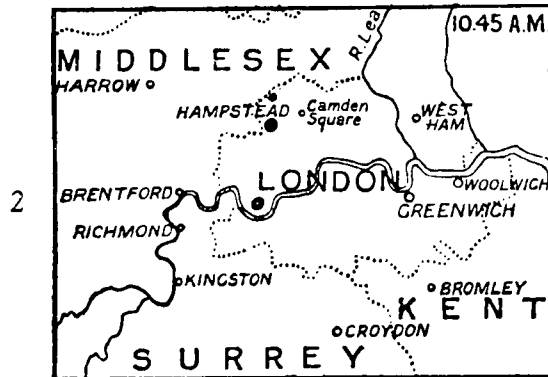


Fig.



B.R. 1914.

0 5 10 15 MILES 20

RAIN-FIELDS, JUNE 14TH, 1914. LONDON AREA.

Fig.

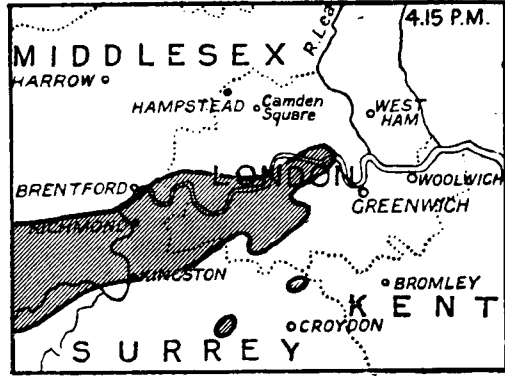
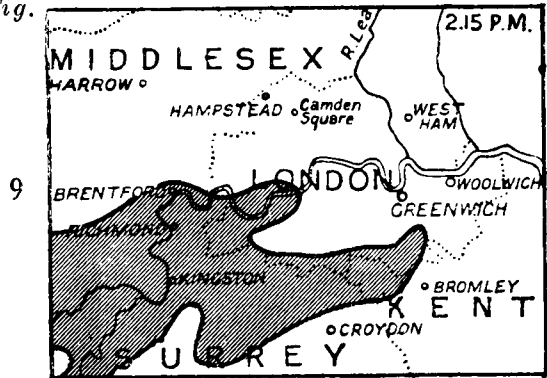
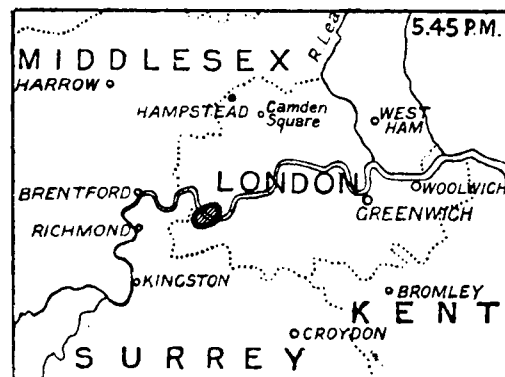
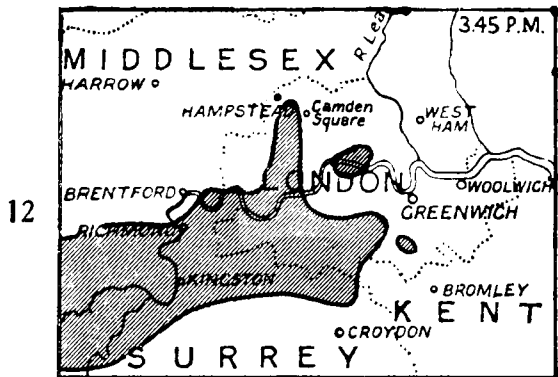
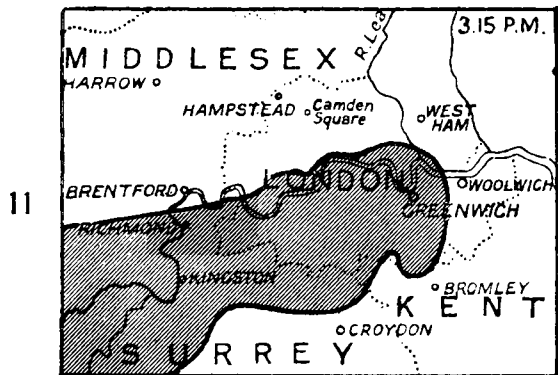
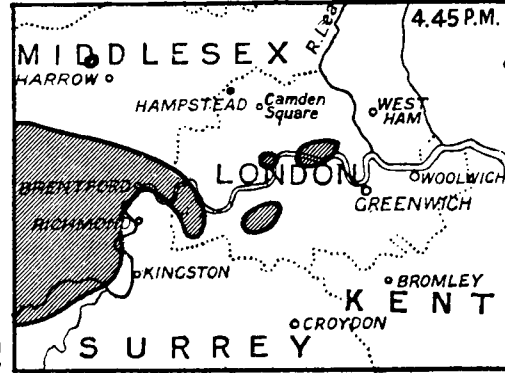
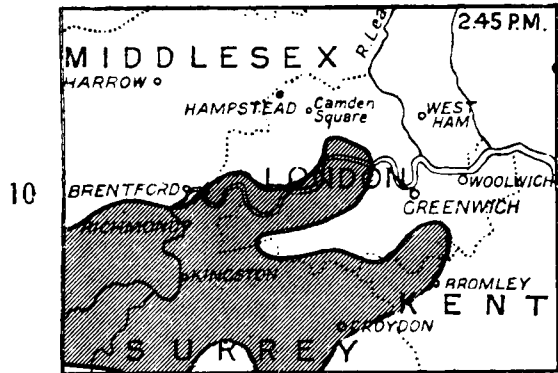


Fig.

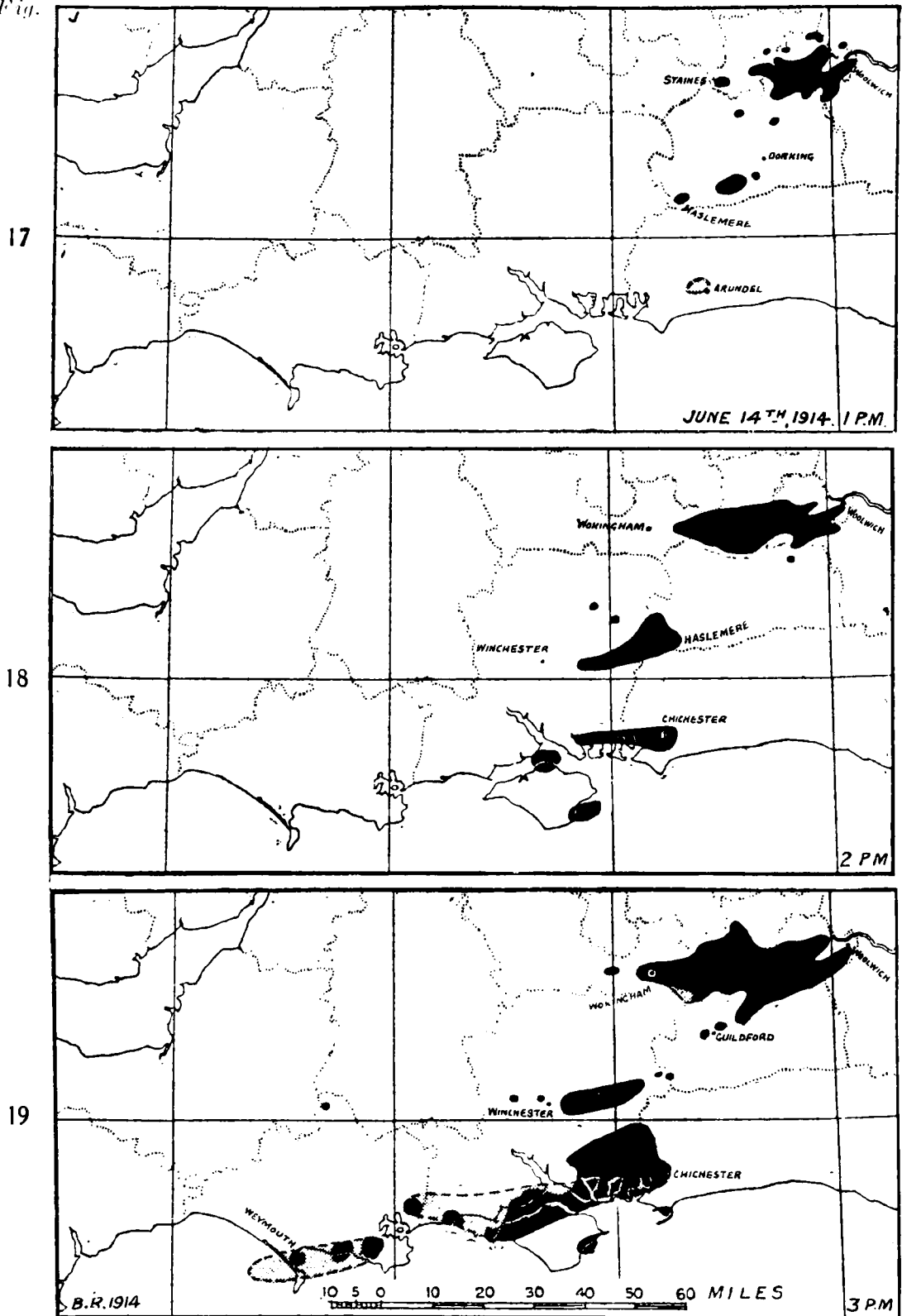


B R 1914.

0 5 10 15 MILES 20

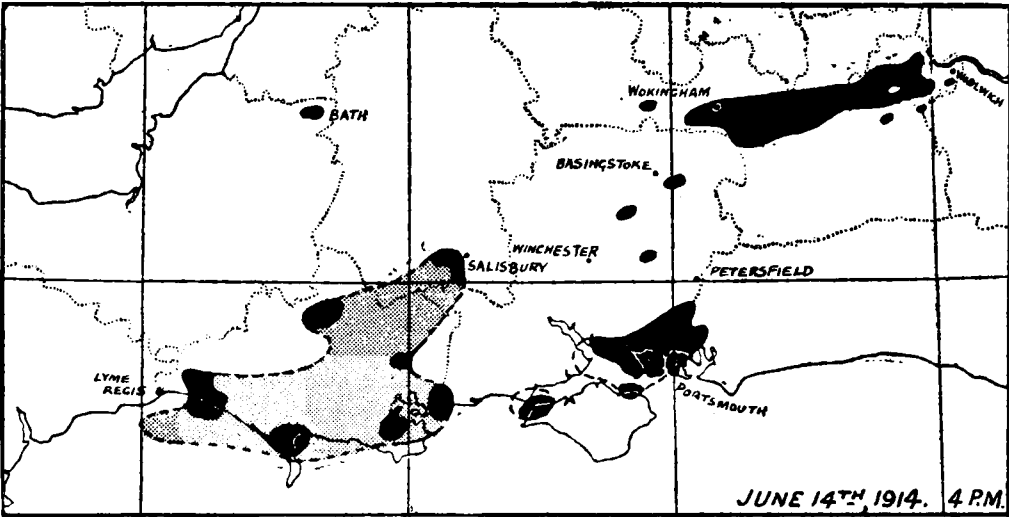
RAIN-FIELDS, JUNE 14TH, 1914.

Fig.

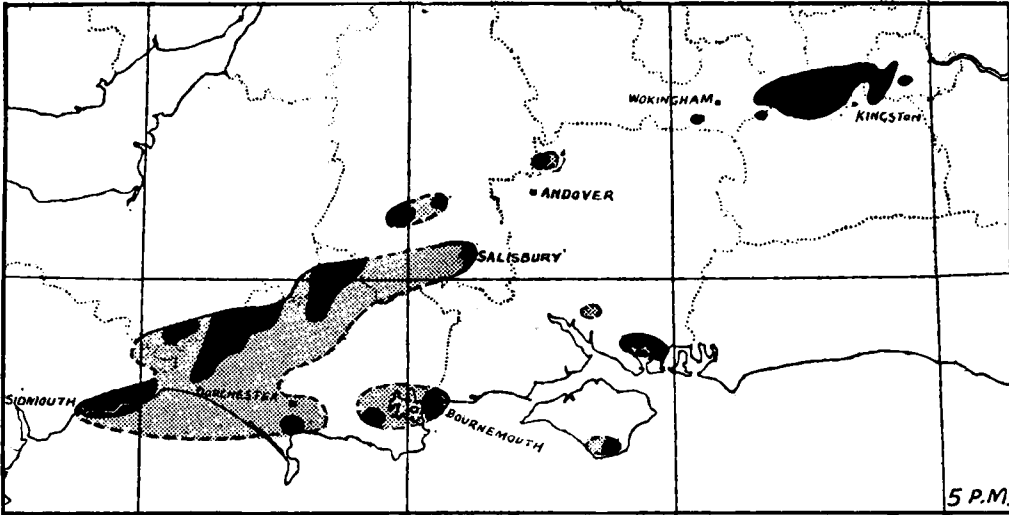


RAIN-FIELDS, JUNE 14TH, 1914.

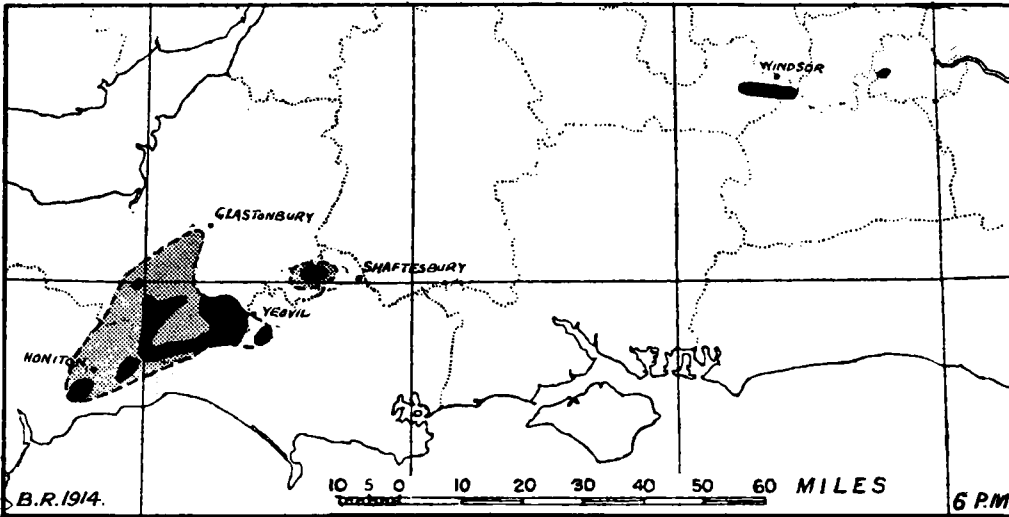
Fig.



20



21



22

east to a point about 5 miles south of Reading on the west (see fig. 20 p. 53). By 4 p.m., the time of greatest extension, the storm had, however, already ceased in the extreme east; that is, we may say that the storm as a whole had moved westward. (iv.) Thereafter the rain-field gradually shortened, but the shortening took place more quickly on the east than on the west, so that by 6 p.m. all that was left was a narrow band south of Windsor and a smaller area in the Chiswick district.

Two features deserve notice; (a.) A certain banding across the main east and west direction has been referred to as being evident about 1 p.m. The direction of the banding is perhaps rather E.N.E. to W.S.W. than N.E. to S.W. This cross-banding continued to develop till at 1.45 p.m. the rain area was almost divided into two parts, a south-eastern and a north-western, the south-eastern edge being remarkably straight. The north-eastern limb had pushed out in the direction of Woolwich. (b.) About 2 p.m. from the north-western limb of the western storm another rain area pushed out. This was accompanied at first by a collapse of the eastern band, but by 3 p.m. the latter had again stretched out, leaving an area with little or no rain between. By 3.15 p.m. the northern part of the storm had become the more important, the rain had almost ceased on the south and cross-banding grew less noticeable.

South of England.—The London storm acquires considerably more interest when it is considered in connection with the events which took place over the rest of the south of England. It is evident from the maps that the phenomena were repeated in storms which took place to the south. These also occurred in bands practically parallel to the London storm. They moved westward, and extended to the north, and if the cross-banding and the division into parallel lines are less noticeable, it is possible that this is due to the lack of sufficient observations. There is certainly some indication of the existence of both phenomena.

The times and places at which these storms first appeared seem also to have some significance. (a.) About 0.45 p.m., when the London storm was reaching the end of its second stage, rain began to fall on the east of Hindhead, and a short time thereafter rain was falling on another area to the east, in the neighbourhood of Leith Hill. This latter fall died out, but the Hindhead rain-field continued to grow and drove westward parallel to the London storm. From the axis of the one to the axis of the other the distance was 20 miles. (b.) Some little time after rain began to fall on Hindhead rain also commenced somewhere south of the

South Downs, in the neighbourhood of Arundel, or between Arundel and Chichester. It also extended westward on a line parallel to the other two. From the axis of this storm to the axis of the Hindhead storm the distance was about 20 miles.

Further west than Southampton the succession of events is less clear, owing to the paucity of observations, but it is fairly certain that the Hindhead rain-field never attained any great size and died out by 4 p.m., while the Chichester storm extended farther west and continued longer before coming to an end. On the line of each of these storms however, rain fell farther west still, but the outline of the rain areas is very doubtful. In the result, and allowing for all errors, it is quite plain from a comparison of the maps for 1, 3, 5, and 6 p.m., that the disturbance was transferred in a west-south-westerly direction to Dorset. Movement westward still continued for rain fell in West Somerset and North Devon between 6 and 8 p.m., in Mid- and South Devon between 9 p.m. and 10 p.m., in Cornwall between 11 p.m. and 1 a.m., and in the Scilly Isles later still.

Comparison with the Storm of 31st May, 1911.—If the result of this investigation be compared with that of the thunderstorm on May 31st 1911, it will be seen that there are some remarkable resemblances and some no less remarkable differences. The curious linear arrangement of thunderstorm rains has often been remarked and when the author has been asked what the results of his investigation have been the enquiry has usually taken the form "Does a thunderstorm move end-ways or sideways?" The answer is difficult to give. One can scarcely generalize from two investigations, but it may be suggested that there are four movements.

(1.) Lengthways, in the direction of the axis, The front end seems to be quite narrow, of the order of a mile wide for some distance from the apex. Sometimes an isolated rain area appears ahead of the front of the main storm and as a rule this eventually joins the main storm, but after the disturbance has reached its maximum a separate rain-area may appear on the line without being absorbed. An example of this is seen on the map for 4 p.m., where rain is marked as falling near Bath.

(2.) Sideways as a spread. This is noticeable between 0.30 and 3 p.m., when the London storm spread southwards (*Figs. 6-10*).

(3.) Sideways as a transference to a line on the side opposite to the "spread," the former storm then dying out. This occurred in 1911, about 7 p.m.

(4.) Sideways as a development. Apparently quite independent storms develop on lines, in 1914 some 20 miles distant, and run similar courses. This seems to take place on the same side as the "spread."

It should be noticed that these are no more than suggestions and that they apply only to summer thunderstorms. Further it should be noticed that, apart from the main storms, small isolated falls of rain occur over a wide area which is in some way affected by the disturbance. This disturbed area itself is a band which includes all the large storms occurring at the time. The cross banding observed in individual storms may have some relation to this fact.

In the manner of beginning and ending there are some differences between the storms of May 31st, 1911 and of June 14th, 1914, but it is doubtful whether they are of importance. In 1911 the storm appeared to grow steadily from one nucleus, while in 1914 not only were there falls of rain before the storm finally took shape, but the falls occurred for something like two hours before anything of the nature of a thunderstorm began. This may be due to the fact that in 1911 the beginning took place in an area where there were few Observers and slight falls might not have been reported, while in the London district it is probable that in 1914 every shower, however slight, was recorded. As to the ending the agreement is sufficiently close to justify the assertion that a thunderstorm or a thunderstorm belt comes to an end by splitting up into a number of detached rain areas. It is possible also that this line of rain areas may extend beyond the limits of the original belt. In this connection the map for 5 p.m. is suggestive.

In two respects the storms of 1911 and 1914 did not agree. (1.) In 1911 the direction of the axis of the storm changed from N. and S. to N.E. and S.W., while in 1914 it seems to have kept the original E. and W. direction throughout, though a comparison of the 1.15 p.m. map with that for 4.15 p.m. seems to indicate some kind of rotational movement.

(2.) In the storms of both 1911 and 1914 the general wind direction over England was the same, yet the axial direction in the one case was N. and S., and in the other E. and W. This seems to suggest that, while the surface winds may act as triggers, the main features of the storm do not depend on surface winds. Rather the direction of the surface winds when the storm is started seems to be controlled by the storm.

METEOROLOGICAL OBSERVATIONS AT CAMDEN SQUARE, LONDON, IN 1914.

SHADE TEMPERATURE.

1914.	MEAN DAILY.			MAXIMUM DAILY.						MINIMUM DAILY.					
	1914.	Diff. from Average.	Mean.	Diff. from Average.	Highest Reading.	Date.	Lowest Reading.	Date.	Mean.	Diff. from Average.	Highest Reading.	Date.	Lowest Reading.	Date.	
January	38.2	—0.3	42.4	—0.9	55.6	9	33.7	20	33.7	—0.1	50.4	10	20.9	24	
February	44.5	+4.8	51.1	+5.6	59.1	14	43.9	25	38.5	+3.8	49.4	15	29.4	27	
March	44.2	+2.1	51.1	+1.1	65.5	31	38.7	20	37.9	+2.5	49.1	31	28.4	11 & 22	
April	51.8	+3.7	62.6	+4.7	76.2	21	52.1	7	41.6	+1.9	50.7	25	34.4	26	
May	55.2	+1.2	65.5	+0.9	82.9	22	49.7	9	45.4	+0.8	57.6	23	37.7	26	
June	61.7	+1.6	73.9	+3.1	89.0	30	61.0	8	50.8	+0.1	61.1	30	41.5	8	
July	64.4	+0.9	74.6	+0.3	93.7	1	65.1	29	55.6	+1.4	67.8	2	47.3	30	
August	64.2	+1.9	75.5	+2.8	85.5	24	66.6	8	54.7	+1.3	60.7	1 & 10	47.1	8	
September	57.9	+0.2	69.6	+2.2	81.6	7	57.0	20	48.7	0.0	60.8	1	35.5	30	
October	52.0	+1.9	59.6	+1.9	68.5	1	53.6	28	45.7	+2.0	52.2	25	34.7	12	
November	45.1	+1.6	51.0	+1.9	61.3	5	38.1	20	39.9	+1.7	50.3	3	29.7	18	
December	42.4	+2.7	47.0	+2.7	55.6	2	37.7	23	37.6	+2.6	47.9	1	28.7	23	
YEAR	51.8	+1.8	60.3	+2.2	93.7	July 1	33.7	Jan. 20	44.2	+1.5	67.8	July 2	20.9	Jan. 24	

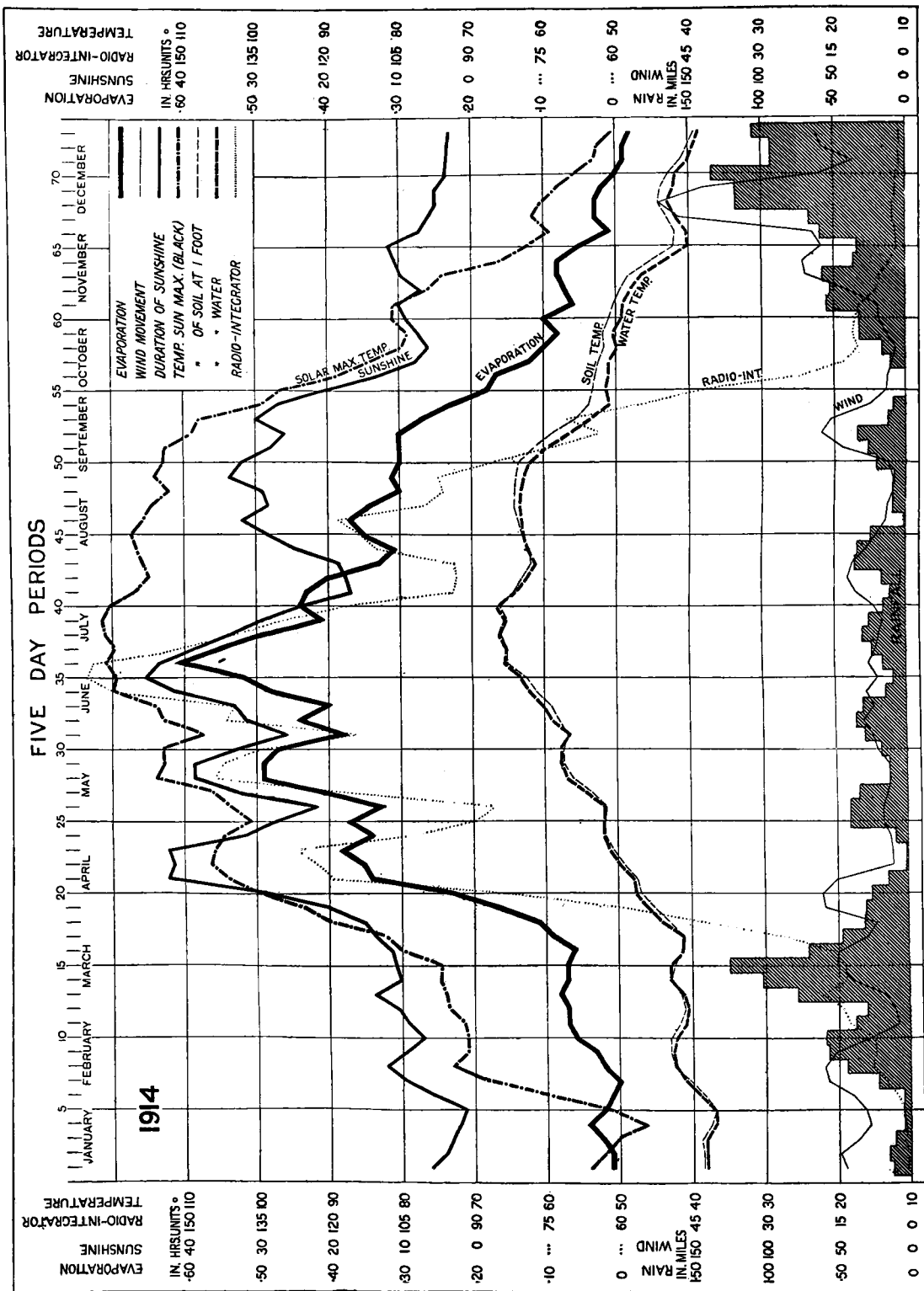
These Tables of meteorological observations are compiled from the readings taken at 9 a.m. and 9 p.m. The average, when quoted, is in every case for the 50 years 1860-1909. The rainfall is from the 8-inch rain gauge of the Meteorological Office pattern ; the radiation temperature from a black-bulb maximum thermometer *in vacuo* at a height of 4 feet above the ground, and from a link-bulb minimum thermomometer laid on short

METEOROLOGICAL OBSERVATIONS AT CAMDEN SQUARE, LONDON, IN 1914.

1914.	RAINFALL.						Evapor- ation.	RADATION TEMPERATURE.		Radio- Integra- tor.	SUNSHINE.		EARTH TEMPERATURE.		
	Total duration.	Max. dura- tion in one day.	Total amount.	Diff. from Average.	Max. amount in one day.	No. of Rain Days.		Mean max. in Sun. Black bulb.	Mean min. on Grass.		Total duration.	Max. in one day.	Mean at 1 foot.	Mean at 4 feet.	Mean at 10 feet.
January.....	24.7	8.8	.55	-1.45	.16	12	.09	51.8	28.8	7.4	15.7	2.5	37.8	43.6	49.9
February.....	55.9	9.6	2.37	+ .77	.47	14	.24	71.6	34.2	47.6	56.6	5.8	42.2	43.5	48.1
March.....	102.4	15.9	4.51	+2.76	.72	25	.52	78.8	33.8	129.0	78.5	9.2	41.9	43.8	47.2
April.....	19.6	4.4	.81	- .81	.19	9	1.84	102.9	35.6	629.5	211.8	11.9	48.6	45.9	46.9
May.....	19.6	4.8	1.74	- .11	.90	8	2.56	107.8	40.6	709.7	187.1	12.8	54.5	50.1	47.4
June.....	17.6	4.2	1.15	-1.17	.19	12	2.93	116.8	48.5	954.4	236.6	12.2	60.7	54.3	48.9
July.....	28.7	11.1	1.26	-1.10	.34	15	2.72	118.2	52.5	704.0	150.2	11.7	64.8	58.8	50.8
August.....	21.9	5.7	1.24	-1.11	.52	9	1.99	115.5	50.6	645.3	167.5	10.8	63.3	59.3	52.8
September.....	16.3	6.2	1.00	-1.19	.18	9	1.68	108.3	44.7	422.5	176.6	10.0	58.5	58.9	53.8
October.....	31.0	5.6	1.25	-1.38	.28	13	.70	83.3	41.6	82.5	56.6	7.3	51.8	54.5	53.8
November...	58.4	12.6	3.52	+1.18	.70	18	.28	66.5	36.2	22.4	49.2	5.9	45.1	50.8	53.0
December...	117.5	15.1	6.34	+4.21	1.40	24	.05	56.1	33.8	10.4	26.9	4.5	42.1	46.7	51.5
YEAR.....	513.6	15.9	25.74	+ .60	1.40	168	15.60	89.8	40.1	4364.7	1413.3	12.8	50.9	50.9	50.3

grass and freely exposed to the sky. The radio-integrator was described in *British Rainfall, 1907*, p. 44. Earth temperature is taken by spirit thermometers suspended in iron tubes of 1 inch internal diameter driven into the soil. They are read once daily at 9 a.m. The shade temperature is from thermometers on a Glaisher stand, the mean daily temperature being the mean of the maximum, minimum, 9 a.m., and 9 p.m. readings.

EVAPORATION FROM A WATER SURFACE AND OTHER METEOROLOGICAL PHENOMENA.



EVAPORATION AND PERCOLATION IN 1914.

WE are glad to be able this year to make some additions to the tables of evaporation, though these are still very far from being representative of the British Isles. The new records include one at New Malden and another at Worstead, in Norfolk. Unfortunately neither of these is made with a standard tank, but we believe that they may be accepted as reasonably comparable. We understand that the instrument used at New Malden is an 8 inch copper evaporimeter, surrounded by water in an outer vessel 14 inches in diameter, and that the tank at Worstead is 2 ft. 6 in. square, instead of the standard six feet. We also print imperfect records taken with standard tanks at Billingshurst and Southport. The former of these two records was, unfortunately, interrupted by the Observer joining the army at the outbreak of war, and the latter was supplementary to the existing record kept by Mr. Baxendell with a 3 foot tank, and was obtained from the standard tank recently removed from Downholland and temporarily installed by the side of the other. The only record printed in *British Rainfall, 1913*, which does not appear again is that at Harlow Moor, near Harrogate, which was accepted as having been observed by a standard tank under a misapprehension, it having been as a matter of fact obtained from a small evaporimeter, and therefore, not comparable with the observations by standard instruments.

There is no change in the list of stations giving records of percolation, and we print these in the usual form. It will be observed that at no station did any appreciable percolation occur at a depth of 3 feet during the long dry summer, but that, as might be expected, a large proportion of the heavy rainfall of March, November, and especially December, passed into the soil. In the last named month it is quite clear that at some of the stations water remained in the gauges and will be included in the January totals, thus giving a false impression of the loss by evaporation during the early winter. This was noticeably the case at Timsbury, where only 5.08 in. out of the total of 15.63 in. of rain which fell during the last three months of the year, passed through the gauge. It is

obvious that the residue of 10·55 in. cannot have evaporated at that season. This is undoubtedly one of the defects of the percolation gauge as a measure of evaporation, and in order to obtain a clear idea of the latter it is necessary to study percolation records in conjunction with evaporation observations from a free water surface.

The amount of evaporation at Camden Square during 1914 was almost exactly equal to the average of 29 years, and in no month was there any marked deviation from the average. We give for the tenth successive year a detailed diagram showing the results of various meteorological observations at Camden Square, in their relation to the amount of observed evaporation. The curves are plotted for periods of 5 days, and the means or totals for each pentad are, as before, smoothed by averaging

Evaporation at Camden Square, 1885-1914.

	Jan. in.	Feb. in.	March. in.	April. in.	May. in.	June. in.	July. in.	Aug. in.	Sept. in.	Oct. in.	Nov. in.	Dec. in.	Total. in.
1885.	·20	·38	·86	1·71	1·98	2·77	3·29	2·25	1·13	·77	·17	·11	15·62
1886.	·23	·13	·53	1·59	1·78	2·93	3·12	1·86	1·46	·63	·27	·12	14·65
1887.	c·07	·29	·76	1·72	1·79	3·68	3·76	2·54	1·25	·78	·21	·07	16·78
1888.	·07	·37	·48	1·16	2·71	2·24	1·44	1·90	1·17	·60	·43	·03	12·60
1889.	·03	·18	·62	1·07	1·76	2·97	2·34	1·96	1·52	·42	·29	c·13	13·03
1890.	·08	·19	·50	1·44	2·63	2·14	2·33	2·02	1·27	·79	·31	·04	13·74
1891.	·03	·16	·73	1·35	1·66	2·83	2·34	1·67	1·00	·62	·20	·22	12·81
1892.	·05	·09	·60	1·88	2·65	3·05	2·84	2·20	1·01	·36	·02	·20	14·95
1893.	c·03	·01	·92	2·33	3·06	3·62	3·12	2·85	1·48	·70	·11	·01	18·18
1894.	c·04	·28	·83	1·17	2·10	2·48	2·49	1·91	·97	·37	·20	·11	12·87
1895.	·14	·64	·36	1·26	3·06	3·31	3·07	2·12	1·27	·54	·19	·07	16·03
1896.	·16	·24	·64	1·57	3·06	3·21	3·63	1·96	·68	·47	·18	·00	15·80
1897.	·23	·21	·76	1·23	2·99	2·48	3·60	2·49	·99	·63	·26	c·14	15·73
1898.	·19	·37	·51	1·28	1·56	2·10	2·96	2·53	1·73	·45	·11	·16	13·95
1899.	·04	·28	·52	1·24	2·34	3·67	4·03	3·78	2·01	·45	·41	·11	18·88
1900.	·03	·16	·80	1·46	2·35	2·85	4·25	2·61	1·61	·89	·24	·15	17·40
1901.	·13	·24	·60	1·98	3·25	3·85	3·37	3·19	1·42	·64	·31	c·05	18·93
1902.	·16	·15	·71	1·75	1·78	2·33	3·30	1·71	1·47	·69	·28	·27	14·60
1903.	·26	·39	·97	1·57	2·24	2·79	3·35	2·53	1·51	·86	·29	·12	16·88
1904.	c·09	·26	·54	1·68	1·81	3·32	4·06	2·86	1·20	·50	·26	·02	16·42
1905.	·17	·35	·65	1·14	3·19	2·49	3·65	2·23	1·24	·78	·09	·16	16·14
1906.	·06	·21	·73	1·90	1·90	3·53	3·65	3·46	2·38	·78	·27	·16	19·03
1907.	·21	·38	1·02	1·27	1·93	2·47	2·65	2·24	1·72	·49	·27	·19	14·84
1908.	·05	·27	·56	1·32	2·23	3·77	2·75	2·47	1·25	·48	·29	·14	15·58
1909.	·14	·30	·30	1·85	2·93	1·70	2·60	2·23	·84	·76	·17	·16	13·98
1910.	·22	·17	·80	1·43	2·52	2·57	2·00	2·12	1·42	·76	·19	·10	14·30
1911.	·15	·32	·59	1·77	2·58	3·34	4·60	3·19	1·96	·64	·37	·02	19·53
1912.	·24	·16	·79	2·34	2·44	2·49	2·55	1·69	1·41	·39	·33	·12	14·95
1913.	·10	·32	·77	1·25	2·49	3·13	2·15	2·09	1·07	·61	·36	·32	14·66
Average	·11	·26	·67	1·54	2·37	2·90	3·08	2·37	1·36	·62	·24	·10	15·62
1914.	·09	·24	·52	1·84	2·56	2·93	2·72	1·99	1·68	·70	·28	·05	15·60
Diff.	—·02—	—·02—	—·15	+·30	+·19	+·03	—·36	—·38	+·32+	+·08+	+·04—	—·05	—·02

NOTE.—c indicates condensation.

each with those on either side of it. A feature of the year was the unusually small wind-movement which persisted until December, and the fact that this does not appear to have had any appreciable effect in reducing the amount of evaporation which was as usual closely related to the duration of sunshine and temperature curves. The most marked abnormality was the double minimum of evaporation in May and June, clearly traceable to the want of sunshine during parts of each of those months.

In the general table of evaporation it will be observed that the total was in excess of the average of the last 7 years at all stations where such an average is available, except Otterbourne, where there was a very trifling deficiency. The largest total was registered at Isfield, with 22·11 in., followed closely by Croydon, with 21·64 in., and the smallest, 14·49 in., at Edinburgh. There appears little doubt that 1914 must be classed as a year of generally large evaporation. This is, of course, due to the dryness of the summer months in practically all parts of the country, and to the fact that no evaporation records were available from the west of Scotland or Ireland, where alone the rainfall of the summer reached the normal amount.

It is interesting to note that, broadly speaking, the amount of evaporation is greater at the more southerly stations than at those in the north, an effect which the obvious dependence of evaporation on temperature and duration of sunshine leads one to expect. The close connection between evaporation and duration of sunshine has frequently been referred to in discussing the diagram of the Camden Square meteorological records. The duration of sunshine for 1914 is available for only three of the stations, and although we do not claim any value for the numerical coefficient (which is certainly not the same for every year) the relation of evaporation in hundredths of an inch to total duration of sunshine in hours at the three stations in question is almost identical. The figures are

			Evaporation in.				Duration of Sunshine hours.				Sunshine Evaporation.
Camden Square	...	...	15·60	...	...	...	1413	...	...	...	·91
Isfield	...	...	22·11	...	...	...	2019	...	...	...	·91
Southport	...	...	17·39	...	...	...	1541	...	...	...	·89

Table of Rainfall, Percolation and Calculated Evaporation at Park Hill House, Stanhope Road, Croydon. Mr. Baldwin Latham, M.Inst.C.E.

NOTE.—The percolation gauges are covered with a natural growth of grass.
Size of percolation gauges 3 ft. square and 3 ft. deep.

1914	Rainfall. Level of Gauge 265·00 ft above O.D.	Percolation Gauge. <i>Chalk</i> . Level of Gauge 264·00 ft. above O.D.		Percolation Gauge. <i>Gravel</i> . Level of Gauge 264·00 ft. above O.D.	
		Percolation.	Calculated Evaporation.	Percolation.	Calculated Evaporation.
	in.	in.	in.	in.	in.
January	·74	·637	·10	·505	·23
February	4·14	3·508	·63	3·407	·73
March	4·46	3·568	·89	3·322	1·14
April	·95	·485	·47	·254	·70
May	1·11	—	1·11	·017	1·09
June	1·04	—	1·04	·003	1·04
July	1·91	—	1·91	—	1·91
August	1·89	—	1·89	·047	1·84
September	·74	—	·74	·009	·73
October	1·46	—	1·46	—	1·46
November	4·03	—	4·03	1·028	3·01
December	8·03	6·260	1·77	7·442	·59
Total	30·50	14·458	16·04	16·034	14·47

NOTE.—C indicates Condensation.

*Observations made at Park Hill House, Stanhope Road, Croydon.
Mr. Baldwin Latham, M.Inst.C.E.*

1914	Evaporation from 12 in. Evaporator floating in Water.	Condensation in 12 in. Evaporator floating in Water.	Average daily Temperature of Water at 9 a.m. in 12 in. Evaporator floating in Water.	Evaporation from 5 in. Evaporator fully exposed in Air.	Average daily Temperature of Water at 9 a.m. in 5 in. Evaporator fully ex- posed in Air.	Temperature of the Dew Point at 9 a.m.
	in.	in.	°	in.	°	°
January	·24	·020	34·6	·650	39·5	34·7
February	·66	·090	41·2	1·825	41·5	40·7
March	1·01	·060	42·7	2·570	43·9	40·2
April	2·39	—	52·3	5·365	59·7	43·5
May	2·95	—	57·4	5·925	64·0	45·1
June	3·63	—	63·8	7·330	70·0	51·2
July	3·53	—	67·1	5·795	71·0	54·9
August	2·67	—	65·5	5·165	70·5	56·8
September	2·59	—	58·8	4·780	62·6	50·7
October	1·03	—	51·2	1·865	51·7	48·3
November	·70	·030	43·5	1·245	43·0	41·4
December	·55	·110	40·6	·735	39·9	39·3
Totals	21·95	·310	...	43·250	...	...
Means .....	...	...	51·6	...	54·8	45·6

Table of Rainfall and Percolation at the South Hants Water Company's Pumping Stations, at Timsbury and Twyford, Hants. Mr. D. Kitchingman, M.Inst.C.E.

NOTE.—The percolation gauges are covered with a natural growth of grass.
Size of percolation gauge 3 ft. square and 3 ft. deep.

1914.	TIMSBURY.			TWYFORD.		
	Rainfall. Level of Gauge 96·39 ft. above O.D.	Percolation Gauge. <i>Chalk.</i> Level of Gauge 89·75 ft. above O.D.		Rainfall. Level of Gauge 138·72 ft. above O.D.	Percolation Gauge. <i>Chalk.</i> Level of Gauge 137·49 ft. above O.D.	
		Percolation.	Calculated Evaporation.		Percolation.	Calculated Evaporation.
	in.	in.	in.	in.	in.	in.
January	·51	·21	·30	·71	·48	·23
February	4·52	4·33	·19	5·40	5·51	c ·11
March	4·31	3·39	·92	4·41	3·75	·66
April	1·39	·98	·41	1·26	·87	·39
May	1·14	·01	1·13	1·31	—	1·31
June	·24	·01	·23	·35	—	·35
July	3·01	·01	3·00	2·95	—	2·95
August	2·88	·01	2·87	2·64	—	2·64
September	1·08	·02	1·06	1·33	—	1·33
October	2·42	·02	2·40	2·11	—	2·11
November	4·50	·12	4·38	3·57	—	3·57
December	8·71	4·94	3·77	9·46	9·01	·45
Total	34·71	14·05	20·66	35·50	19·62	15·88

Table of Rainfall and Percolation at Windwhistle House, Grayshott, Hampshire. Mrs. Lyndon.

660 feet above Sea Level. Gauge 3 ft. × 3 ft. × 3 ft.

1914	Rainfall.	Percolation.	Calculated Evaporation.
	in.	in.	in.
January	·82	·77	·05
February	6·41	6·69	c ·28
March	5·30	4·77	·53
April	1·74	1·60	·14
May	1·30	—	1·30
June	1·08	—	1·08
July	2·63	—	2·63
August	1·67	—	1·67
September	1·61	—	1·61
October	2·31	—	2·31
November	4·54	1·69	2·85
December	11·32	11·39	c ·07
Total	40·73	26·91	13·82

NOTE.—c indicates condensation.

Table of Rainfall, Percolation and Calculated Evaporation at Rothamsted Experimental Station, Harpenden.

Mr. E. J. Russell, D.Sc.

Altitude 420 feet.

1914.	Rainfall.	PERCOLATION AND CALCULATED EVAPORATION THROUGH SOIL.					
		20 in. deep.		40 in. deep.		60 in. deep.	
		Percolation.	Calculated Evaporation.	Percolation.	Calculated Evaporation.	Percolation.	Calculated Evaporation.
	in.	in.	in.	in.	in.	in.	in.
January	·84	·677	·16	·648	·19	·653	·19
February	3·27	2·936	·33	2·919	·35	2·908	·36
March	4·28	3·489	·79	3·455	·82	3·379	·90
April	1·09	·393	·70	·471	·62	·464	·63
May	1·33	·005	1·32	·028	1·30	·034	1·30
June	1·60	·224	1·38	·264	1·34	·260	1·34
July	1·44	·005	1·44	·015	1·42	·017	1·42
August	1·46	·083	1·38	·084	1·38	·062	1·40
September	1·16	—	1·16	—	1·16	—	1·16
October	2·32	1·056	1·26	·989	1·33	·968	1·35
November	2·77	2·394	·38	2·224	·55	2·227	·54
December	7·51	8·141	C ·63	7·934	C ·42	7·667	C ·16
Total	29·07	19·403	9·67	19·031	10·04	18·639	10·43

NOTE.—C indicates condensation.

Table of Rainfall, Percolation and Calculated Evaporation at Rosebank, Berkhamsted, Herts. Mr. E. Mawley, F.R.Met.Soc.

401 feet above Sea Level. Gauge 3 ft. × 3 ft. × 2 ft. 6 in. deep.

1914.	Rainfall.	Percolation and Evaporation. (Soil—disintegrated clay and flints.)			
		Sub-soil Gauge. (Covered with short grass).		Surface-soil Gauge. (Without vegetation).	
		Percolation.	Calculated Evaporation.	Percolation.	Calculated Evaporation.
	in.	in.	in.	in.	in.
January	·85	·702	·15	·734	·12
February	3·08	2·673	·42	2·919	·16
March	4·59	3·716	·87	3·104	1·49
April	1·06	·526	·53	·556	·50
May	1·33	—	1·33	·062	1·27
June	2·68	—	2·68	·930	1·75
July	1·66	—	1·66	·170	1·49
August	1·36	—	1·36	·228	1·13
September	1·15	—	1·15	·176	·97
October	2·26	—	2·26	1·432	·83
November	2·41	·837	1·57	2·171	·24
December	7·99	6·746	1·24	8·085	c ·10
Total	30·42	15·200	15·22	20·567	9·85

NOTE.—c indicates condensation.

Table of Rainfall, Percolation and Calculated Evaporation compared with Evaporation from a Free Water Surface at Harlow Hill, Harrogate. Harrogate Corporation.

Rain gauge and percolation gauge 589 feet above O.D. Gauge 3 ft. × 3 ft.

1914.	Rainfall.	Percolation.	Calculated Evaporation.	Evaporation from Free Water Surface.
	in.	in.	in.	in.
January	1·46	1·53	c ·07	·16
February	1·53	1·10	·43	·66
March	2·64	1·63	1·01	1·61
April	1·12	·75	·37	2·26
May	1·48	·04	1·44	2·56
June	1·91	·06	1·85	3·43
July	4·81	·53	4·28	3·23
August	1·37	—	1·37	2·44
September	1·53	·09	1·44	2·28
October	1·89	·09	1·80	·95
November	3·87	1·94	1·93	·72
December	6·33	4·63	1·70	·77
Total	29·94	12·39	17·55	21·07

EVAPORATION IN 1914.

County Station	London, Camden Square.	Surrey, Croydon, Park Hill Ho.	Surrey, New Malden.	Sussex, Billingshurst, Five Oaks.	Sussex, Isfield Place	Hampshire, Otterbourne
Latitude	51° 32' 20" N.	51° 22' 12" N.	51° 24' N.	...	50° 56' 50" N.	51° 0' 28" N.
Longitude	0 8 10 W.	0 5 32 W.	0 16 W.	...	0 3 40 E.	1 19 55 W.
Altitude	111 ft.	264 ft.	40 ft.	...	41 ft.	112 ft.
Observer	H. R. Mill, D.Sc.	Baldwin Lathan, C.E.	W. J. Carter.	S. C. Russell.	Major H. King.	E. C. Rodda, C.E.
Size of tank	6 ft. × 6 ft.	1 ft. diameter	8 in. diameter	6 ft. × 6 ft.	4 ft. × 4 ft.	6 ft. × 6 ft.
Capacity (galls.)	450	5	...	450	250	450
Height of lip above ground }	3 inches	4 in. above water	3 in. above water	3 inches	3 inches	3 inches
January	in. .09	in. .22	in. .10	in. .15	in. .03	in. .15
February .....	.24	.57	.53	.47	.63	.07
March .....	.52	.95	.89	.86	.89	.45
April	1.84	2.39	1.35	2.52	2.43	2.24
May	2.56	2.95	2.44	...	2.87	2.93
June	2.93	3.63	2.60	...	3.82	3.78
July	2.72	3.53	3.93	...	3.30	3.25
August	1.99	2.67	2.29	...	3.16	2.42
September	1.68	2.59	1.27	...	2.89	2.33
October .....	.70	1.03	.59	...	1.11	.92
November .....	.28	.67	.16	...	.60	.18
December .....	.05	.44	.02	...	.38	.18
Year, 1914...	15.60	21.64	16.17	...	22.11	18.90
Average, 1908-1914 }	15.51	19.89	...	...	19.49	18.99
Difference ...	+ .09	+ 1.75	...	...	+ 2.62	— .09
Year, 1914...	25.72	30.50	26.18	...	32.82	33.17
Average, 1908-1914 }	25.23	29.08	25.92	...	31.46	30.62
Difference ...	+ .49	+ 1.42	+ .26	...	+ 1.36	+ 2.55

EVAPORATION IN 1914—(continued).

County	Norfolk. Worstead	Devon, Torquay W. W., Kennick	Lincoln, Revesby Water Works	Lancashire, Southport, Hesketh Park	Lancashire, Southport, Hesketh Park	Yorkshire, Ardley Reservoir No. 1,
Station .....	...	50° 38' 30" N. 3 41 20 W.	53° 9' N. 0 3 W.	53° 39' 24" N. 2 59 3 W.	53° 39' 24" N. 2 59 3 W.	53° 43' 10" N. 1 33 20 W.
Latitude.....	...	835 ft.	130 ft.	37 ft.	37 ft.	395 ft.
Longitude .....	...	S. C. Chapman, C.E.	J. Shaw.	J. Baxendell.	J. Baxendell.	C. C. Smith, C.E.
Altitude	55	6 ft. × 6 ft.	6 ft. × 6 ft.	3 ft. × 3 ft.	6 ft. × 6 ft.	6 ft. × 6 ft.
Observer	R. Cross.	450	450	112	450	450
Size of Tank	2 ft. 6 in. × 2 ft. 6 in.	3 inches	2 inches	3 inches	3 inches	3 inches
Capacity (galls.)	4 inches					
Hight of lip above ground }						
January	in. ·27	in. 0 ·02	in. ·07	in. ·07	in. ...	in. ·04
February	·66	·03	·49	·40	...	·82
March	1·24	·68	·50	·73	·72	·84
April	2·34	2·71	1·93	2·03	1·86	2·29
May	2·90	3·23	1·89	2·46	2·39	2·27
June	2·74	3·68	2·69	3·25	3·12	3·41
July	2·71	3·47	2·28	3·07	3·02	3·16
August	2·36	2·69	1·94	2·52	2·40	2·32
September	2·16	1·93	1·88	1·89	1·93	2·06
October	1·08	·94	1·72	·67	·65	·72
November	·53	·03	1·30	·22	·24	·18
December	·41	·13	·16	·08	·16	·27
Year, 1914...	19·40	19·50	16·85	17·39	...	18·38
Average, 1908-1914 }	...	18·85	15·01	...	..	17·40
Difference ...	...	+ ·65	+1·84	...	...	+ ·98
Year, 1914...	29·02	51·04	22·80	32·12	32·12	25·55
Average, 1908-1914 }	27·91	44·51	25·31	33·11	33·11	25·22
Difference ...	+1·11	+6·53	—2·51	— ·99	— ·99	+ ·33

Note.—C indicates condensation.

EVAPORATION IN 1914—(continued).

County Station	Yorkshire, Ardsley, Reservoir No. 2, 53° 43' 0" N. 1 33 30 W. 326 ft. C. C. Smith, C.E. 6 ft. × 6 ft. 450 3 inches	Yorkshire, Harrogate, Harlow Hill Res. 53° 58' 30" N. 1 33 30 W. 589 ft. A. S. West, C.E. 6 ft. × 6 ft. 450 flush	Peebles, Talla Water, Victoria Lodge 55° 29' 41" N. 3 25 2 W. 904 ft. Leslie & Reid, C.E. 6 ft. × 6 ft. 450 3 inches	Midlothian, Edinburgh University. 55° 56' 30" N. 3 11 30 W. 240 ft. Prof. T. H. Beare. 6 ft. × 6 ft. 450 3 inches	Mean of Fourteen complete Stations.
Latitude	in. C 09	in. 16	in. 25	in. 00	in. 10
Longitude	52	66	51	18	45
Altitude	58	161	51	55	78
Observer	211	226	230	161	213
Size of tank	208	256	213	232	254
Capacity (galls.)	309	343	323	295	323
Height of lip above ground }	279	323	326	236	307
January	204	244	246	201	238
February	192	228	192	160	203
March	67	95	61	43	87
April	13	72	51	23	41
May	07	77	44	25	26
June					
July					
August					
September					
October					
November					
December					
Year, 1914... Average, 1908-1914 }	1591	2107	1813	1449	1825
Difference ...	...	1869	1763	1424	...
	...	+ 238	+ 50	+ 25	...
RAIN { Year, 1914... Average, 1908-1914 }	2568	2994	5165	2354	3141
Difference ...	...	2913	4799	2531	...
	...	+ 81	+ 366	- 177	...

Note.—C indicates condensation.

THE STAFF OF OBSERVERS.

WHEN, at the beginning of August, 1914, the country was suddenly plunged into war, and the peaceful habits of millions had to be laid aside and replaced by sterner duties, it would hardly have occasioned great surprise if the systematic registration of rainfall had been widely interrupted. We are convinced that the loss of rainfall records, which no future efforts could ever replace, would be, in any circumstances, a calamity, and it is therefore a matter of no small gratification that, even at a time when the nation's demands on the time of all must have the first attention, the number of rainfall records broken or terminated has not been unusually great, and there has been no appreciable falling off in the number of fresh records appearing in our pages. The net increase of 83 is, it is true, smaller than in any year since 1901, but the growth in the number of stations for several years past has been exceptionally great. It is probable that more records than usual, although complete, have failed to reach us, since, rather than run the risk of importuning Observers who may be at the front, or otherwise preoccupied, we have abstained from sending out the usual third applications, except in a very few cases where we had good reason to suppose an oversight had occurred.

We give as usual a short summary of the changes in the numbers of stations in comparison with those of previous years. In this, records which have come to an end are distinguished from those which are only temporarily discontinued or have been omitted from the tables for some other reason, and in the case of the gains, entirely new records are noted separately from those which are reappearing after temporary absence. By this means the real gain for 1914 is seen to be 355, against which must be placed a real loss of 191, leaving a net real gain of 164.

Year.	Total Gain.	Returned.	Real Gain.	Total Loss.	Temporary.	Real Loss.	Net Real Gain.
1906.....	400	58	342	237	40	197	145
1907.....	375	49	326	289	81	208	118
1908.....	444	62	382	251	64	187	195
1909.....	426	89	337	290	87	203	134
1910.....	490	81	409	292	73	219	190
1911.....	502	99	403	304	94	210	193
1912.....	498	81	417	300	120	180	237
1913.....	456	58	348	308	140	168	180
1914.....	432	77	355	349	157	191	164

As usual the changes chiefly affected England where there was a gain of 260 and a loss of 140, but each of the other great divisions of the United Kingdom has made some progress during the year.

1914.	Total Gain.	Returned.	Real Gain.	Total Loss.	Temporary.	Real Loss.	Net Real Gain.
England	310	50	260	249	109	140	120
Wales, &c. ..	39	5	34	29	18	11	23
Scotland	55	14	41	51	20	31	10
Ireland	28	8	20	19	10	9	11
British Isles...	432	77	355	349	157	191	164

In the list, the figures following the name of each county indicate the numbers of records lost and gained, the total number appearing in *British Rainfall, 1914*, and in heavy type the number of records per hundred square miles of area. Instead of encumbering the list with the total numbers for 1913, these are indicated in every case by the letter *a*. In the county of London, for example, $a-4+5=86...74$ means that the number of stations published for 1913, less 4, which did not appear for 1914, and with 5 which appear for the first time, is equal to 86, or 74 to 100 square miles. The commentary on the changes is abbreviated this year in order to save space.

London ($a-4+5=86...74$).—The changes in London are unimportant. We had a good example of the scarcity of rainfall observations in the central area in attempting to construct a map of a recent very local thunder rain, and once more draw attention to the absence of any station in the Boroughs of Islington, Bethnal Green, and Shoreditch.

Surrey ($a-15+24=236...33$).—Of the 24 gains, 20 are entirely new, whereas only 7 records are permanently lost. Among the latter must be counted a valuable high level station at Walton-on-the-Hill, at 570 feet above sea level. Two gauges at Frensham Hall, Haslemere, for which the records for past years have also been sent, and two near Dormans Park, are among the most interesting gains.

Kent ($a-15+15=176...11.5$).—Three records at Tonbridge and two near Edenbridge disappear, the latter, we hope, only temporarily, but we are glad to see some improvement in the North Downs, the record at Highfield Gardens near Shoreham, at an altitude of 700 feet, being particularly useful.

Sussex ($a-10+19=172\dots 12$).—Five of the ten losses are temporary, and there are 18 new records among the 19 gains. Two interesting records on Pevensey Bay and one at Rye are among the latter.

Hampshire ($a-13+15=170\dots 10\cdot5$).—The valuable old records kept by Rev. W. L. W. Eyre at Swarraton and by Dr. Leachman at Petersfield, have been terminated by the death of the Observers. There are two new stations at Winchester, where we have long wished to see them, but otherwise there is little change.

Berkshire ($a-7+10=70\dots 10$).—The loss of records at Wokingham, Sulhampstead and Wantage is to be deplored, and though there is a slight gain in numbers, the county is not better represented than formerly.

Middlesex ($a-7+5=63\dots 27$).—The north-west of the county is still inadequately represented, and it is gratifying to record the discovery of a record extending back to 1902 at Harefield House, complete copies of which have been sent in.

Hertfordshire ($a-4+9=86\dots 14$).—There is a great improvement in the representation of Hertfordshire, and we are especially pleased to have new stations near Little Horne and Welwyn.

Buckinghamshire ($a-5+3=47\dots 6$).—At Speen and at Winchmore Hill we lose two valuable high level stations in the Chilterns.

Oxfordshire ($a-9+10=69\dots 9$).—Most of the losses are temporary and nearly all the gains are new, so that there is some improvement.

Northamptonshire ($a-2+8=72\dots 7$).—There is a substantial and welcome increase in the number of stations, and there is only one permanent loss, but the latter is, we regret to say, one of the oldest and best kept records in England, that at Croyland Abbey, Wellingborough, commenced in 1860 by the late Mr. E. Sharman, and terminated only by his death.

Huntingdonshire ($a-2+0=9\dots 2\cdot5$).

Bedfordshire ($a-0+4=30\dots 6$).

Cambridgeshire ($a-0+6=61\dots 7$).

None of the gains improve the general distribution greatly, but we are glad to record no loss in Bedfordshire and Cambridgeshire.

Essex ($a-8+13=116...8$).—There are a good many changes in this county, and we are very glad to welcome half a dozen new stations in the north-west, where they were badly wanted.

Suffolk ($a-7+4=70...5$).—In Suffolk there is a distinct set-back. Several of the records lost last year have, contrary to expectation, failed again. Among the more important losses are Bishops Hill, Ipswich, commenced in 1872, and Walsham-le-Willows, one of the few records in the centre of the county.

Norfolk ($a-7+4=86...4$).—As in Suffolk the losses outweigh the gains, and unfortunately affect chiefly the north-west of the county, always the most poorly represented.

Wiltshire ($a-4+3=66...5$).

Dorset ($a-4+12=86...9$).—There is a very welcome revival in Dorset, possibly on account of the fact that 1914 was in that county wetter, in relation to average conditions, than in any other part of the British Isles. It is a great pleasure to us to print again in *British Rainfall* the record from Longthorns, which has been resumed. Two of the four losses are directly attributable to the war, and are, we hope, temporary.

South Devon ($a-10+17=158...10$).—Both the losses and gains are fairly numerous. We are glad to regain the old record at the Lee Moor Clay Works on the south-western slopes of Dartmoor, the representation of which is further strengthened by new records at Ashburton and Chagford.

North Devon ($a-3+7=55...6$).—We have received no reply to applications for the record at Hartnolls, where we fear the observations have ceased, and the Observer at Little Silver, near Torrington, being on active service, that record is also not available. These two serious losses are, however, largely counterbalanced by new records at Iddesleigh and Winkleigh, in the same neighbourhood.

Cornwall ($a-13+8=75...5.5$).—It is many years since we have had to record so serious a list of losses in Cornwall, where 13 important records have this year ceased, most of them, we fear, permanently. There are, on the other hand, several very consoling gains among which may be specially mentioned Torracombe Manor, near Morwenstow, and Cardinham, on the south-west of Bodmin Moor.

Somerset ($a-14+12=158...10$).—The losses are numerous, but not extremely serious, except that the termination of the observations at Priddy removes one of the best placed high level stations in the Mendips. Among the gains Wheddon Cross re-appears, the record having been broken by a defect in the gauge, and the high level station at North Ley, near Exford, also returns after five years' absence. Another gain of importance is Otterhead, in the heart of the Blackdown Hills.

Gloucestershire ($a-70+6=110...9$).—We regret to lose again the fine high level station at Colesbourne. Among the gains is Beckford Hall, which has not appeared in *British Rainfall* since 1905.

Herefordshire ($a-2+5=55...6.5$).

Shropshire ($a-5+1=45...3$).—No observations have been possible at Pentreheylin on the Welsh border, one of the most important gains in the county last year, and we also regret the loss of the adjacent record at Baschurch.

Staffordshire ($a-0+6=52...4.5$).—Six entirely new records and no losses are to be placed to the credit of this county.

Worcestershire ($a-3+8=58...8$).—The losses are temporary or unimportant.

Warwickshire ($a-3+7=57...6$).—The increase in numbers in this county continues and it is now among the best represented in the Midlands.

Leicestershire ($a-1+0=43...5$).

Rutland ($a-0+0=8...5$).

Lincolnshire ($a-2+4=87...3$).—Crowland is a very useful addition in the Fenland.

Nottinghamshire ($a-6+1=60...7$).—There has been little progress made in the direction of improving the distribution of stations during the last few years, and although the number per square mile is higher than in most parts of the country, many of the records are kept by public authorities and not by private Observers.

Derbyshire ($a-1+0=117...11$).

Cheshire ($a-2+7=80...8$).—The numbers continue to increase slowly and the great bare patch in the centre is slightly mitigated by the return of the Duddon School record.

South Lancashire ($a-4+3=109...16$).—The only change of importance is the loss of Mr. Baxendell's valuable station at Downholland.

Central Lancashire ($a-2+2=82...15$).—There are no losses or gains of any great moment.

North Lancashire ($a-6+5=65...10.5$).—Three new records in the Furness district and the return of that at Blawith have to be set against the loss of Hawkshead on the southern outskirts of the Lake District.

Yorkshire, West Riding ($a-13+22=348...12.5$).—The losses, which are not numerous for so large an area, are also not serious, several being merely check gauges no longer required. Of the gains we may draw special attention to Horton-in-Ribblesdale, at the foot of Pen-y-ghent, and Selby, in the middle of the great bare district in the lower Ouse valley.

Yorkshire, East Riding ($a-1+0=28...2$).—We still await the awakening of the East Riding to the importance of rainfall observing, which it appears but imperfectly to realize.

Yorkshire, North Riding ($a-8+8=102...5$).—The gains, many of which we owe to the vigilance of Mr. A. J. Walker, of Thirsk, considerably outweigh the losses in importance. Two new records in Wensleydale are especially useful.

Durham ($a-0+1=48...5$).

Northumberland ($a-9+4=60...3$).—Practically all the losses are, we hope, temporary; the most serious being, however, that at Howick Hall. The new record at Humshaugh fills a great gap in the lower North Tyne Valley, and we are glad again to print a record from Stamfordham.

Cumberland ($a-6+5=76...5$).—Staffield Hall in the Eden Valley, and Alston, both give considerable help in determining the rainfall in places of peculiar difficulty, and more than counterbalance the whole of the half-dozen losses.

Westmorland ($a-5+2=55...7$).—There is no change of great importance.

Monmouthshire ($a-4+5=43...8$).—Tredegar, Panteg, and Tintern form three interesting gains in the west, centre, and east of the county respectively.

Glamorganshire ($a-8+4=62...8$).—The records taken on the Bute estate at Aberdare and Treherbert have failed to come in in time for publication, although we understand that they were kept up. We also lose valuable stations in Plas Cil-y-bebyll, Caerphilly and Caes-Newydd, but the last named is in some measure compensated for by the return of Ferndale.

Carmarthenshire ($a-1+2=10...11$).—It will be hard to replace the excellent record at the West Wales Sanatorium at Llanybyther, near Lampeter, and we hope that its loss is not permanent. We add an interesting new record at Laugharne, on Carmarthen Bay.

Pembrokeshire. ($a-3+2=19...3$).—The old record at Castle Malgwyn has at last broken down owing partly we believe, to a change in the garden staff and partly to the detention of Mr. Gower as a prisoner of war in Germany. The recently established station at Mynachlogddu in the Precelly Hills has, unfortunately, lasted a very short time, and the imperfect record for 1914 which we understand was posted to Camden Square early in the year, and which was the only copy extant, never reached us.

Cardigan ($a-0+0=15...2$).

Brecon ($a-2+8=99...13.5$).—Thanks largely to the excellent series of records maintained by the Corporations of Merthyr Tydvil, Cardiff, and Birmingham on the gathering grounds of their respective water works, the number of rain gauges to the square mile is greater in Brecon than in any other county in Wales.

Radnor ($a-0+2=26...5.5$).

Montgomery ($a-2+3=24...3$).

Flint ($a-2+2=15...6$).

Denbighshire ($a-3+2=37...5.5$).

In these four counties the only change of importance is the gain of three records, Llandysilio, Chirk, and Whitehurst, on the English border, which eke out our scanty information as to the great variations of rain-fall in that district.

Merioneth ($a-2+5=14...2$).—Both the losses are, we believe, temporary, and we have five gains all of the first importance, as indeed almost any new station in the county would be, in view of its extremely interesting rainfall distribution and its very poor representation.

Carnarvon ($a-1+2=49...8\cdot5$).—The most important gain is at Madryn Castle, near Pwllheli.

Anglesey ($a-1+0=11...4$).

Isle of Man ($a-0+1=8...3\cdot5$).

Channel Islands ($a-0+1=18$).

Wigtown ($a-0+0=10...2$).

Kirkcudbright ($a-4+0=18...2$).—The loss of Clenerie and of Old Garroch, two of the few stations in the interior, is greatly to be deplored.

Dumfries ($a-1+0=25...2$).

Roxburgh ($a-0+1=14...2$).

Selkirk ($a-0+0=8...3$).

Peebles ($a-3+0=19...5\cdot5$).

Berwick. ($a-1+1=11...2$).

Haddington ($a-1+0=9...3$).

Midlothian ($a-2+2=49...13$).

Linlithgow ($a-0+1=19...16$).

Lanark ($a-2+4=45...5$).

Ayr ($a-4+3=33...3$).

Renfrew ($a-0+0=36...15$).

The changes in the whole of the south of Scotland are inconsiderable, and whilst with the exception of the two stations mentioned in Kirkcudbrightshire, there are no losses of consequence, there is little advance to record. Perhaps the most valuable new record is that at the New Cumnock Power Station, which forms an interesting supplement to the record already received from the Ayrshire Sanatorium.

Dumbarton ($a-3+1=19...7$).

Stirling ($a-1+1=32...7$).

Bute ($a-1+0=5...2$).

Argyle ($a-3+2=69...2$).

In these four counties there is again very little change, but the loss of Millport, the only station in the Cumbraes, and the temporary loss of the invaluable record at Glen Orchy Manse, near Dalmally, and of that at Ladyfield, in Glen Aray, both of which were too imperfect to print, is greatly to be regretted. On the other hand it is gratifying once more to print the record for Drimlie, at the head of Loch Fyne. Part of the year's record at Stronshira is also extant.

Clackmannan ($a-1+0=4...7$).

Kinross ($a-0+1=4...5$).

Fife ($a-0+3=36...7$).

Perthshire ($a-3+9=53...2$).

Forfarshire ($a-1+3=38...4$).

The representation of the Cleish Hills is improved by an additional record at Craigaverral, and there is a useful new station in Glen Ogil, but otherwise there is no appreciable improvement, except in Perthshire, where we are glad to have again the very interesting series of records in the Upper Farg, an excellent new high level station in Glenturret, north of Crieff, and two additional records at Dunkeld and Pitlochry. The only important loss in the whole group of counties is that of Ardvorlich, on the south side of Loch Earn. The record at Urlar, near Aberfeldy, which disappears temporarily, will, we understand, be recommenced after the war.

Kincardine ($a-6+2=15...4$).

Aberdeen ($a-2+2=32...1\cdot6$).

Banff ($a-1+2=8...1\cdot3$).

Moray ($a-1+1=9...2$).

Nairn ($a-1+0=4...2\cdot5$).

We much regret that the extremely interesting group of gauges recently established by the Corporation of Aberdeen in the upper Dye Valley, has been abandoned, and the records have come to an end. We also lose the old record at Cawdor, which had long served as a standard for comparison with the average in the Moray Firth district. The gains

though not numerous are of considerable value. Mr. James Smith, of Crathes, has at our suggestion succeeded in re-establishing the record of Spyhill, in the lower Dye valley, and the east of Aberdeenshire is distinctly strengthened by the new stations at Haddo House and at Ellon.

Inverness ($a-3+12=64\dots1\cdot5$).

Ross and Cromarty ($a-3+1=24\dots0\cdot7$).

It would be difficult to find any spot in the counties of Inverness and Ross and Cromarty where new stations would not be of great value, and the group of new gauges set up by Mr. W. N. McLean in Glen Garry, is one of the most important acquisitions of recent years, even when this is taken into account. We are also glad to add another station, Rothiemurchus, to the rapidly improving representation of Strathspey. In the Hebrides we rejoice to have a complete record from the new station at Lochmaddy, mentioned in *British Rainfall, 1913*, but greatly regret to lose the only stations in the islands of Rhum and Eigg.

Sutherland ($a-2+1=12\dots0\cdot6$).

Caithness. ($a-0+0=12\dots1\cdot7$)

Orkney ($a-0+2=12\dots3$).

Shetland ($a-1+0=5\dots0\cdot9$).

The record at Altnaharra was kept throughout the year but a portion was unfortunately lost before, or during, transmission to us. We have also failed to receive the interesting record started in 1913 at Gubernisgach. The only gain in the northern counties of Scotland was of a record at Golspie, which will be helpful in outlining the peculiar conditions round the Moray Firth. The vast areas in the north-west without a single rain gauge still remain blank.

Cork ($a-2+7=24\dots0\cdot8$).

Kerry ($a-3+2=10\dots0\cdot5$).

We are glad to record a very satisfactory list of new stations in Co. Cork, against which there are no losses of importance. One of the most interesting of the gains is that of Garinish Island, in Bantry Bay. In Kerry we unfortunately lose Lickeen and Muckross, the latter we hope, only temporarily, but gain a new record near Kenmare, where the distribution has greatly improved in the last few years.

Waterford ($a-1+0 = 13...1\cdot8$).

Tipperary ($a-0+0 = 13...0\cdot8$).

Limerick ($a-0+1 = 7...0\cdot7$).

Clare. ($a-1+2 = 12...0\cdot9$).

But for useful new records at Miltown Malbay, Doolin, near Ennistymon, and at Castleconnell, these counties are unchanged.

Wexford ($a-0+3 = 11...1\cdot2$).

Kilkenny ($a-1+1 = 9...1\cdot1$).

Wicklow ($a-0+0 = 18...2$).

Carlow ($a-0+0 = 4...1\cdot2$).

Queen's County ($a-0+3 = 8...1\cdot2$).

King's County ($a-1+0 = 7...0\cdot9$).

Kildare ($a-1+1 = 7...1\cdot1$).

The only points worthy of mention in the whole of the south-east of Ireland are the acquisition of a new station at Johnstown Castle, near Wexford, and of records from a group of three stations on the south-east slopes of the Slieve Bloom Mountains, from which we hope for very useful information in a district where, so far as we are aware, none previously existed. We are glad to print once more the old record at Longraigue, near Foulkes Mill, in the south-west of Co. Wexford.

Dublin ($a-2+4 = 32...9$).—We hope that the high level record at Crooksling Sanatorium, one of the few connecting links between the high rainfall of the Wicklow Hills and the low rainfall round Dublin Bay, will be resumed at an early date.

Meath ($a-0+0 = 9...1\cdot0$).

Westmeath ($0+1 = 9...1\cdot3$).

Louth ($a-0+2 = 5...1\cdot6$).

Longford ($a-1+0 = 3...0\cdot7$).

Two welcome records near Dundalk serve to break what is rather a monotonous want of progress in this part of Ireland.

Galway ($a-1+1 = 7...0\cdot3$).

Roscommon ($a-1+0 = 2...0\cdot2$).

Mayo ($a-1+0=8...0\cdot4$).

Sligo ($a-0+0=3...0\cdot4$).

Leitrim ($a-0+0=3...0\cdot5$).

The gains are conspicuous by their absence, and the losses, although few in number, are serious in so poorly represented a district. . In particular we may mention French Park and, temporarily, Blacksod Point.

Cavan ($a-0+0=5...0\cdot7$).

Fermanagh ($a-1+0=3...0\cdot4$).

Monaghan ($a-0+0=2...0\cdot4$).

Armagh ($a-0+0=7...1\cdot4$).

Down ($a-1+0=12...1\cdot2$).

Antrim ($a-0+0=17...1\cdot4$).

Londonderry ($a-0+0=5...0\cdot6$).

Tyrone ($a-0+0=5...0\cdot4$).

Donegal ($a-1+0=7...0\cdot4$).

No gains and three losses, two of which, Irvinestown and Buncrana, are serious, make rather melancholy reading for the province of Ulster.

Number of complete rainfall records published in the volumes of British Rainfall for the undermentioned years.

Years.	England.	Wales.	Scotland.	Ireland.	British Isles.	Increase over previous years.	No. of Stations per 100 sq. mi.
1861 ...	333 ...	9 ...	109 ...	20 ...	471 ...	47	0·4
1871 ...	1038 ...	88 ...	311 ...	67 ...	1504 ...	5	1·2
1881 ...	1548 ...	131 ...	313 ...	153 ...	2145 ...	41	1·8
1891 ...	2091 ...	168 ...	359 ...	181 ...	2799 ...	23	2·3
1901 ...	2616 ...	253 ...	442 ...	195 ...	3506 ...	13	2·9
1911 ...	3705 ...	397 ...	701 ...	271 ...	5074 ...	198	4·2
1912 ...	3834 ...	429 ...	732 ...	277 ...	5272 ...	198	4·4
1913 ...	3902 ...	440 ...	749 ...	279 ...	5370 ...	98	4·4
1914 ...	3962 ...	450 ...	753 ...	288 ...	5453 ...	83	4·5
Difference from 1913—							
Increase	60	10 ...	4 ...	9 ...	83	...	0·1

OBITUARY.

THE number of Observers, past or present, reporting to the British Rainfall Organization grows steadily larger. It is inevitable that every year should bring the loss by death of many old friends and co-workers who have taken their part in building up and maintaining what has now become a great national undertaking. The number of names in the Obituary list for the twelve months ending on June 30th, 1915, is, we are happy to say, scarcely larger than that for the 11 months reported in our last volume, but it contains the names of 99 Observers, many of whom were among the earliest of Mr. Symons's contributors. We would gladly, were it possible, pay a last tribute to every one by giving a biographical notice, but in many instances, apart from a common interest, our acquaintance has not extended beyond correspondence, and we have therefore been obliged to confine personal notes to a few.

Of the 99 Observers whose names appear in the list we have been able to learn the age of 66, and of these the average age was 71 years. One only, the veteran Earl of Courtown, was a nonagenarian.

Observers deceased in 1914-1915 of 80 years of age or more.

Rt. Hon. the Earl of Courtown	91 years	Mr. Edward Sharman, J.P.	85 years
Miss A. J. Edlmann	.. 87 ..	Mr. John Smyth, M.A., C.E.	84 ..
Rev. John Hart	.. .. 87 ..	Sir Walter Gilbey, Bart.	.. 83 ..
Mr. F. C. Pawle	.. .. 87 ..	Rev. W. H. Freeman	.. 82 ..
Rev. John Dickinson	.. 85 ..	Mr. R. F. Birch	.. .. 80 ..
Mr. A. T. Miller	.. .. 85 ..		

No fewer than 23 of the records of deceased Observers had reached the length of 30 years, and of these 11 exceeded 40 years and two extended to the great duration of 54 years, a remarkable achievement for an individual Observer. The following are the records of 30 years or more.

Record of Thirty years and upwards.

Mr. J. Smyth	.. .. 54 years	Mr. R. F. Sturge	.. .. 45 years
Mr. E. Sharman	.. .. 54 ..	Sir James Rankin, Bart.	.. 42 ..
Rt. Hon. Lord Courtown	.. 49 ..	Mr. S. Alexander	.. .. 41 ..
Mr. E. T. Dowson	.. .. 49 ..	Col. W. B. Bryan	.. .. 41 ..
Rev. W. L. W. Eyre	.. 48 ..	Mr. Peter Murdoch	.. 41 ..
Mr. D. Doncaster	.. .. 45 ..	Rt. Hon. Lord Jersey	.. 39 ..

Record of Thirty years and upwards—(continued).

Mr. W. Fisher 38 years	Mr. Philip Wright 32 years
Mr. E. Simpson 38 „	Mr. C. W. Lane 31 „
Mr. F. Griffith 35 „	Rev. W. T. Tyrwhitt-Drake 31 „
Rt. Hon. Lord Merthyr .. 35 „	Mr. W. Piffe Brown .. 30 „
Mr. E. Rosling 34 „	Miss D. Prater 30 „
Rev. Preb. W. Selwyn .. 34 „	

MR. HENRY BELL, of Greenfield, West Kirby, Cheshire, died on the 4th July, 1914. He was appointed a Justice of the Peace for Wirral, in 1900, and was for many years a Governor of the Caldys Grange Grammar School. Mr. Bell was also one of the Foundation-Managers of the West Kirby Church of England School, and a staunch Churchman. He retired from business many years ago, and devoted himself to local affairs. His rainfall record at Greenfield commenced in 1890. Mr. Bell personally inspected the rain gauge each morning, until two years before his death, when owing to declining health, he was compelled to intrust the reading of the instrument to the head gardener.

MR. JOHN BISSET, J.P., Thornhill, Inch, Aberdeenshire, after an illness extending over three years, died in his 71st year, on the 24th March, 1915. Mr. Bisset was a native of the town, and got his early education at the village school, Inch, whence he passed on to the Grammar School and University of Aberdeen. He returned to his native town to assist his father, who was a bank agent, and succeeded to the agency on his father's death. Mr. Bisset retired from business in 1900. He took a keen interest in public affairs, and held a seat on most of the Local Boards; he also filled the Provost's chair for three years. He was much interested in mechanics, and possessed a high-class turning-lathe with many accessories, including geometrical chucks. He was also interested in many branches of science, and had a good reflecting astronomical telescope with spectroscope and other attachments. He was, besides, an expert photographer, and had a fine collection of photographs of his many journeys in the East and elsewhere. He had a finely equipped private meteorological station provided with a barograph, a thermograph, a Campbell-Stokes' Sunshine Recorder, and a Hyetograph, the record from which was the first from north of the Tweed to appear in *British Rainfall*.

MR. WILLIAM PIFFE BROWN, who was born in Gloucester seventy-eight years ago, spent his life in that city, where he practised as a

solicitor, and he died there on July 14th, 1914. He never married and took little part in public affairs, but he devoted his leisure to scientific studies, especially in geology, astronomy and meteorology, and his holidays for many years to walking tours in Wales. One of his most interesting contributions to meteorology was the exposure of a minimum thermometer on the summit of Glyder Fach, one of the highest peaks of the Snowdon group of mountains, which, read on the occasions of his various visits, supplied the first data as to the lowest temperature at that altitude, and he read more than one valuable paper on the subject to the Royal Meteorological Society.

COLONEL WILLIAM BOOTH BRYAN, V.D., Chief Engineer of the Metropolitan Water Board from the creation of that body in 1904, died suddenly on October 27th, 1914. He was a native of Nottingham and after training as a civil engineer was Borough Engineer of Burnley, 1873-1876, then Borough and Water Engineer at Blackburn from 1876 to 1882, when he was appointed Chief Engineer to the East London Water Company. In all these positions Mr. Bryan realized the importance to the Water Engineer of accurate records of rainfall and for a time kept a rain gauge at his own residence. He was an ardent volunteer having been Lieut.-Colonel of the 2nd Tower Hamlet Rifle Corps from 1889 to 1903, and Honorary Colonel of the 17th Battalion of the County of London Regiment. He was always much interested in our work.

CAPTAIN JOHN CALDER, of The Clett, Castletown, Caithness, died on December 24th, 1914. His career was one of interest and variety such as rarely falls to the lot of a member of the British merchant service. He came of a sea-going family; his father was a famous skipper in the Baltic trade and his grandfather was in the Royal Navy in the great days of the Napoleonic wars. John Calder served his apprenticeship on his father's ship, but when a young man he shipped as quartermaster on a new gunboat, built at Aberdeen for the Chinese Government, for the suppression of piracy in the Chinese seas, and in this service he remained until he reached the rank of Captain. He was then engaged in harbour work in China and for a time before the Japanese war he was in charge of Port Arthur. On leaving China he acted for the Chinese Government as a superintendent of ship-building in England and Germany, and at length quitted active service and settled

in his native village, where he busied himself with scientific pursuits, including the study of meteorology and the enthusiastic recording of rainfall. He was a member of many local boards, including the County Council of Caithness, for which county he was a Justice of the Peace. He was an elder of the Church of Scotland and on several occasions a member of the General Assembly. He was universally beloved for his kindly and unobtrusive nature and he took as real a pleasure in helping the good works of his quiet parish as he had done in fighting the pirates of the China Seas or regulating the troublesome traffic of Eastern ports.

MR. CHARLES EDWARD CHRIMES, of Selwood, Rotherham, who died on the 28th November, 1914, was the surviving Principal of the firm of Guest and Chrimes, Rotherham. He was 75 years of age, and for over 60 years had been associated with the firm of which he eventually became the head, and it was generally due to his efforts that the reputation of Messrs. Guest and Chrimes became as famous as it now is. He was naturally of a retiring disposition, taking no active part in public matters, and what services he rendered in this direction were given in a quiet way, as were his benefactions to local institutions, which were considerable. The greater part of his time was devoted to business and care for his workers, the fact that many men have been employed by the firm during the whole of their working career being a testimonial to his management, kindness and generosity. The late Mr. Chrimes continued the interest in rainfall work shown by his father, Mr. R. Chrimes, who in co-operation with Mr. Symons, carried on the historic experiments at Rotherham on the influence of the height and exposure of rain gauges on the catch of rain. For many years he was a generous contributor to our funds.

The fifth EARL OF COURTOWN died at his ancestral seat, Courtown House, Co. Wexford, on the 28th November, 1914, at the age of 91. He was educated at Eton and subsequently at Geneva, under the charge of the Rev. Merle d'Aubigny, the well-known historian of the Reformation. He served for five years in the Grenadier Guards, but returned to Ireland to assist his father in relieving the distress consequent on the great famine. He succeeded to the title in 1858 and resided on his estates to the end of his long life. He took a keen personal interest in the record of rainfall from the year 1869, when it first appeared in

British Rainfall, and signed every annual return down to 1913. Lord Courtown was a frequent correspondent of the successive Directors of the Rainfall Organization, and he was one of the few Observers whose life sufficed to fix the true average rainfall of his station.

MR. EDWARD THEODORE DOWSON, J.P., of the Old House, Geldeston, near Beccles, died on October 4th, 1914, at the age of 68. He was the only son of the late Mr. Edward Utting Dowson, of Geldeston, and his life was devoted to good works in connection with local philanthropic agencies. He was best known as the honorary Diocesan Secretary for the Norwich Diocese of the Church of England Society for providing homes for waifs and strays. His interest in meteorology dated from a very early period, and his record commenced to appear in *British Rainfall*, 1866, and has never been absent since. It was kept with remarkable care and accuracy and serves as a standard for the rainfall of the coast district of East Anglia. We are happy to know that his sister has undertaken to continue it. Mr. Dowson was always keenly interested in the trial of automatic meteorological instruments, and contributed several papers to the Royal Meteorological Society, of which he was a fellow for 35 years. Some of the most important of these dealt with the indications of the Redier mercurial barograph.

THE REV. WILLIAM LEIGH WILLIAMSON EYRE, Rector of Swarraton, Alresford, who died on October 25th, 1914, at the age of 73, was a life-long student of natural science, devoting himself principally to botany, conchology, and meteorology. He was a fellow of the Royal Meteorological Society for 44 years, and was one of the original members of the British Mycological Society, being President in 1903. Mr. Eyre contributed meteorological observations to the Royal Meteorological Society from 1880 to 1911, and had supplied rainfall records to the British Rainfall Organization since 1869. His observations at Swarraton were continued without a break from 1875 till his death.

MR. WILLIAM FISHER, of Wentworth Castle Estate Office, Barnsley, Yorks, died on November 1st, 1914, at the age of 73. He had been estate agent to the Wentworth family for 33 years, and retired 10 years ago. He was born at Strathbraan, Dunkeld, Perthshire. After completing his education he went to Edinburgh to qualify for estate management.

Having served some time on the Belvoir Castle Estate he received the appointment at Wentworth Castle. He was a staunch Unionist and a devoted Churchman. The Barnsley Agricultural Society, as well as the Barnsley and Stainborough Literary Society found in him a warm friend. He was much interested in the Barnsley branch of the Burns Club, and was one of the oldest members of the Scottish Arboricultural Society. He took great interest in education, and was entrusted with the plans and carried out the work of the new schools at Hood Green, as well as the Parsonage House. He was recognized locally as an authority on meteorology and was a frequent contributor to the press. He had an unbroken record in *British Rainfall* since 1877, and this record, we are happy to say, is being continued by his son.

MR. ERASMUS GOWER, J.P., of Castle Malgwyn, Pembrokeshire, died in June, 1914, at the age of 81. He was the eldest son of Mr. R. F. Gower, of Glandovan, Pembrokeshire, and as a young man he served in the 12th Lancers, retiring as Captain. The rainfall record at Castle Malgwyn which was kept by the gardener, was peculiarly valuable on account of its length; it first appeared in *British Rainfall* in 1872, and to our great regret it has now come to an end, the late Mr. Gower's son, who succeeded him, being a prisoner of war in Germany.

THE REV. JOHN HART died on May 31st, 1914, at Aberlady, at the age of 87. He was born at Aberuthven, Auchterarder, in 1827, and was educated there and at Edinburgh University, where he studied for the ministry of the Church of Scotland. His first charge was at Methel, in Fifeshire, whence he moved to Dundee in 1859, where he attracted an immense congregation. He was presented to the Parish of Aberlady in 1878, by the father of the late Earl of Wemyss, who is said to have described him as "the Spurgeon of Scotland." With the late Earl he was always on terms of closest intimacy and it was often said that the earl and the minister ruled the parish between them. Mr. Hart was a typical specimen of the old Scottish parish minister. He was a tall handsome picturesque figure, with the swinging stride of a man in the habit of walking over hills. His chief recreation was gardening, and he was a famous fruit grower. Shortly before his death Mr. Hart secured the establishment of a new rainfall record in the Earl of Wemyss's garden at Gosford House, with the express object of insuring the continuance

of observations at Aberlady in the event of his successor failing to keep up his old record at the manse.

MR. ARTHUR FRANCIS JONES, of Homefield Cottage, Cranleigh Common, who died on 24th December, 1914, aged 78, was a meteorologist almost from infancy. His niece, Miss Pauline Jones, has most kindly sent to us for preservation in the Library at Camden Square, the last "Weather Book" kept by Mr. Jones, a small octavo volume strongly bound and containing a singularly clearly kept record of eight instruments read daily from January, 1907 to 22nd December, 1914, he having kept it up to within two days of his death, when he had already ruled the columns for January, 1915. The book contains innumerable notes on garden phenomena, summaries of the months, and placed in the book are letters and cuttings about the weather in other districts. Miss Jones also sent for our inspection Mr. Jones's first "Weather Book" for the period September, 1849 to December, 1850, when he was only twelve years of age, a most interesting forerunner of the careful records of his mature years. Miss Jones supplies the following interesting particulars which make us regret keenly that the retiring modesty of Mr. Jones's nature deprived us of the pleasure of making his personal acquaintance. She says, "He had travelled much on the continent, generally with two or three chosen friends, by whom he was called "the colonel," as he took the lead, having the artist's eye for beautiful places. If possible he always went on the rivers from place to place. The Danube had a great fascination for him. For the last thirty years after he left Mincing Lane his chief hobbies were photography, reading, gardening, and last, but by no means least, his keen interest in the British Rainfall Organization."

MR. CHARLES WILLIAM LANE died at Kettering on November 24th, aged 76. He was born in Tewkesbury and after preparing for the Civil Service reasons of health led him to take up the study of law. After some time at Pershore and later in London he came to Kettering in 1882, where he established himself as a solicitor, and soon became clerk to many public Boards. He was an authority on Local Government matters generally and on the Poor Law in particular, and his high character and amiable personality made him one of the most popular citizens of Kettering. In private life he devoted himself to the ambulance movement; he was a musician and was highly proficient in private

theatricals. His ardent Shakespearian studies once led to his arrest as a spy during a visit to the scenes of "Romeo and Juliet" in Italy during the war with Austria fifty years ago. Mr. Lane found time to be an enthusiastic meteorological Observer and kept his rainfall record with his own hand up to the last week of his life.

LORD MERTHYR, K.C.V.O., died on August, 1914, at the age of 77, after a remarkable career. William Thomas Lewis was born in Merthyr Tydvil in 1837, where his father was engineer of the Plymouth Iron Works. He left school before he was thirteen and commenced work as an apprentice in the Iron Works. At the age of eighteen he became an assistant to the Chief Engineer of the Bute Estate, whom he succeeded in 1867. He joined the Institution of Civil Engineers at an early age and made himself master of the complicated system of mining engineering practised in South Wales, and took a leading place amongst the coal-owners of the country. He had more to do than any other man with the development of the South Wales coal-field, and his interest in the condition of the miners led him to work for the amelioration of the conditions of labour as strenuously as for the increase of production. He succeeded in establishing the sliding scale of wages by which remuneration was adjusted to the price of coal. Apart from this he devoted a great part of his time to philanthropic work. Mr. Lewis was knighted in 1885, created a baronet in 1896 and a peer under the title of Lord Merthyr in 1911. As Lord Bute's agent he established rain gauges at various points and was a generous supporter of the work of the Rainfall Organization in which he took a personal interest.

SIR JAMES RANKIN, BART., of Bryngwyn, Herefordshire, died on April 17th, 1915, at the age of 72. He was educated at Trinity College, Cambridge, where he took a first-class in the Natural Science Tripos in 1865. He was the Conservative Member of Parliament for Leominster from 1880 to 1885, and North Herefordshire from 1886 to 1906 and from 1910 to 1912. He devoted special attention to educational questions and published several papers on social and scientific subjects, including state emigration, old age pensions, and the housing of the poor. Sir James took great pleasure in his fine estate, and I always remember the affectionate pride he took in the fine trees to whose beauties he introduced me when inspecting the rain gauge on one occasion. He was

created a baronet in 1898 and filled all the local public positions which a conscientious landowner makes it his duty to occupy.

MR. A. M. RODGER, Curator of the Perthshire Naturalists' Society's museum in Perth, died in January, 1915. He was a man of unbounded energy and enthusiasm in the study of all branches of natural science, though primarily a biologist, and after a training in the Zoological Department of University College, Dundee, he was appointed to the Perth Museum about 20 years ago and did much to build up the reputation which that museum has acquired as one of the most perfect collections of local scientific interest in the United Kingdom.

MR. HENRY ROFE, senior partner of the firm of Henry Rofe and Son, consulting engineers of Westminster, died on March 2nd, 1915, at the age of 76. Mr. Rofe, though not himself a rainfall Observer, had, throughout his long professional career as a water engineer, done much to promote the establishment of rainfall records in remote districts of the country where water is collected for the supply of towns. He had a profound knowledge not only of the scientific but also of the legal aspects of water engineering, and during a long association with him in visits to gathering grounds and in Parliamentary Committee Rooms, I was greatly struck with the genius he showed for getting hold of the simplest and most direct solution of complicated questions, and with the straightforward honesty of his presentation of facts. He was a man of the rare type who inspires confidence and whose advice is sought for and found of use in any difficulty. His death is felt by many beyond the immediate circle of his friends as a personal loss.

THE REV. PREBENDARY WILLIAM SELWYN, born in 1840, was the son of Bishop Selwyn, the first Bishop of New Zealand, with whom he sailed to that far-off dominion in 1841. Returning to England after nine years he passed through Eton and entered at St. John's College, Cambridge, and in 1864 became curate of Chaddeley Corbet, near Kidderminster. He received the vicarage of Bromfield, Salop, in 1866, and continued in this parish for forty years. He became a Prebendary of Hereford Cathedral in 1901, and on his retirement from Bromfield in 1907 he took up his residence at Quarry House, Hereford, where he died on December 24th, 1914, at the age of 74. A life of steadfast devotion to parochial

duties was varied by a keen interest in the foreign missions of the Church, and he identified himself in particular with the Melanesian Mission. Prebendary Selwyn took up the observation of rainfall at Bromfield, and did much to extend an interest in the work amongst his friends, being responsible for the establishment of several valuable records. He had been for 34 years one of our most valued correspondents.

MR. EDWARD SHARMAN, J.P., of Croyland Abbey, Wellingborough, who died on July 28th, 1914, at the age of 85, was the son of Mr. Mark Sharman, of Swanspool, from whom he and his brother, Mr. N. P. Sharman, still happily with us, inherited an interest in the measurement of rainfall which bore fruit in a remarkable series of observations commenced in 1860 and terminated only by his death. But for the accident that his early rainfall records did not appear in *British Rainfall* until 1865, Mr. E. Sharman's name would have been included among the survivors if *British Rainfall, 1860*, to whom we annually pay tribute, with the added and almost unique distinction of an admirably kept daily rainfall record read personally throughout the long period of 54 years.

MR. JOHN SMYTH, M.A., died at his residence, Milltown House, Banbridge, Co. Down, on December 16th, 1914, at the age of 84. He was the doyen of the Irish rainfall Observers, and his frequent contributions to *Symons's Meteorological Magazine* have made his name very familiar to our readers. Mr. Smyth was a student at Trinity College, Dublin, where he took the degree of Master of Arts in 1854 and the diploma of engineering in 1850. As a civil engineer he was engaged on railways and waterworks in Ireland, but he devoted most attention to the business of the Lenadery Bleach Works, in connection with which he travelled extensively on the continent. He was one of the oldest Fellows of the Royal Meteorological Society which he joined in 1863, and he attended the meetings of the British Association with great regularity. There, I had occasion to make his acquaintance nearly thirty years ago and ever since I maintained relations of the most cordial friendship with him. Mr. Smyth was a quiet retiring man, whose good works were little known beyond his own district, but there he was held in honour and his death was felt as an irreparable loss.

Observers Deceased to June 30th, 1915.

Small Capitals designate Observers with 30 years records.

ALEXANDER, SAMUEL	The Shrubby, Felixstowe.
Barclay, Frederick John	Surbiton, Surrey.
Bell, Mrs. Charles Lothian	Linthorpe, Middlesbrough.
*Bell, Henry	West Kirby, Cheshire.
Bell, William, M.R.C.S., J.P.	Rutland House, New Brighton.
Bell, W., C.E.	Aberfeldy.
Belper, Lord	Kingston Hall, Derby.
Billiter, Miss Mary	Dunsfold, Godalming.
Birch, Richard Frederick	Maes Elwy, St. Asaph.
*Bisset, John, J.P.	Thornhill, Insch.
Bloomfield, Col. Alfred	Glemham Grove, Saxmundham.
Bradford, Rt. Hon. Earl of	Weston Park, Staffs.
*BROWN, WILLIAM PIFFE	Belgrave Road, Gloucester.
Bruce, Miss Isabella	The Old Garroch, Dalry.
*BRYAN, COL. W. BOOTH, V.D., C.E.	Elmstead Wood, Chislehurst.
Burn-Murdoch, John George Grey	Gartincaber, Doune.
Byng, Major the Hon. Lionel	Avening House, Gloucester.
*Calder, Capt. John, J.P.	The Clett, Castletown.
Campbell, J.	Sutton, Surrey.
Chambers, Harcourt Augustine F.	Herongate House, Brentwood.
*Chrimes, Charles Edward	Selwood, Rotherham.
Coats, John	Kildonan, Eigg.
Cooke-Yarborough, George Bryon	Campsmount, Doncaster.
Coombes, J.	Englefield Gardens, Reading.
*COURTOWN, RT. HON. EARL OF	Courtown House, Gorey.
Croft, Charles	Long Lee, Keighley.
Dane, Harold, M.R.C.S., L.R.C.P.	Northwood, Middlesex.
Daubuz, John Claude, J.P., D.L.	Killiw, Truro.
De Freyne, Lord	French Park, Co. Roscommon.
Dickinson, Rev. John	Broomhill, Tiverton.
DONCASTER, D.	Broomhall Park, Sheffield.
*DOWSON, EDWARD THEODORE, J.P.	The Old House, Geldeston.
Edlmann, Miss Adine Josephine	Chislehurst.
*EYRE, REV. W. LEIGH W.	Swarraton Rectory, Alresford.
Farrington, Thomas Booth, C.E.	Plas Madoc, Llandudno.
Fisher, Rev. Canon Frederic H.	Church Croft, Hemel Hempstead.
*FISHER, WILLIAM.	Wentworth Castle, Barnsley.
Foster, Bernard Le Neve, J.P.	Dormans Park, Surrey.
Freear, H. M.	Crawley Mill Farm, Woburn.
Freeman, Rev. William Henry	Whitwell House, High Wycombe.
Gilbey, Sir Walter, Bart.	Elsenham Hall, Essex.
Gordon, Alexander Duncan	Woodlands, Chalfont St. Giles.
*Gower, Erasmus, J.P.	Castle Malgwyn, Pembroke.
GRIFFITH, FREDERICK, C.E.	Leicester Corporation Waterworks.
Hall, B. C.	Southchurch Road, Southend-on-Sea.
Harington, The Dowager Lady	Whitbourne Court, Herefordshire.
Harman, Lt.-Col. Ramsay	Wootton Hill, Milton.
Harrison, Frederic James	Maer Hall, Staffordshire.
*Hart, Rev. John	Aberlady Manse, Haddington.
Heygate, Dowager Lady	Bellarena, Londonderry.
Hill, William, F.R.G.S.	The Maples, Hitchin.
Jacques, Rev. Canon Kinton	Brindle Rectory, Lancs.

* See Biographical Note *ante*.

Observers deceased to June 30th, 1915—(continued).

JERSEY, EARL OF, G.C.B., G.C.M.G.	..	Middleton Park, Bicester.
Johnson, J.	..	Lama House, Hayling Island.
*Jones, Arthur Francis	..	Cranleigh Common, Guildford.
Kershaw, Prof. Milton	..	Royal Agricultural College, Cirencester.
Knight, F. A.	..	Wintrath, Winscombe.
*LANE, CHARLES WILLIAM	..	George Street, Kettering.
Lanyon, Alfred	..	Tolvean, Redruth.
Leachman, Albert Warren, M.D.	..	Fairley, Petersfield.
Lillingston, Capt. William George	..	Ullverscroft, Leicester.
Marshall, George	..	Junipers, Hardres, Kent.
*MERTHYR, LORD	..	Aberdare.
Metcalf, Miss	..	Harbledown, Canterbury.
Miles, Sir Henry, Bart.	..	Leigh Court, Bristol.
Miller, Arthur Thomas	..	Emlyn House, Leatherhead.
Miller, Capt. Ernest Cyril	..	Merlewood, Grange-over-Sands.
MURDOCH, PETER	..	Glendrishig, Ayr.
Pawle, Frederick Charles	..	Northcote, Reigate.
PRATER, MISS DOROTHEA J. G.	..	Farnborough, Banbury.
*RANKIN, SIR JAMES, BT., J.P., D.L.	..	Bryngwyn, Hereford.
Robertson, W. P.	..	Sewardstone Lodge, Chingford.
*Rodger, A. M.	..	The Museum, Perth.
*Rofo, Henry, C.E.	..	London.
ROSLING, EDWARD	..	Melbourne, Chelmsford.
Schuster, Rev. William Percy	..	West Lulworth Vicarage, Dorset.
Scott, Miss Albinia Louisa	..	Coppid Hall, Stifford.
Searle, Alfred Henry	..	The White House, Christchurch.
Seawell, Mrs. Arthur	..	Marelands, Bentley, Hants.
*SELWYN, REV. PREB. WILLIAM.	..	Quarry House, Hereford.
*SHARMAN, EDWARD, J.P.	..	Croyland Abbey, Wellingborough.
SIMPSON, EDWARD	..	Walton, Wakefield.
*SMYTH, JOHN, M.A., C.E.	..	Milltown, Banbridge.
Spry, John Samuel	..	St. Mawes, Falmouth.
Squire, W. W., C.E.	..	Bristol.
Strong, Col. Charles Isham	..	Thorpe Hall, Peterborough.
STURGE, ROBERT FOWLER	..	Pembroke Road, Clifton, Bristol.
Sumner, Frank, C.E.	..	London.
Sykes, M. H.	..	Stockton-on-Tees.
Tempest, John Hicks	..	Bradenham House, High Wycombe.
Thomas, Robert Edmund Skeyring	..	Wormington Grange, Glos.
Thompson, George Rodie, J.P., D.L.	..	Lynwood, Ascot.
Townshend, Rev. Canon H. W., M.A.	..	Skibbereen Rectory, Co. Cork.
Travers, Major John Amory, J.P.	..	Tortington House, Arundel.
Travers, P.	..	Fofanny Reservoir, Newry.
TYRWHITT-DRAKE, REV. W. T.	..	Great Gaddesden Vicarage, Herts.
Vachell, Charles Tanfield, M.D.	..	Park Place, Cardiff.
WRIGHT, PHILIP, J.P.	..	Mellington Hall, Montgomery.
Yourdi, George Nicholas, C.E.	..	Birmingham Corporation Waterworks

BRITISH RAINFALL, 1914.

PART II.

RAINFALL AND METEOROLOGY

OF

1914.

EXPLANATION.

THE Observers' Remarks on the Days and on the Year as a whole are given as far as possible in the words of the Observers themselves, and the signature of the Observer is added to each Note on the Year. The designations of "F.R.Met.Soc." is added to the names of those Observers whose interest in Meteorology has led to their becoming Fellows of the Royal Meteorological Society.

It is understood that the Notes refer in each case to extreme or exceptional rather than to normal phenomena. The Notes on the Days are occasionally supplemented by short extracts from the newspaper press and by illustrations. The completeness or incompleteness of this picture of the weather of the year depends upon the interest which the Rainfall Observers of each district take in the meteorological incidents of their locality, and on their willingness to communicate the outcome of their observations in a suitable form. The Notes supplement those published in *Symons's Meteorological Magazine* for the month up to July, 1914.

It is necessary to point out that when phrases such as "gale," "cloudburst," and similar expressions, are used in the Notes these are in every case the Observer's own words, and may possibly not refer to the phenomena technically so called.

The various discussions of the Rainfall of the Year as regards heavy falls in short periods and on rainfall days, droughts, and rain spells, and the general distribution of Rainfall over the British Isles for each month and for the year, are prepared by the Editor after considering all sources of information which have been published or are available for publication.

In order to save space by avoiding frequent repetitions, the names of the Counties are omitted in the Daily remarks, the numerals of the Divisions only being retained. The following abbreviations are employed :—

Bar.	Barometer.	R	Rain, Rainfall.
E.	East.	S	Snow.
H.....	Hail.	S.	South.
L	Lightning.	T	Thunder.
Max.	Maximum (temperature).	Temp. ..	Temperature.
Met. Mag.	<i>Symons's Meteorological Magazine.</i>	Ther. ..	Thermometer.
		TS	Thunderstorm.
Min.	Minimum (temperature).	TSS ..	Thunderstorms.
N.	North.	W.	West.

OBSERVERS' REMARKS ON THE WEATHER OF 1914.

With occasional quotations from the Newspaper Press.

NOTES ON THE DAYS OF 1914.

These notes should be read in conjunction with those on Heavy Rains in 1914, and reference should also be made to *Symons's Meteorological Magazine*, Vol. 49.

JANUARY.

4th*—*Blair Atholl* (XVI). S $3\frac{1}{2}$ inches deep.

4th-5th.—*Talla Reservoir* (XIII). R commenced at 11 a.m. on 4th. Turned to sleet at 10 p.m. Heavy S on 5th, until 3 p.m.; depth 7 inches.

5th.—*Lincluden House* (XII). Heavy S for 2 hours.—*Maxwelton* (XII). S 4 inches deep.—*Hamilton* (XIV).

“In the forenoon . . . snow fell heavily . . . causing the abandonment of the Scottish League football match at Hamilton, and outdoor work had to be completely suspended in several districts.”

—*Drumnadrochit* (XVIII). S 4 inches deep.

8th—9th.—*Miltown Malbay* (XX). Dense fog.

9th.—*Grimsby* (VII). Thick fog.

24th.—*Eye* (III). Thick fog at night.

25th.†—*Newcastle* (X).

“The most serious incident of the gale occurred at No. 7, Water Street . . . the top floor of which was occupied by Mr. John Ayre and his wife and three children. The family were in the kitchen, between six and seven o'clock, when there was a tremendous crash. Masonry came falling around them, the gas was extinguished, and they were nearly choked by the dust which arose. The roof had fallen in.”
—*Newcastle Daily Journal*.

—*Lincluden House* (XII). Strong S. gale.—*Duns* (XIII). High wind; several trees blown down.—*Aberfeldy* (XVI). Heavy R. River in high flood.

28th—31st.—*Bettws-y-Coed* (XI). Practically continuous gale from the evening of 28th.

31st.—*Mildenhall* (V). Kennett said to have been lower than had been known for 35 years.

* See also *Met. Mag.*, February, 1914, p. 16.

† See also *Met. Mag.*, February, 1914, p. 8.

FEBRUARY.

2nd.—*Balerno, Cockburn Hill* (XIII). Severe gale with heavy showers.

11th.—*Tiree* (XV). Violent **TS** from 10.45 to 11.15 p.m.

12th.—*Rousdon* (V). S.W. gale blowing at 53 miles per hour, 2 to 6 p.m.

“The steamer *Miown*, 380 tons, belonging to Cardiff, was wrecked two miles off Shoreham, bound from London to Bristol with cement. All the members of the crew were drowned with the exception of the captain, Walter Jones, of Jersey, who was saved after a terrible experience. His rescue was due to the heroism of three men of the village of Southwick. At sunrise, J. Short, a stevedore, living at a cottage by the Lagoon, saw through his telescope the masts of the ship just above the surface of the water and a man clinging to the top. In a small boat Short, with W. Gardener, its owner, and C. Smart, rowed out in a heavy sea. The captain was waving his handkerchief from the top of the mast, and the three men effected his rescue and subsequently learnt that he had been clinging to the mast for eight hours.”—*The Times*.

12th—13th.—*Warlingham* (II). Wind gusts at 70 miles per hour.

15th.—*Blundellsands* (VIII). Gale about 11 a.m., moderating about 1 p.m. Severe squalls at 3 p.m. and 6.30 p.m. On each occasion bar. rose .05 in.—*Bolton, Queen's Park* (VIII). S.W. wind blowing at 51 miles per hour in afternoon.

16th.—*Castle Forbes* (XXI). Heavy fall of large **H** stones for 8 minutes, from 1 p.m.

21st.*—*Caterham Valley* (II). Heavy **S** from 0.40 to 2.30 p.m., when it changed to **R**.—*Tunbridge Wells* (II). Heavy **S** storm with remarkably large flakes.—*Mayfield, Five Ashes* (II). Enormous **S** flakes about 3 inches in size, but they melted at once, so could not be accurately measured: time about 11.45 a.m. to 0.30 p.m.—*Tottingworth Park* (II). **S** flakes 2 inches across at noon.—*Ticehurst* (II). **S** from 0.15 to 0.30 p.m., and again for about half an hour, from 1.30 p.m.; very large flakes. **R** storm with some **H** lasting about 15 minutes at 4.15 p.m. Violent gale in night.—*Upper Somborne* (II). **T** and **S** at 1 p.m.—*Rayleigh* (IV). Heavy **S** at 4 p.m. Gale.—*Ashmore* (V). **H** and **S** with **R** and exceptionally low bar.—*Tavistock* (V). Severe gale attaining a force of 75 miles per hour.

22nd.—*Meltham, Harewood Lodge* (IX). Corrected bar. at 8.30 a.m., 28.440 in.—*Drax* (IX). Great gale for 2 hours at 7 a.m.—*Duns, Swinton House* (XIII). Bar. fell very low and reached its min. about 9 a.m., when **R** was falling with E. gale. This ceased abruptly about 11 a.m., but bar. remained steady until 5 p.m., though there was brilliant sunshine from

* See also *Met. Mag.*, March, 1914, p 37.

11.30 a.m. to 1 p.m., and a fine afternoon with little wind from S. or S.W. until evening, when it freshened.—*Lynturk Manse* (XVII). **S** and sleet with gale in forenoon; moderated later and **S** disappeared.—*Dublin, FitzWilliam Square* (XXI). Bar. 28·047 in. from 9 to 10 a.m., the lowest recorded since 8th December, 1886.

24th.—*Kilmington Rectory* (V). Between 1.30 and 2.10 p.m. **H** fell steadily, not very large, no wind with it, lying 2 to 3 inches in depth. When melted it measured ·65 in. It had the appearance of a fall of **S** on the ground, and remained all next day and to some extent to the day following. It was very local, there being practically no fall half a mile to the N. and S.

25th.—*Blisworth, Crieff House* (III). Thick damp fog in morning.

27th.*—*St. Pancras, Camden Square* (I). Unusually thick fog in morning; traffic much disorganised. Cleared between 10.30 and 11 a.m., and sunshine followed.—*Hoar Cross* (VI). Dense fog.—*Cargen* (XII). Thick fog in forenoon.

MARCH.

6th.—*Mansfield* (VII). Heavy gale. Large trees blown down.

8th—9th.—*St. Pancras, Camden Square* (I). Continuous **R** for 25·4 hours from 5.30 p.m. on 8th to 6.55 p.m. on 9th; total fall 1·23 in.

10th.—*Colchester, Lexden* (IV). High floods.—*Great Yarmouth* (IV). Very dark from 4 to 4.45 p.m. Strong W. squall with **S**.—*Worfield* (VI). Heavy **H** storm at about 4.30 p.m.

11th—13th.—*Harpsden, Cray* (III). Floods out for the first time this winter.

12th.—*Marchmont* (XIII) and *Buchlyvie* (XV). **S** 3 inches deep.

14th.—*Warlingham* (II). Fierce gusts of **H** and **R** with **T** and **L** at 11 a.m. Max. wind velocity 72 miles per hour.—*Clonmel* (XX). Gale in morning did more damage here than any for about 7 years.

15th.—*Molesey* (II).

“The staff of the Isolation Hospital have had a very trying experience. The institution comprises several blocks of buildings, which have been surrounded by water to a considerable depth, and it was impossible to get from one block to another without going through the water. The matron, in going her rounds, had to be wheeled in a trolley; the nurses in charge of the various wards waded through the flood in seaboots, which were passed on from the day to the night staff when the change of duty took place. The medical officer, finding it impossible to get near the hospital in his motor-car, had to finish the journey in a farm cart.”—*The Times*.

* See also *Met. Mag.*, March, 1914, p. 34.

16th.—*Cowes* (II).

“Two large aviation sheds built on the side of the River Medina at Folly, near Cowes, last year, were . . . lifted bodily by the wind and carried a distance of about 100 ft. Both sheds were wrecked.”

—*North Cadbury* (V). Heavy gale; many trees torn up.—*Snowdonia* (XI). Gale with **H** did some damage.

18th.—*Omagh, Edenfel* (XXIII). **R** spell of 55 days with 10·70 in. of **R** ended.

19th.—*Wantage, Ginge Manor* (II). Sharp **TS** followed by **S**.—*Watford* (III). Very large **S** flakes which looked like feathers from 1 to 3 inches long.—*Peterborough* (III). **S** fell between 8.30 and 9.15 a.m. Heavy **TS** from 3 to 4 p.m.—*Hannington Hall* (V). **S** about $3\frac{3}{4}$ in. deep.

20th.—*St. Pancras, Camden Square* (I). **S** fell almost continuously from 8.45 a.m. until late in afternoon but did not lie.—*East Garston* (II). Very rough; **S** all day.—*Blisworth* (III). Most wintry day this winter. **S** from 9 a.m. to 2 p.m.—*Wroughton* (V). Heavy **S** storms.—*Torquay, Roby Hall* (V). About 2 inches of **S**.—*Moretonhampstead* (V). **S** began at 3 a.m. and by 8 a.m. at least 6 inches had fallen.

23rd.—*Letterkenny* (XXIII). and *Milford* (XXIII). Rain spell of 60 days ended.

25th.—*Crossmolina, Enniscoe* (XXII). Rain spell of 62 days ended.

26th.—Rain spell ended after continuing at *Weybridge* (II) 24 days.—*West Dean* (II). 24 days.—*Goring* (III). 26 days.—*Tavistock* (V). 38 days.—*Polapit Tamar* (V). 29 days.—*Moretonhampstead Rectory* (V). 46 days.—*Fethard-on-Sea* (XX). **TS** with **H** and black **R**.

27th.—*Tottingworth Park* (II). A black cloud at 4 p.m. passed from N.E. to S. **R** fell in torrents 2 miles to the west, not a drop fell here.

28th.—*Dunmanway* (XX). **R** commenced at 5 a.m. and fell heavily for 12 hours, totalling 2·06 in., and causing a great flood.

31st.—*Totland Bay* (II). Shade max. 65°·2 and min. 48°·6, the highest March readings in 28 years' record here.

APRIL.

1st.—*Darrynane Abbey* (XX). Rain spell of 70 days ended.

6th.—*Meltham, Harewood Lodge* (IX). **TS** from 6.15 to 7.30 p.m.

24th.—*Eye* (III). Beast killed by **L** near Holbeach.

MAY.

2nd.*—*Southwell* (VII). Severe frost with E. wind. All stone fruit, except on walls, was killed and potatoes and beans were cut. Oak trees had most of their leaves and buds killed, and walnut tree leaves were all killed.

7th—8th.—*Drumnadrochit* (XVIII). Continuous **R** for about 28 hours, commencing in night of 7th and amounting to 4·65 in., of which 3·38 in. fell on the 8th.

8th.—*Nairn* (XVII).

“An unusually heavy fall of rain took place throughout Nairnshire, and the river Nairn came down in great flood, rising to a height which has not been exceeded for the last forty years.”—*The Scotsman*.

14th.—*Great Yarmouth* (IV). Thick fog at 11.30 p.m.

22nd.†—*Lewisham* (I). A brilliant hot day was followed by exceedingly sharp **TS** which began about 10 p.m. and travelled overhead from W. Vivid **L** which was blue, white and pink in colour. **T** was incessant and heavy; after lasting 46 minutes the storm passed away eastwards.—*St. Pancras, Camden Square* (I). Heavy **TS** from 8.30 to 11.30 p.m. Unusually vivid and continuous **L**.—*New Malden, Edenfield* (II). **TS** with ·40 in. of **R** in 6 minutes.—*Greenhithe* (II). Fine misty morning, and a very hot close day. The temp. at 8 a.m. was 63° F., at noon 78°, and at 4 p.m. 82°. At midnight, and frequently during the night there were heavy showers, accompanied by **T** and vivid **L**, the bar. falling steadily from midnight on the 21st to 10. a.m. on the 23rd, the extreme fall being ·40 in.—*Bennington House* (III). **TS** at night with brilliant **L**.—*Manor Park* (IV). Storm from 9 to 11 p.m. Very loud **T** and vivid **L** almost continuous for about an hour.—*Upminster, High House* (IV). Heavy **R** throughout the night amounting to 3·35 in. Even under the thickest trees and shrubs the ground was soaked next morning. The fields along the banks of the Ingrebourne, which flows through the lower part of the village, were flooded. The storm seems to have been a local one, as though there was heavy **R** about a mile and a half to the S.E., the fall was not remarkably heavy at another place about 2 miles to the N.—*Grimsby* (VII). Severe **TS** from 10 p.m. to midnight. Constant **L** in every direction for an hour.

23rd.—*Westgate-on-Sea, Garlinge* (II). Heavy **TS** with ·71 in. of **R** between 4 and 5 p.m.

* See also *Met. Mag.*, June, 1914, pp. 93, 95.

† See also *Met. Mag.*, June, 1914, p. 95.

23rd—24th.—*Broadford* (XX). Potatoes greatly injured by frosts.

23rd—27th.—*Gogerddan* (XI). Severe frosts did considerable damage.

24th.—*Ballintuim* (XVI). Severe frost at night did a deal of damage to fruit and blackened the leaves of beech, ash, and oak trees.—*Portree* (XVIII). Frost did considerable damage to crops.—*Dunmanway* (XX). Severe night frost injured potatoes in low-lying districts.—*Ballyfin* (XXI). Considerable damage by frost.—*Omagh* (XXIII). Frost did considerable damage to potato crop.

24th—25th.—*Markree* (XXII). Severe frost did considerable damage to crops.

25th.—*Coupar Angus* (XVI). Severe frost damaged early fruits and exposed potato fields.—*Drumnadrochit* (XVIII). Keen frost caused general destruction of young growths of vegetation, trees and garden produce.—*Berriedale* (XIX). Frost did a lot of harm.—*Fethard-on-Sea* (XXI). Frost damaged potato crop.—*Castle Forbes* (XXI). Severe frost did great damage to potatoes, choice shrubs and young forest trees.—*Warrenpoint* (XXIII). Much damage to fruit and potato crop by frost.

25th—26th.—*Faringdon* (II). Frosts cut potatoes and tender plants.—*Oving House* (III). Night frost did considerable damage.—*Codford St. Mary* (V). Severe ground frosts. Shoots of walnut, mulberry, laurel and yew badly cut, also runner beans, potatoes and strawberries.

25th—27th.—*Hampton Poyle* (III). Considerable damage to garden crops by frost.

26th.—*Fordingbridge* (II). Hard frost did much damage to vegetables and fruit.—*Peterborough* (III). Frost cut potatoes and beans down.—*Shepton Mallet* (V). Severe frost cut down potatoes and did considerable damage.—*Wolstaston* (VI). Severe frost did much damage to potatoes and kidney beans.—*Nottingham* (VII).

‘Despite fourteen hours of sunshine with which Nottingham was favoured, the temperature remained low, lower, in fact in the shade, than on one day in January. The sharp night frost which preceded this sunshine did irreparable damage, both in this district and in many other parts of the country. The strawberry crop of North Notts is ruined, early potatoes and kidney beans will be a failure, and the gardens in the suburbs of Nottingham show lamentable results of the unlooked for, though by no means unprecedented, visitation.’—*Nottingham Evening Post*.

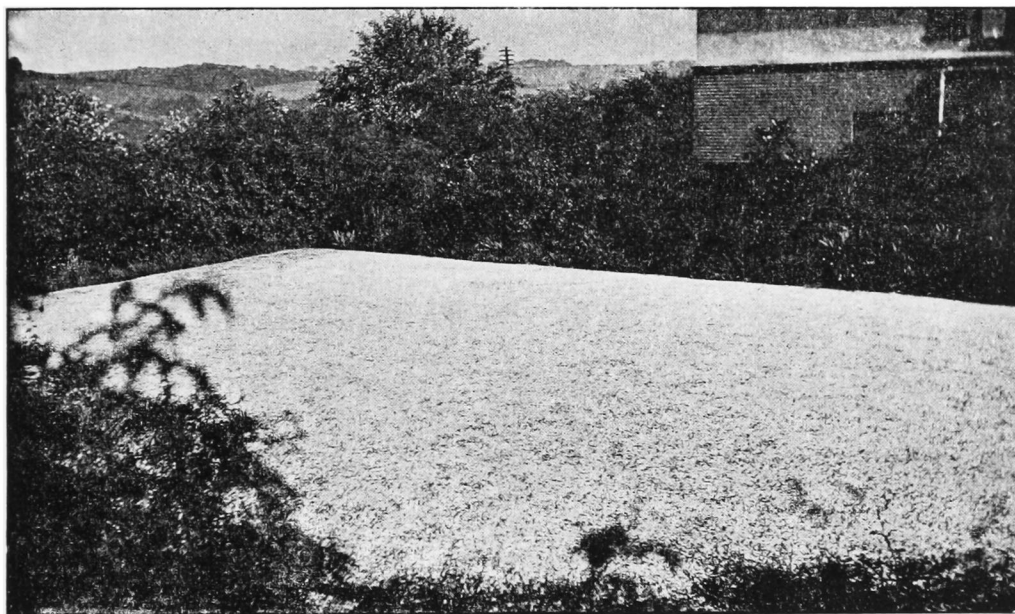
—*Wirksworth* (VII). Severe frost killed the young foliage of ashes which were just coming out. Potatoes and other crops were also much damaged.—*Wath-on-Dearne* (IX). Frost did immense amount of damage.—*Stockton* (X). Frost did much damage.—*Denbigh* (XI). Frost damaged potatoes.

26th—27th.*—*Hartley Wintney* (II). Severe frosts greatly damaged early potatoes.—*Cranfield* (III). Frost did much damage to market garden crops.—*Worcester* (VI). Severe frost, causing much damage to the fruit and root crops.

27th.—*Slough* (III). Severe ground frost, injuring potatoes, beans and strawberries.—*Bucknall* (VII). Frost destroyed potatoes and other garden crops.

JUNE.

7th.—*Purley, Riddlesdown Road* (II). Violent **H** from 4 to 10.20 p.m. ; not a **TS**. In less than 10 minutes ·25 in. fell. The photograph was taken at 4.30 p.m. in sunshine. A much more violent fall occurred at Kenley, doing considerable damage by washing up the roads when melting.—



HAIL ON LAWN AT PURLEY ON JUNE 7TH, 1914.

Photograph by Mr. J. E. Clark.

Winchester, St. Giles Hill (II). Frost at night did great damage in the valley below.

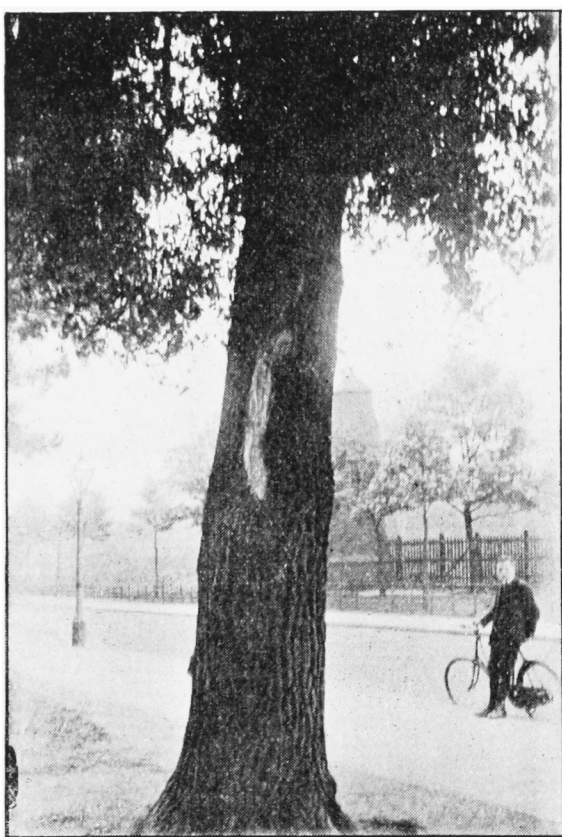
8th.—*Daventry, Sheaf Street* (III). Between 5 and 5.20 p.m. ·93 in. of **R** fell.—*Milton Bryant* (III). Over ·50 in. of **R** in about 20 minutes.

9th.—*West Witton* (IX). **TS** from noon to 4 p.m. in which time 1·30 in. of **R** fell. A shed of hay was fired by **L** on Leyburn Shawe.

* See also *Met. Mag.*, June, 1914, p. 93 ; July, 1914 p. 113.

10th*.—*Hitchin, Preston* (III). A terrific **TS** went over King's Walden, a village 1 mile W. at about 9 a.m. There was a torrential downpour and a tree struck, which was watched from here in brilliant sunshine. —*Bala, National School* (XI). **TS** with .15 in. of **R** in 10 minutes.

14th.†—*Wandsworth Common* (I). Very severe **TS** and exceptionally heavy **R** in early afternoon. Seven persons were killed by **L** while sheltering under trees and four others removed to hospital suffering from injuries. A young chauffeur who was struck and suffered temporary blindness probably owed his life to the fact that he wore rubber



TREE ON WANDSWORTH COMMON STRUCK BY LIGHTNING ON JUNE 14TH, 1914.
FOUR PERSONS STANDING UNDER THE TREE WERE KILLED.

Photograph by Mr. H. E. Carter.

heels on his shoes.—*Dulwich, Alleyn Park* (I). Violent **H** storms. Many **H** stones were like large acid tablets, about an inch long, half an inch broad, and over a quarter of an inch thick. A minute or two after these had fallen a mist arose to a height of about 4 ft. above the ground. **R**

* See also *Met. Mag.*, July, 1914, p. 113.

† See also *Met. Mag.*, July, 1914, p. 110

2.15 in., and of this 1.60 in. to 1.75 in. must have fallen in three quarters of an hour, from 1.30 to 2.15 p.m.—*Lewisham* (I). A **TS** began at 0.24 p.m., and came right overhead from E. with terrific flashes of **L** and loud **T**. At 0.31 p.m. **R** fell with extraordinary fury; within 9 minutes .50 in. had fallen. The second storm came up just after 1 p.m., the **L** being even more severe. At 1.30 p.m. St. Mark's Church, Clarendon Road and the Holy Cross, Catford, were struck. A tree in Hither Green Cemetery, over thirty feet in height was splintered, and two houses were struck at Catford. Another **TS** came up at 2.25 p.m. with torrents of **R** and **H** stones as large as haricot beans fell for about 5 minutes. Four more storms passed over between 3 and 5 p.m., but were only slight; by evening the clouds cleared and the sun shone brightly.—*Wimbledon, Kingston Road* (II). A sharp **TS** at 1.30 p.m., when 1.55 in. of **R** and **H** fell in 1½ hour. Wind N.E. The sky cleared for 15 minutes, then another **TS** when .59 in. of **R** fell. Wind S.S.E., backing later to N.E.—*Wimbledon, Trinity Road* (II). **R** 2.40 in. Between 1 and 2.30 p.m., 1.83 in. fell and another .57 in. between 3 and 4.15 p.m. Needless to say all the smaller plants were washed out of the ground and the garden practically wrecked. A house close by was struck by **L**.—*Wimbledon, Sewage Works* (II). **R** 2.64 in., from 1 to 4 p.m.—*Wimbledon, Cottenham Park* (II). **R** 1.94 in., from 1 to 4 p.m.—*New Malden, Edenfield* (II) **TS** with 1.75 in. of **R** in 3.2 hours, of which .73 in. fell in 10 minutes.—*Wimbledon, The Downs* (II). **R** 2.09 in., from 1 to 4 p.m.

“There was a curious scene close to Kingston Station, where the water was about four feet deep at five o'clock, and motor cars and omnibuses had to make a wide detour. The storm was especially severe in the Wimbledon district, where, owing to the bursting of an overtaxed sewer, the District Railway line was submerged. At Tooting Junction Station the water was a foot deep on the platform.”—*Gardeners' Magazine*.

—*Roehampton, Highwood* (II). During a terrible storm which lasted here for four hours the **R** and **H** fell in surprising fashion. In three hours 2.94 in. was measured, and a great deal of damage was done to summer bedding, flowering shrubs, and other plants.—*Richmond Park, Thatched House Lodge*. (II). Very severe **TS** passed over the house; an oak fence was struck by **L** in two places, and the tree most damaged by **L** in the Park is close to this house. The condition of this part of the Park after the storm was remarkable. The rainfall measurements made were as follows:—1.80 in. in 45 minutes; 2.70 in. in 1½ hours; 3.20 in. in 2 hours; 3.60 in. in 2½ hours; 3.70 in. in 2¾ hours. — *Egham*

Park (II). The storm was very heavy here. **R** began a little before 2.30 p.m. and lasted more or less continuously till about 6 p.m., when 2.81 in. was measured.—*Englefield Green, Harvest Road* (II). **TS** from 2 to 6 p.m. Very severe from 3 to 3.45 p.m., with torrential **R**, and again from 5 to 5.30 p.m. **R** 2 to 6 p.m., 2.77 in., of which about 1.75 in. fell between 2.45 and 3.45 p.m. Considerable damage occurred to property in the district, but with no loss of life. A feature of the storm was that blue sky could be seen both to N. and S. of this station, except when blotted out by **R** and mist.—*West Harting* (II). **T** and **L** for 45 minutes. Large **H** stones but little **R**.—*Petersfield, Ditcham Park* (II). **T** was first heard just before 1 p.m. The lightning recorder first marked at 0.51 p.m. By 2 p.m. a storm was developing due S., and another was beginning some miles to the N. A little later it got very dark to the S.E. and it was this cloud that gradually passed over here, though this cloud and the cloud which was causing the storm to the S. were joined. The **L** was very bright, and as far as seen was all between earth and cloud. There was very heavy **R** to the S., about two miles away before any fell here. The **R** here began about 2.45 p.m., but it was not hard, except for a short burst, till 3 o'clock, when the **R** and **H** were unusually severe. The water got into the house and the **R** stopped about 3.45 p.m. During the time of the fall there was 1.75 in. (total for the day 1.76 in.). It gradually cleared up after this and was a fine evening, though distant **T** was heard till 7 p.m.—*Teddington* (III). **R** 2.52 in., most of which fell in a terrific **TS** from 1.20 to 4 p.m.—*Staines, Belle Vue* (III). **R** 3.48 in., which fell in about 5 hours.—*Staines Reservoirs* (III). **TS** with 2.47 in. of **R** between 1 and 6 p.m.—*Slough, Upton* (III). A four hours' **TS**, resulting in only .01 in. of **R** here.—*Chickerell* (V). Heavy **TS** with **L** in afternoon. A house struck and a cow killed in the next parish of Fleet.—*Rousdon* (V). **T** heard over Portland Bill at 2 p.m., and a **TS** passed down Channel with much **L**, followed by a fiercer storm about 4 p.m. The **T** and **L** became incessant and the sky to the E. was weird and distorted. At 7.45 p.m. the **T** and **L** were coincident. The storm gradually passed over about 9 p.m.—*Yeovil, Coker Court* (V). **R** 2.27 in. in 100 minutes, from 4.40 to 6.20 p.m.

17th.—*Ribble Valley* (IX). A terrible **TS** burst on a hill called Red Shaw situate near Newby Head, about $2\frac{1}{2}$ miles from Gearstones and same distance from Ling Gill Bridge, and flooded Dent Valley as well as the Ribble. The water was very muddy and a kind of marl deposit

was left upon the bed of the river. The back waters were several inches thick with this stuff. A few tons of stones were removed by the torrents.—*Stanhope* (X).

“James Gardner, of Frosterley, was killed by lightning while working in Parson’s Byre Quarry.”—*Newcastle Evening Mail*.

—*Horsley Vicarage* (X). Heavy **TS** with 2·03 in. of **R** flooding the garden. —*Kendal Holmcroft* (X) **R** and large **H** stones fell; ·64 in. in 40 minutes, of which by far the most part fell in 20 minutes.—*Bala, National School* (XI). **TS** with ·48 in. of **R** in an hour.—*Pitlochry, Torrdarach* (XVI). In 80 minutes 1·55 in. of **R** fell.—*Castle Forbes* (XXI). Severe **TS** accompanied by heavy **R** and **H**. Most of the 1·52 in. registered fell between 2 and 3.30 p.m.

18th.—*Oxford, Banbury Road* (III). **T**, **L**, **H**, and 1·50 in. of **R** in an hour. The **H** stones were like square lumps of ice the size of a shilling. —*Worfield* (VI). **TS** with ·30 in. of **R** in about half an hour.—*Shifnal* (VI). Severe **TS**. House struck by **L**.—*Chinley* (VII). **R** described as a cloudburst between Chinley and Hayfield. **H** as pieces of ice came down chimneys in Chinley.—*Musselburgh, Levenhall* (XIII). Severe **TS** with 1·69 in. of **R** in 45 minutes.—*Blairgowrie, Kinloch Manse* (XVI). In 20 minutes ·50 in. of **R** fell.—*Balruddery* (XVI). Sharp **TS**; heavy **H**.

19th.—*Manor Park, Albany Road* (IV). **TS** with **R** and **H** lasting 2 hours and measuring 1·13 in. For a considerable time after the **R** had ceased the ground in places was white with **H**.—*Tilbury* (IV).

“The Roman Catholic Church was damaged by lightning, and some of the ships in Tilbury Docks were struck. Much flooding was caused in the lower part of Tilbury. At Grays, Purfleet, and West Thurrock considerable damage was done.”—*The Times*.

—*Great Chesterford Mills* (IV). In 45 minutes ·92 in. of **R** fell.—*Thetford, Water Works* (IV). Heavy **TS** with **R** and **H** stones half an inch in diameter; ·90 in. of **R** fell in 50 minutes.—*Durham* (X).

“At Ruffside, a village on the fringe of Weardale Moors, a cloud-burst caused great damage to crops and roads. Hailstones of great size and snow also fell.”—*The Times*.

20th.—*Peterborough, Abbeyfields* (III). **TS** with ·75 in. of **R** nearly all of which fell in 25 minutes.—*East Rudham* (IV). During a severe **TS** 2·10 in. of **R** fell in less than two hours.—*Swinton House* (XIII). **T** had been rumbling in the distance for some time, when suddenly at 10.30 p.m. there was a blinding flash and a terrific clap of **T**. A tree was struck and a gate hung on it was flung off its hinges, while an old tree stump

which served as the other gate post was set on fire. **R** fell but did not last more than about 15 minutes and measured .09 in.

21st.—*Clifton, Pembroke Road* (VI). **TS** from 11.30 a.m. to 12.15 p.m. with .52 in. of **R**.—*Kempsey, Draycott House* (VI). **R** 1.23 in. all of which fell between 6 and 9 p.m.—*Dunmanway* (XX). At 4 p.m. .50 in. of **R** fell in 20 minutes.

22nd.—*Clun, Trinity Hospital* (VI). During a heavy storm .70 in. of **R** fell in 25 minutes.

28th.—*Ilfracombe, Bickleighscombe* (V). Thick fog.—*Paisley* (XIV). Between 8.50 and 9.5 p.m. a rainbow was observed. The arc from S. to S.E. was magnificent. Beautiful golden sunset at the time.

*30th.—*Shrewsbury* (VI).

“The heat has had a most serious effect on the stock at the Royal Show. The heat became intense in the afternoon, with a shade temperature of over 84, and a number of valuable animals succumbed. These include two champion winners—one a sheep and the other a pig—and at least five more pigs have died.”—*Manchester Dispatch*.

JULY.

1st.—†*St. Pancras, Camden Square* (I). Shade max. 93°·7, the highest since the record high temp. of 97°·1 on August 9th, 1911.—*Biggleswade Waterworks* (III). **R** 1.83 in. in 65 minutes, from 2.7 p.m. to 3.12 p.m.—*Clopton Manor* (III). Severe **TS** with 1.58 in. of **R**.—*Beaminster* (V). At 3.15 there was a furious squall for 10 minutes, raising a blinding dust, and .10 in. of **R**.—*Tavistock* (V). Earthquake shocks.—*Shepton Mallet* (V). Heavy **TS** occurred about midnight. One flash of **L** struck the band-stand in Collett Park and another struck Lower Downside Farm.—*Stonehouse, Wycliffe College* (VI). About 5 p.m. after a very hot day a remarkable storm swept down from N.W., raising clouds of dust and preceded by a sort of low wall of mist or **R**; .50 in. fell in a few minutes.—*Bristol, Telephone Avenue* (VI). Heavy **TS** with 1.91 in. of **R**, of which 1.20 in. fell in 20 minutes, accompanied by a remarkable gale of wind.

“The congregation at the Bristol Cathedral was practically imprisoned by the storm, which raged with great violence for three-quarters of an hour. The service of the enthronement was over, and the clergy had proceeded to the cloisters. Those of the public who quickly left after the service were doubtless able to take tramcars or get shelter; indeed, many were driven into the Royal Hotel. . . . Suddenly the air began to get dark, and then arose a whirlwind and dust storm. This continued for

* See also *Met. Mag.*, July, 1914, p. 114.

† See also *Met. Mag.*, July, 1914, pp. 112, 114; August, 1914, p. 135.

some two or three minutes, when a flash of lightning cut through the gloom, followed by a deafening crash of thunder, and then came the rain. It was so dense as to obscure the other side of the road. The flashes increased in intensity, and the thunder, growing in volume, made many timorous people really apprehensive. With such an awful deluge and the vast superficial area of the Cathedral roofs it can be readily understood that the gutters were unable to deal with the rush. It poured off the cloisters tiles into the quad. in volumes. The sewer grating was unequal to the strain, and there was quickly an overflow which forced its way into the cloisters nearly as far as the Chapter House and flooded the floor of the minor canons and the vestry to the depth of three inches. As the flood penetrated along the cloisters several of the clergy seized brooms and endeavoured to keep the invading waters at bay."

"AN APPROPRIATE FILM.—In one of the city cinemas, while a film was being exhibited depicting lakes and fountains on the Continent a deluge of water poured through the roof, driving those present pell-mell to the side seats, and continuing to fall for some time. As the colours from the lantern pierced through the falling water to the screen the spectacle was quite pretty—if it was not, perhaps, appreciated so much by the management as by the audience."—*The Bristol Times and Mirror*.

—*Clifton, Pembroke Road*. (VI) **TS** with 1·00 in. of **R** in 45 minutes.—*Wolstaston* (VI). **R** 1·74 in. of which 1·08 in. fell in an hour, from 6 to 7 p.m.—*Bridgnorth, Coton Hall* (VI). In about 2 hours 3·10 in. of **R** fell.—*Worfield* (VI). **TS** with 1·00 in. of **R** in 2 hours.—*Mayfield House* (VI). **R** ·16 in. in 5 minutes.—*Barnt Green, Upwood* (VI). **TS** from S.E. at 4.10 p.m. Hurricane followed by **R** and **H**. Between 4.10 and 4.55 p.m. ·55 in. fell.—*Ashbourne Waterworks* (VII). Between 5.15 and 6.45 p.m. 1·24 in. of **R** fell.—*Chellaston* (VII). Destructive **TS** with 1·20 in. of **R**.—*Wirksworth, Manor House* (VII). Heavy **TS** broke over here about 5 p.m., and 1·10 in. of **R** fell up to 8 p.m. The **L** for some time was continuous.—*Frodsham, Simonsdelf* (VIII). In 15 minutes ·46 in. of **R** fell.—*Rochdale, Fieldhead Yard* (VIII). ·38 in. of **R** fell in 7½ minutes.—*Haworth, Lower Laithe Reservoir* (IX). During a heavy storm ·63 in. of **R** fell between 4.45 and 5 p.m., and 1·00 in. between 4.40 and 5.25 p.m.—*Harewood House* (IX). In 4 hours 1·95 in. of **R** fell.

1st—2nd.—*Southport* (VIII). Severe **TSS** occasioned some structural damage.

2nd.*—*Exebridge Fishery* (V). In 10 minutes, 4.20 to 4.30 a.m., ·30 in. of **R** fell.—*Mayfield House* (VI). **R** ·58 in. in 13 minutes.—*Carnbooth* (XIV). **TS** from 2.30 to 4 a.m. **R** 1·03 in.

4th.—*Colchester, Lexden* (IV). River in flood.

6th.—*Glanmire, Lota Lodge* (XX). **T** from 2 to 5 p.m.; 1·16 in. of **R**.

9th.—*St. Andrews* (XVI). Exposed foliage ruined by N.E. gale.

* See also *Met. Mag.*, July, 1914, p. 112.

11th.—*Clun, Trinity Hospital* (VI). **TS** with $\cdot 64$ in. of **R** in 11 minutes.—*Mostyn Vicarage* (XI). A very heavy **TS** from 7.30 to 10 p.m., with torrential **R**, occurred. During that period $3\cdot 33$ in. of **R** fell; some **R** fell later on, making the record $3\cdot 37$ in. for the 24 hours. Much damage to the roads was done by the floods.—*Bala, National School* (XI). Severe **TS** with $1\cdot 91$ in. of **R** at 6.55 p.m., lasting till 8.30 p.m. Many animals killed and trees struck by **L**. Houses flooded in Bala.

12th.—*Haslemere, The Laurels* (II). **TS** with $\cdot 77$ in. of **R** in about an hour.—*Chobham, The Manor House* (II). During a **TS** $\cdot 65$ in. of **R** fell in half an hour.—*Ospringle, Lorenden* (II). Between 0.45 and 1.45 p.m. $1\cdot 37$ in. of **R** fell.—*Whitstable, Western House* (II). During a heavy storm $1\cdot 54$ in. of **R** was measured; the storm began slightly with a little **R** about noon and just before 1 p.m. it became very dark and then the storm increased in severity with violent **R**. Practically the whole of the **R** fell in less than an hour.—*Faversham, Dunkirk House* (II). **R** $1\cdot 56$ in. between noon and 2.30 p.m. in a furious double **TS**. Many of the **H** stones were as big as small walnuts and lawns were white with **H** at 1.30 p.m. or thereabouts. Most of the **R** came down in a sheet of water in about half an hour during the height of the storm—*i.e.*, between 1.30 and 2 p.m.—*Billingshurst, Five Oaks* (II). From 10.40 to 11.10 a.m., $\cdot 73$ in. of **R** fell, of which $\cdot 36$ in. fell between 10.55 and 11.5 a.m.—*Balerno, Cockburn Hill* (XIII). **TS** with $1\cdot 25$ in. of **R** from 2.30 to 4 p.m.

15th.—*South Norwood* (II). Double rainbows in evening. The primary rainbow was remarkable in that it showed a double violet band with a clear gap between the two.

16th.—*Ticehurst, Myskins* (II). Between 0.15 and 0.30 p.m., $\cdot 60$ in. of **R** fell.

18th—20th.—*Axmouth, Millmead* (V). **R** commenced about 9 p.m. on 18th and fell steadily for 30 hours until about 3 a.m. on 20th, a total of $3\cdot 04$ in.—*Rousdon* (V). Continuous **R** for 30 hours from 8 p.m. on 18th to 2 a.m. on 20th, amounting to $3\cdot 70$ in.

19th.—*Selsey, Large Acres* (II). Fine **R** began at 7 p.m. From 7.15 to 7.40 it was torrential and at 7.40 registered $\cdot 45$ in. It rained off and on in the night and at 9 a.m. next morning measured $1\cdot 45$ in. The heavy **R** was driven by a due S. wind, with a force of 8-9. It hit the ground hard enough to make a continuous splash-mist 4 inches high all over the lawn.—*West Dean* (II). **TS** with $1\cdot 59$ in. of **R**. Roads flooded.—*Winchester, St. Giles Hill* (II). **TS** from 7.15 to 7.45 p.m. with $\cdot 48$ in. of **R**.

—*Liss, Kippences* (II). Heavy **TS** with 1·32 in. of **R**.—*Selborne, The Wakes* (II). Heavy **TS** with 1·41 in. of **R**.—*Mamhead* (V). Sixteen hours continuous **R** yielding 2·02 in.—*Langford Budville* (V). **R** all day and night, totalling 3·07 in.—*Wiveliscombe, Culverhead* (V). The heavy **R**, 3·28 in., was due simply to a steady downpour; there were no **TSS**.—*Oakamoor, Woodbank* (VI). A whirlwind uprooted trees, etc., along a path some 100 to 200 yards wide, travelling from a southerly direction.

20th.—*Mayfield House* (VI). **R** ·75 in. in 25 minutes.—*Ipstones, Sharpcliffe Hall* (VI). In 45 minutes 1·11 in. of **R** fell.

21st.—*Shifnal, National School* (VI). The worst **TS** for years with ·60 in. of **R** in 2 hours. Tower of Wesleyan Church struck.—*Kirkby Lonsdale, Casterton* (X). The school was the centre of a **TS**, and 1·50 in. of **R** fell in 20 minutes. Two columns of **R** seemed to meet on the lawn. At Higher Casterton there was much less **R**, and at Kirkby Lonsdale, 1½ mile away, they continued to play tennis in the sunshine.

22nd.*—*Broadstairs, Providence House* (II). **TS** with 1·82 in. of **R**. Of this 1·65 in. fell in the first hour. This **R** lasted about 1 hour 20 minutes, then stopped, but about 5.45 p.m. **R** again began and lasted about half an hour, in which time ·21 in. fell, making a total of 2·03 in.—*Broadstairs, St. Peter's Court* (II). **R** began to fall at 2.35 p.m. In one hour 1·48 in. fell. The total for the afternoon was 1·82 in. Wind chiefly **E**.

24th—25th.—*Richmond* (IX).

"Snow fell on the moors west of Richmond on Friday and Saturday mornings, and a keen north-westerly wind prevailed afterwards. The subsequent sleet checked hay-making operations in the district for some time. The fruit trees suffered much in the vigorous gale."—*Leeds Mercury*.

28th.—*Briton Ferry, Brynsiriol* (XI). In an hour ·66 in. of **R** fell.

AUGUST.

8th.†—*Borrowdale, Grange* (X). **R** 4·72 in. Big flood.—*Snowdon, Pen-y-Gwryd* (XI). **R** 6·35 in. Heaviest **R** ever known here for 24 hours. Glaslyn flooded on to main road. Conway in flood, cattle drowned.

14th.—*Codford St. Mary* (V). Severe **TS** at night. Both the flashes of **L** and the peals of **T** were extremely prolonged.—*Chickerell* (V). Heavy **TS** in evening for several hours with bright and continuous **L**, chiefly at a distance of several miles.—*Torquay, Roby Hall* (V). **T** began soon

* See also *Met. Mag.*, August, 1914, p. 135.

† See also *Met. Mag.*, September, 1914, p. 146

after 6 p.m. and though distant and less frequent in the middle of the night, lasted for 12 hours. Heaviest about 5 a.m., 15th.—*Mamhead*, (V). **TS** began at 6.30 p.m. and lasted $7\frac{1}{2}$ hours. Very brilliant and continuous **L** between E. and S.—*North Cadbury* (V). Smart **TS** from 7.30 p.m. to midnight. Pale, long-lasting and illuminating **L**.—*Guernsey, St. Martin's Road* (XI). **R** began at 6 p.m. and during the first 15 minutes 1.50 in. fell, increasing to 1.70 in. in 30 minutes. The storm had completely passed by 10 p.m. The sewers could not take the water and Smith Street was a river. Shops in High Street were inundated. The damage done was so serious that a new drain had to be made.—*Castledermot* (XXI). **TS** with 2.85 in. of **R**.—*Rathmines* (XXI). Severe **TSS** from 5.45 p.m. to midnight; the heaviest since 1899.—*Mullingar, Belvedere* (XXI). Severe **TS** with **H** and **R** measuring 2.35 in.—*Gillardstown* (XXI). Violent **TS** with 2.95 in. of **R**.—*Castlepollard, Pakenham* (XXI). Severe **T** and **L** with 3.22 in. of **R**.—*Castle Forbes* (XXI). Violent **TS** which lasted almost continuously for 12 hours.

14th—15th.—*Ashburton* (V). Bad **TS** from 6 p.m. to 6 a.m., with vivid **L** in S. and S.E.—*Tramore, Midvale* (XX). **TS** from about 11 p.m., 14th, to 11 a.m., 15th, in which time 2.23 in. of **R** fell.—*Hacketstown* (XXI). Several heavy **TSS**. Severe loss of cattle in the country round about.

18th.—*Rousdon* (V). Well defined waterspout at 11.35 a.m., lasting about 10 minutes.

20th.—*Whaley Bridge, Mosley Hall* (VII). Heavy **R** fell from 4.15 p.m.; probably .50 in. in half an hour, total .68 in. **T** was heard.

21st.*—*Warlingham* (II). **TS** during solar eclipse and another at 5 p.m.—*Farnham* (II). **T** from 3 to 4 p.m.—*Ticehurst, Myskins* (II). Eclipse splendidly seen, except for about two minutes about the max. phase, when a light cloud obscured the sun. About 2 p.m. wind shifted from S. to W. A **TS** passed from N.W. to N. and away to N.E., along the Wadhurst-Ticehurst ridge, about 3 p.m. Another came up from W. and broke here at 3.30 p.m., and a similar one about 4.30 p.m. During each .05 in. of **R** fell.—*Clopton Manor* (III). Sharp local **TS** with **H** and .74 in. of **R** in half an hour.—*Tenbury, Rochford* (VI). **TS** from 3 to 4 p.m. "The Court" struck by **L**.—*Hodsock Priory* (VII). **H** stones up to $\frac{3}{4}$ inch in diameter.—*Sunderland* (X).

* See also *Met. Mag.*, September, 1914, p. 147; October, 1914, p. 165; November, 1914, p. 181.

"Thunder was heard to the Westward about twelve o'clock, and gradually very heavy clouds gathered. About one o'clock the storm broke suddenly and the rain came down in torrents for some time. The drains were quite unable for a while to cope with the flow, which ran down the streets like small rivers."—*Sunderland Echo*.

22nd—24th.—*Hedsor* (III). Dense fog at night.

23rd.—*Heathfield, Tottingworth Park* (II). A close rolling mist came up the valley at 7 p.m., but did not last long.

24th.—*Filey, Deepdene* (IX). A severe **TS** burst over here about 3.40 p.m. and in 10 minutes .27 in. of **R** fell. During the evening the storm was renewed from time to time, torrents of **R** falling, which was specially heavy between 9 and 10 p.m. It stopped soon after midnight. The total **R** was 1.82 in.

SEPTEMBER.

2nd.—*Glenelg Manse* (XVIII). **TS** at 5 p.m. with very vivid **L**.

3rd.—*Thurso, Buckies* (XIX). Dull and foggy all day.—*Castletown* (XIX). Dense damp fog to 10 a.m.

7th.—*Watten, Stanstill* (XIX). Dense fog.

8th.—*Warrenpoint* (XXIII). Almost black fog followed by heavy **R**.

9th.—*Cashel, Ballinamona* (XX). A severe **TS** about 3 p.m., lasting for a considerable time. The **L** was very vivid. There was very heavy **R** lasting about three-quarters of an hour, during which time the precipitation was .50 in. At one time during the storm there was an exceptionally heavy shower of **H**, some of the stones being about $\frac{3}{4}$ inch in diameter, while the average size was $\frac{1}{2}$ inch or more.—*Limerick, Lansdowne* (XX). In $1\frac{3}{4}$ hours 1.02 in. of **R** fell, accompanied by terrific **T** and **L**.—*Broadford, Hurdlestown* (XX). Severe storm of **L** and **R** took place in the afternoon. The **T** began in the N.E. at 1 p.m. and the sky in that direction was black as ink, while the day was very bright and warm. **R** began at 3.40 p.m. and stopped at 5.15 p.m., in which time 1.06 in. fell. There was more **R** at night; 1.25 in. being the 24 hours' fall. No damage was done about here, but some hay was burned by the **L** a few miles N. of this. Four miles to the S. there was no **R** at all and the roads were dusty and dry all day. The storm came from N.E. to S.W.

14th.—*Southport* (VIII). Severe gale in afternoon and night, reaching maximum force for an hour about 7 p.m. Gusts blowing at 90 miles.

per hour.—*Castle Forbes* (XXI). Gale destroyed many trees and entirely ruined latest varieties of apples. Fruit which remained on the trees was battered and useless.

16th.—*Castle Forbes* (XXI). Sudden fall of .20 in. of **R** in 5 minutes.

17th.—*Buchlyrie* (XV). One bright flash of **L** and one heavy peal of **T** with **R** and heavy **H** at 11.20 a.m.—*Hacketstown* (XXI). In early morning 1.58 in. of **R** fell in about 4 hours and caused the highest flood in the river Dereen known for many years.

20th.—*Raunds* (III). Sharp **H** storm at 2.15 p.m. for about 10 minutes.

21st.—*Mildenhall* (V). Dahlias cut by frost.

22nd—26th.—*St. Pancras, Camden Square* (I). Fogs every morning, clearing between 9 and 10 a.m. Generally sunny afterwards.

27th—28th.—*Aberdeen* (XVII). Heavy N.W. and N.N.W. gale.

30th.*—*Waterford* (XX). Thick fog in morning.

OCTOBER.

11th.—Absolute drought ended after continuing at *Seaford* (II). 24 days.—*West Dean* (II). 24 days.—*Warsash, Hook Vicarage* (II). 22 days.—*Tiverton* (V). 22 days. Flowers were plentiful and apples unusually abundant.—*Fethard-on-Sea* (XXI). 25 days.—*Clonmannon* (XXI). 25 days.

12th.†—Absolute drought ended after continuing at *Caterham Valley* (II). 22 days.—*Brighton* (II). 25 days.—*Oving House* (III). 25 days.—*Oxford* (III). 23 days.—*Peterborough* (III). 23 days.—*Ampthill, Higham Bury* (III). 22 days.—*Braintree, Fennes* (IV). 22 days.—*Lechlade* (VI). 25 days.—*Malvern* (VI). 25 days.—*Droitwich* (VI). 24 days.

13th.—*Monkswood Reservoir* (VI).

“Rain is badly wanted, for the Monkswood reservoir has dropped two feet in the last fortnight, from 14 feet 3 inches to 12 feet 3 inches, showing how much storage water has had to be drawn upon to supplement the steady decreasing yield of the springs. The shutting off of the water supply has had its effect, or matters would have been much worse. In the first week of the intermittent supply the daily consumption had decreased by some 72,000 gallons, and now, of course, the hours are still more restricted.”—*Bath Herald*.

—*Macclesfield* (VIII). A meteor fell with a very loud explosion which frightened all Cheshire and a good part of Lancashire.

* See also *Met. Mag.*, November, 1914, p. 181.

† See also *Met. Mag.*, November, 1914, p. 180.

14th.—*Newport Pagnell, The Croft* (III). After a showery morning **R** fell steadily and heavily from 4 to 9 p.m., with very heavy bursts at intervals. Total **R** 2·21 in.

20th.—*Tramore, Midvale* (XX). Absolute drought of 28 days ended.

24th.—*Grimsby* (VII). Thick fog.—*Sion Mills* (XXIII). Fog all day.

27th.—*Cartmel* (VIII). When driving from Grange to Cartmel, there was a clear sky and bright moonlight over Morecombe and a black cloud over Hampsfell, and as higher ground was reached the heavier the **R** came down. On going down the hill on the Cartmel side about 10.15 or 10.20 it rained much less heavily, and the moon came out brilliantly for a short time and there was an almost perfect lunar rainbow; the end of the arch resting on the Fell had in it decided rainbow tints, but the rest, although almost a perfect arch, had scarcely any colour.

29th.—*Dublin* (XXI). Sharp **TSS** at 4.30 a.m. and 9 a.m., the latter being accompanied by **H**.

NOVEMBER.

1st.—*Tiverton* (V). Severe **T** and **L** in the early morning.

2nd.—*Shrewton* (V). Heavy showers of **R** and **H** for about 20 hours, amounting to 1·96 in. Some **T** and **L**.—*Aldbourn, Upham House* (V). Heavy storms with **T**. **R** 2·08 in.

3rd.—*Rathmines, Leinster Road* (XXI). Dense vapour fog.

4th.—*St. Pancras, Camden Square* (I). Thick fog, clearing at 10 a.m.

6th.—*Lewisham* (I). **TS** passed in a northerly direction at 4 p.m., followed by a sharp shower. A thick fog set in at midnight.—*Boxmoor, Springfield* (III). Three heavy claps of **T** and vivid **L** between 2 and 3 p.m.; ·46 in. of **R** fell in less than an hour.

14th.—*Mansfield, West Bank* (VII). **S** fell for 4 hours and produced ·50 in. of water.—*Wakefield, Durkar* (IX). **S** 3½ inches deep.

15th.—*Torquay, Roby Hall* (V). **T** and one vivid flash of **L** at midday.—*Southwell* (VII). **S** to a depth of 4 inches.—*Goldsborough Hall* (IX). Heavy fall of **S** in early morning.—*Carlbury Hall* (X). **S** ceased to fall at 3 p.m., when it was 5 inches deep.—*Fontburn* (X). **S** fell to a depth of 3 inches.—*Maxwelton* (XII). **S** 3 inches deep.

16th.—*West Witton* (IX). **S** 6¾ inches deep.

29th.*—*Snowdonia, Pen-y-Gwryd* (XI). Gale and **R** all day, amounting to 4·13 in. Floods.—*Lockerbie* (XII).

* See also *Met. Mag.*, December, 1914, p. 197.

“ With a continued heavy rain over the week-end, the river Annan and tributaries are this morning in a heavy spate. At Shillahill, about two miles from Lockerbie, the Annan has overflowed its banks and along its course has inundated miles of home land. The tributaries the Dryfe and Milk are also running in heavy flood this morning.”—*Glasgow Evening Times*.

—*Airdrie* (XIV).

“ Very heavy rain fell at Airdrie. A dense darkness preceded it, and the downpour resembled a cloud-burst. Many houses in the low-lying parts of the town were flooded, and the choking of drains caused an accumulation of water, forming lakes in some of the streets.”—*Glasgow Evening Times*.

—*Kirkintilloch* (XV).

“ Continuous rain filled the rivers Luggie, Kelvin, and Glazert to overflowing, and a strong westerly gale held the waters back, with the result that large tracts of haugh land were flooded. The water came on to several of the public roads, and there was no communication with Milton, the road being impassable near Birdston Bridge, while the Campsie Road was equally impassable at the Kirkintilloch end, where the water lapped the door-step of some houses. In Eastside back courts were inundated, but the storm having somewhat abated this morning no serious damage has been done.”—*Glasgow Evening Times*.

—*Meggernie Castle* (XVI). **T** through the night.

30th.*—*Bathgate Filters* (XIII). From 9.30 to 10 a.m. .26 in. of **R** fell.

—*Linlithgow Academy* (XIII). Between 9.15 and 10.15 a.m. .40 in. of **R** fell.—*Aberfeldy* (XVI). River Tay in high flood.

DECEMBER.

1st.—*Swerford* (III). **T**, **H** and **S** at noon.—*Wolstaston* (VI). Heavy **T** and **L**.—*Denbigh Asylum* (XI). **TS** with **H** and .75 in. of **R**. Rivers in flood.—*Plockton* (XVIII). S.W. gale and **TS** with **L** lasting for 24 hours without a break of more than an hour.—*Clonmel* (XX). Heavy **TS** at 7 a.m. passed to the S.W.

1st—4th.—*Llwydiarth Esgob* (XI). Gale with sheet **L** on 2nd and 4th. Menai Bridge blown out of sockets.

2nd.—*Lewisham* (I). A severe S. gale at night, with terrific squalls blowing slates off the houses and fencing down in many parts of Lewisham.—*Heathfield, Tottingworth Park* (II). **T** and **L** at 6 a.m.—*Fareham, The Mount* (II). At 6 a.m. .14 in. of **R** fell in 5 minutes.—*Aberfeldy, Dall Avon* (XVI). **R** 2.29 in. River Tay in high flood.

4th.—*Lewisham* (I). A gale from S.W., ending in a severe squall with driving sheets of **R**. Just before 3 p.m. a **TS** passed over from W. to E.

* See also *Met. Mag* December, 1914, p. 197

and a house at Blackheath was struck by **L**.—*Heathfield, Tootingworth Park* (II). Gale with **T**, **L** and **H**.

4th—5th.—*Chorley* (VIII).

During the gale of Friday night and Saturday morning a large portion of roof on a newly-erected portion of the Leyland Motor Works, off Golden Hill Lane, was blown in, and damage to the extent of over £200 was caused. The roof of a large timber shed in Forge Street was also blown bodily to the ground."—*Chorley Guardian*.

—*Southport* (VIII). Protracted W.S.W. gale in night with gusts at the rate of 88 miles per hour.

9th.—*St. Pancras, Camden Square* (I). Fog early, becoming black as night from 10 to 10.45 a.m., when it quickly dispersed. **R** commenced at 5.55 p.m., and fell all night, the total, 1.40 in., being the heaviest daily fall since 28th June, 1906, when 2.21 in. fell.—*Seale, Poylehill House* (II). **R** 2.09 in. The 2 inches fell after 7 p.m., probably in 10 to 12 hours. The roads were flooded on low-lying ground and many fields swamped.—*Ryde, Beldornie Tower* (II). **R** 2.10 in. Ryde railway tunnel flooded.

13th.—*Thurso, Buckies* (XIX). **S** 4 inches.

14th.—*Berwick* (XIII).

"The heavy rainfall of the past three days has caused a good deal of flooding, and in Berwickshire and along Tweedside a number of fields are under water. Tweed, Till, and Whitadder are all in high flood and bringing down large trees and branches with them. At Berwick considerable damage was done by the great volume of water overflowing the banks."—*Northern Echo*.

—*Lynturk Manse* (XVII). **R** fell in torrents all day, amounting to 2.40 in. the heaviest fall in 14 years' observations.

15th.—*Fethard-on-Sea* (XX). Dense fog.

18th.—*Heathfield, Tootingworth Park* (II). Vivid **L** at 6 a.m.

19th.—*St. Pancras, Camden Square* (I). **TS** with vivid **L**, heavy **T** and 10 in. of **R** in 10 minutes, from 0.55 to 1.5 p.m.—*Upper Somborne* (II). **TS** with **H** at noon.—*Skibbereen Rectory* (XX). At 10.45 p.m. an extraordinarily fierce squall from W. with noise as of five or six trains. It lasted only 3 minutes and was apparently only a few yards wide. Trees were blown down close to this house, but there was no trace of it in the town, or quarter of a mile away.

20th.—*Bulvan* (IV). At 0.40 a.m., while Observer was doing duty as special constable, the sky was quite clear and there was no moon, when a very large shooting star was seen high over the eastern horizon. It left a very marked trail of light, and suddenly exploded into a large ball of fire which died out rather quickly after lighting up the whole of the

eastern heavens. The trail of light remained for some time, but eventually and very slowly faded away.—*Hacketstown* (XXI). Heavy showers of sleet froze as they fell and left the road a sheet of ice. There were several serious accidents.—*Cloverhill* (XXIII). **S** 8 inches deep.

21st.—*Brighton, Ditchling Road* (II). Rain spell of 28 days with 9.42 in. of **R** ended.—*Westward Ho!*, *Belleue* (V). Rain spell of 29 days ended.—*Macclesfield* (VIII). Dark afternoon. All the shops lit up at 1.30 p.m.

21st—26th.—*Duns* (XIII). **R** falling on 21st froze on the roads to solid ice which greatly hindered traffic. They remained covered till 26th.

22nd.—*West Witton* (IX). A glazed frost caused many local accidents, one of which was fatal.

24th.—*Lewisham* (I). Dense black fog in evening.—*Sparkhill* (VI) Dense fog at night.—*Bolton* (VIII). Dense fog in afternoon and evening.

25th.—*Bath, Combe Down* (V). “Silver frost”—**R** which froze as it fell, both on the ground and on the trees—the road looking as though simply wet, but really ice, on which it was most difficult to walk.—*Thornton-le-Moor* (IX). Thick fog.

26th.—*Drumnadrochit* (XVIII). The worst hurricane for years overturned stacks and trees and unroofed houses.

26th—27th.—*Crosswood Reservoir* (XIII). **S** commenced at 3.30 p.m., 26th, and at 9 a.m., 27th, was 3 inches deep. Continued falling until 2 p.m. Total depth 8 inches.—*Arisaig* (XVIII). A hurricane blowing from S.E. which was worse than the great storm of November, 1911, did enormous damage to trees and plantations in the night. It was worst between 3 and 5 a.m.

27th.—*Tiree* (XV). W.S.W. gale. Wind velocity estimated at 70 to 75 miles per hour from 3 to 5 a.m.

28th.—*Hampstead Observatory* (I). **R** turning to heavy **S** with a gale at 8 p.m. The ground was covered an inch and a half deep by 9 p.m. The bar. subsequently rose an inch in twelve hours.—*St. Pancras, Camden Square* (I). Practically continuous **R** through afternoon, accompanied by **S** and sleet at night with high wind.—*Westminster* (I).

“The weight of the snow caused the top sheets of the recruiting tents on the Horse Guards’ Parade to sag and the big tent was thrown down. A second tent nearly collapsed also. Several trees in St. James’s Park were damaged, large branches being torn from the trunks.”—*The Times*.

—*Warlingham* (II). Max. wind velocity 67 miles per hour.—*Weybridge* (II). Violent storm. Temp. fell from 48°·5 at 7.15 p.m. to 32°·7 at 8.45

p.m., with heavy **S**.—*Westgate-on-Sea* (II). Trees blown down and slates blown off during gale.—*Langley (Kent)* (II). In evening a severe gale was experienced in this district. Trees blown down and buildings partly unroofed. Very heavy damage done. **R** .58 in.—*Detling* (II). A heavy gale rose after sunset blowing from S.W., lasting until after midnight, and causing immense damage to buildings, fruit and orchard trees. Elms fell very largely, not so much breaking as bringing up with their roots all the surrounding earth; possibly the excessive wet assisted in this.—*Ticehurst* (II). At 4 p.m. wind was dead calm with drizzle and fog. At 5 p.m. a S.W. gale was blowing which got worse until about 7 p.m. and remained violent until midnight, when it began to slacken.—*Isle of Wight* (II).

“Trees were blown down in all directions, and one large elm at Norton, near Yarmouth, in its fall severed the whole of the telegraph lines leading to the cable near Fort Victoria. Consequently telegraphic communication between the island and the mainland was entirely cut off until Tuesday evening, and telegrams were sent across to the mainland by boat and despatched from there.”—*Isle of Wight Advertiser*.—*West Dean* (II). Storm of wind rising to hurricane force accompanied by dense **S** which remained on the ground for some hours. Extensive floods.—*Abbot's Ann* (II). Violent **W**. gale commenced at 6.50 p.m. and continued into the night.—*Maidenhead, Hall Place* (II). At noon the bar. had fallen to 29 inches. It fell with gradually increasing speed to 28.6 inches at 7.30 p.m. This is a record in itself, but after very slightly rising it bounded up from 8 to 8.30 p.m. to 28.9 inches; thereafter it rose more slowly. At the same time temp. fell from 42° to 31°. It had been raining heavily from 3.45 p.m., the air being quite calm. At 8.10 p.m. the **R** suddenly moderated and instantly a furious gale sprang up from **S**. by **E**., then quickly veered to **W**. with **S**; afterwards **N.W.** One large tree fell due **E**. and another **S.E.**—*Hedsor* (III). Heavy gale with some **S**. Min. bar. 28.68 in.—*Harpsden, Cray* (III). Very sudden storm in evening. Just before 8 p.m. the bar. having fallen to 28.5 (uncorrected), and the wind being moderate and westerly, temp. in the screen 42°·5, the wind suddenly jumped to **N**. and blew hard with heavy **R**, which shortly turned to **S** which by 9 p.m. covered the ground. The temp. dropped in 15 minutes to 33°, and in half an hour to 32°. At 8 p.m. the bar. began to rise rapidly. **R** fell in 20 minutes to the extent of .15 in. Earlier in the day from 5.15 to 6.30 p.m., .32 in. of **R** fell.—*Ipswich, Copdock* (IV). Bar. fell to 28.65 in. (corrected) at 10 p.m., and a severe gale raged for about 3 hours from 11 p.m.—*Rendlesham Hall* (IV). Heavy **R** followed by a gale of great violence causing considerable

damage. Trees were uprooted and large cedars smashed.—*Hingham Hall* (IV). Great gale with **R**, **H** and **S**. Trees uprooted and telegraph poles blown down.—*Chipping Campden* (VI). Heavy **S** for 4 hours, lying 7 inches deep.—*Barnt Green, Upwood* (VI). **S** began at about 7 p.m. and fell heavily. Trees and telegraph wires broke down under the weight.—*Mullingar, Ballynegall* (XXI). **S** 8½ inches deep.

29th.—*Tiverton* (V).

“Owing to the flood putting out the boiler fires at Messrs. Carr’s new mills, a large number of hands were unable to work there this afternoon.”—*Bath Chronicle*.

Sparkhill (VI). **S** 4 inches deep at 7 a.m.

30th.—*Blisworth* (III). Large floods out.

31st.—*Chertsey* (II).

“Thousands of acres of land are under water. At various points the normal course of the river is only distinguishable by the turbulent, swift-rolling torrent; at Chertsey Bridge, for example, one may look for three or more miles in the direction of Shepperton and Weybridge and see only a melancholy waste of waters.”—*The Times*. —*Worcester* (VI). Owing to the excessive **R** of December the river Severn overflowed its banks. On this day there was 12 ft. 7 inches of flood water. Many of the low-lying houses near the river were flooded and several roads in the city rendered impassable.

NOTES ON THE YEAR, 1914.

(Notes on the months are included in those on the year.)

When an average is referred to in these Notes without a statement of the number of years on which it is based the figure should not be accepted as necessarily comparable with the average of any other station.

ENGLAND AND WALES.

DIVISION I.—LONDON.

WEST KENSINGTON, EDITH ROAD.—A very warm year, the mean temp. being $1^{\circ}6$ above 30 years' average, and the warmest recorded, except 1911. The mean temp. of every month except January was above the average. **R** 1.22 in. above average. Eight months were below the average, but the exceptional fall of December (6.02 in., and the wettest month recorded except June, 1903), brought the total above average. March also had the highest **R** recorded.—*G. Searle*.

ST. PANCRAS, CAMDEN SQUARE.—The **R** of the months was of a very capricious character and only in February, April and May was the fall within an inch of the average amount. January was the driest month with only .55 in., or 28 per cent. of the average, but in April, June, September and October, the fall was less than 50 per cent. of the average, and both in July and August it was only 53 per cent. The most noteworthy feature of the monthly **R**, however, was the unprecedented wetness of March and December. In March the total **R** was 4.51 in., or 158 per cent. above the average, and by far the greatest fall for that month in the 57 years' record, the previous highest March fall being 3.69 in., in 1862. In December the **R** amounted to 6.34 in., or 197 per cent. above the average, and was the greatest fall for any winter month in the long record. At the end of May the aggregate **R** from January 1st was 1.16 in. above the average, but it was just below it at the end of June, and never again reached the average until December. The total **R** was .58 in., or 2 per cent., above the average of 50 years. In spite of the low **R** of

most of the months the number of rain days did not differ from the average by more than 5, except in March and December, when there were 25 and 24 days respectively, or 11 and 9 above the average. The total number, 168, was 5 above the average. There was one absolute drought for 22 days, from September 21st to October 12th. One partial drought from August 9th to September 8th, 31 days with $\cdot 26$ in. of **R**, was followed closely by a second from September 14th to October 12th, 29 days with $\cdot 27$ in. There were no rain spells, the longest period of consecutive rain days being 11, from March 11th to 21st. The duration of **R** was 513·6 hours, or 83·2 hours above the average. In March it amounted to 102·4 hours, the greatest for March in the 35 years for which homogeneous records exist and only previously exceeded in one month, viz., October, 1882, when **R** fell for 103·5 hours. This record was, however, eclipsed by December, when **R** fell for 117·5 hours. The duration was less than 20 hours per month in April, May, June, and September. The duration exceeded 10 hours on 7 days, the greatest daily records being 15·9 hours on March 8th and 15·1 hours on December 9th. The total duration of sunshine was 1413·3 hours, the third highest amount in the 11 years over which the records extend. June was the sunniest month with 236·6 hours' duration, and the only other month when the amount reached 200 hours was April, when there were 211·8 hours. In January the total was only 15·7 hours. Sunshine was recorded on 288 days. There were only 8 sunless days from March 31st to October 12th. The total evaporation from a free water surface amounted to 15·60 in., or only $\cdot 02$ in. below the average of 29 years. The monthly amounts never differed greatly from the average, the largest difference being in August, when the total was 1·99 in., or $\cdot 38$ in. below the average. The year was persistently mild, the mean temp. being above the average in every month but January and then it was only $0^{\circ}\cdot 3$ below. February was relatively the warmest month, the mean temp. being $4^{\circ}\cdot 8$ above the average, this being mainly due to the high max. readings of the month. The mean temp. of March, though $2^{\circ}\cdot 1$ above the average, was actually lower than that of February. In April it was $3^{\circ}\cdot 7$ above the average, this again being primarily due to a succession of high max. temp. The only other month when the difference from the average exceeded $2^{\circ}\cdot 0$ was December, when it was $2^{\circ}\cdot 7$. The annual mean temp. was $51^{\circ}\cdot 8$, or $1^{\circ}\cdot 8$ above the average, and the highest in the record, except in 1868 and 1911. Frosts occurred in the screen on 33 days and on the

grass on 80 days. The latest spring frost was on March 28th in the screen and April 26th on the grass ; the earliest autumn frost was on November 17th in the screen and on October 12th on the grass.—*Hugh Robert Mill, F.R.Met.Soc.*

DIVISION II.—SOUTH EASTERN COUNTIES.

SURREY.

REDHILL, STATION ROAD.—As regards wet days December took the record with 25, March having 21. December also took the record for the total quantity measured, whilst January was the driest month as regards total fall with $\cdot 52$ in., but April and September had the lowest number of wet days, 7 each.—*W. H. Fowler.*

SUTTON, CAMBORNE ROAD.—Of the total **R** for the year 19·47 in. fell during the months of February, March, November, and December, leaving only 10·70 in. for the remainder of the year. The **R** for January and April was extremely light, but **R** fell on 26 days in March. There was a rain spell of 21 days from March 7th to 27th, but notwithstanding the heavy fall in December it provided no rain spell. From December 9th to 14th the total **R** was 3·96 in. for the six days. There was an absolute drought of 22 days from September 21st to October 13th. The year was noted for the comparative absence of fog, **S** and **TSS**. The autumn was warm and many summer flowers continued to bloom even late in November.—*F. E. Wright.*

HASLEMERE, HAZELHURST.—After a dry January with skating on two days, February and March were very wet, with an aggregate **R** of 13·15 in. From February 6th to 23rd there was a rain spell of 18 days, with 7·05 in. There was another rain spell of 16 days from February 28th to March 15th, with 3·68 in. Wet **S** fell on March 18th—20th, measuring in all 1·28 in., but it was never deep and rapidly melted. Another rain spell of 22 days occurred from November 24th to December 15th, total 10·01 in. This included four falls of one inch and over. The **R** of November and December was heavy and continuous, the latter being the wettest month ever recorded in Haslemere, the record beginning (Mr. Penfold's, Courts-hill) in 1875. The **R** of the year was 9·34 in. above the average, and was only exceeded in 1903. The six months from April to September were bright and sunny, although the July **R** was a little in excess of the average. The fruit crop was abundant.—*T. P. Newman. F.R.Met.Soc.*

EWHRST, MALQUOITS.—A bad year for all workers on the land. It was almost impossible to work the waterlogged soil before the middle of April. Then the prolonged drought of summer and autumn caused great anxiety. Where watering of crops could not be resorted to they were in many cases complete failures. Hay crops were very light, spring sown corn poor, and root crops patchy and small. Plums and pears a heavy crop, apples fair. All crops suffered severely in the terrific heat, and through lack of sufficient moisture.—*E. A. Norris.*

FARNHAM, SHORT HEATH LODGE.—The winter was mild with little ice for skating. Excessive **R** in February, 4·77 in., and in March 4·20 in. Spring fine and mild: no frost in screen in April or May. Summer very pleasant with little excessive heat and abundant sunshine. For seven months in succession, *i.e.*, from April to October, the **R** was below the average. Autumn fine and mild, except for sharp cold from November 16th to 24th. There was 21 days' absolute drought, from September 21st to October 11th. The **R** for December, 9·24 in., exceeded the record for any previous month, the next greatest being 8·80 in., in October, 1903, and 7·78 in., in December, 1911. Frost in the screen was recorded on 53 days, 31 in the first half of the year, and 22 in the second. The latest was March 27th, and the earliest November 14th.—*Geo. Chrystie.*

GUILDFORD, ROYAL GRAMMAR SCHOOL.—Of the total **R** 20·37 in. fell in the four months February, March, November, and December, and only 8·84 in. in the remaining eight months. December, with 8·66 in., beat all former records.—*H. N. Weller.*

ENGLEFIELD GREEN, HARVEST ROAD.—A notable year, there being a marked deficiency of **R** until the middle of November. The heavy **R** of December, about 300 per cent. of the average, made, however, the years' total exceed the average by 6 in. In spite of the heavy total of November and December, 10·12 in., there was no flooding in this part of the Thames valley, a district noted for floods, until December 31st. A rain spell of 24 days was recorded in March, and one of 22 days in November—December. Absolute droughts of 22 and 24 days were recorded in April—May and September—October respectively, while a partial drought of 29 days, with only ·11 in. of **R**, occurred during September—October.—*H. Fermor.*

KENT.

TENTERDEN, VIEW TOWER.—1914 was remarkable for a very wet February and a still wetter March, for six droughty months, from April 12th to October 12th, in which only 6·58 in. fell, for a wet November, and an exceedingly wet December. The summer was not nearly so hot as that of 1911, only 8 days having max. temp. over 80°, against 29, so that the drought was not felt so severely and sheep and cattle did not fall to anything like such low prices as in 1893 and 1911. Sunshine was above average, the total, 1882 hours, being 330 hours more than in 1913, though 154 less than in 1911. March was the wettest in 52 years and the only one above 5 in. December wettest for the same period, though nearly equalled by 7·04 in. in 1868, and only exceeded by 9·18 in. in October, 1865, and 7·62 in. in October, 1889. The two months, February 7th to April 6th, had a fall of 9·79 in., and the two months, October 28th to December 27th, 13·06 in.—*J. Ellis Mace.*

SUSSEX.

CHICHESTER, WESTGATE.—January was dry but February and March were very wet. Then followed 7 months with **R** below the average. The **R** in November was slightly above the average, and December, with 8·94 in., was the wettest month in 76 years, excepting only October, 1865, when the fall was 10·61 in. There was an absolute drought of 19 days from April 10th to 29th, and one of 21 days from September 20th to October 11th.—*G. Ashley Tyacke.*

LINCHMERE, BORDEN WOOD.—The third wettest year in the 16 years' record. The total fall in December, 11·54 in., was the greatest for any month in this period.—*Edmund Lamb.*

BRIGHTON, DITCHLING ROAD.—The **R** of the earlier part of the year was considerably above the average. After the middle of April it suddenly took a turn for dryness and during the growing part of the summer the springs and wells were lower than ever known before. This state continued till the middle of October, when a most exceptionally wet time set in, which culminated in the wettest December on record for this part since the year 1869.—*G. Berry Hamlin.*

ISFIELD PLACE.—Duration of sunshine 2019 hours.—*Henry King.*

MAYFIELD, BISHOPSTONE.—The prominent characteristics of the year were (1) a heavy fall at the beginning, February having 4·93 in., and March 6·92 in. (2) This was followed by an exceptionally dry summer

and autumn, from which everything in the garden suffered greatly; both garden and sweet peas were a complete failure and there was later a great dearth of winter vegetables. The longest spell without any measurable **R** was 25 days, from September 17th to October 12th. (3) Finally we had a sort of deluge at the end of the year, the last three months giving 17·10 in., of which 9·70 in. was contributed by December. This total for a single month exceeded anything registered before.—*A. G. Robins.*

CROWBOROUGH, UCKFIELD LODGE.—For the year the **R** was 6·35 in. above the average of 43 years. The **R** formed a new record for December, both in regard to quantity and frequency. The nearest approach was 1876, with 9·02 in.—*J. J. S. Driberg.*

FOREST ROW, HINDLEAP.—An abnormal year. Very dry from April to June, and from August to October. December had the heaviest **R** in one month recorded here during sixteen years. Total **R** for year I think the heaviest recorded here. During December a constant succession of cyclones running round from S.E. to W.N.W., with heavy gales, but no first class tempest. November and December were warmer than usual, while May and the first half of June were rather colder than usual.—*Bryce.*

EAST GRINSTEAD, CRANSTON ROAD.—**R** 9·62 in. above the average of 24 years.—*G. Mitchell.*

HAMPSHIRE.

TOTLAND BAY, ASTON HOUSE.—1914 proved the wettest year since 1891. There were no less than 20 days in 1914 with more than half an inch of **R**. There were two absolute droughts, April 11th—28th, 18 days, and September 18th to October 11th, 24 days. The second quarter of the year, April, May, and June, was very dry with a total **R** of only 2·46 in. March was the wettest March during my 28 years in Totland, so also December was the wettest December. January was the driest January on record. The year was bright with 1882 hours of sunshine. For the first time I registered more than 200 hours of bright sunshine in each of six successive months.—*J. Dover, F.R.Met.Soc.*

FORDINGBRIDGE, OAKLANDS.—The total **R**, 39·85 in., was 8·12 in. above the average of the past 10 years. Only three times in the past 40 years has a greater fall been recorded here, viz., 40·36 in., in 1877 ;

39.88 in., in 1911; and 42.60 in., in 1912. The continued heavy **R** in November and December caused great floods in the district.—*S. B. Rake.*

MILFORD-ON-SEA, SALT GRASS.—A very uneven year. Some frost in January, a record **R** in March, 5.30 in., and in December, 9.57 in. Much E. wind and warm sunshine in April, but a late spring. A droughty May and June, but after a wet July, 3.39 in., and fine dry August and September, excellent garden crops of all fruits, especially apples, pears and plums. Maincrop potatoes had much disease and were poor, owing to drought after planting. A stormy October, November, and December, with high tides and excessive **R**.—*A. C. G. Heygate.*

UPPER SOMBORNE.—January was dry and cold. February was a changeable month and March was very wet. April was dry and warm, there being an absolute drought from the 11th to May 2nd. May was genial and June very dry and warm. July was hot and thundery, the max. temp. of the year being 91° on the 1st. August was showery. September was fair with strong winds and little **R**, an absolute drought occurring from the 18th to October 11th, a period of 24 days. October was mild but November was cold, rough and wet, there being a great prevalence of westerly gales. December was the wettest month of the year.—*Chas. Alleway.*

HARTLEY GRANGE.—**R** 3.92 in. above the average of 43 years.—*F. Walkinshaw.*

ASHLEY OLD MANOR HOUSE.—Regarding the behaviour of the intermittent Somborne stream during 1914, the current rose late in comparison with most years, thus responding to the moderate **R** of November and December, 1913, and of January, 1914. The heavier falls in February and March, amounting to 9.68 in., caused the stream to start flowing from Tanner's Pond about February 20th and to augment gradually until it reached its greatest volume towards the end of April. No current flowed above Little Somborne. The depth to water level in a well at that village was 5 feet on May 4th, from which date the level gradually sank to 27 feet on November 7th, an exceptionally low level. By the end of July the current ceased to flow from Tanner's Pond. The water in my well at Ashley reached its lowest level of 120 feet 9 inches, between November 10th and 14th, whilst the first noticeable rise of the Somborne occurred about December 21st, by which time a rise of 3½ feet from the lowest level had occurred in my well.—*Legh S. Powell, F.R.Met.Soc.*

BERKSHIRE.

WINDSOR, ALMA ROAD.—We had a very fine mid-year, a very great amount of sunshine, and **R** short of the average until December, when the fall far exceeded any December I remember during over 70 years of observations. The Thames valley was flooded. The Conservators of the River Thames were most assiduous in preventing the spreading of the floods—*Christopher Sainty*.

MAIDENHEAD, HALL PLACE.—The year was remarkable for the uneven distribution of **R**. In March there were 23 consecutive days with **R**. In April and the beginning of May 22 consecutive days without **R**, and again in September and October there were 25 consecutive days without **R**.—*Gilbert A. Clayton East*.

DIVISION III.—SOUTH MIDLAND COUNTIES.**MIDDLESEX.**

HARROW WEALD, HILL HOUSE.—**R** 1·22 in. above the average of 25 years.—*Alex. Crossman*.

PONDERS END, BYLOCK HALL.—**R** about the average. Very dry and fine spring, summer and autumn. **R** of April to October, inclusive, only 8·32 in. December and March very wet, thus adjusting the average. Frosts on 43 nights. Maxima above 80° on 19 days. Absolute drought September 21st to October 11th, 21 days.—*H. E. Freir*.

HERTFORDSHIRE.

WATFORD, WEETWOOD.—**R** about 3·25 in. above the average, and very frequent, especially in March and December. August and September were dry; January and April very dry. March and December were very wet, the latter month having about three times the average **R**, and being a record. The Colne valley flooded here at end of year.—*John Hopkinson, F.R.Met.Soc.*

BUNTINGFORD, THROCKING RECTORY.—The months of March (3·98 in.) and of December (6·09 in.), were the wettest of their name as yet registered at Throcking. The latter was the wettest month recorded for the 35 years. February had the highest day temp. recorded for that month.—*Bernard W. Harvey*.

BUCKINGHAMSHIRE.

SLOUGH, UPTON.—The first month was dark and sunless and the driest January since 1892. March was the wettest month of that name in the

40 years' record. There were over 210 hours of sunshine in April. The effect of 22 days' absolute drought ending on May 2nd was severely felt by all vegetation except deep-rooted trees. But for some alleviation in July, the dry weather continued into October, and parched the soil to dust, ruined the pastures and injured the root crops. The close of the year was wet, December having the greatest **R** for any month since the gauge was established.—*Richard Bentley, F.R.Met.Soc.*

OXFORDSHIRE.

CAVERSHAM, RECTORY ROAD.—The dry period which had prevailed since May came to an end in December, when the **R** for the month amounted to 6·73 in. Thousands of acres were submerged, and the floods were as extensive as in December, 1910. The rush of water at Caversham Mill stream was so great that the tow-path between Reading and Lower Caversham was cut away in several places, and the authorities had to close it.—*W. Simpson.*

NORTHAMPTONSHIRE.

BLISWORTH, CRIEFF HOUSE.—**R** ·37 in. below, and **R** days 18 above, the average of 30 years.—*Alfred Westley.*

SYWELL HALL.—Attention may be drawn to the two comparatively dry periods between March 23rd and June 7th, and between August 11th and October 20th.—*T. A. Dickson, F.R.Met.Soc.*

BEDFORDSHIRE.

AMPTHILL, HIGHAM BURY.—**R** 1·27 in. above the average of 23 years.—*E. J. Jekyll.*

GREAT BARFORD HOUSE.—A fine year up to October 13th, to which date only 12·75 in. of **R** had fallen; exceedingly wet to the end of the year. A splendid harvesting time. Equable temperature and very few days when the thermometer reached 80°.—*J. Arnold Whitchurch.*

DIVISION IV.—EASTERN COUNTIES.

ESSEX.

COLCHESTER, HILL HOUSE, LEXDEN.—A cold January was followed by mild weather and much sunshine in February. The wettest March in the record, which included a rain spell of 21 days, ending on the 27th,

caused high and long continued floods. The seven months, April to October, had only 8·34 in. of **R**, the lowest since 1893, when 8·09 in. fell in the corresponding months. November began and ended in mild weather with a cold spell from 13th to 23rd. December was rather mild and the wettest month in 26 years' record.—*S. F. Hurnard*.

SUFFOLK.

HAWKEDON RECTORY.—**R** 2·31 in. above the average of 25 years.—*B. P. Oakes*.

COCKFIELD RECTORY.—In the middle six months there was more than 6·00 in. deficiency in the **R**. The Rectory moat was lower than for thirty years. The wettest December in 21 years, and exceeded by only two months in my whole record, bringing the year's **R** to an inch above the average.—*E. Hill*.

NORFOLK.

NORWICH.—There was a deficiency of **R** in April, May, June, August, September, and October, but the heavy downpours of December, 6·67 in., brought the year's total to about 2 inches above the average. The mean temp. of every month, January excepted, was above the average. The excess was more than 2°·0 in five months and in February was as much as 5°·3. The mean temp. of the year, 50°·5, was as high as in the warm year, 1911. The shade max. exceeded 80° on 13 days. The duration of sunshine for the year was 1691 hours, and there were only 49 sunless days. The brightest month was April with 236 hours, June coming next with 233 hours. The harvest was a very fine one, commencing about August 6th, and concluding before the month was ended.—*A. W. Preston, F.R.Met.Soc.*

DIVISION V.—SOUTH WESTERN COUNTIES.

WILTSHIRE.

SALISBURY PLAIN, SHREWTON.—The year was marked by two wet periods, viz., February 6th to April 11th, and October 14th to December 31st, the latter continuing into 1915. July and the first few days of August was also a rather wet period, the rest of the year being very dry. A great rose year, but otherwise not remarkable in farm or garden.—*F. J. Wardale*.

DORSETSHIRE.

CHEDINGTON COURT.—**R** 12·25 in. above the average of 17 years, and the wettest year in that period. December with 10·21 in. was the wettest month in the record.—*H. Birkinshaw.*

BEAMINSTER, HAMILTON LODGE.—The **R**, 50·65 in., was 12·67 in. above the average of 41 years, and constituted a record, the previous highest being 49·25 in., in 1903. December was the wettest month here in 42 years, except December, 1876 (11·44 in.), October, 1891 (10·63 in.), and December, 1911 (9·97 in.).—*Fiennes Trotman.*

DEVONSHIRE.

TAVISTOCK.—January was dry and dull, with no **R** between 10th and 24th. February was mild, wet and rough. March was very wet seriously affecting the working of the land. April mild and dry, only ·02 in. of **R** after the 12th. May rather dry but rather dull, and June rather bright, **R** slight. July was warm, but rather wet, and August was warm, with **R** about the average. In September, slight **R** fell in the middle of the month; warm at the beginning, cool at the end; no **R** fell from 20th till October 12th. October, fine till the 20th, when **R** fell till the end of the month. November, rainy and rather rough, cold snap third week. December, very wet and stormy.—*W. J. Monk.*

ASHBURTON, DRUID HOUSE.—**R** 12·71 in. above the average of 49 years.—*J. S. Amery.*

TORQUAY, ROBY HALL.—January was cold and sunless. In February came **R** and gales which lasted pretty well through March. The weather took up on April 12th. We had a period of welcome **R** early in May, and from then till the third week in October the weather was almost ideal. We had 40 days during that time when the max. temp. went up to or above 70°, but it only once went as high as 77°. Generally speaking it was never too cold to sit out of doors, nor too warm for strong exercise. From April 12th to October 22nd, only 13·23 in. of **R** fell on 65 days, but there was no drought. The weather broke on October 21st and from then to the end of the year we had constant gales and **R**, with a total of 17·05 in. for the 10 weeks.—*John Edwards-Moss.*

KINGSKERSWELL, SOUTH HILL.—**R** 9·67 in., and rain days 16, above the average of 19 years.—*E. A. Foster.*

MORETONHAMPSTEAD RECTORY.—The **R** was 6·88 in. above the average for the last 13 years. There were three rain spells during the year;

46 days from February 9th to March 26th ; 18 days from October 21st to November 7th ; and 27 days from November 24th to December 21st.—*Stanley D. Dewey, F.R.Met.Soc.*

AXMINSTER, LEA COMBE HOUSE.—The early winter was dry and rather cold ; the latter weeks very wet and mild. The spring as a whole was brilliantly fine, warm and sunny with moderate **R**, though the early weeks were wet and rough and there was a very cold and harsh snap in late May. The summer was generally fine and warm with ample **R**. The **R** in fact was considerably above the normal, owing to the very wet July, but the number of rain days was not excessive and the greater part of the **R** fell at night. The summer was one of the best for crops for many years. The early autumn was fine, dry and warm with much sun, and a deficiency of **R**. From October 25th till the end of the year, however, a complete change took place and the weather was constantly coarse and rough, with an excessive **R**.—*A. C. F. Luttrell.*

WOOLACOMBE.—Total duration of sunshine 1636·4 hours.—*R. W. Hansford.*

ILFRACOMBE METEOROLOGICAL STATION.—Total duration of sunshine 1713·8 hours.—*O. M. Prouse.*

CORNWALL.

HELSTON, TENDERAH.—A year of heavy **R**, owing entirely to the excessive falls in March, 8·16 in., and December, 9·20 in., but with comparatively few wet days. The year was one of unusually even temp., with the exception of some slight frosts on two or three nights in January and December. There was not even a hoar frost for the whole year.—*J. Walker Tyacke.*

TRURO, BOSVIGO.—There were two periods of absolute drought, viz., 21 days, from April 11th to May 1st, and 23 days, from September 19th to October 11th.—*C. L. Rashleigh.*

CALLINGTON, MOUNT LODGE.—In the first half of the year only 21·04 in. of **R** fell, and in the second half 32·15 in. There were absolute droughts of 19 and 23 days respectively, lasting from April 11th to 29th, and from September 20th to October 12th. Three rain spells occurred, lasting from February 26th to March 20th, 23 days ; from October 21st to November 4th, 15 days ; and from November 24th to December 8th, 15 days.—*G. Brown.*

SOMERSETSHIRE.

STON EASTON.—**R** 9·04 in. above the average of 46 years.—*H. E. Hippisley*.

EAST HARPTREE, HARPTREE COURT.—**R** 7·34 in. above the average of 32 years. December, with 9·13 in., was the wettest December in that period.—*W. W. Kettlewell*.

CLEVEDON, BOWLING GREEN.—**R** 5·54 in. above the average of 35 years. December was terrible here; the waters being out all over the low lying land. The little stream which comes out of the rocks at Cheddar, in summer, was like a swollen torrent.—*A. B. Trestrail*.

DIVISION VI.—WEST MIDLAND COUNTIES.**GLOUCESTERSHIRE.**

STROUD, STANLEY PARK.—**R** 4·92 in. above the average of 26 years.—*W. H. Marling*.

STONEHOUSE, WYCLIFFE COLLEGE.—After a dry January it rained on 51 out of 64 days, from February 6th to April 10th. Then followed 22 days without **R**. The latter part of August and the early part of September were fine and again no **R** fell from September 20th to October 12th. December was very wet.—*W. A. Sibly*.

HORFIELD, GLOUCESTER ROAD.—The dew-fall for 1914 was ·64 inch. It was measured by exposing two trays, one of glass and one of aluminium, both 8 inches in diameter. One of these was exposed on grass and the other on soil, and the amount condensed measured by volume, if possible, but mostly by weight, and recorded. The grass dish always gave the larger measurement, being about 20 per cent. higher than that on the soil. Time of observation, September to April, at sunrise, and April to September, varying from 5 to 6 a.m., always keeping the dishes clear of direct sunlight.—*F. H. Robbins*.

CHIPPING SODBURY, THE RIDGE.—**R** ·75 in. below the average of 43 years.—*P. Burges*.

HEREFORDSHIRE.

WOOLHOPE, THE HYDE.—**R** ·21 in. above the average for the last 23 years. With the exception of a partial drought during August, September, and October (the three months only yielding 4·10 in.), the **R** was evenly distributed throughout the year, making the season one

of the most fruitful I ever remember. Corn, hops, and fruit were abundant, I may say, superabundant. Strawberries, which were injured by frost on the nights of May 25th and 26th, were the one exception.—*J. A. Thompson.*

BURGHILL COURT.—On the whole a dry year with absolute droughts from April 12th to May 1st, 20 days, and from September 20th to October 12th, 23 days. The crops were excellent, as in May and June there was heavy **R** after spells of dry weather, which saved the situation. July was wet and “hindersome” for the hay harvest, but each week some could be got in. December was again very wet with 5·36 in., but this was required as the wells were dry. The floods came out only during the last few days of the month. First severe frost affecting dahlias, on November 17th.—*E. D. Woodhouse, F.R.Met.Soc.*

SHROPSHIRE.

CHURCH STRETTON, WOLSTASTON.—Cold with E. wind from January 11th to 25th. Bad colds were prevalent in February, owing to damp changeable weather. A very wet March was followed by a dry April with high temp. after the 15th. May also was dry and good for tillage, and in June **R** was much needed. July was showery and August warm and sultry on the whole. The corn crops were excellent. September was wonderfully fine and October very mild. November was wet and December specially so, with severe gales, **S**, frost, and fog.—*W. Bowden.*

WORCESTERSHIRE.

MOSELEY, CHANTRY ROAD.—**R** 18 in. below the average of 40 years. December with 6·59 in. was 3·75 in. above the average, and the wettest December in 40 years.—*G. F. Lyndon.*

WARWICKSHIRE.

WARWICK CASTLE GARDENS.—The **R** up to the middle of October was exceptionally low. The quantity registered for December, 5·59 in., is a record for many years, and is more than fell in the first four months of the year, or in July, August and September. The **R** during the last week caused serious floods in the Avon valley.—*H. F. Smale.*

FARNBOROUGH.—A dry year, up to November and December, when there was very heavy **R**. The harvest weather was superb, and the hay harvest, too, had good weather for its ingathering. Vegetation generally

was wonderful throughout the year, root crops, vegetables, and flowers all doing very well and flowering splendidly ; roses were specially good. There was a good deal of winter T. One heavy fall of S and some very sharp frosts.—*Constance A. Prater.*

DIVISION VII.—NORTH MIDLAND COUNTIES.

LEICESTERSHIRE.

BELVOIR CASTLE.—The total R was 2·15 in. above the average. Mean temp. of the year 49°·1, which is 1°·1 above the average. Total sunshine 1624·8 hours, which is 112·9 hours above the average ; there were 67 sunless days.—*W. H. Divers.*

LINCOLNSHIRE.

WELBOURN.—The year was chiefly noticeable for long dry periods, in January (18th to 27th), in April (12th to 24th), in May (13th to 22nd), in August (10th to 22nd) and the beginning and end of September and the early part of October. R was afterwards fairly frequent, and in the latter part of December fell nearly every day. This being a clay soil the R makes the land in a dreadful state from constant soaking.—*M. Burt.*

LOUTH, WESTGATE.—R 1·83 in. below the average of 42 years. December, with 6·39 in., was the wettest in the record, the nearest approach being 6·04 in. in 1901.—*Fred. Fawcett.*

NOTTINGHAMSHIRE.

SOUTHWELL, ELMFIELD.—The year was, on the whole, dry and warm. There was an absolute drought continuing for 22 days, from September 21st to October 12th. In the autumn the soil was thoroughly dry and baked so hard that in many districts ploughing was delayed and in others where the soil was lighter germination after sowing was hindered. The last three months of the year were wet, and the phenomenal precipitation in December served to bring up the total R for the year to within 1·43 in. of the average. In each month of the year the mean temp. exceeded the average, February, March, April, and October being much in excess. On only four occasions did the shade temp. exceed 80° F., namely two in June and two in July. There were no very severe frosts,

but the two frosts in May, viz., on the 2nd and again on the 26th, did much damage to the fruit crop, especially to plums and apples.—*H. Handford.*

WORKSOP, HODSOCK PRIORY.—Taken as a whole the year was unusually mild and very dry except just at the end, with a moderate excess of sunshine. The mean temp. $49^{\circ}\cdot8$, was $1^{\circ}\cdot9$ above the average, and the same as in 1898, but higher than in any other previous year, with the single exception of 1911, when the mean was $49^{\circ}\cdot9$. Every single month in the year was warmer than the average, the largest excess being in February ($5^{\circ}\cdot6$) and April ($3^{\circ}\cdot9$); the latter month was warmer than in any previous year, and February very nearly so. May was the only month in which the excess was less than $0^{\circ}\cdot5$. There were 6 days on which the temp. reached 80° , two each in June, July, and August, with a max. of $84^{\circ}\cdot6$ on June 30th. There were also 57 other days on which 70° was reached, a number well above the average. There were 60 frosts in the screen and 143 on the grass, both rather low values. The last frost in spring was on May 27th, a fortnight later than the usual date, while the first autumn one was on September 25th, a fortnight earlier than usual. The total **R** for the year was $2\cdot72$ in., or 11 per cent., below the average. Up to the middle of October the year was very dry, three months, March, June, and July, had an average fall, but in all the others there was a substantial deficiency. But the latter part of October and the two following months were rather wet, and so brought the total for the year nearer to the average than at one time seemed probable. There were 1344 hours of sunshine, which is 88 hours more than the average, or 30 per cent. of the possible duration, April, June, and September were the brightest months, while the largest deficiency was in March. Duration of **R**, 367 hours, or less than in any of the previous nine years, except 1905. The duration was greatest in December, and least in April and September.—*H. Mellish, F.R.Met.Soc.*

DERBYSHIRE.

CHELLASTON.—**R** $\cdot37$ in. above the average of 35 years. The heavy **R** in December, $5\cdot18$ in., caused great floods during the last few days.—*H. Chambers.*

BELPER, QUARRY BANK.—**R** $1\cdot05$ in. above the average of 38 years.—*John Hunter, F.R.Met.Soc.*

DIVISION VIII.—NORTH WESTERN COUNTIES.

LANCASHIRE.

BLUNDELLSANDS, MYRA.—**R** .07 in. below the average of 39 years. First six months exceptionally dry, only 9.69 in. being registered (average for this period 12.19 in.). With exception of 1912, the driest April here for 21 years. The driest June for 10 years, the wettest July for 26 years, the driest August for 15 years and, with exception of 1909, the wettest December for 35 years. Partial drought of 35 days from September 20th to October 24th, during which time .32 in. of **R** was registered. Rain spell of 16 days from November 23rd to December 8th, during which exactly 3.00 in. fell. **S** was observed on 6 days, but in no case did it amount to more than slight showers; **H** on 15 days, and **TSS** on 13 days.—*Hugh Montgomery, F.R.Met.Soc.*

CHATBURN, MIDDLEWOOD.—**R** .95 in. below the average of 26 years.—*W. King Wilkinson.*

HAMPSON-IN-ELLEL.—The winter months both in the beginning and end of the year had an excess of **R**, and so had also July, but low falls in April, June, August, and October brought the year's total to 39.19 in., our average for 15 years being 39.56 in. A partial drought of 35 days ended on October 24th. Hay harvest began in the sunny days of June, but was finished under the unfavourable rain conditions of July. For the grain harvest the weather was perfect. There was an absence of great heat during the summer, but mild weather continued through the autumn and into December, and roses were flowering on December 18th.—*W. G. Welch.*

DIVISION IX.—YORKSHIRE.

WEST RIDING.

SLAIDBURN, WHITEHOLME.—**R** 3.15 in. below the average of 41 years.—*W. King Wilkinson.*

MELTHAM, HAREWOOD LODGE.—**R** about 7 per cent. above the average. After a wet March the **R** was continuously deficient until nearly the end of October. November and December were both extremely wet and taken together exceed any other two consecutive months in my record of 34 years. Temp. was much above the average, though not quite equal to 1893 and 1911; every month except May exceeded the average, February by no less than 6°.5. Except on the 1st July there

were no **TSS** worth mentioning; **S** was conspicuous by its absence; in recent years there has been no period so stormy as from November 29th to December 6th.—*Chas. Lewis Brook, F.R.Met.Soc.*

NORTH RIDING.

WEST WITTON, IVY HOUSE.—January and February were comparatively mild and open though the **R** in February was nearly exactly double that of January. March and the first fortnight of April were quite open, and the last two weeks of April gave 11 days of ground frost or dew, as the case might be; the latest spring ground frost was on the morning of May 27th. June had 3·89 in. of **R** (including a noteworthy fall of 1·83 in. on the 9th). July was fairly fine but somewhat deficient in sunshine for the hay harvest. August was a brighter month, though the frequent autumn dews fell rather early. September was a fair corn harvest month though dews were frequent and the first autumn ground frost occurred on October 22nd. The early days of November were decidedly misty and December was a meteorological curiosity, giving, *inter alia*, 9·97 in. of **R** on 27 days, **L** on 4 days, **H** on 5 days, **S** on 9 days, a gale (force 8) on 2 days, 20 days of ground frost and 2 days of glazed frost, resulting in many local accidents, one of which was fatal.—*Jas. B. Espiner, F.R.Met.Soc.*

LEYBURN, BOLTON HALL.—The distribution of **R** for 1914 was, on the whole, accomplished very pleasantly in this district. Nothing excessive, also no periods of absolute drought. Springs were getting dried up during October, but were abundantly renewed in November and December. The total of 8·85 in. in December is noteworthy, inasmuch as I can find but one month (October, 1903, with **R** 8·98 in.), during a period of 43 years, which nearly approaches this figure. Total **R** 3·77 in. above the average of 43 years.—*F. Scrivener.*

DIVISION X.—NORTHERN COUNTIES.

DURHAM.

SUNDERLAND, WEST HENDON HOUSE.—The **R** was 1·13 in. below the arithmetical average and ·28 in. below the geometrical mean, calculated for sets of series of 35 years, from 1860 to 1913 inclusive. April was the driest month in the year, with ·64 in. The heaviest monthly fall was in June, viz., 3·67 in., of which 1·98 in. fell on three consecutive days. Some **R**, **S**, or **H** fell on 231 days in the year, reaching a measurable

amount on 185 days. **S** fell on 10 days only, covering the ground on 6 days. The duration of time that **R** fell was much below the average, although much above it in December. There were striking excesses of S.W. and N.W. winds in the year. Although, so far as observed, the N.E. wind blew for the shortest time of any of the eight winds, during the year, it had the largest total **R**. This was, however, mainly due to a fall of 1.34 in. with this wind on June 9th. The cloud and fog were slightly above the average. **T** and **L** were infrequent during 1914; also solar halos, except in December.—*Thos. Wm. Backhouse, F.R.Met.Soc.*

NORTHUMBERLAND.

MORPETH, BOTHALHAUGH.—April was dry, sunny and warm, and brought everything forward. On May 1st there were 10° of frost and frosty nights on May 23rd, 24th, and 25th. This was bad for flowering shrubs; the result was not a berry on hollies in the autumn. April was much short of the average **R**, June a good deal above. August and October a good deal below; the other months much the same, except November and December, which gave 6.55 in. against an average of 5.00 in. The summer on the whole was sunny but not warm; the autumn very fine; and then the terrible **R** day after day from the end of October to the close of the year. The winter was what we may call mild; an absence of **S** (except in November) and severe frost, but there was much frost in December.—*William Ellis.*

CUMBERLAND.

KESWICK, SHU-LE-CROW.—**R** 7.42 in., and rain days 13, above the average of 42 years.—*A. Mitchell Dawson, F.R.Met.Soc.*

SEASCALE, WHINTHWAITE.—**R** 1.77 in. above the average of 25 years.—*Robert Hellon.*

WESTMORLAND.

RYDAL, THE STEPPING STONES.—The year was principally remarkable for the wetness of February, November, and December, and the dryness of the spring, summer, and autumn, though there were no long spells of drought. In November, from the 25th to the 29th there were five consecutive days on which over an inch of **R** fell. So far this century I have not had more than three consecutive days with such a fall. Altogether in the 12 days, November 25th to December 6th, we measured 14.26 in. of **R**.—*Gordon Wordsworth.*

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS.

GLAMORGAN.

COWBRIDGE, FONMON CASTLE.—**R** 4·96 in. above the average of 30 years.—*O. H. Jones.*

PEMBROKE.

ST. DAVIDS.—The months of April, May, June and September were dry. December, with 7·31 in. of **R** gave the heaviest monthly fall in my record. Beautiful weather throughout summer. Good crops of hay, corn and green crops—*D. P. Williams.*

HAVERFORDWEST.—January was fine and dry and there were no very low temperatures. February and March were wild, wet and stormy, and agricultural operations were much impeded. The summer months and right on to the end of October were fine and warm, and except in June and July, the **R** was small. Wells and springs became very low towards the end of October, but in spite of dry weather crops of all kinds were good, and harvested early in excellent condition, whilst fruit crops were abundant and suffered little from late frosts. Mushrooms were abundant in the early part of June, but there were none afterwards. November and December produced a large **R** and swelled the total for the year to 1·16 in. above the average for 66 years. The total amount of bright sunshine for the year was 1814·2 hours, being 266·7 hours in excess of the average for the last 14 years, and was the largest amount recorded during that period except in 1911. April was the sunniest month with 261·6 hours, and only one sunless day; there were no **TSS** of consequence, but some heavy gales occurred in December.—*J. W. Phillips.*

DENBIGH.

DENBIGH, GARN.—The wettest July since 1888, when there was exactly the same fall, 5·09 in. The wettest December in 31 years, the life of the gauge. The greatest annual **R** since 1910, and 4·83 in. above the average of the 31 years.—*W. D. W. Griffith.*

ISLE OF MAN.

DOUGLAS.—January was overcast on the whole and February was very changeable. A squally and showery March was followed by a fine April, during which upwards of 12 hours sunshine was recorded each

day in the week commencing the 15th. The first half of May was showery but June was very fine, there being only one sunless day. July was fine on the whole and August, though wet in the first week, became settled on the 11th. September and October were unusually dry and November was typical of the weather of that month. December was extremely wet. The total duration of sunshine, 1658·0 hours, was 57·4 hours above the average.—*F. Cottle.*

GUERNSEY.

ST. MARTIN'S, LES BLANCHES.—A wet year, the fifth in succession, and the third wettest of the 21 years 1894-1914. Compared with the average the excess for the year was 5·50 in. January was a very dry month, and the year provided others, April and June in particular, but onwards from February, that month included, the accumulated total was always in excess of the average. March and December were very wet, the latter month with 8·29 in. of **R** being the second wettest month at this station during the last 21 years. Two absolute droughts occurred, April 11th to 28th, 18 days; and September 20th to October 11th, 22 days. There were three rain spells, February 28th to March 30th, 31 days, with 5·71 in.; October 19th to November 5th, 18 days, with 3·79 in.; and December 4th to 31st, 28 days, with 8·16 in.—*Basil T. Rowsell.*

SCOTLAND.

DIVISION XII.—SOUTHERN COUNTIES.

WIGTOWN.

WHITHORN, CUTROACH.—The first three months and the last two were wet and stormy, especially December and the total **R** approached within a few inches of the average. From April to the end of October we had, with few exceptions, one fine long summer. No frost to speak of.—*J. G. Martin.*

KIRKCUDBRIGHT.

JARDINGTON [DUMFRIES].—January was mild but in February there was a great deal of changeable weather, with some fine springlike days. March was cold, wet and changeable, and the first 14 days of April were showery. From the 14th there was a week of warm sunny weather,

and vegetation made good progress. The **R** was deficient in May, and in June was the lowest in the past 22 years. Crops were suffering and water supplies getting low. July was comparatively dry, but **R** on the 31st and in the first week of August helped vegetable growth considerably. Owing to the continued shortage of **R** a number of small streams ran dry until nearly the end of November. Heavy **R** in the first week of December raised the springs to their normal winter level.—*J. Rutherford.*

DUMFRIES.

MONIAIVE, MAXWELTON HOUSE.—**R** for the year 4·72 in. above the average.—*D. Brougham.*

DIVISION XIII.—SOUTH EASTERN COUNTIES.

BERWICK.

SWINTON HOUSE.—The year began in the middle of a cold snap which had commenced in the previous December, and for the first week some **S** was lying in places. Afterwards the winter was one of the mildest ever known here. April was unusually warm and sunny. The summer and early autumn were very pleasant, and the weather for harvesting was good. The extreme beauty of the country in the lovely weather which occurred during the opening months of the war, when the minds of all were full of the European tragedy, was quite pathetic. The deficiency of **R** following on a succession of dry years, caused many burns and wells to run dry, the shortage of water being especially acute in September. The **R** of December 12th and 13th caused the Leet to rise and produce the biggest flood there had been for about 20 years. On December 21st **R** falling after a sharp frost covered the roads with a solid coating of ice, which remained for four days.—*A. E. Swinton.*

LINLITHGOW.

LINLITHGOW, GRANGE.—There was no **S** and hardly any frost the whole year. The spring was open but late, and very little sowing was done before April. **R** about average in first quarter, but April was rather dry. June was unusually dry with only ·54 in. of **R**. The July fall was about average and the crops grew well, hay being all ricked in the dry spell that began on the 19th. August was a good harvest month and crops were nearly all cut by the end of it. September was a very fine

dry harvest month, with only .57 in. of **R** and crops were all got in in grand condition. The potato crop was remarkably plentiful. The fine weather of summer and autumn caused a scarcity in the local reservoirs, and had there not been a good fall in November (3.89 in.) and December (5.55 in.), there would have been a water famine such as the various local authorities experienced in 1911 and 1913.—*H. M. Cadell.*

DIVISION XIV.—SOUTH WESTERN COUNTIES.

LANARK.

BIGGAR.—January was, on the whole, a good winter month. February was mild and wet and March was very disagreeable, a large part of the **R** being in the form of **S**, which, however, melted rapidly. Fine weather set in after April 13th and continued generally through the summer until the second week in September. October was a fine month, but the **R** was rather heavy in November. December had very unsettled weather all through with frequent high winds.—*John Eunson.*

DIVISION XV.—WEST MIDLAND COUNTIES.

STIRLING.

POLMONT, VELLORE.—The **R** was rather over the average, June and September being exceptionally dry. Cereals were all good and well secured, but the root crops suffered from want of moisture in September and October.—*W. Brown.*

ARGYLL.

HOLY LOCH, ARDNADAM.—The first and last weeks of January were warm and wet, the second and third weeks were cold and dry. The weather was wet and dull and frequently cold through February, March and the first half of April. Fine dry weather followed and continued until July 23rd, when there was a cold snap until the 27th. August was fine and sunny and the **R**, though heavy, nearly all fell at night. September was a fine dry month and October exceptionally so. November was mild and wet, except from 12th to 24th. December was mild and stormy up to the 18th, and cold, calmer and drier after.—*J. Cairns Mitchell.*

DIVISION XVI.—EAST MIDLAND COUNTIES.

FIFE.

ST. ANDREWS, QUEEN'S GARDENS.—January and February were mild with a good deal of high wind and gardens were well advanced at the end of the latter month. March had cold winds but many fine, sunny days and most of the **R** fell at night. In April there was 17 days' absolute drought, ending on the 28th, and almost continuous sunshine, and on 3 days the temp. reached 70°. May and June were both fine and vegetation was well advanced. July was less summerlike but August was a pleasant month, with an unusual amount of E. winds. September, with .36 in. of **R**, was the driest month since the record began in 1901. The **R** of October was very welcome as water supplies had become deficient. There were high E. winds and rough seas in the last week. November was not remarkable but December was stormy with intervals of still frosty days, when skating and curling were possible.—*I. J. R. Macadam, F.R.Met.Soc.*

FORFAR.

ARBROATH, DISHLAND HILL.—The **R** was below the average of the past 25 years, by 2.06 in. There was scarcely any **S**. April, June, and September were very dry and the only cold period was in the last week of December. March was the wettest month and September the driest, there being no **R** in the latter from 1st to 8th, and from 20th to 30th. The last three months of the year were wet, as also was the beginning of August, which was dry from 11th to 21st.—*J. Campbell.*

DIVISION XVII.—NORTH EASTERN COUNTIES.

KINCARDINE.

FETTERCAIRN, THE BURN.—The **R** here was very irregularly distributed. Up to October 20th it seemed that we were to be far below the average, afterwards it was quite made up. Our water supply was becoming very low, although, curious to say, it was by no means so seriously affected as two years ago, when many people had to clear out of their houses altogether for a time. This I attribute to the thorough soaking we had in the first three months of the year. Practically 24 of the 34 in. fell in the first and last quarters, only 10 in. being registered during the six months April to September. Crops on the whole, on light soil, quite good; on clay, not so good.—*Chas. McInroy*

ABERDEEN.

ALFORD, LYNTURK MANSE.—Up to the end of October the **R** was under the average, which is here 25·64 in. for these ten months on 14 years' observations, while in 1914 it was 22·92 in. There were many complaints of lack of water, continued from last year. November and December, however, restored the balance with records of 4·57 in. and 6·19 in. respectively, the corresponding averages being only 3·63 in. and 3·38 in. The result was a total **R** 1·03 in. above the average. The total number of rain days was considerably under the average (180 compared with 208). Spring, summer, and autumn were all fine. The sowing season was good, and the harvest season was considered the best that has occurred for many years and it was early, though not quite so early as 1911. The harvest was short in duration, and the crop was good here.—*Jas. B. Duncan.*

DIVISION XVIII.—NORTH WESTERN COUNTIES.

INVERNESS.

LOCH NESS, DRUMNADROCHIT.—The most noticeable feature of the year was the severe summer drought. Taking April to September inclusive as the summer half-year, the total fall was 13·91 in., on 96 days. The fall for May, 5·65 in., is a record owing to the destructive cloud-burst on the 7th and 8th, amounting to 4·65 in. The first three months and the last three, or the winter months, gave a fall of 24·38 in., on 109 days. The wet period beginning on November 23rd and ending on December 9th, 17 days, during which 8·65 in. fell, or an average of ·51 in. a day, was the heaviest experienced here since 1885.—*Angus Grant.*

ROSS.

LOCH CARRON, PLOCKTON.—The spring was unusually dry and cold. There was slight ground frost as late as June 10th and 11th. August was a month of extremes ; part of it was warm and clear and other periods as dark, stormy and cold as winter. December was remarkable for the frequent occurrence of **T** and **L**, there being no fewer than 7 **TSS**, one of which, on the 1st, lasted for 24 hours without a break of more than an hour.—*C. P. Anstruther Mackay.*

DIVISION XIX.—NORTHERN COUNTIES.

SUTHERLAND.

LOCK STACK, ACHFARY.—Total duration of sunshine, 1060·1 hours.—*James Munro.*

IRELAND.

DIVISION XX.—MUNSTER.

CORK.

DUNMANWAY, THE RECTORY.—The heaviest **R** of any year since I began observations here in 1904, and the fall for December, 14·02 in., was the heaviest of any month in that period. December, February, March and August had falls considerably over the average; June, May, April, and October considerably under. There was a very dry spell from April 12th to June 30th, and from September 22nd to October 20th. As a rule the periods of the year that were dry in 1913 were wet in 1914, and *vice versa*.—*Arthur Wilson.*

MIDLETON, BALLINACURRA.—Though ranking in the minds of many as a dry year, in consequence of the low **R** of April, May, and June, and the fact of summer drought affecting hay and root crops, the **R** was over the average, owing to the months of February, March, August, and December yielding excessive precipitation. December was the wettest month since records began in 1904.—*John H. Bennett.*

KERRY.

DARRYNANE ABBEY.—**R** 28 per cent. above the average of 25 years. December, with 11·62 in. of **R**, was the wettest month in my 35 years' record.—*D. O'Connell.*

WATERFORD.

WATERFORD, BROOK LODGE.—**R** 1·95 in. and rain days 4 above the average of 40 years.—*C. P. Bolton.*

CLARE.

DERRAVOHER [LIMERICK].—A long dry summer, but not very warm. A fine autumn until November 20th, but from then until the close of the year the weather was wet and miserable.—*A. W. Shaw.*

BROADFORD, HURDLESTOWN.—The wettest year on record here, but the number of rain days was fairly low.—*W. A. Bentley.*

DIVISION XXI.—LEINSTER.

WICKLOW.

RATHNEW, CLONMANNON.—The features of the year were the two absolute droughts (1) from April 14th to May 1st, 18 days, (2) from September 17th to October 11th, 25 days, and also the extraordinary **R** in December, 8·29 in. Notwithstanding the latter, the total for the whole year was under the average for the last 12 years by 1·05 in. The rain days, 163, were fewer than in any of the last 12 years, except 1904, which also had 163.—*W. H. A. Truell.*

CARLOW.

HACKETSTOWN RECTORY.—The year on the whole was drier than the average, and also milder. The **R** of December, 8·33 in., was the heaviest recorded in five years, save in the same month of 1911. January, April, and June were exceptionally dry. In April there was no **R** after the 13th. The heavy **R** in July and August, 4·16 in. and 4·00 in., was largely due to heavy downpours which accompanied **TSS**. Only on 58 days in the year did the minimum temp. fall below 32°, and the autumn was most remarkably mild and dry, summer flowers continuing to bloom well into November, and the first frost recorded being on November 14th. For five days before Christmas the country was quite frost bound and all roads impassable without considerable danger.—*C. S. S. Ellison.*

DUBLIN.

RATHMINES, LEINSTER ROAD.—January was mild and remarkably sunless. There was a constant succession of cyclonic depressions in February, but in spite of generally bad weather the amount of sunshine was large. Cyclonic conditions persisted through March, which was squally and unsettled with moderate **R** on a large number of rain days. April was fine and warm, the mean temp. 50°·2 being the highest, and the **R** ·68 in., the lowest, since 1882. An absolute drought of 19 days ended on May 2nd, after which the weather was changeable. June and July were generally favourable and temp. exceeded 70° on 11 days in the

former and 10 days in the latter month. Although August was the wettest month of the summer it was also the warmest and sunniest. September and October were singularly dry and mild. November was wet and generally unpleasant. December, with 7·02 in. of **R**, was the wettest month I ever recorded, the nearest being August, 1905, with 7·00 in. Gales occurred on 13 days and were at times severe.—*E. H. Cannon.*

LONGFORD.

CLOONDRAH.—**R** 2·82 in. below the average of 21 years. January and June with 1·15 in. and ·86 in. respectively, had the lowest **R** recorded in those months. The **R** of December, 5·30 in., was the heaviest recorded in that month.—*J. J. Bourke.*

DIVISION XXII.—CONNAUGHT.

MAYO.

CONG, THE GLEBE.—A year of extremes. The first three or four months and the last two were extremely wet, the intervening period extremely fine.—*R. Y. Lynn.*

DIVISION XXIII.—ULSTER.

ARMAGH.

LURGAN, BELLE VUE.—**R** 2·08 in. below the average of previous 10 years. The first six months, with the exception of February and March were much below the average in **R**, as were also July, September and October, the last especially so. December was exceptionally wet. It had the highest record for over 30 years and only twice before (1886 and 1911) had the **R** exceeded 4 inches in this month. The last six months' **R** exceeded that of the first six by 48 per cent., and this year of drought ended in floods.—*S. A. Bell.*

DOWN.

WARRENPOINT, CLONALLON.—On the whole 1914 was a fine year, and though an absolute or even partial drought did not quite occur, still the dry periods in April, May and June, and again in September and October were very severe. Temp. was normal. A great prevalence of either fog or haze was remarkable throughout the year, either taking place

on 225 days and the density of some fogs being very great. High winds from "moderate" to a "gale" occurred on 53 days. The **R** for December, 8.93 in., was quite abnormal, and had never been equalled within memory.—*A. W. Mansergh.*

ANTRIM.

ANTRIM, ARDNAVEIGH.—A dry cool year, but with little frost. Very deficient **R** up to November, but the fall in December was the heaviest I have recorded in any month, the previous heaviest being 6.38 in. in August, 1904.—*Henry B. Murray.*

BALLYMENA, HARRYVILLE.—**R** 8.97 in. above the average of 30 years. We had about 1537 hours of bright sunshine, compared with 1467 hours in 1913.—*J. R. Williams.*

TYRONE.

SION MILLS, SION HOUSE.—The principal feature of the weather of January was the dry period from 8th to 23rd. Shade temp. was below 40° for the whole period from 11th to 23rd. February was the wettest month since August 1910, and the wetness continued into March, the 19th being the first rainless day since January 22nd. The **R** was below the average each month from April to July, and only about the average in August. September was fine and fairly warm, except from 10th to 19th. October was generally fine and dry, but cold towards the end. The **R** in November was the heaviest since February. December was stormy and cold with heavy **R** and **S**, and frequent frosts.—*G. Herdman.*

THE DISTRIBUTION OF RAINFALL IN TIME.

THE distribution of rainfall in time throughout the year may be studied in a variety of ways, and a large number of continuous automatic records of rainfall from all parts of the country would provide ideal material for such a purpose, but sufficient records of such a kind to represent the various conditions of the British Isles in anything approaching a complete manner are not available. We are, therefore, still compelled to confine ourselves mainly to the ordinary records taken once in every twenty-four hours, and to regard the "rainfall day" from 9 a.m. to 9 a.m. as the unit of time upon which to base discussion. The "rainfall day" is recorded as a "rain day" whenever the Observer, following the rule as to the measurement of small quantities of rain, enters a fall of .01 in. or more in the register. The sections included under the general heading of "The Distribution of Rainfall in Time," deal first with the frequency of rain days during the year, and the occurrence of consecutive runs of rain days, and of periods of dry weather, respectively, and proceed to take account of such records of Duration of Rainfall as have been received, and of Heavy Rains in Short Periods. For the purpose of giving a fair account of the occurrence of rain days, droughts and rain spells over the whole of the British Isles, 100 stations have been selected, distributed uniformly over the country, and their records have been subjected to careful analysis, the results of which are set out in the tables and maps which follow.

The positions of the stations referred to are shown on the accompanying index map. It will be seen that from the many thousands of records at our disposal we have been able to make a selection which insures that no large area is unrepresented, and, subject to using only records which we believe to be made with absolute regularity, this has been the chief aim of our choice. It is, therefore, perhaps hardly necessary to assure Observers whose records, although perfect in every respect, have not been selected, that the omission implies no want of confidence in their accuracy, but only that another, equally well kept, happened to fit

better into the scheme of distribution. Other records than the 100 quoted in the tables are not infrequently made use of in order to amplify the discussion of the details of any particular wet or dry spell, and in constructing the map showing the number of rain days during the year, which appears on page [63], at least 1000 other records were plotted, so that the run of the lines might be shown in greater detail.

DISTRIBUTION OF RAINFALL IN TIME

INDEX MAP OF STATIONS



RAIN DAYS IN 1914.

THERE are many practical difficulties in the way of discussing the number of days in the year on which rain has fallen, not the least of which is the great effect on the number of rain days recorded produced by a very small deviation from the standardized practice in measuring small quantities of rain. The displacement by little more than a hair's-breadth of the lowest graduation mark on a measuring jar, or a want of complete transparency in the glass, may make all the difference between the recording of $\cdot 01$ inch of rain or entering the day as rainless, and we believe that there are hundreds of conscientiously kept rainfall records, quite trustworthy in respect of freedom from personal error, which indicate a number of days with $\cdot 01$ in., either too large or too small, for reasons chiefly arising from the imperfection of the measuring glass. An attempt has been made within the last few years to encourage the use of the "Camden" pattern glass, which by means of a cone-shaped lower end, facilitates the accurate measurement of small quantities, and we hope, for this reason, that its use will become general.

The study of a very large number of records of rainfall in all parts of the country has shown that the number of days upon which a reading of $\cdot 01$ in. has been recorded may vary from 50 or more at some stations, to none at all at others only a short distance away, where no physical reason for such discrepancies can be found. The actual number of days with $\cdot 01$ in. of course varies in different years and at different places, but from an examination of the tables of intensity of rainfall in *British Rainfall* from 1903 to 1909, summarized in *British Rainfall*, 1909, pp. [124]-[125], there is reason to think that the number does not vary greatly from 25 in normal years in most parts of the British Isles.

In drawing the map of the number of rain days in 1914, which appears on p. [62], it was impossible to give full weight to every one of the 1000 or more figures plotted. The only course possible in preparing such a map is to draw the lines in such a way as to be most in harmony with the largest number of observations. Being constructed in this way,

TABLE I.—*Number of Rain Days in 1914.*

STATION.	COUNTY.	Jan.	Feb.	Mar.	Apr.	May.	June	July.	Aug.	Sep.	Oct.	Nov.	Dec.	Total.	Total Rain-fall.	Amount per Rain Day
ENGLAND & WALES.																
St. Pancras, Camden Square ...	London	12	14	25	9	8	12	15	9	9	13	18	24	168	in. 25.72	in. .15
Tenterden, View Tower ...	Kent	13	20	24	11	13	8	15	13	6	16	19	27	185	32.43	.18
Brighton, Ditchling Road ...	Sussex	13	17	23	12	10	10	15	12	8	14	20	26	180	34.52	.19
Totland Bay, Aston House ...	Hampshire	11	18	19	10	8	6	15	12	7	14	22	22	164	36.46	.22
Petersfield, Ditcham Park ...	"	13	20	25	9	11	11	15	15	9	14	18	25	185	44.09	.24
Newport Pagnell, The Croft ..	Buckinghamshire	13	16	24	9	10	10	12	15	11	12	20	23	175	25.42	.15
Goring, Elmcroft	Oxfordshire	4	10	27	8	15	11	18	15	7	14	17	27	188	30.67	.16
Cambridge, Botanic Gardens ...	Cambridgeshire	13	14	24	11	11	11	17	12	6	11	17	22	169	23.25	.14
Shoeburyness	Essex	3	11	25	14	9	6	12	9	11	14	21	24	172	19.89	.12
Colchester, Hill House, Lexden	"	13	15	26	10	12	7	16	9	5	13	19	24	169	23.49	.14
Beccles, Sotterley Hall... ..	Suffolk	3	14	23	9	14	9	12	10	9	16	22	24	173	26.55	.15
Swaffham, The Paddocks	Norfolk	4	15	22	9	11	11	16	11	10	14	20	22	175	24.99	.14
Salisbury Plain, Shrewton	Wiltshire	3	11	26	10	16	9	19	15	13	14	19	25	194	37.21	.19
Dorchester, Wollaston House...	Dorsetshire	3	14	27	10	11	6	18	13	9	12	18	21	177	45.58	.26
Ashburton, Druid House.....	South Devon	4	14	28	10	14	10	18	13	14	15	20	27	201	64.84	.32
Bude, The School House.....	Cornwall	1	14	17	28	10	12	19	14	13	12	22	28	201	37.27	.19
St. Austell, Trevarna	"	2	15	29	11	13	11	19	14	14	15	16	25	201	53.06	.26
Angersleigh, Leigh Court	Somerset	3	17	28	10	17	13	20	14	10	15	20	27	204	43.54	.21
Simonsbath.....	"	5	19	29	11	14	12	20	18	13	16	22	27	224	77.63	.35
Mickleton, Bank House	Gloucestershire	4	10	26	10	16	14	19	11	9	13	20	24	187	25.23	.14
Clifton, Pembroke Road	"	5	15	26	11	16	10	21	16	11	14	22	24	205	39.60	.19
Hereford, Holmer Hall	Herefordshire	1	11	22	11	13	11	22	13	12	15	20	22	189	25.36	.13
Shifnal, National School	Shropshire	4	16	25	11	15	12	20	13	10	14	18	25	196	30.43	.16
Mayfield House [Ashbourne] ...	Staffordshire	5	16	22	12	13	9	21	11	12	14	19	24	190	37.40	.20
Blaby, Whetstone Road	Leicestershire	4	16	24	11	12	11	15	13	8	13	21	23	182	25.71	.14
Market Deeping, Wiltsthorpe ...	Lincolnshire	2	10	21	10	10	9	16	12	6	13	18	19	156	22.50	.14
Spilsby, Ashby Road	"	4	14	17	10	11	8	14	9	9	12	15	22	155	20.70	.13
Workop, Hodsock Priory	Nottinghamshire	5	15	20	9	11	9	15	14	8	14	19	25	173	21.60	.12
Northwich, Winnington	Cheshire	2	12	24	11	14	12	20	14	10	11	20	27	190	29.35	.15
St. Michael's-on-Wyre Vicarage	North Lancashire	5	16	28	11	20	11	21	12	12	12	21	22	202	34.30	.17
Settle	Yorkshire, W.R.	2	18	28	11	17	11	21	16	12	14	25	24	219	47.00	.21
Meltham, Harewood Lodge	"	8	21	27	15	13	13	20	14	13	16	24	26	221	47.65	.22
Hull, Pearson Park	"	3	18	24	8	14	9	18	13	9	13	23	27	190	24.75	.13
Thirsk, Mount St. John	"	2	15	20	9	15	10	11	12	10	14	25	26	181	24.66	.14

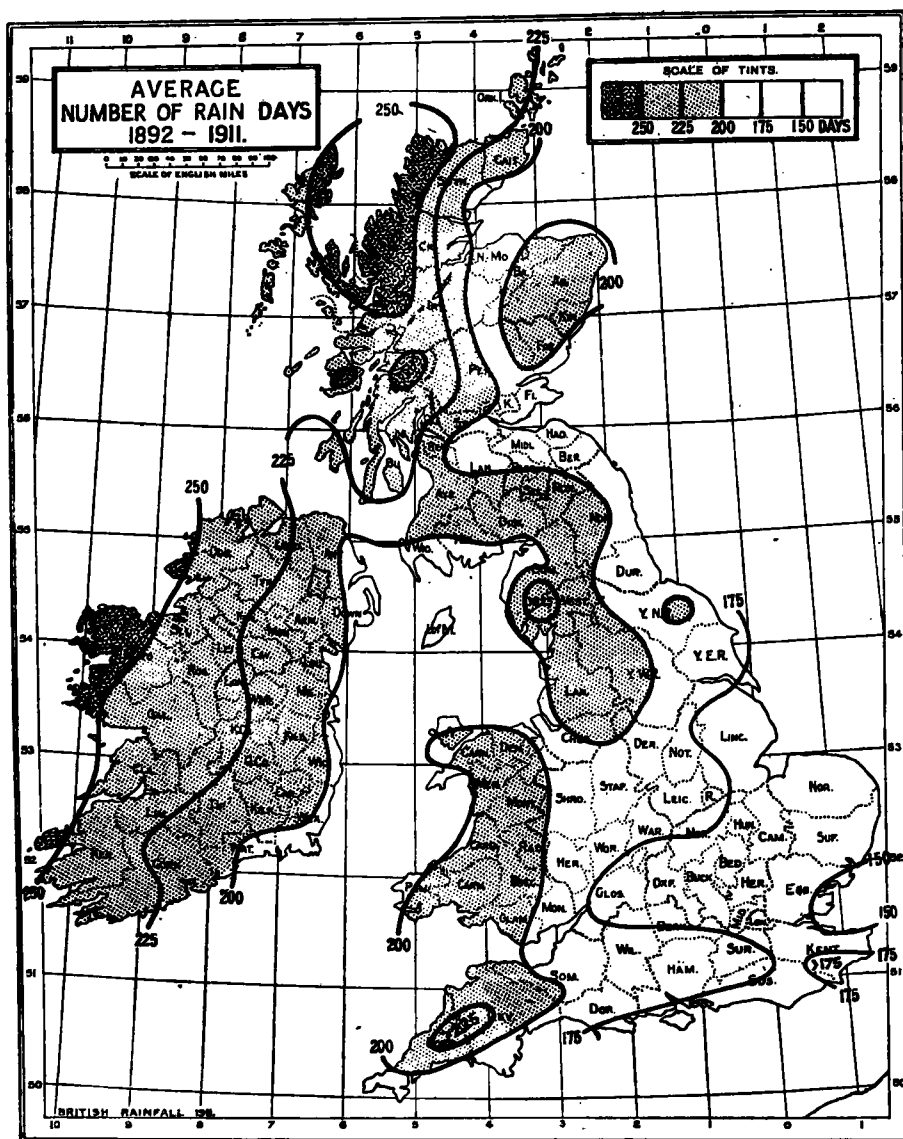
TABLE I.—*Number of Rain Days in 1914—(continued).*

STATION.	COUNTY.	Jan.	Feb.	Mar.	Apr.	May.	June	July.	Aug.	Sep.	Oct.	Nov.	Dec.	Total.	Total Rain-fall.	Amount per Rain Day
ENGLAND & WALES—(con.)																
Sleights, Brook Park.....	Yorkshire, N.R. ...	5	18	15	11	11	12	11	8	10	12	24	26	177	28.37	in. .16
Sunderland, West Hendon House	Durham.....	2	20	18	8	12	12	12	13	9	12	24	25	187	24.94	in. .13
Haltwhistle, Bellister Castle...	Northumberland ...	2	16	22	14	17	10	10	11	13	13	24	20	193	39.68	in. .21
Glanton Pyke Gardens.....	".....	6	19	17	8	13	14	11	11	8	15	24	21	179	31.48	in. .18
Kirkby Stephen, Redman House	Westmorland	1	15	22	14	13	10	14	14	10	11	22	22	193	49.42	in. .26
Dungeon Ghyll	".....	2	19	27	16	22	14	20	17	14	12	22	23	236	111.36	in. .47
Treherbert, Tyn-y-waun	Glamorgan	6	17	21	14	15	12	20	15	13	15	22	27	221	98.72	in. .45
Carmarthen, The Friary	Carmarthen	2	14	22	13	13	10	19	21	11	15	22	27	219	53.36	in. .24
Fishguard, Goodwick Station..	Pembroke	2	17	22	13	10	13	10	17	11	13	22	25	199	36.62	in. .18
Aberystwyth, Gogerddan	Cardigan	2	15	23	13	13	10	21	17	12	17	21	25	214	49.41	in. .23
Birmingham W.W., Tyrmynydd	Radnor	1	18	25	15	16	13	22	18	14	16	23	27	236	71.19	in. .30
Lake Vyrnwy.....	Montgomery.....	5	17	19	13	12	10	15	15	11	12	22	24	196	52.68	in. .27
Mostyn Vicarage	Flint	1	17	19	13	18	15	21	17	12	14	22	27	221	37.59	in. .17
Abersoch.....	Carnarvon.....	4	14	22	7	11	11	19	14	11	11	20	24	188	44.52	in. .24
Lligwy	Anglesey	15	15	25	8	14	7	17	14	10	11	19	23	188	31.43	in. .17
England & Wales	(Mean of 49 stations)..	15	18	25	11	13	10	17	13	10	13	23	24	192	39.26	in. .20
ISLE OF MAN.																
Douglas, Clypse Res., Onchan...	Isle of Man	17	23	27	13	16	8	17	13	13	13	24	23	207	42.88	in. .21
SCOTLAND.																
Whithorn, Cutroach	Wigtown	4	12	22	14	14	7	16	15	11	11	19	24	189	36.28	in. .19
Jardington [Dumfries]	Kirkcudbright	5	16	23	15	13	8	14	17	9	10	21	19	189	38.45	in. .20
Victoria Lodge, Edinburgh W.W.	Peebles	1	19	26	15	18	17	15	16	15	15	23	25	228	51.65	in. .23
Marchmont House	Berwick	4	17	16	11	10	9	8	13	10	18	26	23	181	29.11	in. .16
Motherwell, Dalzell Gardens ..	Lanark	4	15	22	15	16	11	17	19	12	12	22	19	204	32.42	in. .16
Girvan, Pinmore.....	Ayr	8	19	26	16	18	17	17	16	12	14	23	23	225	51.36	in. .23
Buchlyvie, The Manse	Stirling	1	18	26	17	19	12	16	21	18	17	23	25	236	44.03	in. .19
Rothsay, Arden Craig	Bute	1	18	26	16	16	10	13	18	13	15	21	22	211	51.78	in. .25
Loch Awe, Ford	Argyll	6	20	27	16	20	17	19	20	19	15	22	24	244	74.62	in. .31
Campbeltown, Witchburn	".....	10	19	25	15	20	15	18	19	13	14	22	23	230	50.26	in. .22
Islay, Eallabus	".....	14	18	27	17	17	15	16	18	15	17	23	28	234	52.75	in. .23
Mull, Ulva.....	".....	14	19	28	14	23	19	22	19	18	17	22	23	248	68.08	in. .27
Colinsburgh Manse	Fife	2	16	19	9	12	14	10	16	7	15	19	17	174	25.59	in. .15
Aberfeldy, Dall Avon	Perth	11	19	24	13	12	11	10	16	11	14	24	22	197	40.96	in. .21

Fettercairn, The Burn	1	16	17	22	8	11	13	15	12	7	16	20	21	178	33·95	·19
Logie Coldstone, Loanhead ..	1	16	12	23	10	12	11	15	12	15	16	25	18	185	33·79	·18
New Deer Schoolhouse	4	19	9	25	13	17	11	18	11	15	19	25	16	198	31·59	·16
Gordon Castle	2	17	10	27	10	16	15	17	17	12	20	24	15	200	28·56	·14
Granton-on-Spey	3	16	13	19	11	15	14	18	13	13	15	23	19	189	31·96	·17
Drumnadrochit	9	17	20	20	14	18	15	21	14	14	8	22	22	205	38·30	·19
Loch Nevis, Inverie	12	20	27	22	16	20	15	17	19	17	16	22	20	231	86·44	·37
Glenleven, Kinlochmore	17	19	27	26	17	18	17	20	19	18	20	23	24	248	102·76	·42
Skye, Dunvegan	18	19	28	25	17	21	18	21	17	18	21	25	18	248	74·45	·30
Glencarron Lodge	9	18	25	26	18	23	19	19	21	20	17	24	22	252	89·83	·36
Invershin	1	14	13	21	12	10	11	16	15	15	10	22	15	174	28·47	·16
Loch Stack	5	19	25	27	20	22	16	21	19	21	20	24	23	257	83·31	·32
Thurso, Buckies	3	19	15	27	13	19	16	18	14	19	24	26	20	230	40·20	·17
Scotland (Mean of 27 stations) ..	17	17	21	24	14	17	14	17	16	14	16	23	21	214	50·04	·23
IRELAND.																
Skibbereen Rectory	6	18	27	28	12	10	9	19	17	17	13	17	29	216	56·11	·26
Mallow, Longueville	9	17	26	30	11	13	5	26	20	12	14	18	28	220	42·33	·19
Darrynane Abbey	4	22	28	31	13	20	15	29	23	16	13	19	29	258	63·75	·25
Waterford, Brook Lodge	3	18	24	23	10	12	10	18	19	5	10	19	22	190	41·71	·22
Cahir, Bengurragh	3	21	26	31	14	15	9	23	22	13	12	20	28	234	41·45	·18
Ennistymon House	2	20	27	29	14	20	13	26	21	17	13	19	28	247	55·74	·23
Broadford, Hurdlestown	3	16	27	29	15	17	10	24	19	16	12	20	30	235	49·31	·21
Gorey, Courtown House	4	14	25	25	8	11	8	13	14	7	11	19	23	178	36·96	·21
Abbey Leix, Blandsfort	2	16	25	24	14	15	11	19	18	12	11	23	23	211	38·34	·18
Dublin, FitzWilliam Square ..	2	12	19	26	11	17	9	20	17	9	12	23	23	198	26·52	·13
Kells, Headfort	4	17	23	22	12	16	11	15	18	11	14	20	28	207	35·00	·17
Moate, Coolatore	1	16	27	25	11	14	8	20	21	13	11	22	26	218	39·39	·18
Ballynahinch Castle	3	18	27	28	14	19	14	23	21	16	15	19	28	242	64·87	·27
Woodlawn	4	18	26	27	14	16	10	22	19	14	13	21	28	228	42·84	·19
Crossmolina, Enniscoe	2	18	30	30	15	22	11	22	20	18	16	22	28	250	55·09	·22
Collooney, Markree Observatory	2	16	27	27	14	18	13	21	20	17	16	20	25	234	47·32	·20
Mohill Rectory	5	17	28	27	14	14	14	21	19	15	13	20	27	229	43·71	·19
Monaghan, Rowantree House ..	3	14	24	24	15	15	12	17	16	11	12	20	24	204	30·01	·15
Seaforde	2	15	24	23	12	15	10	15	17	10	7	23	26	197	38·83	·20
Bushmills, Dundarave	3	14	25	25	16	16	12	16	18	12	15	22	21	212	35·37	·17
Omagh, Edenfel	3	17	28	28	16	15	13	16	17	14	15	23	24	226	41·59	·18
Dunfanaghy, Horn Head	3	17	26	26	15	21	15	19	21	16	17	25	29	247	47·11	·19
Killybegs, Rockmount	5	19	26	27	16	18	13	19	18	16	14	20	25	231	59·08	·26
Ireland	17	17	26	27	13	16	11	20	19	13	13	21	26	222	44·89	·20
(Mean of 23 stations) ..	16	16	21	25	12	15	11	18	16	12	14	21	24	205	43·50	·21
BRITISH ISLES																

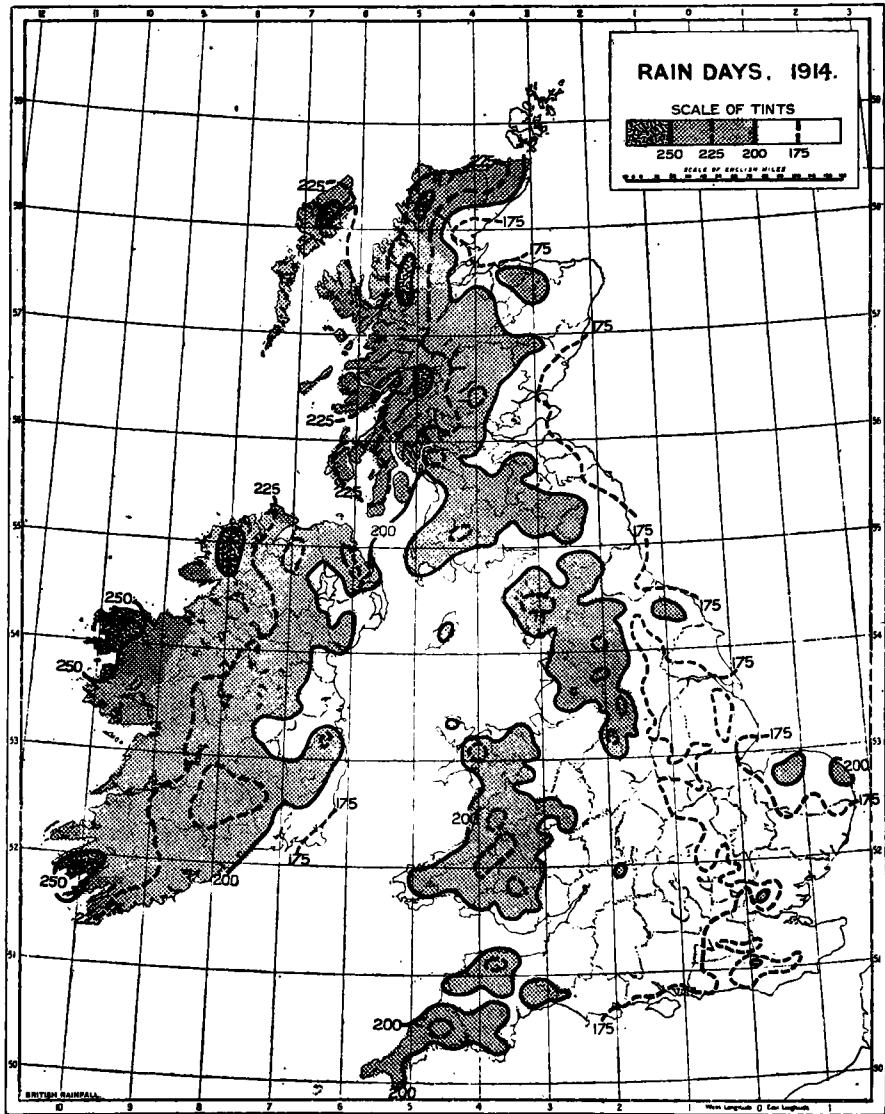
the map is, we are confident, substantially correct, and gives a reasonably accurate picture of the distribution of rain days in 1914.

The smallest number of rain days during the year occurred as usual in the east of Great Britain. Less than 175 days with rain were recorded



along most of the east coast, over a good part of the east Midlands of England and over a narrow strip of the south coast extending westwards to Dorset. The number of days did not fall appreciably below 160 in any part of the country, the east of Kent being probably the most favoured district in respect of small number of days with rain. The line of 175 days followed almost the average course in England, and also

appeared on the east coast of Scotland, where, however, it has no place on the average map. More than 200 rain days occurred over practically the whole of the west, the districts with this number of days coinciding almost exactly with the average. The line of 225 days also took a very



normal position, cutting off the north-west of Scotland and the west of Ireland, and appearing in a few mountain districts in England and Wales, whilst 250 rain days occurred only at isolated spots in the West Highlands and on the exposed west coasts of Ireland.

In all parts of the British Isles the distribution of days with rain was close to the average, and the following table which compares the mean

values for the different countries with the average values, completely bears this out. In Table II. we give the general values for the countries side by side with those for the previous 11 years, and each year's total may be compared with the average for the period 1892-1911, upon which the average map is based. It will be observed that a general excess of

TABLE II.—*Rain Days, 1903-1914, compared with Average, 1892-1911.*

Year.	ENGLAND & WALES. Average 187.			SCOTLAND. Average 216.			IRELAND. Average 223.			BRITISH ISLES. Average 204.		
	Rain Days.	Diff. from Aver.	Per cent. of Aver.	Rain Days.	Diff. from Aver.	Per cent. of Aver.	Rain Days.	Diff. from Aver.	Per cent. of Aver.	Rain Days.	Diff. from Aver.	Per cent. of Aver.
1903	211	+24	113	244	+28	113	252	+29	113	229	+25	112
1904	188	+ 1	101	219	+ 3	101	231	+ 8	104	206	+ 2	101
1905	186	— 1	99	222	+ 6	103	221	— 2	99	203	— 1	100
1906	192	+ 5	103	226	+10	105	231	+ 8	104	210	+ 6	103
1907	203	+16	109	232	+16	107	240	+17	108	218	+14	107
1908	189	+ 2	101	221	+ 5	102	228	+ 5	102	206	+ 2	101
1909	195	+ 8	104	216	0	100	209	—14	94	204	0	100
1910	209	+22	112	221	+ 5	102	233	+10	104	218	+14	107
1911	175	—12	94	209	— 7	97	202	—21	91	191	—13	94
1912	212	+25	113	228	+12	106	235	+12	105	222	+18	109
1913	190	+ 3	102	212	— 4	98	220	— 3	99	203	— 1	100
1914	192	+ 5	103	214	— 2	99	222	— 1	100	205	+ 1	100

5 days in England and Wales is counterbalanced by a very slight deficiency in Scotland and Ireland, so that the general value for the whole country was 205, or within one day of the average. The records on which these general values are based are given on pp. [59]-[61].

The outstanding feature of the year was the great excess of rain days in March, following a rather less pronounced excess in February. In these two months the normal frequency of days with rain in the British Isles as a whole is at its annual minimum, and the large number of 46 days with rain out of 59 is very unusual. In Ireland the number was no less than 53, and some stations had rain every day. The number of rain days was also abnormally high in November and December, in all parts of the country, but this is a season at which the frequency is usually great. There were no months of very marked deficiency, but January and each month from April to October, except possibly July, and in Ireland August also, had values rather below the average.

Summing the year up it may be regarded as one of average rainfall frequency in all parts of the country, but with generally fewer days with rain in the summer and more in the winter than in a normal year.

DROUGHTS IN 1914.

It is convenient to repeat from year to year the definitions of the two classes of Droughts extracted for the purpose of this discussion. They are substantially identical with those framed by the late Mr. Symons, when he first commenced the systematic classification of droughts in 1887, so that comparable data now exist for a period of 28 years.

THE ABSOLUTE DROUGHT is a period of *more than* 14 consecutive days no one of which is a rain day.

THE PARTIAL DROUGHT is a period of *more than* 28 consecutive days the mean rainfall of which does not exceed .01 in. per day.

The names of the 100 selected stations will be found in the table on pp. [59]-[61], and their positions are indicated in the map on p. [57], but in the table of droughts the names of those stations at which no droughts occurred during the year have been omitted to save space.

Before discussing the individual droughts of 1914 the total number of instances occurring during the year may be compared with similar statistics for previous years. It should be pointed out that previous to 1910 the number of records used was less than 100, but a proportional correction has been made, so that the data for all the years quoted are comparable. The comparative summary shows that in regard to absolute droughts the number observed at 100 stations in 1914 fell below the average by 17, but that in respect of partial droughts the number was practically the average. On the other hand the mean length of the absolute droughts of the year was 2 days above the average, whilst that of the partial droughts was 4 days below. The area without absolute droughts, shown by the number of stations without one was above the average, but that over which no partial droughts occurred was normal.

It will be seen from the sketch maps on p. [67] that with trifling exceptions absolute droughts occurred only in the southern half of the British Isles. In Ireland only the south and east coasts experienced

absolute drought ; in Scotland one record only of the 25 in the list was found to contain one, whilst in the north of England there was only one

Comparative Summary of Droughts, 1887—1914.

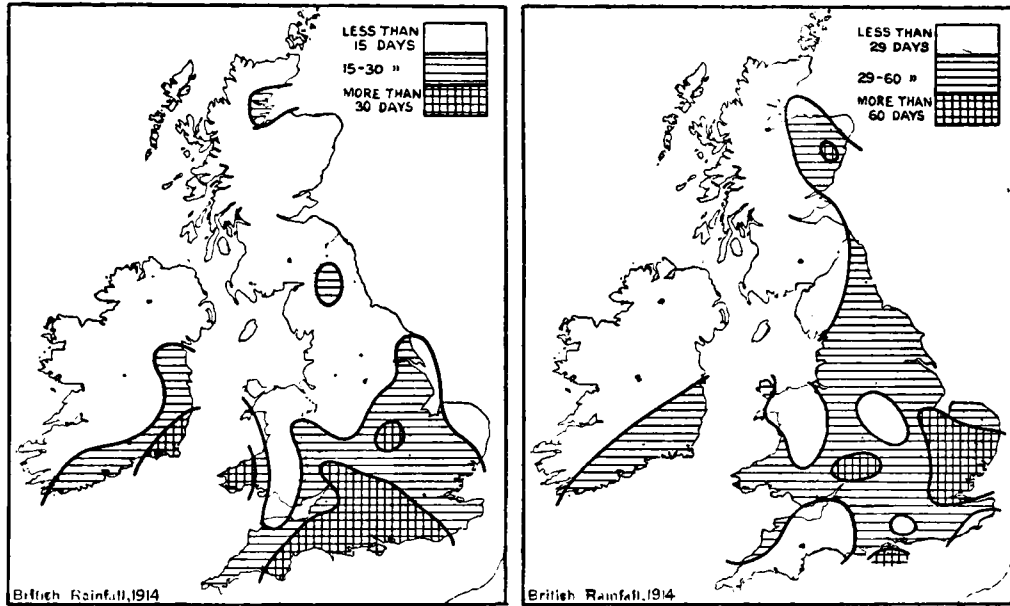
	ABSOLUTE DROUGHTS.				PARTIAL DROUGHTS.			
	No. of Droughts at 100 Stations	Duration.		Stations without one.	No. of Droughts at 100 Stations	Duration.		Stations without one.
		Mean.	Greatest.			Mean.	Greatest.	
		days.	days.			days.	days.	
1887	160	21	34	4	116	40	74	18
1888	34	17	20	70	8	42	50	92
1889	84	21	30	26	76	34	45	30
1890	26	18	20	78	6	30	31	94
1891	52	18	34	56	76	36	49	28
1892	72	16	20	50	34	35	64	66
1893	78	20	44	46	106	51	114	20
1894	104	18	31	20	88	37	62	26
1895	104	19	29	32	94	39	64	38
1896	54	18	26	50	98	40	75	32
1897	40	18	20	62	14	40	61	88
1898	62	17	28	54	62	38	77	52
1899	120	21	31	20	82	35	48	40
1900	28	17	21	76	18	32	35	82
1901	112	17	20	20	18	37	56	84
1902	10	17	18	90	4	37	41	96
1903	22	19	25	79	33	34	41	71
1904	12	16	18	88	18	34	41	82
1905	26	17	20	74	59	36	48	60
1906	73	17	25	47	40	36	55	62
1907	56	19	25	51	30	32	41	71
1908	74	18	32	48	52	35	54	68
1909	47	17	23	66	18	37	51	84
1910	32	16	24	70	23	33	42	78
1911	137	19	32	20	137	36	75	19
1912	105	19	32	26	68	37	69	42
1913	67	17	26	33	52	37	62	54
Average	66	18	26	50	53	37	56	58
1914	49	20	25	65	54	33	50	57
Diff.	-17	+2	-1	+15	+1	-4	-6	-1

NOTE.—The values previous to 1910 have been increased to the equivalent of 100 stations for ready comparison.

isolated absolute drought affecting part of Northumberland. At least one absolute drought occurred over that part of England south of a line drawn from the Humber to the Bristol Channel, except Norfolk, whilst two occurred over a considerable area in the south of England and in the districts bordering St. George's Channel. There was no station at which more than two absolute droughts were observed. Partial droughts

were rather more widely distributed and at least one was observed in the south-east of Ireland, part of the east coast of Scotland, South Wales, and the greater part of England. The area with two partial droughts

ABSOLUTE DROUGHTS IN 1914. PARTIAL DROUGHTS IN 1914.



was confined to a small part of Aberdeenshire and various small areas in the south-east of England, and at one station, Shoeburyness, three partial droughts occurred.

The closing weeks of 1913 and the greater part of January, 1914, were unusually dry in most parts of the south of England, but the rare phenomenon of a long winter drought was experienced only over very small areas. Two stations in the list, Totland Bay, in the Isle of Wight, and Holmer Hall, near Hereford, recorded a partial drought. That in the Isle of Wight which lasted only 33 days, from December 27th to January 28th, occurred generally in the north of the island, but apparently not on the mainland. That at Hereford was also peculiarly local, but considerably more protracted, lasting from December 7th to January 24th, a period of 49 days, during which only .45 in. of rain fell. Six stations (not quoted in the table) in the immediate neighbourhood of Holmer Hall, recorded this drought. The only other instance of winter drought was from January 11th to February 10th, at a few stations in the east of England.

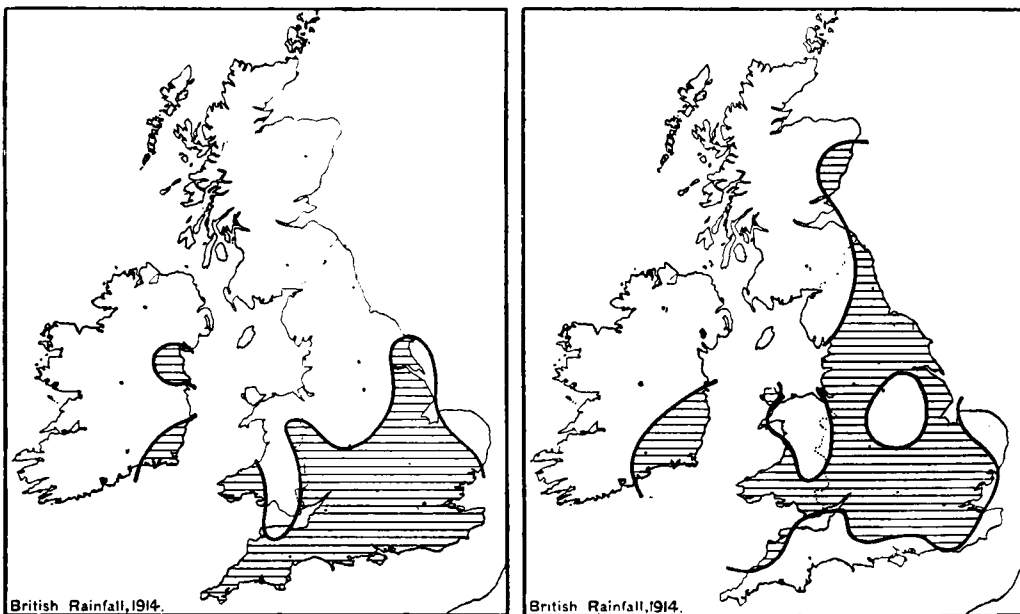
The only droughts of a widespread nature during 1914 occurred in

two well-defined periods, one in spring, the other in autumn. The earlier, or spring drought, lasted generally as an absolute drought, from April 11th or 12th till about May 1st. The area affected was a fringe of the south and east coasts of Ireland and part of the south of England. Some twelve days later a local absolute drought, confined exclusively to the west coast of Wales, occurred, lasting generally from May 12th to 27th.

A very limited area in the east of England, including part of the south-eastern Midlands, experienced a partial drought which occupied the last weeks of August and the first week of September. At Shoeburyness this drought persisted throughout the whole period from July 23rd to September 10th, 50 days, with only $\cdot 39$ in. of rain.

The most important droughty period of the year set in in the third week of September and lasted till about the third week of October. From

THE AUTUMN DROUGHT OF 1914.



The shaded area in the left-hand map indicates the district where an Absolute Drought occurred in the Autumn of 1914; that in the right-hand map the district where a Partial Drought occurred.

about September 20th to October 11th or 12th an absolute drought occurred in the south of England and in small areas in the south-east of Wales and the east of Ireland. It terminated about a week earlier in Wales than in other parts of the district affected. A partial drought which affected almost the whole of England, part of the south-east of

Ireland and a small area in the east of Scotland, also occurred in connection with this absolute drought. The duration of this drought, which was nowhere remarkable, was greatest at Dublin, where it lasted 38 days, and in the north of England, where two stations recorded partial drought for 37 days. Certain areas in North Wales and in the Midlands, as well as most of the south and part of the east coasts of England, escaped this drought, the extent of which, as well as that of the absolute drought which occurred at the same time, is shown in the accompanying maps.

Droughts in 1914.

STATION & COUNTY.	ABSOLUTE DROUGHTS.			PARTIAL DROUGHTS.			
	Began.	Ended.	Last- ed.	Began.	Ended.	Last- ed.	Rain.
ENGLAND & WALES			Days			Days	in.
St. Pancras (Camden Square) ..	Sept. 21	Oct. 12	22	Aug. 9	Sept. 8	31	·26
<i>London—2.</i>				Sept. 14	Oct. 12	29	·27
Tenterden (View Tower)	Sept. 18	Oct. 9	22	None			
<i>Kent—1.</i>							
Brighton (Ditchling Rd., Preston)	Apr. 12	Apr. 29	18	Sept. 14	Oct. 12	29	·29
<i>Sussex—3.</i>	Sept. 18	Oct. 12	25				
Totland Bay (Aston House)	Apr. 11	Apr. 28	18	{ 1913 }			
<i>Hampshire—1.</i>	Sept. 18	Oct. 11	24		Jan. 28	33	·32
Petersfield (Ditcham Park)	Apr. 11	Apr. 29	19	May 4	June 7	35	·32
<i>Hampshire—5.</i>	Sept. 21	Oct. 11	21	None			
Newport Pagnell (The Croft)....	Sept. 21	Oct. 12	22	Aug. 9	Sept. 8	31	·31
<i>Buckinghamshire—5.</i>							
Goring (Elmcroft)	Apr. 11	May 2	22	Sept. 14	Oct. 12	29	·22
<i>Oxfordshire—4.</i>	Sept. 18	Oct. 11	24				
Cambridge (Botanic Gardens) ..	Sept. 21	Oct. 12	22	Aug. 9	Sept. 11	34	·32
<i>Cambridgeshire—2.</i>				Sept. 13	Oct. 12	30	·26
Shoeburyness	Sept. 26	Oct. 12	17	Jan. 11	Feb. 10	31	·28
<i>Essex—3.</i>				July 23	Sept. 10	50	·39
Colchester (Hill House, Lexden)	Sept. 20	Oct. 9	20	Sept. 14	Oct. 13	30	·17
<i>Essex—5.</i>				Aug. 3	Sept. 10	39	·33
Beccles (Sotterley Hall)	None			Sept. 18	Oct. 22	35	·29
<i>Suffolk—3.</i>				Jan. 11	Feb. 10	31	·26
Swaffham (The Paddocks)	None			Aug. 9	Sept. 7	30	·28
<i>Norfolk—4.</i>				Aug. 9	Sept. 10	33	·27
Salisbury Plain (Shrewton)	Apr. 12	May 1	20	Sept. 14	Oct. 12	29	·29
<i>Wiltshire—3.</i>	Sept. 21	Oct. 11	21				
Dorchester (Wollaston House) ..	Apr. 11	May 2	22	None			
<i>Dorsetshire—3.</i>	Sept. 20	Oct. 12	23				
Ashburton (Druid House)	Apr. 11	May 1	21	None			
<i>South Devonshire—4.</i>	Sept. 20	Oct. 11	22				
Bude (The School House)	Sept. 20	Oct. 12	23	Sept. 19	Oct. 22	34	·32
<i>Cornwall—1.</i>							

Droughts in 1914—(continued).

STATION & COUNTY.	ABSOLUTE DROUGHTS.			PARTIAL DROUGHTS.			
	Began.	Ended.	Last- ed.	Began.	Ended.	Last- ed.	Rain.
St. Austell (Trevarna)	Sept. 20	Oct. 11	Days 22	None		Days	in.
<i>Cornwall—2.</i>							
Angersleigh (Leigh Court)	Apr. 11	May 1	21	None			
<i>Somerset—3.</i>	Sept. 20	Oct. 11	22				
Mickleton (Bank House)	Sept. 20	Oct. 12	23	Aug. 10	Sept. 8	30	·29
<i>Gloucestershire—4.</i>				Sept. 13	Oct. 13	31	·21
Clifton (Pembroke Road)	Sept. 20	Oct. 12	23	None			
<i>Gloucestershire—5.</i>							
Hereford (Holmer Hall)	Apr. 12	Apr. 29	18	{ 1913 Dec. 7 }	Jan. 24	49	·45
<i>Herefordshire—1.</i>	Sept. 27	Oct. 11	15		Oct. 13	31	·30
Shifnal (National Schools)	None			Sept. 13	Oct. 13	31	·30
<i>Shropshire—4.</i>				Sept. 20	Oct. 20	31	·27
Blaby (Whetstone Road)	Apr. 12	May 2	21	None			
<i>Leicestershire—4.</i>	Sept. 21	Oct. 12	22				
Market Deeping (Wilsthorpe) . .	Sept. 20	Oct. 12	23	Jan. 11	Feb. 10	31	·29
<i>Lincolnshire—2.</i>				Sept. 13	Oct. 12	30	·11
Spilsby (Ashby Road)	Sept. 20	Oct. 12	23	Sept. 20	Oct. 19	30	·20
<i>Lincolnshire—4.</i>							
Worksop (Hodsock Priory)	None			Jan 11	Feb. 9	30	·25
<i>Nottinghamshire—5.</i>							
Northwich (Winnington)	None			Sept. 20	Oct. 24	35	·29
<i>Cheshire—2.</i>							
St. Michaels-on-Wyre Vicarage	None			Sept. 20	Oct. 24	35	·34
<i>North Lancashire—5.</i>							
Settle	None			Sept. 20	Oct. 24	35	·35
<i>Yorkshire, West Riding—2.</i>							
Meltham (Harewood Lodge)	None			Sept. 18	Oct. 19	32	·31
<i>Yorkshire, West Riding—8.</i>							
Hull (Pearson Park)	Sept 21	Oct. 13	23	Sept. 20	Oct. 19	30	·30
<i>Yorkshire, East Riding—3.</i>							
Thirsk (Mount St. John)	None			Sept. 18	Oct. 24	37	·28
<i>Yorkshire, North Riding—2.</i>							
Sleights (Brook Park)	None			Sept. 20	Oct. 24	35	·30
<i>Yorkshire, North Riding—5.</i>							
Sunderland (W. Hendon House)	None			Sept. 20	Oct. 24	35	·24
<i>Durham—2.</i>							
Haltwhistle (Bellister Castle) . .	Aug. 9	Aug. 23	15	None			
<i>Northumberland—2.</i>							
Glantou (Glanton Pyke Gardens)	None			Sept. 20	Oct. 20	31	·25
<i>Northumberland—6.</i>							
Kirkby Stephen (Redman House)	None			Sept. 18	Oct. 24	37	·25
<i>Westmorland—1.</i>							
Treherbert (Tyn-y-waun)	None			Sept. 20	Oct. 20	31	·23
<i>Glamorgan—6.</i>							
Carmarthen (The Friary)	May 12	May 27	16	Sept. 19	Oct. 20	32	·21
<i>Carmarthen—2.</i>	Sept. 20	Oct. 5	16				
Fishguard (Goodwick Station) . .	May 12	May 27	16	Sept. 17	Oct. 17	31	·31
<i>Pembroke—2.</i>	Sept. 19	Oct. 5	17				
Aberystwyth (Gogerddan)	None			Sept. 20	Oct. 20	31	·28
<i>Cardigan—2.</i>							

Droughts in 1914—(continued).

STATION & COUNTY.	ABSOLUTE DROUGHTS.			PARTIAL DROUGHTS.			
	Began.	Ended.	Last- ed.	Began.	Ended.	Last- ed.	Rain
			Days			Days	in.
Lake Vyrnwy	Sept. 20	Oct. 11	22	None			
<i>Montgomery—5</i>							
Abersoch	May 11	May 27	17	None			
<i>Carnarvon—4.</i>							
Lligwy	None			Sept. 20	Oct. 24	35	·16
<i>Anglesey.</i>							
SCOTLAND.							
Fettercairn (The Burn)	None			Sept. 18	Oct. 19	32	·30
<i>Kincardine—1.</i>							
Cromar (Logie Coldstone, Loan- head)	None			Aug. 11	Sept. 13	34	·31
<i>Aberdeen—1.</i>				Sept. 20	Oct. 19	30	·21
Gordon Castle	None			Apr. 3	May 3	31	·30
<i>Moray—2.</i>							
Invershin	Oct. 8	Oct. 24	17	None			
<i>Sutherland—1.</i>							
IRELAND.							
Skibbereen Rectory	May 23	June 6	15	May 10	June 18	40	·23
<i>Cork—6.</i>							
Mallow (Longueville)	Apr. 14	May 1	18	May 10	June 18	40	·33
<i>Cork—9.</i>							
Waterford (Brook Lodge)	Apr. 14	May 1	18	Sept. 17	Oct. 20	34	·04
<i>Waterford—3.</i>	Sept. 17	Oct. 5	19				
Cahir (Bengurragh)	None			Sept. 17	Oct. 23	37	·33
<i>Tipperary—3.</i>							
Gorey (Courtown House)	Apr. 13	May 1	19	Sept. 17	Oct. 21	35	·32
<i>Wexford—4.</i>	Sept. 17	Oct. 11	25				
Abbey Leix (Blandsfort)	None			Sept 17	Oct. 20	34	·34
<i>Queen's County—2.</i>							
Dublin (FitzWilliam Square)....	Apr. 14	May 2	19	Sept. 17	Oct. 24	38	·25
<i>Dublin—2.</i>							
Kells (Headfort)	Sept. 20	Oct. 9	20	None			
<i>Meath—4.</i>							

RAIN SPELLS IN 1914.

A RAIN SPELL is the antithesis of an Absolute Drought, and is defined as follows :—

A RAIN SPELL is a period of *more than* 14 consecutive days, every one of which is a rain day.

All rain spells observed at the 100 selected stations referred to in the foregoing sections have been extracted and are quoted in the list at the end of this section. The comparative frequency of such phenomena may be seen by the following summary, which now embraces 12 years' observations.

Comparative Table of Rain Spells at 100 Stations.

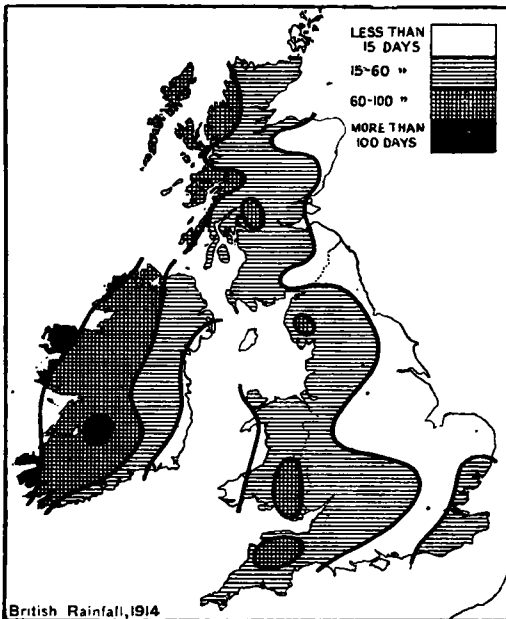
Year.	No. of Rain Spells.	DURATION OF SPELLS.				STATIONS WITH			
		Mean.		Greatest.		None.	1 or 2.	3 or 4.	5 or more.
		days.	Mean R per day. in.	days.	Mean R per day. in.				
1903...	282	22	·28	52	·51	11	41	26	22
1904...	152	19	·22	34	·27	31	51	11	7
1905...	121	19	·24	44	·38	45	39	12	4
1906...	125	21	·25	50	·40	38	47	11	4
1907...	177	21	·25	45	·17	38	30	18	14
1908...	159	19	·24	49	·43	21	59	12	8
1909...	110	19	·26	45	·12	36	52	12	0
1910...	235	21	·25	64	·30	24	34	25	17
1911...	185	22	·29	39	·15	19	50	23	8
1912...	198	22	·27	58	·19	29	32	30	9
1913...	128	21	·29	64	·19	44	34	19	3
1914...	150	22	·29	70	·28	30	44	25	1
Average	169	21	·26	51	·28	30	43	19	8

NOTE.—The values previous to 1910 have been increased to the equivalent of 100 stations for comparison.

Judged by the average of that period the number of rain spells noted in 1914 was slightly deficient. The area over which no rain spells occurred was equal to the average, the deficiency being caused by the fact that only one station registered five or more spells against an average of eight such stations out of the 100. The most noteworthy feature of the comparative table is the occurrence during 1914, of the longest rain spell yet recorded, viz., 70 days, at Darrynane, in Co. Kerry.

The geographical distribution of rain spells during the year is conveniently shown in the accompanying map. In previous years the method followed in constructing such a map has been to plot over the site of each station the number of instances of rain spells which occurred during the year, but we have sometimes found, as in the present case, that this may be misleading. A case in point may be mentioned : an unusually protracted rainy period in the early spring brought rain daily from January 23rd to March 18th at Omagh, whilst at Dunfanaghy, two days, February 9th and 27th, during this period, happened to be rainless.

RAIN SPELLS IN 1914.



The occurrence of these two dry days broke up the long spell at Dunfanaghy into three shorter spells, each, however, of sufficient duration to be quoted in the table, with the somewhat paradoxical result that whilst the station at which the wet period was the more persistent and remarkable recorded only one rain spell, that at which it was to a certain extent intermittent, was credited with three spells. In order to overcome this defect in the map as an expression of the prevalence of rain spells, we have, on this occasion followed the plan previously intro-

duced in dealing with droughts, and have plotted the number of days during the year which were involved in rain spells, in preference to the actual number of such spells recorded.

Speaking generally, the east of Great Britain, south of the Moray Firth and north of Essex, experienced no rain spell during the year. The south coast from Dorset to Sussex, and the coast fringe bordering the greater part of the Irish Sea, were also immune. In Great Britain the area with 60 days or more was confined to small patches in the most rainy districts of England and Wales and a narrow strip of the West Highlands, but in Ireland the whole of the western half had more than 60 days, and the Atlantic coast strip, shown in solid black in the map, was involved in rain spells during more than 100 days, the number of days reaching a

maximum of 113 at Darrynane, in Kerry, the only station which recorded a rain spell during the summer months.

The rain spells of 1914 occurred, like the droughts, in two well defined periods. One of these periods immediately preceded the April-May drought, and the other immediately followed the September-October drought. The earlier wet period began with a widespread rain spell in the whole of the west of Scotland and everywhere in Ireland, except in a narrow strip on the east and south coasts. It also occurred in the English Lake District and in central and North Wales. This spell commenced generally on or about January 23rd and terminated in different places on dates between February 7th and the end of that month. In Ireland, and the north and west of Scotland, it was succeeded by a second rain spell of even more variable duration and this spell also affected the west and south of England and Wales. At some stations in Scotland, and over most of the west of Ireland, a further rain spell occurred, lasting well into April, and in the west of Ireland generally the whole period from January 23rd to mid-April formed an almost unbroken succession of rain days. The longest rain spell recorded in the table was of 70 days' duration, at Darrynane Abbey, and at Enniscoe in Co. Mayo there was only one day in the 81 days from January 23rd to April 13th without measurable rain. As a matter of interest we add the following examples from records not quoted in the table, showing the remarkable persistence of daily rainfall at many Irish stations.

The Winter-Spring Rain Spell of 1914.

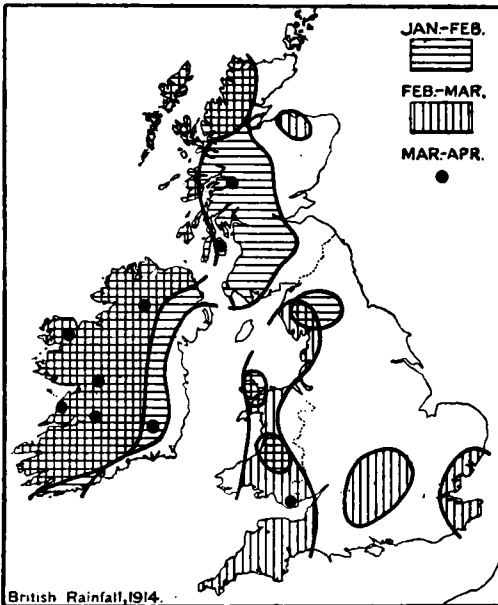
Station.	County.	Began.	Ended.	Days.	Rainfall.	Rain per day.
Killarney.....	Kerry.....	3 Jan. 23	Apr. 13	81	26·19	·32
Newmarket-on-Fergus	Clare	3 „ „	„ „	81	13·33	·16
Dugort, Slievemore ...	Mayo	8 „ „	Mar. 23	60	19·37	·32
Letterkenny	Donegal..	2 „ „	„ „	60	13·53	·23
Milford	„	3 „ „	„ „	60	11·61	·19

It is interesting to note that only in two instances since the registration of rain spells was first commenced in 1903, have spells exceeding 60 days in length been put on record, viz., 64 days with 18·98 in. of rain, from January 7th to March 11th, 1910, at Darrynane, and 64 days with 12·35 in. of rain, from November 22nd, 1912, to January 24th, 1913, at Carrigaholt, both stations being on the south-west coast of Ireland, undoubtedly the most persistently rainy district in the British Isles.

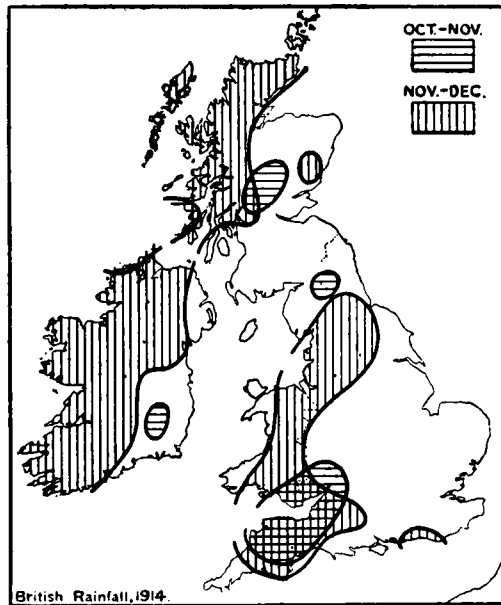
The mean rate of rainfall per day during the earlier series of rain spells of 1914, was not very high in most districts, but reached $\cdot 64$ in. at Dungeon Ghyll, in Westmorland, and $\cdot 66$ in. at Kinlochmore, in West Inverness-shire.

An attempt has been made to show approximately on a map the areas affected by the winter-spring rain spells of 1914. The period may be divided roughly into three parts, which for convenience we designate the spells of January-February, February-March, and March-April, though these expressions do not define them exactly. The extent of the January-

THE WINTER-SPRING RAIN SPELLS OF 1914.



THE AUTUMN RAIN SPELLS OF 1914.



February spell is shown by horizontal shading, and that of the February-March spell by vertical shading, whilst the stations at which the more restricted spell of March-April occurred are indicated by black dots. The sequence in some cases took the form of three separate spells, whilst at other stations two, and in some cases all three, were combined.

The autumn period of rain spells of 1914, marking the opening stages of one of the wettest winters experienced in the British Isles during at least half a century, was observed over almost the same districts as that of the spring. In scattered areas shown on the accompanying map by horizontal shading a separate short rain spell preceded the main spell. It commenced in England about October 21st and ended about November 7th, but in Scotland and Ireland occurred about a week later. The

commencement of the principal spell was almost simultaneous in all parts where it occurred, being within a day or so of November 22nd. The duration was not great, being usually till December 8th or 9th, but in central Ireland it continued till about December 20th. The area affected is shown on the map by the vertical line tint. It will be seen that the only district of appreciable extent in which both the short rain spells of the autumn occurred lay in the south-west of England and Wales. The mean rate of daily rainfall in the autumn rain spells was markedly higher than that during those of the early part of the year, being as high as .35 in. and .33 in. at stations as far east as Brighton and Fettercairn, respectively, whilst in the west of Scotland generally it reached .50 in., rising to the very high figure of 1.05 in. at Kinlochmore, where 17.84 in. of rain fell in 17 days. This is the highest rate of fall recorded during a complete rain spell in 12 years. At Dunvegan in the Isle of Skye, no day during this spell had less rain than .13 in.

Rain Spells of a Mean Rate of .40 in. or more per day in 1914.

Div.	Station.	Began.	Ended.	Lasted.	Total Fall.	Rain per Day.		
						Max.	Min.	Mean
				days.	in.	in.	in.	in.
V.	Ashburton	Nov. 24	Dec. 8	15	8.40	1.65	.06	.56
"	Simonsbath	Feb. 9	Mar. 26	46	18.55	1.54	.01	.40
"	"	Nov. 24	Dec. 8	15	6.91	1.03	.03	.46
X.	Kirkby Stephen ...	" 24	" 9	16	9.07	1.35	.02	.57
"	Dungeon Ghyll ...	Jan. 23	Feb. 24	33	21.04	2.12	.01	.64
"	"	Feb. 26	Mar. 26	29	12.35	1.40	.01	.43
XI.	Treherbert	" 26	" 26	29	11.93	1.56	.02	.41
"	"	Nov. 24	Dec. 8	15	10.19	1.88	.05	.68
"	Tyrmynydd	" 23	" 8	16	8.24	1.26	.02	.51
XV.	Loch Awe (Ford)..	Jan. 23	Feb. 23	32	13.11	1.42	.07	.41
"	"	Nov. 23	Dec. 9	17	9.46	1.46	.07	.56
"	Mull (Ulva)	" 22	" 10	19	8.13	1.03	.01	.43
XVIII.	Drumnadrochit ...	" 23	" 9	17	8.66	1.06	.07	.51
"	Loch Nevis(Inverie)	Jan. 23	Feb. 24	33	13.67	1.35	.03	.41
"	"	Nov. 22	Dec. 8	17	11.31	1.32	.04	.67
"	Kinlochmore	Jan. 23	Feb. 23	32	21.11	1.93	.03	.66
"	"	Mar. 28	Apl. 14	18	10.86	1.84	.03	.60
"	"	Nov. 23	Dec. 9	17	17.84	3.13	.04	1.05
"	Skye (Dunvegan)..	" 22	" 8	17	8.12	1.40	.13	.48
"	Glencarron	Jan. 23	Feb. 18	27	12.31	1.98	.04	.46
"	"	Nov. 22	Dec. 9	18	11.61	1.23	.01	.65
XIX.	Loch Stack	" 22	" 9	18	9.08	1.19	.09	.50
XXII.	Markree Obsy. ...	" 23	" 9	17	6.81	.72	.02	.40
XXIII.	Killybegs	" 22	" 8	17	8.07	.85	.01	.47

There were in all 24 instances recorded in 1914 of rain spells with a mean rate of daily rainfall reaching or exceeding .40 in., and particulars of these are brought together in the preceding table, which is comparable with the similar tables given in previous years. Of the instances quoted 9 took place during the winter-spring spells, and the remaining 15 all began between November 22nd and 24th and ended between December 8th and 10th. The most notable was that at Kinlochmore, with a mean daily fall of 1.05 in., already referred to. At the same station a mean daily fall of .66 in. was maintained during the 32 days from January 23rd to February 23rd, whilst at Dungeon Ghyll rain fell at a mean rate of .66 in. per day, for a period of 33 days, beginning on the same date and ending one day later. Only two of the instances quoted occurred in Ireland, both in the November-December rain spell, confirming the fact to which attention has previously been drawn, that Irish rain spells, although commonly more prolonged, are not, as a rule, so remarkable for high rainfall as those which occur in the rainy districts of Great Britain.

Table of Rain Spells, 1914.

STATION & COUNTY.	Began.	Ended.	Last- ed.	Total Rain.	RAIN PER DAY.		
					Max.	Min.	Mean
ENGLAND AND WALES.			Days	in.	in.	in.	in.
Tenterden (View Tower) <i>Kent</i> —1.	Mar. 11	Mar. 26	16	3.38	.95	.01	.21
Brighton (Ditchling Road, Preston) <i>Sussex</i> —3.	Nov. 24	Dec. 15	22	7.77	1.59	.01	.35
Newport Pagnell (The Croft) <i>Buckinghamshire</i> —5.	Mar. 7	Mar. 27	21	3.23	.40	.01	.15
Goring (Elmcroft) <i>Oxfordshire</i> —4.	Mar. 3	Mar. 26	24	4.33	.58	.02	.18
Shoeburyness <i>Essex</i> —3.	Mar. 7	Mar. 21	15	2.85	.88	.02	.19
Colchester (Hill House, Lexden) . . <i>Essex</i> —5.	Mar. 7	Mar. 27	21	3.73	.53	.01	.18
Salisbury Plain (Shrewton) <i>Wiltshire</i> —3.	Mar. 7	Mar. 25	19	4.00	.67	.01	.21
Ashburton (Druid House) <i>South Devonshire</i> —4.	Nov. 24	Dec. 9	16	2.99	.47	.02	.19
	Feb. 26	Mar. 21	24	7.28	.94	.02	.30
	Oct. 21	Nov. 6	17	5.93	1.05	.01	.35
	Nov. 24	Dec. 8	15	8.40	1.65	.06	.56
Bude (The School House) <i>Cornwall</i> —1.	Feb. 27	Mar. 15	17	3.52	.87	.02	.21
	Oct. 23	Nov. 8	17	2.10	.42	.01	.12
	Nov. 23	Dec. 21	29	6.37	.91	.01	.22
St. Austell (Trevarna) <i>Cornwall</i> —2.	Feb. 26	Mar. 26	29	8.11	.90	.03	.28

STATION & COUNTY.	Began.	Ended.	Last- ed.	Total Rain.	RAIN PER DAY.		
					Max.	Min.	Mean
Angersleigh (Leigh Court)	Feb. 28	Mar. 21	Days 22	in. 4.84	in. 1.18	in. .02	in. .22
<i>Somerset—3.</i>	Oct. 21	Nov. 7	18	4.77	.75	.01	.26
	Nov. 24	Dec. 8	15	3.41	.69	.01	.20
Simonsbath	Feb. 9	Mar. 26	46	18.55	1.54	.01	.43
<i>Somerset—5.</i>	Oct. 21	Nov. 4	15	4.93	.82	.01	.33
	Nov. 24	Dec. 8	15	6.91	1.03	.03	.46
Mickleton (Bank House)	Mar. 7	Mar. 26	20	2.31	.26	.01	.12
<i>Gloucestershire—4.</i>							
Clifton (Pembroke Road)	Oct. 21	Nov. 7	18	3.01	.63	.01	.17
<i>Gloucestershire—5.</i>	Nov. 24	Dec. 9	16	4.09	.74	.01	.26
Hereford (Holmer Hall)	Oct. 21	Nov. 7	18	2.57	.52	.01	.14
<i>Herefordshire—1.</i>							
Northwich (Winnington)	Nov. 23	Dec. 8	16	2.62	.61	.02	.16
<i>Cheshire—2.</i>							
St. Michaels-on-Wyre Vicarage ..	Mar. 7	Mar. 21	15	2.18	.41	.01	.15
<i>North Lancashire—5.</i>	Nov. 24	Dec. 8	15	3.69	.79	.04	.25
Settle	Nov. 21	Dec. 9	19	6.92	1.09	.01	.36
<i>Yorkshire, West Riding—2.</i>							
Meltham (Harewood Lodge)	Nov. 24	Dec. 8	15	5.31	.79	.04	.35
<i>Yorkshire, West Riding—8.</i>							
Thirsk (Mount St. John)	Nov. 21	Dec. 9	19	1.88	.34	.01	.10
<i>Yorkshire, North Riding—2.</i>							
Haltwhistle (Bellister Castle)	Oct. 29	Nov. 13	16	3.85	.59	.02	.24
<i>Northumberland—2.</i>							
Kirkby Stephen (Redman House)	Feb. 9	Feb. 23	15	5.67	1.57	.01	.38
<i>Westmorland—1.</i>	Nov. 24	Dec. 9	16	9.07	1.35	.02	.57
Duncheon Ghyll	Jan. 23	Feb. 24	33	21.04	2.12	.01	.64
<i>Westmorland—2.</i>	Feb. 26	Mar. 26	29	12.35	1.40	.01	.43
Treherbert (Tyn-y-waun)	Feb. 26	Mar. 26	29	11.93	1.56	.02	.41
<i>Glamorgan—6</i>	Mar. 28	Apr. 11	15	5.50	.93	.01	.37
	Oct. 21	Nov. 6	17	5.75	1.16	.02	.34
	Nov. 24	Dec. 8	15	10.19	1.88	.05	.68
Carmarthen (The Friary)	Mar. 3	Mar. 26	24	5.23	.80	.01	.22
<i>Carmarthen—2.</i>	Dec. 6	Dec. 20	15	4.33	1.40	.02	.29
Aberystwyth (Gogerddan)	Feb. 6	Feb. 23	18	4.56	.84	.03	.25
<i>Cardigan—2.</i>	Mar. 3	Mar. 20	18	5.28	.75	.02	.29
Birmingham W. W. (Tyrmynydd)	Feb. 6	Mar. 25	48	17.20	1.63	.01	.36
<i>Radnor—1.</i>	Nov. 23	Dec. 8	16	8.24	1.26	.02	.51
Lake Vyrnwy	Nov. 24	Dec. 8	15	5.71	1.15	.01	.38
<i>Montgomery—5.</i>							
Mostyn Vicarage	Nov. 23	Dec. 8	16	3.35	.50	.03	.21
<i>Flint—1.</i>							
Lligwy	Feb. 7	Mar. 5	27	4.67	.61	.01	.17
<i>Anglesey.</i>	Mar. 7	Mar. 21	15	1.81	.30	.01	.12
SCOTLAND.							
Whithorn (Cutroach)	Feb. 7	Feb. 23	17	3.42	.59	.01	.20
<i>Wigtown—4.</i>							
Edinburgh W. W. (Victoria Lodge)	Jan. 24	Feb. 23	31	9.33	.93	.02	.30
<i>Peebles—1.</i>							
Motherwell (Dalzell Gardens)	Feb. 7	Feb. 22	16	2.58	.39	.04	.16
<i>Lanark—4.</i>							
Girvan (Pinmore)	Feb. 5	Feb. 24	20	6.01	1.02	.02	.30
<i>Ayr—8.</i>							

STATION & COUNTY.	Began.	Ended.	Last- ed.	Total Rain.	RAIN PER DAY.		
					Max.	Min.	Mean
Buchlyvie (The Manse)	Jan. 23	Feb. 17	Days 26	in. 5.01	in. .68	in. .03	in. .19
<i>Stirling</i> —1.	Oct. 25	Nov. 13	20	3.83	.58	.01	.19
	Nov. 23	Dec. 14	22	7.49	1.35	.01	.34
Rothsay (Ardenraig)	Jan. 23	Feb. 7	16	4.08	.80	.03	.26
<i>Bute</i> —1.	Feb. 9	Feb. 23	15	4.77	.91	.02	.32
	Mar. 28	Apr. 13	17	4.02	.65	.01	.24
Loch Awe (Ford)	Jan. 23	Feb. 23	32	13.11	1.42	.07	.41
<i>Argyll</i> —6.	Nov. 23	Dec. 9	17	9.46	1.46	.07	.56
Campbeltown (Witchburn)	Feb. 6	Feb. 23	18	6.19	1.11	.01	.34
<i>Argyll</i> —10.	Feb. 25	Mar. 20	24	4.53	.91	.01	.19
Islay (Eallabus)	Jan. 23	Feb. 8	17	3.65	.73	.02	.21
<i>Argyll</i> —14.	Feb. 10	Mar. 9	28	7.11	.74	.03	.25
	Nov. 1	Nov. 16	16	3.47	.56	.02	.22
	Nov. 24	Dec. 21	28	8.57	1.04	.01	.31
Mull (Ulva)	Jan. 23	Mar. 7	44	14.05	1.43	.01	.32
<i>Argyll</i> —14.	Nov. 22	Dec. 10	19	8.13	1.03	.01	.43
Aberfeldy (Dall Avon)	Jan. 24	Feb. 18	26	5.75	.92	.01	.22
<i>Perth</i> —11.	Oct. 29	Nov. 13	16	3.77	1.08	.01	.24
Fettercairn (The Burn)	Nov. 25	Dec. 14	20	6.68	1.58	.01	.33
<i>Kincardine</i> —1.							
Gordon Castle	Mar. 2	Mar. 16	15	1.31	.30	.01	.09
<i>Moray</i> —2.							
Drumnadrochit	Jan. 23	Feb. 8	17	4.78	1.54	.03	.28
<i>Inverness</i> —9.	Nov. 23	Dec. 9	17	8.66	1.06	.07	.51
Loch Nevis (Inverie)	Jan. 23	Feb. 24	33	13.67	1.35	.03	.41
<i>Inverness</i> —12.	Nov. 22	Dec. 8	17	11.31	1.32	.04	.67
Glenleven (Kinlochmore)	Jan. 23	Feb. 23	32	21.11	1.93	.03	.66
<i>Inverness</i> —17.	Mar. 28	Apr. 14	18	10.86	1.84	.03	.60
	Nov. 23	Dec. 9	17	17.84	3.13	.04	1.05
Skye (Dunvegan).....	Dec. 21	Jan. 10	21	5.12	.84	.02	.24
<i>Inverness</i> —18.	(1913)						
	Jan. 23	Mar. 6	43	15.54	1.51	.01	.36
	Nov. 22	Dec. 8	17	8.12	1.40	.13	.48
Glencarron Lodge	Jan. 23	Feb. 18	27	12.31	1.98	.04	.46
<i>Ross</i> —9.	Mar. 9	Mar. 23	15	3.04	.62	.02	.20
	Nov. 22	Dec. 9	18	11.61	1.23	.01	.65
Invershin	Nov. 23	Dec. 9	17	3.51	.49	.04	.21
<i>Sutherland</i> —1.							
Loch Stack	Jan. 24	Feb. 8	16	6.09	1.75	.01	.38
<i>Sutherland</i> —5.	Feb. 26	Mar. 18	21	5.84	.82	.03	.28
	Nov. 22	Dec. 9	18	9.08	1.19	.09	.50
Thurso (Buckies)	Nov. 22	Dec. 6	15	3.22	.48	.02	.21
<i>Caithness</i> —3.							
IRELAND.							
Skibbereen Rectory	Jan. 23	Feb. 23	32	8.42	.80	.02	.26
<i>Cork</i> —6.	Nov. 24	Dec. 12	19	7.28	2.00	.01	.38
Mallow (Longueville)	Jan. 23	Feb. 25	34	8.38	1.06	.01	.25
<i>Cork</i> —9.	Mar. 9	Mar. 31	23	4.74	1.11	.01	.21
	Nov. 24	Dec. 12	19	5.97	1.40	.04	.31
Darrynane Abbey	Jan. 22	Apr. 1	70	19.49	1.15	.01	.28
<i>Kerry</i> —4.	June 28	July 20	23	4.68	1.04	.01	.20
	Nov. 23	Dec. 12	20	6.31	1.22	.03	.32

STATION & COUNTY.	Began.	Ended.	Last- ed.	Total Rain.	RAIN PER DAY.		
					Max.	Min.	Mean
			Days	in.	in.	in.	in.
Cahir (Bengurragh)	Feb. 4	Feb. 23	20	5.22	.96	.01	.26
Tipperary—3.	Feb. 25	Apr. 1	36	4.92	.60	.01	.14
	Nov. 24	Dec. 18	25	6.64	1.07	.01	.27
Ennistymon House	Jan. 23	Feb. 25	34	9.53	.70	.01	.28
Clare—2.	Mar. 9	Mar. 25	17	3.64	.57	.02	.21
	Mar. 27	Apr. 10	15	2.84	.52	.02	.19
	Nov. 24	Dec. 12	19	6.23	.90	.01	.33
Broadford (Hurdlestown)	Jan. 23	Feb. 3	32	8.35	.84	.01	.26
Clare—3.	Feb. 25	Mar. 20	24	4.63	.58	.02	.19
	Mar. 27	Apr. 13	18	2.69	.40	.01	.15
	Nov. 23	Dec. 22	30	6.82	.92	.01	.23
Abbey Leix (Blandsfort)	Feb. 9	Feb. 26	18	3.80	.80	.01	.21
Queen's County—2.	Mar. 26	Apr. 9	15	2.86	.58	.01	.19
	Oct. 28	Nov. 15	19	2.93	.52	.01	.15
Kells (Headfort)	Nov. 24	Dec. 21	28	5.31	.64	.01	.19
Meath—4.							
Moate (Coolatore)	Jan. 31	Feb. 23	24	4.00	.63	.01	.17
Westmeath—1.	Mar. 11	Mar. 31	21	3.27	.54	.01	.16
Ballynahinch Castle	Jan. 23	Feb. 8	17	6.24	1.44	.08	.37
Galway—3.	Feb. 10	Mar. 5	24	8.24	.96	.02	.34
	Mar. 7	Mar. 25	19	4.73	.97	.03	.25
	Nov. 24	Dec. 20	27	8.74	.96	.02	.32
Woodlawn	Feb. 4	Feb. 23	20	4.65	.56	.02	.23
Galway—4.	Mar. 11	Mar. 25	15	3.27	.56	.04	.22
	Mar. 27	Apr. 12	17	3.02	.65	.02	.18
	Nov. 23	Dec. 21	29	6.93	.79	.01	.24
Crossmolina (Enniscoe)	Jan. 23	Mar. 25	62	16.44	1.19	.02	.27
Mayo—2.	Mar. 27	Apr. 13	18	4.10	.59	.02	.23
	Nov. 22	Dec. 20	29	11.20	1.01	.04	.39
Collooney (Markree Observatory)	Jan. 23	Feb. 8	17	4.56	.74	.04	.27
Sligo—2.	Feb. 10	Mar. 22	41	8.28	.75	.02	.20
	Nov. 23	Dec. 9	17	6.81	.72	.02	.40
Mohill Rectory	Jan. 23	Mar. 20	57	11.38	.63	.01	.20
Leitrim—5.	Nov. 23	Dec. 20	28	6.45	.70	.01	.23
Monaghan (Rowantree House)	Feb. 2	Feb. 22	21	3.03	.54	.01	.14
Monaghan—3.	Nov. 23	Dec. 8	16	4.01	.57	.02	.25
Bushmills (Dundarave)	Feb. 9	Feb. 23	15	2.98	.48	.01	.20
Antrim—3.	Feb. 25	Mar. 18	22	3.18	.54	.01	.14
	Nov. 22	Dec. 7	16	3.58	.58	.02	.22
Omagh (Edenfel)	Jan. 23	Mar. 18	55	10.70	.62	.02	.19
Tyrone—3.	Mar. 28	Apr. 13	17	3.04	.40	.04	.18
	Nov. 20	Dec. 14	25	7.37	.80	.02	.29
Dunfanaghy (Horn Head)	Jan. 23	Feb. 8	17	5.29	1.62	.01	.31
Donegal—3.	Feb. 10	Feb. 26	17	4.00	.58	.01	.24
	Feb. 28	Mar. 17	18	3.67	.49	.05	.20
	Oct. 31	Nov. 15	16	3.06	.61	.01	.19
	Nov. 21	Dec. 22	32	10.16	1.12	.02	.32
Killybegs (Rockmount)	Jan. 23	Feb. 8	17	4.78	.96	.03	.28
Donegal—5.	Feb. 10	Feb. 25	16	3.78	.55	.03	.24
	Feb. 27	Mar. 23	25	7.58	.90	.01	.30
	Nov. 22	Dec. 8	17	8.07	.85	.01	.47

DURATION OF RAINFALL IN 1914.

THE amount of attention devoted to recording the measured Duration of Rainfall is steadily increasing and year by year we are able to add fresh records to the tables included in this section, and generally to widen the observational basis upon which future knowledge of this element of the climate of the British Isles must be built up. The number of new records appearing for 1914 is eleven, and two only of those which were printed last year are not available this year, so that the total number is increased from 34 to 43.

Of the new records two, those at Billingshurst and Moretonhampstead, are imperfect. Another imperfect record is that at Tynemouth, where the observations came to an end in September and cannot for the present be resumed. Of the new and complete records the most interesting in England are at Almeley, near the Welsh border, in Herefordshire, and Bolton, both of which, lying in the neighbourhood of elevated land, help to link up the few mountain records with those on the plains. In the Pennines a Hyetograph record at Lower Laithe Reservoir in the Sladen Valley, near Haworth, supplements the existing records at Skipton and Huddersfield. Mr. A. J. Walker, whose unflagging zeal in studying the comparative merits of various types of self-recording rain gauge has been invaluable, has added a Hyetograph to his series at Mount St. John, Thirsk. As this type of instrument is now more widely used than any other in the British Isles the new record should be most helpful in the difficult task of standardizing the measurement of rainfall duration.

In Wales and Scotland there are no new stations, but we are still enabled to publish the records from Cray and Aber Clyd in South Wales, both more than 1000 ft. above sea level and places of high annual rainfall; and in Scotland the record for Kinlochleven in West Argyllshire, is fortunately complete, and affords an interesting contrast with Mr. Smith's observations at Crathes, not very far from the east coast.

It is gratifying this year to be able to publish three Irish records for the first time. One of them, mentioned in *British Rainfall, 1913*, is from

a Hyetograph at University College, Cork. The others we owe to the courtesy of Sir W. N. Shaw, Director of the Meteorological Office, who has kindly allowed us to examine the traces of the Beckley recording gauges taken at Valencia and Armagh Observatories.

In order to accommodate the increasing number of tables of rainfall duration in the space at our disposal, we have been obliged this year to curtail the number of columns, and to omit those giving the number of days with rain, and the mean amount and duration of rain per rain day, in each month. We retain, however, the mean rate of fall of rain per hour and give the actual rainfall in each month for comparison with the duration.

The record of the duration of rainfall at Camden Square, commenced in 1880, is now available for 34 years. It will be seen that the duration of rainfall in London during 1914 was in excess of the average by 83·2 hours, or 19 per cent., whereas the amount of rainfall exceeded the average by only 6 per cent, indicating that the characteristic of the year was prolonged, rather than heavy rainfall. Whilst only three years, 1903, 1909, and 1913, in the whole period, had a greater duration of rainfall, at the same time only three years, 1904, 1908, and 1909, showed a smaller mean rate of rainfall per hour. This is perfectly consistent with the distribution of rainfall throughout the year, which was characterized by a great excess during the winter months, when the mean rate of rainfall is always small, and a persistent if not very pronounced deficiency during the summer, when the mean rate of fall is normally greater. The most remarkable feature was the great duration in March and December, with 102·4 and 117·5 hours respectively, both unprecedented values for months of the same name, and in the case of December unprecedented in any month. There had, previously to 1914, been only two months in which rain fell for more than 100 hours, namely October, 1882, with 103·5 hours, and June, 1903, with 102·2 hours. The duration was, on the other hand, small throughout the summer half year, less than 20 hours each being observed in April, May, June, and September, though no month gave an unprecedentedly small total.

Whilst we have no averages with which to compare the records for other parts of the country, it is interesting to notice that so far as can be judged, the duration values in all parts, except the north of England, were high. Three stations, Melbury, in North Devon, Cray, in Brecon-

shire, and Kinlochleven, in West Argyll, recorded more than 1000 hours of rainfall during the year, and the only stations with less than 500 hours lay in the centre and east of England. Nearly all parts of the country

Comparison of Amount, Duration and Intensity of Rainfall, and Number of Rain Days at Camden Square in 1914 with the Average for 33 years, 1881-1913.

YEAR.	AMOUNT.		DURATION.		INTENSITY.		RAIN DAYS.	
	Total.	Per cent. of average	Total.	Per cent. of average	Rate per Hour.	Per cent. of average	Total.	Per cent. of average
	in.		hours		in.			
1881	27·92	115	486·3	113	·057	102	152	94
1882	27·14	112	480·7	112	·056	100	165	102
1883	24·40	101	393·5	92	·062	111	164	101
1884	20·35	84	336·8	78	·060	107	150	93
1885	26·64	110	470·0	109	·057	102	165	102
1886	27·01	112	427·2	99	·063	112	176	109
1887	19·21	79	300·3	70	·064	114	140	87
1888	27·74	115	435·7	101	·064	114	173	107
1889	23·85	99	428·5	100	·056	100	169	104
1890	21·23	88	409·5	95	·052	93	161	99
1891	28·15	116	490·3	114	·057	102	178	110
1892	22·61	94	372·5	87	·061	109	158	98
1893	19·80	82	388·0	90	·051	91	148	91
1894	27·94	115	477·7	111	·058	104	185	114
1895	21·47	89	380·0	88	·057	102	137	85
1896	23·52	97	404·3	94	·058	104	159	98
1897	22·86	94	371·2	86	·062	111	164	101
1898	m 17·69	73	m 298·5	69	·059	105	140	87
1899	22·54	93	337·5	79	·067	120	144	89
1900	23·28	96	366·3	85	·064	114	174	107
1901	22·17	92	310·2	72	M ·071	127	m 128	79
1902	20·84	86	352·5	82	·059	105	162	100
1903	M 38·10	157	M 688·5	160	·055	98	179	110
1904	20·65	85	491·8	114	m ·042	75	160	99
1905	22·97	95	456·4	106	·050	89	162	100
1906	24·26	100	420·4	98	·058	104	163	101
1907	23·01	95	418·8	97	·055	98	175	108
1908	23·67	98	500·7	117	·047	84	157	97
1909	26·75	110	576·5	134	·046	82	M 190	117
1910	25·36	105	491·2	114	·052	93	186	115
1911	24·79	102	473·0	110	·052	93	155	96
1912	27·88	115	516·2	120	·054	96	180	111
1913	22·41	93	453·0	105	·049	87	163	101
Average.	24·19	100	430·4	100	·056	100	162	100
1914	25·72	106	513·6	119	·050	89	168	104
Difference from average	+ 1·53	+6	+83·2	+19	- ·006	- 11	+6	+4

had their maximum duration in December; February and March being nearly everywhere the closest competitors. In December the duration exceeded 100 hours practically everywhere and reached 201·3 hours at Kinlochleven, where, however, the March duration was still greater, amounting to 243·7 hours, or practically one-third of the possible duration. The records also agree in indicating a small rainfall duration throughout the summer.

Generally speaking the mean rate of rainfall per hour throughout the year showed no great deviation from the normal, being about ·05 in. generally. We are particularly interested to observe the high values of ·079 in. at Valencia and ·066 in. at Kinlochleven, the only two west coast stations in districts of high rainfall. Extremely little information as to the relative rate of fall of rain in wet and dry places is available, but such data as have come before us in the past have suggested, broadly speaking, that the rate differs little in different parts of the country, and that the larger rainfall in the rainy districts results from prolongation of rain rather than from greater intensity. While the accumulation of records from very rainy districts will no doubt in time enable this extremely important point to be settled, in the meanwhile our interest must be centred in the hope that some of our readers will help in solving it by the establishment of automatic rainfall records in such places as the Lake District.

Duration of Rainfall in 1914.

<i>Shad Thames Pump. Stat., London.</i> LONDON COUNTY COUNCIL. N. and Z's. Hyetograph. 43 ft. above Sea.				<i>Camden Square, London.</i> DR. H. R. MILL, F.R.Met.Soc. Casella's Standard. 111 ft. above Sea.			
1914.	Rainfall.	Duration.	Rate per hour.	1914.	Rainfall.	Duration.	Rate per hour.
	in.	hours.	in.		in.	hours.	in.
Jan.	·41	22·3	·018	Jan.	·55	24·7	·022
Feb.	1·90	51·4	·037	Feb.	2·37	55·9	·042
March	3·64	108·2	·034	March	4·51	102·4	·044
April	·65	19·7	·033	April	·80	19·6	·041
May	1·67	23·5	·071	May	1·74	19·6	·089
June	1·08	20·5	·053	June	1·14	17·6	·065
July	·99	30·0	·033	July	1·26	28·7	·044
Aug.	1·05	22·0	·048	Aug.	1·24	21·9	·057
Sept.	·73	17·7	·041	Sept.	1·00	16·3	·061
Oct.	·82	32·3	·025	Oct.	1·25	31·0	·040
Nov.	2·47	52·2	·047	Nov.	3·52	58·4	·060
Dec.	5·41	128·7	·042	Dec.	6·34	117·5	·054
Year	20·82	528·5	·039	Year	25·72	513·6	·050

Park Hill House, Croydon, Surrey.
MR. BALDWIN LATHAM, M.Inst.C.E.
265 ft. above Sea.

1914.	Rainfall.	Duration.	Rate per hour.
	in.	hours.	in.
Jan.	·74	16·7	·044
Feb.	4·14	89·2	·046
March	4·46	98·6	·045
April	·95	19·3	·049
May	1·11	15·6	·071
June	1·04	15·5	·067
July	1·91	26·2	·073
Aug.	1·89	21·4	·089
Sept.	·74	11·5	·064
Oct.	1·46	22·5	·065
Nov.	4·03	58·2	·069
Dec.	8·03	124·5	·065
Year	30·50	519·2	·059

Edenfield, New Malden, Surrey.
MR. W. J. CARTER, F.R.Met.Soc.
Casella's Recorder. 43 ft. above Sea.

1914.	Rainfall.	Duration.	Rate per hour.
	in.	hours.	in.
Jan.	·47	29·1	·016
Feb.	2·78	117·9	·024
March	4·09	123·9	·033
April	·88	20·9	·042
May	1·44	25·5	·056
June	2·50	25·0	·100
July	1·87	54·3	·034
Aug.	1·18	25·4	·046
Sept.	·88	22·9	·038
Oct.	1·08	35·9	·030
Nov.	2·62	63·6	·041
Dec.	6·39	148·0	·043
Year	26·18	692·4	·038

The Old House, Sevenoaks, Kent.
MR. W. TATTERSALL, F.R.Met.Soc.
N. and Z's. Hyetograph. 510 ft. above Sea.

	in.	hours.	in.
Jan.	·84	51·5	·016
Feb.	4·34	117·1	·037
March	5·63	143·9	·039
April	1·47	34·5	·043
May	1·74	22·7	·077
June	·88	13·4	·066
July	1·38	28·2	·049
Aug.	2·30	35·8	·064
Sept.	1·15	24·9	·046
Oct.	2·00	44·0	·045
Nov.	4·20	79·7	·053
Dec.	7·91	172·3	·046
Year	33·84	768·0	·044

Five Oaks, Billingshurst, Sussex.
MR. S. C. RUSSELL, F.R.Met.Soc.
N. and Z's. Hyetograph.

	in.	hours.	in.
Jan.	·59	32·0	·018
Feb.	4·95	124·0	·040
March	4·75	91·4	·052
April	1·58	26·2	·060
May ....	..	..	..
June ....	..	..	..
July ....	..	..	..
Aug. ....	..	..	..
Sept. ....	..	..	..
Oct. ....	..	..	..
Nov. ....	..	..	..
Dec. ....	..	..	..
Year .....	..	..	..

Isfield Place, Sussex.
MAJOR H. KING.
N. and Z's. Hyetograph. 51 ft. above Sea.

	in.	hours.	in.
Jan.	·71	29·7	·024
Feb.	4·54	92·1	·049
March ..	5·49	104·3	·052
April	1·33	25·5	·052
May	·71	11·5	·062
June	·93	10·1	·092
July	1·57	20·6	·076
Aug.	·70	20·4	·034
Sept.	1·42	17·8	·080
Oct.	2·25	34·0	·066
Nov.	4·22	62·8	·067
Dec.	8·95	149·6	·060
Year	32·82	578·4	·057

Timsbury, Hants.
MR. D. KITCHINGMAN, M.Inst.C.E.
N. & Z. Tipping-bucket. 90 ft. above Sea.

	in.	hours.	in.
Jan.	·51	52·3	·010
Feb.	4·52	126·7	·036
March	4·31	108·5	·040
April	1·39	35·5	·039
May	1·14	26·7	·043
June	·24	14·7	·016
July	3·01	54·7	·055
Aug.	2·88	42·9	·067
Sept.	1·08	31·6	·034
Oct.	2·42	62·6	·039
Nov.	4·50	89·3	·050
Dec.	8·71	166·5	·052
Year	34·71	812·0	·043

Twyford, Hants.

MR. D. KITCHINGMAN, M.Inst.C.E.
N. & Z. Tipping-bucket. 139 ft. above Sea.

1914.	Rainfall.	Duration.	Rate per hour.
	in.	hours.	in.
Jan.	·71	46·1	·015
Feb.	5·40	131·7	·041
March	4·41	112·7	·039
April	1·26	24·0	·053
May	1·31	24·5	·053
June	·35	4·5	·078
July	2·95	48·2	·061
Aug.	2·64	34·8	·076
Sept.	1·33	26·2	·051
Oct.	2·11	50·8	·041
Nov.	3·57	77·5	·046
Dec.	9·46	151·3	·063
Year	35·50	732·3	·048

University College, Reading, Berks.

DR. H. N. DICKSON, F.R.Met.Soc.
N. and Z's. Hyetograph. 153 ft. above Sea

1914.	Rainfall.	Duration.	Rate per hour.
	in.	hours.	in.
Jan.	·57	19·6	·029
Feb.	2·20	49·1	·045
March	3·76	74·6	·050
April	·68	14·8	·046
May	1·64	17·0	·096
June	1·11	12·9	·086
July	2·14	24·1	·089
Aug.	1·87	20·1	·093
Sept.	·81	13·1	·062
Oct.	1·78	31·8	·056
Nov.	1·98	49·7	·040
Dec.	6·49	108·5	·060
Year	25·03	435·3	·058

Woodford House, Cranford, Northants

MR. E. N. PLEVINS, F.R.Met.Soc.
N. and Z's. Hyetograph. 252 ft. above Sea.

	in.	hours.	in.
Jan.	·82	23·9	·034
Feb.	1·00	25·1	·040
March	2·31	56·5	·041
April	·54	14·9	·036
May	1·12	18·6	·060
June	2·99	37·0	·081
July	1·22	25·2	·048
Aug.	1·57	27·2	·058
Sept.	·65	12·6	·052
Oct.	2·46	43·3	·057
Nov.	1·87	37·5	·050
Dec.	4·61	89·5	·052
Year	21·16	411·3	·051

Lyngate Cottage, Worstead, Norfolk.

MR. ROBERT CROSS.
N. and Z's. Hyetograph. 55 ft. above Sea.

	in.	hours.	in.
Jan.	2·57	51·8	·050
Feb.	1·52	36·5	·042
March	3·21	67·6	·048
April	·67	13·9	·048
May	1·30	14·7	·088
June	2·16	25·8	·084
July	3·64	28·4	·128
Aug.	1·17	9·3	·126
Sept.	1·44	14·6	·099
Oct.	2·09	23·9	·087
Nov.	2·79	37·6	·074
Dec.	6·46	104·1	·062
Year	29·02	428·2	·068

The Hoe, Plymouth, Devon.

MR. JAMES PATON.
Halliwell Recorder. 117 ft. above Sea.

	in.	hours.	in.
Jan.	1·18	49·0	·024
Feb.	5·47	137·0	·040
March	6·51	148·6	·044
April	1·97	45·0	·044
May	1·60	46·5	·034
June	1·18	41·5	·028
July	5·63	92·7	·061
Aug.	2·33	54·7	·043
Sept.	3·04	41·8	·073
Oct.	2·85	44·6	·064
Nov.	4·21	75·0	·056
Dec.	9·91	150·8	·066
Year	45·88	927·2	·049

Freedom Fields, Plymouth, Devon.

MR. JAMES PATON.
N. and Z's. Hyetograph. 208 ft. above Sea.

	in.	hours.	in.
Jan.	1·48	48·3	·031
Feb.	5·98	124·4	·048
March	7·28	151·0	·048
April	2·00	43·8	·046
May	1·88	44·2	·043
June	1·43	30·9	·046
July	6·53	85·9	·076
Aug.	2·44	44·4	·055
Sept.	3·19	32·6	·098
Oct.	3·05	39·6	·077
Nov.	4·59	72·0	·064
Dec.	10·59	142·3	·074
Year	50·44	859·4	·059

Moretonhampstead Rectory, Devon.
 REV. S. D. DEWEY, F.R.Met.Soc.
 N. and Z's. Hyetograph. 600 ft. above Sea.

1914.	Rainfall.	Duration.	Rate per hour.
	in.	hours.	in.
Jan.	1.11	..	..
Feb.	6.00	..	..
March	7.63	..	..
April	1.69	..	..
May	1.77	..	..
June	2.02	..	..
July	5.04	75.0	.067
Aug.	1.92	54.3	.035
Sept.	2.06	45.6	.045
Oct.	4.22	68.4	.062
Nov.	5.17	110.8	.047
Dec.	12.05	185.3	.065
Year	50.68	..	..

Melbury Reservoir, Parkham, Devon.
 MR. BALDWIN LATHAM, M. Inst.C.E.
 N. & Z. Tipping-bucket. 516 ft. above Sea.

1914.	Rainfall.	Duration.	Rate per hour.
	in.	hours.	in.
Jan.	3.18	78.2	.041
Feb.	5.91	128.9	.046
March	9.58	195.6	.049
April	2.41	50.7	.047
May	2.14	58.9	.036
June	2.37	43.6	.054
July	5.14	111.0	.046
Aug.	5.83	91.3	.064
Sept.	3.37	60.8	.055
Oct.	3.75	70.6	.053
Nov.	6.42	109.7	.059
Dec.	10.02	167.4	.060
Year	60.12	1166.7	.052

Dollarward, House, Cirencester, Glos.
 MR. C. P. HOOKER, F.R.Met.Soc.
 N. and Z's. Hyetograph. 366 ft. above Sea.

	in.	hours.	in.
Jan. ....	.75	54.0	.014
Feb.	3.59	96.4	.037
March	4.35	133.2	.033
April	1.41	38.2	.037
May	1.58	48.0	.033
June	2.58	38.7	.067
July	3.76	69.9	.054
Aug.	1.50	44.1	.034
Sept.	1.68	34.0	.049
Oct.	2.20	67.9	.032
Nov.	4.73	105.2	.045
Dec.	6.67	142.9	.047
Year	34.80	872.5	.040

Almeley, Herefordshire.
 MR. B. G. RONALDS, F.R.Met.Soc.
 N. and Z's. Hyetograph. 396 ft. above Sea.

	in.	hours.	in.
Jan. ....	.90	21.6	.042
Feb.	2.95	48.3	.061
March	2.50	56.8	.044
April	1.11	21.3	.052
May	1.34	27.5	.049
June	1.94	31.5	.062
July	3.87	51.9	.075
Aug.	2.38	31.0	.077
Sept.	1.06	18.2	.058
Oct.	2.41	44.0	.055
Nov.	3.56	53.6	.066
Dec.	6.36	96.9	.066
Year	30.38	502.6	.060

West Bromwich, Staffordshire.
 MR. A. D. GREATOREX, M.Inst.C.E.
 N. and Z's. Hyetograph. 543 ft. above Sea.

	in.	hours.	in.
Jan.	1.04	30.5	.034
Feb.	2.17	34.6	.063
March	2.18	51.7	.042
April	1.00	21.7	.046
May	1.58	33.8	.047
June	2.37	36.9	.064
July	3.42	37.3	.092
Aug.	2.19	26.9	.081
Sept. ....	.92	14.9	.062
Oct.	1.51	39.1	.039
Nov.	3.56	47.8	.075
Dec.	6.19	125.8	.049
Year	28.13	501.0	.056

Sewage Works, Bilston, Staffordshire.
 MR VINCENT TURNER, A.M.Inst.C.E.
 N. and Z's. Hyetograph. 423 ft. above Sea.

	in.	hours.	in.
Jan. ....	.90	36.0	.025
Feb.	2.00	51.6	.039
March	2.05	51.8	.040
April ....	.76	19.0	.040
May	1.17	33.8	.035
June	2.53	42.4	.060
July	2.28	34.0	.067
Aug.	1.74	29.0	.060
Sept.	1.08	21.0	.051
Oct.	1.59	40.6	.039
Nov.	3.05	57.2	.053
Dec.	5.73	125.5	.046
Year	24.88	541.9	.046

Mayfield House, Ashbourne, Staffs.
MR. GRAHAM C. LAWSON.
Casella's Recorder. 374 ft. above Sea.

1914.	Rainfall.	Duration.	Rate per hour.
	in.	hours.	in.
Jan.	2.10	55.8	.038
Feb.	2.27	51.5	.044
March	4.40	96.1	.046
April	1.29	28.3	.046
May	2.19	52.0	.042
June	1.26	29.8	.042
July	5.74	74.3	.077
Aug.	2.91	42.7	.068
Sept.	2.16	35.3	.061
Oct.	2.68	60.7	.044
Nov.	4.34	80.2	.054
Dec.	6.06	128.1	.047
Year	37.40	734.8	.051

Bourneville, Selly Oak, Warwickshire.
MESSRS. CADBURY, BROS. LTD.
N. and Z's. Hyetograph. 434 ft. above Sea.

1914.	Rainfall.	Duration.	Rate per hour.
	in.	hours.	in.
Jan. ....	.99	30.8	.032
Feb.	2.39	56.4	.042
March	2.67	64.9	.041
April	1.08	22.0	.049
May	1.89	44.0	.043
June	2.97	39.5	.075
July	3.83	49.7	.077
Aug.	2.04	33.3	.061
Sept.	1.29	23.7	.054
Oct.	2.06	47.3	.043
Nov.	3.94	49.9	.079
Dec.	7.27	103.0	.070
Year	32.42	564.5	.057

Trent Lane, Nottingham.
MR. A. BROWN, M.Inst.C.E., F.R.Met.Soc.
Halliwell Recorder. 85 ft. above Sea.

	in.	hours.	in.
Jan.	1.28	26.7	.048
Feb.	1.02	20.2	.050
March	2.09	51.7	.040
April ....	.71	19.0	.037
May	1.86	24.0	.077
June	2.01	34.4	.059
July	2.70	41.0	.066
Aug.	2.20	22.6	.097
Sept. ....	.65	14.6	.045
Oct.	1.70	33.1	.051
Nov.	2.92	34.4	.085
Dec.	4.49	70.4	.064
Year	23.63	392.1	.060

Hodsock Priory, Nottinghamshire.
LT.-COL. H. MELLISH, F.R.Met.Soc.
Halliwell Recorder. 56 ft. above Sea.

	in.	hours.	in.
Jan. ....	.98	26.7	.037
Feb. ....	.96	20.1	.048
March	1.79	40.7	.044
April ....	.70	12.8	.055
May	1.56	20.1	.078
June	2.09	26.2	.080
July	2.28	28.3	.081
Aug.	1.41	23.6	.060
Sept. ....	.99	12.2	.081
Oct.	2.43	40.0	.061
Nov.	2.34	39.5	.059
Dec.	4.07	76.6	.053
Year	21.60	366.8	.059

Myra, Blundellsands, Lancashire.
MR. HUGH MONTGOMERY, F.R.Met.Soc.
N. and Z's. Hyetograph. 31 ft. above Sea.

	in.	hours.	in.
Jan.	1.41	42.7	.033
Feb.	1.45	30.8	.047
March	2.86	60.2	.047
April ....	.57	11.5	.050
May	1.91	39.5	.048
June	1.49	23.5	.063
July	4.34	54.8	.079
Aug.	1.79	35.0	.051
Sept.	3.47	28.7	.121
Oct.	2.10	22.5	.093
Nov.	3.02	51.5	.059
Dec.	5.23	89.0	.059
Year	29.64	489.7	.061

Queens Park, Bolton, Lancashire.
MR. THOS. MIDGLEY, F.R.Met.Soc.
Casella's Recorder. 390 ft. above Sea.

	in.	hours.	in.
Jan.	3.10	88.0	.035
Feb.	2.28	60.0	.038
March	5.08	151.5	.034
April	1.45	31.3	.046
May	2.90	66.2	.044
June	1.80	67.8	.027
July	5.99	85.7	.070
Aug.	3.64	54.5	.067
Sept.	4.98	74.3	.067
Oct.	2.84	46.2	.061
Nov.	6.17	86.8	.071
Dec.	6.73	118.7	.057
Year	46.96	931.0	.050

Worden Hall, Leyland, Lancashire.
MR. H. NOWELL FFARINGTON, F.R.Met.Soc.
N. and Z's. Hyetograph. 125 ft. above Sea.

1914.	Rainfall.	Duration.	Rate per hour.
	in.	hours.	in.
Jan.	2.25	61.2	.037
Feb.	2.31	56.9	.041
March	4.00	97.8	.041
April	1.22	24.4	.050
May	1.68	53.2	.032
June	1.35	30.9	.044
July	5.11	78.7	.065
Aug.	2.53	48.1	.053
Sept.	3.51	46.1	.076
Oct.	2.11	40.6	.052
Nov.	4.44	77.7	.057
Dec.	5.57	94.0	.059
Year	36.08	709.6	.051

Hesketh Park, Southport, Lancashire.
MR. J. BAXENDELL, F.R.Met.Soc.
N. and Z's. Fernley gauge. 39 ft. above Sea.

1914.	Rainfall.	Duration.	Rate.
	in.	hours.	in.
Jan.	1.57	53.7	.029
Feb.	2.01	47.1	.043
March	3.27	89.9	.036
April ....	.85	14.6	.058
May	1.95	52.1	.037
June	1.35	29.1	.046
July	4.73	69.8	.068
Aug.	1.64	42.5	.039
Sept.	3.62	39.2	.092
Oct.	2.47	28.3	.087
Nov.	3.56	74.4	.048
Dec.	5.10	113.0	.045
Year	32.12	653.7	.049

Huddersfield Cemetery, Yorkshire.
MR. J. FIRTH.
Halliwell Recorder. 410 ft. above Sea.

	in.	hours.	in.
Jan.	2.93	93.8	.031
Feb.	2.57	53.5	.048
March	3.76	115.6	.033
April	1.29	24.7	.052
May	1.57	42.3	.037
June	2.71	44.2	.061
July	2.69	43.3	.062
Aug.	1.68	34.6	.049
Sept.	1.98	34.0	.058
Oct.	2.06	62.0	.033
Nov.	5.33	82.0	.065
Dec.	7.19	130.9	.055
Year	35.76	760.9	.047

Lower Laithe Res., Haworth, Yorks.
MR. M. R. BARNETT, M.Inst.C.E.
N. and Z's. Hyetograph. 772 ft. above Sea.

	in.	hours.	in.
Jan.	3.93	115.3	.034
Feb.	4.79	94.4	.051
March	5.70	134.3	.042
April	2.12	28.9	.073
May	1.74	38.6	.045
June	1.87	22.8	.082
July	3.97	40.7	.098
Aug.	2.07	38.2	.054
Sept.	3.00	34.0	.088
Oct.	2.47	39.6	.062
Nov.	7.84	88.9	.088
Dec.	9.83	121.4	.081
Year	49.33	797.1	.062

Town Hall, Skipton, Yorkshire.
MR. A. E. W. ALDRIDGE.
N. and Z's. Hyetograph. 367 ft. above Sea.

	in.	hours.	in.
Jan.	2.84	55.5	.051
Feb.	3.11	61.3	.051
March	4.10	146.6	.028
April ....	.99	23.4	.042
May	1.65	58.3	.028
June	2.22	35.2	.063
July	3.10	51.0	.061
Aug.	2.31	49.0	.047
Sept.	1.74	31.2	.056
Oct.	2.15	62.7	.034
Nov.	4.96	109.8	.045
Dec.	7.11	191.1	.037
Year	36.28	875.1	.041

Mount St. John, Thirsk, Yorkshire.
MR. A. J. WALKER, F.R.Met.Soc.
Halliwell Recorder. 542 ft. above Sea.

	in.	hours.	in.
Jan.	1.51	51.0	.030
Feb.	1.64	40.6	.040
March	1.88	73.3	.026
April ....	.58	13.3	.044
May	1.69	45.3	.037
June	1.82	37.1	.049
July	4.66	62.0	.075
Aug.	1.67	31.6	.053
Sept.	1.41	18.3	.077
Oct.	1.98	47.9	.041
Nov.	2.64	71.4	.037
Dec.	5.10	118.5	.043
Year	26.58	610.3	.044

Mount St. John, Thirsk, Yorkshire.

MR. A. J. WALKER, F.R.Met.Soc.

Newey Recorder. 542 ft. above Sea.

1914.	Rainfall.	Duration.	Rate per hour.
	in.	hours.	in.
Jan.	1.51	49.4	.031
Feb.	1.64	40.9	.040
March	1.88	79.7	.024
April ....	.58	13.2	.044
May	1.69	40.6	.042
June	1.82	37.2	.049
July	4.66	62.2	.075
Aug.	1.67	33.9	.049
Sept.	1.41	20.8	.068
Oct.	1.98	47.5	.042
Nov.	2.64	72.4	.036
Dec.	5.10	129.8	.039
Year	26.58	627.6	.042

Mount St. John, Thirsk, Yorkshire.

MR. J. A. WALKER, F.R.Met.Soc.

Lander & Smith. 542 ft. above Sea.

1914.	Rainfall.	Duration.	Rate per hour.
	in.	hours.	in.
Jan.	1.51	48.6	.031
Feb.	1.64	38.1	.043
March	1.88	73.8	.025
April ....	.58	13.1	.044
May	1.69	41.4	.041
June	1.82	36.8	.049
July	4.66	61.3	.076
Aug.	1.67	32.0	.052
Sept.	1.41	19.1	.074
Oct.	1.98	45.1	.044
Nov.	2.64	66.5	.040
Dec.	5.10	121.3	.042
Year	26.58	597.1	.045

Mount St. John, Thirsk, Yorkshire.

MR. A. J. WALKER, F.R.Met.Soc.

N. and Z's. Hyetograph. 542 ft. above Sea.

	in.	hours.	in.
Jan.	1.51	..	..
Feb.	1.64	..	..
March	1.88	..	..
April ....	.58	..	..
May	1.69	..	..
June	1.82	..	..
July	4.66	..	..
Aug.	1.67	27.6	.060
Sept.	1.41	17.2	.082
Oct.	1.98	40.9	.048
Nov.	2.64	61.9	.043
Dec.	5.10	107.4	.047
Year	26.58	..	..

Percy Park, Tynemouth, N'th'mbrlnd.

MR. J. E. BURNETT, F.R.Met.Soc.

N. and Z's. Hyetograph. 90 ft. above Sea.

	in.	hours.	in.
Jan.	1.76	41.4	.043
Feb. ....	.91	15.3	.059
March	2.18	54.9	.040
April ....	.69	11.8	.058
May	1.46	25.8	.057
June	3.26	29.7	.110
July	4.01	40.8	.098
Aug.	2.10	42.0	.050
Sept.	1.91	17.4	.110
Oct. ....	..	..	..
Nov. ....	..	..	..
Dec. ....	..	..	..
Year .....	..	..	..

Cray Reservoir, Breconshire.

MR. R. H. WYRILL, M.Inst.C.E.

Halliwell Recorder. 1030 ft. above Sea.

	in.	hours.	in.
Jan.	6.24	143.3	.043
Feb.	11.20	145.0	.077
March	8.80	183.0	.048
April	2.66	51.5	.052
May	5.57	96.7	.058
June	3.19	62.5	.051
July	7.75	158.3	.049
Aug.	6.53	106.9	.061
Sept.	2.21	41.2	.054
Oct.	4.15	69.3	.060
Nov.	7.36	121.9	.060
Dec.	12.79	188.8	.068
Year	78.45	1368.4	.057

Aber Clyd, Black Mtns., Breconshire.

THE REFEREES, ABERTILLERY W.B. ACT.

N. and Z's. Hyetograph. 1880 ft. above Sea.

	in.	hours.	in.
Jan.	2.84	54.7	.052
Feb.	6.11	92.9	.066
March	6.88	131.0	.052
April	1.74	31.8	.055
May	2.93	48.5	.060
June	3.85	44.8	.086
July	6.16	96.7	.064
Aug.	3.76	75.8	.050
Sept.	2.57	42.5	.060
Oct.	5.18	79.6	.065
Nov.	7.79	104.2	.074
Dec.	9.74	152.8	.064
Year	59.55	955.3	.062

<i>Blackwater Dam, Glenleven, Argyll.</i>				<i>Pinewood, Crathes, Kincardineshire.</i>			
THE BRITISH ALUMINIUM CO.				MR. JAMES SMITH.			
N. and Z's. Hyetograph. 1072 ft. above Sea				N. and Z's. Hyetograph. 142 ft. above Sea			
1914.	Rainfall.	Duration.	Rate per hour.	1914.	Rainfall.	Duration.	Rate per hour.
	in.	hours.	in.		in.	hours.	in.
Jan.	11·32	102·3	·111	Jan.	1·16	37·5	·031
Feb.	14·56	243·7	·060	Feb.	3·45	54·5	·063
March	6·57	130·3	·050	March	4·00	92·9	·043
April	8·80	125·0	·070	April	·64	23·2	·028
May	4·01	88·2	·045	May	2·35	60·6	·039
June	4·11	80·7	·051	June	·72	15·8	·046
July	3·20	67·7	·047	July	3·13	45·0	·070
Aug.	6·83	111·8	·061	Aug.	1·23	19·2	·064
Sept.	5·15	92·6	·056	Sept.	1·38	22·6	·061
Oct.	2·95	57·2	·052	Oct.	3·53	100·0	·035
Nov.	13·74	161·9	·085	Nov.	4·23	73·5	·058
Dec.	14·81	201·3	·074	Dec.	8·69	131·4	·066
Year	96·05	1462·7	·066	Year	34·51	676·2	·051

<i>University College, Cork.</i>				<i>Valencia Observatory, Co. Kerry.</i>			
PROF. C. W. L. ALEXANDER.				METEOROLOGICAL OFFICE.			
N. and Z's. Hyetograph. 66 ft. above Sea.				Beckley Gauge. 30 ft. above Sea.			
	in.	hours.	in.		in.	hours.	in.
Jan.	1·93	73·3	·026	Jan.	3·70	80·8	·046
Feb.	6·46	127·8	·051	Feb.	10·98	132·6	·083
March	5·33	99·6	·054	March	8·09	94·9	·085
April	1·37	30·0	·046	April	2·35	29·6	·079
May	1·40	37·0	·038	May	1·80	35·6	·051
June	·88	12·8	·069	June	1·67	37·3	·045
July	3·00	57·9	·052	July	6·53	72·2	·090
Aug.	3·78	94·6	·040	Aug.	6·49	70·4	·092
Sept.	3·07	58·9	·052	Sept.	5·24	73·1	·071
Oct.	1·51	79·5	·019	Oct.	5·93	57·6	·103
Nov.	3·26	60·8	·054	Nov.	5·01	60·7	·083
Dec.	10·73	133·6	·080	Dec.	11·33	132·2	·086
Year	42·72	865·8	·049	Year	69·12	877·0	·079

<i>Armagh Observatory, Co. Armagh.</i>			
METEOROLOGICAL OFFICE.			
Beckley Gauge. 210 ft. above Sea.			
	in.	hours.	in.
Jan.	1·36	31·2	·044
Feb.	2·93	64·4	·045
March	4·03	88·1	·046
April	1·30	22·2	·059
May	1·33	31·9	·042
June	2·14	40·3	·053
July	2·13	35·4	·060
Aug.	3·05	51·1	·060
Sept.	1·34	14·6	·092
Oct.	1·54	24·8	·062
Nov.	3·76	57·5	·065
Dec.	7·15	118·9	·060
Year	32·06	580·4	·055

HEAVY RAINS IN SHORT PERIODS.

FOR the forty-seventh successive year we give a list of all the instances of notable heavy rainfalls of short duration, particulars of which have been sent to us. We have no means of knowing to what extent these lists may be regarded as representative of the character of each year's heavy rains, but it is certain that many phenomena of this nature must pass entirely unrecorded. This is no doubt largely due to the extreme capriciousness of thunderstorm rains, both in regard to time and space. The most enthusiastic Observer cannot always be certain of being on the spot at the exact moment when exceptional rainfall begins and ends, and, even if the time of a storm is noted carefully, a reading of the gauge on the following morning usually includes other lighter rain, so that the precise amount which fell during the period of greatest intensity cannot be accurately ascertained. There is the further difficulty that the area affected by such rain-storms is nearly always extremely small so that even with a great army of 5,000 Observers there is a large risk that the centre of heaviest rainfall may occur in a district where there is no means of measuring it. The more extensive use of self-recording rain gauges will in time do much to overcome the former of these two hindrances, but the latter will remain, it is to be feared, till the day when every parish is provided with a rain gauge as a matter of course. Meanwhile we believe that this section, however far it may be from exhaustive, contains information of positive value, both in a scientific and in a more directly practical sense, for it puts upon record in a comparable form such information as is obtained, and it is hardly too much to hope that nearly half a century's records, however imperfect they may be, give some indication of the nature of the most extreme rainfalls which places in the British Isles are likely to experience.

The instances dealt with are, for the purpose of uniformity of treatment, confined to those passing certain more or less arbitrary limits of intensity. These limits, selected for reasons described in *British Rainfall*, 1908, p. [75], are set out in the following table, and determine the positions of the curves in the diagram on p. [96]. This table and diagram refer only to falls of a duration of one hour or less. At the present time hardly sufficient data have been accumulated to fix the

limits satisfactorily beyond one hour. No falls are quoted which do not reach the lower limits, whilst those which attain the intensities regarded as "remarkable," or "very rare," are distinguished in Table III. by a single or double cross respectively

TABLE I.—*Limits of Exceptional Falls.*

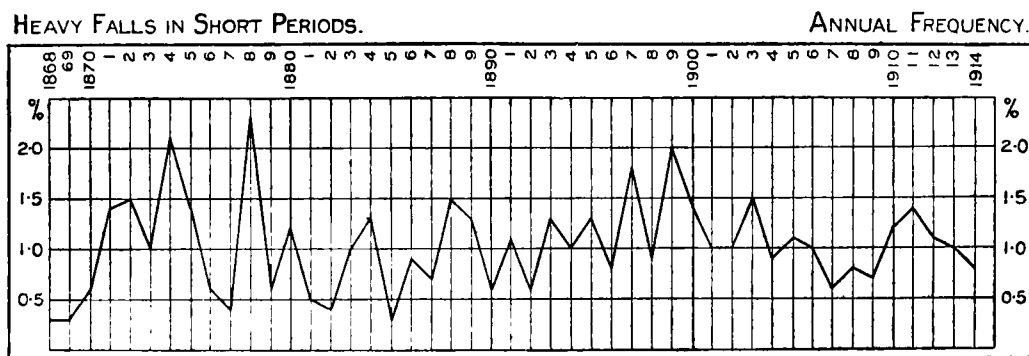
Minutes.	WORTHY OF NOTICE.		REMARKABLE.		VERY RARE.	
	Amount.	Rate per hour.	Amount.	Rate per hour.	Amount.	Rate per hour.
	in.	in.	in.	in.	in.	in.
10.....	·30	1·80	·65	3·90	1·00	6·00
20.....	·53	1·59	1·06	3·18	1·58	4·74
30.....	·70	1·40	1·35	2·70	2·00	4·00
40.....	·82	1·23	1·54	2·31	2·26	3·39
50.....	·92	1·10	1·67	2·00	2·42	2·90
60.....	1·00	1·00	1·75	1·75	2·50	2·50

In *British Rainfall*, 1913, pp. 46—54, Mr. R. C. Mossman examined and classified all the noteworthy examples of heavy rainfalls lasting two hours or less, which had been put upon record from 1868 to 1913, inclusive, and the data extracted furnish the following average values. These refer to the number of instances of notable falls in England and Wales, south-east, south-west, north-east and north-west, and in Scotland and Ireland, respectively. In counting the instances any cases of two or more measurements during one storm, sometimes quoted separately in the tables, have been counted as one only. The number of records reported for 1914 may be compared with these averages, but owing to the increase in the number of rainfall stations from year to year the comparison is only valid in respect of the relative numbers of instances in the various districts. It will be observed for instance, that the number of heavy falls noted in 1914, was proportionally larger in England, S.E. and S.W. than in the other districts. The number for England, S.W. was exceeded four times only in the previous 48 years, though a larger number has frequently been observed in England S.E. The last figure

Number of Noteworthy Rains of two hours duration or less.

Average.	England and Wales.					Scotland.	Ireland.	Total.	Per cent. of records received.
	S.E.	S.W.	N.E.	N.W.	Total.				
1869-1913.	15·1	7·0	4·1	1·9	28·1	2·1	1·1	31·3	1·0
1914.	22	14	4	3	42	3	1	47	0·8

in each line shows, so far as it can be arrived at, the true relation of the number of notable heavy rains in 1914 to the average. This is the percentage which the total number of noteworthy falls quoted bears to the total number of rainfall records received during the year, thereby making allowance for the fluctuating number of stations. This shows that the number of noteworthy falls for 1914 was relatively rather smaller than has been the case in an average year. The percentage values arrived at by the same process in each year since 1868 are shown in the following curve, which may be taken as the best available indication of the variations in frequency of such phenomena since that time.



The number of noteworthy Heavy Rainfalls of 2 hours' or less duration reported during each year is expressed as a percentage of the total number of observing stations during that year.

The only other comparison with previous years is given in Table II., setting out all instances since 1868, of rainfalls of one hour's duration or less which have exceeded the intensity under the heading "very rare," in Table I. One record, that of 1.50 in. in 15 minutes at St. Martin's

TABLE II.—*Rainfalls of very rare Intensity lasting for one hour or less.*

Year.	Date	Div.	Station	Amount.	Duration.	Rate per hour.
				in.	hr. min.	in.
1912	May 8	XV.	Alexandria .....	.26	0 1½	10.40
1888	Mar. 24	XI.	Chepstow, Shirenewton Hall..	.33	0 2	9.90
1906*	June 17	IX.	Ilkley, Eaton Road.....	.50	0 4	7.50
1893	Aug. 10	VIII.	Preston, Corporation Offices...	1.25?	0 5?	15.00?
"	June 14	XI.	Chepstow, Shirenewton Hall..	.62	0 5	7.44
1906	Aug. 2	II.	Guildford, Piccard's Rough ...	.89	0 8	6.68
1892	July 3	VIII.	Bolton, The Park.....	1.00?	0 9?	6.67?
1902	May 30	III.	Cambridge, Sydney Street.....	1.10	0 10	6.60
1878	June 23	I.	St. Pancras, Camden Square..	1.00	0 10	6.00

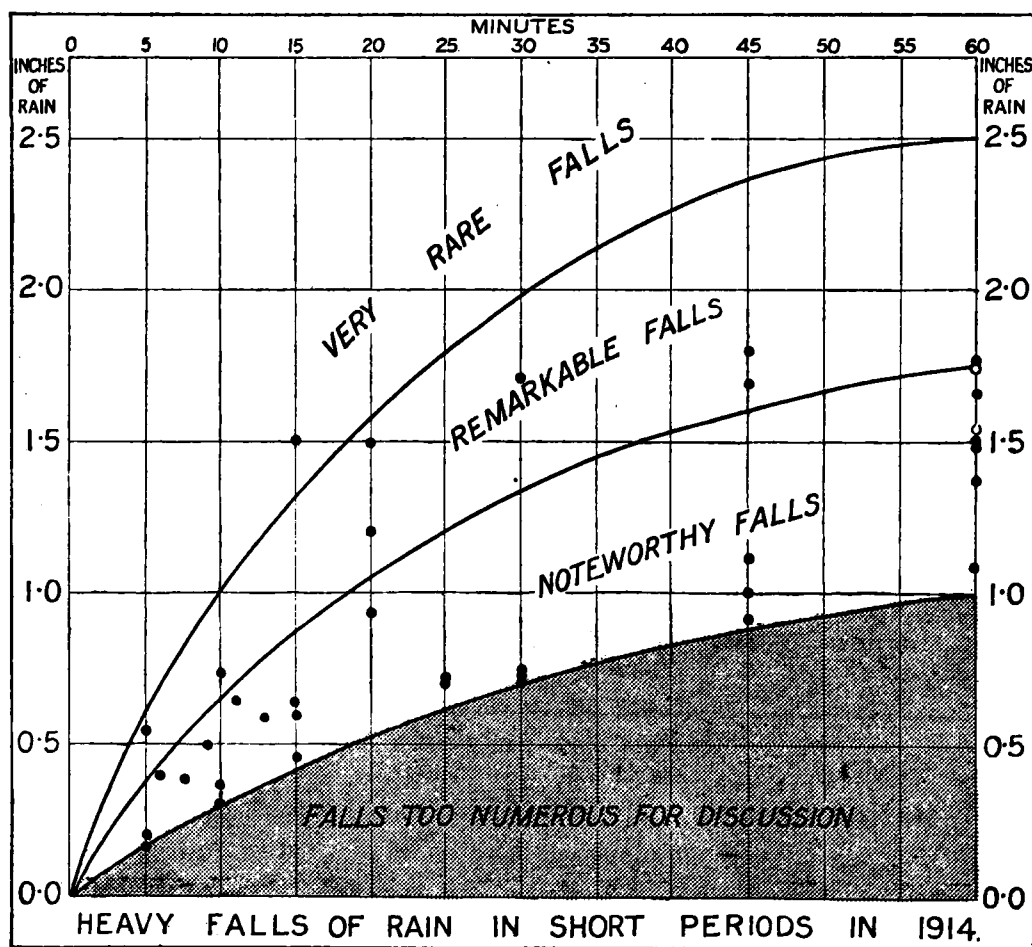
TABLE II.—*Rainfalls of very rare Intensity—(continued).*

Year.	Date.	Div.	Station.	Amount.	Duration.	Rate per hour.
1912	July 22	VII.	Wirksworth, Manor House ...	1·00	0 10	6·00
1914	Aug. 14	XI.	Guernsey, St. Martin's Road.	1·50	0 15	6·00
1906	„ 2	II.	Haslemere, Lower Street.....	1·46	0 15?	5·84?
1878	June 23	I.	St. Pancras, Camden Square..	1·43	0 15	5·72
1875	Aug. 7	II.	Canterbury, Harbledown.....	2·12	0 20	6·36
1878	June 23	I.	St. Pancras, Camden Square..	1·80	0 20	5·40
1897	„ 24	III.	Luton Pumping Station	1·65	0 20	4·95
1878	„ 23	I.	St. Pancras, Camden Square..	2·30	0 28	4·93
1880	July 22	XI.	Cowbridge, Ash Hall.....	2·90	0 30	5·80
1895	June 27	IX.	Middleton-in-the-Wolds	2·00	0 30	4·00
1902	Sep. 10	II.	Surbiton, Vronvelin.....	2·00	0 30	4·00
1904	July 27	„	Cooling, Broomy Farm	2·66	0 45	3·55
1909	Sep. 29	V.	Ilfracombe Reservoir.....	2·50?	0 45	3·33?
1895	June 26	„	Marlborough	2·71	0 50	3·25
1903	July 18	VI.	Betley Hall [Crewe].....	2·53	0 50	3·04
1905	„ 9	III.	Enfield, Carisbrooke.....	2·44	0 50	2·93
1911	May 31	II.	Epsom, Ashley Road	2·44	0 50	2·93
1901	July 29	„	Wadhurst, Lower Cousley Wood..	3·25?	0 55	3·55?
1913	June 17	IV.	Elveden Hall	2·85	0 58	2·95
1901	July 12	II.	Maidenhead, Lowood.....	3·63	1 0?	3·63?
1903	May 30	„	Beddington Corner.....	3·50	1 0	3·50
1911	„ 26	„	Fareham, The Mount	3·00	1 0	3·00
1897	July 21	IV.	Ipswich, Bishops Hill	2·95	1 0	2·95
1895	June 26	VI.	Worcester, Diglis Lock.....	2·75	1 0	2·75
1909	„ 1	XII.	Carsphairn, Shiel.....	2·71	1 0?	2·71?
1873	July 28	XVII.	Fettercairn	2·60	1 0	2·60
1889	June 7	II.	Tonbridge, Ferndale.....	2·60?	1 0?	2·60?
1886	July 25	VIII.	Sale, Brooklands.....	2·58	1 0	2·58
1899	„ 22	V.	Dorchester Water Works.....	2·56	1 0?	2·56?
1875	„ 22	„	Trowbridge, Sunnyside.....	2·53	1 0	2·53
„	June 29	III.	Cardington	2·50	1 0	2·50
1886	July 25	IX.	Wakefield, Stanley Vicarage..	2·50	1 0	2·50

* Did not appear in *British Rainfall*.

Road, Guernsey, on August 14th, 1914, can be added to this list, but double crosses have been placed in the table against a number of records of longer duration than one hour, which certainly merit this distinction. The most remarkable were the result of a series of measurements made at intervals in the course of the great thunderstorm of June 14th, by Sir Frederick Treves, at his house at Richmond Park, where 3·70 in. of rain fell in 2 hours, 45 minutes. Other records made during the same storm which find a place in the table were chiefly from stations in the neighbourhood between Wimbledon and Staines, where the rainfall was most intense. The most notable feature of this rainfall was the long

period during which a very high rate of fall was maintained. No fewer than 22 records in the table were observed on this day. The double cross must also be placed against the fall of 3·10 in. in 2 hours at Coton Hall, near Bridgnorth, on July 1st, and that of 3·33 in. in 2 hours, 30 minutes, at Mostyn, in Flintshire, on July 11th. The thunderstorm of July 1st was felt over the greater part of the West Midlands of England and 12 records in the table refer to this day; that of July 11th was more local, the borders of North Wales being the chief centre. A few days later there were again remarkably intense rainfalls, giving 1·11 in. in



When a query is attached to the entry in the Table the dot representing the fall is hollow.

45 minutes at Ipstones, in Staffordshire, on July 20th, 1·50 in. in 20 minutes in a very local storm at Casterton, near Kirkby Lonsdale, on the 21st, and several records in north-east Kent on the 22nd, the heaviest being 1·76 in. in an hour at Cliftonville.

It is worthy of note that only one fall quoted occurred before the beginning of June, in 1914, that of .40 in. in 6 minutes on May 22nd, at New Malden, and only one after the end of August, viz., .20 in. in five minutes at Castle Forbes, in Co. Longford. The latter is the only record given for Ireland, principally no doubt, owing to the scarcity of Observers but partly, we believe, on account of the infrequency of rainfall of very high intensity in the west.

TABLE III.—*Heavy Rains in Short Periods in 1914.*

Date.	Div.	Station.	Amount.	Duration.		Rate per hour.
			in.	hr.	min.	in.
July 2	IX.	Middlesbrough, Ormesby .....	.54	..	5	6.48x
Sept. 16	XXI.	Castle Forbes .....	.20	..	5	2.40
July 1	VI.	Mayfield House .....	.16	..	5	1.92
May 22	II.	New Malden, Edenfield .....	.40	..	6	4.00
July 1	VIII.	Rochdale, Fieldhead Yard.....	.38	..	7½	3.04
June 14	I.	Lewisham .....	.50	..	9	3.33
„ 14	II.	New Malden, Edenfield .....	.73	..	10	4.38x
July 12	II.	Billingshurst, Five Oaks .....	.36	..	10	2.16
„ 2	V.	Exebridge Fishery .....	.30	..	10	1.80
„ 11	VI.	Clun, Trinity Hospital .....	.64	..	11	3.49
„ 2	VI.	Mayfield House .....	.58	..	13	2.68
Aug. 14	XI.	Guernsey, St. Martin's Road.....	1.50	..	15	6.00xx
July 1	IX.	Haworth, Lower Laithe Reservoir ..	.63	..	15	2.52
„ 16	II.	Ticehurst, Myskins .....	.60	..	15	2.40
„ 1	VIII.	Frodsham, Simonsdelf .....	.46	..	15	1.84
„ 21	X.	Kirkby Lonsdale, Casterton	1.50	..	20	4.50x
„ 1	VI.	Bristol, Telephone Avenue	1.20	..	20	3.60x
June 8	III.	Daventry, Sheaf Street .....	.93	..	20	2.79
July 20	VI.	Mayfield House .....	.71	..	25	1.70
June 22	VI.	Clun, Trinity Hospital .....	.70	..	25	1.68
Aug. 14	XI.	Guernsey, St. Martin's Road.....	1.70	..	30	3.40x
„ 21	III.	Clopton Manor.....	.74	..	30	1.48
July 12	II.	Billingshurst, Five Oaks .....	.73	..	30	1.46
„ 22	II.	Westgate-on-Sea, Garlinge .....	.72	..	30	1.44
June 14	II.	Richmond Park, Thatched Ho. Lodge	1.80	..	45	2.40x
„ 18	XIII.	Musselburgh, Levenhall	1.69	..	45	2.25
July 20	VI.	Ipstones, Sharpcliffe Hall	1.11	..	45	1.48
„ 1	VI.	Clifton, Pembroke Road	1.00	..	45	1.33
„ 1	IX.	Haworth, Lower Laithe Reservoir ..	1.00	..	45	1.33
June 19	IV.	Great Chesterford Mills .....	.92	..	45	1.23
July 22	II.	Margate, Cliftonville	1.76	1	0	1.76x
June 14	II.	Englefield Green, Harvest Road	1.75?	1	0	1.75?x
„ 14	II.	Petersfield, Ditcham Park ..	1.75	1	0?	1.75?x
July 22	II.	Broadstairs, Providence House.....	1.65	1	0	1.65
„ 12	II.	Whitstable, Western House	1.54?	1	0	1.54?
June 18	III.	Oxford, Banbury Road	1.50	1	0	1.50
July 22	II.	Broadstairs, St. Peter's Court	1.48	1	0	1.48
„ 12	II.	Ospringe, Lorenden	1.37	1	0	1.37
„ 1	VI.	Church Stretton, Wolstaston	1.08	1	0	1.08

TABLE III.—(continued).

Date.	Div.	Station.	Amount.	Duration.	Rate per hour.
			in.	hr. min.	in.
July 1	III.	Biggleswade Waterworks	1·83	1 5	1·69x
„ 1	IX.	Halifax, Dean Clough Mills	1·81	1 15	1·45
„ 22	II.	Broadstairs, Providence House.....	1·82	1 20?	1·37?
June 17	XVI.	Pitlochry, Tordarrach	1·55	1 20	1·16
„ 14	II.	Richmond Park, Thatched Ho. Lodge	2·70	1 30	1·80xx
„ 14	II.	Wimbledon, Trinity Road	1·83	1 30	1·22
„ 14	II.	Wimbledon, Kingston Road.....	1·55	1 30	1·03
July 12	XIII.	Balerno, Cockburn Hill	1·25	1 30	·83
„ 1	VII.	Ashbourne Waterworks	1·24	1 30	·83
„ 11	XI.	Bala, National School	1·91	1 35	1·21
June 14	V.	Yeovil, Coker Court	2·27	1 40	1·36x
„ 14	II.	Richmond Park, Thatched Ho. Lodge	3·20	2 0	1·60xx
July 1	VI.	Bridgnorth, Coton Hall	3·10	2 0?	1·55?xx
June 20	IV.	East Rudham	2·10	2 0	1·05x
„ 14	II.	Richmond Park, Thatched Ho. Lodge	3·60	2 30	1·44xx
July 11	XI.	Mostyn Vicarage	3·33	2 30	1·33xx
„ 12	II.	Faversham, Dunkirk House	1·56	2 30	·62
June 14	II.	Richmond Park, Thatched Ho. Lodge	3·70	2 45	1·35xx
„ 14	II.	Roehampton, Highwood	2·94	3 0	·98x
„ 14	II.	Wimbledon, Sewage Works	2·64	3 0	·88x
„ 14	II.	Wimbledon, The Downs	2·09	3 0	·70
„ 14	II.	Wimbledon, Cottenham Park	1·94	3 0	·65
„ 14	II.	New Malden, Edenfield	1·75	3 12	·55
„ 14	II.	Wimbledon, Trinity Road	2·40	3 15	·74
„ 14	II.	Egham Park	2·81	3 30?	·80?x
„ 14	II.	Englefield Green, Harvest Road	2·77	4 0	·69
„ 14	III.	Staines, Belle Vue	3·48	5 0	·70?x
„ 14	III.	Staines Reservoirs	2·47	5 0?	·49

HEAVY FALLS ON RAINFALL DAYS IN 1914.

THE aim of this section of *British Rainfall* is to place upon record from year to year an account, as complete as the information received and the space at our disposal enables us to make it, of individual heavy rains. The selection of the instances described or mentioned in the following chronicle is determined primarily by the choice of the heaviest rainfalls recorded during the year, though in some cases we have been guided by the occurrence of rains more noteworthy on account of the peculiar, or characteristic nature of their geographical distribution. Details, more or less complete, of daily rainfalls in 1914 have been considered for 4,360 stations, and it is manifestly impossible to print the amount of rain measured at each station on every day with a sufficiently large rainfall to make it of interest. By far the greater part of the data are, therefore, presented in the form of maps constructed by plotting the individual measurements and showing the general distribution by means of isohyetal lines. From any one of these maps the rainfall of the day or days dealt with, at any particular place, can be ascertained approximately by noting the position of the station with reference to the isohyetal lines. These maps, although published on a small scale, are exact reproductions of the original maps drawn on the scale of 19 miles to the inch, and are, therefore, scientific documents and not mere diagrams. The maps and the descriptions of the distribution of rainfall are supplemented by quoting the actual records at certain stations in order to carry on the system introduced into *British Rainfall* in 1865. These records are the *maximum* daily rainfall of the year at stations where it reached either 2.50 in., or 7.5 per cent. of the year's rainfall at the station in question. There is, of course, no intrinsic virtue in the maximum daily fall of the year, and other daily falls may easily have greater importance or interest, but with half a century of records treated on a uniform plan for comparison, we

hesitate to break away from the old system until another has been shown to be better. Meanwhile some idea may be obtained of the frequency of heavy daily rainfalls by examining all instances of falls of 2·50 in. or more in the rainfall day, irrespective of whether they constitute the maximum fall of the year or not. The total number of measurements of 2·50 in. or more recorded during 1914 at all stations for which records in sufficient detail have been sent to us, was 321, of which number 200 were maximum falls for the year, leaving only 121 instances of 2·50 in. rainfalls which failed to find a place in the chronicle owing to the accident of another fall being larger. It is of interest to note that only 55 out of 4,360 stations recorded 2·50 in. or more on more than one day in the year, and these all lay within 14 of the 120 counties of Great Britain. The following short table summarizes the instances of two or more falls observed. Of those qualifying only two stations in Co. Down and one in the North Riding of Yorkshire are situated elsewhere than in the rainy

Number of stations with two or more falls of 2·50 in. or more in 1914.

County.	Number of Stations.	Number of Falls.	Station with largest number.	
Devon	1	3	Princetown	3
Lancashire	2	5	Skelwith Fold	3
Yorkshire	2	4	{ Slaidburn, Whitendale	2
			{ Lockwood Beck Reservoir	2
Cumberland	3	10	Seathwaite	5
Westmorland	15	38	Dungeon Ghyll	4
Monmouth	1	2	Cwmtillery	2
Glamorgan	1	2	Llyn Fawr Reservoir	2
Brecon	2	6	Swansea W.W., Bwlch	4
Merioneth	1	3	Llechwydd Quarries	3
Carnarvon	9	52	Pen-y-Gwryd	12
Argyll	4	12	Ardgour	4
Perth	1	2	Stronvar	2
Inverness	11	32	Kinlochquoich	5
Down	2	5	Foffany Reservoir	3
Total	55	176	Pen-y-Gwryd	12

west coast regions of Great Britain, and 35 out of the 55 stations lie in the three counties of Inverness-shire, Westmorland, and Carnarvonshire. The large number of heavy daily rainfalls recorded at the Snowdon stations is certainly the most notable feature observed, and it should be remarked that no station in the west of Ireland appears in the list.

The daily rainfalls of 1914 add the following records to the summary of maximum falls drawn up in *British Rainfall, 1910*, and revised year by year since. The only striking entry added on this occasion is the

Div.	County.		Station.	Date.	M.
VI.	Gloucester ..	<i>substitute</i>	Tibberton Court	July 1st, 1914 ..	3·91
VIII.	LANCASHIRE	<i>add</i>	Coniston, Holywath ..	Aug. 8th, 1914 ..	4·29
XI.	<i>Merioneth</i> ..	<i>add</i>	Llechwyd Quarry	Aug. 8th, 1914 ..	4·66
.	CARNARVON	<i>add</i>	Snowdon, Pen-y-Gwryd	Aug. 8th, 1914 ..	6·35
"	"	<i>add</i>	" Cwm Dyli ..	Dec. 17th, 1914 ..	4·30
"	"	<i>add</i>	" Old Road ..	Dec. 17th, 1914 ..	4·40
XXI.	Westmeath	<i>substitute</i>	Castlepollard	Aug. 14th, 1914 ..	3·22
XXIII.	Down	<i>add</i>	Foffany Reservoir	Dec. 25th, 1914 ..	4·25

great rainfall of 6·35 in. at Pen-y-Gwryd, on August 8th, the first record of more than 6 inches in one day yet observed in the County of Carnarvon, and the only fall of more than 5 inches recorded during 1914. The record of 3·91 in. in the thunderstorm of July 1st at Tibberton Court, in the north-west of Gloucestershire, yielded the largest daily total so far measured in that county.

Part 1.—The Chronicle.

January 8th.

With high pressure areas in the south-west of Europe a series of very deep depressions passed during the early days of January, in a westerly direction well to the north of the British Isles, and westerly or south-westerly winds brought heavy rain on the west coasts. A small secondary depression which developed on the morning of the 8th was probably associated with the concentration of the heaviest fall in North Lancashire, particularly in the Forest of Bowland, where five of the six records quoted were observed.

VIII.	Wyresdale (Abbeystead Reservoir)	2·50 in. or 5·0 per cent.
"	" (Abbeystead Gardens)	2·56 " 5·1 "
IX.	Slaidburn (Dunsop Houses)	2·60 " 3·9 "
"	" (Brennand)	3·70 " 5·5 "
"	" (Whitendale)	2·86 " 4·0 "
X.	Netherwasdale Vicarage	2·90 " 4·9 "

January 25th.

A winter rainfall of no very great extent chiefly affecting the west of Scotland.

XV.	Ardgour House	3·63 in. or 3·4 per cent.
"	Glenleven (Kinlochleven)	2·61 " 2·8 "
XVIII.	Fort William (Atholl Bank)	3·22 " 3·8 "

January 30th—February 1st.

With a pressure gradient producing strong south-westerly winds, heavy rains occurred in the West Highlands on these three days.

January 30th.

XV.	Loch Eil (Corran)	3·09 in. or 3·4 per cent.
XVIII.	Glen Kingie (Lochan)	3·40 „ 3·1 „
„	Loch Quoich (Glenquoich)	2·96 „ 2·5 „

February 1st.

XV.	Ballachulish (Glencoe Gardens)	3·40 in. or 3·3 per cent.
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February 13th and 14th.

On both days between 2 and 3 inches of rain fell at a number of normally rainy stations in the uplands of both North and South Wales.

February 13th.

XI.	Ystradyfodwg (Tyntya Hospital)	2·55 in. or 3·6 per cent.
„	Rhondda W.W. (Llyn Fawr Reservoir).....	2·88 „ 2·9 „

February 14th.

XI.	Abertillery (Cwmillery)	2·54 in. or 3·3 per cent.
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April 5th.

A slowly moving depression which skirted the Outer Hebrides brought the maximum rain of the year to two stations in West Inverness-shire.

XVIII.	Loch Quoich (Kinlochquoich)	3·20 in. or 2·5 per cent.
„	Loch Arkaig (Glendessary)	3·20 „ 2·6 „

April 12th.

A dozen stations, again all in the west of Scotland, recorded their heaviest rainfall of the year, in no case a very remarkable fall for the locality.

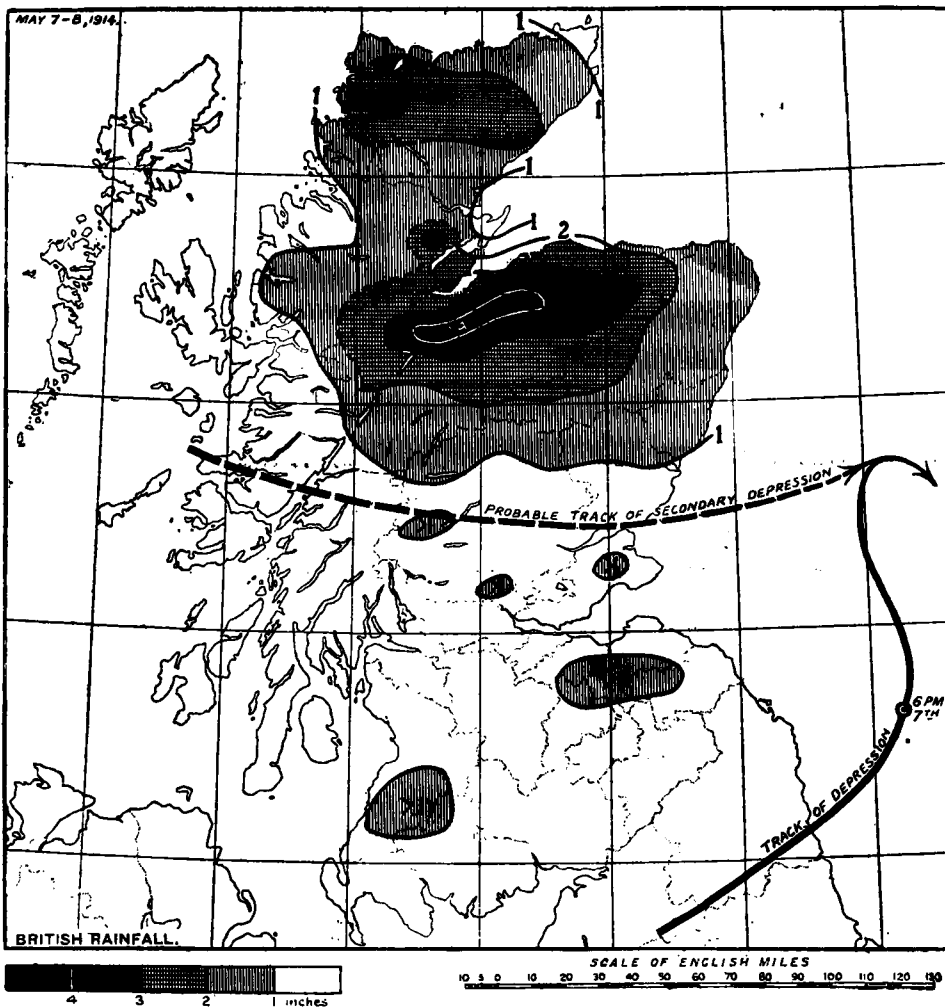
XV.	Glen Etive	3·04 in. or 2·7 per cent.
„	Mull (Glencannel)	2·82 „ 2·4 „
XVIII.	Loch Nevis (Inverie Gardens)	2·71 „ 3·1 „
„	Loch Arkaig (Achnacarry)	3·45 „ 3·5 „
„	Skye (Scalpay Island)	3·00 „ 3·9 „

May 7th and 8th.

A small secondary depression which originated on the morning of the 7th, off the west coast of Scotland, apparently passed during that day across Perthshire into the North Sea, and possibly coalesced with a primary depression which had moved north-eastward from Cumberland. The

depression afterwards turned sharply to the south-east and crossed the North Sea. Heavy rain fell on both days in the neighbourhood of the Moray Firth, the centre of greatest fall lying in Nairnshire. The rainfall of the two days appears to have been continuous, lasting for about 28 hours, and we give a map of the whole fall. More than one inch of rain fell practically everywhere in the north of Scotland, and over more

RAINFALL, MAY 7th—8th, 1914.



limited areas in the south. The fall exceeded 2 inches in Sutherland, and also in a large unbroken area which included the south-west of Ross and Cromarty and the east of Inverness-shire, and extended eastwards well into Aberdeenshire. The scarcity of observing stations prevents the positions of the lines being fixed exactly in the west. Over about 1,200 square miles in the centre of this district the rainfall exceeded 3 inches,

and in a narrow central core, not well defined, but probably stretching from Drumnadrochit nearly into Strathspey, more than 4 inches fell. The track of the main depression of May 7th is shown in a solid line on the map, and the hypothetical track of the secondary in a broken line. The occurrence of heavy rainfall on the left-hand side of the track of some depressions, to which we have frequently drawn attention, is again well exemplified, and we are inclined to associate the great rains in the north with the movements of the secondary depression, and the more scattered fall in the south with those of the primary system.

The areas over which more than an inch of rain fell on the two days together, were as follows :—

	Area, sq. miles.	General Rainfall, inches.	Volume of Rain, sq. miles x inches.
More than 4 inches	271	4·30	1,164
3—4 inches	1,065	3·41	3,636
2—3 „	3,664	2·45	8,982
1—2 „	7,657	1·46	11,198
Total more than 1 inch	12,657		24,980

The general rainfall of the two days over the area with more than 1 inch was 1·97 in.

May 8th.

XI.	Lake Cowlyd (Gors-y-Llithrig)	3·46 in. or 3·9 per cent.	
XVII.	Drummuir	2·68 „	7·1 „
„	Keith Station	2·50 „	6·7 „
„	Dufftown (Victoria Terrace)	2·68 „	6·8 „
„	Knockando	2·85 „	..
„	Ardclach (Glenferness)	3·25 „	9·0 „
XVIII.	Loch Ness (Aberchalder)	2·85 „	7·5 „
„	Drumnadrochit	3·38 „	8·8 „
„	Alness (Ardross Castle)	3·20 „	7·9 „

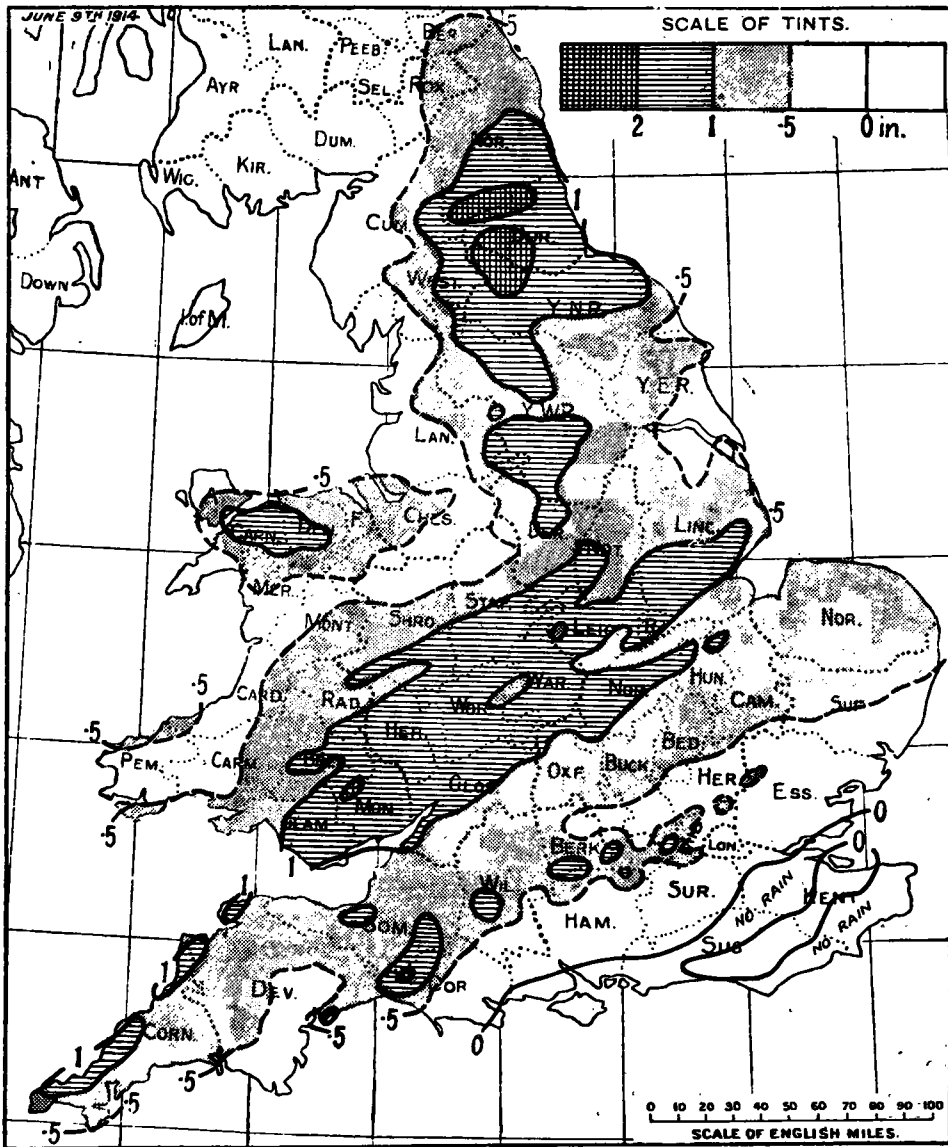
May 22nd.

Thunderstorm rains yielded rather more than an inch at a number of stations in Lincolnshire, but the only record of sufficient magnitude to quote occurred at Upminster, in Essex, where 3·35 in. of rain fell during the night. We have inquired with care into the circumstances of this record, and reference may be made to the Observers' remarks on p. [7] of this volume. We are satisfied that there is no reason to doubt its accuracy. The nearest stations to Upminster lying some four miles in all directions recorded only about ·50 in., so that the area affected was extremely small.

IV.	Upminster (High House)	3·35 in. or 14·8 per cent.
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June 9th.

A small and shallow depression moving in an irregular manner hovered about the mouth of the English Channel during the day, and it is probable that other secondary depressions affected the pressure distribution in

RAINFALL, JUNE 9th, 1914.

the south of England. Although only four maximum falls of sufficient magnitude to quote occurred, one in Monmouthshire and the others in

the north of England. more than 400 stations in England and Wales. chiefly in the Midlands, experienced their heaviest rainfall of the year. These falls were distributed in a way suggestive of thunderstorm rain. but thunder was not reported widely. The area with more than half an inch of rain was bounded on the south-east by a line running from Plymouth to Yarmouth. and on the north-east, except for an isolated patch in North Wales, by a line from Pembroke north-eastward to Stafford, and thence northward to Berwick. The one-inch areas lay in two well defined strips, one narrow and interrupted, stretching from Exmouth to Slough, and the other wider and more continuous, from Land's End to Skegness. There were also large irregularly shaped one-inch areas in North Wales and on the Pennines, the latter spreading to the east coast between Whitby and Morpeth. Various small areas, the largest of which lay in the Northern Pennines, had over 2 inches. We give a map showing the distribution over England and Wales, but as this owes its interest more to the characteristic linear arrangement of the wet patches than to the magnitude of the fall it seems unnecessary to expend the time necessary to measure the areas and calculate the general rainfall.

X.	Darlington (Hummersknott)	1.78 in. or	7.5 per cent.
„	Piercebridge (Carlbury Hall)	1.94 „	7.6 „
„	Alston (Nenthead).....	3.04 „	3.9 „
XI.	Blaenavon	2.77 „	3.9 „

June 14th.

A description of the phenomena connected with the thunderstorms of this day, together with a map of the distribution of rainfall, appears in Part I. of this volume, and they need not, therefore, be dealt with fully here. The rainfall which reached a high degree of intensity, was chiefly centred in a small area in the south-west of London, and an illustration of the damage done by lightning during the storm is given on p. [10]. About 50 stations, mostly in that neighbourhood, but including half a dozen in Somersetshire, recorded their maximum fall and of these 29 appear in the following list.

I.	Streatham (Southwark Waterworks).....	2.45 in. or	10.4 per cent.
„	„ Hill Reservoir	2.26 „	9.0 „
„	Putney Heath Reservoir	2.43 „	9.1 „
„	Roehampton (Highwood)	2.99 „	11.2 „
„	Wimbledon Park (Woodhouse)	2.65 „	9.3 „

I.	Balham (High Road)	2.80 in. or 10.0 per cent.
"	" (Park Road)	2.30 .. 8.6 "
"	Wandsworth Common (Patten Road)	1.89 .. 7.8 "
"	Southfields (Coronation Gardens)	2.58 .. 9.4 "
"	Dulwich (Alley Park)	2.15 .. 7.9 "
II.	Wimbledon (Kingston Road)	2.15 .. 7.6 "
"	" (Trinity Road)	2.40 .. 9.1 "
"	" (Sewage Works)	2.64 .. 10.4 "
"	New Malden (Sewage Works)	1.90 .. 7.6 "
"	Kingston (Palace Road)	1.86 .. 7.7 "
"	" (Sewage Works)	2.74 .. 8.8 "
"	" (Union Street)	2.38 .. 8.6 "
"	Wimbledon (Raynes Park Pumping Station)	1.98 .. 7.7 "
"	" (Worple Road)	2.06 .. 8.2 "
"	" (Alyn Bank, The Downs)	2.09 .. 7.8 "
"	Richmond Park (Thatched House Lodge) ..	3.70
"	Egham Park	2.81 .. 9.2 "
"	Englefield Green (Queenswood)	2.63 .. 7.9 "
"	" (Harvest Road)	2.77 .. 8.9 "
III.	Sunbury (Sunbury Lodge)	2.30 .. 8.3 "
"	Hampton Wick (Park House)	2.32 .. 8.1 "
"	Teddington (Clarence Road)	2.52 .. 9.5 "
"	Staines (Belle Vue)	3.48 .. 11.0 "
"	" Reservoir	2.47 .. 8.8 "

June 18th.

Extremely violent and very local thunderstorms occurred in parts of the north of England and there were many lightning fatalities. The district most severely affected, lying some eight miles north of Stanhope, on the eastern edge of the Durham Moors, is, unfortunately, one in which no rain gauge is known to be in use, though, if the following account, which we quote in a somewhat abridged form from a local newspaper, may be accepted, it is doubtful whether any rain gauge could have remained to tell the tale.

"The worst effects of the cloudburst were felt in the Roughside district, near Blanchland. The first indication that the people received of the impending phenomenon was a roaring noise. Many of the residents imagined that the disturbance was caused by the engine of a heavy motor-car, but on looking out of their windows they saw the waterspout approaching at a terrific speed. In appearance it was a dense body of a conical shape, hanging downwards towards the earth, and uniting with a similar cloud from below, the two forming an unbroken column, which extended from the earth to the sky. Presently the cloud burst, and an immense volume of water was discharged on the land adjoining the farmstead occupied by Mr. Steele. The result was that the whole of the countryside was immediately flooded, while at the same time heavy rain fell in neighbouring districts. Hailstones and snow fell to a depth of two and three feet in places, while the position was rendered additionally uncomfortable by the intense heat which prevailed. Large stone walls were dashed to the ground, and their contents scattered over the fields. Many of the highways were flooded to a considerable depth. Upper Harp Bank, leading to Riding Mill, was seriously damaged, and in places entirely destroyed. The

gardens at Roughside Hall caught the full force of the flood, and to get the water away a large wall had to be removed. The waterspout covered the area from Hunter House Gate to West Roughside, and the storm lasted three hours. Mr. T. Steele, of West Roughside, had eight valuable sheep killed by the lightning, while several sheep and cattle were seen floating down the river."

A severe thunderstorm was also reported from the Cleveland District in North Yorkshire, and at Lockwood Beck Reservoir, near Guisborough. 2·67 in. of rain was measured. The only maximum falls qualifying for the chronicle occurred in other centres; the fall of 1·69 in. at Musselburgh is reported as having all fallen in 45 minutes.

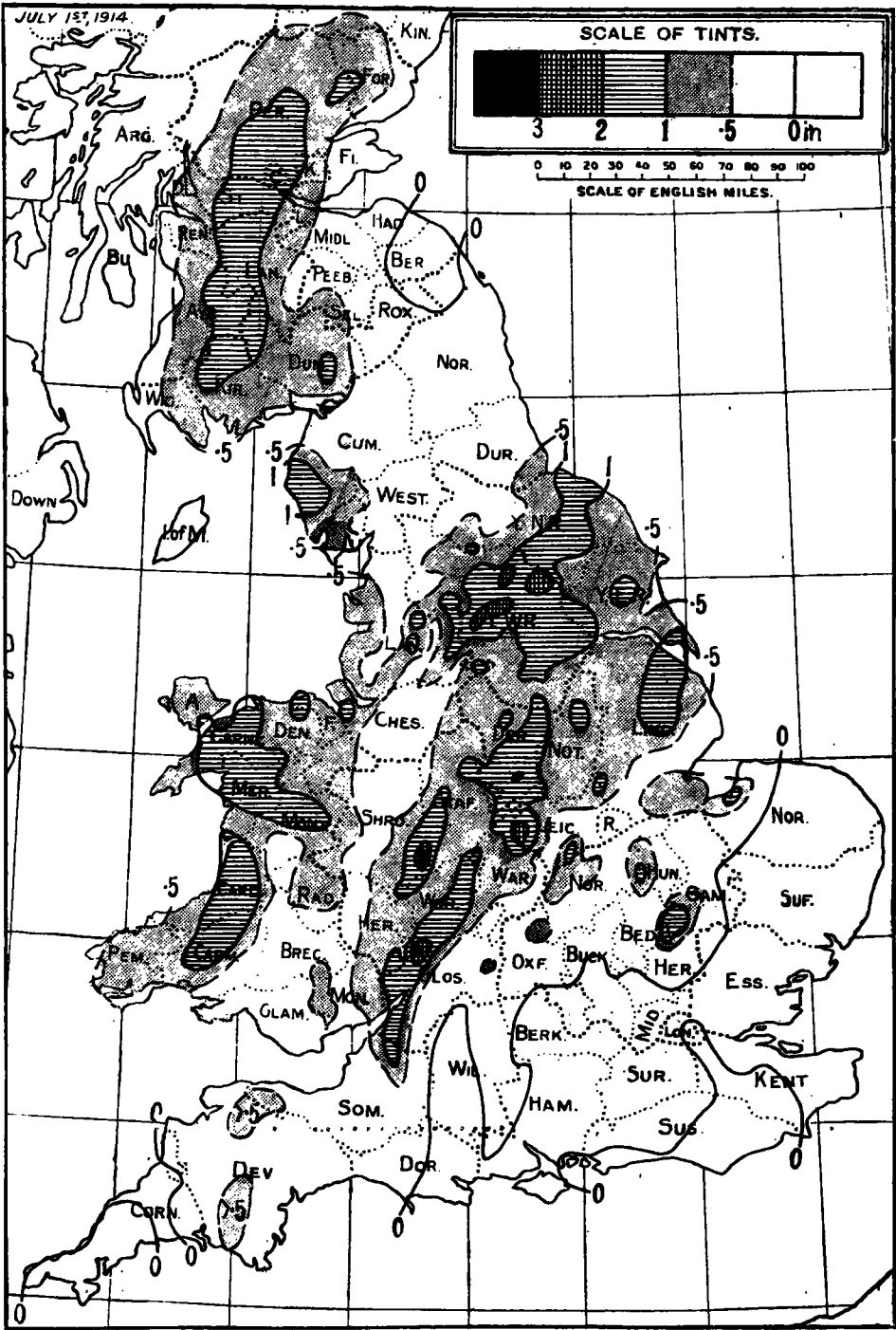
VI.	Oswestry (The Mount Reservoir)	2·62 in. or 7·0 per cent.
XIII.	Musselburgh (Levenhall)	1·69 „ 7·5 „

July 1st.

Widespread thunderstorm rains, locally of considerable intensity, took place over an area stretching from Devonshire to Aberdeenshire. The accompanying map shows the details of the distribution of rain during the twenty-four hours which was of an unusually complex nature, though showing a tendency to the characteristic structure of parallel strips so frequently observed in rains of this nature. More than one inch of rain fell over a series of areas extending from the Mendip Hills in the south to Saltburn-on-Sea, over a considerable portion of the west of Wales, and a narrow strip stretching through Scotland from Newton Stewart to Kirriemuir. There were also numerous smaller one-inch areas in parallel lines on either side of the main strip in England, but it was only within the latter that falls of 2 inches occurred. There were seven small patches in which this amount was exceeded, the four more southerly being situated respectively in Gloucestershire, Worcestershire, Warwickshire, and Derbyshire, and the three more northerly in Yorkshire. More than 3 inches fell very locally in the centre of the Gloucestershire and Worcestershire areas, where the intensity of the storm appears to have reached its maximum. Maximum falls occurred at about 200 stations in England and Wales and at about a dozen in Scotland. The thunderstorms of this day supplied 11 instances of the heavy falls in short periods, reported on pp. [97]–[98].

III.	Biggleswade (Waterworks)	1·84 in. or 7·8 per cent.
VI.	Tibberton Court	3·91 „ 12·2 „
..	Bridgnorth (Coton Hall)	3·10 „ 9·7 „
..	Bedworth Cemetery	2·35 „ 8·4 „

RAINFALL, JULY 1st. 1914,



VI.	Nuneaton (Chilvers Coton Vicarage)	2.45 in.	or 9.4 per cent.
VII.	Littleover Old Hall	2.29 „	7.6 „
IX.	Wakefield (Field Head Reservoir)	1.74 „	7.5 „
„	Leeds (Knostrop)	1.80 „	8.5 „
„	Aberford (Lotherton Hall)	1.82 „	7.5 „
„	Harewood (Arthington)	2.92 „	7.7 „
„	York (Acomb Landing)	2.10 „	8.3 „
„	Wetherby (Ribston Hall).....	2.10 „	7.8 „
„	Harrogate (Beaver Dyke Reservoir)	2.77 „	7.9 „
„	Ouseburn (Thorpe Underwood Hall)	2.35 „	8.6 „

July 2nd.

Widespread thunderstorms again occurred chiefly in the west and north of England and Wales, but the rainfall was in no case extremely heavy. The area with .50 in. embraced the whole of Wales, except the south-western counties and the extreme north-west, and in England extended southward to Dorchester, eastward to Newbury, and northward to Preston. Another .50 in. area stretched from Ashbourne to the north-east coast of Yorkshire. More than 1 inch fell on the east of Exmoor, over nearly the whole of the Welsh border, and over part of north-east Derbyshire and the North and East Ridings of Yorkshire. There were considerable areas in the east Midlands and east of England over which no rain fell on this day.

VI.	Shrewsbury (Ordnance Survey Office)	1.97 in.	or 7.5 per cent.
VII.	Eckington (Mosbrough C. E. School).....	2.32 „	8.4 „
IX.	Doncaster (Wadworth Wall)	2.00 „	7.8 „
„	„ (Hexthorpe Hall)	1.94 „	8.4 „
„	„ (Littlemoor Terrace)	1.70 „	8.0 „
„	„ (Pumping Station)	1.68 „	7.9 „
„	Goole	1.83 „	7.5 „

July 3rd.

A local thunderstorm in the north of Essex, one record just reaching the limit for quotation.

IV.	Halstead (The Brewery)	1.93 in.	or 7.5 per cent.
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July 11th.

A local thunderstorm rain which was nowhere severe, except in north-east Wales. Much damage was done by flooding in Flintshire.

XI.	Cilcain	2.45 in.	or 9.0 per cent.
„	Mostyn Vicarage	3.37 „	9.0 „
„	Cerrig-y-Druidion (Bwlch-y-Beudy)	2.69 „	4.9 „

July 12th.

Thunderstorms again occurred in many parts of England.

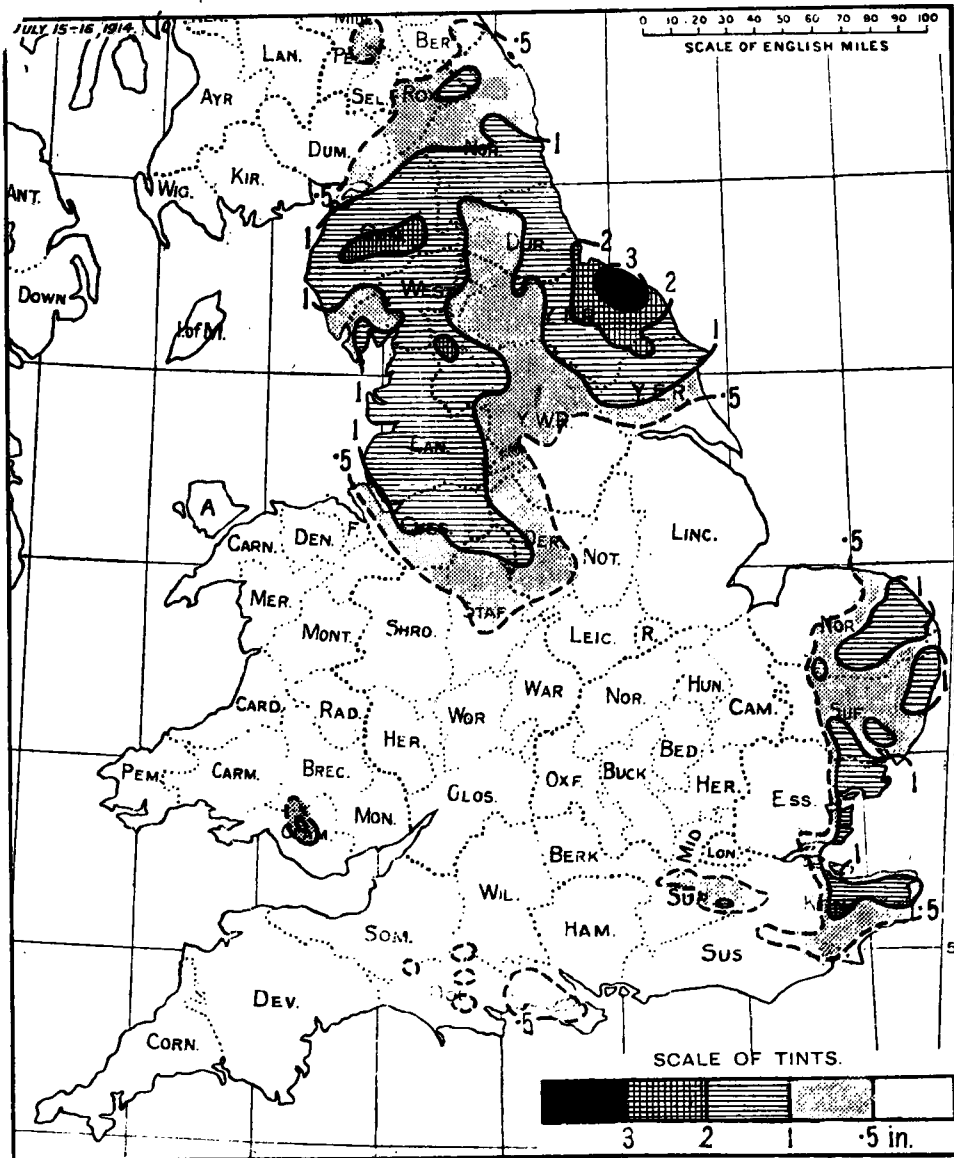
VII. Tydd (North Level Sluice) 2·15 in. or 8·3 per cent

July 15th and 16th.

A small and shallow depression moved northward from near Calais over the North Sea on the 15th, and brought a wet day to the east coast of England, more than an inch falling in East Anglia. On the following day this depression travelled north-westward across the centre of Scotland, and heavy rain fell over practically the whole of the north of England, the heaviest rainfall lying on the east coast, the lightest rainfall along the centre of the country, and a second belt of moderately heavy fall lying on the west. As the rainfall of the 15th was evidently associated with the earlier stages and that on the 16th with the later stages of the same pressure system, the accompanying map gives the fall of the two days together. The south-eastern rain-splash was concentrated on a fringe of the east coast, more than half an inch falling between Dover and Cromer. The fall exceeded an inch practically everywhere on the coastal strip and extended inland about 30 miles in Norfolk, but it does not seem to have reached 2 inches in any part of the district. In the north of England more than half an inch of rain fell everywhere north of a line running from Hull to Huddersfield, thence south to Stafford and north-east to Birkenhead. The area with more than 1 inch consisted of two long tongues from 20 to 30 miles wide, joined by a narrow neck in the north. The western tongue stretched southward from Carlisle to Ashbourne and embraced the western slopes of the Pennines and the Lake District. In a small patch lying across the Eden Valley south of Carlisle, and another over Whernside, rather more than 2 inches fell. The eastern tongue extended from Rothbury to York and on the coast to Flamborough Head. More than 2 inches fell between Hartlepool and Scarborough, and in a well defined central core with an area of about 250 square miles on the North Yorkshire Moors more than 3 inches fell. The track of the atmospheric depression of July 15th-16th unfortunately lies entirely outside the map which we reproduce, and in order to bring in the track of the depression we have prepared a small-scale map on which the area which received more than one inch of rain alone is shown. This illustrates the concentration of heavy

rainfall on the left of the track of the depression, this being one of the comparatively rare instances in which it is possible to bring out the

RAINFALL, JULY 15th—16th, 1914.



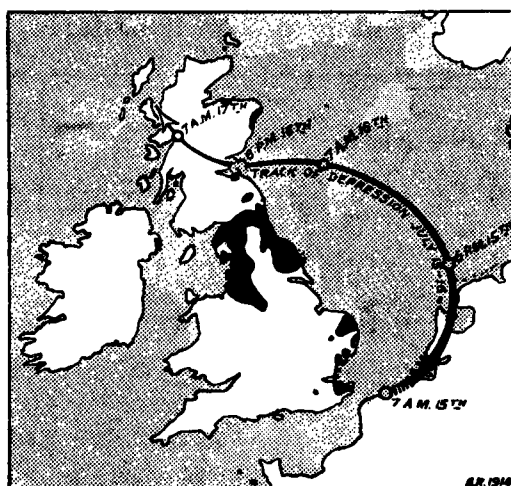
relationship in the case of a depression moving in a direction opposite to that usually followed.

The area with more than 1 inch of rain on the two days was as follows.

	Area, sq. miles.	General Rainfall, inches.	Volume of Rain, sq. miles x inches.
More than 3 inches	253	3·30	834
2—3 inches	823	2·31	1,903
1—2 „	9,758	1·25	12,212
Total more than 1 inch	10,834		14,949

The general rainfall of the above area was 1·38 in.

TRACK OF DEPRESSION, JULY 15th—16th, 1914.



On the 15th 22 stations, all in East Anglia, recorded their maximum rainfall for the year, and on the 16th 150 stations, all in the north, of which about half a dozen were in Scotland.

July 15th.

IV. Shoeburyness	1·77 in. or 8·9 per cent.
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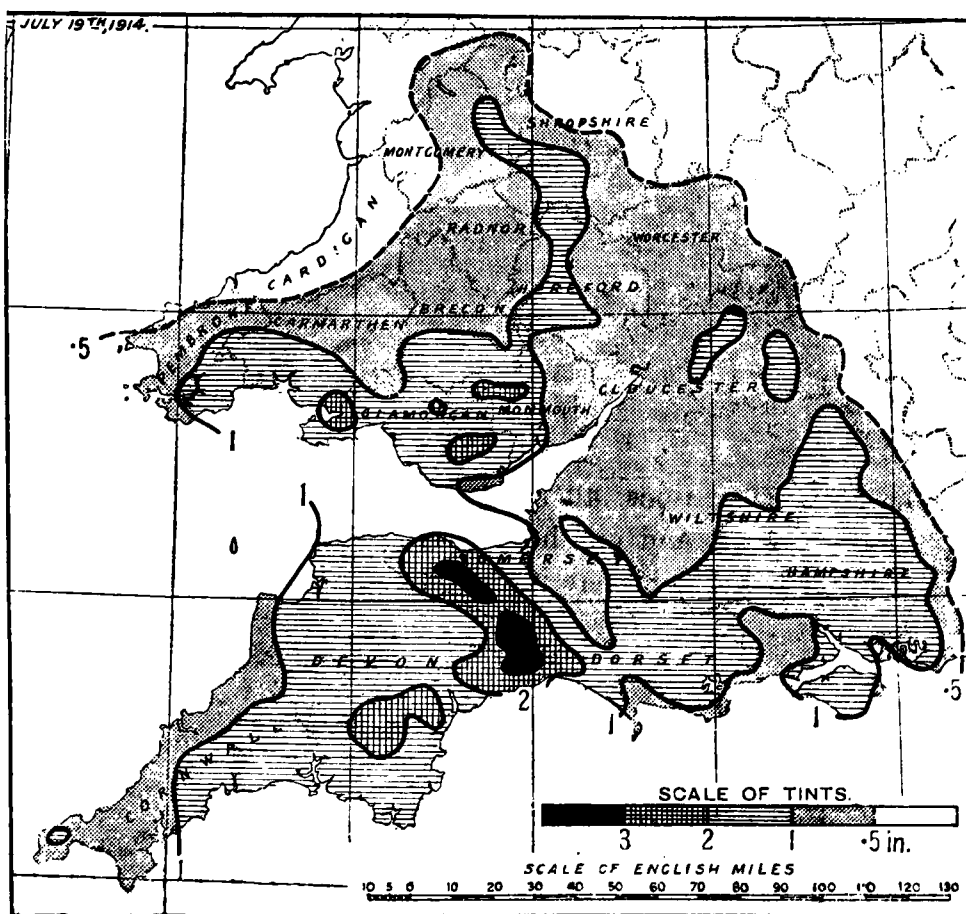
July 16th.

IX. Thirsk (Newbuilding)	2·07 in. or 7·6 per cent.
„ Glaisdale (The Gables Gardens)	3·21 „ 8·4 „
„ Sleights (Brook Park)	3·00 „ 10·6 „
„ Whitby (Park Hall, Aislaby)	3·37 „ 11·1 „
„ „ (Ocean Road)	2·53 „ 10·3 „
„ „ (Mulgrave Castle)	3·03 „ 10·3 „
„ Guisborough (Lockwood Beck Reservoir)....	2·80 „ 7·2 „
„ Skelton-in-Cleveland Rectory	2·26 „ 7·5 „
„ Kildale Hall	3·17 „ 7·6 „
„ Middlesbrough (Linthorpe)	2·00 „ 7·7 „
„ „ (Albert Park)	2·13 „ 8·0 „
X. Hartlepool (Hart Reservoir)	1·91 „ 7·9 „
„ Ryhope Pumping Station	1·90 „ 7·5 „
„ Washington (Usworth School)	1·86 „ 7·8 „
„ Renwick (Ravenwood)	2·60 „ 6·1 „

July 19th.

A large and shallow depression, the centre of which lay off the south-west of Ireland on the morning of July 19th, moved south-eastward to the mouth of the English Channel, and increased greatly in intensity during the day. Thunderstorm phenomena were reported from some stations in Hampshire and a local whirlwind at Oakamoor, in Staffordshire, but in the south-western counties where the rainfall reached its

RAINFALL, JULY 19th, 1914.



greatest amount the fall is described as a steady downpour, lasting generally about sixteen hours. More than 150 stations, nearly all in Dorset, Devon, and Somerset, recorded their maximum rainfall for the year on this day. The area with .50 in. or more occupied the whole of the south-west of England and Wales, the limiting isohyet passing from Bognor north-westward through Oxford, Birmingham and Shrewsbury,

to Bala, and thence south-westward to St. David's Head. No rain fell to the east of a line running from Deal through Sheerness and thence northward to Grimsby. The line of $\cdot 25$ in. which is not shown in the map, ran for the most part within 5 miles of the half-inch line, so that a belt of country about 15 miles in width had less than $\cdot 25$ in. of rain.

More than 1 inch fell over an area which extended from Truro in the south-west to Chichester in the south-east, and stretched north-eastward in two great tongues one of which included the whole of the south coast strip of Wales and the Welsh border northward to Welshpool, and the other the Wessex district and as far north as Abingdon. There were also two small isolated one-inch areas in Gloucestershire. On the east the southern one-inch area ran up to within 5 miles of the half-inch line, the heavy fall being sharply limited along the eastern front. The two-inch areas included four small patches in South Wales, and two large patches in the east of Devonshire, the east of Somerset and west of Dorset; and the rainfall exceeded 3 inches over part of the east of Exmoor and over the Blackdown Hills, the latter patch extending southward to Axminster.

The area with more than $\cdot 50$ in. has been measured with the following results :—

	Area, sq. miles	General Rainfall, inches.	Volume of Rain, sq. miles \times inches
More than 3 inches	206	3·13	645
2—3 inches	1,155	2·33	2,692
1—2 „	9,180	1·29	11,798
$\cdot 50$ —1 „	9,812	$\cdot 78$	7,657
Total more than $\cdot 50$ inch	20,353		22,792

The general rainfall over the above area was 1·12 in., and over the 10,541 square miles with more than 1 inch it was 1·44 in.

V. Broadwindsor (Blackdown House)	2·51 in. or 4·7 per cent.	
„ Ashburton (Leusdon Vicarage)	2·55 „	3·5 „
„ Princetown (Huccaby House)	3·23 „	4·9 „
„ North Bovey (Manor House)	2·95 „	4·8 „
„ Christow (Laployd)	2·52 „	4·3 „
„ Axmouth (Millmead)	2·70 „	6·5 „
„ Rousdon [Lyme Regis]	3·20 „	7·5 „
„ Ottery St. Mary (Broad Street)	2·81 „	6·5 „
„ „ „ (Manor House)	2·75 „	6·4 „
„ Northleigh Rectory	3·14 „	6·2 „
„ Kilminster (Haddon Corner)	3·37 „	6·9 „
„ Axminster (Lea Combe House)	2·70 „	6·4 „
„ Honiton (Combe Raleigh)	2·88 „	6·4 „
„ Chardstock Vicarage	2·56 „	5·3 „
„ Wellington (Old Way House)	2·66 „	6·2 „

V.	Angersleigh (Blagdon Reservoir)	3.29 in. or 7.1 per cent
"	" (Leigh Hill Reservoir)	3.25 " 7.2 "
"	" (Leigh Court)	2.80 " 6.4 "
"	Langford Budville (Ritherdens)	2.96 " 7.0 "
"	" (Bindon)	3.07 " 7.3 "
"	Milverton (Spring Grove).....	3.03 " 6.5 "
"	Wiveliscombe (Culverhead)	3.28 " 6.6 "
"	Cutcombe (Wheddon Cross)	2.90 " 4.8 "
"	Chard Vicarage	2.76 " 5.1 "
"	Cricket St. Thomas (Cricket House)	2.57 " 5.0 "
"	Otterhead	3.20 " 6.2 "

July 22nd.

A local thunderstorm which was accompanied by rainfall of high intensity for little more than an hour in east Kent.

II.	Broadstairs (Providence House)	2.03 in. or 7.5 per cent.
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August 3rd.

XVIII.	North Uist (Monach)	3.02 in. or 6.8 per cent.
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August 8th.

With the passage north-eastward of a large but not deep depression which moved in a track about half-way between Iceland and the Hebrides, the wind in the west of the British Isles changed from south to south-west, and heavy rain fell in normally rainy districts, especially in the English Lakes and North Wales, where big floods occurred. The fall of 6.35 in. at Pen-y-Gwryd is the largest daily rainfall yet recorded in Snowdonia, and is more than an inch in excess of the amount recorded at any other station on the day, but we see no reason to doubt its accuracy.

VIII.	Cartmel W. W. (Newton Reservoir)	2.70 in. or 5.0 per cent.
"	Rusland Hall	2.50 " 5.6 "
"	" (Crossland House)	2.50 " 4.6 "
"	Greenodd (Summerhill)	2.68 " 4.4 "
"	Coniston (Holywath)	4.29 " 4.5 "
"	Hawkshead (Tower Bank, Sawrey)	3.31 " 4.9 "
"	Cartmel Fell Schoolhouse	2.50 " 4.3 "
X.	Borrowdale (Seathwaite)	4.71 " 3.7 "
"	" (Rosthwaite)	4.10 " 4.0 "
"	Bowness (Dawstone)	3.18 " 4.8 "
"	" (Fallbarrow)	3.50 " 5.4 "
"	" (Fellside).....	3.25 " 4.9 "
"	Windermere (Holehird)	3.33 " 4.6 "
"	" (Brockhole)	3.22 " 4.6 "
"	Ambleside (Wansfell)	3.36 " 4.5 "

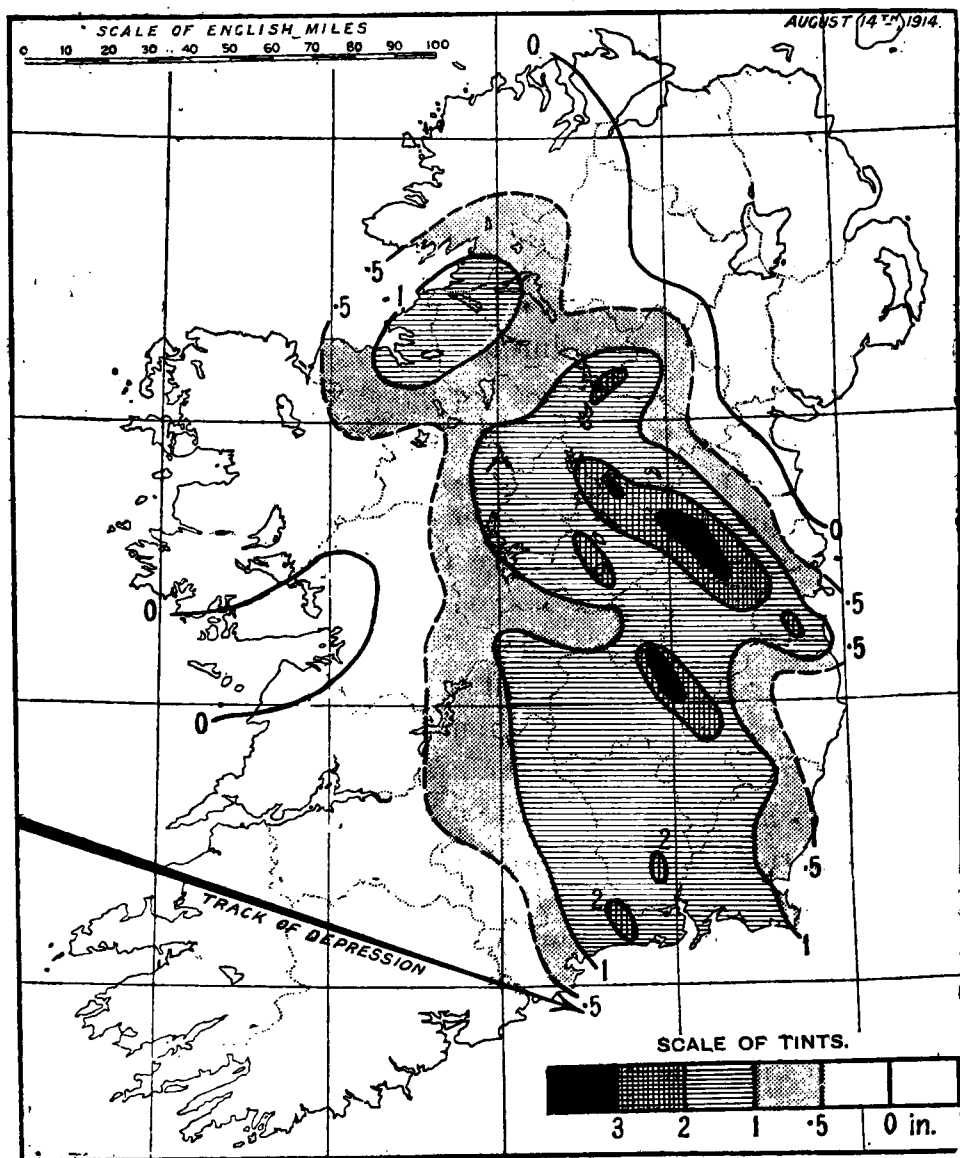
X.	Ambleside (Gale House)	3·25 in, or	4·1 per cent.
„	„ (Tweenway House)	3·39 „	4·4 „
„	Dungeon Ghyll	3·55 „	3·2 „
„	Kendal (Crosthwaite Vicarage)	2·80 „	4·9 „
„	„ (Vicarage Terrace)	2·64 „	5·0 „
„	„ (Holmcroft)	2·72 „	5·1 „
„	„ (Birchfield)	2·83 „	4·9 „
„	„ (Low Slack)	2·81 „	5·1 „
„	Kirkby Lonsdale (Casterton)	2·70 „	5·1 „
XI.	Blaenau Festiniog (Llechwydd Quarries)	4·66 „	4·6 „
„	Snowdon (Pen-y-Gwryd)	6·35 „	4·1 „
„	Nant-y-Crogwyn (Penmachno)	3·00 „	..

August 14th.

The *Monthly Weather Report* of the Meteorological Office indicates that a depression passed in a south-easterly direction from the coast of Clare to the neighbourhood of Paris during August 14th, but the precise position of the centre at any time during the day was not well defined and the system which eventually re-formed in the Mediterranean was, at the time when rain fell more like an elongated trough of low pressure between anticyclones lying respectively over Scandinavia and Spain. Heavy thunderstorms occurred over a large area in the east of Ireland and also near the probable track of the depression in the Devon-Cornwall peninsula and in the Channel Islands (See Observers' Remarks, p. [18]). The distribution in Ireland was difficult to trace out with precision owing to the scarcity of observing stations, but we give a map showing the most probable run of the isohyets. The area with more than ·50 in. appears to have stretched unbroken from northern Donegal southward to the coast at Waterford and to have included the whole of the central basin and the south-eastern counties. Within this area more than one inch fell over nearly the whole country between Donegal Bay and the south coast from Waterford to Wexford. The small number of observing stations in the counties of Fermanagh and Leitrim makes it almost impossible to draw the lines with any degree of certainty in the north-west of Ireland, and while it appears more probable that the north-western extremity of the one-inch area was isolated from the main body, as is shown on the map, it is quite possible that more than one inch fell along its whole length. Numerous small areas with more than 2 inches were scattered over the east of Ireland and in Meath, Westmeath, and Kildare a good many stations reported falls exceeding three inches. It is of course possible, in view of the thunderstorms which accompanied

this rain, that the areas with various amounts of rain were considerably more broken than they are shown on the map, but accepting the lines

RAINFALL, AUGUST 14th, 1914.



as they are drawn, we have measured the area over which rain fell in Ireland and are able to give the following results :—

	Area, sq. miles.	General Rainfall, inches.	Volume of Rain, sq. miles x inches.
More than 3 inches	188	3.06	575
2—3 inches	873	2.33	2,035
1—2 „	7,364	1.29	9,503
.50—1 „	5,491	.74	4,076
Less than .50 inch	14,173	.21	2,942
Total area with rain ..	28,089		19,131

The general rainfall of the area with rain was .68 in., and that of the 8,425 square miles with more than an inch of rain was 1.44 in.

XX.	Knockaderry	2.50 in. or 5.6 per cent.
XXI.	Castledermot	2.85 „ 8.4 „
„	„ (Millbrook)	2.76 „ 8.5 „
„	Monasterevan (Moore Abbey)	3.30 „ 9.9 „
„	Ballyboden (Rathmines Waterworks)	2.85 „ 7.5 „
„	Summerhill House	3.14 „ 9.1 „
„	Athboy (Mitchelston)	3.09 „ 9.0 „
„	„ (Frankville)	3.06 „ 8.4 „
„	Castlepollard (Gillardstown House)	2.95 „ 8.4 „
„	„ (Pakenham Hall)	3.22 „ 8.8 „
XXIII.	Belturbet (Cloverhill)	2.60 „ 7.1 „

August 24th.

IX.	Filey (Deepdene)	1.82 in. or 7.8 per cent.
XI.	Beddgelert (Council School)	2.94 „ 3.2 „

September 16th.

A V-shaped depression developed during this day, and on the following morning was situated with its axis traversing the Irish Sea from north to south. The day was wet in the south of Ireland, the north-west of England and most of Wales.

VIII.	Broughton-in-Furness	2.69 in. or 5.0 per cent.
„	Greenodd (Pennybridge School)	2.71 „ 4.5 „

September 30th.

XIX.	Loch Stack (Achfary)	2.81 in. or 3.4 per cent.
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October 14th.

A shallow low pressure system, which on the previous day had moved north-eastward along the English Channel, lay on the morning of the 14th with its centre near the Thames estuary. It appears during the day to have turned suddenly southward moving into France and dispersing. The rain was heavy only in an area embracing part of Oxford-

shire, Buckinghamshire, and Northamptonshire, and it exceeded 2·00 in. in the north of Buckinghamshire.

III.	Wolverton (St. George's Vicarage).....	2·02 in. or 7·8 per cent.		
"	" (The School House)	2·10 "	8·3	"
"	" (Council School)	1·96 "	8·1	"
"	Newport Pagnell (The Croft)	2·21 "	8·7	"
"	" " (Lovat Bank)	2·07 "	8·4	"

November 2nd.

Although no record qualified for inclusion in the list, nearly 100 stations, mainly in Wiltshire and Dorset, recorded their maximum rainfall for the year on this day, the fall exceeding one inch over the south-west of England generally and reaching 2 inches at one or two stations near Blandford. This rain appears to have been associated with the passage northward of a small depression which moved from the mouth of the English Channel into Ireland.

November 29th.

The pressure distribution was of an intensified winter type with a gradient from south-east to north-west and strong south-westerly winds brought considerable rain in the westerly districts of Great Britain from Dartmoor to the western Highlands. About 3 inches fell at the wettest spots in all the rainy areas and about 4 inches at Pen-y-Gwryd, in Snowdonia. Considerable flooding occurred in the Scottish Lowlands.

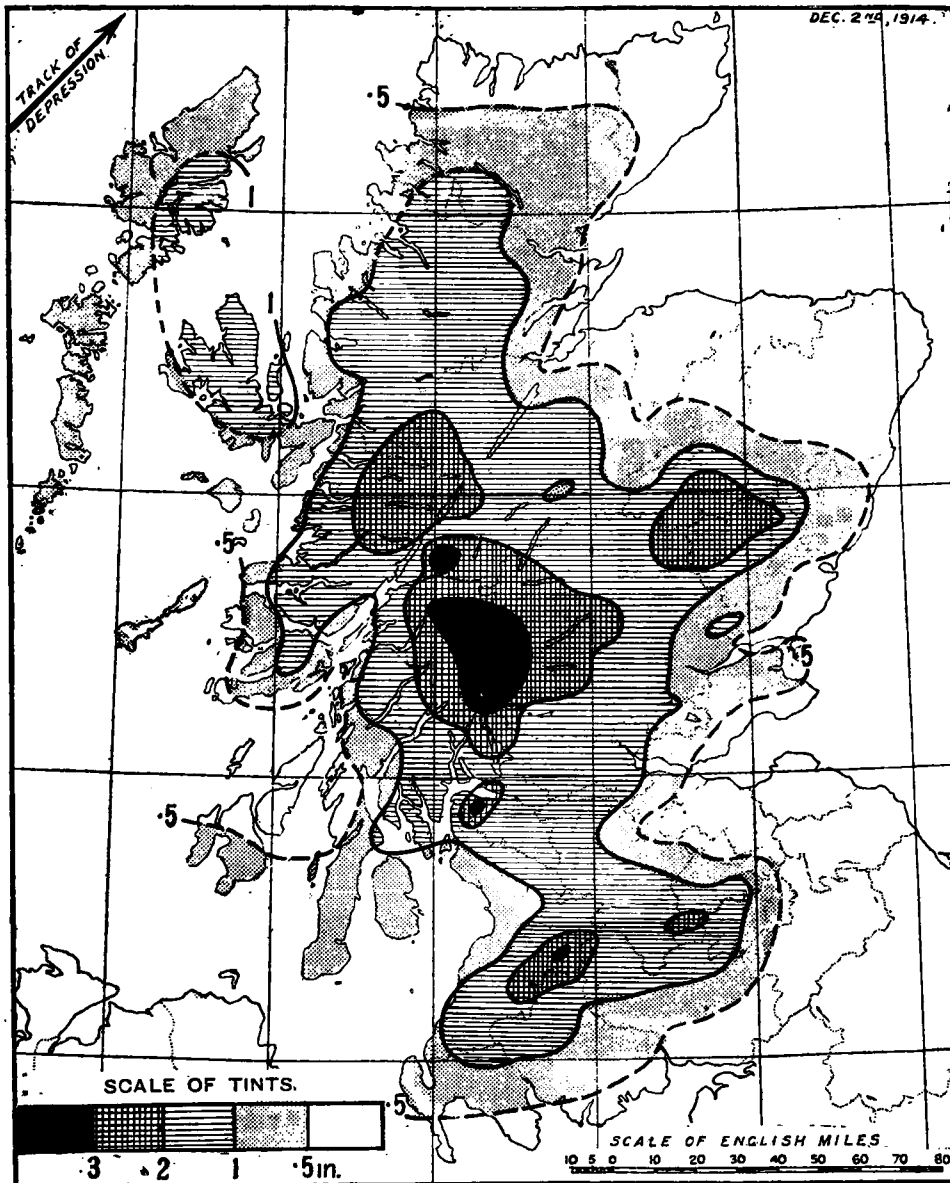
V.	Princetown (H.M. Prison)	3·17 in. or 3·0 per cent.		
XV.	Glenleven (Blackwater Dam, South)	3·34 "	3·5	"
XVI.	Killin (The Manse)	3·00 "	..	
"	" (Morenish Lodge)	2·55 "	..	
XVIII.	Clunes	2·53 "	3·2	"
"	Glenleven (Blackwater Dam, North)	3·20 "	3·3	"

December 2nd—4th.

The early part of December, which proved to be one of the wettest months known in England and Wales at least, for more than half a century, was characterized by an exceptionally deep depression which travelled in a north-easterly direction past the Outer Hebrides, and was accompanied by strong squally westerly winds, shifting later, on the approach from the west of a fresh low pressure system, to a southerly direction. The heavy rainfall which was associated with the earlier depression was unusually widespread, affecting practically the whole of Scotland on the 2nd, and

a map showing the distribution of rainfall on that day is given. The fall exceeded half an inch over the whole country, except a fringe round the coast on the north, east, south, and part of the west. More than

RAINFALL, DECEMBER 2nd, 1914.



an inch fell over the whole of the interior of Scotland, from the borders of Sutherland in the north, to Wigtownshire on the south, and from the mountains of Kincardineshire on the east, to Ardnamurchan on the west, an area of approximately 10,000 square miles. There were large

districts chiefly on the more elevated land, where more than 2 inches fell, the most important occupying the very rainy part of the West Highlands, and in four patches arranged roughly in a straight line from Ben Nevis to New Cumnock, in Ayrshire, more than 3 inches fell. The centre of heaviest fall appears to have been on the hills south of Port Glasgow, in Renfrewshire, where 3·85 in. was measured at Douglasshill. It will be observed that the isohyets of this day run, in the main, parallel with the coast, accentuating the rain-producing influence of the land in weather of this type. It will also be observed that the least rainfall in any inland locality occurred in the lowland valley, between the Clyde and the Forth, while the highest rainfall was found in the southern uplands on the south and in the Highlands on the north. The small number of observing stations in Ross and Cromarty and Sutherland makes it impossible to delineate the northern part of the map with the same detail possible for the south, but it appears quite probable that another area with more than 2 inches occurred north of the Highland Railway, where no stations for the measurement of rainfall exist. The area over which more than an inch of rain fell on this day was as follows :—

	Area, sq. miles.	General Rainfall, inches.	Volume of Rain, sq. miles × inches.
More than 3 inches	487	3·10	1,512
2—3 inches	2,993	2·33	6,962
1—2 „	10,184	1·34	13,668
Total more than 1 inch	13,664		22,142

The general rainfall of the area with more than one inch of rainfall on December 2nd was 1·62 in.

Part of the lowlands of Scotland had more than an inch again on both December 3rd and 4th, but the fall on the 3rd was heaviest in North Wales, and that on the 4th in the English Lakes.

December 2nd.

XIV.	New Cumnock (Ayr Sanatorium)	2·52 in. or 4·2 per cent.	
„	„ „ Power Station	3·50 „	5·1
„	Douglasshill Filters (Port Glasgow W.W.) ..	3·85 „	6·3 „
„	Parkhill Filters („ „) ..	3·54 „	6·9 „
„	Port Glasgow (Broadfield)	3·40 „	5·7 „
„	„ „ (Elmworth)	2·78 „	4·6 „
XV.	Glen Etive	3·04 „	2·7 „
„	Glenorchy Manse	2·55 „	..
XVI.	Balquhidder (Stronvar)	2·80 „	3·7 „
„	„ (Edinchip)	2·64 „	3·7 „
„	Kenmore (The Manse)	3·04 „	6·0 „

XVI.	Glenlyon (Meggernie Castle)	2·94 in. or 4·2 per cent.
„	Invergyle	3·35 „ ..
XVIII.	Glenleven (Kinlochmore Gardens)	3·13 „ 3·0 „

December 3rd.

XI.	Lake Eigiau (Dam Site)	3·13 in. or 3·3 per cent.
„	Llanberis (Brynrefail School)	2·50 „ 3·8 „
„	„ (Llandinorwig School)	2·71 „ 4·2 „
„	Bethesda (Penrhyn Quarries)	2·87 „ 4·2 „

December 4th.

X.	Patterdale (Greenside Mine)	2·80 in. or 2·8 per cent.
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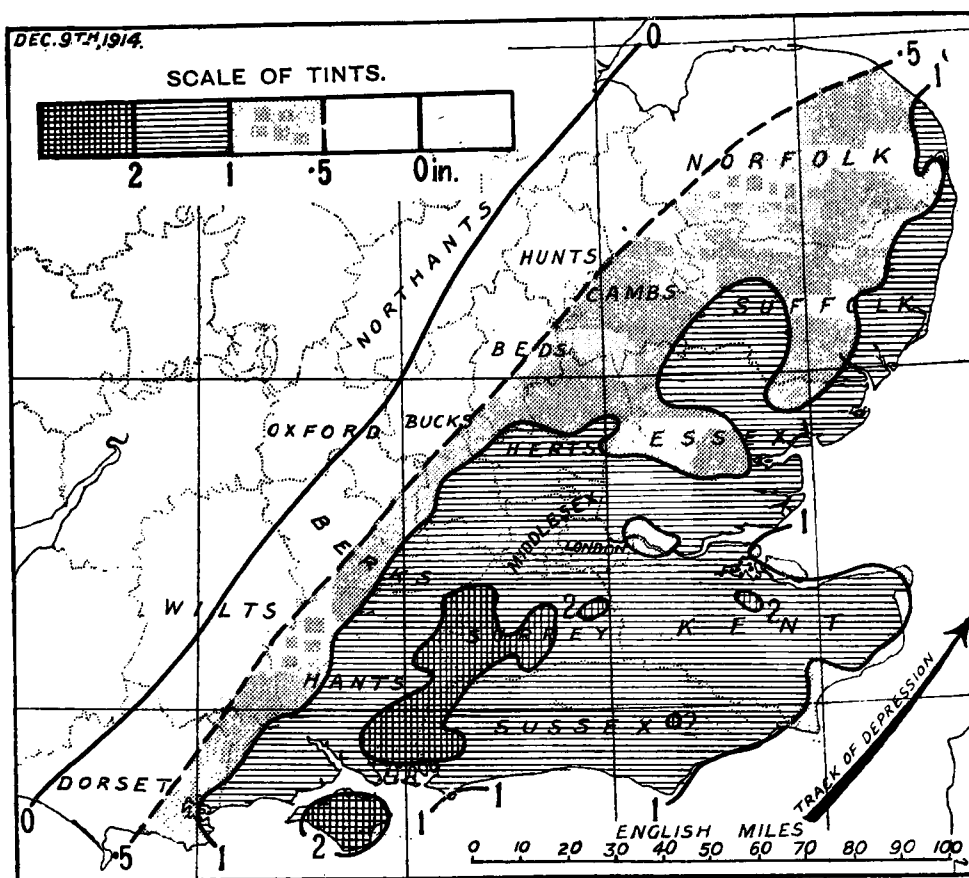
December 9th.

No fewer than 739 stations all in the south-east of England, as well as 8 in the Channel Islands, recorded their maximum rainfall for the year on this day, the district affected being that in which more rain gauges exist to the square mile than in any other area of equal size in the world. The centre of the depression associated with this rainfall moved during the day from the Bay of Biscay through the Straits of Dover into the North Sea. The most noteworthy feature of the map is the extremely well defined limit of the rain area on the north-west. No rain fell in that direction beyond a very nearly straight line from the Wash to Bridport, and the line bounding the area with more than half an inch, which ran from Cromer to Portland Bill, at an average distance of about 25 miles from the zero line, was almost as straight. The one-inch area was more irregular, but stretched unbroken from Happisburgh on the Norfolk coast to Swanage. North of the Thames estuary this area was mainly confined to a coast fringe not more than 10 miles wide, but more than 1 inch fell over practically the whole of the south-eastern counties, the only exceptions being a small patch in the east of London and a narrow coast strip from Sheerness to Pevensy. An interrupted band of two-inch splashes extended along the centre of this area from the Isle of Wight to Sittingbourne, and a few scattered stations recorded more than 2·50 in. It is interesting to observe that the general trend of the isohyets in a direction from south-west to north-east, and the axis of the belt of heaviest rainfall are parallel to the track of the depression. The diminution of the rainfall towards the south-east coast suggests that the whole of the one-inch area lay on the left of the track.

The area with rain was so sharply marked off from that over which no rain fell that we have measured the whole and are able to give the following results :—

	Area, sq. miles.	General Rainfall, inches.	Volume of Rain, sq. miles x inches.
More than 2 inches	827	2·16	1,782
1—2 inches	7,321	1·40	10,217
·50—1 „	4,740	·81	3,822
Less than ·50 inches.....	4,195	·25	1,049
Total area with rain ..	17,083		16,870

RAINFALL, DECEMBER 9th, 1914.



The general rainfall of the rain area was ·99 in., and that of the area with more than one inch of rain was 1·47 in.

II. Cobham (Hatchford Park)	2·60 in. or 7·4 per cent.
„ Ewhurst (Garlands)	2·91 „ 8·1 „
„ Farnham (Charleshill)	2·26 „ 7·7 „
„ Shere (Burrows Lea).....	2·81 „ 8·7 „

II.	Gomshall (The Croft)	2.50 in. or 7.5 per cent.
„	Byfleet Rectory	2.14 „ 7.9 „
„	Brompton Sanatorium	2.27 „ 7.7 „
„	Frimley (Tomlinscote)	2.29 „ 7.8 „
„	Detling (The Croft)	2.43 „ 8.1 „
„	Compton House [Petersfield]	2.59 „ 6.0 „
„	Sandown (Free Library)	2.51 „ 6.3 „
„	Petersfield (Weston)	2.66 „ 5.6 „
„	Blackwater (Hawley)	2.20 „ 7.5 „

December 11th.

A winter rainfall of no great importance affecting chiefly the east of Ireland. This fall was probably associated with a small secondary depression. ..

XXI.	Glen-na-Smoel (Rathmines W.W.)	2.50 in. or 5.2 per cent.
„	Rathmines (Dartrey Road)	2.13 „ 7.9 „

December 13th.

A steady east wind brought heavy rainfall to the east of Scotland, but the amount reached 2 inches only in the hills of Forfarshire and Aberdeenshire, and only two records are of sufficient importance to find a place in the chronicle.

XVI.	Glen Prosen (Balnaboth Gardens)	2.50 in. or 4.9 per cent.
XVII.	Strachan (Bridge of Dye)	2.97 „ 6.5 „

December 17th.

The type of pressure distribution favourable for south-westerly winds which characterized December as a whole, was accompanied on this day by much rain in Wales and the English Lake District. More than four inches fell at one or two stations in the rainiest spots, and more than three inches over wide areas of the high land in the west.

VIII.	Skelwith Fold [Ambleside]	3.87 in. or 4.6 per cent.
IX.	Sedbergh (Dent Post Office)	2.58 „ 3.3 „
„	Wharfedale (Oughtershaw)	2.50 „ 3.6 „
X.	Borrowdale (Grange)	4.86 „ 5.0 „
„	Ravenstonedale (The Chantry)	2.50 „ 4.6 „
„	Ambleside (Skelwith Bridge)	4.07 „ 4.7 „
„	„ (White Craggs)	3.50 „ 4.6 „
„	„ (Gale House)	3.25 „ 4.1 „
„	Rydal (The Stepping Stones)	3.50 „ 4.1 „
„	„	2.77 „ 3.3 „
„	„ (High Close)	3.40 „ 4.0 „
„	„ (Silverthwaite)	3.35 „ 4.3 „
„	Ambleside (Rydal Farm)	3.30 „ 4.1 „
„	Grasmere (The Wray)	3.38 „ 3.6 „

N.	Kendal (Ellergreen)	3.05 in. or 4.7 per cent.	
..	Tebay (Orton)	3.44 "	..
XI.	Treherbert (Tyn-y-Waun)	2.73 "	2.8 "
..	Rhondda (Pont Llest Wen Reservoir).....	2.76 "	2.9 "
..	Swansea W.W. (Bwlch)	3.30 "	3.0 "
..	Trecastle (Blaenau-hydfer)	3.42 "	3.6 "
..	Blaenan Festiniog (Oakley Quarries)	2.93 "	2.8 "
..	Lake Cowlyd (Llethyr Gwyn)	3.96 "	4.0 "
..	" (Ffrith Fawr)	3.29 "	3.5 "
..	" (Ffrith Carreg Wen)	3.71 "	3.5 "
..	Snowdon (Cwm Dyli)	4.30 "	3.2 "
..	" (Old Road)	4.40 "	3.6 "

December 25th.

A V-shaped secondary depression associated with a primary, the centre of which lay off the north-west coast of Ireland, affected the district surrounding the Irish Sea and resulted in a wet day in the north-east of Ireland and the south-west of Scotland. None of the records were very remarkable.

XV.	Morvern (Ardtornish)	2.72 in. or 3.3 per cent.	
"	" (Kingairloch)	2.52 "	2.4 "
"	Mull (Knock)	2.58 "	3.0 "
XXIII.	Newcastle (R. Co. Down Golf Club)	2.51 "	6.4 "
"	" (Tullymore Park)	2.83 "	5.1 "
"	Mourne Mountains (Fofanny Res.)	4.25 "	5.3 "

December 27th.

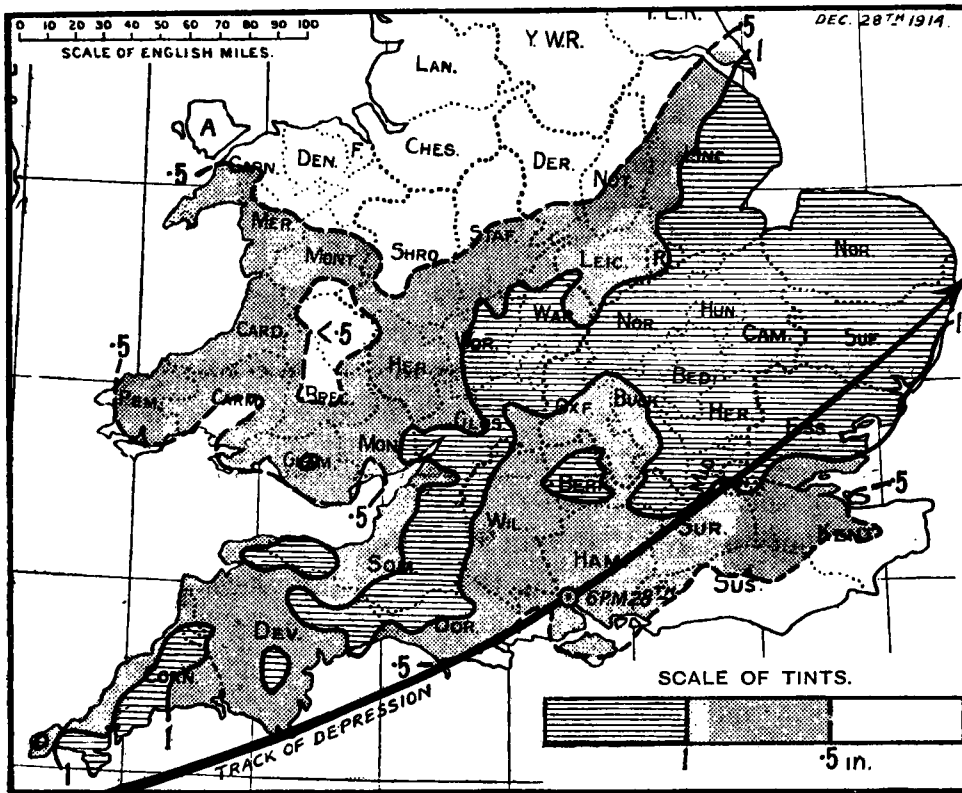
The pressure condition were of a rather complicated nature, but the distribution of rainfall was chiefly influenced by the movements of a secondary depression which, forming on the south-eastern fringe of the primary low pressure area lying over the Atlantic, passed across the centre of England and Wales, and was accompanied by heavy rainfall chiefly confined to Wales and the north-west of the English Midlands, but not reaching a very large amount anywhere. About 50 stations in England and 30 in Wales recorded their heaviest daily rainfall of the year on the 27th, but none were large enough to put on record here.

December 28th.

A depression appeared off the south of Ireland on the evening of the 28th and moved north-eastward across London to the North Sea, where it possibly coalesced with that mentioned in the paragraph relating to December 27th. More than half an inch of rain fell in all parts of the

south of England, except the south-east coast; and a long band, interrupted and narrow, in the south-west, but broad and continuous in the north-east, in which more than an inch of rain fell, stretched from Land's End to the east coast between Grimsby and Southwold. There does not appear to have been any part of the area where as much as 2 inches

RAINFALL, DECEMBER 28th, 1914.



fell on this day, but the area with more than one inch was unusually large, and we reproduce the map and give the general rainfall of the area with more than one inch as calculated from it.

	Area, sq. miles.	General Rainfall, inches.	Volume of Rain, sq. miles x inches
More than 1 inch	16,729	1.20	20,063

About 450 stations all in England, recorded their wettest day for the year on this day, but of these two, only had falls heavy enough to quote.

III. Huntingdon (Hinchingsbrooke)	1.67 in. or 7.5 per cent.
„ Great Abington (Abington Hall)	1.85 „ 8.4 „

Part II.—Abstract.

With the single exception of the general tables of total rainfall at the end of *British Rainfall* there is no branch of the study of rainfall which has been carried on on such a uniform plan as has that of the maximum daily rainfall of the year, and although slight changes have been introduced from time to time in the tables in this section, some, at least, of them date back to 1865, the year 1914 now added being the fiftieth of the series. There are many points in which these tables fall short of perfection, but as considerable space has been devoted to the subject in recent volumes, we do not propose to dwell on it in detail at present.

Table I. sets out the 20 highest maximum daily readings observed during the year. It should be noted that in no year is more than one fall at the same station given, and that at the rainiest stations such as those in the English Lake District and Snowdonia several other daily records in 1914 were larger than those lower down in the list. Of the maximum falls in 1914 that of 6.35 in. at Pen-y-Gwryd on August 8th, was easily the largest, no other record giving more than 5 inches. Six of the entries in the table are of records taken on the same day, but the figures are in no case, with the exception of Pen-y-Gwryd, remarkable for stations of such high annual rainfall. The other entries in the table, with two exceptions, refer to winter rainfalls, of which two occurred in January and all the others during the very rainy December, when strong westerly or south-westerly winds brought abnormally heavy rains to the western districts of the British Isles. The two exceptions were examples of thunderstorm rains, one occurring at Tibberton, in north-west Gloucestershire, during the storm of July 1st, and the other at Richmond Park, in the storm of June 14th. Table I. shows, incidentally, that there were only ten stations, out of the 4,360 for which records were received, at which a daily fall of as much as 4 inches was observed during the year.

In Table II. it is possible that the fall of 3.70 in. at Richmond Park, on June 14th, would have headed the list, but the total rainfall for the year at that station has unfortunately not reached us, and we are unable to give the percentage value. As it is, the first place must be given to the very local storm of May 22nd, at Upminster, which yielded 14.8 per cent. of the small annual total at that station. The remainder of the table consists of the most noteworthy records during the thunderstorms of June 14th and July 1st, and the cyclonic rainfall of July 16th in Yorkshire, and also includes two readings during the great Irish rainfall of

August 14th. As was the case with the records quoted in Table I. the maximum percentage values in 1914 were by no means high, and there is no doubt that the absence of very large daily falls was a feature of the year.

TABLE I.—*The Largest Maximum Falls in 1914.*

Date.	Div.	Station.	Depth.	Per Cent	Total.
Aug. 8	XI.	Snowdon, Pen-y-Gwryd	6·35	4·1	154·26
Dec. 17	X.	Borrowdale, Grange	4·86	5·0	96·81
Aug. 8	X.	„ Seathwaite	4·71	3·7	128·91
„ 8	XI.	Blaenau Festiniog, Llechwydd Quarries	4·66	4·6	101·68
Dec. 17	XI.	Snowdon, Old Road	4·40	3·6	122·82
„ 17	XI.	„ Cwm Dyli	4·30	3·2	132·82
Aug. 8	VIII.	Coniston, Holywath	4·29	4·5	95·55
Dec. 25	XXIII.	Mourne Mountains, Foffany Res.	4·25	5·3	80·20
Aug. 8	X.	Borrowdale, Rosthwaite	4·10	4·0	101·24
Dec. 17	X.	Ambleside, Skelwith Bridge	4·07	4·7	86·06
„ 17	XI.	Lake Cowlyd, Llethyr Gwyn	3·96	4·0	98·29
July 1	VI.	Tibberton Court	3·91	12·2	32·21
Dec. 17	VIII.	Skelwith Fold [Ambleside]	3·87	4·6	84·61
„ 2	XIV.	Dougliehill Filters	3·85	6·3	60·79
„ 17	XI.	Lake Cowlyd, Ffrith Carreg Wen ..	3·71	3·5	106·56
Jan. 8	IX.	Slaidburn, Brennand	3·70	5·5	67·51
June 14	II.	Richmond Park, Thatched Ho. Lodge	3·70	..	..
Jan. 25	XV.	Ardgour House	3·63	3·4	106·97
Aug. 8	XV.	Dungeon Ghyll	3·55	3·2	111·36
Dec. 2	XIV.	Parkhill Filters	3·54	6·9	51·50

TABLE II.—*The Largest Maximum Percentages in 1914.*

Date.	Div.	Station.	Per Cent.	Depth.	Total.
May 22	IV.	Upminster, High House	14·8	3·35	22·60
July 1	VI.	Tibberton Court	12·2	3·91	32·21
June 14	I.	Rochampton, Highwood	11·2	2·99	26·62
July 16	IX.	Whitby, Park Hall, Aislaby	11·1	3·37	30·38
June 14	III.	Staines, Belle Vue	11·0	3·48	31·54
July 16	IX.	Sleights, Brook Park	10·6	3·00	28·37
June 14	II.	Wimbledon, Sewage Works	10·4	2·64	25·40
„	I.	Streatham, Southwark W.W.	10·4	2·45	23·57
July 16	IX.	Whitby, Mulgrave Castle	10·3	3·03	29·35
„	IX.	„ Ocean Road	10·3	2·53	24·66
June 14	I.	Ballham, High Road	10·0	2·80	28·09
Aug. 14	XXI.	Monasterevan, Moore Abbey	9·9	3·30	33·30
July 1	VI.	Bridgnorth, Coton Hall	9·7	3·10	31·89
June 14	III.	Teddington, Clarence Road	9·5	2·52	26·62
„	I.	Southfields, Coronation Gardens	9·4	2·58	27·43
July 1	VI.	Nuneaton, Chilvers Coton Vicarage..	9·4	2·45	26·00
June 14	I.	Wimbledon Park, Woodhouse	9·3	2·65	28·58
„	II.	Egham Park	9·2	2·81	30·49
„	I.	Putney Heath Reservoir	9·1	2·43	26·72
Aug. 14	XXI.	Summerhill House	9·1	3·14	34·56

TABLE III.—*Comparison of Maximum Fall and Maximum Percentage with those in previous years.*

Year.	ABSOLUTE HIGHEST RAINFALL.				ABSOLUTE HIGHEST PERCENTAGE.			
	Depth	Per cent.	STATION.	Div.	Per cent.	Depth	STATION.	Div.
	in.					in.		
1865	6·41	5·5	Seathwaite	10	13·0	4·40	Fleckney	7
1866	6·38	3·6	„	„	10·0	2·48	Burton	6
1867	4·78	17·7	Hartlip	2	17·7	4·78	Hartlip	2
1868	5·60	4·8	Camusinas	15	11·0	4·00	Tongue	19
1869	6·70	4·5	Seathwaite	10	10·0	3·40	Tillydesk	17
1870	6·00	17·1	Tongue	19	17·1	6·00	Tongue	19
1871	4·24	9·6	Melbury	5	11·5	3·62	Warter	9
1872	5·82	3·2	Seathwaite	10	10·0	3·70	Hillington Hall	4
1873	4·20	2·9	„	„	11·8	2·77	Oscott	6
1874	5·32	4·4	Bryn Gwynant	11	11·9	2·50	Welwyn	3
1875	5·33	9·7	Newport W.W.	„	13·2	3·95	Letheringsett	4
1876	4·50	5·5	Foffany	23	8·5	3·70	Cragside	10
1877	4·98	5·3	Skye, Portree	18	9·3	3·09	Wellington	6
1878	4·24	8·6	Springfield	11	11·8	3·90	Haverstock Hill	1
1879	4·05	4·1	Little Langdale	10	12·3	3·80	Cambridge, Merton V.	3
1880	4·75	3·9	Seathwaite	„	11·7	3·34	Marmont Priory Lock	„
1881	5·42	4·7	Sligachan	18	10·6	3·20	Aboyne Castle	17
1882	4·51	3·0	Seathwaite	10	9·1	2·80	Bothalhaugh	10
1883	5·27	9·0	Glen-na-Smoel	21	12·3	4·31	Skegness	7
1884	6·78	5·0	Seathwaite	10	13·8	2·66	Diss, Thelveton	4
1885	4·62	3·2	„	„	9·6	2·62	Beccles, Ellough	„
1886	4·20	9·9	Little Bredy	5	11·5	4·10	Leeds, Methley Park..	9
1887	4·93	13·0	Galway, Queen's Coll.	22	13·0	4·93	Galway, Queen's Coll.	22
1888	5·20	5·4	Wythburn Vicarage	10	11·8	3·24	Rothamstead	3
1889	4·45	16·5	North Ockendon	4	16·5	4·45	North Ockendon	4
1890	7·29	3·7	Ben Nevis Observatory	18	17·2	3·68	Slough, Langley	3
1891	6·14	4·2	Seathwaite	10	14·4	4·00	Montrose, Sunnyside..	16
1892	5·80	4·5	„	„	15·0	4·27	Flax Bourton	5
1893	4·96	3·5	„	„	16·2	4·48	Cranmer Hall	4
1894	7·74	5·1	Ben Nevis Observatory	18	11·1	3·56	Sidcup	2
1895	4·83	16·1	Mellington Hall	11	16·1	4·83	Mellington Hall	11
1896	4·59	3·7	Seathwaite	10	11·1	2·78	Barkby	7
1897	8·03	5·6	„	„	14·1	2·40	Chatteris, Horseyway L.	3
1898	6·70	18·1	Angerton Hall	„	18·1	6·70	Angerton Hall	10
1899	5·21	5·6	Borrowdale, Grange...	„	14·6	3·10	Wallingford	2
1900	5·40	11·9	Ilkley, Cherry Bank...	9	13·1	4·50	Gilstead Filters	9
1901	5·66	5·7	Dungeon Ghyll	10	17·9	4·24	Maidenhead, The Firs	2
1902	5·92	3·8	Ben Nevis Observatory	18	15·5	3·51	Esher Sewage Works..	„
1903	4·78	2·2	„ „ „	„	12·8	4·41	Dartford, West Hill Ho.	„
1904	5·62	6·0	Skelwith Bridge	10	15·8	3·48	Leamington, Binswood Av.	6
1905	5·71	14·0	Glen-na-Smoel	21	14·9	3·98	Cofton Vicarage	5
1906	6·15	4·7	Seathwaite	10	11·9	2·50	Cambridge, Herschel Ho.	3
1907	4·86	9·4	Kingsbridge	5	12·5	3·40	Lincoln, St. Botolph's	7
1908	4·80	9·9	Treharris	11	16·0	3·45	Great Glemham	6
1909	6·46	5·7	Kinlochquoich	18	11·1	3·30	Tidworth Ho. [Ludgershall]	2
1910	4·51	3·4	Seathwaite	10	13·0	3·93	Wheatley, Waterstock	3
1911	7·00	4·7	„	„	14·2	3·25	Haxby, Moorlands ...	9
1912	7·31	21·3	Brundall	4	22·2	6·67	Norwich, Carrow Ho.	4
1913	6·06?	26·0?	Doncaster Pump'g Stn	9	26·0?	6·06?	Doncaster Pump'g Stn	9
1914	6·35	4·1	Pen-y-Gwryd	11	14·8	3·35	Upminster	4

NOTE.—The maximum values in each column are printed in heavy type and the minimum in italic type.

TABLE IV.—*Comparison of the Mean of all the Maximum Falls of 1914 with similar data for previous years.*

Years.	Number of Returns.	Mean Percentage.	Mean Amount.	Mean Total Fall in year.	Ratio taking 33=100.	Total Fall being assumed =33in. Mean Max. =
			in.	in.		
1865.....	481	5.1	1.70	33	100	5.2 per cent
1866.....	590	3.7	1.48	40	121	4.5 "
1867.....	584	4.6	1.44	31	94	4.4 "
1868.....	676	4.3	1.43	33	100	4.3 "
1869.....	637	4.2	1.42	34	103	4.3 "
1870.....	687	4.9	1.30	27	82	3.9 "
1871.....	752	4.9	1.49	30	91	4.5 "
1872.....	743	m 3.4	1.59	M 47	M 142	4.8 "
1873.....	809	4.6	1.35	29	88	4.1 "
1874.....	1010	4.4	1.41	32	97	4.3 "
1875.....	1081	5.0	M 1.83	37	112	M 5.5 "
1876.....	1112	3.9	1.49	38	115	4.5 "
1877.....	1180	3.8	1.56	41	124	4.7 "
1878.....	1186	4.3	1.49	35	106	4.5 "
1879.....	978	4.2	1.52	36	109	4.6 "
1880.....	1117	4.8	1.72	36	109	5.2 "
1881.....	1194	4.1	1.45	35	106	4.4 "
1882.....	1463	3.6	1.42	39	118	4.3 "
1883.....	1505	4.0	1.41	35	106	4.3 "
1884.....	1691	4.8	1.32	28	85	4.0 "
1885.....	1801	4.5	1.41	31	94	4.3 "
1886.....	1718	4.6	1.64	35	106	5.0 "
1887.....	1921	4.5	m 1.14	m 25	m 76	m 3.5 "
1888.....	1974	4.4	1.41	32	97	4.3 "
1889.....	1812	4.8	1.41	29	88	4.3 "
1890.....	2081	5.0	1.46	29	88	4.4 "
1891.....	2218	4.1	1.47	35	106	4.5 "
1892.....	2231	5.4	1.62	30	91	4.9 "
1893.....	2267	4.8	1.30	27	82	3.9 "
1894.....	2321	4.2	1.46	35	106	4.4 "
1895.....	2423	4.5	1.37	30	91	4.2 "
1896.....	2465	4.4	1.33	30	91	4.0 "
1897.....	2598	4.1	1.36	33	100	4.1 "
1898.....	2691	5.0	1.42	28	85	4.3 "
1899.....	2791	4.7	1.42	30	91	4.3 "
1900.....	2702	4.6	1.61	35	106	4.9 "
1901.....	2747	M 5.7	1.58	28	85	4.8 "
1902.....	2832	4.4	1.20	27	82	3.6 "
1903.....	2936	4.0	1.67	41	124	5.1 "
1904.....	3093	4.6	1.31	29	88	4.0 "
1905.....	3250	4.8	1.31	27	82	4.0 "
1906.....	3365	4.5	1.40	31	94	4.2 "
1907.....	3465	4.1	1.32	32	97	4.0 "
1908.....	3596	4.4	1.31	30	91	4.0 "
1909.....	3666	4.4	1.51	34	103	4.6 "
1910.....	3894	3.8	1.34	35	106	4.1 "
1911.....	4130	4.2	1.38	33	100	4.2 "
1912.....	4315	3.8	1.57	41	124	4.8 "
1913.....	4408	3.9	1.31	34	103	4.0 "
Average.	2065	4.4	1.45	33	100	4.4 "
1914.....	4360	4.1	1.50	37	112	4.5 "
Difference	+2295	-0.3	+0.05	+4	+12	-0.1 "

Table III. compares the largest individual fall and the largest individual percentage observed in the year with similar figures for previous years. With the increased representation of rainy parts of the country, as the number of stations grows, the chance of a large daily rainfall being missed decreases, but it is extremely probable that larger rainfalls may have occurred during some years than the records quoted. Higher daily readings than the record of 6·35 in. at Pen-y-Gwryd have been observed in 11 out of the 49 years, six of the instances having been at Seathwaite and two at Ben Nevis Observatory, where the records ceased in 1904. No higher record appears for any Welsh station, though this is probably on account of the scarcity of daily records in the rainy Snowdon district. The columns on the right hand side of the table give the highest percentage value for each year, and show that the figure of 14·8 at Upminster ranks neither very high nor very low among the highest percentages observed in the 50 years.

Summary of Maximum Falls in 1914.

	No. of Records.	Mean Amount.	Mean Percent- age of Annual Fall.	Falls of 2·00 in. or more.	Per Cent. of Total Number.	Falls of 3·00 in. or more.	Per Cent. of Total Number.
		in.		No.		No.	
England & Wales...	3603	1·51	4·3	468	13·0	59	1·6
Scotland	497	1·51	3·4	100	20·1	26	5·2
Ireland	260	1·45	3·6	34	13·1	6	2·3
British Isles...	4360	1·50	4·1	602	13·8	91	2·1

In Table IV. are compared the mean values of all the data for each year. It will be seen that by this method of computation the mean amount of the maximum daily rainfall at each station in 1914 was ·05 in. above the average value and that the mean percentage of the annual rainfall was 0·3 per cent below the average. The table shows that there is not a very wide range in such values from year to year but that even so the deviation from the average in 1914 was very slight. Such deviation as occurred shows that whilst the maximum falls of the year were a little higher than usual the increase was not quite proportional to the increase in total annual rainfall.

Dealing with the data for the great divisions of the British Isles separately we find that the mean maximum fall differed much less than usual, the amount for England and Wales being this year equal to that

for Scotland, viz., 1·51 in., and that for Ireland being only ·06 in. lower. Ten years' data can be compared and it appears from these that the value for England was the second highest in that period, 1912 giving 1·56 in., on account of the great rainfall in East Anglia during that year, whereas for Scotland the 1914 value was the lowest with two exceptions, since 1905. In Ireland the figure was about normal. The number of stations having falls of 2·00 in. or more, and 3·00 in. or more, respectively, was high in all the great divisions, though least marked in Scotland.

Comparison of Maximum Falls.

	No. of Records.	Mean Amount. in.	Mean Percent- age.	Falls of 2·00 in. or more. No.	Per Cent. of Total.	Falls of 3·00 in. or more. No.	Per Cent. of Total.
ENG. & WALES—							
1905.....	2719	1·28	4·9	176	6·5	12	0·4
1906.....	2846	1·31	4·6	310	10·9	24	0·8
1907.....	2915	1·30	4·2	95	3·3	16	0·6
1908.....	3002	1·26	4·5	178	5·9	25	0·8
1909.....	3069	1·47	4·4	427	13·9	37	1·2
1910.....	3254	1·34	3·8	232	7·1	30	0·9
1911.....	3430	1·34	4·3	278	8·1	58	1·7
1912.....	3643	1·56	3·9	546	15·0	105	2·9
1913.....	3663	1·30	4·1	316	8·6	51	1·4
1914.....	3603	1·51	4·3	468	13·0	59	1·6
SCOTLAND—							
1905.....	332	1·29	3·5	32	9·6	2	0·6
1906.....	325	1·68	3·9	78	24·0	6	1·8
1907.....	342	1·59	3·9	21	6·1	3	0·9
1908.....	386	1·54	4·2	68	17·6	9	2·3
1909.....	393	1·81	4·3	117	29·8	31	7·9
1910.....	405	1·51	3·6	63	15·6	2	0·5
1911.....	467	1·63	3·6	116	24·9	27	5·8
1912.....	435	1·75	3·5	110	25·3	25	5·8
1913.....	503	1·35	3·4	59	11·8	9	1·8
1914.....	497	1·51	3·4	100	20·1	26	5·2
IRELAND—							
1905.....	199	1·88	5·9	72	36·2	31	15·6
1906.....	194	1·14	3·3	7	3·6	0	0·0
1907.....	208	1·21	3·1	2	1·0	2	1·0
1908.....	208	1·47	4·0	29	13·9	2	1·0
1909.....	204	1·46	4·0	14	6·9	1	0·5
1910.....	235	1·48	3·6	23	9·8	1	0·4
1911.....	233	1·41	3·7	22	9·4	2	0·9
1912.....	237	1·46	3·5	28	11·8	1	0·4
1913.....	242	1·45	3·6	31	12·8	2	0·8
1914.....	260	1·45	3·6	34	13·1	6	2·3

Table V. shows that taking the British Isles as a whole the number of stations reporting 2·00 in. or more was 13·8 per cent. of the whole, while 2·1 per cent. of the stations had falls of 3·00 in. or more, these figures being respectively 2·2 and 0·4 above the average.

TABLE V.—*Maximum Falls in each year exceeding 2·00 in., and exceeding 3·00 in.*

Year.	Total number of records.	Falls of 2·00 in. or more.		Falls of 3·00 in. or more.	
		Number.	Per cent. of total No.	Number.	Per cent. of total No.
1882	1463	140	9·6	8	0·6
3	1505	170	11·3	23	1·5
4	1691	138	8·2	9	0·5
5	1801	179	10·0	24	1·3
6	1718	158	9·2	44	2·6
7	1921	52	<i>m</i> 2·7	4	<i>m</i> 0·2
8	1974	374	18·9	34	1·7
9	1812	170	9·4	24	1·3
1890	2081	345	16·6	54	2·6
1	2218	270	12·2	39	1·8
2	2231	470	21·1	81	<i>M</i> 3·6
3	2267	183	8·1	29	1·3
4	2321	313	13·5	36	1·6
5	2423	249	10·3	31	1·3
6	2465	249	10·1	16	0·6
7	2598	275	10·6	62	2·4
8	2691	373	13·9	72	2·7
9	2791	283	10·0	43	1·5
1900	2702	641	<i>M</i> 23·7	89	3·3
1	2747	497	18·1	68	2·5
2	2832	163	5·8	30	1·1
3	2936	625	21·3	83	2·8
4	3093	246	8·0	29	0·9
5	3250	280	8·6	45	1·4
6	3365	395	11·7	30	0·9
7	3465	118	3·4	21	0·6
8	3596	275	7·7	36	1·0
9	3666	558	15·2	69	1·9
1910	3894	318	8·2	33	0·8
1	4130	416	10·1	87	2·1
2	4315	684	15·9	131	3·0
3	4408	406	9·2	62	1·4
Average ..	2699	313	11·6	45	1·7
1914	4360	602	13·8	91	2·1
Difference	+1661	+289	+2·2	+46	+0·4

MONTHLY RAINFALL.

It is possible that at some future time *British Rainfall* will include an account of the distribution of rainfall on every day in the year, instead of only on those days upon which exceptional conditions prevail, but as yet the shortest division of time for which we find it convenient to discuss every successive period, whether normal or abnormal in respect of rainfall, is the calendar month. This interval of time presents the advantage of being sufficiently short to enable a fair idea to be obtained of the fluctuations of rainfall within the year, whilst at the same time sufficiently long to enable average values to be established which have a definite climatological meaning. The averages referred to in this section cover the period of 35 years from 1875-1909, and are the same as those discussed in the article on Isomeric Rainfall Maps in Part I. of this volume, to which the reader is referred.

Each map of monthly rainfall on the left-hand page at each opening from p. [140] to p. [163] is compiled from observations at more than 2000 stations. These maps, drawn in the first instance from about 1000 records, for publication in the *Monthly Weather Report* of the Meteorological Office, and subsequently completed and revised by means of the records received at the end of the year, were plotted on skeleton maps on a scale of 19 miles to one inch. The isohyets on these maps were drawn in accordance with the plotted rainfall records and the relationships known to exist between the distribution of rainfall and the configuration of the land in conjunction with the prevailing rain-bearing winds. After being drawn the lines on the maps were copied by hand on the scale of 60 miles to an inch, and finally photographed for reproduction reduced to the largest size compatible with our page, which this year has enabled a slight increase to be made. For the purpose of aiding the reader in locating any particular spot on the map the county boundaries are shown, but we should like it to be widely known that the originals of these maps, measuring 33 in. by 29 in., are preserved at Camden Square, and can be consulted there by any Observer who desires to avail himself of the opportunity. A selection of the records

used in the construction of the maps is given in the table on pp. [167]-[175]. This table comprises 301 records carefully selected from amongst the most trustworthy, so as to give, as far as possible, an equal distribution over the country.

The maps depicting the relation of the rainfall of each month to the average are of necessity far less detailed than those showing the actual rainfall, since the number of records for which averages of 35 years are available is limited. About 120 such records have been used and the percentage which the fall during each month bore to the average fall for that month forms the material from which the maps were constructed. In drawing the lines the maps of actual rainfall were kept in view, and as far as possible full effect has been given to minor local variations, which might otherwise escape notice on account of the larger mesh of the network of stations available. Of the 120 records, 106, carefully selected for their equable distribution, are given in Table I., and from these records the general values of percentage of the average in the great divisions of the British Isles were calculated. The positions of the stations are indicated by dots on the map for January, the dots being hollow in the case of stations not quoted in Table I. In order to avoid delay in publication on account of the depletion of the staffs of the British Rainfall Organization and of the engravers, owing to the war, the positions of stations have not been shown on the maps for the other months.

Taking the British Isles as a whole, five months in 1914 were wet and seven dry. The year opened with a dry month, January having only 79 per cent. of the average, but the other winter months were all wet, and the most marked feature of the year was the pronounced wetness of February-March and November-December. The rainfall in the earlier of these two wet periods was 160 per cent. of the average in February and 162 per cent. in March. The excess in neither month was very exceptional, but for the two considered together was noteworthy. It should of course be borne in mind that the spring months are, for the British Isles as a whole, the driest period of the year, and that the total fall during February and March would not have been very greatly in excess of the average of any two autumn months. The second wet period in 1914, consisting of November and December, formed only the first half of the most rainy winter experienced in the British Isles during half a century. The rainfall of November was 132 per cent. of the

average, and was, in itself, not by any means without precedent, but the fall in December reached the great figure of 180 per cent. For the two months together the rainfall was 157 per cent. of the average, or relatively slightly less than in February-March, when it amounted to 161 per cent. The only other wet month in the year was July, but the surplus was very slight, the fall being 107 per cent. of the average. This month formed the only break in a summer of persistently deficient rainfall. The fall during April, May, and June was not, however, remarkably small, the general amounts being respectively 81, 85, and 68 per cent. of the average. but during August, September, and October the deficiency was rather more marked, the percentages being 88, 67, and 56. October was the driest month of the year, but many previous Octobers have been drier.

In England the months with excess and deficiency respectively were the same as in the British Isles as a whole, but whilst February did not have more than 137 per cent. of the average, the excess in March and December was more pronounced, the former having 185 and the latter 207 per cent. of the average. July was the only wet summer month and the driest months were April, September, and October, with 64, 63, and 64 per cent. of the average respectively.

In Wales as a whole February and March were together slightly wetter than in England, the falls amounting to 159 and 185 per cent. July was also wetter than in England, with 149 per cent., but November and December slightly less so, with 120 and 193 per cent. respectively. Wales however, was not greatly behind England in the very remarkable rainfall of December. As in England all the months of the year, except those already mentioned, were dry, and the deficiency was most marked in October, which had only 46 per cent. of its rather large average fall.

Scotland differed from other parts of the British Isles in having a general rainfall equal to or greater than the average in each of the first five months of the year. The excess was, however, not very great, the wettest month in the period being February, with 160 per cent. of the average, whilst January and May had only 101 and 100 per cent. respectively, that is to say they were really average months. Scotland also differed from the remainder of the British Isles by having a deficient general rainfall in July, when only 85 per cent. of the average fell. The five consecutive months from June to October each had less than the average, the driest being again October, with 48 per cent., this being one of the driest Octobers ever experienced in Scotland. November

and December were less remarkable for wetness than in England or Ireland, the percentage of the average being 136 and 146.

Ireland shared with Great Britain the high general rainfall in February-March and November-December, and in February had the greatest excess of any of the great divisions of the British Isles, the rainfall being 199 per cent. of, or practically double, the average. July had slightly more than the average as in England, but in Ireland this was followed by a wet August owing to the great rainfall on the 14th, and the fall for that month was 113 per cent of the average. January, April, May, June, September, and October all had deficient rainfall, the fall in October, which was the driest month, being 57 per cent. of the average.

There is no question December was the most remarkable month of the year so far as rainfall is concerned. The great rainfall has been mentioned coupled with the more moderate excess in November because these two months formed the earlier stages of a winter, the whole of which was, in England and Wales at any rate, and probably also in Ireland, one of the wettest of which any record has been preserved.

A preliminary discussion of the rainfall of the winter as a whole was given in a paper by Dr. H. R. Mill and Mr. H. E. Carter, read before the Royal Meteorological Society in May, 1915, but a full discussion must, of course, be deferred until it can be dealt with in *British Rainfall, 1915*. With regard to the rainfall of December, 1914, it is a matter of interest to refer to our treatment of previous wet Decembers in *British Rainfall, 1911*, p. [178], which dealt with all previous instances of wet Decembers in the last 50 years, on the occasion of the remarkably wet December of that year. The only two wetter Decembers previously observed were those of 1868 and 1876, and these three may now be compared with December, 1914. The little sketch maps given in *British Rainfall, 1911*, on p. [177], enable the general outlines of the distribution to be seen at a glance, and they can readily be compared with the map of December, 1914, on p. [162] of this volume. It will be observed that the areas with more than 10 inches of rain, shown in solid black, are considerably more scattered in the 1914 map than in the others, but it should be pointed out that as the number of rainfall stations grows and their distribution improves, it is possible to define these areas with greater precision, and a similar effect would probably have been seen in the earlier maps had more data been available. The relative wetness of the four Decembers may be compared by measuring the areas over which various amounts

of rain fell, and the following comparison, which refers to England and Wales, gives the result of such measurement :—

		<i>Area in square miles.</i>							
DECEMBER.		Less than 4 in.		4—6 in.		6—8 in.		8—10 in.	More than 10 in.
1868	...	3,646	...	17,750	...	18,748	...	10,217	7,947
1876	...	3,885	...	18,693	...	16,205	...	12,935	6,590
1911	...	12,698	...	16,536	...	10,674	...	8,990	9,410
1914	...	920	...	20,860	...	16,770	...	11,830	7,928

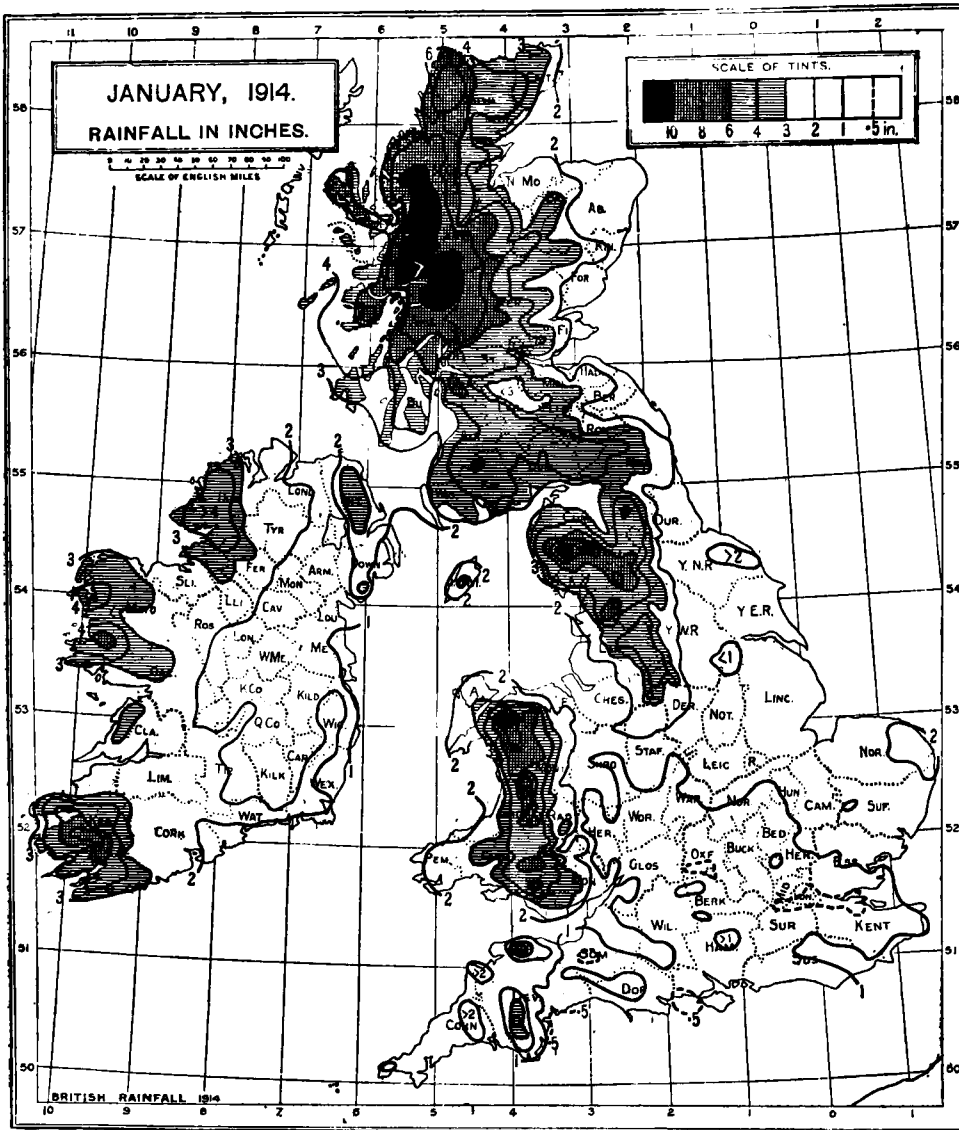
It will be seen that December, 1914, had by far the smallest area with less than 4 inches of rain, and an area with more than 10 inches practically the same in extent as in 1868, but considerably less than in 1911. In 1911, however, the area with less than 4 inches was larger than in any of the other wet Decembers examined and the general rainfall was, on that account, the lowest of the four.

The general rainfall for England and Wales, as computed from large scale maps by planimeter measurement gives the following results :—

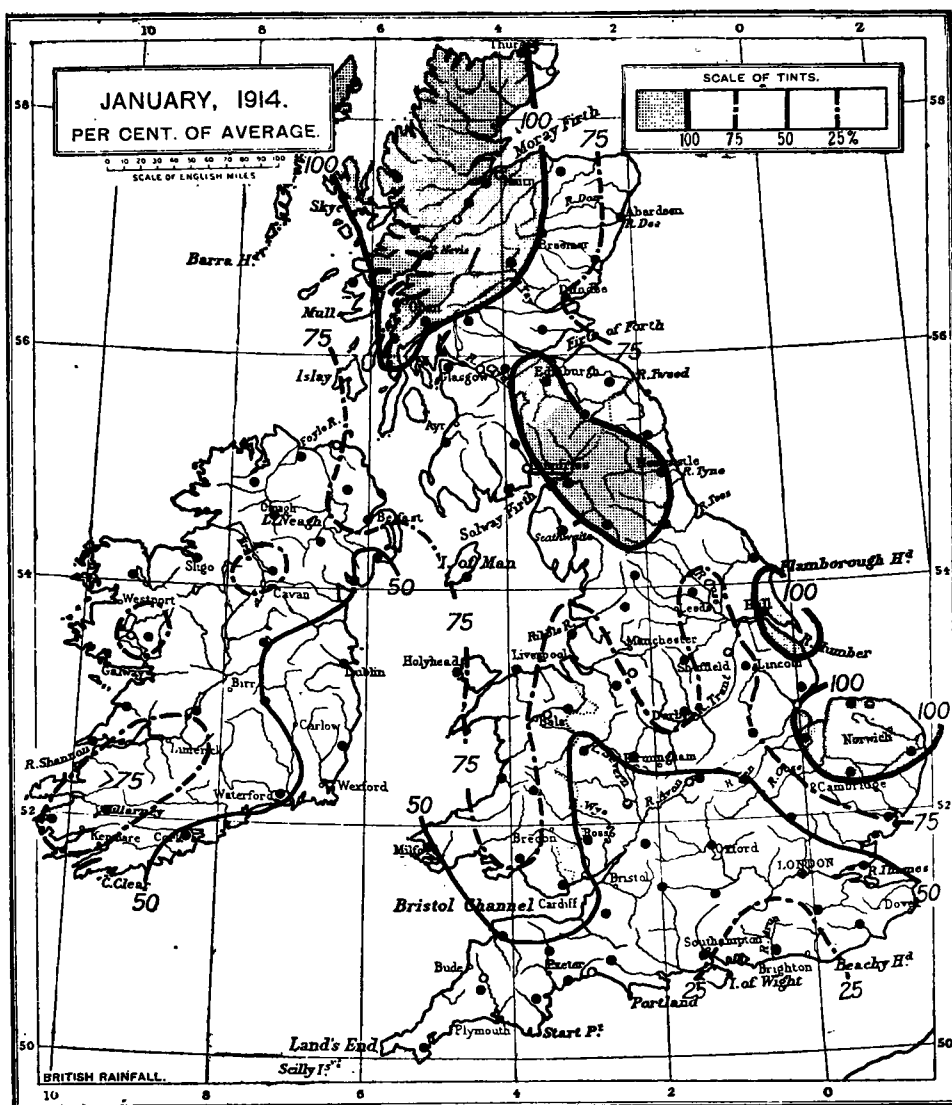
DECEMBER	1868.		1876.		1911.		1914.
	in.		in.		in.		in.
General Rainfall	7·39	...	7·24	...	7·03	...	7·37

Values of such an amount cannot of course be trusted to so close a margin as ·02 in., but they are the most accurate determinations possible. December, 1914, and December, 1868, must be regarded as equal, and December, 1876, and 1911, as only slightly less wet.

Popular misconceptions have not infrequently been referred to in these pages, and the opportunity may be taken here to controvert the curiously widespread impression that the heavy rains of November and December were connected in some way with the military operations in France and Flanders. The usual argument appears to be that the unprecedented rain of December occurred after the unprecedented consumption of high explosives in the early months of the war, and that two unprecedented phenomena, occurring simultaneously, or nearly so, must stand to each other in the relation of cause and effect. An exactly similar argument was brought forward in 1903 to explain the unprecedented wetness of that year as an effect of the introduction of transatlantic wireless telegraphy. The fact that 1852 and 1872 were equally wet years showed that wireless telegraphy was not required to account for the phenomenon. Similarly the fact that the Decembers of 1868, 1876, and 1911 were practically as wet as December, 1914, shows that a war is not necessary to produce an abnormally wet winter month.



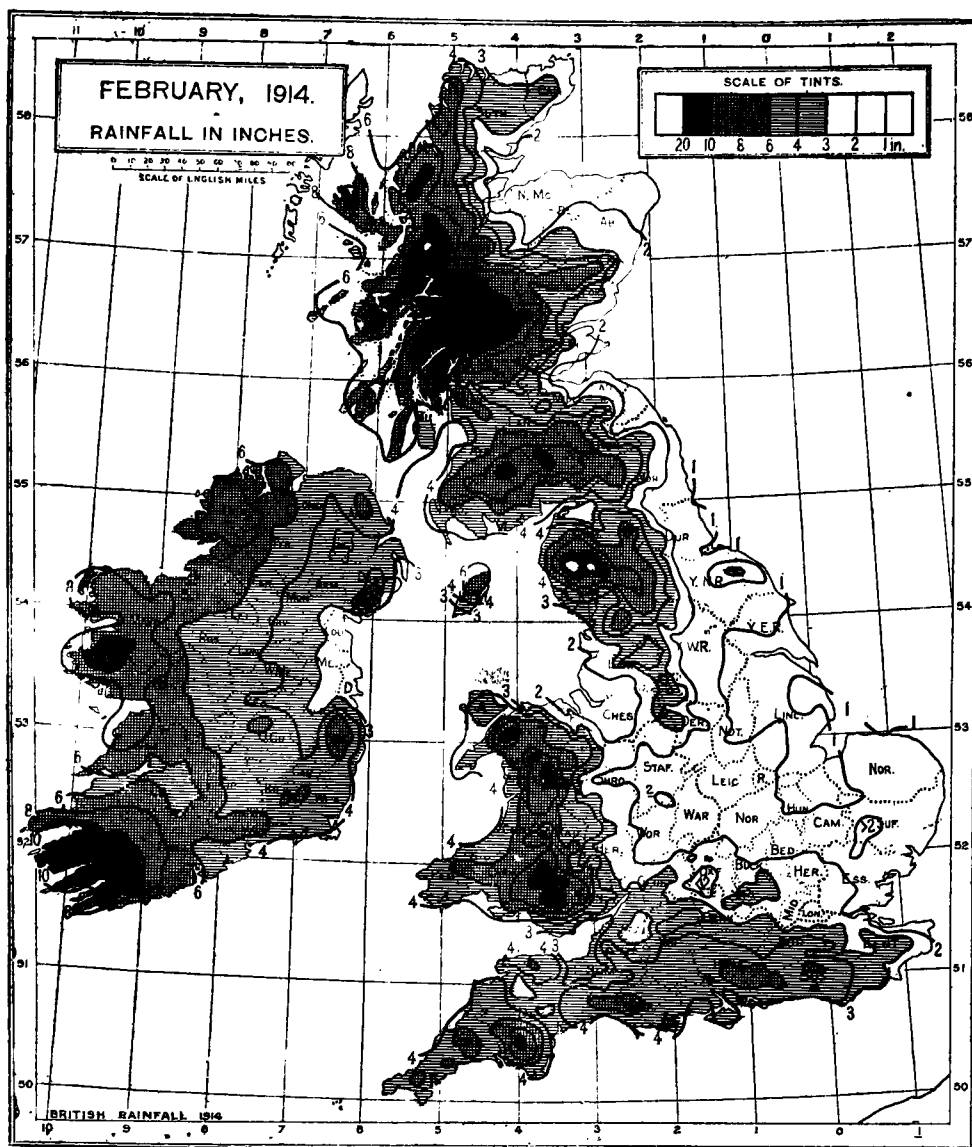
January.—Anticyclonic conditions prevailed generally and the rainfall was unusually slight, but disturbed weather occurred towards the end and heavy rain fell in the more westerly districts. The total fall was less than one inch over the south of England generally, falling as low as .50 in. in the lower Thames Valley. Less than 2 inches fell everywhere in England and Wales except the uplands, and also in the east of Scotland and Ireland. In the west of Ireland the areas with more than 4 inches were exceptionally small for a mid-winter month, but more than 4 inches fell over the west of Scotland and the rainiest part had more than 10 inches. On limited areas in the northern Pennines and in North



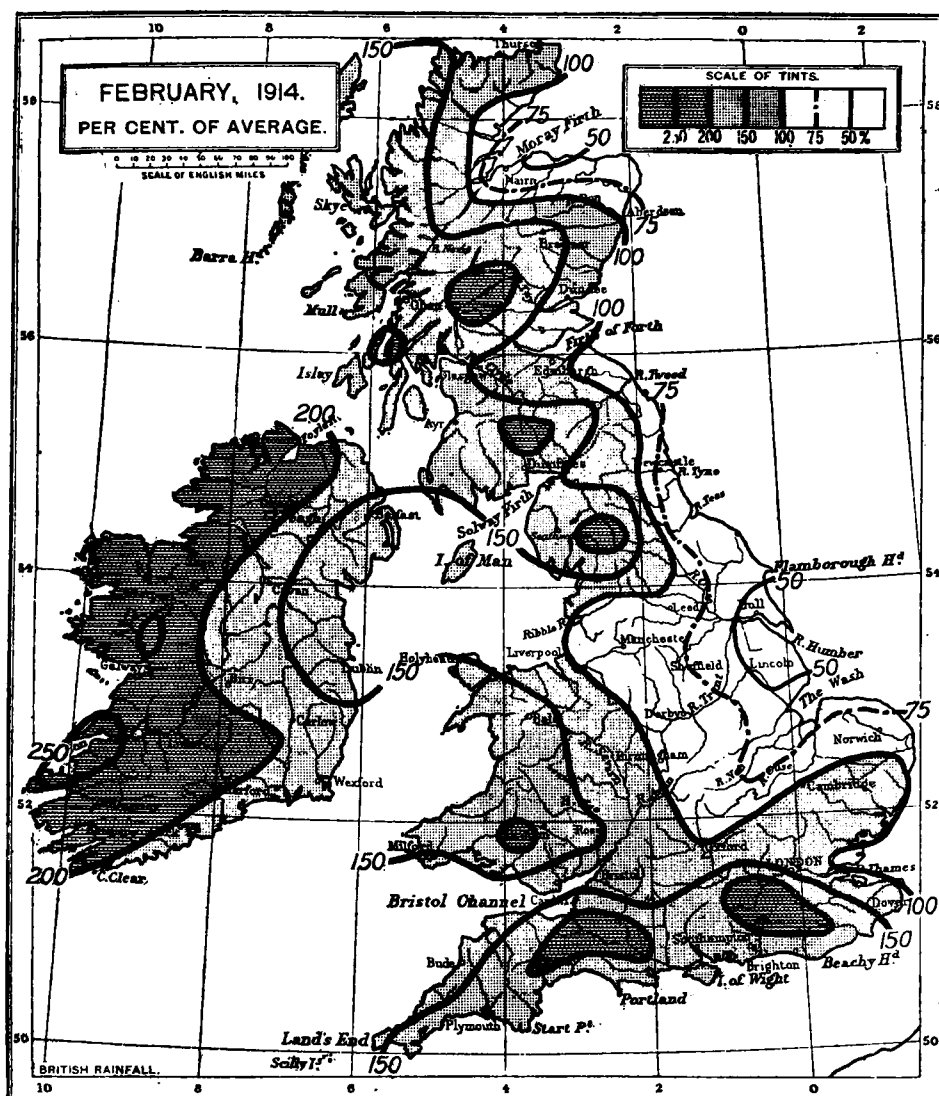
and Central Wales more than 6 inches fell, but the area with more than 10 inches was very small.

The only places with more than the average rainfall were the north-western half of Scotland, a patch stretching from Midlothian to Westmorland and part of the east coast of England. Less than half the average fell in the south of England and the east of Ireland, and less than a quarter in Sussex.

The general rainfall was 1 per cent. above the average in Scotland, but England, Wales and Ireland had deficiencies of 34, 31, and 34 per cent., respectively, the general fall for the British Isles being 21 per cent. below the average.



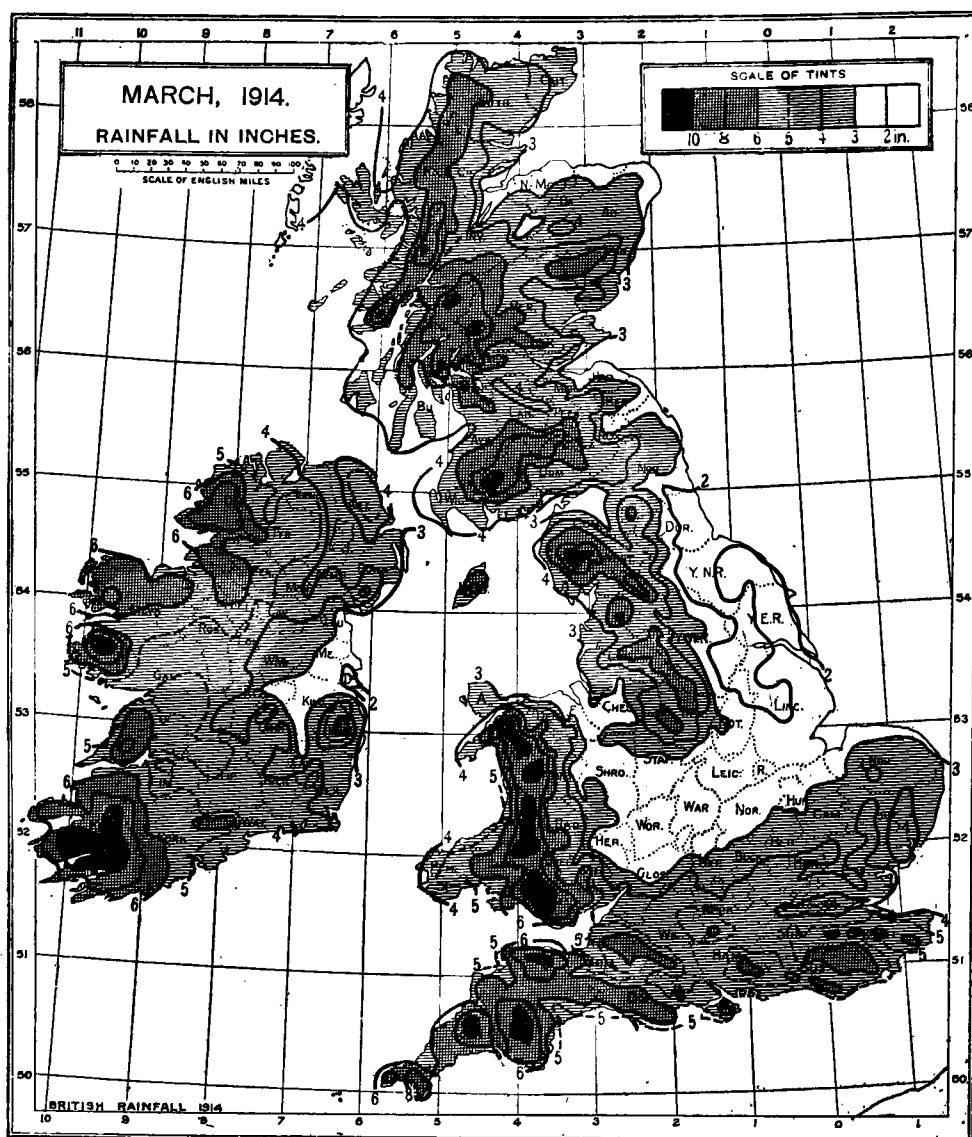
February.—A month of persistent south-westerly winds with a very large number of depressions travelling in unusually northerly tracks. Repeated heavy rainfalls occurred in the exposed westerly districts of Scotland, and almost uninterrupted rainfall of less intensity on the Atlantic coast of Ireland, where more than 10 inches fell in the most rainy parts. Upwards of 20 inches fell in part of the English Lake District. More than 4 inches fell in the south of England and practically everywhere in the west. In Ireland less than 3 inches fell only over a small area stretching from the coast of Down to Dublin, but owing to the almost entire absence of easterly winds the rainfall in the east of Great Britain was slight, and less than an inch of rain fell in part of



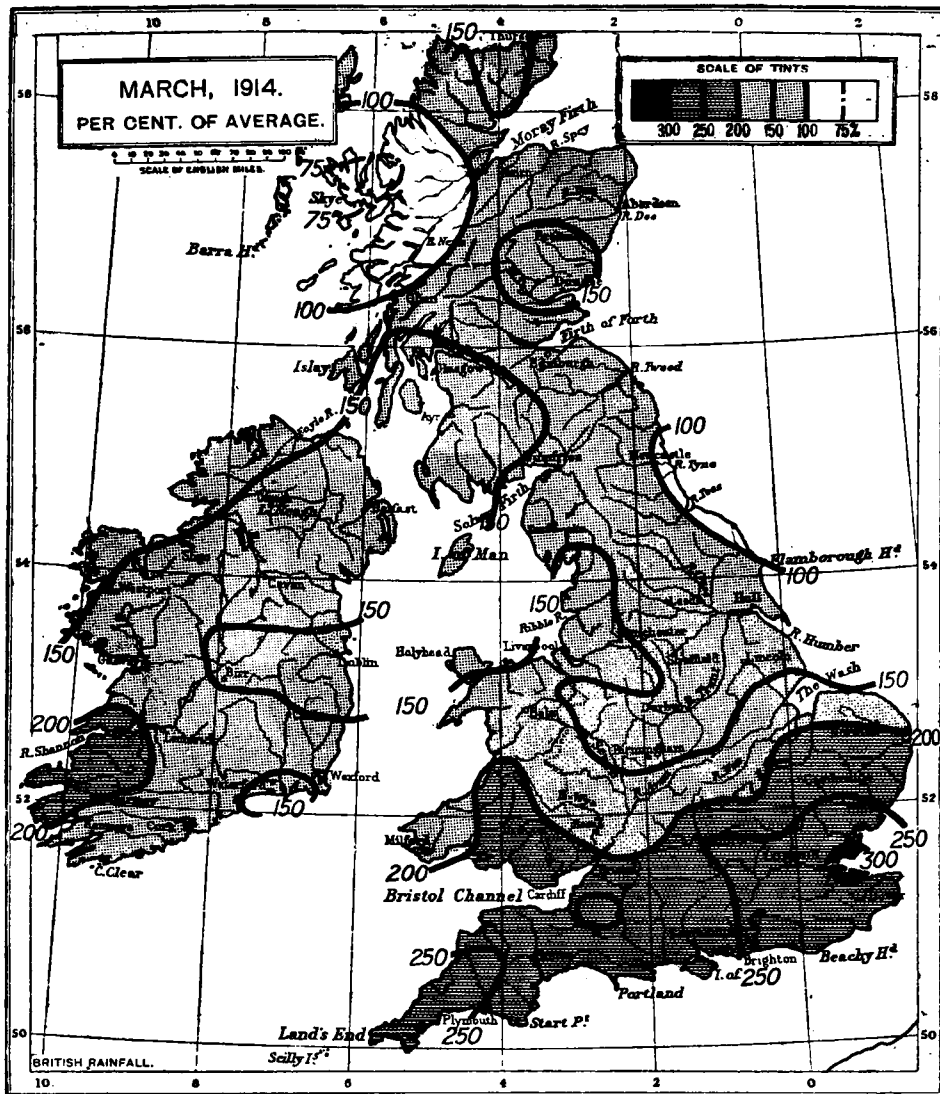
the east of England and less than 2 inches in the English Midlands and most of the east coast of Scotland.

The western half of Ireland and isolated areas in the west and south of Great Britain, had more than twice the average rainfall, but less than the average amount fell over the whole of the east of Great Britain, north of Cambridgeshire. Two small areas, respectively near the Moray Firth and the Humber estuary, had slightly less than half the average.

The rainfall was excessive in all the great divisions of the country, most so in Ireland, where the fall was 99 per cent. above the average. The excess in Scotland was 60 per cent., in Wales 59 per cent., and in England 37 per cent., that for the whole country being 60 per cent.



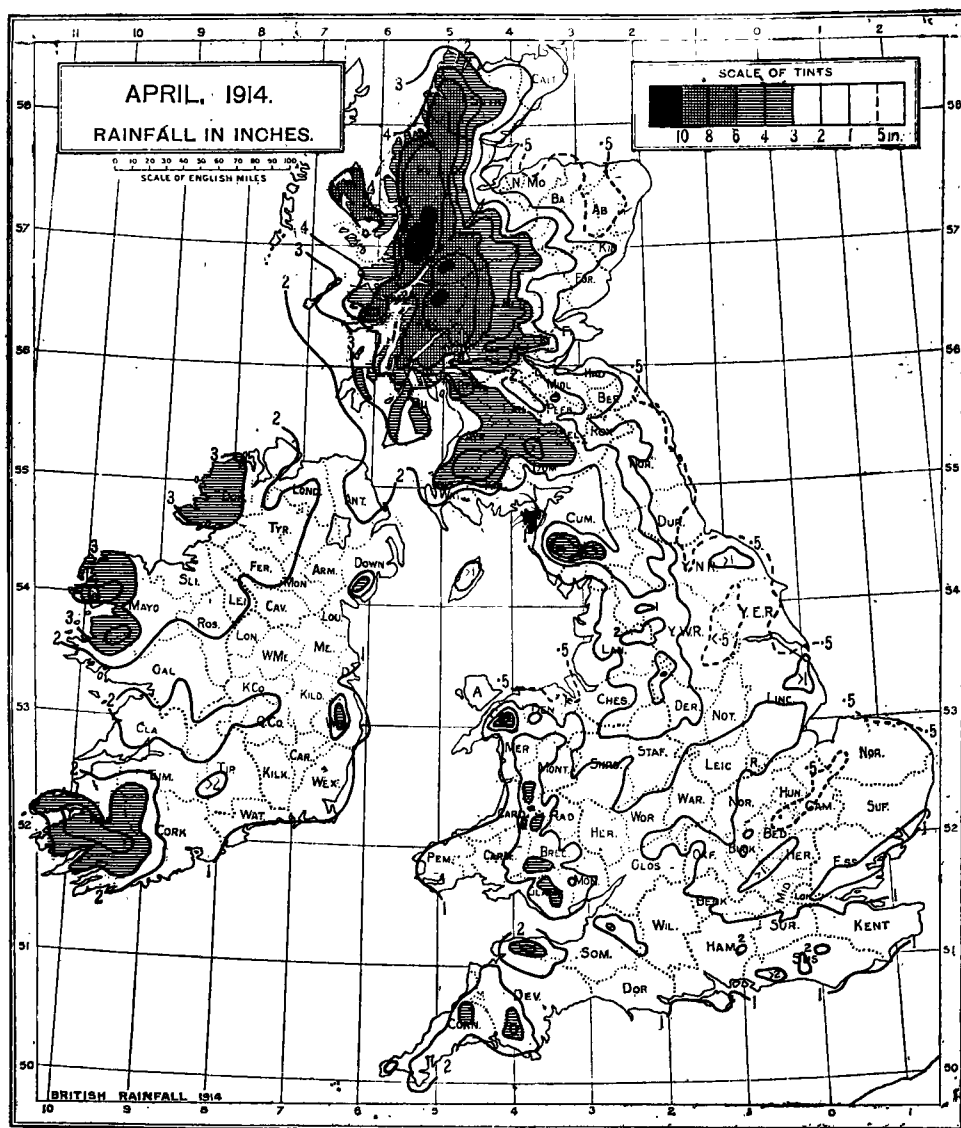
March.—Another month of disturbed atmospheric conditions, but the numerous depressions followed more southerly tracks than in February, and while persistent and excessive rain fell in the south-west of Ireland and south of England, the west of Scotland was less rainy. In the west of Ireland persistent rainy conditions continued throughout the month and more than 6 inches fell, with more than 10 inches in Kerry and Mayo. More than 6 inches fell in the West Highlands, but more than 10 inches only over very small areas. This amount, however, was recorded over a large part of Wales and the Devon-Cornwall peninsula, and more than 6 inches fell in the south of England as far east as Dover, a very unusual occurrence for a spring month. Less than 3 inches fell



in the east of Ireland, in the north Midlands of England, and round the Firths of Moray and Forth.

A small area in the north-east of England, and part of the west of Scotland, had less than the average, but there was an excess of more than 50 per cent. everywhere in the south of the British Isles, the fall reaching twice the average in Kerry and in the south of England, and three times the average in the Thames estuary.

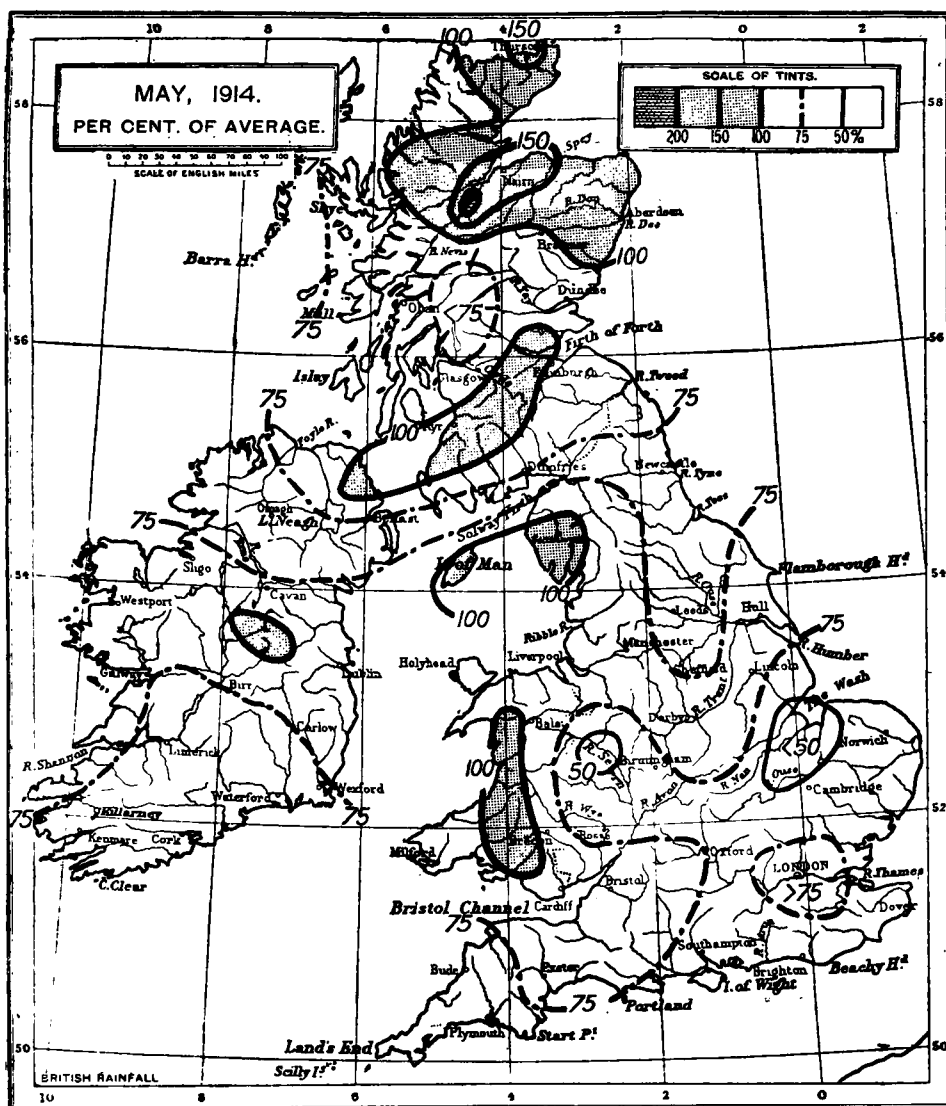
England and Wales were the wettest of the great divisions each with an excess of 85 per cent., whilst Ireland had 69 per cent., and Scotland 27 per cent., above the average. For the British Isles as a whole the excess was 62 per cent.



April.—During the first twelve days the weather continued disturbed and considerable rain fell, particularly in the west of Scotland, but afterwards anticyclonic conditions became established and in the south the remainder of the month was almost rainless. The only appreciable area with more than 4 inches of rain during the month was in the West of Scotland and in a few isolated patches more than 10 inches fell. Comparatively small areas on the west coast of Ireland and insignificant patches in England and Wales had more than 3 inches. Less than one inch fell on a strip of the east coast of Ireland and practically the whole of the east of Great Britain north of Essex, but in the south rather

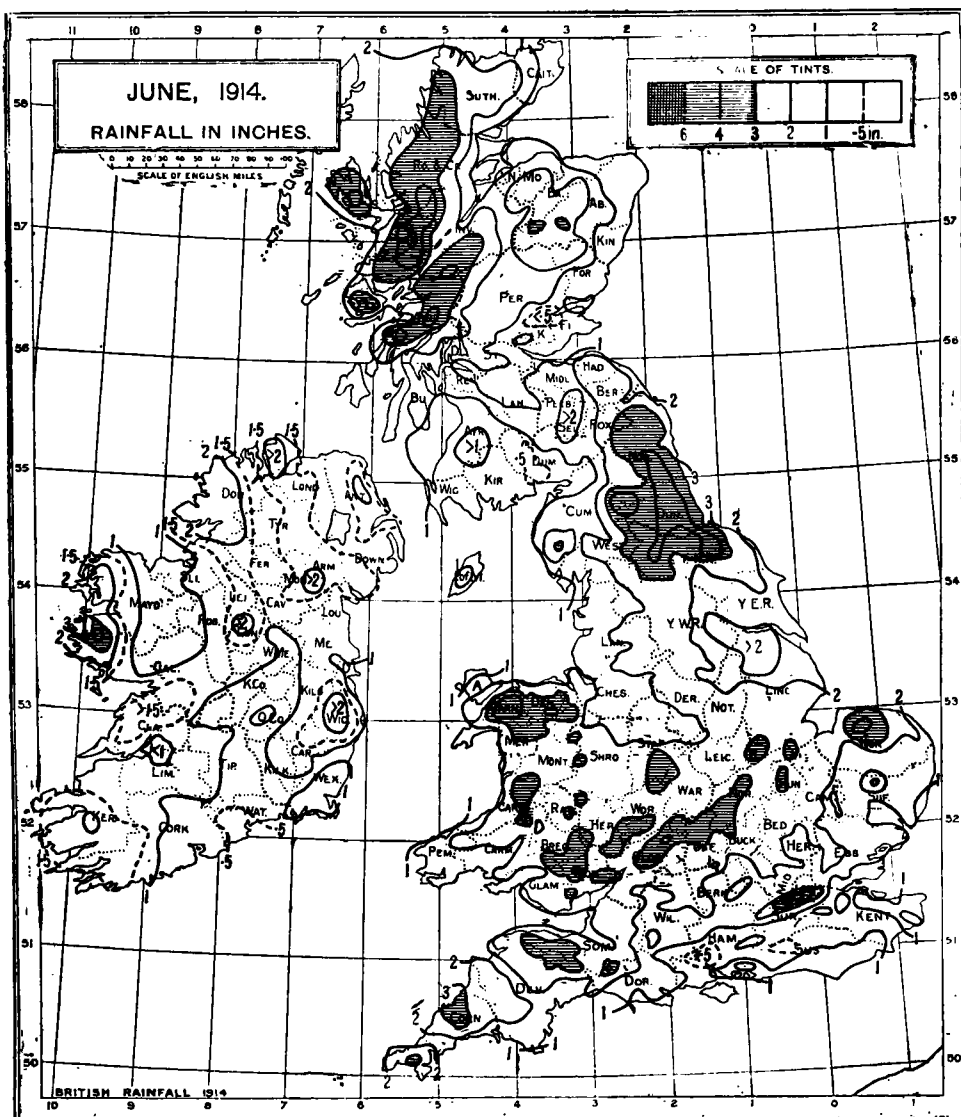


May.—Save for short periods of anticyclonic conditions in the second half the weather was chiefly dominated by slow-moving depressions which were not productive of much rain, except on the 7th and 8th, when heavy rain fell in the north-east of Scotland. Principally on account of this storm the rainfall of the month exceeded 6 inches in scattered areas in the north, but elsewhere that amount was reached only at spots such as Seathwaite and Snowdonia. Most of Scotland had more than 2 inches, but in Ireland less than 2 inches fell generally. In England, save where thunderstorms occurred, falls of 2 inches were confined to the uplands of the west and the amount diminished to less than 1 inch on the south-east coast and round the Wash.

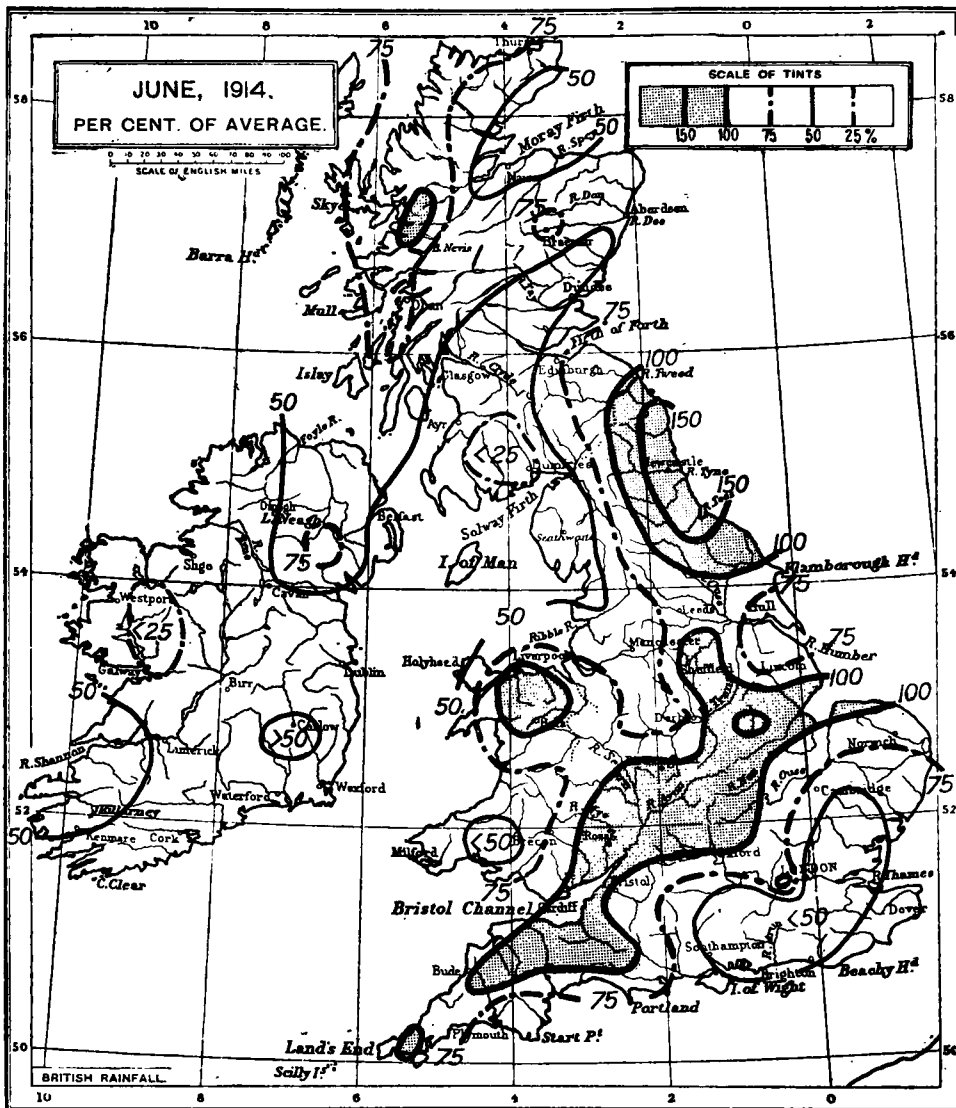


The total rainfall exceeded the average in the north-east of Scotland, and reached twice the average on Loch Ness. There were also small areas in the south of Scotland, central Ireland, and the west of England and Wales, where the fall just exceeded the average, but in most parts differed little from 75 per cent. of the average, falling, however, to less than half the average in two small patches in the English Midlands.

The general rainfall was just equal to the average in Scotland and only 5 per cent. below it in Wales, but in England the deficiency was 25 per cent., and in Ireland 24 per cent. For the British Isles as a whole there was a deficiency of 15 per cent.



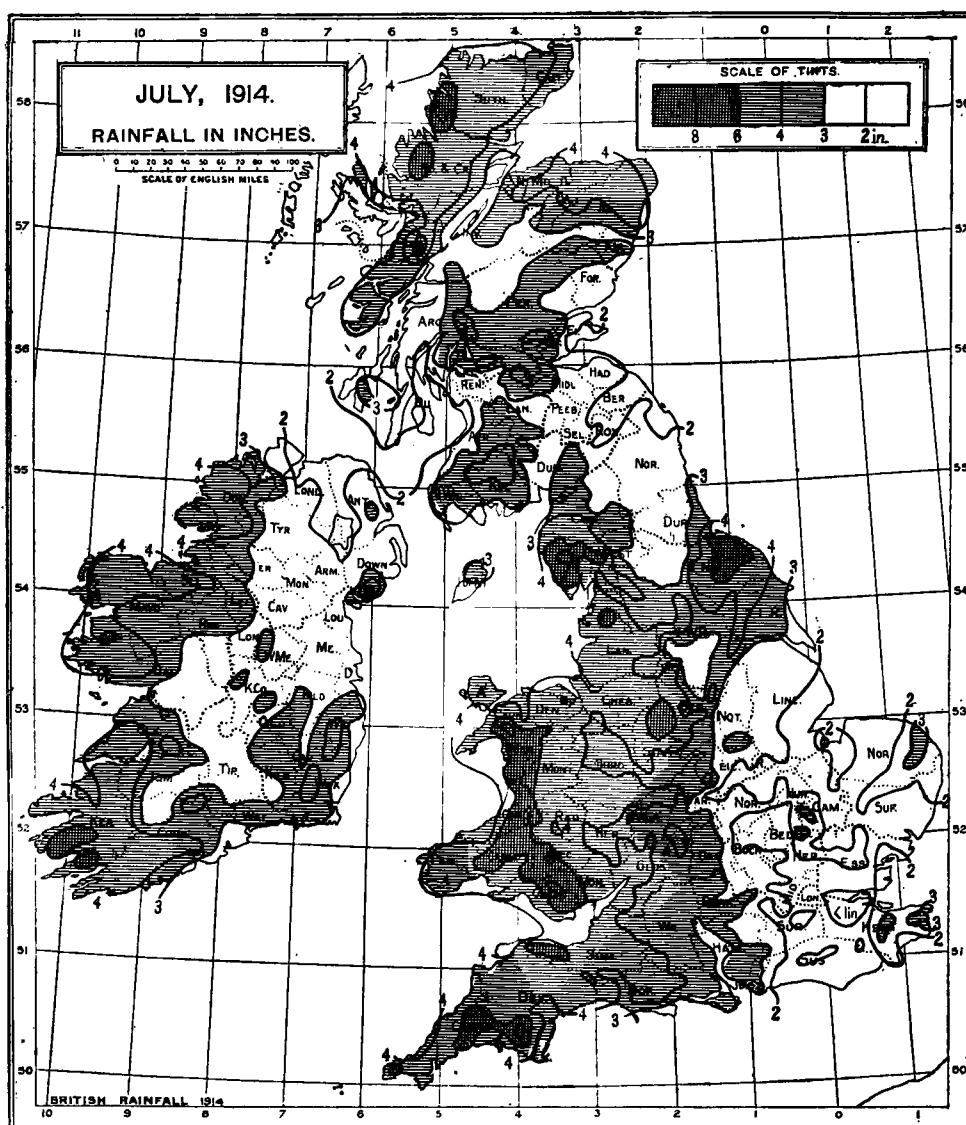
June.—The pressure distribution was abnormal, the isobars running from north to south instead of from north-east to south-west, and crossing the normal isobars almost at right angles in the north. There were few depressions of any intensity, but thundery conditions developed at times, principally between Land's End and Norfolk, where numerous small patches had more than 3 inches of rain in the month on this account. On the 14th a heavy thunderstorm brought a great rainfall in the south-west of London. A fall of three inches was confined, otherwise, to North Wales, the north-west of Scotland, and the north-east of England, the last on account of local rainfall on the 9th. Less than 1 inch fell in the east and south-west of Scotland and in a considerable area in



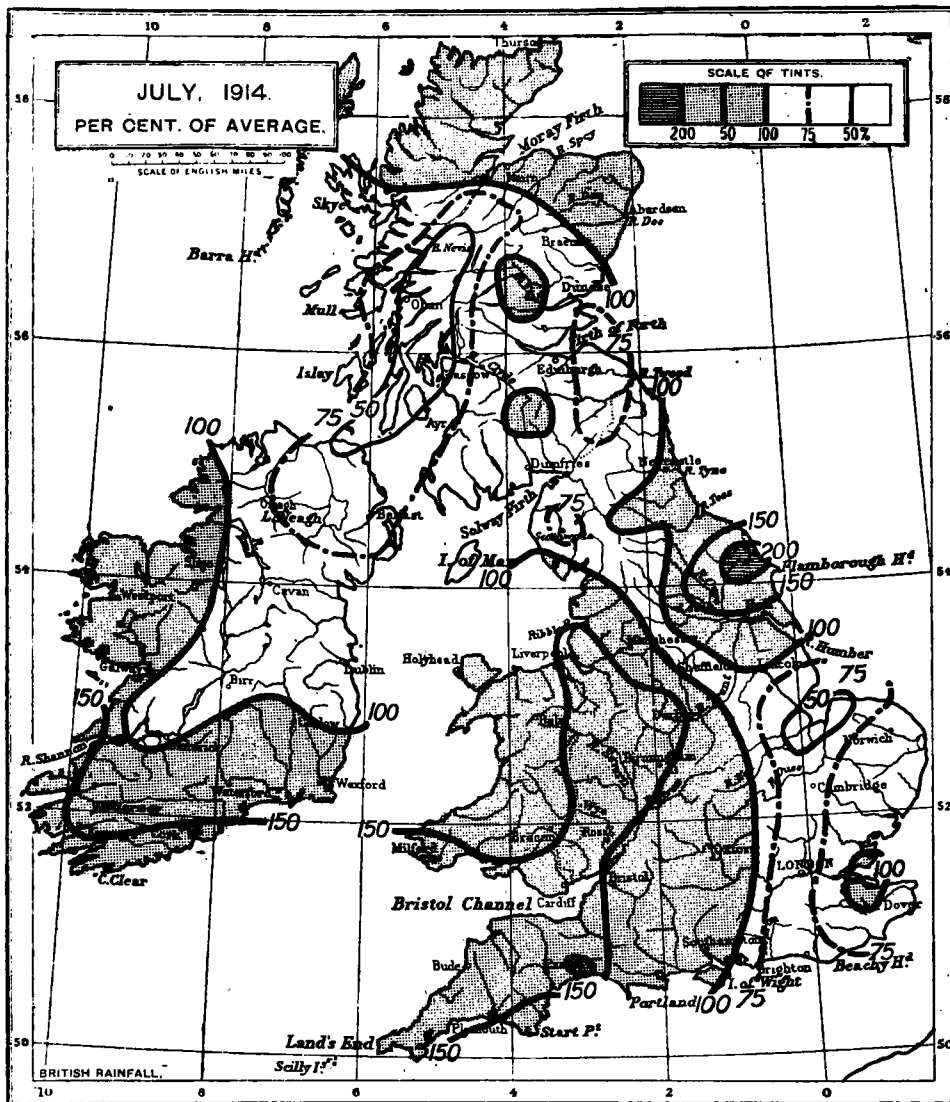
the south-east of Ireland, while as little as half an inch fell in Co. Waterford

The rainfall exceeded the average in the thunderstorm area in England and in the north-eastern counties, and also in patches in North Wales and west Inverness-shire. It was less than half the average round the Moray Firth and on a long strip lying across the south of Scotland, and extending to Lancashire. Most of Ireland and part of the south-east of England also had less than half the average.

The general fall was least in Ireland, being 54 per cent. in defect, and the deficiency was 40 per cent. in Scotland, 23 per cent. in Wales, and 14 per cent. in England. For the British Isles as a whole it was 32 per cent.

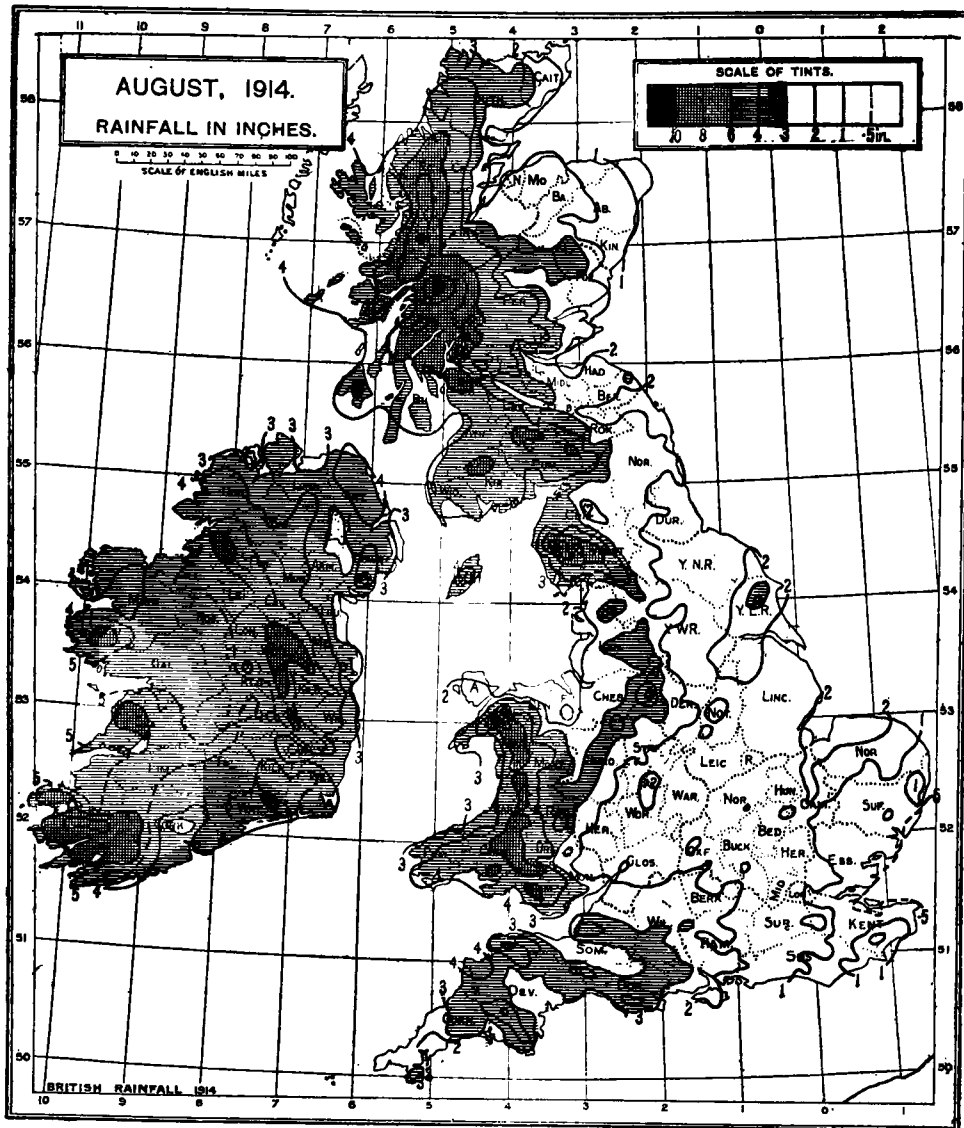


July.—The distribution of rainfall was extremely complicated, being influenced by local thunderstorms and by irregularly moving cyclonic depressions. Broadly speaking the total exceeded 6 inches only in Wales, the English Lakes and a few spots in the West Highlands. Large areas in the west and south of Ireland had rather over 3 inches and this amount fell over about half of Scotland and an unbroken area covering the whole of the west of England and Wales and extending east as far as Scarborough and South Shields. There was a well marked band with less than 3 inches stretching from the south of Ireland through Argyllshire to the Moray Firth, less than 2 inches falling over part of this area.

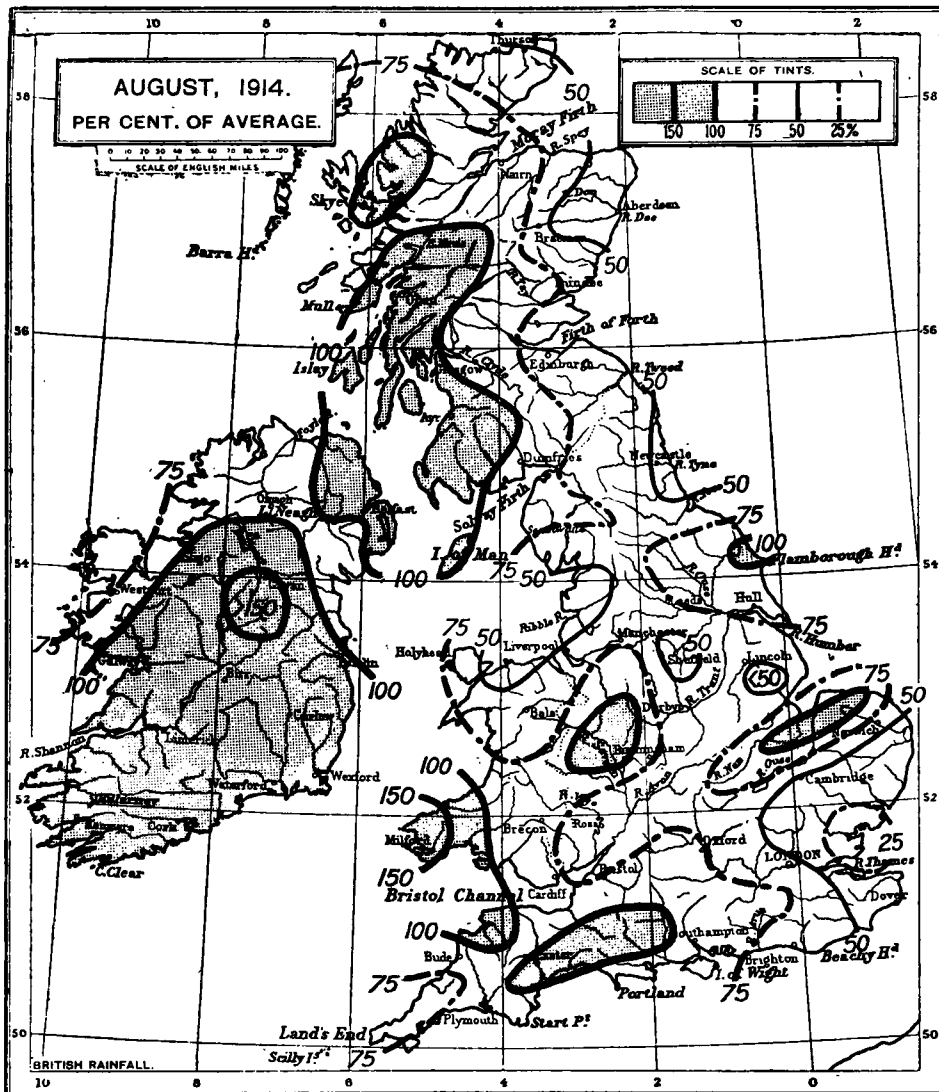


This dry band corresponded with less than half the average, from the coast of Antrim to Fort Augustus. The only other place with an equal deficiency was the neighbourhood of the Wash. The rainfall exceeded the average slightly in the north of Scotland, and on the north-east coast of England, rising to twice the average at Scarborough. The south and west of Ireland and the south-west of England and Wales also had more than the average fall, the excess being greatest generally on the coast.

Scotland had a general rainfall 15 per cent. below the average, but the general fall was above the average everywhere else, the excess being 4 per cent. in Ireland, 16 per cent. in England, and 49 per cent. in Wales, whilst for the British Isles as a whole the excess was 7 per cent.

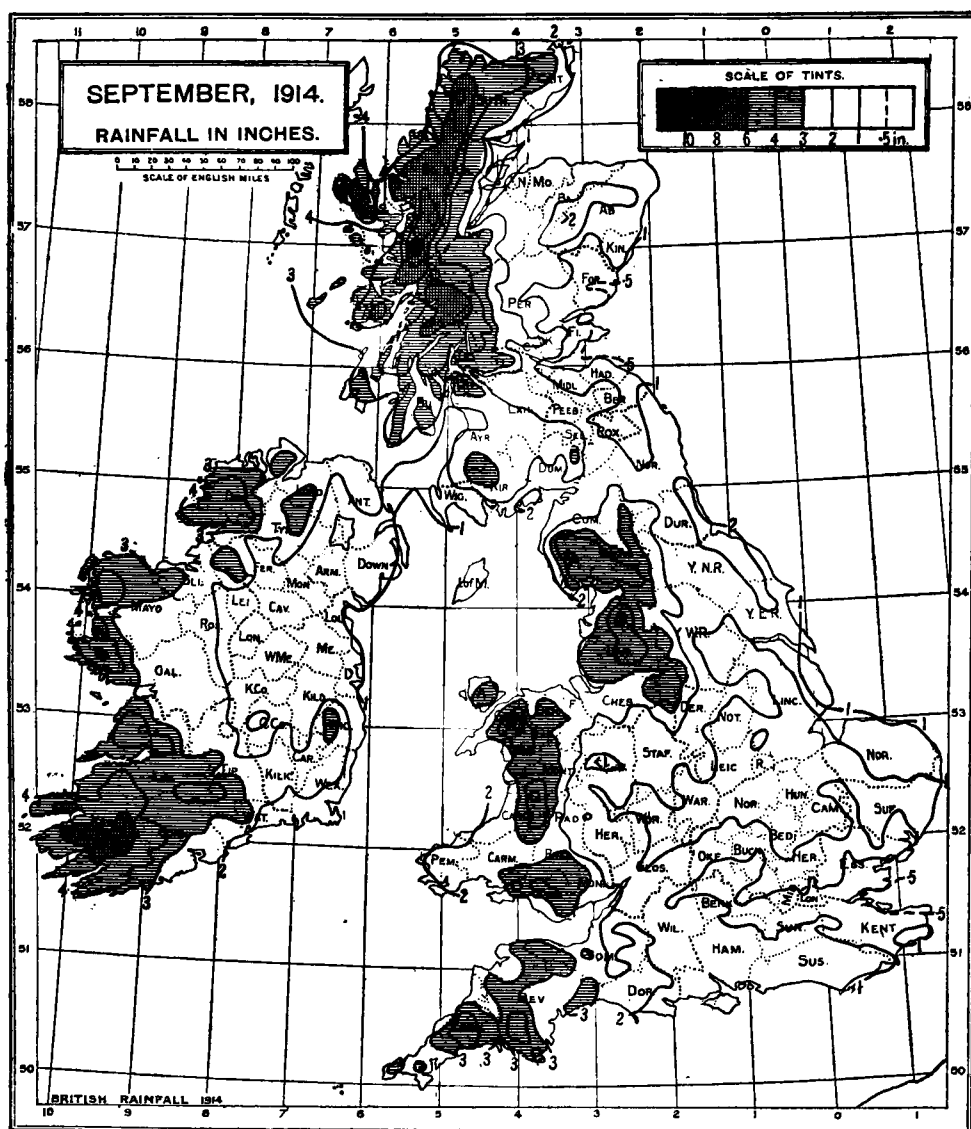


August.—Barometric depressions were few and followed rather northerly tracks, but the winds were, on the whole, south-westerly, and heavy rain fell at times in western districts, the storm of the 8th being particularly severe. Heavy cyclonic rainfall in the east of Ireland on the 14th caused the total to exceed 3 inches practically everywhere in the island, and to reach 6 inches in Westmeath. Six inches fell also in Kerry and in the west of Scotland, Wales and the English Lakes. The area with more than 3 inches occupied the whole of the west of Scotland and most of Wales, but in England was very limited and less than 2 inches fell almost everywhere in the east. Part of the south-east of England had less than 1 inch.



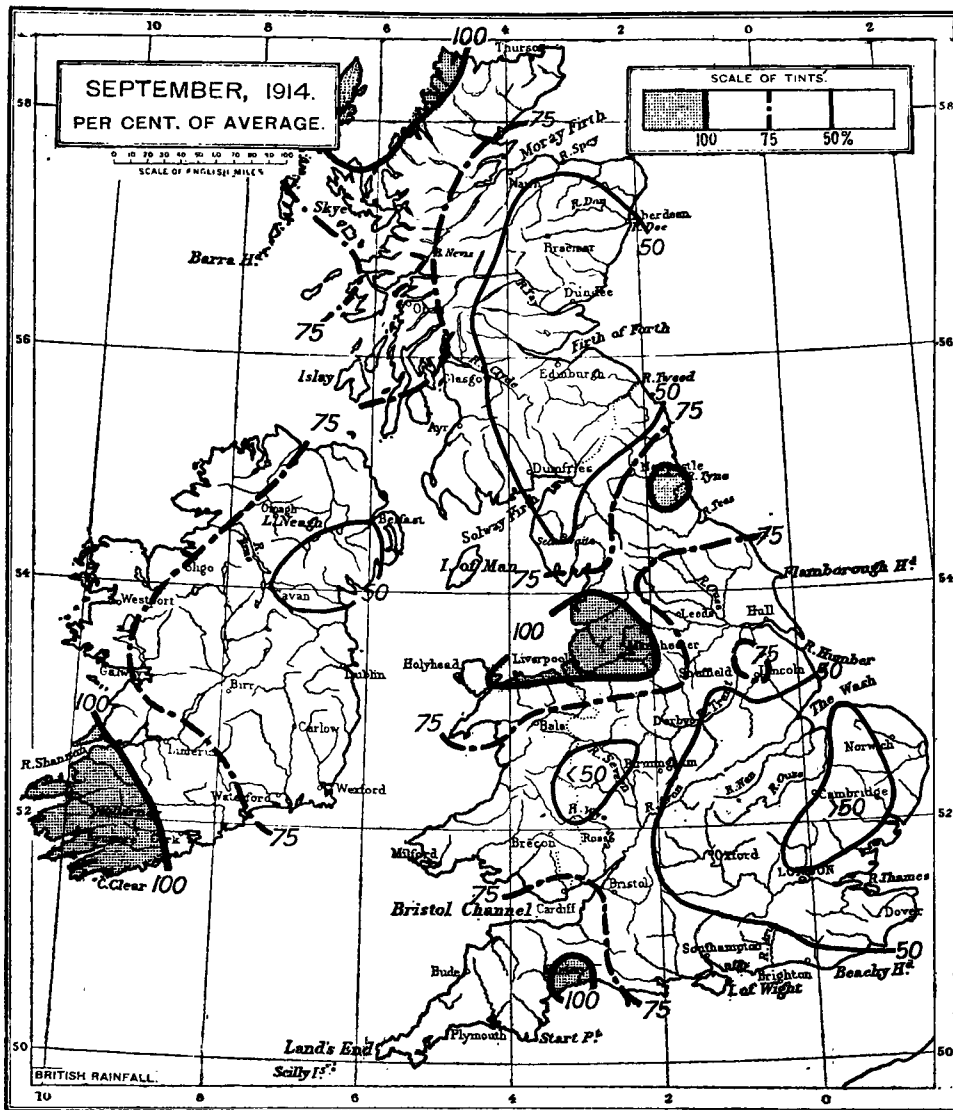
The rainfall exceeded the average in the west of Scotland, and also in the centre and south of Ireland. In Scotland the fall diminished to less than half the average in the east and the same remark applies to the north-east and south-east of England. The most conspicuous feature of the map in England and Wales was an interrupted band of rainfall slightly exceeding the average stretching from the mouth of the Bristol Channel to Norfolk.

The general rainfall was above the average in Ireland by 13 per cent., but there was a deficiency of 12 per cent. in Scotland, of 16 per cent. in Wales and of 29 per cent. in England. For the British Isles the fall was 12 per cent. below the average.



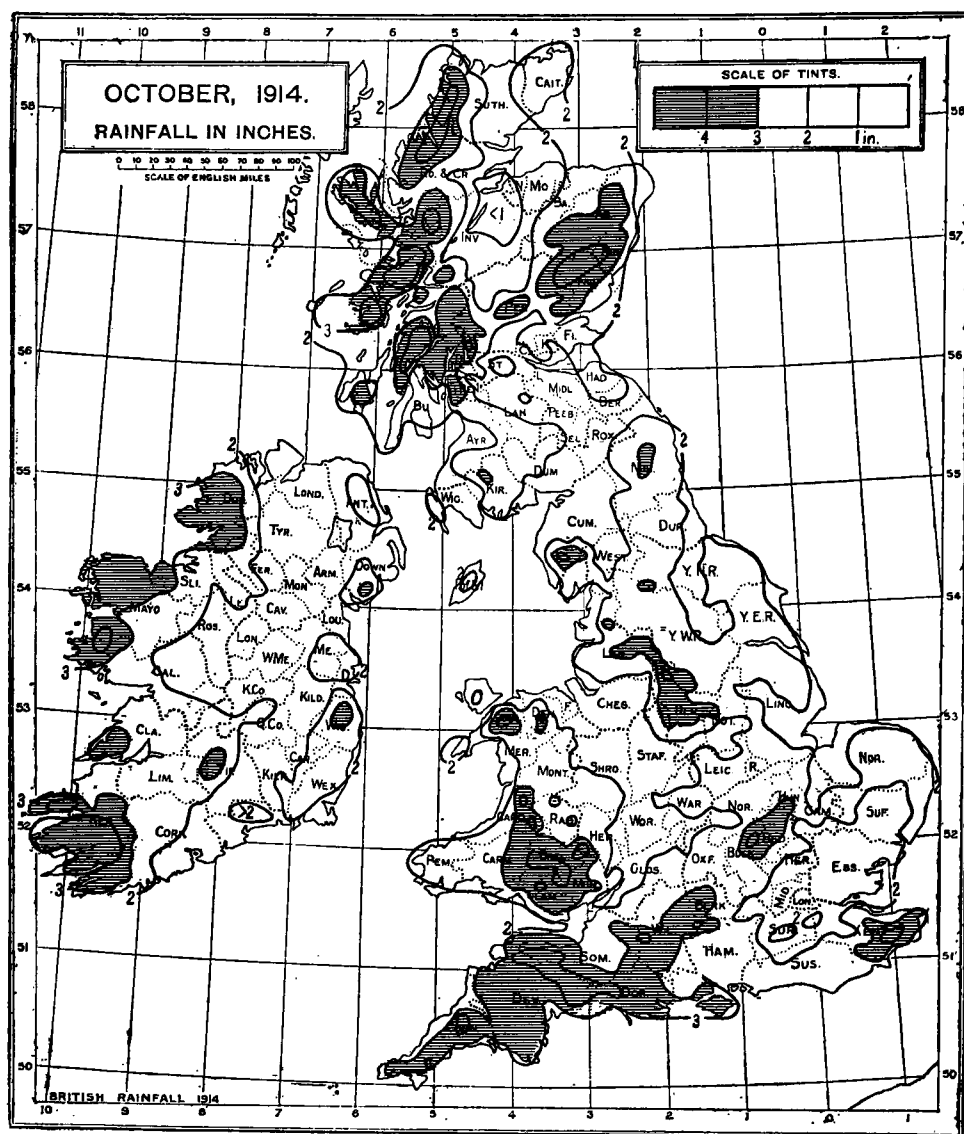
September.—As in August the pressure disturbances were infrequent and mostly passed to the north of Scotland. The fall exceeded 6 inches in the normally rainy districts in Scotland, and in Kerry, but elsewhere only very locally and whilst more than 3 inches was general in western districts the areas with less than 3 inches, and in some instances less than 2 inches, extended to the west coasts in many places. The east coasts again had deficient rainfall, less than 1 inch falling on the coastal strips in places and also in the lower Thames Valley. Less than half an inch fell in parts of Forfar and Fife and round the Thames Estuary.

The rainfall exceeded the average only in the south-west of Ireland, part of the extreme north-west of Scotland and isolated areas in England.



The east was again dry, but it is noteworthy that for the fourth successive month wet patches occurred in parts of the north-east of England. These relatively wet patches were not always in exactly the same position, but they were in every case simultaneous with other wet areas to the south-west.

The general rainfall in September was below the average in all the great divisions, the deficiency being greatest, 37 per cent., in England, whilst Scotland had a deficiency of 35 per cent., Wales 27 per cent., and Ireland 26 per cent. For the British Isles the rainfall was 33 per cent. below the average.



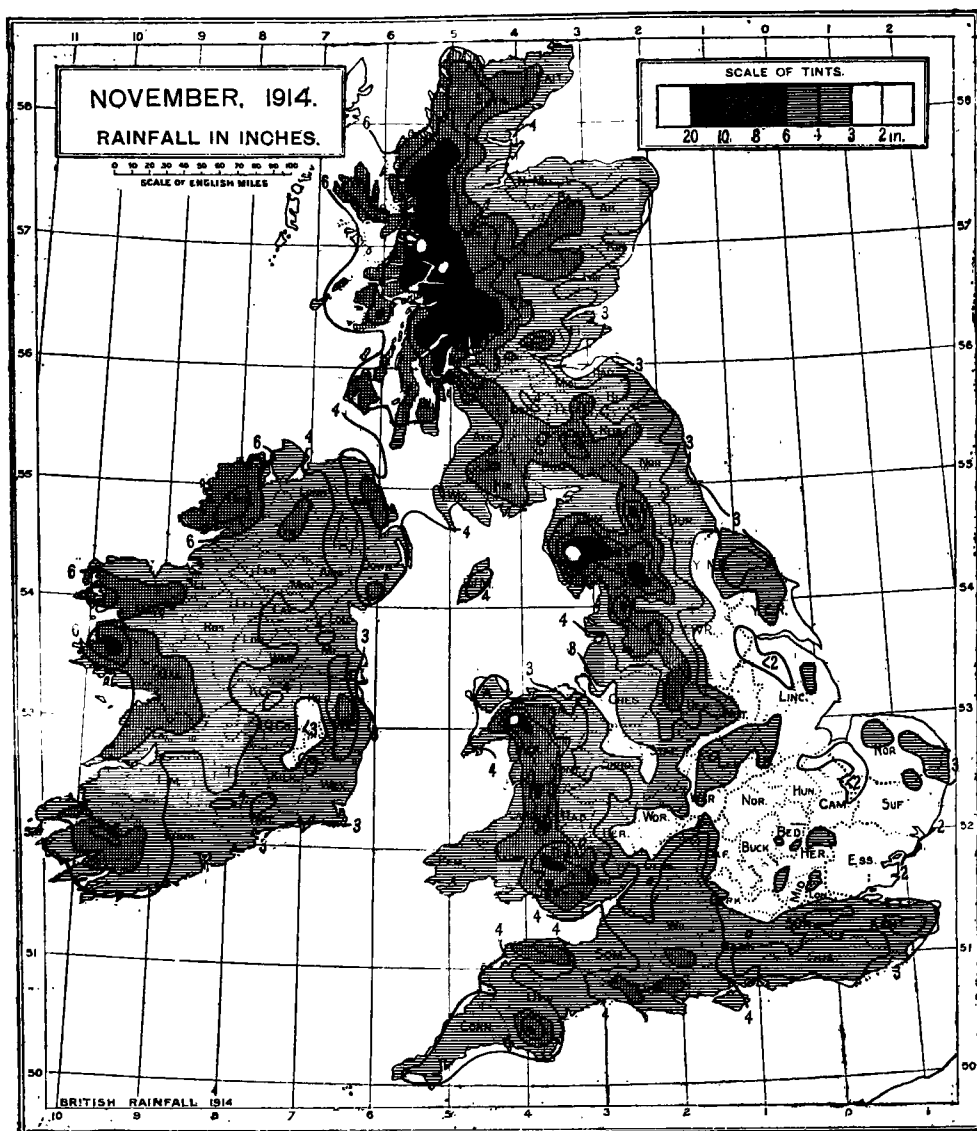
October.—Barometric pressure was unusually high and the moderate dryness which marked practically the whole summer was intensified in October. The total rainfall was less than 6 inches in all parts, and the area with 3 inches was confined within narrow limits for a month normally of such high rainfall. Large areas in the Pennines and in North Wales had between 2 and 3 inches, and the whole of the central part of Ireland had less than 2 inches. A small area round the Moray Firth had rather less than 1 inch of rain and large areas in the north and south of Scotland had less than 2 inches. In England and Wales less than 2 inches fell in the western Midlands, in the north of Cumberland and Westmorland, and over a narrow fringe passing



round the entire coast, except in the south.

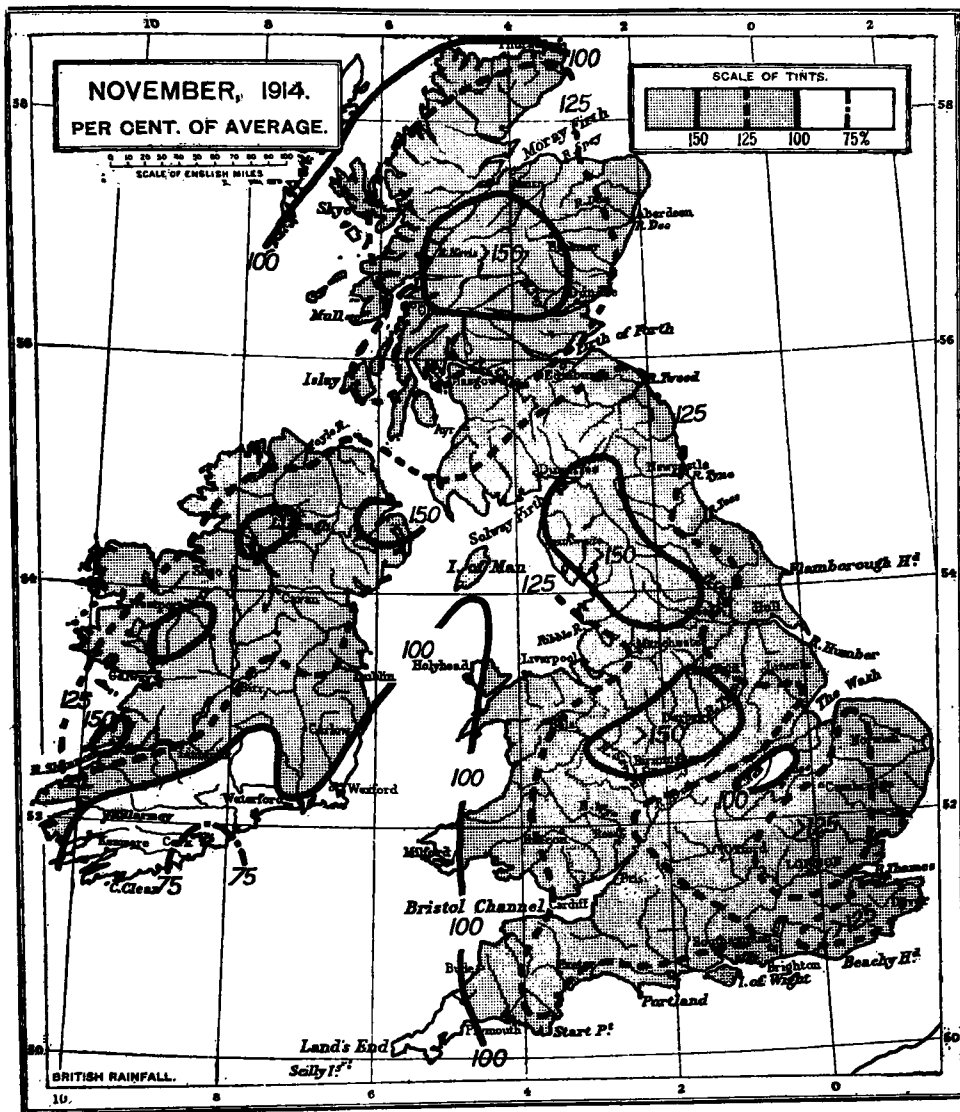
The only spot with more than the average was at the mouth of the Shannon. Most of the east of Ireland and the west of Great Britain had less than half the average, and in the centre of Scotland less than a quarter of the average fell. In the east of Great Britain generally the rainfall differed little from three quarters of the average.

The rainfall for the British Isles as a whole was 44 per cent. short of the average, this being the driest month of the year. The deficiency was most marked in Wales and Scotland, with respectively 54 and 52 per cent. less than the average, whilst in Ireland the fall was 43 per cent., and in England 36 per cent., in defect.



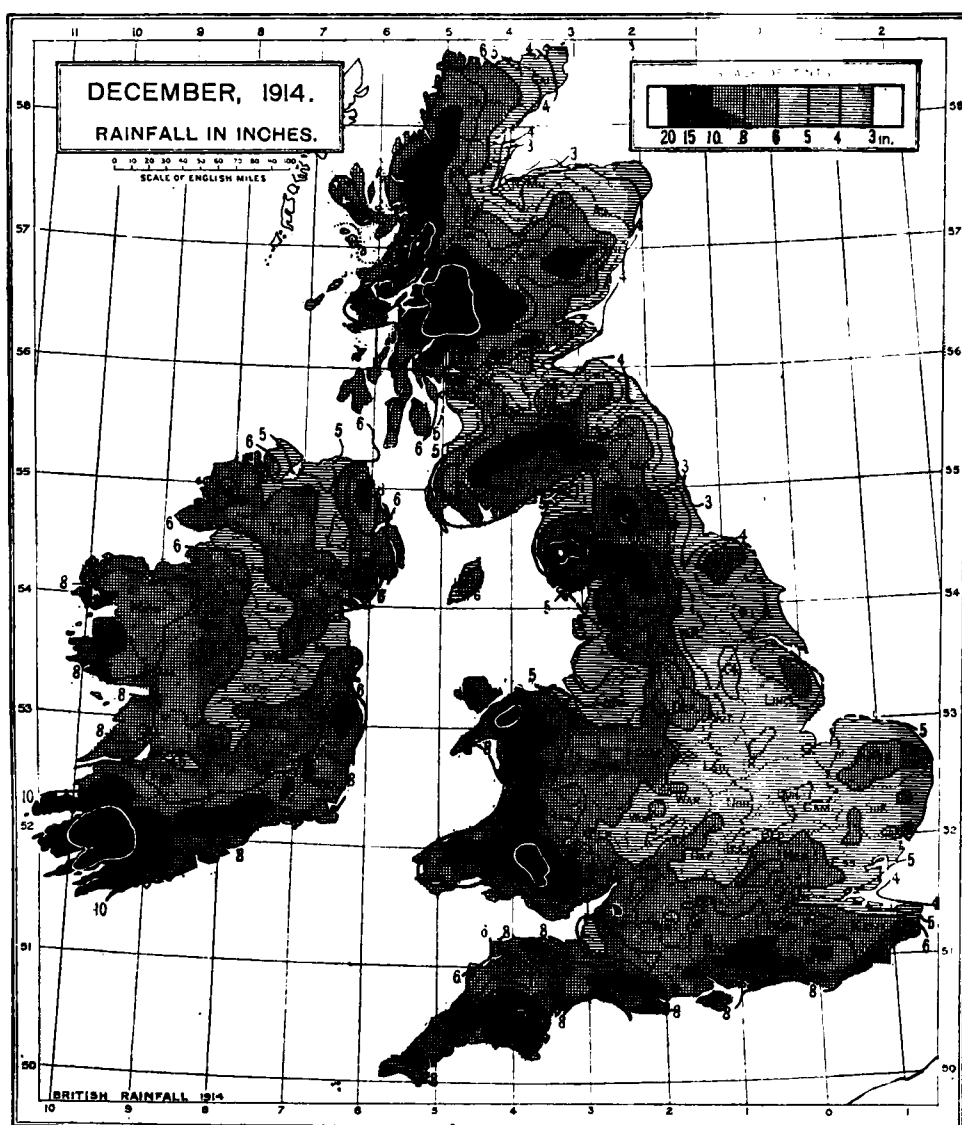
November.—The pressure conditions were favourable as a general rule for south-westerly and westerly winds, and a number of depressions crossed England, some of which followed very abnormal tracks. The most conspicuous rainy area was again the west of Scotland, where more than 3000 square miles had a rainfall of at least 10 inches. More than 10 inches also fell in Connemara and in numerous patches in the west of England and Wales. More than 6 inches fell in all the elevated districts in the west. Less than 3 inches occurred in the east Midlands of England generally, and there were one or two isolated spots where less than 2 inches fell.

The rainfall, expressed as a percentage of the average, did not vary

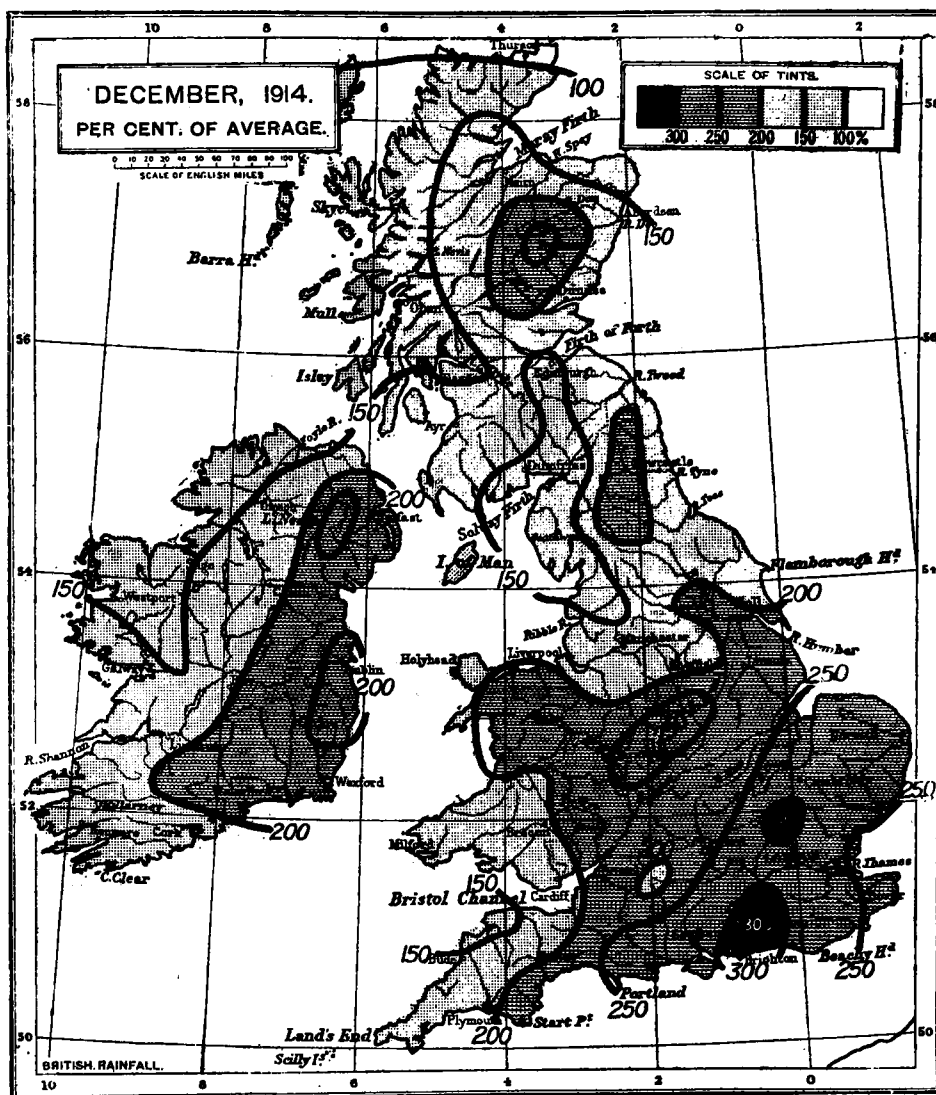


greatly from place to place. The only area of any size with less than the average rainfall occupied the south coast of Ireland and the western promontories of North and South Wales and of Cornwall. Less than the average also probably fell in the Outer Hebrides and possibly in Northamptonshire. The areas with most pronounced excess, in every case less than 100 per cent., lay in the interior of Ireland, Scotland, and northern England.

The relation of the general rainfall to the average was remarkably uniform, the excess in England, Wales, Scotland and Ireland being respectively 34, 20, 36, and 27 per cent. For the British Isles the excess was 32 per cent.



December.—The barometric pressure in December was the lowest recorded in that month since 1876, and the conditions were again favourable for strong south-westerly winds. Frequent deep and rainy depressions crossed the British Isles, and remarkably heavy and persistent rainfall occurred in all parts of the country. The enormous areas with more than 10 inches of rain shown in the map, too numerous to describe in detail, stretched eastwards nearly to the east coast of Ireland and Scotland, and in England as far as Sussex. The only areas with less than 6 inches of rain were parts of the centre and north of Ireland, a strip of the east of Scotland and of the sheltered plain of Ayrshire, the Solway Estuary, the Cheshire plain, and the eastern half of England



north of the Thames. Some narrow strips on the east coast of Great Britain had less than 4 inches.

The rainfall was possibly below the average in the extreme north of Scotland only. It was more than twice the average in the eastern half of Ireland, in patches in the east Midlands of Scotland and the north of England, and in the whole of England and Wales south-east of a line drawn from Hull to Anglesey and thence to Plymouth. More than three times the average fell in Hertfordshire, Surrey and West Sussex.

The general rainfall was 107 per cent. above the average in England, 93 per cent. in Wales, 89 per cent. in Ireland, and 46 per cent. in Scotland, the excess for the British Isles as a whole being 80 per cent.

TABLE I.—*Monthly Rainfall in 1914: the Average, 1875–1909, being taken as 100.*

Div.	Station.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
I.	St. Pancras, Camden Square ..	30	143	265	46	99	50	49	52	50	46	150	298	102
II.	Tenterden, View Tower	33	197	263	71	68	55	92	54	44	99	145	258	117
"	Edenbridge, Falconhurst	35	200	269	73	91	33	84	78	42	67	117	283	115
"	Arundel, Patching	22	192	266	122	56	48	67	68	69	72	124	334	119
"	Fawley, Cadland	25	187	242	72	67	47	145	92	59	79	126	290	121
III.	Basingstoke, Sherborne St. John	34	201	242	59	65	25	119	77	46	62	117	286	112
"	Royston, Therfield	69	117	216	66	58	78	73	39	47	75	131	301	101
"	Oxford, Magdalen College	28	102	251	56	75	109	128	82	38	99	118	243	109
"	Wellington, Swanspool	46	72	153	35	62	109	102	91	35	77	91	216	91
"	March	109	70	209	39	32	97	44	109	30	76	109	266	96
IV.	Shoeburyness	47	92	355	56	69	26	147	18	32	84	120	239	103
"	Ipswich, Orwell Park	88	120	241	53	62	65	63	28	52	71	104	262	99
"	Bury St. Edmunds, Westley	116	121	243	46	69	54	93	31	54	72	125	277	105
"	Geldeston	116	99	223	41	71	72	97	37	36	86	112	266	103
"	Holkham Hall	146	73	155	32	72	153	46	93	60	59	130	281	105
V.	Bishops Cannings	25	141	215	71	86	72	149	92	55	91	143	186	111
"	Evershot, Melbury House	39	246	246	59	88	117	133	133	74	79	129	253	135
"	Ashburton, Druid House	31	195	220	76	81	53	152	104	83	68	149	229	126
"	Barnstaple	51	112	237	106	74	100	161	124	89	59	109	145	111
"	Falmouth Observatory	42	162	269	97	69	107	161	75	82	60	88	177	115
"	Altarnon	48	136	263	97	63	106	163	66	90	52	107	154	110
VI.	Litton, Sherborne Reservoir	48	214	252	110	85	86	147	90	78	81	127	223	128
"	Stroud, Upfield	33	138	190	70	80	105	132	50	54	61	127	243	106
"	Church Stretton, Wolstaston ..	40	130	167	67	46	78	170	110	44	56	153	230	108
"	Wolverhampton, Wrottesley ..	69	122	119	38	55	126	186	109	50	52	154	266	113
"	Malvern, Church Street	35	112	182	77	68	129	183	57	60	60	120	237	108
"	Ryton-on-Dunsmore	50	87	171	76	77	123	131	63	36	84	123	239	104
VII.	Market Overton	76	88	170	79	80	171	89	56	35	89	146	231	108
"	Revesby	96	55	158	55	51	102	66	48	46	72	127	222	91
"	Lincoln, Skellingthorpe Hall ..	64	51	116	56	86	78	98	51	88	70	114	223	91
VIII.	Mickleover Manor	86	83	144	46	92	73	156	61	66	77	152	269	109
"	Middlewich, Bostock Hall	69	72	154	48	80	77	179	87	76	44	180	186	102
"	Chaburn, Middlewood	92	82	142	47	81	66	112	51	105	46	180	141	97
"	Southport, Hesketh Park	62	97	155	46	92	60	162	44	117	66	113	165	98
IX.	Sheffield, Redmires Reservoir ..	78	89	136	59	60	113	87	36	79	71	155	187	97
"	Arncliffe Vicarage	91	142	149	54	83	80	79	54	68	47	168	154	101
"	Wetherby, Ribston Hall	59	89	132	50	64	82	155	79	62	61	154	210	100

TABLE I.—*Monthly Rainfall in 1914: the Average, 1875-1909, being taken as 100—(continued).*

Div.	Station.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
IX.	Hull, Pearson Park.....	109	42	117	22	92	67	141	80	65	71	101	200	94
"	Scarborough, Osgodby	94	63	94	36	90	98	230	104	63	66	120	179	105
X.	Darlington, Cleveland Parade..	95	74	107	29	63	159	101	58	96	74	120	170	96
"	Newcastle, Town Moor	112	74	99	40	60	169	101	57	108	75	133	159	100
"	Rothbury, Cragside.....	93	102	119	28	79	169	98	57	40	88	135	200	102
"	Carlisle, Spital Cemetery	108	130	124	71	81	44	92	69	46	33	160	125	88
"	Borrowdale, Seathwaite	90	193	133	83	103	45	70	77	45	27	169	122	100
XI.	Appleby, Castle Bank.....	102	240	138	81	92	77	108	81	81	39	156	223	119
"	Abergavenny, Larchfield	34	172	163	69	72	125	153	59	52	76	136	248	115
"	Ystalyfera, Wern School	85	200	213	69	114	48	141	82	64	46	122	171	114
"	Cardiff, Ely	58	124	244	116	91	98	199	84	86	51	130	174	119
"	Haverfordwest	46	152	176	41	85	56	160	175	64	50	97	185	108
"	Aberystwyth, Gogerddan	95	157	208	27	115	74	139	84	70	29	113	205	109
"	Birmingham W.W., Tyrmynydd	79	173	196	83	96	65	139	81	60	50	138	180	115
"	Wrexham, Pack Saddle Res. ..	56	119	135	49	84	98	150	58	79	33	135	219	100
"	Llandudno	83	124	146	26	95	111	138	41	104	32	119	234	103
"	Holyhead	67	153	127	34	98	44	121	69	92	47	88	178	94
XII.	Douglas	78	138	193	40	119	37	89	97	56	41	101	137	94
"	Auchencairn, Torr House	93	169	148	75	74	29	92	89	59	32	145	122	94
"	Drumlanrig Castle	89	246	182	110	97	16	100	119	41	57	138	172	116
XIII.	Hawick, Branxholme	100	169	120	81	85	93	54	69	39	30	137	177	97
"	North Esk Reservoir	110	128	135	141	96	71	99	66	41	44	113	103	93
XIV.	Marchmont House	82	93	131	37	81	95	45	61	36	57	137	187	86
"	Airdrie, Hillend Reservoir.....	97	123	146	115	117	34	85	89	47	55	129	155	99
"	Girvan, Pinmore	79	166	184	115	113	28	78	107	61	41	102	168	103
XV.	Loch Thom	90	166	158	130	75	47	47	100	71	53	125	139	102
"	Lochgilhead, Poltalloch	129	220	162	164	89	84	47	130	85	65	132	154	121
"	Inveraray, Newtown	103	157	127	181	92	61	48	105	84	45	140	113	105
"	Islay, Eallabus	77	188	134	108	93	61	88	135	76	67	136	118	108
"	Mull, Quinish	85	176	92	143	80	74	76	91	73	50	115	138	99
XVI.	Loch Leven Sluices	94	122	145	73	104	31	95	61	30	69	147	184	99
"	Balquhadder, Stronvar	83	218	136	148	62	34	75	81	46	30	128	153	103
"	Blair Atholl	114	211	169	108	77	62	110	95	45	43	174	239	125
"	Dundee, Eastern Necropolis....	72	127	160	41	90	50	76	80	35	86	132	166	94
XVII.	Fettercairn, The Burn	83	132	152	31	107	38	101	55	32	94	126	191	98
"	Braemar	99	166	152	63	94	81	80	52	31	57	160	281	111
"	Aberdeen, Cranford House	64	104	123	29	109	54	134	36	44	95	122	163	93

TABLE I.—*Monthly Rainfall in 1914: the Average, 1875-1909, being taken as 100—(continued).*

Div.	Station.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
XVII.	Gordon Castle	88	44	121	37	150	48	146	74	60	60	130	139	94
XVIII.	Glenquoich	114	157	81	214	66	106	90	98	85	34	147	112	108
"	Drumadrochit	126	120	90	97	243	46	66	60	46	20	190	170	106
"	Inverness, High School	113	62	113	56	191	39	140	71	40	35	170	124	98
"	Fort William, Atholl Bank	121	178	86	192	83	72	37	114	76	25	175	149	112
"	Loch Torridon, Bendauph	107	173	71	185	123	90	108	117	92	37	131	140	113
"	Stornoway	122	156	132	128	86	63	115	78	119	42	97	105	103
XIX.	Dunrobin Castle	122	81	159	52	100	41	121	76	72	46	131	162	100
"	Thurso, Holborn Head	107	133	158	119	177	77	125	37	93	57	101	74	100
XX.	Glanmire, Lota Lodge	49	180	169	46	59	29	164	102	89	34	71	181	99
"	Killarney, District Asylum	87	217	197	73	52	59	116	110	109	61	87	190	119
"	Valencia, Glanleam	75	240	231	62	72	57	164	129	128	94	105	173	130
"	Waterford, Brook Lodge	55	172	145	54	57	43	118	140	50	54	107	223	105
"	Nenagh, Castle Lough	74	227	159	72	51	27	72	121	72	71	142	141	106
"	Ennistymon House	72	239	197	87	85	51	100	130	81	63	142	185	120
"	Carrigaholt Castle	72	273	226	77	97	66	161	128	116	106	164	198	142
XXI.	Gorey, Courstown House	34	191	164	46	88	44	104	113	60	61	99	251	106
"	Abbey Leix, Blandsfert	49	185	160	71	74	50	111	124	71	52	103	220	107
"	Dublin, Fitz William Square	47	128	107	35	88	44	86	105	66	43	123	273	96
"	Mullingar, Belvedere	50	164	149	67	111	41	84	150	72	37	130	213	108
"	Greenore	55	104	172	54	78	46	101	86	42	64	120	218	96
XXII.	Tuam, Gardenfield	79	263	153	74	77	16	164	109	62	52	184	132	115
"	Crossmolina, Enniscoe	61	214	156	92	83	27	133	68	82	62	112	143	104
"	Markree Observatory	58	214	162	88	92	40	124	125	70	50	141	159	111
XXIII.	Belturbet, Cloverhill	77	184	179	77	75	49	88	161	50	61	134	155	109
"	Armagh Observatory	53	138	175	63	55	84	70	87	49	54	132	253	101
"	Seaforde	46	139	167	64	65	48	74	110	36	45	144	234	100
"	Belfast, Queen's University	98	123	149	74	73	49	62	95	52	47	163	233	103
"	Ballymena, Harryville	100	176	176	93	105	65	81	127	62	51	148	252	121
"	Limavady, Drenagh	60	209	142	75	80	61	65	81	70	37	119	167	97
"	Omagh, Edenfel	73	203	183	94	70	39	76	96	62	47	158	170	106
"	Convoy	72	246	137	91	65	40	87	94	89	53	136	127	104
England (Mean of 45 Stations)		66	137	185	64	75	86	116	71	63	64	134	207	106
Wales (" 9 ")		69	159	185	60	95	77	149	84	73	46	120	193	110
Scotland (" 28 ")		101	160	127	120	100	60	85	88	65	48	136	146	104
Ireland (" 23 ")		66	199	169	71	76	46	104	113	74	57	127	189	110
British Isles (" 106 ")		79	160	162	81	85	68	107	88	67	56	132	180	107

MONTHLY RAINFALL AT 301 STATIONS IN THE BRITISH ISLES DURING 1914.

ENGLAND.

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
I.	London	St. Pancras (Camden Sq.)	.55	2.37	4.51	.80	1.74	1.14	1.26	1.24	1.00	1.25	3.52	6.34	25.72
II.	Surrey	Warlingham (Redvers Rd.)	.92	5.27	5.84	1.28	1.61	1.20	2.22	1.71	.93	2.12	4.37	10.10	37.57
"	"	Haslemere (Hazelhurst)	1.00	7.11	6.04	1.88	1.56	1.13	3.15	1.91	1.70	2.30	5.17	11.96	44.91
"	"	Woking (The Grange)	.69	3.17	4.11	1.24	1.16	.82	2.51	2.05	.87	1.88	3.39	7.61	29.50
"	Kent	Tenterden (View Tower)	.71	3.74	5.13	1.26	1.12	1.12	2.03	1.30	.98	3.43	4.46	7.15	32.43
"	"	Hythe (Hillcrest Road)	1.07	2.36	4.64	1.19	.94	1.88	1.66	1.26	.95	2.98	3.48	6.53	28.94
"	"	St. Peter's Court	1.01	1.25	4.43	1.15	1.47	.98	3.34	.60	.52	3.12	3.08	4.90	25.85
"	"	Ospringe (Lorenden)	.53	3.53	5.48	1.49	.88	1.17	3.40	.50	.64	2.41	3.68	6.63	30.34
"	"	Tonbridge (The Manor Ho.)	.65	3.61	5.12	1.36	.75	.62	1.38	1.05	.79	1.69	3.80	7.04	27.86
"	Sussex	Arundel (Patching)	.56	4.16	5.19	2.22	1.01	1.03	1.66	1.71	1.77	2.87	4.40	9.71	36.29
"	"	Balcombe (The Gables)	1.20	5.65	6.47	1.95	1.62	.64	1.78	1.66	1.34	2.29	4.60	9.77	38.97
"	"	Eastbourne (Glenholme)	1.14	3.80	5.03	1.35	.81	1.08	1.63	1.48	1.61	2.73	4.01	8.00	32.67
"	Hampshire	Totland Bay (Aston House)	.45	3.84	5.45	1.00	.62	.84	3.44	2.08	1.27	3.78	4.62	9.07	36.46
"	"	West Dean	.42	3.86	4.54	1.19	1.19	.44	3.28	2.66	1.26	2.53	5.39	7.88	34.64
"	"	Bps. Waltham (Swanmore Ho.)	1.02	6.38	5.70	1.73	2.13	.58	4.01	2.26	1.88	2.54	4.80	11.74	44.77
"	"	Basingstoke (Sherborne S.J.)	.79	4.49	5.04	1.13	1.25	.57	2.87	1.96	1.03	2.15	3.49	7.96	32.73
III.	Hertfordshire	St. Albans (County Museum)	.80	3.49	4.61	.83	1.38	1.76	2.00	1.73	1.17	2.21	2.71	8.16	30.85
"	"	Royston (Therfield Rec.)	1.14	1.89	3.61	1.11	1.17	1.84	2.00	1.07	.94	2.05	3.07	6.05	25.94
"	"	Slough (Upton)	.56	2.78	3.97	.76	1.80	1.45	2.06	1.43	.86	1.71	2.45	7.41	27.24
"	Buckinghamshire	Hampden House	.91	3.24	5.14	.92	1.56	1.85	2.96	1.52	.89	2.42	2.67	8.11	32.19
"	"	Buckingham (Adstock Fields)	.78	2.04	3.74	1.09	.89	2.08	1.99	1.97	1.11	3.24	2.10	4.52	25.55
"	Oxfordshire	Oxford (Magdalen College)	.49	1.65	3.64	.94	1.35	2.48	3.11	2.01	.76	2.80	2.66	5.01	26.90
"	"	Goring (Elmcroft)	.64	2.46	4.52	.62	1.66	2.01	3.86	2.53	.77	2.52	2.43	6.65	30.67
"	Northamptonshire	Wellingboro' (Swanspool)	.88	1.23	2.63	.62	1.23	2.34	2.58	2.14	.74	1.99	2.02	4.59	22.99
"	Huntingdonshire	Huntingdon (Bosworth Ho.)	1.05	1.20	2.85	.61	.67	2.92	2.12	1.56	.90	2.92	2.22	5.31	24.33
"	Bedfordshire	Shillington	.93	1.75	3.73	.53	1.17	1.93	2.17	1.17	.83	2.42	2.61	6.51	25.75
"	Cambridgeshire	Ely (The Palace)	1.76	1.16	3.07	.73	1.27	1.96	2.30	2.10	.96	2.13	2.44	4.87	24.75
"	"	Wisbech (Monica Road)	1.53	.73	2.77	.90	.92	2.22	1.48	2.09	.76	1.92	1.93	4.87	22.12
IV.	Essex	Grays Sewage Works	.55	2.11	3.75	.64	1.12	1.00	.76	.82	.55	1.29	2.48	5.12	20.19
"	"	Epping (The Hemnalls)	1.06	2.75	4.41	1.22	1.67	2.92	1.86	1.73	1.43	1.38	3.03	6.93	30.39

ENGLAND—(continued.)

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
IV.	Essex	Bradwell-on-Sea (Bradwell Hall)	.96	1.45	4.38	1.01	1.21	1.11	3.26	.72	.61	1.78	2.21	5.20	23.90
"	"	Shalford (Littles)	1.42	1.96	3.77	.81	1.33	1.49	2.05	.83	1.11	1.52	2.64	6.03	24.96
"	Suffolk	Hawkedon Rectory	2.08	2.09	4.09	.98	1.24	1.27	2.06	1.02	1.24	1.93	2.74	6.36	27.10
"	"	Ipswich (Woolverstone Pk.)	1.57	1.58	3.53	.87	1.13	1.31	1.59	.70	1.27	1.96	2.83	6.21	24.55
"	"	Aldborough (Aldingham Ho.)	1.77	1.55	4.02	.74	1.24	.84	1.67	.74	1.03	2.62	2.98	6.00	25.20
"	"	Bacton	1.45	2.14	3.79	.74	1.14	1.61	1.35	.81	.83	1.87	3.09	5.52	24.34
"	Norfolk	Geldeston [Beccles]	1.77	1.39	3.50	.63	1.27	1.27	2.29	.81	.77	2.44	2.80	5.51	24.45
"	"	Aylsham (Millgate)	2.52	1.45	3.20	.50	1.22	1.74	1.71	1.57	1.49	2.51	3.27	6.82	28.00
"	"	Sandringham House	1.59	1.33	2.77	.83	1.43	2.63	2.75	2.59	1.05	1.95	2.67	5.10	26.69
"	"	Watton	1.82	1.55	3.99	.74	1.14	1.93	1.27	1.20	1.35	2.49	3.03	6.89	27.40
V.	Wiltshire	Calne (High Street)	.67	3.14	4.66	1.42	1.54	2.14	3.55	2.77	1.17	2.81	4.48	6.57	34.92
"	"	Mere (Charnage)	1.61	3.91	5.39	1.39	2.24	1.51	3.82	3.78	1.66	3.51	5.03	7.33	41.18
"	"	Salisbury Plain (Shrewton)	.75	3.95	4.72	1.30	1.46	1.56	3.33	2.96	1.36	3.22	5.64	6.96	37.21
"	"	Marlborough (Mildenhall)	.75	3.82	4.92	1.33	2.20	1.67	3.00	2.56	1.05	3.46	5.05	8.05	37.86
"	Dorsetshire	Warmwell (Warmwell Ho.)	1.09	4.76	6.31	1.56	1.71	1.14	4.73	4.21	2.03	3.57	5.38	9.09	45.58
"	"	Beaminster Vicarage	1.09	6.17	6.33	1.36	2.10	2.74	5.16	3.70	2.77	3.93	5.99	9.79	57.73
"	"	Wimborne (Codford House)	.57	5.46	5.22	1.11	1.25	1.52	3.86	3.62	1.99	3.27	6.72	8.73	43.32
"	"	Kingsbridge (Collapit Creek)	1.23	4.13	6.42	1.28	1.46	1.24	3.45	2.44	3.21	4.08	4.04	8.26	41.24
"	South Devonshire	Princetown (H.M. Prison)	5.18	14.93	18.49	4.36	4.85	2.77	9.52	6.37	5.32	5.39	10.66	18.74	106.58
"	"	Teignmouth (Den Gardens)	.59	3.92	4.89	1.33	1.64	1.06	3.38	2.09	2.52	2.66	4.35	9.02	37.45
"	"	Cullompton	.86	3.86	6.60	1.77	2.01	1.95	4.09	3.19	2.32	3.71	3.08	8.43	41.87
"	"	Chumleigh (Leigh House)	1.85	2.80	7.07	1.90	1.77	2.42	4.84	2.43	3.06	3.67	3.20	6.44	41.45
"	"	Barnstaple (N. Devon Athenæum)	1.63	3.13	5.82	2.33	1.60	2.20	4.60	4.06	2.79	2.78	4.32	6.05	41.31
"	"	Okehampton (Oaklands)...	2.44	6.44	9.93	2.37	2.02	2.10	4.67	3.44	2.99	4.18	5.13	11.82	57.53
"	"	Redruth (Trewirgie)	1.78	6.36	7.72	2.01	1.41	2.56	4.81	2.69	2.61	3.80	4.75	11.23	51.73
"	Cornwall	Bude (The School House)	1.50	3.12	5.61	1.81	1.33	2.16	4.14	3.47	2.44	1.53	3.51	6.65	37.27
"	"	Penzance (Morrab Garden)	1.66	4.30	8.13	2.04	1.17	2.67	5.09	2.55	3.53	3.00	4.18	9.48	47.80
"	"	St. Austell (Trevana).....	1.63	6.01	7.80	2.31	1.65	1.93	6.30	2.60	3.67	3.22	4.72	11.22	53.06
"	"	Altarnon Sanctuary	2.88	6.71	11.50	3.65	1.97	3.30	6.46	3.14	3.99	3.62	6.52	11.40	65.14
"	Somersetshire	Street (Hind Hayes)	.92	2.56	5.17	1.27	1.78	1.33	4.46	2.99	1.91	2.51	3.53	5.91	34.64
"	"	Burnham (Chalbury)	.86	2.04	4.68	1.55	1.29	1.83	4.26	4.31	2.10	2.32	2.83	5.29	33.36
"	"	Winsford School	2.77	5.44	10.77	2.75	2.88	3.41	6.15	4.20	3.41	5.20	6.69	10.98	64.65
VI.	Gloucestershire	Stroud (Upfield)	.76	2.92	3.81	1.46	1.67	2.55	3.64	1.44	1.29	1.95	3.52	6.59	31.60
"	"	Mickleton (Bank House)...	.58	1.57	2.58	.67	1.50	3.18	3.27	1.04	.85	1.54	2.85	5.60	25.23
"	"	Clifton (Pembroke Road)...	1.33	3.46	4.82	1.76	2.02	2.56	5.60	2.91	1.63	2.06	4.28	7.17	39.60
"	"	Fairford (Ha herop Castle)	.72	2.92	4.63	1.25	1.68	2.59	4.04	2.20	1.59	2.25	4.68	5.94	34.49

ENGLAND—(continued.)

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
VI.	Herefordshire	Ross (The Graig).....	1·67	2·81	3·05	1·53	1·64	3·17	4·73	1·42	1·08	1·81	2·88	6·48	31·27
	Shropshire	Ludlow (Ashford House)...	1·08	3·10	3·07	1·14	1·55	2·30	4·19	2·55	1·50	3·02	4·40	7·48	35·38
	"	Bishop's Castle Vicarage...	1·25	3·76	3·15	1·22	1·06	2·14	4·81	3·25	1·13	2·15	4·14	7·72	35·78
	"	Much Wenlock (Willey Pk.)	·93	2·08	2·26	1·12	1·53	2·58	4·39	2·00	1·29	1·82	3·59	6·68	30·27
	"	Oswestry (The Mount Res.)	2·11	3·50	3·31	1·15	2·03	4·06	4·11	2·13	1·42	2·05	4·10	7·71	37·68
	Staffordshire	Market Drayton (Old Springs)	1·87	2·20	2·51	·91	2·72	1·94	4·42	4·77	1·67	1·59	3·25	7·04	34·89
	"	Shugborough.....	1·75	1·82	2·97	·81	1·65	1·93	5·61	2·12	1·14	1·84	3·79	6·98	32·42
	"	Burton (Shobnall)	1·46	1·25	2·43	·64	1·29	1·83	3·45	1·57	·89	2·04	3·04	5·08	24·97
	"	Mayfield Ho. [Ashbourne]	2·10	2·27	4·40	1·29	2·19	1·26	5·74	2·91	2·16	2·68	4·34	6·06	37·40
	Worcestershire	Worcester (Belmont Road)	·77	1·36	2·44	1·15	1·27	2·42	3·70	1·36	1·10	1·64	2·43	5·54	25·18
VII.	"	Dudley (Borough Cemetery)	1·16	2·04	2·25	·85	1·38	3·20	2·91	2·49	·99	1·82	3·44	6·28	28·81
	Warwickshire	Wormleighton Hall.....	·87	1·77	2·88	1·06	1·39	2·99	2·17	1·55	1·04	1·92	2·90	6·03	26·57
	"	Bedworth Cemetery.....	1·01	1·50	2·40	1·59	1·23	2·30	4·86	1·71	·75	2·13	2·86	5·47	27·81
	Leicestershire	Market Harboro' (Rose Hill)	1·26	1·55	2·41	·88	1·49	2·53	2·63	1·70	·66	2·33	4·54	5·21	23·69
	"	Loughboro' (Nan Pantons Res.)	1·13	1·49	2·76	1·30	1·75	2·46	3·02	1·24	·87	2·58	3·54	5·70	28·45
	"	Belvoir Castle	1·58	1·20	2·72	1·39	1·97	2·96	3·02	1·24	·87	2·69	2·15	4·18	21·72
	Lincolnshire	Stamford (St. George's Sq.)	1·63	·90	2·39	·92	1·07	2·77	1·67	1·22	·42	2·08	2·34	4·48	22·09
	"	Roston (Black Sluice, Skirbeck)	1·52	·97	2·49	1·09	1·88	2·57	2·05	1·29	·86	1·96	2·79	4·84	24·31
	"	Stenford (Rauceby Hall)...	1·09	·60	1·93	·90	1·56	2·21	2·23	2·50	·90	2·09	2·31	4·42	22·74
	"	Willingham-by-Stow	1·62	·92	2·82	·81	·95	2·05	1·26	2·05	·74	1·76	2·46	4·43	21·87
VIII.	"	Skegness	1·82	1·47	2·59	1·09	1·57	1·55	2·81	1·30	·86	2·33	3·21	6·39	26·99
	"	Louth (Westgate).....	1·21	·54	1·68	·50	1·54	1·82	3·09	2·30	·84	2·16	2·19	4·73	22·60
	"	Burton-upon-Stather Vic...	1·22	1·45	2·35	·85	1·81	2·37	2·42	1·64	1·06	3·14	3·91	5·88	28·10
	Nottinghamshire	Mansfield (West Bank) ...	3·29	2·91	5·40	1·53	3·09	2·45	5·07	4·56	4·14	3·18	6·44	8·17	50·23
	Derbyshire	Buxton (Devonshire Hospital)	1·50	1·15	3·00	·98	1·79	1·34	5·09	3·91	1·82	1·12	2·36	4·86	28·92
	Cheshire	Sandbach (Malkins Bank)	1·67	2·29	3·08	·74	1·34	1·45	4·19	2·77	2·31	2·17	2·11	5·01	29·13
	"	Aldford	1·41	1·69	3·10	·97	2·03	1·84	4·86	2·21	3·09	1·90	3·19	5·49	31·78
	South Lancashire	Liverpool (Huyton Vic.) ..	2·14	2·00	3·69	1·09	1·92	2·51	4·04	2·59	2·53	1·59	3·50	5·01	32·61
	"	Manchester (Whitworth Pk.)	4·19	4·06	5·22	1·59	2·27	2·38	3·91	3·09	3·23	2·85	7·21	8·37	48·37
	Central	Burnley (Swinden)	4·73	3·18	5·38	1·47	2·89	1·96	5·00	2·64	5·77	2·66	8·04	6·42	50·14
IX.	"	Stonyhurst College	2·50	2·37	4·05	·99	2·05	1·71	5·07	3·11	3·78	2·72	4·40	5·59	38·34
	"	Horwich (Wallsuches).....	1·57	2·01	3·27	·85	1·95	1·35	4·73	1·64	3·62	2·47	3·56	5·10	32·12
	"	Southport (Hesketh Park)	5·12	6·72	6·20	1·54	3·67	1·53	6·93	5·88	5·25	2·71	7·79	8·03	61·37
	North	Greenodd (Summer Hill) ..	2·60	3·49	4·05	·95	2·13	1·02	4·17	2·59	3·01	2·10	4·65	5·34	36·10
	"	Morecambe	4·56	4·63	5·39	1·13	1·95	1·60	3·22	2·63	2·80	2·27	6·00	8·41	44·59
	Yorkshire, W. R. ...	Settle (Giggleswick School)
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ENGLAND—continued.

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
IN.	Yorkshire, W.R.	6 Doncaster (Wadworth Hall)	1.17	1.30	1.74	.77	1.85	1.82	4.38	2.54	1.00	2.28	2.33	4.49	25.67
"	"	7 Sheffield (Weston Park) ...	1.61	1.97	2.60	1.31	1.47	2.18	2.50	1.27	1.59	2.25	3.98	6.07	28.80
"	"	8 Meltham (Harewood Lodge)	4.04	3.89	5.64	1.71	2.20	3.07	3.54	2.20	2.71	2.56	6.81	9.28	47.65
"	"	9 Garforth (Manor Farm) ...	.99	1.42	3.04	.93	1.25	1.92	3.61	1.23	1.17	2.13	2.56	5.63	25.88
"	"	10 Ilkley (St. James' Road) ..	1.88	2.66	4.12	1.15	1.10	2.66	2.87	1.82	1.57	2.59	5.36	8.04	35.82
"	"	10 York (Mount Villas)	1.79	1.20	2.45	.57	1.72	1.96	5.98	1.50	1.25	2.17	3.11	5.41	29.11
"	"	2 Birdsall Gardens	1.56	1.84	2.21	.57	1.92	2.13	3.60	2.02	2.07	2.23	2.78	5.49	28.42
"	"	3 Patrington	1.93	.67	1.92	.45	1.80	1.14	2.89	1.45	.87	2.07	2.70	4.73	22.62
"	"	3 Market Weighton (Dalton Holme)	1.59	.95	1.83	.51	2.14	3.24	4.07	2.68	1.89	1.99	3.19	5.27	29.35
"	"	4 Bridlington	1.79	.96	1.91	.54	1.44	1.32	2.47	2.79	1.47	2.25	2.76	4.79	24.49
"	"	1 Leyburn (Bolton Hall) ...	2.14	3.73	2.33	1.02	1.65	1.83	4.38	1.52	1.29	1.96	2.54	4.61	36.62
"	"	2 Thirsk (Mount St. John)...	1.49	1.35	1.65	.47	1.57	1.86	5.47	.85	1.51	2.34	3.03	6.05	29.35
"	"	5 Whitby (Mulgrave Castle)	1.91	2.24	1.99	.65	1.45	1.86	5.59	1.00	2.45	2.04	2.65	4.01	28.45
"	"	6 Middlesbrough (Ormesby)	1.51	1.21	1.18	.57	2.14	4.10	5.59	1.33	1.56	2.10	4.81	6.84	30.21
N.	Durham	1 Barnard Castle (County School)	1.55	2.84	2.25	.62	1.27	3.09	1.95	1.33	1.56	2.10	4.81	6.84	30.21
"	"	2 Wearhead Station	4.85	6.92	4.37	2.83	2.62	5.03	2.05	2.14	2.95	1.80	9.91	13.49	58.96
"	"	2 Ushaw (St. Cuthbert's College)	1.47	1.52	1.64	.56	1.27	4.41	2.41	2.25	1.78	2.30	3.35	4.85	27.81
"	Northumberland	2 Haltwhistle (Bellister Castle)	3.40	3.31	3.76	2.21	2.11	2.59	2.60	2.28	1.85	1.45	6.59	7.53	39.68
"	"	3 Corbridge (Howden Dene)	1.72	1.55	2.16	.79	1.29	2.94	2.36	2.18	1.37	2.02	4.15	5.72	28.25
"	"	4 Bellingham (High Green Manor)	3.32	4.64	3.74	1.14	2.18	2.46	2.61	2.40	1.22	2.32	4.67	7.37	38.07
"	"	5 Morpeth (Bothal Haugh) ...	2.10	1.37	2.48	.53	1.44	3.43	2.58	2.23	1.36	2.03	3.15	3.40	26.10
"	"	5 Rothbury (Cragside)	2.35	2.40	3.38	.67	2.00	3.64	2.73	1.87	1.00	3.69	4.57	6.63	34.93
"	"	6 Ilderton (Lilburn Cottage)	1.87	2.53	2.97	.66	1.54	3.80	2.69	2.12	1.14	2.49	4.50	5.53	30.84
"	Cumberland	1 Penrith (Benson House) ...	2.92	5.81	3.84	1.25	2.18	1.25	3.90	1.85	2.29	1.22	5.54	7.33	39.38
"	"	1 Wigton (Brookfield)	2.34	3.11	2.75	1.16	2.13	1.37	3.98	3.46	1.44	1.20	5.04	4.48	32.46
"	"	2 Borrowdale (Seathwaite)...	12.13	21.14	14.11	5.71	7.70	3.09	6.23	8.86	5.12	3.46	22.92	18.44	128.91
"	"	3 Whitehaven (Irish Street) ..	3.19	4.89	4.30	1.12	2.48	1.23	5.04	3.96	1.97	2.23	5.78	6.08	42.27
"	Westmorland	1 Kirkby Stephen (Redman Ho.)	4.19	7.39	3.83	1.57	2.70	3.16	2.70	2.37	2.69	1.27	6.77	10.78	49.42
"	"	3 Kendal (Crosthwaite Vic.)	5.32	7.61	6.48	1.75	2.14	1.22	5.09	5.48	4.18	2.22	7.98	8.12	57.59
England. Mean of 131 stations			1.73	3.11	4.26	1.23	1.69	2.07	3.43	2.26	1.73	2.42	4.11	6.98	35.02

MONMOUTH, WALES AND THE ISLANDS.

N.I.	Monmouth.....	3	Abergavenny (The Chain).	1.37	5.99	4.74	1.97	2.08	4.50	1.80	1.49	3.09	5.15	10.39	45.88
"	"	4	Chepstow (Piercefield Pk.)	1.43	3.84	4.59	1.70	2.19	4.67	2.66	1.70	2.39	4.55	8.16	40.57

MONMOUTH, WALES AND THE ISLANDS—(continued.)

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
XI.	Glamorgan	Swansea (The Knoll)	2.96	5.56	7.52	1.52	2.83	1.56	5.27	5.81	3.76	2.68	5.61	9.44	54.52
"	"	Treherbert (Tyn-y-waun)...	8.26	13.80	13.57	3.64	5.27	2.71	8.10	7.63	4.32	4.73	10.73	15.96	98.72
"	"	Cardiff (Penylan)	2.13	3.74	6.38	2.88	2.33	2.93	6.21	3.53	2.68	2.45	5.21	8.16	48.63
"	Carmarthen	Carmarthen (The Friary)..	2.96	6.20	6.12	1.53	3.03	1.74	6.46	4.54	2.27	2.56	5.80	10.15	53.36
"	"	Llanwrda (Dolaucothy) ...	3.97	7.02	8.28	1.53	3.74	1.94	6.77	6.97	2.46	2.86	6.71	10.63	62.88
"	Pembroke	St. David's	1.78	4.70	3.83	.78	1.35	2.02	3.65	3.90	2.01	2.47	3.87	7.31	37.67
"	"	Tenby (Glendower)	2.19	3.76	5.41	1.25	2.23	1.36	4.79	3.83	2.27	2.80	4.62	8.37	42.88
"	Cardigan	Aberystwyth(NorthParade)	2.12	3.62	4.25	.48	2.14	1.83	4.05	3.25	2.08	1.29	3.65	7.36	36.12
"	"	Birmingham W.W. (Claerddu)..	6.50	6.30	10.65	2.45	5.45	2.80	8.20	6.60	5.10	3.45	7.90	11.80	77.20
"	Brecon	Brecon (New Inn)	3.00	9.32	9.39	2.89	3.10	2.65	5.95	3.26	1.37	2.99	7.76	12.36	64.04
"	"	Hay (Waunderwen).....	1.28	4.04	3.94	1.36	1.87	2.42	3.75	2.05	1.16	2.88	4.13	9.52	38.40
"	Radnor	Llandrindod Wells (Kimberley)	2.55	5.22	4.93	1.53	1.35	1.91	4.18	3.58	1.74	2.66	4.62	7.94	42.21
"	Montgomery	Llandinam (Plas Dinam)...	2.12	4.52	5.08	1.41	1.45	1.88	3.72	2.96	1.82	1.69	4.66	9.26	40.57
"	"	Lake Vyrnwy (Bank Cynon Isaf)	7.72	6.70	7.32	2.66	3.51	2.42	5.60	4.49	2.69	2.46	8.13	12.60	66.30
"	Flint	Mostyn Vicarage	1.61	1.91	3.35	.53	2.00	2.63	7.35	1.43	4.86	1.89	3.68	6.35	37.59
"	Denbigh	Cerrigy-Droctid (Bwlch-y-Bendy)...	4.82	5.63	5.17	1.71	3.42	2.81	7.05	3.48	2.89	2.58	5.72	9.96	55.24
"	Merioneth	Blaenau Ffestiniog (Oakley Qrs.)	12.81	9.44	14.30	2.36	6.41	3.00	9.74	11.92	5.50	3.64	11.52	14.40	105.13
"	"	Dolgelly (Bryntirion)	7.16	5.88	9.26	1.42	3.10	2.32	6.16	4.19	3.47	1.58	6.35	10.43	63.32
"	"	Llandudno	2.09	2.62	3.12	.47	1.76	2.18	3.39	1.29	2.60	1.21	3.79	6.64	31.26
"	Carnarvon	Abersoch	2.89	4.79	5.54	.55	2.47	1.58	6.39	3.63	2.75	2.00	4.03	7.90	44.52
"	"	Llanerchymedd (Llwydiarth Esgob)	2.34	3.65	3.73	.73	1.93	1.11	3.54	2.03	3.27	1.66	4.40	6.31	34.70
Wales.	Mean of 23 stations	.....	3.74	5.58	6.55	1.63	2.91	2.25	5.63	4.13	2.79	2.52	5.76	9.63	53.12
XI.	Isle of Man	Douglas (Borough Cemetery)	2.80	4.25	5.51	.96	2.95	.94	2.86	3.84	2.00	1.91	4.53	6.44	38.99

SCOTLAND.

XII.	Wigtown	Stoneykirk (Ardwell Ho.)	3.03	4.05	4.51	1.92	2.75	.77	4.22	4.21	1.19	2.16	5.06	6.35	40.22
"	"	Garliestown (Galloway House)	2.50	3.60	4.49	1.51	1.72	.38	2.43	2.88	1.11	1.44	3.78	5.03	30.87
"	Kirkcudbright	Dalry (Glendaroch)	4.23	8.15	7.98	2.71	2.61	.60	3.59	5.63	1.68	2.33	7.06	10.95	57.52
"	"	Dalbeattie (Little Richorn) ...	3.72	5.72	4.85	1.57	1.94	.64	3.58	4.72	1.71	2.01	4.95	6.16	41.60
"	Dumfries	Moffat (Anchen Castle) ...	5.22	8.65	7.01	3.41	2.57	1.07	3.39	4.44	2.11	1.80	7.48	9.05	56.21
"	"	Langholm (Ewes, Burnfoot)	4.15	6.79	5.69	3.00	2.56	1.52	2.91	3.59	1.80	1.25	7.92	8.25	49.43
"	Roxburgh	Hawick (Wolfelee)	3.17	4.69	3.75	1.41	2.41	2.74	2.38	2.12	1.04	1.47	5.37	8.31	38.86
"	Selkirk	Selkirk (The Hangingshaw)	2.11	3.54	3.80	1.36	2.31	1.44	1.98	1.54	.64	1.65	4.00	7.12	31.49
"	Peebles	Stobo (Dawyck Gardens)..	3.21	6.70	5.35	1.72	2.77	2.12	2.71	2.17	1.87	1.74	5.23	8.58	44.17
"	Berwick	Marchmont House	1.96	2.00	3.47	.85	2.06	2.27	1.47	2.17	.95	2.20	4.41	5.30	29.11

SCOTLAND—(continued.)

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
N.III.	Haddington	Dunbar (Broxmouth Park)	1.60	1.54	2.71	.36	1.84	1.62	2.29	2.57	.55	2.02	3.40	4.92	25.42
"	Midlothian	West Calder (Addiewell)	2.57	3.47	4.58	2.38	2.34	1.01	2.84	3.04	1.40	1.32	4.69	5.90	35.54
"	"	Edinburgh (Blackford Hill)	2.12	1.74	2.84	1.29	1.93	1.00	2.35	1.48	.57	1.23	2.62	3.60	22.77
N.IV.	Lanark	Leadhills	4.48	10.84	8.29	3.93	3.41	1.76	2.69	6.81	2.68	2.72	8.11	11.71	67.43
"	"	Strathaven (E. Overton Ho.)	4.27	4.88	4.59	3.18	2.78	.67	2.64	3.55	1.50	1.77	6.13	5.88	41.84
"	"	Dalry (Blair)	4.35	4.52	6.30	3.67	2.20	1.14	2.69	5.01	2.82	2.64	6.09	6.33	47.76
"	Ayr	Maybole (Culzean Gardens)	3.23	4.24	3.17	2.41	1.41	.74	1.42	2.94	2.01	1.19	3.69	5.26	31.71
"	"	Barrhill (Dochroyle)	3.05	4.29	4.64	1.90	2.10	.85	3.10	3.98	2.02	1.50	4.12	6.55	38.10
"	"	New Cumnock (Ayr Sanatorium)	4.78	9.21	8.88	3.82	2.61	.93	3.12	4.01	2.36	1.73	7.74	11.11	60.30
"	Renfrew	Glasgow (Queen's Park)	3.20	3.73	4.10	2.39	1.85	.57	2.46	2.76	1.60	1.17	4.57	5.61	34.01
N.V.	Dumbarton	Cardross (Kilmahew)	4.16	5.83	6.26	2.81	1.33	.69	3.38	4.88	1.59	2.38	4.64	7.29	45.24
"	"	Falkirk (Westbank)	3.48	3.37	4.27	1.85	2.19	.62	3.25	2.89	1.11	1.48	5.36	6.93	36.80
"	"	Buchlyvie (The Manse)	3.37	4.54	3.99	3.35	1.98	.96	2.92	5.24	2.73	1.64	5.68	7.63	44.03
"	"	Rothsay (Crichton Road)	5.03	7.60	6.26	3.44	1.99	1.44	2.68	6.20	3.70	3.20	6.12	8.00	55.66
"	Bute	Morvern (Kilgairloch)	9.57	16.64	7.45	8.42	4.06	3.26	5.11	9.37	7.71	4.26	13.60	14.09	103.54
"	Argyll	Glenleven (Kinlochleven)	10.22	14.33	7.59	9.41	3.61	3.70	3.51	6.72	5.34	2.77	11.39	14.90	93.49
"	"	Taynuilt (Barguilean)	8.49	11.67	7.28	7.24	3.19	1.79	2.63	6.00	4.28	2.61	9.72	11.76	76.66
"	"	Loch Awe (Ford)	6.77	10.81	6.86	5.25	3.26	4.29	2.30	7.20	4.93	4.25	8.75	10.04	74.62
"	"	Muasdale (Killean Manse)	3.35	7.08	5.68	3.25	1.98	2.09	2.26	4.49	3.30	2.82	5.92	8.03	50.25
"	"	Campbeltown (Wichburn)	3.73	7.42	5.37	3.32	2.65	1.83	2.34	3.97	3.64	2.48	5.81	7.70	50.26
"	"	Ardrishaig (Canal Office)	6.21	8.79	7.08	6.12	2.93	2.01	2.86	6.47	4.56	4.06	7.14	8.44	66.67
"	"	Lochgairhead (Nuthill)	7.43	12.22	9.32	6.62	2.89	1.71	3.08	5.60	4.01	3.29	9.26	10.96	76.39
"	"	Islay (Ardbeg)	3.68	5.00	5.09	2.80	2.49	1.43	3.14	4.01	3.79	2.80	5.87	6.23	46.33
"	"	Jura (Ardfin)	3.79	8.25	5.67	3.69	3.48	1.85	4.04	5.66	3.55	3.16	7.55	6.81	57.50
"	"	Iona	4.58	5.94	3.99	2.98	2.24	1.91	3.29	3.85	3.65	3.12	6.29	7.42	49.26
"	"	Mull (Quinish)	4.69	7.83	3.92	4.26	2.38	2.45	3.12	4.53	3.79	2.95	7.18	9.08	56.18
"	"	Tiree (Cornaimore)	3.25	6.61	3.88	3.00	1.35	1.57	2.81	4.30	3.55	3.01	5.71	7.35	45.79
N.VI.	Pfife	Colinsburgh (Balcarres)	1.77	2.87	3.91	.86	2.38	.63	1.89	2.38	.54	2.36	3.45	3.92	26.15
"	"	Cupar (Rankeillour)	2.33	2.06	3.35	.86	1.97	.76	1.35	2.85	.46	2.32	4.00	6.02	29.14
"	"	Balquhider (Stronvar)	7.22	13.83	8.19	6.15	2.55	1.40	3.24	5.05	2.70	2.22	10.05	13.50	76.10
"	Perth	Glendevon (Tormaukin)	5.41	6.51	7.20	3.29	3.03	.87	5.02	3.88	2.01	2.61	9.35	12.76	61.94
"	"	Grieff (Strathearn Hydro.)	3.11	6.43	5.03	1.76	1.37	.53	3.53	4.19	1.08	2.01	5.50	8.64	43.18
"	"	Aberfeldy (Dall Avon)	2.88	6.20	3.89	1.75	1.35	.85	2.42	2.56	.88	2.01	6.05	10.12	40.96
"	"	Glenlyon (Meggernie Castle)	6.15	10.60	6.82	6.42	2.54	1.81	2.43	4.48	2.40	1.85	10.34	13.28	69.12
"	"	Coupar Angus	1.79	3.51	3.45	.86	1.84	.94	3.02	2.51	.64	2.51	3.71	6.69	31.47
"	"	Arbroath (Muirheads Res.)	1.23	2.47	3.61	.70	1.59	.69	2.09	2.69	.50	3.11	3.16	4.36	26.20
"	"	Glen Prosen (Pearsie)	1.97	3.78	4.94	1.21	1.74	.78	2.88	2.98	.80	4.06	5.72	7.36	38.22

SCOTLAND—(continued.)

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
XVII.	Kincardine	Fettercairn (The Burn) ...	2.22	3.35	4.07	.77	2.47	.85	3.05	1.97	.90	3.34	4.38	6.58	33.95
"	"	Crathes (Pinewood).....	1.16	3.45	4.00	.64	2.35	.72	3.13	1.23	1.38	3.53	4.23	8.69	34.51
"	Aberdeen	Braemar (Derry Lodge) ...	2.86	4.00	3.72	1.35	2.51	2.41	2.51	1.97	1.46	1.85	6.02	8.33	38.99
"	"	Aberdeen (Cranford House)	1.51	2.45	3.25	.65	2.61	1.09	4.01	1.12	1.19	3.07	4.01	5.58	30.54
"	"	Strathdon Estate Office ...	1.89	2.74	4.15	.61	3.35	2.71	3.76	1.90	2.06	3.08	5.73	7.35	39.33
"	"	New Deer School House...	1.32	1.45	3.30	.77	3.20	.87	5.54	1.72	2.38	2.57	5.07	4.40	31.59
"	"	Huntly (Cruchie)	1.34	1.80	2.77	.33	3.54	1.59	4.37	1.86	1.97	2.49	3.82	3.91	29.77
"	Moray	Gordon Castle	1.76	.86	2.86	.64	3.14	1.02	4.76	2.45	1.56	2.03	3.71	3.77	28.56
"	"	Grantown-on-Spey	2.52	1.46	3.25	.85	3.94	2.15	3.71	2.40	1.52	1.02	4.48	4.66	31.96
"	Nairn	Nairn (Achareidh)	2.58	1.32	2.21	.64	3.66	.94	3.17	1.75	1.27	.92	3.88	2.39	24.73
XVIII.	Inverness	Kingussie	3.56	2.52	2.88	1.59	3.28	1.33	2.24	2.44	1.46	.60	5.90	5.86	33.66
"	"	Fort Augustus (S. Benedict's)	3.98	4.12	2.19	3.47	4.21	1.46	1.42	3.03	2.19	.79	8.01	7.57	42.44
"	"	Loch Quoich (Glenquoich)	15.49	15.37	8.26	11.68	3.78	5.46	6.10	8.04	7.85	3.55	16.93	15.28	117.79
"	"	Drumnadrochit	4.56	3.46	2.79	1.79	5.66	1.04	2.21	1.87	1.34	.71	6.48	6.39	38.30
"	"	Arisaig House	4.88	6.38	3.52	4.87	4.10	3.91	3.33	5.10	4.94	3.62	7.63	8.10	60.38
"	"	Fort William	11.11	12.18	5.49	7.02	3.28	2.72	1.80	6.99	5.04	1.86	13.18	14.01	84.71
"	"	Skye (Kyleakin)	4.56	7.00	2.98	4.05	1.93	2.47	1.91	4.40	3.08	2.52	7.18	7.09	49.17
"	"	" (Dunvegan)	6.30	10.53	3.81	6.86	3.41	3.41	3.18	5.62	8.06	4.86	8.61	9.80	74.45
"	"	Barra (Castle Bay)	2.15	5.05	3.42	2.48	1.36	1.25	3.24	4.00	3.05	2.67	3.53	5.63	37.83
"	"	South Uist (Ushenish).....	3.61	5.44	4.56	5.08	2.20	1.75	3.44	5.52	5.77	3.65	5.62	4.55	51.19
"	"	Alness (Ardross Castle) ...	4.25	3.06	3.72	1.29	4.92	.85	2.76	1.99	1.66	2.25	6.08	7.77	40.60
"	Ross and Cromarty	Braemore House	9.03	5.90	6.03	7.53	3.04	2.25	6.50	2.63	5.33	4.50	5.46	8.15	66.35
"	"	Loch Torridon (Bendamph)	10.11	13.03	5.16	8.70	5.57	3.65	5.76	7.72	6.70	3.10	11.65	13.84	94.99
"	"	Poolwe (Inverewe Gdns.)	7.12	4.35	3.77	7.78	4.19	1.70	4.74	6.83	5.23	2.48	8.52	7.35	64.06
"	"	Glencarron Lodge	10.28	7.24	6.09	8.83	5.46	4.11	5.62	7.12	8.03	2.60	13.00	11.45	89.83
"	"	Stornoway.....	6.23	6.54	5.10	3.39	2.19	1.53	3.39	2.99	4.74	2.25	5.38	6.24	49.97
XIX.	Sutherland	Invershin	2.01	1.96	3.27	1.68	1.92	1.22	3.87	1.59	2.44	1.12	3.45	3.94	28.47
"	"	Dunrobin Castle	3.35	2.10	4.20	1.05	2.18	.87	3.53	2.05	1.80	1.44	4.25	5.00	31.82
"	"	Tongue Manse	3.71	3.16	3.83	1.85	3.22	1.40	4.97	2.92	3.67	1.75	5.91	6.63	43.02
"	"	Loch Stack	8.26	6.99	6.93	6.88	6.57	3.82	7.14	4.45	9.17	4.19	9.16	9.45	83.31
"	Caithness	Berriedale (Langwell)	3.13	2.82	3.64	.81	3.04	.79	3.56	2.35	2.13	2.91	5.05	4.89	35.12
"	"	Thurso (Buckies)	3.13	2.81	4.40	1.62	3.15	1.54	4.69	1.93	3.51	2.83	6.22	4.37	40.20
Scotland. Mean of 79 stations			4.34	5.80	4.82	3.21	2.77	1.64	3.28	3.85	2.81	2.42	6.41	7.73	49.08

IRELAND.

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
NX.	Cork	Skibbereen Rectory.....	3.51	7.51	7.49	2.39	1.41	1.98	4.88	4.45	3.86	2.71	4.57	11.35	56.11
"	"	Clonakilty (Shannon Vale Ho.) ..	2.75	6.45	5.63	1.74	1.19	.23	4.29	4.64	3.77	1.86	4.30	8.82	45.67
"	"	Dunmanway (The Rectory) ..	4.86	11.03	8.73	3.05	2.04	1.67	4.43	6.15	4.23	2.86	5.52	14.02	68.59
"	"	Midleton (Ballynacurra) ..	1.64	5.56	4.48	1.23	1.32	.76	3.41	4.36	4.25	1.77	3.17	8.98	39.13
"	"	Mallow (Summer Hill) ..	2.45	7.43	5.87	1.47	1.16	.91	2.70	2.93	3.90	2.28	3.51	10.44	45.05
"	"	Mitchelstown Castle	2.08	7.05	5.64	1.25	1.56	1.56	5.41	3.39	3.52	1.87	3.48	7.95	44.76
"	Kerry	Gap of Dunloe (Gearahmeen) ..	10.00	16.50	13.90	4.80	4.20	2.00	6.00	8.70	8.10	5.40	9.00	18.00	106.60
"	"	Darrynane Abbey.....	3.59	9.26	8.23	2.26	2.20	1.80	6.11	6.43	4.58	4.08	3.59	11.62	63.75
"	"	Kenmare (Dromore)	4.63	11.02	10.25	3.22	2.73	1.65	5.02	6.65	4.64	2.12	5.24	11.74	68.91
"	Waterford	Lismore Castle.. ..	1.85	7.11	5.54	1.46	1.57	.50	3.13	4.75	3.01	1.78	3.85	9.82	44.37
"	"	Waterford (Brook Lodge) ..	2.08	5.47	3.84	1.44	1.34	1.19	3.70	5.23	1.59	2.14	4.05	9.64	41.71
"	Tipperary	Nenagh (Traverston)	2.19	7.41	5.63	2.63	2.09	1.60	2.25	4.05	2.64	2.90	4.91	8.79	47.09
"	"	Clonmel (Bruce Villa).....	1.66	6.64	4.37	1.48	1.43	.90	2.35	4.56	3.28	1.65	2.94	9.58	40.84
"	"	Cashel (Ballinamona)	2.33	6.05	5.38	2.08	1.63	.72	2.31	4.64	3.94	2.25	3.57	6.42	41.32
"	Limerick	Foynes	2.52	5.95	5.61	1.45	1.88	1.05	4.34	5.39	3.05	2.02	4.69	7.28	45.23
"	Clare	Ennislymon House	3.11	8.23	6.37	2.03	2.29	1.63	3.56	6.49	3.41	2.77	6.55	9.30	55.74
"	"	Carrigaholt Castle	2.39	7.43	5.72	1.71	2.06	1.64	4.42	5.03	3.87	3.73	6.04	7.89	51.93
"	"	Derriavoher [Limerick] ..	2.11	4.54	3.83	1.65	1.49	.98	3.80	5.26	3.78	2.11	3.16	5.11	37.82
"	"	Newmarket-on-Fergus (Carrigraun) ..	2.61	5.91	5.34	1.91	1.91	.96	3.87	6.53	4.71	2.57	4.73	7.51	48.56
"	Wexford	Scarriff (Woodpark)	2.15	6.22	5.24	2.50	2.05	.81	2.96	4.95	2.85	2.72	5.88	6.64	44.97
"	"	Wexford (Tate School) ..	2.12	5.01	3.71	1.12	1.12	1.45	3.09	4.49	1.82	3.07	3.19	8.89	39.08
"	"	Enniscorthy (Ballyhyland) ..	1.84	5.67	4.69	1.43	1.94	1.15	4.36	5.37	2.21	2.42	3.78	9.22	44.08
"	"	Gorey (Courtown House) ..	1.09	5.24	3.74	1.09	1.97	1.13	3.01	3.75	1.68	2.30	3.38	8.58	36.96
"	Kilkenny	Kilkenny (Lavistown Ho.) ..	1.25	3.60	3.10	1.13	1.41	1.31	3.06	4.67	2.29	1.73	2.67	6.20	32.42
"	Wicklow	Rathdrum (Avondale)	1.67	4.82	4.24	1.36	1.91	1.15	2.97	3.74	2.12	2.24	4.77	9.40	40.39
"	"	Bray (Fassaroe)	1.04	4.95	3.36	1.32	1.83	1.36	3.31	3.61	1.21	2.51	5.04	9.99	39.53
"	Queen's County	Abbey Leix (Blandsfort)...	1.55	4.73	4.15	1.80	1.80	1.30	3.33	4.88	2.09	1.84	3.37	7.50	38.34
"	King's County	Birr Castle.....	1.23	4.50	3.42	2.09	1.58	.91	2.39	4.12	1.69	1.83	3.52	5.32	32.60
"	"	Ballycumber (Mooreck Lodge) ..	1.28	3.61	3.06	2.38	1.76	.76	2.80	5.13	1.42	1.75	3.87	5.24	33.06
"	Kildare	Castledermot (Millbrook) ..	1.32	3.34	2.90	1.47	1.76	1.35	3.23	4.95	1.37	1.68	2.58	6.46	32.41
"	"	Monasterevan (Moore Abbey) ..	1.14	3.41	2.71	1.29	1.55	.89	3.13	5.94	1.70	1.93	3.55	6.06	33.30
"	"	Balbriggan (Ardgillan) ..	.88	2.21	2.07	1.33	1.90	1.38	2.56	3.28	1.07	2.05	3.08	6.69	28.50
"	Dublin	Dunboyne (Stirling Clonee) ..	1.54	2.74	2.08	1.12	1.90	.90	3.12	4.15	1.10	1.92	5.02	7.12	32.71
"	Meath	Drogheda (Mullacrogan)...	.74	2.38	1.96	1.27	1.56	1.12	2.35	3.02	1.40	2.54	3.61	5.57	27.52
"	"	Athboy (Frankville).....	1.73	3.71	3.30	1.63	1.73	.97	2.78	7.04	2.08	1.95	3.66	5.70	36.28

IRELAND—(continued).

Div.	County.	Station.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
XXI.	Westmeath	Mullingar (Belvedere).....	1.56	4.38	3.93	1.58	2.78	1.11	2.65	6.00	2.16	1.17	4.38	7.21	38.91
	"	Castlepollard (Pakenham Hall) ..	1.72	3.67	3.72	1.36	2.54	.83	3.08	7.36	1.23	1.81	3.77	5.69	36.78
	Louth.....	Greenore	1.48	2.37	3.85	1.19	1.83	1.17	2.84	2.97	1.14	1.82	3.76	6.68	31.10
XXII.	Longford	Ballymahon (New Castle).....	1.60	4.36	3.80	1.93	2.21	1.20	2.22	5.69	1.55	1.80	4.04	5.93	36.33
	"	Knockboy House.....	2.24	6.75	5.23	1.80	2.20	1.31	4.64	5.47	3.42	3.08	4.93	8.07	49.14
	Galway ..	Tuam (Gardenfield).....	3.12	8.33	4.92	1.92	2.17	.47	5.17	4.83	2.21	2.01	7.90	6.18	49.26
"	"	Woodlawn.....	2.71	5.37	5.53	2.04	1.93	1.46	2.70	4.42	2.43	1.72	5.77	6.76	42.84
"	"	Strokestown (Castlenode).....	2.40	5.06	4.09	2.02	1.92	1.26	2.79	5.01	1.43	1.80	3.46	5.82	37.06
"	Roscommon	Crossmolina (Enniscoe) ...	3.25	9.00	6.81	2.88	2.64	.87	4.32	3.19	3.63	3.29	6.46	8.75	55.09
"	Mayo	Westport (St. Helens).....	2.83	8.58	5.10	3.35	2.65	1.20	3.79	3.14	2.64	2.81	5.37	8.76	50.22
"	"	Cong (The Glebe)	3.84	9.21	5.83	2.19	2.41	.75	4.27	4.89	2.92	2.54	6.78	9.28	54.91
"	"	Dugort (Slievemore Hotel).....	4.37	9.94	7.35	3.97	3.29	2.50	3.50	4.78	3.73	3.40	8.82	10.66	66.31
"	Sligo	Collooney (Markree Obs.) ..	2.25	6.84	5.38	2.21	2.57	1.24	4.18	5.39	2.57	2.12	5.66	6.91	47.32
"	Leitrim	Mohill (Rectory)	2.85	5.41	5.76	2.38	2.02	1.99	3.19	5.93	1.51	2.16	4.46	6.05	43.71
XXIII.	Cavan.....	Killeshandra (Drom Mullac) ..	2.36	4.80	5.79	1.94	1.51	1.58	2.61	5.25	1.28	1.54	4.19	4.49	37.34
	"	Enniskillen (Portora)	2.34	6.02	5.66	2.23	1.61	1.10	3.18	5.97	1.94	1.80	5.16	5.50	42.51
	Fermanagh	Belleek	3.70	7.34	6.00	2.25	1.64	2.24	3.15	6.95	2.25	3.26	4.37	5.23	48.38
"	"	Dartrey [Cootehill]	1.63	3.94	4.60	1.78	1.39	1.48	2.60	4.49	1.73	2.23	4.53	6.53	36.93
"	Monaghan.....	Armagh Observatory	1.36	2.93	4.03	1.30	1.33	2.14	2.13	3.05	1.34	1.54	3.76	7.15	32.06
"	Armagh.....	Seaforde	1.58	3.90	4.73	1.77	1.77	1.39	2.47	4.02	1.18	1.63	5.55	8.84	38.83
"	Down.....	Donaghadee	1.90	3.29	3.03	1.65	2.02	1.52	2.14	2.95	.89	1.53	2.39	4.83	28.14
"	"	Belfast (Queen's University) ..	2.73	2.84	3.65	1.61	1.72	1.22	1.90	3.34	1.48	1.56	5.21	7.72	34.98
"	Antrim	Glenarm Castle.....	3.88	3.84	5.61	2.53	1.80	1.33	1.80	2.21	1.47	1.53	6.32	10.08	42.40
"	"	Bushmills (Dundarave) ...	1.89	5.13	4.07	1.72	1.84	1.35	1.43	4.08	2.27	1.81	4.85	4.93	35.37
"	"	Ballymena (Harryville) ..	3.74	5.27	5.39	2.38	2.98	1.88	2.77	5.31	2.13	1.92	5.84	10.01	49.62
"	Londonderry.....	Limavady (Drenagh)	1.95	5.58	4.16	1.66	1.91	1.59	2.12	3.17	2.23	1.37	4.45	6.02	36.21
"	Tyrone	Cookstown (Lissan).....	2.33	4.24	5.56	1.27	1.30	.79	1.71	3.57	1.24	1.61	5.12	5.80	34.54
"	"	Omagh (Edenfel).....	2.52	5.43	5.44	2.34	1.85	1.11	2.53	4.07	2.11	1.76	5.78	6.65	41.59
"	Donegal.....	Milford (The Manse)	2.59	6.13	4.61	1.89	2.06	.92	3.17	2.60	3.19	1.60	5.80	6.44	41.00
"	"	Dunfanaghy (Horn Head).....	3.26	7.34	4.54	2.90	2.45	1.38	3.57	3.03	2.26	2.10	7.09	7.19	17.11
"	"	Killybegs	4.36	6.53	8.04	2.82	3.70	2.33	5.19	4.34	4.15	3.23	7.73	6.66	59.08
"	"	Convoy	3.02	8.09	5.22	2.48	1.87	1.26	3.07	4.18	3.24	2.31	6.57	6.48	47.79
Ireland. Mean of 67 stations ..			2.45	5.89	5.03	1.95	1.96	1.28	3.30	4.69	2.53	2.23	4.75	7.79	43.85
BRITISH ISLES. Mean of 301 stations ..			2.73	4.63	4.76	1.94	2.13	1.79	3.53	3.37	2.27	2.38	4.99	7.55	42.07

SEASONAL RAINFALL, 1913-14.

For some years past we have given a synopsis of the rainfall conditions for the six-monthly periods ending respectively with March and September, each of these having such well marked climatological features as to constitute a natural division of the year for the purpose of rainfall study. The table appended to this section gives for each half-year the total rainfall at 106 stations, the 35 years' average, and the difference from the average in inches. The fall is also expressed as a percentage of the average for the period dealt with. The percentage values for each half-year and for the seasonal year are plotted on maps, and lines of equal percentage of the average drawn for every 10 per cent.

During the winter of 1913-14 the rainfall showed an excess of probably more than 40 per cent. in three widely separated localities, in no instance of large extent. The largest of these embraced the extreme west of Co. Clare and Co. Kerry, where the maximum excess of 47 per cent. was noted at Carrigaholt Castle. An excess of more than 40 per cent. was also recorded in part of Argyll, and over a small portion of Essex, where the rainfall at Shoeburyness exceeded the average by 43 per cent. More than 20 per cent. above the average fell over the whole western half of Ireland and the greater part of the west of Scotland, in parts of the south-west of England and Wales, and in the south-eastern counties of England. In Scotland and Ireland the excess diminished fairly regularly from west to east, but in the south-east of Ireland the average line lay nearly along the coast. In Scotland on the other hand, the east coast south of the Moray Firth was very dry, the east of Aberdeenshire having a deficiency of more than 25 per cent. and being the driest part of the British Isles. In the southern half of England the most marked feature was a comparatively dry tongue extending from South Lancashire, where less than 90 per cent. of the average fell, to Southampton, where about 10 per cent. more than the average fell. This tongue separated the large wet area of the south-east of England from the less uniformly wet districts of the south-west. Over the British Isles as a whole the fall was 111 per cent. of the average, the maximum being

were dry nearly everywhere. It is worthy of remark that the areas in which the rainfall did exceed the average were, with one notable exception, approximately the same as in the winter period, the rainfall exceeding the average in the west of Ireland, the districts on both sides of the Bristol Channel, and over the north-west of Scotland. On the



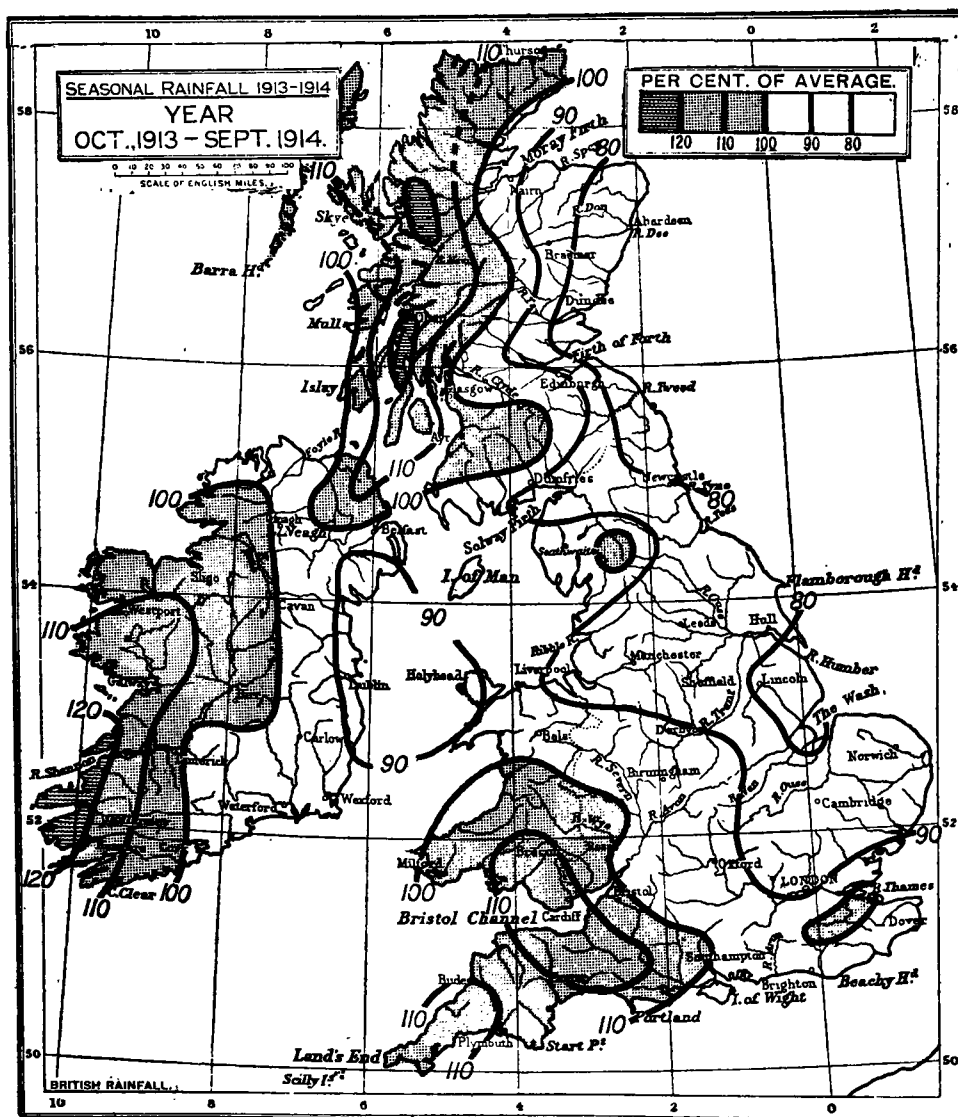
other hand the driest part of the British Isles in the summer half-year coincided with one of the large wet areas observed during the winter period, practically the whole of the south-east of England to the east of a line joining the Wash and the Isle of Wight having less than 70 per cent. of the average. Over a considerable part of Suffolk, Essex, and

Kent less than 60 per cent. of the average fell. No pronounced departure from the average of wide extent occurred in other parts of England. The north-west of England generally had less than 80 per cent. of the average, but more than this proportion fell in the north-east, and a small area in the vicinity of Filey had rather more than the average. While England was the driest of the four large divisions, with a deficiency of 20 per cent., Wales had the nearest approach to average conditions with a general deficiency of only 9 per cent., this moderation being almost wholly due to the pronounced wetness of July.

Over Scotland the ratio of the observed rainfall to the average increased steadily from the south-east to the north-west, less than 70 per cent. falling over most of the Border and along a broad east coast strip to Aberdeen. The region showing an excess lay entirely to the north and west of the Great Glen, rather more than 10 per cent. above the average falling in the west of Ross and Cromarty, but in the outlying islands rather less than the average fell. The general fall for Scotland was 15 per cent. below the average. In Ireland only over a portion of Co. Clare and Co. Kerry did the rainfall exceed the average. The deficiency was most marked in the north-east, the rainfall in Co. Down being less than 70 per cent. of the average. The fall was less than 80 per cent. over the north-east and south coasts generally. For Ireland the general fall was 17 per cent. below the average, and the general fall for the British Isles was also 17 per cent. in defect.

As in both half-years, with the local exception referred to, the broad features of the distribution were similar, the map for the seasonal year ending September, 1914, does not differ markedly from the seasonal maps, there being an excess of about 20 per cent. in the west and a deficiency of the same amount in the east of the country. In the south-east of England where the winter period was wet and the summer period dry, the values for the whole year did not differ much from the average. The principal dry areas embraced a fairly broad strip on the east coast of Scotland and part of the north-east of England, where rather less than 80 per cent. of the average fell. A smaller area in which the deficiency was about 20 per cent. covered the whole of Lincolnshire. More than the average fell over the western half of Ireland, the west and north-west of Scotland, the north-east of Ireland, and to the south-west of a line joining Aberystwyth and the Isle of Wight. The excess was greatest in the west of Scotland and the south-west coast of Ireland.

Taking the British Isles as a whole there was a deficiency of only 1 per cent., entirely due to the relative dryness of England, which had 93 per cent. of the average; in Wales and Ireland there was an excess of 3 per cent. and in Scotland 1 per cent.



The remarkable character of the seasonal year was thus an average rainfall over the country as a whole, produced by a very dry summer following a very wet winter, the complementary character being even more marked than in the case of the seasonal year 1912-13.

Seasonal Rainfall, 1913-1914, in Relation to the Average, 1875-1909.

Div.	Stations.	Winter Six Months, October, 1913—March, 1914.				Summer Six Months, April — September, 1914.				12 Months, Oct., 1913—Sept., 1914. Per cent. of Average.
		Rainfall. in.	Aver- age. in.	Difference from Average. in.	Per cent. of Aver.	Rainfall. in.	Aver- age. in.	Difference from Average. in.	Per cent. of Aver.	
I.	St. Pancras, Camden Square.....	13.68	12.38	+1.30	111	7.18	12.73	-5.55	56	83
II.	Tenterden, View Tower	18.61	15.31	+3.30	122	7.81	12.33	-4.52	63	96
"	Edenbridge, Falconhurst	21.84	16.75	+5.09	130	8.92	13.51	-4.59	66	102
"	Arundel, Patching	20.71	17.17	+3.54	121	9.40	13.31	-3.91	71	99
"	Fawley, Cadland	20.07	17.89	+2.18	112	11.43	13.98	-2.55	82	99
III.	Basingstoke, Sherborne St. John	19.78	15.86	+3.92	125	8.81	13.31	-4.50	66	98
"	Royston, Therfield	13.07	12.02	+1.05	109	8.13	13.54	-5.41	60	83
"	Oxford, Magdalen College.....	13.20	11.98	+1.22	110	10.65	12.60	-1.95	85	97
"	Wellingborough, Swanspool	11.17	12.27	-1.10	91	9.65	12.93	-3.28	75	83
IV.	March	10.79	10.71	+ .08	101	7.47	12.32	-4.85	61	79
"	Shoeburyness	13.99	9.82	+4.17	143	5.43	9.46	-4.03	57	101
"	Ipswich, Orwell Park	14.67	12.56	+2.11	117	6.72	12.40	-5.68	54	86
"	Bury St. Edmunds, Westley.....	14.42	12.26	+2.16	118	7.72	13.14	-5.42	59	87
"	Gedeston	12.87	11.91	+ .96	108	7.04	11.82	-4.78	60	84
"	Holkham Hall	11.77	11.46	+ .31	103	9.27	12.10	-2.83	77	89
V.	Bishops Cannings	14.78	15.70	- .92	94	13.44	15.17	-1.73	89	91
"	Evershot, Melbury House	26.70	22.27	+4.43	120	16.14	15.93	+ .21	101	112
"	Ashburton, Druid House	35.54	32.16	+3.38	111	17.95	19.45	-1.50	92	104
"	Barnstaple	23.21	21.30	+1.91	109	17.58	15.84	+ 1.74	111	110
"	Falmouth Observatory	32.45	26.14	+6.31	124	16.27	16.55	-.28	98	114
"	Altarnon Sanctuary.....	43.41	35.83	+7.58	121	22.51	23.14	-.63	97	112
"	Litton, Sherborne Reservoir	25.28	21.38	+3.90	118	18.23	18.25	-.02	100	110
VI.	Stroud, Uptield	15.06	15.15	- .09	99	12.05	14.66	-2.61	82	91
"	Church Stretton, Wolstaston	17.26	16.57	+ .69	104	13.93	15.84	-1.91	88	96
"	Wolverhampton, Wrottesley	11.27	12.64	-1.37	89	13.56	13.75	-.19	99	94
"	Malvern, Church Street	14.91	14.14	+ .77	105	13.75	14.43	-.68	95	100
"	Ryton-on-Dunsmore	14.25	12.93	+1.32	110	11.61	13.63	-2.02	85	97
VII.	Market Overton	13.06	13.40	-.34	97	11.37	13.70	-2.33	83	90
"	Revesby	11.87	12.59	-.72	94	7.67	12.56	-4.89	61	78
"	Lincoln, Skellingthorpe Hall	9.63	11.34	-1.71	85	9.39	12.36	-2.97	76	80

Seasonal Rainfall, 1913-1914, in Relation to the Average, 1875-1909—(continued).

Div.	Stations.	Winter Six Months, October, 1913—March, 1914.				Summer Six Months, April—September, 1914.				12 Months, Oct., 1913—Sept., 1914.
		Rainfall.	Aver- age.	Difference from Average.	Per cent. of Aver.	Rainfall.	Aver- age.	Difference from Average.	Per cent. of Aver.	
VII.	Mickleover Manor	in. 12·35	in. 12·75	in. —·40	97	in. 11·72	in. 13·90	in. —2·18	84	90
VIII.	Middlewich, Bostock Hall	12·25	14·63	—2·38	84	14·66	15·33	—·67	96	90
"	Chatburn, Middlewood	20·72	23·39	—2·67	89	15·81	20·28	—4·47	78	84
IX.	Southport, Hesketh Park	14·86	16·73	—1·87	89	14·14	15·97	—1·83	89	89
"	Sheffield W. W., Redmires Res.	22·49	22·20	+·29	101	13·64	19·11	—5·47	71	88
"	Arncliffe Vicarage	35·87	35·66	+·21	101	17·70	25·83	—8·13	69	87
"	Wetherby, Ribston Hall	11·78	13·31	—1·53	89	11·49	13·56	—2·07	85	87
"	Hull, Pearson Park	11·35	13·17	—1·82	86	10·73	13·25	—2·52	81	84
"	Scarborough, Osgodby	10·48	14·17	—3·69	74	13·12	12·23	+·89	107	89
X.	Darlington, Cleveland Parade	9·69	12·59	—2·90	77	11·17	13·18	—2·01	85	81
"	Newcastle-on-Tyne, Town Moor	9·86	13·92	—4·06	71	12·69	14·02	—1·33	91	81
"	Rothbury, Cragside	13·87	18·60	—4·73	75	11·91	15·64	—3·73	76	75
"	Carlisle, Spital Cemetery	16·27	15·62	+·65	104	11·20	16·55	—5·35	68	85
"	Borrowdale, Seathwaite	82·40	76·47	+5·93	108	36·71	53·01	—16·30	69	92
XI.	Appleby, Castle Bank	22·04	18·62	+3·42	118	13·82	15·79	—1·97	88	104
"	Abergavenny, Larchfield	23·66	20·77	+2·89	114	14·20	16·34	—2·14	87	102
"	Ystalyfera, Wern School	48·66	36·79	+11·87	132	23·63	27·25	—3·62	87	113
"	Cardiff, Ely	26·52	23·26	+3·26	114	21·12	19·02	+2·10	111	113
"	Haverfordwest Castle	27·59	27·12	+·47	102	20·24	19·69	+·55	103	102
"	Aberystwyth, Gogerddan	29·99	24·58	+5·41	122	18·34	20·88	—2·54	88	106
"	Birmingham W. W., Tynmynydd	42·80	37·20	+5·60	115	21·84	24·86	—3·02	88	104
"	Wrexham, Pack Saddle Reservoir	16·01	17·24	—1·23	93	13·41	15·45	—2·04	87	90
"	Llandudno	15·75	16·56	—·81	95	11·79	13·80	—2·01	85	91
"	Holyhead	18·90	19·96	—1·06	95	11·75	15·06	—3·31	78	88
XII.	Douglas	25·40	23·40	+2·00	109	13·55	18·15	—4·60	75	94
"	Anchencain, Torr House	26·49	25·53	+·96	104	15·19	21·27	—6·08	71	89
"	Drumlanrig Castle	32·60	25·17	+7·43	129	15·08	18·54	—3·46	81	109
"	Hawick, Branxholme	19·29	18·49	+·80	104	10·42	15·31	—4·89	68	88
XIII.	North Esk Reservoir	24·25	21·46	+2·79	113	14·85	18·29	—3·44	81	98

Seasonal Rainfall, 1913-1914, in Relation to the Average, 1875-1909—(continued.)

Div.	Stations.	Winter Six Months, October, 1913-March, 1914.				Summer Six Months, April-September, 1914.				12 Months, Oct., 1913-Sept., 1914	
		Rainfall. in.	Aver- age.	Difference from Average.	Per cent. of Aver.	Rainfall. in.	Aver- age.	Difference from Average.	Per cent. of Aver.		Per cent. of Average.
XIII.	Marchmont House	13.92	17.06	- 3.14	82	9.77	16.70	- 6.93	59		70
XIV.	Airdrie, Hillend Reservoir	21.72	19.99	+ 1.73	109	14.06	17.73	- 3.67	79		95
"	Girvan, Pinnore	33.40	28.37	+ 5.03	118	17.82	21.40	- 3.58	83		103
XV.	Loch Thom	40.96	36.37	+ 4.59	113	22.00	28.10	- 6.10	78		98
"	Lochgilplead, Poltalloch	40.75	28.71	+ 12.04	142	21.96	22.55	- .59	97		122
"	Inveraray, Newtown	50.01	40.92	+ 9.09	122	25.87	27.75	- 1.88	93		111
"	Islay, Eallabus	30.80	28.38	+ 2.42	109	19.42	20.41	- .99	95		103
XVI.	Mull, Quinish	35.38	32.98	+ 2.40	107	20.53	23.59	- 3.06	87		99
"	Loch Leven Sluices	18.25	19.86	- 1.61	92	10.92	16.68	- 5.76	65		80
"	Balquhiddier, Stronvar	52.65	45.08	+ 7.57	117	21.09	28.69	- 7.60	74		100
XVII.	Blair Atholl	20.90	17.91	+ 2.99	117	12.14	14.44	- 2.30	84		102
"	Dundee, Eastern Necropolis	11.79	14.08	- 2.29	84	9.31	14.56	- 5.25	64		74
"	Fettercairn, The Burn	15.42	18.36	- 2.92	84	10.01	16.39	- 6.38	61		73
"	Braemar	18.21	19.11	- .90	95	10.25	15.82	- 5.57	65		82
"	Aberdeen, Cranford House	12.72	17.32	- 4.60	73	10.67	15.41	- 4.74	69		71
XVIII.	Gordon Castle	11.58	15.25	- 3.67	76	13.57	15.09	- 1.52	90		83
"	Glenquoich	89.57	68.75	+ 20.80	130	42.91	40.59	+ 2.32	106		121
"	Dumnadrochit	22.01	20.27	+ 1.74	109	13.91	15.86	- 1.95	88		99
"	Inverness High School	13.39	14.18	- .79	94	11.87	12.96	- 1.09	92		93
"	Fort William, Atholl Bank	59.25	46.72	+ 12.53	127	26.85	29.08	- 2.23	92		114
"	Loch Torridon, Bendamph	61.58	51.38	+ 10.20	120	38.10	32.55	+ 5.55	117		119
"	Stornoway	36.10	30.03	+ 6.07	120	18.23	18.37	- .14	99		112
XIX.	Dunrobin Castle	18.96	17.46	+ 1.50	109	11.48	14.44	- 2.96	80		95
"	Thurso, Holburn Head	21.73	18.99	+ 2.74	114	13.77	13.72	+ .05	100		109
XX.	Glanmire, Lota Lodge	27.91	25.64	+ 2.27	109	15.06	18.44	- 3.38	82		97
"	Killarney, District Asylum	44.09	33.49	+ 10.60	132	19.08	21.32	- 2.24	90		115
"	Valencia, Glanleam	45.81	32.08	+ 13.73	143	25.18	23.93	+ 1.25	105		127
"	Waterford, Brook Lodge	21.97	21.72	+ .25	101	14.49	17.85	- 3.36	81		92
"	Nenagh, Castle Lough	25.52	21.46	+ 4.06	119	13.58	17.97	- 4.39	76		99

Seasonal Rainfall, 1913-1914, in Relation to the Average, 1875-1909—(continued).

Div.	Stations.	Winter Six Months, October, 1913—March, 1914.				Summer Six Months, April—September, 1914.				12 Months, Oct., 1913—Sept., 1914.
		Rainfall.	Aver- age.	Difference from Average.	Per cent. of Aver.	Rainfall.	Aver- age.	Difference from Average.	Per cent. of Aver.	
		in.	in.	in.		in.	in.	in.		Per cent. of Average.
XX.	Ennistymon House	34.25	25.03	+ 9.22	137	19.41	21.49	- 2.08	90	116
	Carrigaholt Castle	28.98	19.74	+ 9.24	147	18.73	16.86	+ 1.87	111	130
XXI.	Gorey, Courtown House	18.84	18.80	+ .04	100	12.63	16.19	- 3.56	78	90
"	Abbey Leix, Blandsfort	21.52	18.51	+ 3.01	116	15.20	17.41	- 2.21	87	102
"	Dublin, Fitz William Square	13.45	13.84	- .39	97	10.24	13.84	- 3.60	74	86
"	Mullingar, Belvedere	19.50	18.37	+ 1.13	106	16.28	17.78	- 1.50	92	99
"	Greenore	17.22	16.23	+ .99	106	11.14	16.10	- 4.96	69	88
XXII.	Tuam, Gardenfield	31.31	23.27	+ 8.04	135	16.77	19.42	- 2.65	86	113
"	Crossmolina, Enniscroe	37.90	31.04	+ 6.86	122	17.53	21.83	- 4.30	80	105
"	Markree Observatory	27.98	22.97	+ 5.01	122	18.16	19.74	- 1.58	92	108
XXIII.	Belburbet, Cloverhill	20.01	17.24	+ 2.77	116	14.57	16.50	- 1.93	88	102
"	Armagh Observatory	17.85	15.52	+ 2.33	115	11.29	16.36	- 5.07	69	91
"	Seaforde	21.26	20.34	+ .92	105	12.60	18.57	- 5.97	68	87
"	Belfast, Queen's University	20.67	17.40	+ 3.27	119	11.27	16.41	- 5.14	69	94
"	Ballymena, Harryville	28.04	21.49	+ 6.55	131	17.45	19.35	- 1.90	90	111
"	Limavady, Drenagh	20.77	19.93	+ .84	104	12.68	17.53	- 4.85	72	89
"	Omagh, Edenfel	24.87	20.45	+ 4.42	122	14.01	18.93	- 4.92	74	99
"	Convoy	30.59	25.64	+ 4.95	119	16.10	20.30	- 4.20	79	102
Means.	England (mean of 45 stations)	18.79	17.90	+ 0.89	105	12.48	15.61	- 3.13	80	93
	Wales " " (9 ")	27.76	24.83	+ 2.93	112	17.37	19.15	- 1.78	91	103
	Scotland " " (28 ")	30.49	27.08	+ 3.41	113	17.22	20.23	- 3.01	85	101
	Ireland " " (23 ")	26.10	21.75	+ 4.35	120	15.37	18.44	- 3.07	83	103
	British Isles " " (106 ")	24.29	21.80	+ 2.49	111	14.78	17.77	- 2.99	83	99

THE RELATION OF THE TOTAL FALL OF RAIN IN 1914 TO THE AVERAGE.

It is not, we believe, recognised so widely as it should be, that, even in an area so limited in extent as the British Isles, the total rainfall of every year varies widely in its relation to the average in different parts of the country. It is true that if we calculate the general proportion of the average fall over the country as a whole for each successive year, certain periodical fluctuations of a definite nature may be observed, suggesting that influences may be at work which operate over wide areas, but at the same time there seems little doubt that it is very rare indeed for the rainfall in any calendar year to be above, or below, the average in all parts of the country at once. The number of trustworthy rainfall records of sufficient duration to yield satisfactory average values has not, until recent years, been large enough to enable maps such as that which forms the frontispiece of this volume to be constructed, and we are unable to compare the distribution of rainfall in this way over a very long period, but similar maps have been published, including that for 1914, for the last nine years and all agree in indicating a wide range of percentage values from place to place in the same year.

In preparing the map for 1914 the records of 251 stations were utilized. The data plotted were obtained by expressing the total rainfall of the year at each of these stations as a percentage of the average annual rainfall during the period 1875-1909. In a few cases where the record was not of sufficient length to cover the whole period the average has been in part computed by reference to neighbouring stations. The values on the map are indicated by means of lines passing through places at which the percentage departure from the average was equal and these lines have been drawn for each successive 10 per cent. of excess or deficiency. The distribution is further emphasized by tinting the areas

of deficient rainfall red and those of excessive rainfall blue, the colour being deeper if the excess or deficiency exceeded 10, 20, 30, or 40 per cent. respectively. A selection of 200 of the records used is given in the table at the end of the section, the stations being chosen so as to be as far as possible evenly distributed over the country, in order that the mean of all may fairly represent the general value for each of the large divisions of the country, and for the British Isles as a whole.

Speaking broadly, the distribution of rainfall relatively to the average, in 1914, was similar to that during 1913, but the past year was almost everywhere wetter than its predecessor. The chief features of the map are a broad and unbroken belt of excessive rainfall, stretching from the south-west of Ireland to the north of Scotland, and a wet area which occupied the inland part of the north of England, practically the whole of Wales and the whole of the south of England. The areas with less than the average rainfall included a narrow fringe of the extreme west of Scotland and north of Ireland, and a wider and drier strip on the east coast from the Orkneys southward to the Wash, broken only by a small extension of the inland wet area to the coast between Sunderland and Scarborough. Less than the average fell also along the Scottish border and on the coasts surrounding the northern half of the Irish Sea, so that if we leave out of account the south of England and the west of Ireland the distribution of rainfall during the year may be said to have been characterized by a deficiency in the maritime counties and an excess in the inland districts.

In the two main wet areas the excess was greatest in the south. Rather more than 40 per cent. above the average fell in the east of Dorset and about 30 per cent. over the whole of that county, whilst in Ireland more than 30 per cent. excess fell on the coast of Clare and Kerry, and possibly slightly more than 40 per cent. at the mouth of the Shannon. In spite of these large local excesses the areas over which the fall was more than 20 per cent. above the average were by no means extensive. They included a part of the west coast of Ireland extending from Galway Bay to Bantry Bay, and small patches in Antrim, Argyll, and Perthshire in the western wet tract; and in the wet area of England and Wales two patches in South and North Wales and a long strip, averaging about 15 miles in width, running from Plymouth to Uckfield. More than 110 per cent. of the average fell over a string of areas from the west coast of Ireland to the west coast of Ross and Cromarty, and over an unbroken

area embracing the greater part of the south of England, the eastern half of Wales, and the west of the English Midlands. This amount fell also on part of the northern Pennines and on small patches in the north of Hertfordshire and the North Riding of Yorkshire, the latter wet area being directly attributable to the high rainfall of the summer months on the north-east coast of England in contrast to the remainder of the east of Great Britain. In the dry districts the rainfall was less than 90 per cent. only on part of the extreme east coast of Scotland and a small area round the Solway Firth. One station in Fifeshire had rather less than 80 per cent. of the average fall, but so great a deficiency was undoubtedly very local.

The great extent of the wet areas during the year in comparison with those of deficient rainfall resulted in the general fall over all the great divisions being in excess of the average. The excess was smallest, 3 per cent., for Scotland, where there were no very marked excesses. In Ireland the general fall was 8 per cent. in excess, in England 9 per cent., and in Wales 10 per cent., whilst for England and Wales together the

ABSTRACT.

COUNTRIES.	No. of Records utilized.	Average. 10 years 1900-09.	Average. 35 years 1875-1909.	1914.	Diff. from Averages 1875-1909.	
					Amount.	Per cent.
England.....	85	32·55	33·40	36·30	2·90	+ 9
Wales.....	16	46·37	46·95	51·79	4·84	+ 10
England and Wales.....	101	34·74	35·55	38·76	3·21	+ 9
Isle of Man	1	41·35	41·55	38·99	2·56	— 6
Scotland	54	46·09	45·00	46·23	1·23	+ 3
Ireland	44	40·42	40·35	43·45	3·10	+ 8
British Isles	200	39·08	39·18	41·80	2·62	+ 7

excess was 9 per cent. For the British Isles as a whole the rainfall of 1914 was 7 per cent. above the average.

We have omitted the table giving a rough comparison of the rainfall of the various divisions of the British Isles based on the measurements of the 30 years' average rainfall map prepared in 1903. This map was used as a provisional guide pending the completion of a more accurate map, and since the average of the 35 years ending in 1909 has been introduced the deficiencies of the old map have become more pronounced,

so that we feel that it is better to cease to make use of it even before the completion of the new map, now in course of preparation.

The wetness of 1914 seems to put a definite period to the sequence of one wet year followed by two dry years, to which we have frequently had occasion to refer, and it is now apparent that we have entered upon a succession of years in which those with excessive rainfall are equally numerous, or more numerous than those with deficient rainfall when the British Isles are regarded as a whole.

COMPARISON OF THE RAINFALL OF THE YEAR 1914 WITH THE AVERAGE OF THE PERIODS 1900-09 & 1875-1909.

ENGLAND.

DIV.	COUNTY and river-division.	STATION.	Average 1900-09.	Average 1875- 1909.	Depth in 1914.	Difference from Average 1875-1909. Per Amount. cent
			in.	in.	in.	in.
I.	London	2 St. Pancras (Camden Square)	24·57	25·11	25·72	·61 + 2
II.	Surrey	6 Haslemere (Hazlehurst)	35·84	36·15	44·91	8·76 + 24
	„ Kent	1 Tenterden (View Tower).....	26·34	27·64	32·43	4·79 + 17
	„ „	3 Selling (Harefield)	29·86	29·85	34·41	4·56 + 15
	„ „	4 Edenbridge (Falconhurst) ...	31·06	30·26	34·70	4·44 + 15
	„ Sussex	2 Arundel (Patching)	29·61	30·48	36·29	5·81 + 19
	„ „	5 Hailsham Vicarage	30·02	30·48	36·04	5·56 + 18
	„ Hampshire	1 Ventnor (Flint Cottage)	27·95	28·97	33·80	4·83 + 17
	„ „	8 Basingstoke (Sherborne St. John)	29·27	29·17	32·73	3·56 + 12
III.	Hertfordshire	1 Tring (Cowroast Lock)	28·73	28·89	32·67	3·78 + 13
	„ „	3 Royston (Therfield Rectory)..	24·64	25·56	25·94	·38 + 1
	„ Buckinghamshire ...	4 Slough (Langley)	23·52	24·18	25·36	1·18 + 5
	„ „	5 Buckingham (Adstock Fields)	24·25	25·96	25·55	·41 — 2
	„ Oxfordshire	3 Oxford (Magdalen College)...	23·31	24·58	26·90	2·32 + 9
	„ Northampton	4 Wellingborough (Swanspool) ...	24·41	25·20	22·99	2·21 — 9
	„ Cambridgeshire	2 Cambridge (Quy Hall).....	22·00	23·11	22·82	·29 — 1
	„ „	2 March	22·37	23·03	22·02	1·01 — 4
IV.	Essex	3 Shoeburyness	18·69	19·28	19·89	·61 + 3
	„ „	4 Chelmsford (High Street).....	22·66	23·02	24·88	1·86 + 8
	„ „	5 Earls Colne (Chalkney Ho.)	22·83	23·43	25·60	2·17 + 9
	„ Suffolk	2 Ipswich (Orwell Park).....	24·10	24·96	24·69	·27 — 1

ENGLAND—(continued).

DIV.	COUNTY and river-division.	STATION.	Average 1900-09	Average 1875- 1909.	Depth in 1914.	Difference from Average 1875-1909.	
						Amount.	Per cent
			in.	in.	in.	in.	
IV.	Suffolk	5 Bury St. Edmunds (Westley)	24·11	25·40	26·66	1·26	+ 5
„	Norfolk	1 Geldeston [Beccles]	22·74	23·73	24·45	·72	+ 3
„	„	1 Cawston Rectory	25·29	26·91	27·47	·56	+ 2
„	„	3 Wells (Holkham Hall)	23·63	23·56	24·75	1·19	+ 5
„	„	4 Swaffham (Little Dunham)...	25·68	27·57	26·61	·96	— 3
V.	Wiltshire	3 Warminster (Rye Hill)	35·21	36·75	44·63	7·88	+ 21
„	„	4 Landford (Northlands)	30·04	30·11	36·67	6·56	+ 22
„	„	6 New Swindon	26·37	28·05	34·74	6·69	+ 24
„	Dorset	1 Evershot (Melbury House) ...	37·70	38·20	51·42	13·22	+ 35
„	„	3 Wareham (South Street)	32·10	31·39	44·80	13·41	+ 43
„	South Devon ..	2 Devonport (Rowdens Res.)...	33·78	35·58	43·14	7·56	+ 21
„	„ „	4 Ashburton (Druid House) ...	48·68	51·61	64·84	13·23	+ 26
„	„ „	6 Cullompton	33·22	35·18	41·87	6·69	+ 19
„	North Devon ..	2 Arlington Court	53·81	53·39	58·72	5·33	+ 10
„	„ „	3 Okehampton (Oaklands).....	43·95	46·25	57·53	11·28	+ 24
„	„ „	3 Northam Vicarage	34·13	35·55	41·61	6·06	+ 17
„	Cornwall	2 Falmouth (New Observatory)	41·95	42·69	49·09	6·40	+ 15
„	„	2 St. Austell (Trevarna).....	43·85	46·21	53·06	6·85	+ 15
„	„	3 Altarnon Sanctuary	57·51	58·97	65·14	6·17	+ 10
„	„	4 Scilly (St. Mary's)	30·44	32·36	34·31	1·95	+ 6
„	Somerset	2 Street (Millfield)	28·73	29·94	34·71	4·77	+ 16
VI.	Gloucestershire ..	3 Stroud (Upfield)	29·03	29·81	31·60	1·79	+ 6
„	„	5 Clifton (Pembroke Road) ...	32·43	34·88	39·60	4·72	+ 14
„	„	7 Great Barrington	28·59	29·83	32·43	2·60	+ 9
„	Herefordshire	1 Kington (Lynhales)	31·55	33·28	36·82	3·54	+ 11
„	Shropshire	3 Church Stretton (Wolstaston)	31·74	32·41	34·90	2·49	+ 8
„	Staffordshire	2 Market Drayton (Old Springs)	29·47	29·41	34·89	5·48	+ 19
„	„	3 Wolverhampton (Wrottesley)	24·65	26·39	29·96	3·57	+ 13
„	„	5 Cheadle (The Heath House)	32·10	32·65	37·73	5·08	+ 16
„	Worcestershire	1 Malvern (Church Street)...	28·12	28·57	30·87	2·30	+ 8
„	Warwickshire	1 Ryton-on-Dunsmore (Ryton Ho.)	26·20	26·56	27·68	1·12	+ 4
VII.	Leicestershire ..	4 Thornton Reservoir	25·73	26·44	28·51	2·07	+ 8
„	Rutland	3 Market Overton	26·74	27·10	29·23	2·13	+ 8
„	Lincolnshire	3 Boston (Black Sluice, Skirbeck).	23·21	23·35	22·09	1·26	— 5
„	„	3 Lincoln (Skellingthorpe Hall)	22·72	23·70	21·50	2·20	— 9
„	„	4 Louth (Westgate)	27·30	28·74	26·99	1·75	— 6
„	Nottinghamshire ..	4 Eastwood Colliery	27·78	28·46	30·21	1·75	+ 6
„	„	5 Worksop (Hodsock Priory)...	23·15	24·46	21·60	2·86	— 12
VIII.	Cheshire	1 Macclesfield (The Park)	33·58	34·73	38·64	3·91	+ 11
„	„	1 Torrside Reservoir	42·95	44·46	48·64	4·18	+ 9
„	„	2 Middlewich (Bostock Hall).	29·15	29·96	30·68	·72	+ 2
„	South Lancashire...	3 Bolton (Smithills Hall)	46·80	46·29	48·39	2·10	+ 5
„	Central „	1 Stonyhurst College	45·88	46·79	50·14	3·35	+ 7
„	„ „	3 Southport (Hesketh Park) ...	31·13	32·70	32·12	·58	— 2
„	North „	2 Cartmel (Holker Hall)	46·93	44·31	46·27	1·96	+ 4
„	„ „	4 Wray Vicarage	43·74	44·34	46·96	2·62	+ 6
IX.	Yorks, West Riding	1 Sedburgh	52·52	52·12	57·54	5·42	+ 10
„	„ „ „	7 Sheffield W. W. (Redmires Res.)	40·25	41·31	40·13	1·18	— 3
„	„ „ „	9 Malham Tarn ..	57·13	58·02	58·22	·20	+ 0

ENGLAND—(continued).

DIV.	COUNTY and river-division.	STATION.	Average 1900-09.	Average 1875- 1909.	Depth in 1914.	Difference from Average 1875-1909. Per Amount, cent
			in.	in.	in.	in.
IX.	Yorks, West Riding	11 Wetherby (Ribston Hall).....	28·10	26·87	26·96	·09 + 0
"	" East "	2 Warter	27·43	29·75	31·38	1·63 + 5
"	" " "	3 Patrington	22·40	24·05	22·62	1·43 — 6
"	" North "	1 Leyburn (Bolton Hall).....	31·72	32·79	36·62	3·83 + 12
"	" " "	2 Rounton Grange	25·56	25·82	25·33	·49 — 2
"	" " "	4 Scarborough (Osgodby)	24·09	26·40	27·78	1·38 + 5
"	" " "	5 Guisborough (Lockwood Beck)	31·89	33·13	38·66	5·53 + 17
X.	Durham	2 Wolsingham	31·02	33·75	35·47	1·72 + 5
"	"	2 Sunderland (W. Hendon Ho.)	25·29	26·07	24·94	1·13 — 4
"	Northumberland ...	4 Hallington (Fawcett)	28·11	28·95	29·57	·62 + 2
"	"	5 Rothbury (Cragside)	33·66	34·24	34·93	·69 + 2
"	Cumberland	1 Carlisle (Spital Cemetery) ...	33·21	32·17	28·31	3·86 — 12
"	"	2 Borrowdale (Seathwaite).....	126·16	129·48	128·91	·57 — 0
"	"	3 Whitehaven (Irish Street) ...	43·57	41·70	42·27	·57 + 1
"	Westmorland	1 Appleby (Castle Bank)	35·15	34·41	41·01	6·60 + 19

MONMOUTH AND WALES.

XI.	Monmouth	3 Abergavenny (Larchfield) ...	34·83	37·11	42·66	5·55 + 15
"	Glamorgan	3 Ystalyfera (Wern School)....	63·91	64·04	72·82	8·78 + 14
"	"	5 Cardiff (Ely Pumping Station)	41·02	42·28	50·11	7·83 + 19
"	Carmarthen	2 Carmarthen (The Friary).....	47·85	48·80	53·36	4·56 + 9
"	"	2 Llanwrda (Dolaucothy) ...	55·89	56·60	62·88	6·28 + 11
"	Pembroke	3 St. Davids.....	37·72	36·75	37·67	·92 + 3
"	"	4 Haverfordwest	45·54	46·81	50·53	3·72 + 8
"	Cardigan	2 Aberystwyth (Gogerddan) ...	45·81	45·46	49·41	3·95 + 9
"	Brecon	4 Nanthir Reservoir [Aberdare]	57·23	59·39	71·76	12·37 + 21
"	Radnor	1 Birmingham WW (Tyrmynydd)	59·27	62·06	71·19	9·13 + 15
"	Montgomery	5 Lake Vyrnwy (Bank Cynon Isaf)	54·83	55·33	66·30	10·97 + 20
"	Flint	1 Northop (Soughton Hall) ...	32·29	32·55	34·54	1·99 + 6
"	Denbigh	1 Wrexham (Pack Saddle Res.)	33·43	32·69	32·79	·10 + 0
"	Merioneth	3 Tan-y-bwlch (The Gardens)..	62·93	62·25	66·58	4·33 + 7
"	Carnarvon	2 Llandudno.....	29·76	30·36	31·26	·90 + 3
"	Anglesey Llanerchymedd (Llywdiarth Esgob)	39·66	38·57	34·70	3·87 — 10

ISLE OF MAN.

XI.	Isle of Man	Douglas (Borough Cemetery)	41·35	41·55	38·99	2·56 — 6
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SCOTLAND.

XII.	Wigtown	3 Stoneykirk (Ardwell House)..	38·52	36·40	40·22	3·82 + 10
"	Kirkcudbright	3 Dalry (Glendarroch)	55·17	52·60	57·52	4·92 + 9
"	"	4 Auchencairn (Torr House) ...	48·94	46·80	44·19	2·61 — 6
"	Dumfries	3 Durrisdeer (Drumlanrig Gdns.)	46·22	43·71	50·86	7·15 + 16
"	"	4 Moffat (Craigielands).....	53·06	53·20	55·27	2·07 + 4
"	Roxburgh ..	3 Hawick (Bransholme).....	32·27	33·80	32·81	·99 — 3

SCOTLAND—(continued.)

DIV.	COUNTY and river-division.	STATION.	Average 1900-09.	Average 1875- 1909.	Depth in 1914.	Difference from Average 1875-1909. Per Amount. cent
			in.	in.	in.	in.
XIII.	Selkirk	5 Galashiels (Stantling Craigs)	33·63	34·75	33·64	1·11 — 3
„	Peebles	3 N. Esk Reservoir [Penicuik]	39·94	39·75	37·15	2·60 — 7
„	Berwick	4 Marchmont House	32·52	33·76	29·11	4·65 — 14
„	Haddington	4 Prestonkirk (Smeaton)	26·00	25·47	24·51	·96 — 4
XIV.	Lanark	4 Airdrie (Hillend Reservoir)...	38·13	37·72	37·27	·45 — 1
„	Ayr	3 Kilmarnock (North Craig Res.)	45·21	40·92	41·40	·48 + 1
„	„	8 Girvan (Pinmore)	53·19	49·77	51·36	1·59 + 3
„	Renfrew	2 Glasgow (Queen's Park)	38·60	35·97	34·01	1·96 — 5
XV.	Bute	1 Rothesay (Crichton Road) ...	54·65	52·10	55·66	3·56 + 7
„	Argyll	2 Loch Sunart (Glenborrodale)	69·47	66·99	69·71	2·72 + 4
„	„	7 Kilmelfort (Arduaine)	59·13	57·60	60·94	3·34 + 6
„	„	9 Mull of Kintyre	46·02	41·42	42·01	·59 + 1
„	„	11 Inveraray (Newtown)	71·25	68·67	72·24	3·57 + 5
„	„	14 Islay (Eallabus)	51·26	48·79	52·75	3·96 + 8
„	„	14 Mull (Quinish)	57·55	56·57	56·18	·39 — 1
XVI.	Clackmannan	1 Dollar Academy ...	40·68	41·39	40·36	1·03 — 2
„	Kinross	2 Loch Leven Sluice	36·70	36·54	36·18	·36 — 1
„	Fife	2 Colinsburgh (Balcarres)	32·78	33·37	26·15	7·22 — 22
„	Perth	3 Balquhiddie (Stronvar)	74·43	73·77	76·10	2·33 + 3
„	„	14 Blair Atholl ...	33·36	32·35	40·31	7·96 + 25
„	„	15 Blairgowrie (Ballintuim Ho.)	38·58	37·68	44·66	6·98 + 18
„	Forfar	2 Dundee (Eastern Necropolis)	27·72	28·64	26·78	1·86 — 6
XVII.	Kincardine	1 Fettercairn (The Burn)	35·13	34·75	33·95	·80 — 2
„	Aberdeen	1 Braemar (Bank)	34·11	34·93	38·77	3·84 + 11
„	„	1 Logie Coldstone (Loanhead).	32·72	30·67	33·79	3·12 + 10
„	„	1 Aberdeen (Cranford House)..	32·70	32·73	30·54	2·19 — 7
„	„	4 New Deer Schoolhouse	32·89	34·74	31·59	3·15 — 9
„	Moray	2 Gordon Castle	30·64	30·34	28·56	1·78 — 6
„	„	3 Grantown-on-Spey	32·65	31·23	31·96	·73 + 2
XVIII.	Inverness	3 Kingussie	29·66	29·62	33·66	4·04 + 14
„	„	7 Glenquoich	115·15	109·34	117·79	8·45 + 8
„	„	9 Drumnadrochit	35·08	36·13	38·30	2·17 + 6
„	„	9 Inverness (High School).....	28·12	27·14	26·53	·61 — 2
„	„	13 Arisaig House	62·88	61·75	60·38	1·37 — 2
„	„	17 Fort William	77·59	75·80	84·71	8·91 + 12
„	„	18 Skye (Scalpay Island)	77·22	74·40	76·66	2·26 + 3
„	„	19 North Uist (Monach)	42·13	46·55	44·66	1·89 — 4
„	„	19 Harris (Island Glass)	46·26	42·44	43·66	1·22 + 3
„	Ross & Cromarty	4 Strathpeffer	30·85	30·35	30·53	·18 + 1
„	„	5 Fearn (Lower Pitkerrie)	23·49	23·18	22·42	·75 — 3
„	„	7 Braemore House	61·89	60·02	66·35	6·33 + 11
„	„	8 Loch Torridon (Bendamph)..	90·40	83·93	94·99	11·06 + 13
„	„	9 Glencarron	87·59	86·50	89·83	3·33 + 4
„	„	10 Stornoway	50·48	48·40	49·97	1·57 + 3
XIX.	Sutherland	2 Dunrobin Castle	33·07	31·90	31·82	·08 — 0
„	Caithness	2 Wick	31·35	29·88	28·77	1·11 — 4
„	„	3 Dunnet Head	29·16	29·89	28·50	1·39 — 5
„	Orkney	Shapinsay (Balfour Castle) ...	30·57	32·13	27·70	4·43 — 14

IRELAND.

DIV.	COUNTY and river-division.	STATION.	Average 1900-09.	Average 1875- 1909.	Depth in 1914.	Difference from Average 1875-1909.	
						Per Amount.	cent
			in.	in.	in.	in.	
XX.	Cork	7 Glanmire (Lota Lodge)	41·90	44·08	43·55	·53	— 1
	"	9 Mallow (Summer Hill)	38·20	38·90	45·05	6·15	+ 16
	" Kerry	3 Killarney (District Asylum)..	50·48	54·81	65·31	10·50	+ 19
	"	4 Darrynane Abbey	47·76	49·95	63·75	13·80	+ 28
	"	6 Valencia (Glanleam)	56·10	56·01	72·71	16·70	+ 30
	" Waterford	3 Waterford (Brook Lodge) ...	40·12	39·57	41·71	2·14	+ 5
	" Tipperary	1 Nenagh (Castle Lough)	38·55	39·43	41·85	2·42	+ 6
	"	3 Clonmel (Bruce Villa).....	35·90	37·10	40·84	3·74	+ 10
	" Limerick	2 Foynes	39·23	39·60	45·23	5·63	+ 14
	" Clare	2 Ennistymon House	47·77	46·52	55·74	9·22	+ 20
	"	3 Carrigaholt Castle	36·97	36·60	51·93	15·33	+ 42
	"	3 Newmarket-on-Fergus(Carrigoran)	41·99	42·00	48·56	6·56	+ 16
XXI.	Wexford	3 Enniscorthy (Ballyhyland) ...	42·13	42·70	44·08	1·38	+ 3
	"	4 Gorey (Courtown House) ...	33·34	34·99	36·96	1·97	+ 6
	" Kilkenny	2 Kilkenny (Lavistown House)	30·92	31·15	32·42	1·27	+ 4
	" Wicklow	4 Bray (Fassaroe).....	39·80	41·10	38·60	2·50	— 6
	" Carlow	2 Carlow (Browne's Hill) ..	34·30	34·36	34·23	·13	— 0
	" Queen's County ...	2 Abbey Leix (Blandsfort).....	37·70	35·92	38·34	2·42	+ 7
	" King's County	1 Birr Castle.....	32·77	32·86	32·60	·26	— 1
	" Kildare	1 Monasterevan (Moore Abbey)	32·18	32·50	33·30	·80	+ 2
	"	2 Straffan House	30·56	31·61	30·73	·88	— 3
	" Dublin	3 Balbriggan (Ardgillan)	28·62	29·57	28·50	1·07	— 4
	" Meath	4 Kells (Headfort)	34·25	37·25	35·00	2·25	— 6
	" Westmeath	1 Athlone (Twyford)	34·99	37·35	40·87	3·52	+ 9
	"	1 Mullingar (Belvedere)	35·89	36·15	38·91	2·76	+ 8
	" Louth	3 Greenore ..	32·95	32·33	31·10	1·23	— 4
XXII.	Galway	3 Tuam (Gardenfield).....	44·06	42·69	49·26	6·57	+ 15
	"	4 Woodlawn.....	42·19	41·57	42·84	1·27	+ 3
	" Mayo	2 Crossmolina (Enniscoe)	54·37	52·87	55·09	2·22	+ 4
	"	4 Westport (St. Helen's)	47·10	46·20	50·22	4·02	+ 9
	"	6 Cong (The Glebe)	49·78	48·90	54·91	6·01	+ 12
	" Sligo	2 Collooney (Markree Obs.) ...	44·40	42·71	47·32	4·61	+ 11
XXIII.	Cavan	1 Belturbet (Cloverhill)	35·52	33·74	36·91	3·17	+ 9
	" Armagh	5 Armagh (Observatory).....	32·09	31·88	32·06	·18	+ 1
	" Down	2 Seaforde.....	39·47	38·91	38·83	·08	— 0
	" Antrim	1 Belfast (Queen's University)..	35·89	33·81	34·98	1·17	+ 3
	"	3 Bushmills (Dundarave)	37·91	37·56	35·37	2·19	— 6
	"	5 Ballymena (Harryville)	42·52	40·84	49·62	8·78	+ 21
	" Londonderry	5 Londonderry (Creggan Res.)	42·94	41·78	41·12	·66	— 2
	"	5 Limavady (Drenagh)	37·88	37·46	36·21	1·25	— 3
	" Tyrone ..	3 Omagh (Edenfel)	42·30	39·38	41·59	2·21	+ 6
	" Donegal	3 Dunfanaghy (Horn Head) ...	45·18	44·40	47·11	2·71	+ 6
	"	5 Killybegs	60·95	60·60	59·08	1·52	— 3
	"	8 Convoy	48·64	45·94	47·79	1·85	+ 4

EXTREMES OF RAINFALL IN 1914.

THERE is probably no single page in the annual volumes of *British Rainfall* so frequently quoted by reviewers as that giving the names of the stations in each of the great divisions of the British Isles, at which the highest and the lowest amounts of total rainfall during the year in question were recorded. There is no doubt that extreme phenomena are of real interest and importance and should be put on record on that account, but for several reasons the page of "extremes of rainfall" hardly merits the prominence so frequently given to it. The records quoted are of course, limited by the accident as to whether the observations available in any particular year fairly represent the wettest and driest parts of the country. For example, during the lifetime of the Ben Nevis Observatory that station only once failed to head the list for Scotland, seldom exceeding its nearest competitor by less than 40 or 50 inches of rainfall, and in one year by the generous margin of 98·21 in. It is obvious that the termination of such a record makes the extreme values for subsequent years meaningless by comparison, and similar examples could be multiplied indefinitely. Another important point is that extremes, from their very nature, are not so fully susceptible of confirmation as ordinary records, and it has always been a matter of great difficulty to ensure that the values appearing in the page of extreme rainfall are of as high a degree of accuracy as those which make no claim to such distinction. For this reason we have decided this year to replace the lists of extreme rainfalls by a short descriptive statement.

In England the highest rainfalls occurred, as usual, in the heart of the Lake District, where more than 100 inches fell over the whole central area. More than 150 inches was apparently limited to the slopes of Scafell, the highest reading being 188·45 in. at the new rain gauge on the Sty. The only other part of England where more than 100 inches fell was on the highest part of Dartmoor. In Wales more than 100 inches was observed in at least three patches of considerable area, situated respectively in the neighbourhood of the Brecon Beacons, round Plynlimon, and in Snowdonia. The last named was, as usual, the most rainy

part of the country, and more than 150 inches fell at several stations on the east of Snowdon, the largest total recorded being 189·02 in. at an altitude of 2,340 feet, on the Crib Goch spur of the mountain. As far east as Pen-y-Gwryd the high total of 154·26 in. was recorded by a gauge read daily. In Scotland, the year being wet in the west, large areas in the West Highlands had over 100 inches of rain, but the scarcity of stations prevents us from outlining them very exactly. They included probably most of the elevated district between the Dingwall and Skye railway at Glencarron, and the Isle of Mull, and also a large tract stretching from Ben Nevis to the Trossachs. The wettest area, except possibly the summit of Ben Nevis, where no observations are available, was round Loch Quoich, where two stations recorded more than 120 inches, and one, Loan, as much as 174·40 in. In Ireland the largest falls were, as usual, not so heavy as in Great Britain, no doubt partly on account of the great lack of Observers. As much as 100 inches was observed only over the Macgillicuddy Reeks, in Co. Kerry, and on a small area in the west of Galway. The largest reading was 106·60 in. at Gearahameen, on the Lake of Killarney.

Turning to the smallest readings observed, these occurred in England, in three small areas where alone less than 20 inches appears to have fallen. The most northerly lay in the lower Trent Valley, between Gainsborough and Doncaster, the second between Peterborough and the Wash, and the third at the mouth of the Thames Estuary, where 19·89 in. was recorded at Shoeburyness. In Wales less than 30 inches fell round the estuary of the Dee and on the north coast of Denbighshire, and the smallest fall was rather more than 25 inches on the north coast of Flint, the reading at Prestatyn being 25·34 in. In Scotland a very narrow fringe with less than 25 inches appeared at intervals along the east coast from the Dornoch Firth southward. It is unlikely that the fall was anywhere so small as 20 inches, but it fell to 21·72 in. at Fortrose. In Ireland only a small part of the east coast between Dundalk and Bray had less than 30 inches. The smallest falls observed were about 25 inches on the coast of Co. Dublin, the reading at Howth Castle being 25·09 in.

Over the British Isles as a whole it is not possible to decide whether the wettest spot was round the Styne in Cumberland or in Snowdonia, in both of which places little short of 200 inches fell. The driest part of the country was probably round Shoeburyness, where the total fall was between 19 and 20 inches.

BRITISH RAINFALL, 1914.
PART III.

GENERAL TABLE
OF
TOTAL RAINFALL IN 1914
AT
5453 STATIONS
IN
GREAT BRITAIN AND IRELAND,
WITH THE NAMES OF
THE OBSERVERS
OR OTHER AUTHORITIES FOR THE OBSERVATIONS.

COMPILED UNDER THE DIRECTION OF

HUGH ROBERT MILL,

Director,

BY

CARLE SALTER,

Assistant Director,

of the British Rainfall Organization

62. CAMDEN SQUARE, LONDON, N.W.

EXPLANATORY NOTE.

The counties are divided up into numbered areas, corresponding to the river-basins. A full description of these river-divisions for England and Wales was given in a special article in Part I. of *British Rainfall, 1910*, (pp. 37–66), and a similar article on the river-divisions of Scotland and Ireland appeared in Part I. of *British Rainfall, 1911*, (pp. 49–72), with detailed maps showing all the river-divisions in each Division. These maps are now placed at the beginning of the Divisions to which they refer.

The Divisions in the General Table are the same as those adopted by the Registrars General of England and Scotland. The stations in each river-division are arranged nearly in the order of their latitude from South to North.

For convenience, the first name is that of a place which can be easily found on any large scale map; the second name is added to fix the site of observation more closely. In a very few instances, when in [] instead of (), it is that of the nearest town in an adjoining county; *e.g.*, “Haslemere (Courts Hill)” means Courts Hill, near Haslemere, both in one county; but “Geldeston [Beccles]” means Geldeston near Beccles, which is in another county.

In the column headed “diameter,” figures in old-style type indicate the length of the sides of rectangular mouthed gauges.

The letter D signifies that daily observations have been received. M indicates that the gauge is read only once a month. (R) denotes that the gauge used is a self-registering or a recording instrument, the correct reading of which depends upon the mechanism being in working order.

When the words *per* M.O. follow the name of the Observer the record is printed on the authority of the Meteorological Office. M.O.S. indicates Meteorological Office, Edinburgh, and S.M.S. Scottish Meteorological Society.

The total rainfall is printed in ordinary type under the heading of the unit in which the readings were made, *i.e.*, in inches or millimetres. The total as converted from inches to millimetres, or from millimetres to inches, is printed in old style type.

A few entries of total rain will be found in italics—indicating that the values have been corrected, *e.g.*, when snow has been lost, when the amount for a short period has been computed from other records, or when the gauge has been moved for a short distance during the year. The rule has been observed that a record is not printed if the gauge has been moved more than a mile, or if there is a greater difference than 50 feet of altitude between the two positions.

A dagger (†) denotes that the rain gauge has been visited and examined by the Editor or one of his assistants. A note of interrogation (?) implies doubt, not necessarily error; it is not intended to cast any suspicion on the accuracy of the Observer. The absence of information is indicated by ...

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Detailed Maps showing the division of each county into river basins are given in the General Table.

ENGLAND AND WALES.

DIVISION I.—LONDON. (Area, 117 sq. mi.)

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with .01 in. or more
		Diam.	Height Above Ground Sea Level			1914		
		in.	ft.	in.	feet.	mm.	inches.	
1.—THAMES—Right Bank Tributaries. 67 sq. mi.								
SOUTHWARK,								
D Walworth (Brettell Street)	Miss Moor	5	1	5	...	634	24.97	173
BERMONDSEY,								
D Shad Thames Pumping Station	London County Council...	6	28	5	43	529	20.82	151
D LAMBETH (Brockwell Park).....	" " " "	8	1	3	140	618	24.33	162
D " (Brixton Hill Res.) ...	Met. Water Board.....	5	3	2	115	604	23.79	176
D BATTERSEA (Battersea Park) ...	London County Council...	5	9	8	23	645	25.41	154
D† " (Water Works)	Mr. F. J. Goldsworthy...	5	3	6	26	568	22.35	146
D " Nine Elms (Heathwall)	London County Council...	8	39	4	54	574	22.60	169
WANDSWORTH,								
D† Streatham (Southwark W.W.)	Met. Water Board.....	5	4	1	120	599	23.57	160
D " " Hill Reservoir ...	" " " "	5	3	1	197	639	25.16	176
D† " (Putney Heath Reservoir) ...	" " " "	5	1	0	180	679	26.72	172
D " Roehampton (Highwood) ...	Mr. A. F. Jenner	5	1	0	100	676	26.62	156
" Wimbledon Pk. (Woodhouse)	Sir A. E. Bateman, K.C.M.G.	5	1	1	150	726	28.58	163
D† " (Balham High Road)..... (R)	P. Dodd, Esq., C.E.	6	1	6	89	714	28.09	168
D " (" Park Road)	Mrs. G. B. Latham	5	1	0	80	674	26.54	157
D " Wandsworth Com. (Patten Rd)	F. C. Bayard, Esq.	5	1	0	100	617	24.29	161
D† " Southfields (Coronation Gdns.) (R)	P. Dodd, Esq., C.E.	6	1	6	37	697	27.43	161
" Clapham Com. (Macaulay Rd.)	Miss A. H. Boyson.....	5	1	0	75	619	24.37	156
" " " (The Chase) ...	H. N. Prentice, Esq.....	5	1	5	70	603	23.74	...
D CAMBERWELL, Dulwich	W. Marriott, Esq.	5	1	0	171	691	27.19	172
D† " Nunhead (Southwark W.W.)	Met. Water Board.....	5	1	0	173	589	23.18	174
DEPTFORD (Telegraph Hill)	London County Council...	5	9	6	135	460	18.10	...
D† " (Kent Water Works)	Met. Water Board.....	5	1	0	20	569	22.41	156
GREENWICH								
D† (Deptford Pumping Station)	London County Council...	10	4	0	18	630	24.79	154
D† " (Royal Observatory) No. 8	Sir F. W. Dyson, F.R.S...	8	1	0	150	597	23.51	174

DIVISION I.—LONDON.—(*continued*).

STATIONS.		AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with "01 in. or more
			Diam.	Height Above Ground SeaLevel		1914			
			in.	ft.	in.	feet.	mm.	inches.	
1.—THAMES—Right Bank Tributaries—(con.)									
GREENWICH									
†	„ (Royal Observatory) No. 6	Sir F. W. Dyson, F.R.S...	8	0	5	150	606	23-86	178
†	„ „ „ No. 7	„ „ „ „	8	0	5	155	585	23-02	175
†	„ „ „ No. 5	„ „ „ „	8	10	0	165	587	23-12	176
†	„ „ „ No. 4	„ „ „ „	8	21	6	176	524	20-65	169
†	„ „ „ No. 3	„ „ „ „	8	38	4	193	458	18-04	159
LEWISHAM,									
†	„ Sydenham (Lethen Grange)	G. F. Chambers, Esq.....	5	1	5	220	772	30-41	192
†	„ Forest Hill (Barr Beacon)...	Met. Water Board.....	5	3	3	340	671	26-41	169
†	„ (Clarendon Road)	G. E. Dacey, Esq.	5	1	0	...	598	23-56	178
†	„ Woolwich, Eltham (High St.)...	Met. Water Board.....	5	1	0	245	592	23-31	156
†	„ Plumstead Com.(St.John's Rd.)	D. W. Horner, Esq.	8	1	0	277	574	22-60	196
2.—THAMES—Left Bank Tributaries. 50 sq. mi.									
†	PADDINGTON (Harrow Road) ...	C. W. Heinemann, Esq....	8	1	0	101	643	25-32	175
†	KENSINGTON (V. & A. Museum).	J. Storr, Esq.....	8	0	6	27	610	24-01	174
†	„ (Meteorological Office)	Meteorological Office	8	57	0	70	553	21-76	158
†	„ (Holland House) ...	Mr. C. Dixon	5	4	0	68	621	24-44	166
†	„ (Campden Hill) ..	Met. Water Board.....	8	1	0	142	714	28-13	170
†	HAMMERSMITH (The Creek).....	London County Council...	8	20	0	35	575	22-64	164
†	FULHAM (Acfold Road).....	Mrs. H. W. Carter	5	1	0	13	611	24-06	160
†	„ (Hammersmith Cemetery)	Mr. R. J. Brown	5	1	0	16	623	24-54	169
†	„ W.Kensington (Edith Rd.)	G. Searle, Esq.....	5	0	10	16	601	23-67	164
†	CHELSEA (Lots Road Pump.Stat.)	London County Council...	8	33	6	54	552	21-72	155
†	„ (Western „ „)	„ „ „ „	8	1	0	19	597	23-49	170
†	„ (Physic Garden)	W. Hales, Esq.	5	1	0	20	627	24-70	165
†	„ (Oakley Street)	A. Hampton Brown, Esq.	5	1	0	25	612	24-08	170
†	„ (St. Luke's Gardens)...	T.W.E.Higgins, Esq. C.E.	5	1	0	25	638	25-13	172
WESTMINSTER									
†	„ (King's Scholars Pond)	London County Council...	8	11	6	31	642	25-29	174
†	„ (Buckingham Palace)	Mr. W. Osborne.....	5	8	6	35	641	25-25	165
†	„ (Kensington Gardens)	Mr. W. Beecher.....	8	2	2	...	633	24-91	173
†	„ (St. James's Park) ...	HM Office of Works per MO	8	1	0	27	592	23-32	162
†	„ (Hyde Park)	Royal Humane Society...	8	1	3	...	517	20-36	158
†	„ (Spring Gardens)...(1)	London County Council...	8	66	4	95	620	24-43	166
†	„ „ „ „ „(2)	„ „ „ „	12	65	11	95	617	24-30	166
†	„ „ „ „ „(3)	„ „ „ „	8	6	0	35	623	24-54	166
†	„ (Strand)	J. J. Steward, Esq.	5	40	0	80	623	24-54	160
ST. MARYLEBONE,									
†	„ Regent's Pk (R Botanic Gdns)	Mr. J. L. North	8	1	0	130	661	26-03	161
†	„ (Hamilton Terrace)	E. Heron Allen, Esq	5	0	6	...	627	24-68	...
†	„ „ „ „ „	Miss Cobb	5	0	11	125	629	24-75	158
†	„ (Ormond Terrace)	Mrs. Hamlyn Price	5	1	5	145	630	24-82	179
†	HAMPSTEAD (Barrow Hill Res.)...	Met. Water Board.....	5	3	4	197	586	23-09	169
†	„ (Frognaal Gardens)...	E. L. Hawke, Esq.	3	0	6	345	709	27-90	...
†	„ (Kemplay Road)	C. Clarke, Esq.	5	2	0	...	702	27-64	...
†	„ (Kidderpore Res.)...	Met. Water Board.....	5	1	0	322	580	22-82	170
†	„ (New End Square)..	Mr. W. Pikesley	5	1	0	...	683	26-90	167
†	„ Observatory	E. L. Hawke, Esq.	8	1	0	451	709	27-93	165
†	„ (Golders Hill)	London County Council...	5	9	8	350	581	22-89	...
†	St.PANCRAS (Camden Square)	Dr. H. R. Mill	8	0	9	111	653	25-72	168

DIVISION I.—LONDON—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with .01 in. or more
		Diam.	Height Above Ground		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
2.—THAMES—Left Bank Tributaries—(con.)								
† St. PANCRAS (Camden Sq.) <i>weekly</i>	Dr. H. R. Mill	5	1	2	111	650	25·60	...
D† „ „ „ „ <i>Snow g.</i>	„ „ „ „	8	3	5	113	628	24·71	162
† „ „ „ „ <i>float g. M</i>	„ „ „ „	8	0	11	111	641	25·24	...
STOKE NEWINGTON								
D† „ „ „ „ (New River Filter Beds)	Met. Water Board.....	5	1	0	101	617	24·28	158
D† „ „ „ „ „ „ „ „ (Reservoirs)	„ „ „ „ „ „ „ „	5	1	0	105	642	25·29	171
D HACKNEY (Clapton Pond) (R)	Norman Scorgie, Esq., C.E.	8	2	6	70	626	24·66	157
† HOLBORN (Stone Yard).....	E. F. Spurrell, Esq.	5	12	0	89	624	24·58	...
D† FINSBURY (New River Head) ..	Met. Water Board.....	5	1	0	100	590	23·21	174
CITY OF LONDON (Guildhall) ..	E. E. Finch, Esq.	8	51	0	95	627	24·67	169
„ „ „ „ „ „ „ „ „ „	„ „ „ „ „ „ „ „	8	2	6	46	582	22·90	169
D STEPNEY (Mile End).....	J. Metson, Esq.	5	10	0	50	676	26·62	145
D POPLAR, Isle of Dogs (Stewart Rd.)	London County Council...	8	1	0	15	598	23·56	159
D „ „ „ „ „ „ „ „ „ „ (Island Gardens)	„ „ „ „ „ „ „ „	5	4	6	...	604	23·79	143
D† „ „ „ „ „ „ „ „ „ „ (Old Ford Pump. Station)	Met. Water Board.....	8	0	9	19	590	23·25	158
D „ „ „ „ „ „ „ „ „ „ „ „ „ „ (Penstock Ho.)	London County Council...	8	1	0	35	607	23·91	163
D WOOLWICH (N. Woolwich Pumpg. Sta.)	„ „ „ „ „ „ „ „	8	0	9	12	542	21·35	142
D „ „ „ „ „ „ „ „ „ „ „ „ „ „ (Barking Outfall) ...	„ „ „ „ „ „ „ „	8	0	6	6	533	21·00	163

DIVISION II.—SOUTH EASTERN COUNTIES.

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with '01 in. or more
		Diam.	Height Above		1914			
			Ground	SeaLevel				
		in.	ft.	in.	feet.	mm.	inches.	
SURREY. (Area, 725 sq. mi.)								
1.—ARUN. 45 sq. mi.								
†Haslemere (Clammer Hill)	Col. Farquhar Glennie.....	5	1	0	400	1007	39·65	173
„ „ (Grayswood Tower)....	S. Barker, Esq.	5	1	0	625	1057	41·62	161
Chiddingfold (Rovehurst).....	G. L. Halahan, Esq.	5	0	9	300	842	33·13	...
Dunsfold (Durfold)	the late Miss Billiter.....	5	1	0	225	873	34·36	...
Godalming (Rockwoods, Brook)	<i>Surrey Advertiser</i>.....	...	...	...	450	929	36·56	...
„ Witley ('Tigbourne Court)	Mr. J. A. Murphy.....	5	1	0	250	981	38·62	171
„ Oakwood Vicarage.....	Rev. Canon J. Shearme...	5	0	9	285	795	31·30	168
„ Abinger (Joldwynds, Holmbury)	Mr. F. Cornish	5	1	0	550	912	35·90	161
2.—MEDWAY. 50 sq. mi.								
„†Dormans Park (Chartham Park)	Col. T. D. Margary	5	1	0	270	900	35·43	172
† „ „ (Hillside)	late B. LeNeve Foster, Esq.	5	0	8	...	892	35·10	161
„ Lyden Croft [Edenbridge]	Surg.-Gen. C. Planck	8	1	0	212	820	32·29	181
„ Oxted (Stone Hall)	W. P. Metcalfe, Esq.....	5	1	2	320	835	32·88	172
„ Limpsfield (Ballards Shaw)	F. C. Bayard, Esq.	5	1	1	500	890	35·04	184
3.—THAMES—Darent. 22 sq. mi.								
Chelsham (Fairchildes)	A. S. Daniell, Esq.	8	1	0	600	928	36·55	...
„ „ „	Mr. G. T. Mansfield	5	0	10	600	960	37·80	...
„ Addington (Hares Bank Pump St.)	G. F. Carter, Esq., C.E....	5	1	0	331	782	30·77	177
„† „ Hills Reservoir	F. C. Bayard, Esq.	8	0	9	473	761	29·97	183
„ South Norwood (Woodside Vic.)	Rev. Paget M. Bowman...	5	1	0	...	673	26·48	161
„ „ „ (Holmesdale Road)	E. A. Martin, Esq.....	5	1	0	200	703	27·66	182
„ „ „ (Apsley Road) ...	W. H. Cullis, Esq.....	5	1	2	125	673	26·51	149
„ Norwood (Auckland Road)	Miss J. Cooper	5	1	5	230	638	25·13	159
„ Penge Recreation Ground.....	H. W. Longdin, Esq., C.E.	8	1	6	120	681	26·80	153
4.—THAMES—Wandle. 71 sq. mi.								
„ Kingswood (Margery Hall Res.)	W. Vaux Graham, Esq. C.E.	5	1	0	691	888	34·96	165
„ Upper Gatton	F. Druce, Esq.	5	1	0	601	876	34·49	167
„ Caterham Reservoir	A. E. Cornwall-Walker Esq	5	1	0	705	961	37·82	195
„ Chaldon Rectory	F. C. Bayard, Esq.	5	1	0	542	952	37·46	155
„ Chipstead (Eyhurst)	D. Morphew, Esq.....	5	0	11	538	812	31·98	183
„ „ (Dial Cottage)	F. C. Bayard, Esq.	5	1	0	550	814	32·03	179
„ Caterham (Ashfield)	A. Malden, Esq.....	5	1	6	610	887	34·93	181
„ „ Asylum.....	Dr. P. E. Campbell	5	1	0	607	904	35·61	185
„ „ Valley (Bradenhurst)	Henry Haes, Esq.	5	1	0	580	952	37·50	202
„ Warlingham (The Larches)	Mrs. B. F. Harris	5	1	0	615	943	37·12	213
„ „ (Redvers Road) ...	R. H. Curtis, Esq.....	8	1	0	610	954	37·57	192
„ Caterham Valley (Mount Vernon)	M. Ll. Evans, Esq.	5	0	10	500	976	38·41	184
„ „ „ Dépôt	A. E. Cornwall-Walker Esq	5	1	6	431	949	37·37	199
„ Netherne (Surrey County Asylum)	F. C. Bayard, Esq.	5	1	0	560	892	35·13	178
„ Banstead (Burgh Heath)	Capt. E. R. Taylor.....	5	1	0	571	906	35·69	174
„ „ „ „ Reservoir)	W. Vaux Graham, Esq C.E.	5	1	0	570	905	35·63	156
„ Chipstead (The Lodge)	F. E. Goad, Esq.	5	0	9	558	938	36·92	178
„ „ „ (How Green Reservoir)	W. Vaux Graham, Esq C.E.	5	1	0	528	890	35·06	169
„ Kenley (Elmhurst)	Mrs. Jay Jones	5	0	8	430	896	35·28	180
„ „ „ (Shord Hill)	A. Wildy, Esq.	5	0	10	450	878	34·55	188
„ „ „ Pumping Station.....	A. E. Cornwall-Walker Esq	5	1	6	275	839	33·03	181
„ Purley (Riddlesdown Road) No.1	J. Edmund Clark, Esq....	5	1	0	360	870	34·24	188
„ „ „ „ „ No.2	„ „ „ „ „	5	1	0	360	863	33·97	187
„ „ „ „ „ (Pumping Station)	A. E. Cornwall-Walker Esq	5	1	0	215	783	30·82	181

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with "01 in. or more
		Diam.	Height Above			1914		
			Ground	Sea Level		mm.	inches.	
SURREY—(con.)		in.	ft.	in.	feet.			
4.—THAMES—Wandle—(con.)								
D Sanderstead (Beechwood Road) ..	E. Alexander, Esq.	5	1	0	370	813	32·02	181
D South Croydon (Avondale Road) ..	Dr. G. J. Hinde, F.R.S....	5	1	0	225	816	32·14	192
D Wallington	F. C. Bayard, Esq.	5	4	1	140	751	29·58	193
D "	"	8	1	0	140	752	29·61	196
D Carshalton (Sewage Works)	Baldwin Latham Esq. C.E.	5	1	0	118	726	28·58	163
D Beddington (Sewage Farm)	G. F. Carter, Esq., C.E....	5	1	0	129	615	24·22	179
D Croydon (Croham Manor Road) ..	F. C. Bayard, Esq.	5	1	0	318	837	32·94	186
D " (Edridge Road) ..	A. A. Gilpin, Esq.	5	5	6	190	680	26·79	163
D " (Duppas Hill Lane) ..	P. G. T. Hand, Esq.	5	1	0	168	735	28·93	167
D " (Waddon New Road) ..	G. Corden, Esq.	5	1	0	146	728	28·67	173
D " (Park Hill House)	Baldwin Latham Esq., C.E.	8	1	0	265	775	30·50	193
D " (Ashburton Road)	G. C. Brooke, Esq.	5	1	5	210	718	28·25	...
D Beddington Corner (Millgreen Rd)	F. C. Bayard, Esq.	5	4	0	77	663	26·10	163
D Wimbledon (Kingston Road) ..	H. A. Marshall, Esq.	5	1	0	54	719	28·29	185
D " (Trinity Road)	P. J. Bevan, Esq., C.E....	5	1	0	53	668	26·28	157
D " (Sewage Works)	C. H. Cooper, Esq., C.E....	5	1	0	55	645	25·40	157
5.—THAMES—Mole & c. 229 sq. mi.								
D Charlwood (Greenings)	J. Innes, Esq.	5	1	0	300	825	32·49	171
D Outwood (The Orchards)	F. C. Bayard, Esq.	5	1	0	280	862	33·93	180
D Dorking (Stone House, Rose Hill)	Lt.-Col. J. R. Greenhill...	5	1	0	240	966	38·05	183
D " (West Street) ..	Mrs. W. A. Marsh.	8	26	0	224	965	38·00	145
D " (Denbies)	Mr. J. Ansell	5	0	9	610	947	37·27	187
D " (Pixham Firs)	J. Croft Deverell, Esq....	8	0	6	150	900	35·44	196
D Brockham (North Lodge)	H. R. Kempe, Esq., C.E....	5	0	9	160	887	34·92	159
D Reigate (Hartwood)	R. W. Clutton, Esq.	5	1	0	174	824	32·45	181
D South Nutfield (Hale Edge)	R. C. Grant, Esq.	5	1	0	270	797	31·37	167
D Earlswood (Sewage Farm)	F. T. Clayton, Esq., C.E.	5	1	6	196	745	29·34	153
D Redhill (Station Road)	W. H. Fowler, Esq.	5	18	0	270	805	31·68	150
D " (Wigmore)	W. A. Gunner, Esq.	5	1	0	250	864	34·00	175
D " (Warwick Road)	A. E. Cornwell-Walker Esq	5	1	6	284	849	33·42	177
D Reigate (The Gas Works)	F. C. Bayard, Esq.	10	1	0	275	836	32·90	178
D " (The Knowle)	G. Weston, Esq.	5	1	0	390	806	31·72	168
D " (Wray Lodge)	A. Rosling, Esq.	5	1	0	316	856	33·68	168
D " (" Park Road)	Mr. F. W. Hedges	5	3	0	281	854	33·64	166
D " (Castle Grounds)	F. T. Clayton, Esq., C.E.	5	1	6	350	777	30·58	186
D " (Northcote)	Mr. H. Tanner	5	1	3	364	894	35·21	171
D " (Laglands)	J. Welch, Esq.	5	1	2	375	885	34·86	163
D " (Colley Lane)	W. H. Fowler, Esq.	859	33·82	...
D Redhill (Sid Court, Linkfield Lane)	Miss Janvrin	5	1	0	290	831	32·70	175
D Nutfield Priory	Mrs. Fielden	8	1	2	468	808	31·83	216
D " "	Mr. J. Moffatt	8	1	2	331	889	35·00	203
D " (Holmesdale)	C. Trentham Maw, Esq....	8	3	0	500	859	33·82	170
D Betchingley (South Park Farm)	W. Lambert, Esq.	5	0	4	340	871	34·30	...
D Betchworth (Snower Hill)	T. Du Buisson, Esq.	8	0	9	250	794	31·25	174
D " (Sandhills)	C. J. Whittington, Esq....	5	1	0	250	814	32·05	163
D " (The Holmes)	F. R. Rushton, Esq.	5	0	8	322	907		

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		<i>Days with .01 in. or more</i>
		Diam.	Height Above			1914		
			Ground	Sea Level				
		in.	ft.	in.	feet.	mm.	inches.	
SURREY—(con.)								
5.—THAMES—Mole & c—(con.)								
+ Mickleham (Norbury Park)	Mr. G. Kent	8	1	0	500	844	33·24	...
d Headley (The Hurst)	F. C. Bayard, Esq.	5	1	3	450	894	35·20	151
d Walton-on-the-Hill (Walton Manor)	Mr. J. Millichamp	5	1	0	600	845	33·26	172
+ Great Bookham (Sole Farm) ...	E. H. Sharp, Esq., K.C....	5	1	6	150	854	33·63	...
+ Leatherhead (Emlyn House) ...	the late A. T. Miller, Esq..	5	1	0	160	808	31·82	...
d Tadworth (Warren Gate).....	W. J. Saunders, Esq.....	550	801	31·55	167
d Ashted (D'Abernon Chase).....	F. C. Bayard, Esq.	5	1	0	280	731	28·78	...
d+ „ (Barnet Wood Lane) ...	Rev. T. E. R. Phillips.....	5	1	0	173	723	28·45	172
d+ „ (Oakfield Road)	H. F. Acocks, Esq.	5	1	4	179	724	28·51	161
d+ „ (The Hut)	F. C. Bayard, Esq.	5	0	5	200	731	28·78	163
d Cobham (Hatchford Park)	Sir H. B. Samuelson, Bart.	8	1	0	170	888	34·97	146
Oxshott (Oaklands)	J. J. Morrish, Esq.	0	6	246	733	28·87	...
d Banstead (The Hall).....	F. C. Bayard, Esq.	8	1	0	480	819	32·24	162
b Epsom (The Durdans)	J. Barclay, Esq.....	8	0	11	217	792	31·18	179
d Weybridge (Burcote)	Mrs. C. Sanger	5	0	9	117	680	26·76	176
d Sutton (Camborne Road)	F. E. Wright, Esq.	5	1	0	250	766	30·17	171
d Claygate (Hertslets)	N. C. Armitage, Esq.....	5	1	0	106	640	25·20	181
Esher (The Lammas)	Rev. Preb. D. Anderson...	5	1	1	...	677	26·65	...
d „ (Sewage Works).....	F. C. Bayard, Esq.	5	1	0	42	676	26·62	159
d Sutton (High School, Cheam Rd.)	Miss R. Marsden	5	1	0	197	658	25·91	150
d „ (Water Works).....	W. Vaux Graham, Esq C.E.	5	1	6	166	701	27·60	157
d „ (Sewage Works)	W. H. Grieves, Esq., C.E.	8	1	0	100	782	30·80	158
d+ Surbiton (Seething Wells) ...	Met. Water Board.....	5	0	10	34	703	27·67	176
d „ (Vronvelin, Lovelace Rd.)	late F. J. Barclay, Esq....	5	1	0	50	706	27·78	169
Walton-on-Thames (Ashdown)..	R. H. Spens, Esq.	5	0	4	...	727	28·62	...
d East Molesey (Ember House) ...	Wilfrid Taylor, Esq.....	5	1	0	30	754	29·69	164
d+ West Molesey (Walton Works)...	Met. Water Board.....	5	0	6	35	646	25·45	158
New Malden Sewage Works ...	F. C. Bayard, Esq.	5	1	0	45	636	25·03	...
d „ „ (Edenfield).....	W. J. Carter, Esq.....	5	1	0	40	665	26·18	163
Kingston (Palace Road) ...No. 1	Charles Price, Esq.....	5	0	10	...	615	24·21	154
d „ „ (County Hall)	E. Underwood, Esq.	5	0	9	31	684	26·92	142
d „ „ Sewage Works.....	F. C. Bayard, Esq.	5	1	0	25	791	31·13	161
d „ „ (Union Street)	Mr. T. Davis	8	3	0	26	708	27·88	159
d+ Wimbledon (Raynes Park).....	Messrs. J. Carter & Co....	8	1	0	75	637	25·07	175
d „ „ „ Pump.St.) .C. H. Cooper, Esq., C.E....	C. H. Cooper, Esq., C.E....	5	1	0	50	657	25·85	158
d „ „ (Worplesdon)	N. Langsmith, Esq.	5	1	1	100	637	25·07	147
d „ „ (Alyn Bank, The Downs)	F. C. Bayard, Esq.	5	1	1	162	683	26·90	172
d+ Richmond (The Terrace)	„ „ „	8	1	6	109	665	26·18	160
d „ „ (The Old Palace).....	Rev. A. Welsh Owen.	8	0	9	...	674	26·55	162
d+ „ „ (Kew Observatory)(R)	Meteorological Office	11	1	9	20	688	27·10	172
6.—THAMES—Wey. 236 sq. mi.								
Haslemere (Whitwell Hatch) ...	Marquis of Sligo	5	1	6	680	1044	41·10	...
d+ „ „ (Courts Hill)	Mr. E. Biles	8	4	8	481	1054	41·50	185
d „ „ (The Laurels)	Stanley Smallpeice, Esq..	5	0	9	540	1087	42·78	180
„ „ (Frensham Hall) No.1	Samuel Kevan, Esq.	5	0	9	475	1062	41·80	...
„ „ „ „ „) No.2	„ „ „ „ „ ,	1001	39·40	...

DIVISION II.—SOUTH EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more
		Diam.	Height Above Ground. SeaLevel			1914		
			in.	ft.	in.	feet.	mm.	
SURREY—(con.)								
6.—THAMES—Wey—(con.)								
D† Hindhead (Stoatley Hall)	Mr. H. Simmons	5	1	0	800	1092	43·00	160
D Churt (Furze Hills)	Rev. Clements G. O. Bond	5	1	6	390	1003	39·49	176
Witley (Sandhills).....	L. W. Lodge, Esq.	8	1	0	450	1000	39·38	190
D „ (King Edward's School)..	J. Wood, Esq.	5	1	3	330	822	32·38	172
D „ (Great Roke).....	Mrs. Dixon	5	6	0	300	862	33·94	174
D „ (The Mount)	Mrs. J. H. Foster	5	1	0	375	994	39·14	205
D Hascombe Place.....	C. T. Musgrave, Esq.....	8	1	0	420	950	37·41	157
Cranleigh (Stonewall)	W. Welch, Esq.....	5	1	0	182	907	35·70	...
D „ (Winterfold)	Mr. R. Turvey	8	3	6	603	793	31·22	169
Abinger (Feldemore).....	E. Waterhouse, Esq.....	5	3	6	505	915	36·02	162
D Bramley (Grafham Grange).....	S. A. Shepherd, Esq.....	8	0	4	180	875	34·44	156
Godalming (Milford Nurseries)..	<i>Surrey Advertiser</i>	894	35·20	...
D Ewhurst (Downhurst Lodge) ..	Mr. W. Bradfield	5	1	0	350	881	34·70	169
„ (Garlands).....	G. Johnston, Esq.	5	2	6	360	913	35·93	167
D „ (Malquoits).....	W. Webb, Esq.	5	1	0	400	930	36·61	176
D „ (Coneyhurst).....	Mr. J. Russell	8	1	0	581	854	33·61	183
„ (Woolpit)	Mr. H. W. Perrin	8	1	6	600	813	32·02	...
Shamley Green (Lee Crouch) ...	P. E. W. Street, Esq.....	5	1	0	165	864	34·01	168
D Godalming (Charterhouse)	O. H. Latter, Esq.....	5	1	0	315	870	34·24	193
Peper Harow (Glebe House).....	George Marsh, Esq.	5	1	0	200	890	35·03	...
D Bramley (The Limes)	Rev. C. J. Etty	5	1	0	136	888	34·95	155
Wonersh (Little Tangley)	Mr. H. Crane	5	1	0	200	824	32·46	...
D Farnham (Charleshill)	Mrs. Oliver	5	1	0	230	748	29·45	171
D „ (Bourne Corner)	Miss I. M. Deedes	5	1	0	357	831	32·73	160
D Shere (Burrows Lea).....	Miss Barnard	8	1	0	400	819	32·24	189
D „ (Coombe End).....	Bertram Warren, Esq....	8	1	3	286	849	33·44	161
D „ (Manor House)	Sir R. A. Bray	5	1	0	350	853	33·59	182
Albury (Dalton Hill Gardens)...	<i>Surrey Advertiser</i>	737	29·02	...
„ (Lockner Holt Gardens)	„ „	855	33·67	...
D Abinger Rectory	Miss Brodie Hall	5	1	0	381	931	36·64	166
D „ Hall.....	Lord Farrer	8	2	0	320	898	35·36	170
D Farnham (Crooksbury Ridges)...	F.R. Walters, Esq., M.D....	5	1	4	440	834	32·82	197
D „ (High Park Road).....	V. B. Longhurst, Esq....	5	1	1	260	886	34·87	194
D „ (Short Heath)	Morris Birkbeck, Esq....	5	1	0	352	869	34·20	201
D „ („								

DIVISION II.—SOUTH EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with '01 in. or more
		Diam.	Height Above Ground			1914		
		in.	ft.	in.	feet.	mm.	inches.	
SURREY—(con.)								
6.—THAMES—Wey—(con.)								
D Horsley (Woodcote Lodge)	Rt. Hon. Sir H. E. Roscoe	7	0	6	620	921	36·27	162
Worplesdon (Perry Hill Farm)	Mr. G. H. Claydon	5	1	3	140	749	29·48	...
(" " School)	<i>Surrey Advertiser</i> .....	...	...	...	...	740	29·14	...
Send (Sendholme) .....	" " .....	...	...	...	...	710	27·95	...
Ripley (Dunsborough House) ...	C. F. M. Cleverly, Esq.	5	1	6	70	695	27·37	...
D Woking (The Grange)	Rev. F. Wilson	5	0	8	78	749	29·50	187
" (The Green)	Mrs. Howlett	5	0	9	120	716	28·21	...
" (Normanhurst)	George Duffas, Esq.	5	1	0	200	756	29·77	...
D Mayford	A. R. Ricardo, Esq. ....	...	...	...	145	726	28·57	154
D Pyrford (Pyrford Croft)	H. W. Page Phillips, Esq. ...	5	1	6	100	710	27·94	168
D " (Southbourne)	C. Echlin Gerahty, Esq.	5	1	0	100	694	27·31	170
D Maybury (Grove Cottage)	F. C. Bayard, Esq.	5	1	0	115	741	29·19	157
D Horsell (Lindisaye)	H. Horncastle, Esq.	5	4	2	120	702	27·62	160
" (") ... weekly g.	" "	5	0	9	120	704	27·72	...
D " (Kettlewell Hill)	Claude Marzetti, Esq.	5	0	9	115	740	29·13	172
D Wisley (R.H.S. Gardens)	S. T. Wright, Esq.	8	1	0	150	667	26·26	159
" (West Hall Gardens)	Mr. G. Carpenter	5	1	6	61	661	26·03	144
D West Byfleet (Kilmeena)	F. Littleboy, Esq.	5	1	0	100	695	27·36	166
D " (Hollywood)	Allanson Bailey, Esq.	5	1	1	100	698	27·46	175
D Byfleet	J. E. Dowell, Esq.	5	1	1	59	673	26·49	161
D " Rectory	Rev. G. E. Money	8	0	11	50	686	27·00	163
D Weybridge (Field Place)	Mrs. Yool	5	1	0	118	676	26·63	169
" (")	" "	5	1	0	109	688	27·07	...
D " (Heath Field)	Miss A. T. Gardiner	5	1	0	100	741	29·17	163
D " (West Oaks)	A. Whittet, Esq.	5	1	0	36	681	26·82	171
D " (Station Road)	H. K. G. Rogers, Esq.	5	1	1	85	719	28·32	177
D " (Lyncroft)	Maj.-Gen. J. P. Battersby ..	5	0	10	70	630	24·80	155
" (Fairhaven)	Commander C. Paget, R.N. ...	5	0	10	60	738	29·04	178
7.—THAMES—Bourne. 55 sq. mi.								
D Brookwood (Knapp Hill)	Mr. G. C. H. Simmonds ...	5	1	0	181	755	29·71	180
" (" " Lynbrook)	<i>Surrey Advertiser</i>	5	1	8	200	730	28·74	...
D Chobham (Sandpit Hall)	K. A. H. Power, Esq.	5	1	0	100	727	28·63	179
D " (Chobham House)	Miss C. M. Perceval	5	3	0	80	844	33·21	164
D " (The Manor House) ...	F. A. Walter, Esq.	5	1	0	150	755	29·74	166
Bagshot (Pennyhill Park)	<i>Surrey Advertiser</i> .....	...	...	...	...	790	31·09	198
D Chertsey (Ottershaw)	Mrs. R. H. Otter	5	1	0	200	715	28·16	190
" (Long Cross)	F. A. Baker, Esq.	5	3	0	205	660	26·00	...
D " (Botleys Park Gardens) ..	Mr. H. Whitmarsh	5	1	5	111	759	29·89	170
D Sunningdale (The Camp)	Lady Hooker	5	1	2	252	698	27·49	186
D Virginia Water (St. Ann's Heath)	Rev. J. Peck	8	1	1	120	689	27·11	174
D Egham Park	J. R. FitzGerald, Esq.	5	0	11	150	774	30·49	174
D Englefield Green (Queenswood) ..	W. G. Rigden, Esq.	6	2	0	200	849	33·42	175
D " (Harvest Road)	H. Fermor, Esq.	5	0	9	205	789	31·07	187
8.—THAMES—Loddon. 17 sq. mi.								
Frimley Green Waterworks ...	F. J. Garland, Esq.	5	8	0	220	687	27·04	...
D " (Brompton San.) ..	G. W. Smith, Esq.	5	0	4	380	752	29·60	174
D " (Ridgemount) ...	C. C. Haviland, Esq.	5	0	9	350	754	29·69	194
D " (Tomlinseote)	Mr. T. Dawson	5	1	9	200	743	29·26	194

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with 0·1 in. or more	
		Diam.	Height Above Ground.		1914			
		in.	ft.	in.	feet.	mm.	inches.	
SURREY—(con.)								
8.—THAMES—Loddon—(con.)								
d Camberley (Pembroke Lodge) ...	Lt.-Col. A. de B. V. Paget	5	1	0	290	683	26·89	159
KENT. (Area, 1532 sq. mi.)								
1.—ROTHER & C. 217 sq. mi.								
d Hawkhurst (Hensill).....	F. Ross Thomson, Esq.....	5	3	0	200	874	34·40	150
Tenterden (Summerhill)	Mrs. Wilkin	8	1	0	150	772	30·40	171
" (")	" "	5	1	0	150	816	32·12	171
" (Ashenden)	Major Herbert Neve	5	1	0	190	746	29·35	...
d " (View Tower)	J. Ellis Mace, Esq.	8	1	5	190	840	33·09	197
d " (" ") Snowdon	" " "	8	1	5	190	824	32·43	185
Cranbrook (Hartley)	G. Pile, Esq.	5	1	3	405	878	34·55	164
Benenden (East End Sanatorium)	Dr. W. J. Cox	5	1	0	180	855	33·65	...
d High Halden (Beryl Lodge).....	R. Matthews, Esq.	5	1	0	...	816	32·14	182
Biddenden (Sandpit Wood)	J. Ellis Mace, Esq.	5	1	0	218	861	33·89	...
Dungeness	Meteorological Office	8	1	3	21	728	28·67	160
d Hythe	C. Jones, Esq., C.E.	5	1	0	29	755	29·71	176
d " (Hillcrest Road).....	J. B. Jordan, Esq.....	5	1	0	190	735	28·94	167
d " (Sandling Park).....	Rt. Hon. L. Hardy, M.P.	8	1	0	260	779	30·67	151
Sandgate	C. J. Conquest, Esq., C.E.	5	1	6	52	667	26·27	146
d Folkestone (BoroughSanatorium)	M. Yunge Bateman, Esq.	5	1	0	102	730	28·72	170
d " (Cheriton Road)	J. Duncan Walker, Esq.	5	1	0	160	714	28·12	170
d " (Radnor Park)	A. E. Nichols, Esq., C.E.	8	0	11	102	715	28·16	167
d " (Cherry Gardens) ...	H. Turner, Esq.....	5	1	6	230	742	29·22	167
d " (LowerStanden,Capel)	" " "	5	2	11	250	756	29·76	158
Dover	W.C.Hawke, Esq. per M.O.	8	1	0	231	694	27·34	194
d " (Water Works)	" " "	5	1	6	200	751	29·58	153
d Kearsney (Chilton Farm)	" " "	5	1	6	127	833	32·78	153
2.—STOUR & C. 386 sq. mi.								
d Ashford (Oakwood)	H. F. Horsnail, Esq.....	5	1	4	170	881	34·67	156
d Dover(MartinMill Pumping Stat.)	L. Holman, Esq.	5	11	0	298	770	30·31	146
d Wye (S.E. Agricultural College)	H. C. Chapelow, Esq.....	8	1	0	150	852	33·54	159
d " (Bilting House)	Capt. W. W. Knight.....	5	1	3	158	934	36·77	173
Ashford (Eastwell Park Gdns.) (R)	Mr. J. G. Weston	10	3	6	410	814	32·05	153
Charing Pumping Station... ..	L. Holman, Esq.	5	1	0	593	784	30·87	...
Deal and Walmer W.W. M	A. Mantle, Esq.	12	1	0	110	805	31·68	...
d " " " "	" " "	5	1	0	110	803	31·61	164
Kingston (Hleden)	E. H. French, Esq., C.B.	5	2	0	200	820	32·29	...
Eastry (Brewery)	T. Nevill Cheate, Esq....	5	0	10	85	804	31·65	...
d Sandwich (Upton House, Word)	Capt. W. Elwin Napier...	5	1	0	32	755	29·72	162
d Chilham (Lower Ensden)	F. Ivo Neame, Esq.	5	4	10	223	756	29·76	156
Wingham (Margate W.W.)	Mr. W. R. Hosking	5	1	0	138	879	34·59	155
Sandwich (St. George's Golf Club)	W. Ryder Richardson, Esq.	6	1	1	3	613	24·12	142
d Littlebourne House	T. M. Patterson, Esq.....	5	1	8	41	731	28·77	181
d Canterbury (Oaten Hill House)..	Rev. Canon H. M. Carr...	5	1	3	50	837	32·94	167
" (Irrigation Works)..	C. Terry, Esq., C.E.....	5	2	6	15	842	33·13	158
" (St. Thomas' Hill)...	J. Spillett, Esq.....	5	0	6	230	835	32·88	...
d Wickhambreux (The Willows)..	A. Baird, Esq.	5	0	8	22	740	29·15	183

DIVISION II.—SOUTH EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more
		Diam.	Height Above Ground SeaLevel			1914		
		in.	ft.	in.	feet.	mm.	inches.	
KENT—(con.)								
2.—STOUR & C—(con.)								
Minster (Gas Works)	W. Thomson, Esq., C.E....	6	1	0	60	640	25·19	...
d Ramsgate (Southwood W.W.)...	" "	6	1	0	169	691	27·21	158
d† " (Archer House)	Miss L. M. Wainwright...	5	0	11	75	633	24·92	148
d† Broadstairs (Providence House).	Cecil Hamersley, Esq.....	5	2	0	50	685	26·96	169
d Reculver	Allington Collard, Esq....	5	5	2	27	590	23·21	145
d† St. Peter's	Rev. H. C. V. Snowden...	5	0	9	140	675	26·56	169
d† " " Court.....	A. J. Richardson, Esq....	5	1	0	135	657	25·85	162
d Birchington (Hollydene)	W. Tomlin, Esq., Junr....	6	6	0	75	617	24·30	146
d† " (Rose Bank)	Mr. G. Hore	5	5	0	45	617	24·29	143
d† " (Fernleigh)	R. Grant, Esq.	5	1	0	40	630	24·79	164
d Westgate-on-Sea (Garlinge) ...	D. W. Horner, Esq.,	5	1	5	75	612	24·09	166
† Kingsgate (White Ness)	Mr. T. Tullett	5	3	0	98	688	27·09	152
3.—SWALE & C. 167 sq. mi.								
d Selling (Luton)	F. Ivo Neame, Esq.	5	4	9	263	879	34·60	166
d " (Harefield).....	Sidney Neame, Esq.	5	4	6	219	874	34·41	180
d Bicknor Rectory..... <i>Snowdon g.</i>	Rev. W. T. Martin	5	1	0	517	821	32·33	178
d Boughton-under-Blean Vic. ...	Rev. W. H. Rammell.....	5	2	4	116	758	29·83	162
d Ospringe (Lorenden)	Walter C. Stunt, Esq....	5	1	6	180	771	30·34	147
d Faversham (Westwood Court)...	L. H. Finn, Esq.	8	1	3	30	764	30·06	152
d Teynham (New Gardens)	Col. J. F. Honeyball	5	1	5	30	682	26·87	152
d Faversham (Uplees Marshes) ...	W. J. Wright, Esq.	5	4	4	9	504	19·86	...
d Whitstable (Western House)No.1	J. W. Hayward, Esq.	5	0	10	17	635	25·01	150
d "								

DIVISION II.—SOUTH EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with 0·1 in. or more	
		Diam.	Height Above		1914			
			Ground	Sea Level				
		in.	ft.	in.	feet.	mm.	inches.	
KENT—(con.)								
4.—MEDWAY—(con.)								
D Markbeece (Edells)	Miss M. F. Pearse	5	1	0	320	789	31·07	174
D „ (High Buckhurst) ...	Edmund Dean, Esq.	5	1	0	400	831	32·71	166
D Chiddingstone Hoath (Truggers)	Alsager Vian, Esq.	5	0	8	350	854	33·64	169
Staplehurst (Coppwilliam Farm)	J. Norris, Esq.	5	1	4	100	736	28·96	165
Penshurst (The Quarry House) ..	Louis E. Wood, Esq.	8	1	0	206	787	30·98	...
D „ (Petre's Field)	„ „ „ „	5	1	0	151	807	31·78	182
D „ Park	Mr. J. M. Sturgess	5	0	9	265	758	29·86	178
D Tonbridge (Mabledon Park)	J. F. W. Deacon, Esq.	5	1	2	190	735	28·95	158
„ (Brooklands)	G. J. Kimmins, Esq.	5	0	10	120	760	29·93	160
D „ (The Manor House) ..	M. S. David, Esq.	5	1	1	135	708	27·86	170
„ (Pinnacles)	A. H. Neve, Esq.	5	1	0	140	720	28·35	173
„ („)	M „ „ „ „	5	1	0	140	725	28·56	...
D Hadlow Place	C. J. G. Hulkes, Esq.	5	1	0	50	738	29·05	196
D „ (Golden Green)	F. W. E. Shrivell, Esq.	5	1	0	100	748	29·47	175
D Hildenborough (Hollenden Ho.) ..	C. H. Scott, Esq.	8	1	0	100	681	26·82	173
„ (Fairhill)	Mr. W. Parker	5	0	9	200	760	29·90	...
D Ulcombe Place	A. O. Walker, Esq.	5	1	0	350	696	27·41	171
D Linton Park	Mr. C. Pratt	5	0	8	...	742	29·20	157
D Langley (Rumwood Court)	Mr. W. J. Gould	5	1	9	354	690	27·17	181
Otham (Synyards)	Ambrose Boyson, Esq.	5	1	0	315	754	29·67	171
D Leeds (Schoolhouse)	H. E. Bridge, Esq.	5	1	0	217	636	25·06	179
D† Sevenoaks (River Hill)	Lt.-Col. J. M. Rogers, D.S.O.	8	4	0	535	726	28·58	172
D „ (Soar Farm, Plaxtol) ..	H. Stonham, Esq.	5	3	0	300	726	28·57	151
D Maidstone (Lower Tovil)	Lawrence Green, Esq.	5	1	0	30	675	26·56	189
D „ (W. W., Barming) ...	W. J. Ware, Esq., C.E.	8	1	0	30	695	27·35	166
D† „ (Brenchley Gardens) ..	T. F. Bunting, Esq., C.E.	5	0	9	50	703	27·69	173
D† „ (Mill Street)	„ „ „ „	8	6	0	38	698	27·47	172
D East Malling (Broadwater)	C. B. Mercer, Esq.	5	1	6	169	677	26·66	177
D West Malling (St. Leonards) ...	G. Phillips, Esq.	5	1	0	...	754	29·68	165
Maidstone (Allington Lock)	Mr. W. Smith	5	1	0	45	714	28·10	168
D „ („ Nursery) ..	Messrs. G. Bunyard & Co.	5	1	6	112	713	28·08	173
D† Detling (The Croft)	R. Cooke, Esq.	5	1	2	330	744	29·30	210
D „ („)	„ „ „ „	5	1	0	330	756	29·78	210
„ (Pollhill Fields)	„ „ „ „	5	1	0	...	727	28·63	...
Halling Pumping Station	L. Holman, Esq.	5	1	0	75	633	24·91	...
Rainham (Meresborough)	S. Wakeley, Esq.	5	1	0	230	698	27·46	161
D „ (Mardale House)	Dr. F. W. H. Penfold ...	5	1	2	109	727	28·63	184
D Chatham (Luton W. W.)	W. Coles Finch, Esq.	5	3	0	88	631	24·86	155
D Rochester (Knights Place)	Miss F. H. Pye	5	3	0	320	671	26·42	183
Strood Water Works	W. Banks, Esq., C.E.	5	3	0	112	633	24·92	171
D Frindsbury (The Shrubbery) ...	Warwick Stunt, Esq.	5	1	6	150	607	23·90	158
D „ (Stonehouse)	E. W. Wood, Esq.	5	5	0	20	610	24·03	151
D Hoo St. Mary (St. Mary's Hall) ..	H. Pye, Esq.	5	5	6	146	556	21·88	156
5.—THAMES—Darent. 256 sq. mi.								
† Westerham (Quebec Square) ..	Met. Water Board	5	1	0	380	923	36·34	...
D† „ Hill Pumping Stat.	„ „ „ „	5	1	0	539	819	32·25	189
† Sevenoaks (Tonbridge Rd. Res.) M	A. Grainger, Esq.	5	1	6	556	807	31·78	...
„ (Kippington Grange) ..	Sir Douglas Fox, C.E.	5	1	0	510	825	32·47	154
D† „ (The Old House)	W. Tattersall, Esq.	8	1	0	510	860	33·84	187

DIVISION II.—SOUTH EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0·1 in. or more
		Diam.	Height Above		SeaLevel	1914		
		in.	ft.	in.		feet.	mm.	inches.
KENT—(con.)								
5.—THAMES—Darent—(con.)								
D Sevenoaks (Speldhurst Close) ...	Rev. D. D. Mackinnon...	5	1	0	470	778	30·64	175
† Brasted (Combe Bank)	Robert L. Mond, Esq.....	8	0	10	323	838	33·01	...
D† Tatsfield (Betsom Hill).....	Met. Water Board.....	5	0	7	820	952	37·48	168
† Seal (St. Lawrence Reservoir) ...	A. Grainger, Esq.	8	1	0	665	818	32·22	...
† „ (Oak Bank Reservoir)	„ „ „	8	1	0	550	851	33·51	...
† „ (Kemsing Pumping Station) ..	„ „ „	5	1	0	292	844	33·22	...
D Sevenoaks (Chevening Gardens) ..	Mr. C. Sutton.....	5	1	0	360	947	37·28	156
D† Knockholt (Kent Waterworks) ..	Met. Water Board.....	5	1	0	785	899	35·38	175
D Otford (Beechy Lees)	Mr. R. Edwards.....	5	0	10	480	868	34·18	185
D Shoreham (Highfield Gardens) ...	Mr. H. Woodgate	5	1	3	700	887	34·91	152
D† Halstead Rectory	Rev. F. H. Deane	5	1	0	530	901	35·48	186
Downe (Petleys)	Miss Murton	5	0	11	...	843	33·20	...
D „ (Council School)	A. J. Ridge, Esq.	5	0	8	500	969	38·14	179
D Chelsfield (Woodlands).....	A. T. Waring, Esq.	5	4	4	400	773	30·42	165
D Keston (Forest Lodge)	F. C. Bayard, Esq.	5	1	0	300	865	34·07	151
D West Wickham (Wickham Court) ..	„ „ „	5	1	2	300	824	32·44	162
Hayes (Hayes Place).....	„ „ „	8	1	0	350	756	29·78	...
D† Orpington (Kent Waterworks) ...	Met. Water Board.....	5	1	0	220	773	30·43	174
Meopham	Jesse Garratt, Esq.	5	1	1	290	653	25·72	157
Cobham (Sole Street).....	J. Scratton, Esq.	5	1	8	311	713	28·08	...
„ (Scales Hill).....	A. W. Booth, Esq.....	5	2	0	300	678	26·71	...
D Bromley Common (Elmfield) ...	Rev. J. P. Faunthorpe....	5	0	9	240	680	26·77	188
D Bickley (Sunnydene).....	Sir J. Wrench Towse.....	5	1	0	270	710	27·97	165
D „ (Farrants).....(R)	L. E. Chalmers, Esq.....	8	3	6	...	679	26·73	173
D Bromley (Widmore Road)	D. G. Simpson, Esq.....	8	0	6	260	714	28·10	179
„ (The Palace)	F. C. Bayard, Esq.	5	1	0	187	690	27·18	...
D „ (Ravensfell)	Capt. H. L. Richardson...	5	1	0	200	688	27·07	168
„ (Gilbert Road)	Edward Kinder, Esq.....	5	2	3	200	698	27·47	...
„ (Lansdown Road)	C. A. Case, Esq.	5	1	0	220	673	26·50	169
Shortlands (The Gables)	A. March Tapp, Esq.....	5	1	0	210	636	25·06	...
D Beckenham (Croydon Road).....	J. A. Angell, Esq.....	8	1	0	110	806	31·73	185
Chislehurst (Hawkwood)	F. C. Bayard, Esq.....	5	1	0	300	657	25·86	...
D Gravesend (Thong)	C. H. Scriven, Esq.	5	1	0	255	643	25·33	181
D Southfleet (Kent Waterworks) ..	Met. Water Board.....	5	1	0	82	623	24·51	166
D Wilmington(„ „ „) ..	„ „ „	5	1	0	25	567	22·31	159
D Dartford (West Hill House).....	F. C. Bayard, Esq.	5	1	3	100	621	24·46	...
D Higham (Telegraph Hill)	Mr. J. Filmer	5	1	0	310	578	22·77	179
D „ Waterworks	W. A. Walker, Esq.....	8	1	0	142	555	21·86	153
D „ (Oakleigh)	C. Lake, Esq.....	5	1	2	25	545	21·47	150
D Erith (Crossness)	London County Council...	14	0	6	16	542	21·35	153
SUSSEX. (Area, 1458 sq. mi.)								
1.—LAVANT & C. 175 sq. mi.								
D† Selsey (Large Acres) ... <i>Field g.</i>	E. Heron Allen, Esq.....	5	1	0	25	772	30·38	180
D† „ („ „) ... <i>Snowdon</i>	„ „ „ „ „	5	1	0	25	830	32·69	180
„ Sidlesham (Ivy Grange)	J. W. Moore, Esq.....	5	1	1	20	784	30·87	...
D† Bognor	A. G. Thompson, Esq., C.E.	8	1	0	21	786	30·95	178
D† „ (Albert Road)	H.L.F. Guernonprez, Esq.	8	1	0	20	794	31·26	174

DIVISION II.—SOUTH EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with "01 in. or more	
		Diam	Height Above		1914			
			Ground	Sea Level				
		in.	ft.	in.	feet.	mm.	inches.	
SUSSEX—(con.)								
1.—LAVANT & C—(con.)								
† Felpham (Outerwyke)	F. J. Neale, Esq.	8	1	0	8	738	29.05	163
Bognor (Lidsey Lodge)	H. Neale, Esq.	8	1	2	25	844	33.21	161
D West Thorney (The Manor House) ..	H. Padwick, Esq.	5	1	0	23	889	34.99?	183
† Arundel (Bonhams, Yapton) ...	W. Harrison, Esq.	5	1	0	24	800	31.50	173
† „ (Drove Farm, „) ...	„ „ „ „ „ „	5	1	0	14	783	30.81	173
D Chichester (Westgate)	G. Ashley Tyacke, Esq.	8	0	6	40	859	33.81	177
D „ (Oakwood House) ...	F. Baring Du Pré, Esq.	5	0	8	130	982	38.66	181
D West Bourne [Emsworth]	Rev. L. B. Birkett.	5	1	0	50	1002	39.47	186
D Funtington.	J. A. Greenwood, Esq.	5	1	0	95	968	38.13	174
West Stoke Rectory	Rev. Preb. W. F. Shaw.	5	1	0	176	996	39.21	153
D Chichester (Goodwood Gardens) ..	Mr. F. Brook	5	1	3	133	1056	41.57	176
D „ (Watergate House) ...	W. M. Christy, Esq.	5	1	0	236	1060	41.74	189
„ (West Dean Park) ...	Mr. W. H. Smith	10	1	6	190	1027	40.43	...
„ (Chilgrove)	J. W. Woods, Esq.	5	0	6	284	1002	39.46	...
D Compton House [Petersfield] ...	Rev. H. M. Langdale.	5	1	0	255	1095	43.11	201
2.—ARUN. 285 sq. mi.								
D† Tortington House	late Major J. A. Travers. ..	5	1	0	25	859	33.82	177
D† Patching	J. Drewitt, Esq.	5	1	0	180	922	36.29	158
D† „ House	Mrs. Joad	5	0	10	130	890	35.04	155
West Chiltington (Gaywood) ...	E. Burney-Young, Esq.	5	0	8	134	982	38.64	...
Cocking Rectory	Mrs. Randall	5	1	0	193	1010	39.78	182
D Elsted (Telegraph House)	The Earl Russell	5	1	0	625	1048	41.24	164
Bepton (Linch Farm)	G. Eames, Esq.	5	0	8	276	1255	49.40	163
D Midhurst (Pendean)	Lt.-Col. P. C. Bulloch.	5	1	0	206	1160	45.67	166
D West Harting [Petersfield]	Miss Monkhouse.	5	1	0	400	1126	44.31	176
Petworth (Selham House)	C. C. Lacaita, Esq. ....	...	...	...	...	1060	41.75	...
D Stedham (Rotherhill)	Dr. W. A. Wills	8	0	8	170	1106	43.56	157
D Rogate (Durford Abbey Farm) ...	J. Harmsworth, Esq.	5	3	0	156	994	39.12	176
Easebourne (Hollist)	Nigel V. Combe, Esq.	5	0	10	107	1151	45.30	160
D Petworth Park Gardens	Mr. E. W. Pull.	5	1	0	182	1016	40.01	175
Tillington (River House)	The Hon. Lady Cunliffe.	5	1	0	230	991	39.01	163
Lodsworth	Lt.-Col. E. O. Hollist, R.A.	8	2	0	230	1012	39.83	169
Midhurst (K. Edward VII. San.) ..	T. L. Evans, Esq., per M.O.	5	1	0	480	1030	40.56	192
Wisborough Green (Lowfold) ...	B. de F. Osmaston, Esq.	5	1	6	120	772	30.39	...
D Linchmere (Borden Wood)	E. G. Lamb, Esq.	8	1	0	260	1094	43.08	178
„ (Hollycombe)	J. C. Hawkshaw, Esq.	8	6	6	550	1179	46.43	...
D Fernhurst (Blackdown House) ...	Lady Philipson Stow.	5	1	0	550	946	37.26	169
D Lower Beeding (The Warren) ...	Leicester M. Reed, Esq.	5	0	10	430	914	36.00	156
D Horsham (Christ's Hospital)	A. E. Johnson, Esq.	8	1	0	170	830	32.69	164
† „ (Manor House)	H. Padwick, Esq.	8	0	10	140	861	33.88	149
D† „ (Richmond Road)	Miss L. E. Whitling	5	1	2	190	870	34.24	191
D† „ (Wimblehurst)	Miss E. M. Allcard	5	1	0	195	844	33.25	188
Slinfold (Rapkyns)	W. Duncan Knight, Esq.	5	1	0	170	738	29.07	...
3.—ADUR & C. 237 sq. mi.								
† Rottingdean School	G. Mason, Esq.	5	1	0	120	800	31.49	...
D† Worthing (Victoria Park)	Dr. R. H. Wilshaw	8	1	0	36	795	31.31	164
D† West Worthing (Hillmorton Lo.) ..	A. Morris Butler, Esq.	5	1	0	30	830	32.69	159
† East Preston (Bay Trees)	Rev. J. B. Orme.	5	0	9	25	831	32.70	...
D† Brighton (Old Steyne)	D. Forbes, Esq., M.D.	5	1	0	32	794	31.28	171

DIVISION II.—SOUTH EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ≥ 0.1 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
SUSSEX—(con.)								
3.—ADUR & C—(con.)								
d† Hove (Marine Park)	Dr. A. Griffith	8	1	0	25	819	32.24	179
d† Brighton W.W. (Goldstone Bottom)	J. Johnston, Esq., C.E.	8	0	7	140	813	32.00	160
d† „ „ (Lewes Road)	„ „ „	8	3	6	88	859	33.82	179
d† „ „ (Shoreham)	„ „ „	8	1	9	12	816	32.14	160
d† „ „ (Upper Portslade)	„ „ „	8	1	3	167	859	33.83	175
d† „ „ (Race Hill Reservoir)	„ „ „	8	1	0	466	901	35.49	182
„ „ (White Hawk Kite Station)	S. H. R. Salmon, Esq.	5	1	0	380	784	30.86	...
d† Preston Park (Clifton Villa)	Henry Rogers, Esq.	5	1	0	76	870	34.24	164
† „ „ (The Knowle, Withdeane)	P. J. Trouncer, Esq.	8	1	3	100	872	34.31	...
d† „ „ (Ditchling Road)	G. Berry Hamlin, Esq.	5	1	0	302	877	34.52	180
† Patcham (Upper Roedale)	„ „ „	5	1	0	385	927	36.50	...
„ „ (Hollingbury Camp)	„ „ „	5	1	0	575	959	37.76?	...
d† Falmer (Brighton W.W.)	J. Johnston, Esq., C.E.	8	1	8	209	950	37.40	191
d† Patcham („ „)	„ „ „	5	1	6	207	967	38.08	187
d Bramber (Burletts)	Hatton G. Sugden, Esq.	5	3	6	75	967	38.08	177
„ Steyning (Crescent Road)	Mr. H. J. Hide	5	1	0	80	1010	39.76	153
„ Hassocks (Pyecombe)	Mr. F. S. Mitchell	5	0	7	392	986	38.84	...
d Clayton Windmills	E. A. Martin, Esq.	5	1	0	584	1195	47.05	165
d Hurstpierpoint (Danny Park)	Mr. J. J. Bunney	8	1	3	180	1113	43.81	154
d Ditchling	E. A. Martin, Esq.	5	1	0	220	975	38.37	173
d Keymer (The Limes)	Miss Berry	5	1	1	145	1074	42.27	169
„ „ (Ockley Manor)	R. G. Davidson, Esq.	8	2	0	192	979	38.56	...
„ Burgess Hill (Ote Hall)	Mrs. Woods	5	1	6	...	943	37.12	...
„ Cowfold (Maple Bank)	Miss Ford	5	1	6	105	864	34.00	...
d Wykehurst Park Gardens	Mr. T. Tyson	5	1	6	360	856	33.69	156
d Cuckfield (Hilfield House)	Miss A. K. O'Brien	5	1	0	300	876	34.47	179
„ „ (Workhouse)	Mr. E. Gosden per M.O.	8	1	0	389	771	30.36	148
d „ „ (Henmead Hall)	Mrs. Maxwell Campbell	5	3	5	365	885	34.85	184
d Lower Beeding (Leonardslee)	Sir E. G. Loder, Bart.	8	1	0	235	870	34.26	172
4.—OUSE. 224 sq. mi.								
d Seaford College	Col. F. W. Savage, V.D.	5	1	6	38	805	31.68	154
d „ „ (Bowden House School)	J. F. Thomas, Esq.	5	1	0	190	777	30.60	164
d Newhaven (Poverty Bottom)	J. T. Bickford, Esq.	8	1	1	51	808	31.82	160
d Lewes (Little Dene)	Miss B. Brand	8	0	11	93	1028	40.47	203
„ „ (Cobbe Place)	F. A. Bosanquet, Esq.	5	0	8	50	907	35.72	...
d Falmer Court	Miss K. Moulden	5	3	0	312	969	38.15	173
d Lewes W.W. (Kingston Pump. Sta.)	A. Wells, Esq.	8	1	3	13	1028	40.47	175
„ East Hoathley (Old Whyly)	H. C. Harbord, Esq.	5	1	0	160	901	35.48	...
d Isfield Place	Major H. King	5	1	0	41	834	32.82	165
„ „ „ „ weekly g. „ „	„ „ „	5	1	0	41	830	32.68	...
„ „ „ „ monthly g. „ „	„ „ „	5	1	0	41	826	32.51	...
„ Framfield (High Cross)	Maj. R. Lawrence Thornton	5	0	6	175	908	35.73	...
d Uckfield (Agricultural College)	Prof. S. A. Woodhead	8	1	0	166	822	32.36	181
d Newick Rectory	Mrs. C. Powell	5	1	5	134	691	27.20?	171
d Haywards Heath (Franklyn Road)	Mr. R. Inglis	5	1	0	260	920	36.22	167
d „ „ „ (S. Wilfrid's Par.)	Mr. J. E. Shirley	5	1	0	300	889	35.01	176
d Buxted Park	Hon. H. B. Portman	8	1	0	94	980	38.57	187
„ „ (Strawberry Hall)	C. Rintoul, Esq.	5	1	0	180	955	37.61	165
d Mayfield (Five Ashes)	Miss Emily Aston	5	1	5	300	948	37.32	186

DIVISION II.—SOUTH EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0.1 in. or more	
		Diam.	Height Above		1914				
			Ground.	Sea Level					
		in.	ft.	in.	feet.	mm.	inches.		
SUSSEX—(con.)									
4.—OUSE—(con.)									
	Nutley Vicarage	Rev. C. Neill	5	1	0	386	923	36.33	157
D	„ (The Hall)	Miss Cook	5	0	10	417	957	37.69	170
D	Ardingly (Brook House)	H. R. G. Clarke, Esq.	8	1	0	240	895	35.22	159
	Lindfield (Gravellye)	Mrs. Weedon	5	...		170	858	33.80	192
	„ (Malling Priory)	D. P. Pennethorne, Esq.	5	1	0	160	917	36.12	...
D	Ardingly (Lywood House)	G. Forrester Scott, Esq.	5	0	9	240	901	35.48	190
D	Balcombe (The Gables)	Mr. G. J. Warren	8	1	3	358	990	38.97	191
D	„ (Stockcroft)	R. Newton, Esq.	5	1	1	341	1009	39.74	182
D	„ (Waterworks)	F. Martin, Esq., C.E.	8	1	0	471	1016	39.99	157
	„ (Highley Manor)	H. Faure Walker, Esq.	8	1	6	420	978	38.50	184
5.—CUCKMERE & C. 189 sq. mi.									
†	Eastbourne (Wilmington Square) ..	S. R. Henderson Esq per MO	5	1	0	39	791	31.14	172
D	„ (Glenthorne)	Miss Woodd	8	1	6	86	830	32.67	183
	„ (Arundel Road)	J. C. Wright, Esq.	5	1	0	70	846	33.31	...
D	„ (Ocklynge Cemetery) ..	C. Montague Wood, Esq.	5	3	6	171	770	30.33	151
D	„ (Staveley Cross)	J. Weston, Esq.	5	1	6	110	795	31.30	177
D	West Dean	A. J. Howard, Esq.	8	1	0	112	714	28.13	178
D	Jevington (Church Farm)	„ „ „	8	0	9	274	844	33.25	175
D	Litlington (Plough & Harrow Inn) ..	„ „ „	8	1	0	19	883	34.76	151
	Willingdon Sewage Farm	T. E. Varley Kirtlan, Esq.	5	1	0	24	912	35.89	...
D	Pevensey Pumping Station	„ „ „	5	1	0	12	685	26.98	158
D	„ Bay Pumping Station ..	„ „ „	5	1	0	7	734	28.91	159
D	Bexhill (Marina)	K. J. M. Fegan, Esq.	8	1	0	27	735	28.92	172
†	St. Leonards (West Marina) ..	H. Colborne, Esq.	8	1	0	24	731	28.78	...
†	„ „ (Gensing Gardens) ..	„ „ „	8	1	0	179	762	30.00	178
D	Hailsham Vicarage	Rev. F. Clyde Harvey	5	1	0	105	915	36.04	152
D	„ (Magham Down)	W. E. Bear, Esq.	5	1	0	90	805	31.68	148
D	Hurstmonceux Place	H. A. James, Esq.	5	1	8	83	704	27.71	146
D	Hastings (Newgate)	P. H. Palmer, Esq., C.E.	8	5	6	240	763	30.04	160
	„ (Filsham Reservoir) ..	H. Colborne, Esq.	5	0	10	91	742	29.23	...
	„ (Halton Reservoir)	„ „ „	5	0	10	301	785	30.90	...
	„ (Fairlight Reservoir) ..	„ „ „	5	0	10	517	766	30.14	...
D	„ (Cemetery)	Walter Field, Esq.	5	0	8	478	749	29.48	199
D	Battle (Crowhurst Park) ..	Mr. A. Munday	5	1	0	480	881	34.70	172
D	Horeham Road (Coxlow)	Miss P. C. Harrison	5	1	0	260	842	33.15	188
D	„ Grange	W. F. Beauford, Esq.	5	1	2	260	879	34.59	175
D	„ Road (Hollycroft Cottage) ..	J. Hamlin, Esq.	5	1	0	300	918	36.15	182
D	Heathfield (The White Cottage) ..	J. F. Leigh Clare, Esq.	5	1	3	500	886	34.87	172
6.—ROTHER. 194 sq. mi.									
D	Winchelsea (Nesbit Cottage) ..	Miss G. Leigh	5	1	1	124	850	33.46	169
D	„ (Mariteau House) ..	C. W. Champion, Esq.	5	1	0	120	890	35.04	168
D	Battle (Whatlington)	Miss H. Gripper	5	1	3	90	927	36.48	181
	Udimore (The Hammonds)	J. G. Mair-Rumley, Esq.	8	1	0	144	805	31.70	157
	Rye (Fairfield House)	Walter Dawes, Esq.	5	1	0	146	760	29.91	...
D	Beckley (Bixley Lodge)	B. E. de N. Ramus, Esq.	5	1	0	230	933	36.74	163
D	Heathfield (Tottlingworth Park) ..	Mr. J. Masson	5	1	0	500	927	36.48	153
D	„ (Holbans Farm)	Miss G. M. Hay	5	0	11	450	923	36.33	160
D	Northiam (Great Dixter)	Nathaniel Lloyd, Esq.	8	1	0	210	820	32.28	168
D	Mayfield (Bishopstone)	A. G. Robins, Esq.	5	1	0	430	992	39.06	173

DIVISION II.—SOUTH EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0.1 in. or more
		Diam.	Height Above		1914			
			Ground	Sea Level				
SUSSEX—(con.)								
6.—ROTHER—(con.)								
D Wadhurst (The Olives).....	Miss Edith P. Luck	5	1	0	380	948	37.34	177
D Hurst Green (Boarzell).....	Sir F. W. Fison, Bart. ...	8	1	0	270	832	32.75	175
D Ticehurst (Myskyns).....	E. H. Cartwright, Esq....	5	1	0	340	976	38.41	198
D „ House	Mr. J. D. Jordan	5	4	9	423	879	34.59	152
7.—MEDWAY. 117 sq. mi.								
D Crowborough (Jarvis Brook).....	Crowborough Water Co....	5	1	0	325	1051	41.39	171
D „ (Uckfield Lodge).....	J. J. S. Driberg, Esq.....	8	1	0	796	1083	42.65	222
D „ (Te Whare).....	Miss Hames	5	1	0	796	1169	46.02	247
D Wadhurst (Lower Cousley Wood)	F. Wilkin, Esq.....	5	1	0	416	817	32.18	176
D† Forest Row (Wych Cross Place)..	D. W. Freshfield, Esq....	5	0	10	600	1035	40.75	156
† „ „ (Hindleap Lodge) ...	Mr. A. Adam	5	1	6	620	903	35.55	...
„ „ (Charlwood Farm)...	A. Hoare, Esq.	5	1	0	250	1025	40.35	...
D Coleman's Hatch (Holly Hill)...	J. MacAndrew, Esq.	5	1	0	355	976	38.43	170
D Eridge Green (Danegate).....	Sir H. G. Walpole, K.C.B.	5	0	10	400	982	38.67	166
D Frant (Henley House)	E. Malden, Esq.....	5	1	6	440	892	35.12	190
„ (Eridge Castle)	Mr. A. Wilson	5	1	0	400	1028	40.46	...
„ (Highfield)	C. M. R. Cleeve, Esq....	5	2	3	413	897	35.33	...
D Crawley Down (The Grange).....	T. H. W. Buckley, Esq....	5	1	0	430	954	37.57	179
„ „ (Rushetts)	Miss C. Scaramanga .....	...	...	...	...	986	38.83	...
D East Grinstead (Brockhurst Obsy.)	F. J. Hanbury, Esq.....	8	1	0	435	978	38.49	192
D „ „ (Highfields)	G. Mason, Esq.	5	0	9	400	900	35.43	172
D „ „ (Cranston Road)...	Mr. G. Mitchell	8	2	2	420	989	38.95	166
Glen Andred [Groombridge] ...	Mrs. Boardman	8	1	0	320	918	36.13	...
Cozleigh [„]	J. Anderson, Esq.....	8	2	0	230	906	35.69	170
8.—THAMES—Mole. 27 sq. mi.								
D Worth (South Hill)	Miss R. M. Ravenshaw...	8	1	6	558	1032	40.64	190
9.—THAMES—Wey. 10 sq. mi.								
D Ripsley [Liphook].....	W. D. Bosanquet, Esq....	5	1	0	400	1064	41.87	172
HAMPSHIRE. (Area, 1622 sq. mi.)								
1.—ISLE OF WIGHT. 150 sq. mi.								
D† Ventnor (Flint Cottage)	J. S. Ineson, Esq.	5	1	0	99	858	33.80	170
D „ (Royal National Hospital)	Miss M. Gibson ..	5	1	0	60	881	34.70	176
D Shanklin ..	E. C. Cooper, Esq., C.E....	8	1	0	184	977	38.46	180
D Sandown (Free Library)	C. E. Gilchrist, Esq.....	8	1	0	30	1010	39.78	200
Brightstone Rectory	Rev. E. W. Silver .....	...	...	...	100	937	36.88	...
D† Totland Bay (Aston House).....	J. Dover, Esq.	8	1	3	145	926	36.46	164
D Brading (Ryde W.W., Knighton)	J. T. Harvey, Esq., C.E.	8	2	0	53	1174	46.20	163
D† Ryde (New Lodge, St. John's Park)	Mrs. Dobie	5	1	1	147	1013	39.89	186
„ (Perivale)	Major E. C. Murray	5	1	3	193	1044	41.09	174
D† „ (Pier Street)	G. Nicholson, Esq.....	12	9	7	35	1014	39.91	163
D „ (Esplanade Gardens)	C. Mathew, Esq.	8	2	0	6	942	37.07	162
D† „ (Beldornie Tower)	P. Craven Hall, Esq.....	5	1	0	30	887	34.92	183
D† Wootton (Fernhill)	C. Gordon Brodie, Esq....	8	0	6	118	1036	40.77	174
D Binstead (Quarr Hill)	Dr. J. Winthrop Woodruff	5	0	10	100	951	37.43	161
D East Cowes (Spring Hill).....	G. Shedden, Esq.	5	1	0	121	924	36.38	172
D Cowes W.W. (Broadfields)	J. W. Webster, Esq., C.E.	5	0	10	161	966	38.04	170
„ (Upper Moor Green)	J. G. K. Day, Esq.	5	4	0	160	956	37.62	160

DIVISION II.—SOUTH EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more
		Diam.	Height Above Ground. SeaLevel			1914		
		in.	ft.	in.	feet.	mm.	inches.	
HAMPSHIRE—(con.)								
1.—ISLE OF WIGHT—(con.)								
Cowes (High Street)	Mr. H. S. Benzie	5	6	0	20	982	38·64	159
„ (R. Yacht Squad. Castle)	„ „ „	8	4	0	0	860	33·86	153
2.—STOUR. 32 sq. mi.								
d† Bournemouth (Coastguard Stat.)	Messrs. Primavesi Bros.	5	1	0	100	847	33·33	186
† „ (Pleasure Gardens)	C. Dales, Esq.	5	1	0	41	1085	42·70	180
d† „ (West Cliff)	Rev. G. A. Rideout	5	1	0	145	1025	40·34	180
d „ (Rodney House)	S. Hyla Greves, Esq.	5	1	6	145	978	38·49	182
† „ (Vale View)	C. Dales, Esq.	5	1	0	145	992	39·04	183
d† Christchurch (Heron Court)	The Earl of Malmesbury..	5	1	2	25	1110	43·68	181
d† „ (Hurn Bridge House)	J. A. A. Foster, Esq.	8	1	0	30	1030	40·56	179
3.—EAST AVON & C. 114 sq. mi.								
d† Christchurch (Winkton Lodge) ..	Miss Lassell	5	1	0	34	936	36·86	191
d Hinton Admiral (East Close) ..	Col. A. M. Blake	5	1	0	185	1003	39·48	169
d Ringwood (Moortown House) ..	Rev. A. D. Pennington..	5	1	1	48	944	37·17	188
d „ (West Mount)	R. F. Williams, Esq.	5	1	0	100	1009	39·71	206
„ Vicarage	Rev. W. D. Bodkin	5	2	0	520	870	34·24	...
„ (Ellingham Vicarage) ..	Rev. E. W. Poore	8	0	6	66	984	38·73	192
d Fordingbridge (Cuckoo Hill) ..	Heywood Sumner, Esq.	5	1	0	150	1016	40·02	180
d „ (Oaklands)	S. B. Rake, Esq.	8	1	0	135	1012	39·85	196
4.—TEST & SOLENT. 551 sq. mi.								
d Milford-on-Sea (Salt Grass)	A. C. G. Heygate, Esq.	5	1	0	6	958	37·72	168
„ „ „ (Milford House) ..	E. L. Agar, Esq.	5	0	8	40	938	36·93	178
d Lymington (The Salterns)	P. A. Ouvry, Esq.	5	1	0	1	962	37·88	174
Milton (Wootton Hill)	J. A. Harman, Esq.	5	1	0	188	1080	42·52	164
Burley (Park View)	Rev. W. Esdaile	5	4	0	200	1036	40·77	...
„ (Manor House)	Col. F. Willan	5	1	4	210	949	37·35	...
d Fawley (Cadland)	Mr. L. Smith	8	4	6	52	978	38·49	200
d Hythe (The Garth, Dibden)	P. C. Crossley, Esq.	8	1	0	127	952	37·48	182
d „ (Heathfield, „)	Mr. Jesse Reeves	5	1	3	127	1041	41·00	195
d „ (Heatherdown, Purlieu) ..	J. H. S. Gilman, Esq.	5	1	4	126	1011	39·82	188
† Lyndhurst (Cuffnells)	R. G. Hargreaves, Esq.	5	1	0	195	1153	45·38	...
Marchwood (Byams)	Maj. H. J. G. Lloyd	5	1	0	0	1009	39·72	166
Southampton (East Park)	Col. C. F. Close, C.M.G.	8	1	0	65	939	36·97	178
„ Common Res. M	E. C. Rodda, Esq., C.E.	5	1	0	193	897	35·30	...
d Ampfield Vicarage	Rev. Vere Awdry	5	3	0	233	832	32·74	185
d Romsey (Timsbury)	(R) D. Kitchingman, Esq., C.E.	8	1	8	96	882	34·71	173
d West Dean Rectory	Rev. E. Wells	5	1	0	149	880	34·64	184
d West Tytherley (Buckholt)	R. J. Townshend, Esq.	5	0	11	410	923	36·33	189
† Horsebridge (Bossington House) ..	W. H. Deverell, Esq.	8	0	9	92	922	36·28	177
d† Ashley Old Manor House	Legh S. Powell, Esq.	5	1	3	235	887	34·92	176
d† „ (Upper Somborne)	Mr. Charles Alleway	8	1	0	200	836	32·93	185
d† Broughton	W. Steele Tomkins, Esq.	5	1	3	125	971	38·22	175
d† Stockbridge (Houghton Lodge) ..	Mr. G. Morris	5	1	0	190	938	36·94	158
d Barton Stacey (Moody's Down) ..	H. J. Gardiner, Esq.	5	1	3	230	896	35·26	172
d Micheldever (Northbrook House) ..	Miss E. M. Hare	5	0	11	325	893	35·17	189
d Sutton Scotney (The Nursery) ..	R. d'Eyncourt Day, Esq.	5	1	0	200	882	34·74	178
d Abbot's Ann Rectory	Rev. F. de Paravicini	5	0	10	220	921	36·25	180
Longparish House	Mrs. Diggle	5	2	6	192	796	31·32	...
d Andover Sewage Works	C. Jerome, Esq.	8	1	6	...	862	33·92	168

DIVISION II.—SOUTH EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ≥ 0.1 in. or more
		Diam.	Height Above		1914			
			Ground.	Sea Level				
		in.	ft.	in.	feet.	mm.	inches.	
HAMPSHIRE—(con.)								
4.—TEST & SOLENT—(con.)								
D Oakley Rectory	Rev. F. G. Hume	5	1	6	365	929	36.57	195
„ (Malshanger)	G. Walter, Esq.	5	1	0	400	892	35.10	170
„ (Manydown Park) ... (R)	S. E. Bates, Esq. ....	...	1	8	415	727	28.62	...
„ (Upper Wootton)	W. R. Thomson, Esq.	5	1	4	500	881	34.68	176
Hurstbourne Tarrant (The Rookery)	R. E. C. Burder, Esq. ..	...	...	...	...	970	38.21	...
D Faccombe Manor	H. Gibson, Esq.	8	1	3	760	1140	44.88	187
D Vernham Dean (Rowe House) ...	Adm. E. H. Gamble, C.B.	5	0	7	650	938	36.95	156
5.—ITCHEN & SPITHEAD. 417 sq. mi.								
D Alverstoke (Monckton House) ...	J. Blake, Esq.	5	1	0	15	866	34.11	165
† Portsmouth (Eastney)	A. W. Ward, Esq., C.E.	8	0	9	16	760	29.93	...
D† „ (Victoria Park)	Dr. A. Mearns Fraser	5	1	0	18	842	33.13	165
D Hayling Island (Richmond House)	E. S. McEuen, Esq.	5	1	2	16	840	33.06	162
D „ „ (Littlemead)	Douglas S. Bird, Esq.	5	1	2	15	824	32.46	173
D „ „ (Lama House) ...	Douglas Johnson, Esq.	5	1	2	14	824	32.46	146
D Porchester (Noel Cottage)	Miss Montgomerie Frost ..	5	2	0	...	745	29.33	173
D Fareham (Burpham House)	W. S. Stevenson, Esq., M.D.	5	1	6	30	944	37.15	169
D „ (The Mount)	H. R. Pink, Esq.	5	1	0	250	851	33.50	168
D „ (Roche Court)	Mrs. H. F. Rawstone	5	1	0	104	977	38.45	176
D Warsash (Hook Vicarage)	Rev. C. B. Lloyd	5	1	2	60	884	34.80	182
D† Havant (Farlington)	H. Ashley, Esq., C.E.	5	1	0	77	756	29.78	172
† „ („)	M „ „ „ „	5	1	0	77	760	29.92	...
D† „ „ „ „	„ „ „ „ „	5	1	0	25	833	32.81	171
† „ „ „ „	M „ „ „ „ „	5	1	0	25	839	33.04	...
Cosham (Purbrook Grange)	Miss F. A. Deverell	8	0	9	100	944	37.15	164
D Netley (Lake House)	Miss Pennington	8	1	0	54	941	37.06	202
Wickham (Park Place)	Lt.-Col. H. R. Farquhar ..	5	1	0	150	940	37.01	183
Bitterne (Moorlands)	Courtenay F. Wilson, Esq.	5	1	0	200	924	36.37	168
D Botley (Hedge End)	Rev. T. H. Philpott	8	1	1	178	941	37.06	183
† „ (Brook House)	Beckett Powell, Esq.	5	3	2	45	950	37.41	...
† „ (Rectory)	Rev. G. E. C. Osborne	5	1	0	50	940	37.02	...
D† „ (Botley Hill)	Lady Jenkyns	5	1	6	36	934	36.77	181
D† „ (Beechcroft, Curdridge) ..	Miss L. M. S. Pasley	5	1	0	96	896	35.28	201
D† Horndean (Blendworth Lodge) ...	Mrs. Long	8	0	10	217	1086	42.75	185
D Catherington (St. Catherines) ...	Capt. R. H. Archer, R.N.	5	1	3	370	1079	42.48	194
Chalton (Woodcroft)	M Capt. C. J. P. Cave	5	1	0	230	1092	42.98	...
D Bishops Waltham (The Palace Ho.)	A. F. Hardy, Esq.	5	1	3	116	947	37.30	171
„ „ (Swanmore House)	W. H. Myers, Esq.	8	1	0	390	1137	44.77	191
D Droxford (Uplands)	Miss Bridge	5	1	0	279	1102	43.38	195
D „ (Fairfield House)	H. Hamilton Bridge, Esq.	5	1	0	254	1069	42.09	202
D „ (Fir Hill)	Capt. Mackenzie-Grieve ..	5	3	6	212	1037	40.82	180
D† Eastleigh (Fair Oak Park)	G. H. Pember, Esq.	5	1	0	180	961	37.83	165
D Chandlers Ford (Fryern)	Miss Grace Stuart	5	1	2	150	899	35.38	164
D† Petersfield (Ditcham Park)	Capt. C. J. P. Cave	8	1	0	555	1120	44.09	185
† „ (Downley)	M „ „ „ „ „	5	1	2	374	1137	44.76	...
D Otterbourne (Eldersfield)	G. Norsworthy, Esq.	5	1	0	137	936	36.86	186
D „ House	E. Christian, Esq.	5	1	2	111	910	35.83	193
D „ (W. W., Shawford)	E. C. Rodda, Esq., C.E.	5	1	0	113	842	33.17	181
D Westbury House Gardens	Col. H. LeRoy Lewis CB, DSO	5	2	10	296	1140	44.89	157
Winchester (Owslebury House) ..	W. Welsh, Esq.	5	1	0	365	879	34.61	166

DIVISION II.—SOUTH EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with '01 in. or more
		Diam.	Height Above Ground SeaLevel			1914		
		in.	ft.	in.	feet.	mm.	inches.	
HAMPSHIRE—(con.)								
5.—ITCHEN & SPITHEAD—(con.)								
D Twyford (Pumping Station)..(R)	D.Kitchingman,Esq.,C.E.	8	1	9	139	902	35.50	173
D „ (Mallards Close).....	G. R. Marsh, Esq.	5	1	0	145	857	33.73	171
Kilmeston Manor	Mrs. Heathcote	5	4	6	323	960	37.79	...
Petersfield (Broadhanger).....	Mrs. R. M. Caulfeild.....	5	1	0	730	1168	45.97	...
Privett (Basing Park Gardens)..	Mr. T. S. H. Down	8	2	0	600	1066	41.97	...
D Winchester (St. Giles' Hill).....	Mrs. Wilde.....	5	1	0	250	793	31.21	182
„ („ „)...M	„ „ „	5	1	0	215	722	28.41	...
D† „ (Northgate Place)...	H. E. Johnson, Esq.	8	1	3	180	904	35.58	181
D Ovington Rectory	Rev. H. F. La M. Stowell	5	1	0	221	1035	40.76	170
Itchen Stoke Rectory	Rev. V. E. Skrine	5	1	0	200	923	36.33	160
D „ Abbas (Chilland)	W. J. Arnold, Esq.	5	1	3	200	888	34.94	162
D Medstead Manor	Capt. E. Jervoise, R.N....	8	1	10	705	926	36.45	193
Ellisfield Manor.....	H. Hoare, Esq.	8	0	9	630	985	38.77	...
6.—ARUN. 32 sq. mi.								
†Petersfield (Sunwood)	M Capt. C. J. P. Cave	5	0	10	479	1139	44.83	...
„ (The Miscombe) ... M	„ „ „	5	1	1	250	1150	45.29	...
„ (Buriton House)	L. G. Bonham Carter, Esq.	5	1	9	293	1105	43.51	...
D† „ (Old Ditcham).....	Capt. C. J. P. Cave	5	1	1	250	1094	43.05	170
„ (Nursted)..... M	„ „ „	5	1	0	270	1132	44.58	...
„ („ House)	J. Rowe Bennion, Esq....	5	1	9	350	1126	44.34	...
D „ (Weston)	Capt. P. W. Seward	5	1	0	330	1218	47.94	166
„ (The Mount,Ramshill)	F. G. Padwick, Esq.....	8	1	0	250	1211	47.66	177
D Liss (Overcombe)	Miss Jebb	5	1	0	500	1042	41.03	187
D „ (Highfield).....	J.S. Gamble,Esq.,CIE.,FRS	5	0	9	325	1092	43.00	194
„ (The Lodge)	Ernest Latter, Esq.	5	1	3	240	1088	42.83	195
D „ (Kippences)	Rev. W. A. H. Thorold...	5	0	9	250	1080	42.52	156
D Greatham (King's Holt)	Mrs. Chase Parr.....	5	1	7	325	1018	40.10	155
„ (Manor House).....	F. Coryton, Esq.	7	0	7	250	1036	40.79	...
D „ (Le Court).....	Heath Harrison, Esq. ...	5	0	6	420	1105	43.50	165
7.—THAMES—Wey. 97 sq. mi.								
D Liphook (Fowley)	E. A. Lee, Esq.	5	0	10	296	1117	43.96	203
Colmer Rectory	Rev. A. C. Hervey.....	5	1	1	560	1066	41.98	...
East Tisted (Rotherfield Park)...	Mr. W. H. Yates	5	1	0	550	1252	49.29	184
D Newton Valence Vicarage.....	Rev. A. C. MacLachlan...	5	1	0	586	1088	42.82	182
D Selborne (The Wakes)	Col. A. Bibby	5	1	0	400	1151	45.30	186
D†Grayshott	Mrs. Lyndon	5	1	0	661	1034	40.73	197
D Headley (Eveley)	Mr. T. Carter.....	5	1	3	295	1133	44.62	164
D Liphook (Bordon Camp)	The Division Officer R.E.	8	1	0	268	970	38.17	161
Headley Park.....	Mr. G. Glaysher.....	8	1	6	250	902	35.50	...
Alton House	B. W. Bentinck, Esq.	5	1	3	300	874	34.40	...
„ (Holybourne Lodge)	Capt. Francis D. Webb...	5	1	0	365	901	35.47?	151
„ (Shalden Manor)	J. Gathorne Wood, Esq....	8	3	0	594	1020	40.17	194
D Froyle (Park Edge)	R. B. Sedgwick, Esq.....	5	1	0	350	798	31.40	194
Bentley (Marelands)	Miss Seawell	5	0	8	310	892	35.10	170
8.—THAMES—Loddon. 164sq. mi.								
D Herriard Vicarage.....	Rev. E. L. Crawhall	5	1	0	557	907	35.72	180
D Warren Corner [Farnham]	F. Wilkin, Esq.....	5	1	0	560	812	31.98	181
D Upton Grey (Hoddington House)	Lord Basing	8	1	0	378	966	38.05	162
D Aldershot (Sewage Works)	Mr. J. Edwards	5	1	0	231	842	33.14	201

DIVISION II.—SOUTH EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0·1 in. or more
		Diam.	Height Above Ground		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
HAMPSHIRE—(con.)								
8.—THAMES—Loddon—(con.)								
D Basingstoke (Queen Mary's Sch.)	L. S. Theobald, Esq.	5	1	0	289	873	34·36	169
D „ (Pumping Station) ..	F. R. Phipps, Esq., C.E.	5	0	6	320	790	31·10	164
D „ (Sherborne St. John)	Rev. D. W. Chute	5	1	2	267	831	32·73	186
D Winchfield (Elvetham Park) ...	Mr. G. B. Mitchison	8	1	0	217	810	31·87	186
D Hartley Wintney	W. G. Machin, Esq.	5	1	2	222	785	30·92	171
D „ Grange	F. Walkinshaw, Esq.	8	1	0	221	783	30·84	179
Sherfield-on-Loddon Manor	<i>Reading Mercury</i> .....	...	...	...	...	791	31·14	...
D Blackwater (Hawley)	D. Morland, Esq.	5	1	0	210	746	29·37	164
D Strathfieldsaye Rectory	Rev. F. Page-Roberts.	5	1	0	164	753	29·65	185
D „ House Gardens ..	Mr. A. G. Nichols	5	1	8	166	801	31·52	177
D Heckfield (Park Corner)	Miss Martineau	5	1	2	257	701	27·59	174
9.—THAMES—Kennet. 65 sq. mi.								
Ewhurst Park Gardens	The Duke of Wellington	5	2	2	400	915	36·04	188
D Kingsclere	Dr. R. Maples	5	0	3	327	900	35·45	178
BERKSHIRE. (Area, 722 sq. mi.)								
1.—TEST. 2 sq. mi.								
2.—THAMES—Bourne. 15 sq. mi.								
D Sunningdale (Lynwood)	late G. Rodie Thompson Esq	5	1	0	266	776	30·58	188
3.—THAMES—Loddon & c. 162 sq. mi.								
D Wellington College	E. M. Eustace, Esq.	5	1	0	283	796	31·33	181
D „ „ (Woodside) ..	Mr. W. J. Townsend	8	2	9	240	725	28·56	174
D Crowthorne (Firholt)	A. H. Hobhouse, Esq.	5	1	0	307	753	29·64	189
D „ „ „ ..	„ „ „ „ ..	2	1	0	307	765	30·11	191
D Finchampstead (West Court) ...	C. E. Harris-St. John, Esq.	5	1	0	180	664	26·15	171
Swallowfield Park	Sir Charles Russell, Bart.	5	1	0	150	679	26·72	...
D Ascot (Winkfield Manor)	C. A. Ferard, Esq.	5	1	0	240	768	30·23	191
D Wokingham (Fieldhouse)	H. C. Mylne, Esq.	5	1	0	220	704	27·72	195
D Winkfield (Ryemead)	Mrs. Aubrey Elliott	5	0	10	220	732	28·84	182
D Warfield (Hawthorndale)	Lt.-Col. G. H. Burges ...	5	1	0	207	714	28·12	185
D Windsor (Royal Gardens)	Mr. T. Edwards	5	1	0	88	728	28·64	190
D „ (Osborne Road)	Miss M. G. Cookson	8	1	0	88	695	27·37	209
D „ (Alma Road)	C. Sainty, Esq., C.E.	5	1	0	72	698	27·49	177
D Maidenhead (Heywood Park) ...	Greville H. Palmer, Esq.	8	1	0	102	663	26·12	150
D „ (Hall Place)	Sir G. A. C. East, Bart.	8	1	2	275	727	28·63	174
Remenham Hill (Wedmore)	Mrs. Burnell	5	0	10	...	744	29·27	187
D Bisham Vicarage	Rev. W. Farrer	5	1	0	100	698	27·47	180
D Temple House [Marlow]	Mrs. Owen Williams	5	1	0	106	790	31·09	201
4.—THAMES—Kennet & c. 224 sq. mi.								
Mortimer (Wokefield Park)	A. Palmer, Esq.	5	4	0	180	709	27·93	166
Brimpton (Stonehouse)	F. Hadden, Esq.	5	0	7	350	807	31·76	167
D „ (Littlepark)	Major W. Y. Langford ...	5	1	0	345	802	31·57	173
D Newbury (Sandleford Priory) ...	Mr. T. W. Ellis	8	2	0	381	882	34·74	192
D „ (Greenham Common) ..	H. L. Bowman, Esq., D.Sc.	5	1	0	328	936	36·87	184
D „ (Grammar School) ...	<i>Newbury Weekly News</i> ..	...	...	...	...	783	30·81	168
D Shinfield (University Coll. Farm)	Dr. H. N. Dickson	5	1	0	200	714	28·12	167
Woolhampton (Douai Abbey) ...	Rev. E. H. Brietzeke O.S.B.	5	1	3	365	761	29·96	...
Bucklebury Place	A. W. Sutton, Esq. <i>per</i> M.O.	5	1	0	409	766	30·15	159

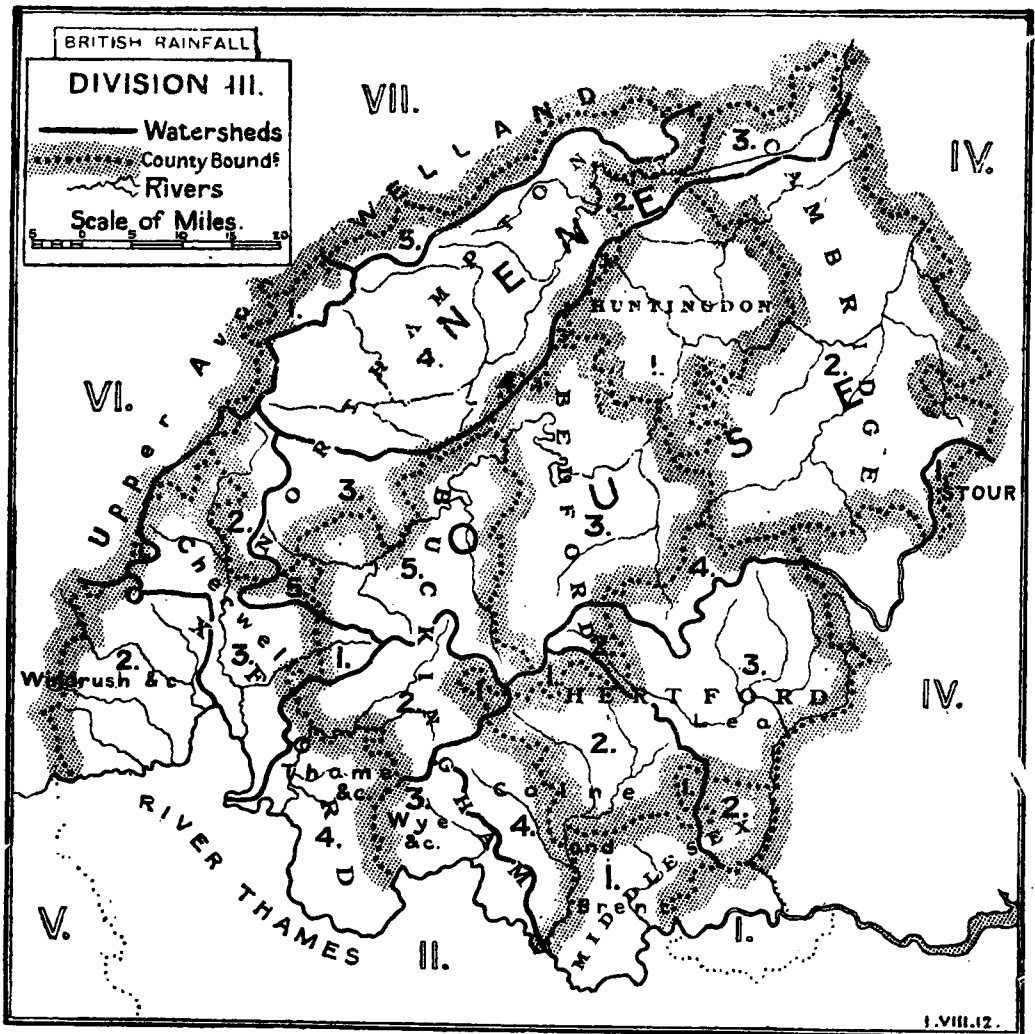
DIVISION II.—SOUTH EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with "01 in. or more
		Diam.	Height Above Ground, Sea Level			1914		
		in.	ft.	in.	feet.	mm.	inches.	
BERKSHIRE—(con.)								
4.—THAMES—Kennet & c—(con.)								
Reading (Leighton Park School)	C. I. Evans, Esq. <i>per</i> M.O.	8	1	0	265	688	27.09	168
" (Northcourt Avenue)...	R. Osmond, Esq.	5	0	9	225	700	27.54	188
" W.W. (Bath Road) ...	L. C. Walker, Esq., C.E.	8	...	...	218	645	25.40	157
" "								

MAP OF DIVISION III.

SOUTH MIDLAND COUNTIES,

Showing the River-Divisions.



On a map of this scale the River Thames may be taken as a county boundary throughout.

DIVISION III.—SOUTH MIDLAND COUNTIES.

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0.1 in. or more
		Diam.	Height Above Ground, Sea Level			1914		
		in.	ft.	in.	feet.	mm.	inches.	
MIDDLESEX. (Area, 232 sq. mi.)								
1.—THAMES—Colne & Brent. 185 sq. mi.								
Shepperton Lock [Weybridge]...	R. A. Swarbrick, Esq.....	5	1	0	41	705	27.77	...
D Sunbury (Sunbury Lodge)	F. A. Walroth, Esq.	5	3	9	38	705	27.77	158
D† Hampton	Met. Water Board	8	1	0	42	663	26.12	167
D „ Wick (Park House) ...	A. Shorter, Esq.....	5	1	0	28	726	28.60	152
Teddington (Clarence Road) ..	T. Gale, Esq.	5	1	3	32	676	26.62	151
D Staines (Belle Vue)	J. Gundry, Esq.	5	1	0	51	801	31.54	173
D „ Reservoir	Met. Water Board.....	5	1	0	50	716	28.17	182
D Twickenham (Sewage Works)...	F. W. Pearce, Esq., C.E.	5	1	7	37	672	26.47	154
D Isleworth (Mandeville House)...	A. Worsley, Esq.	8	1	0	24	863	33.97?	171
Sipson (Hollycroft)	Mr. W. J. Mitchell	5	1	0	95	616	24.26	...
D† Kew Bridge (Waterworks)	Met. Water Board	8	1	0	37	661	26.01	163
D Chiswick (Grove Park)	A. E. Brounger, Esq.....	5	1	1	18	661	26.04	167
D Ealing (Webster Gardens)	H. M. Baker, Esq.....	5	1	6	97	649	25.54	183
† „ (Longfield Avenue)	W. R. Hicks, Esq., C.E.	5	9	0	114	616	24.27	173
D† „ (St. Stephen's Road) ...	H. W. Peal, Esq.	5	0	10	156	686	27.00	173
† „ (Hanger Hill Reservoir)...	Met. Water Board	5	1	0	...	650	25.59?	...
† Perivale (Northern Sewage Farm)...	W. R. Hicks, Esq., C.E.	5	1	0	56	685	26.96	187
D† Willesden Reservoir	Met. Water Board.....	5	2	6	199	644	25.35	156
D† „ Green (Strode Road)...	Miss Lamport.....	5	1	0	150	698	27.47	183
„ (Richmond Avenue)...	W. Godden, Esq.	5	1	0	166	649	25.54	196
„ (Stonebridge Farm) (R)...	O. C. Robson, Esq., C.E.	10	5	9	100	649	25.55	168
D Highgate (North Hill)	L. J. Tatham, Esq.	5	1	0	400	676	26.61	175
D „ „ „ Depôt) ...	E. J. Lovegrove, Esq., C.E.	5	5	4	309	682	26.87	166
D Harrow (Bessborough Road Depôt)...	J. P. Bennetts, Esq., C.E.	5	1	0	215	706	27.81	179
Golders Green (Garden Suburb)...	Secy. Gdn. Suburb, per M.O.	8	1	0	231	638	25.11	162
D† „ „ (Highfield Avenue)...	A. E. Payne, Esq.	5	1	0	175	655	25.77	167
D† Hendon Sewage Works	(R) S. S. Grimley, Esq., C.E.	6	1	8	150	538	21.18?	157
D† „ „ (Central School)	J. W. Butler, Esq.	5	1	4	220	699	27.53	184
D Wealdstone House	Capt. K. R. Cobb	5	0	11	236	651	25.62	162
D Harefield (Harefield House).....	Walter J. B. Byles, Esq.	5	0	8	290	791	31.14	154
D† Northwood (Haslemere)	Miss McBean	5	1	0	240	725	28.56	177
D „ „ (The Knoll).....	Mrs. Tilley	5	1	0	240	760	29.94	171
D Harrow Weald (Hill House) ...	A. Crossman, Esq.....	5	3	6	284	685	26.96	190
D North Finchley	Miss M. Shoults.....	5	0	8	295	684	26.92	175
D† Mill Hill (Flower Lane)	Mrs. Edwards	5	1	0	250	713	28.08	155
D† „ „ (Ridgeway House) ...	F. J. Turner, Esq.	5	1	0	370	660	25.97	167
D† „ „ (The Hollies)	C. Wright, Esq.	5	1	0	350	664	26.15	165
Dyrham Park [Barnet].....	Mr. H. Juniper	5	1	0	310	706	27.78	...
D „ „ (Mount Grace)	J. Forbes, Esq.	5	1	0	380	722	28.43	177
2.—THAMES—Lea. 47 sq. mi.								
D Crouch End (Barrington Road)...	E. J. Lovegrove, Esq., C.E.	8	3	10	122	697	27.43	173
D Harringay (Wightman Rd. Depôt)...	„ „ „	8	23	3	113	533	20.99	160
D Highgate (Avenue Road)	C. S. Nicholson, Esq.....	5	1	0	212	715	28.14	168
Tottenham (Drayton Road)	Urb. Dist. Council per M.O.	5	1	3	51	592	23.29	...
D† Hornsey (High Street)	Met. Water Board.....	5	1	0	109	687	27.03	168
† Muswell Hill (Grand Avenue)...	G. Michael Williams, Esq.	5	1	0	317	730	28.75	...
D† „ „ (Tollington School)...	W. Campbell Brown, Esq.	5	1	11	380	717	28.22	168
D† „ „ (Colney Hatch Lane)...	Miss Abethell.....	5	0	10	310	763	30.04	183
D „ „ (Sewage Farm) ...	E. J. Lovegrove, Esq., C.E.	8	4	5	214	712	28.04	185

DIVISION III.—SOUTH MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more
		Diam. in.	Height Above Ground		SeaLevel feet.	1914 mm. inches.		
MIDDLESEX—(con.)								
2.—THAMES—Lea—(con.)								
d Alexandra Park (Grove Avenue)	Ernest A. Lee, Esq.	5	1	0	235	705	27·76	176
d Wood Green (Maryland Road)...	Mr. F. C. Hornsey.....	8	9	4	118	687	27·06	164
d " " (Town Hall) ... (R)	C. H. Croxford, Esq.....	8	5	6	126	570	22·42?	160
d† Finchley (Victoria Park)	C. J. Jenkin, Esq., C.E....	5	1	0	272	728	28·68	175
d " (Etchingham Park) ..	Mrs. J. W. Scott	5	1	2	295	711	28·00	183
d Southgate (Reservoir Road).....	W. B. Butler, Esq.....	5	1	0	255	700	27·54	171
d Ponders End (Bylock Hall)	H. E. Freir, Esq.	5	1	0	50	627	24·69	172
d† " " Pumping Station..	Met. Water Board	8	1	0	45	643	25·33	170
Hadley Wood (Camlot).....	Miss Paget	5	1	1	350	661	26·03	...
d† Enfield (Southbury Road)	Met. Water Board ..	5	1	0	109	662	26·08	155
d " (Public Offices).....	Dr. W. P. Warren.....	8	13	0	141	655	25·79	186
d† " (CarisbrookeCullodenRd.)	J. McEwan, Esq.	5	1	0	204	696	27·38	175
d " (Clay Hill).....	G. H. C. Lea, Esq.....	5	1	0	200	702	27·65	180
d " (Roselands,TurkeyStreet)	E. S. Rashleigh, Esq.....	5	0	7	80	636	25·05	167
d Potter's Bar (North Lodge)	W. Gundry, Esq.	6	1	0	332	767	30·21	167
HERTFORDSHIRE. (Area, 635 sq. mi.)								
1.—THAMES—Thame. 10 sq. mi.								
d Tring (Grove Lodge).....	Miss Boyson	8	1	0	450	864	34·01	187
d " (Pendley Manor)	Mrs. Williams	5	2	0	420	875	34·46	188
d " (Cowroast Lock)	Gordon C. Thomas, Esq....	5	3	8	394	830	32·67	163
2.—THAMES—Colne. 199 sq. mi.								
d Gate House [Northwood]	O. S. Holt, Esq.....	8	4	6	448	687	27·05	179
d Rickmansworth (Moor Park)... ..	Lord Ebury.....	5	2	0	340	688	27·08	169
d " (SandyLo.GolfClub)	J. F. Markes, Esq.....	5	2	6	300	696	27·40	165
" (Croxtley Green) ..	S. Ingleby Oddie, Esq....	5	0	7	250	712	28·02	...
d† Totteridge (West Lodge)	W. H. Newman, Esq.....	5	1	0	390	718	28·25	183
d† " (Dollis Brae)	C. Stewart King, Esq....	5	1	0	350	721	28·40	161
d† Elstree (Aldenhall House) ... (R)	Mr. E. Beckett	10	4	9	305	694	27·34	150
d Watford (Oxhey Grange)	J. Doyle Penrose, Esq....	5	1	0	300	718	28·28	159
d " (Bushey Hall Road) ..	J. Durst, Esq.	5	1	2	230	748	29·43	166
d Bushey (Royal Masonic School)..	J. H. Gare, Esq.	5	1	3	225	827	32·55	180
d† " (Colne Valley W.W.) ...	C. P. Sinclair, Esq.	5	1	0	200	730	28·75	184
d† Watford(LondonOrphanAsylum)	Rev. E. Hartley-Parker..	5	1	0	230	707	27·83	172
d† " (Park Road).....	E. J. Slinn, Esq.	5	1	6	263	732	28·82	177
d† " (Weetwood).....	J. Hopkinson, Esq.	5	1	0	269	768	30·24	192
† " (")..... M	" " " " " " " "	5	1	0	269	764	30·09	...
Radlett (Sewage Disposal Works)	E. H. L. Lailey, Esq.....	5	0	10	347	698	27·50	...
d† Shenley (Kitwells).....	T. H. Riches, Esq.	5	1	0	420	760	29·94	172
" (")..... M	" " " " " " " "	5	1	0	420	715	28·15	...
Sarratt (Goldingtons) .....(R)	P. Clutterbuck, Esq.....	8	3	0	400	737	29·00	...
† Chipperfield (Little Callipers) ...	A. W. Rivington, Esq....	5	1	0	407	744	29·31	...
d† Langley (Langley Rise)	T. Goldring, Esq.	5	1	0	360	764	30·06	158
d London Colney (Bowmans)	C. Barwell Field, Esq.....	5	1	0	235	707	27·82	186
d Hemel Hempstead (Apsley Mills)	Messrs. J. Dickinson & Co.	24	1	4	260	641	25·25	187
d " (ManorEstate)	C. A. Bracey, Esq.	5	1	0	...	790	31·12	179
d " (ChurchCroft)	late Rev. Canon F. H. Fisher	5	3	0	300	767	30·21	179
d St. Albans (Hill End Asylum)...	G. Goodchild, Esq.	5	1	0	295	734	28·89	159

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0·lin. or more
		Diam.	Height Above Ground		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
HERTFORDSHIRE—(con.)								
2.—THAMES—Colne—(con.)								
d St. Albans (County Museum) ...	J. Hopkinson, Esq.	5	1	0	389	784	30·85	189
" (Jenning Road)	M. L. Nicholas, Esq.	5	1	6	380	716	28·17	190
d " (Gorhambury).....	Mr. W. Newberry	5	1	0	423	785	30·91	195
+ Berkhamsted (Anglefield).....	E. T. Browne, Esq.	5	1	0	450	813	32·01	181
+ " (Rosebank)	E. Mawley, Esq.	8	1	0	401	773	30·43	183
+ " { }M	" " "	8	1	0	401	771	30·35	..
d Childwickbury Gardens.....	Mr. T. Nutting	12	1	0	400	775	30·52	162
d Gt.Gaddesden(GoldenParsonage)	Elliott Kitchener, Esq....	8	1	0	536	807	31·78	207
Harpenden (Rothamsted)	Lawes Agricultural Trust	5	0	9	420	738	29·07	175
" { }	" " "	8	0	9	420	695	27·37	174
d " { }	" " "	72x87	0	9	420	794	31·25	207
d " (Chenies).....	G. Paget, Esq.	5	0	6	420	678	26·71	169
3.—THAMES—Lea. 340 sq. mi.								
d Barnet (Summerhill).....	F. A. Milne, Esq.	5	0	10	400	666	26·22	175
d " (Bedford Avenue).....	Miss Haines	5	1	3	350	769	30·29	195
d Hadley (Hadley Bourne)	Mrs. Weber	5	1	0	430	770	30·33	189
d Cheshunt (Manor House).....	J. E. Sharpe, Esq.....	5	1	0	83	657	25·87	154
d " (Goff's Oak House) ...	W. M. Cuningham, Esq.	5	1	0	310	643	25·33	185
d " (DarnicleHillPump.Stat.)	J. E. Sharpe, Esq.....	5	1	0	250	711	28·00	174
d Northaw (St. Just).....	Miss Poland	5	1	0	400	781	30·74	201
+ Broxbourne (Stafford House) ...	A. F. Newbery, Esq.	5	1	0	118	672	26·46	170
+ Hoddesden (Feilde's Weir)	Met. Water Board	8	3	8	95	675	26·58	183
d Haileybury College	P. H. Latham, Esq.	8	1	0	270	680	26·78	178
d Gilston Park	Mr. E. Leach	8	1	0	175	687	27·04	158
d Hatfield (Holwell House).....	Wilfrid E. Laurie, Esq....	5	1	6	240	660	26·00	156
d " (Surveyor's Office).....	Urban A. Smith, Esq., C.E.	5	1	0	270	639	25·15	172
d Hertford (Bayfordbury)	H. W. Clinton Baker, Esq.	8	1	2	250	655	25·77	179
d Stanstead Abbots	E. H. Barlow, Esq.	5	1	2	115	648	25·52	157
+ Hertford (Sewage Works)	Met. Water Board.....	8	1	0	121	656	25·83	172
+ Ware (Red House).....	" " "	5	1	0	115	675	26·56	173
+ " (Chadwell Spring)	" " "	5	1	0	...	679	26·73	170
d Welwyn (Bridge House)	Dr. B. W. Thomas	5	2	3	216	809	31·86	171
d " (Codicote Lodge)	Mr. F. A. Akers	5	1	0	340	765	30·12	182
d Much Hadham	T. W. Mott, Esq.	5	1	0	212	661	26·04	172
d Bishops Stortford(Barrell'sDown Rd.)	H. Sheppard, Esq.....	5	1	2	300	707	27·85	168
d Benington House.....	Miss E. A. Parker.....	5	1	0	406	676	26·62	170
+ " Lordship	A. F. Bott, Esq.	5	0	10	365	723	28·47	190
d Little Hadham (Hadham Hall)..	W. Minet, Esq.	5	0	10	338	663	26·11	154
d Standon (Libury Hall).....	S. Knothe, Esq.	5	1	3	380	697	27·43	186
d Buntingford (Hamels Park)	H. Shepherd Cross, Esq....	5	1	3	390	732	28·84	171
d " (Westmill,ColesPk.)	T. Greg, Esq.....	5	1	0	379	655	25·80	147
d Hitchin (Preston)	R. de V. Pryor, Esq.....	8	2	5	480	686	26·99	190
d Weston Park	M. R. Pryor, Esq.....	5	0	8	470	690	27·15	161
Little Hormead (Mutford'sFarm)	J. W. How, Esq.	5	1	0	310	714	28·11	...
d Buntingford (ThrockingRectory)	Rev. B. W. Harvey	5	1	0	487	704	27·73	211
d Royston (Therfield Rectory). ...	Mr. J. Cracknell	5	1	0	513	659	25·94	171
d Offley (School House)	C. W. Mears, Esq.....	5	1	0	526	714	28·10	188

DIVISION III.—SOUTH MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0·1 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
HERTFORDSHIRE—(con.)								
4.—OUSE. 86 sq. mi.								
D ⁺ Hitchin (The Chilterns)	F. Ransom, Esq.	5	0	9	300	712	28·01	187
D „ (Chiltern Road)	A. Latchmore, Esq.	5	1	0	297	684	26·95	178
D ⁺ „ (High Down)	Miss E. Pollard	5	1	1	422	702	27·62	181
D „ (Roxley House, Willian)	Mrs. H. Bendixson	5	1	6	370	652	25·65	160
D Letchworth (Garden City)	A. W. E. Bullmore, Esq. c. E.	5	1	0	218	686	27·02	162
D „ (Gemon Road)	A. W. Brunt, Esq.	5	1	0	290	731	28·77	174
D Baldock (High Street)	Dr. F. W. Langston Day... ..	5	1	0	214	673	26·49	168
D Royston (Barley)	W. W. Cook, Esq.	5	1	0	300	698	27·50	176
D „ (Earlshill House).....	J. Phillips, Esq.....	8	1	6	225	647	25·48	189
BUCKINGHAMSHIRE. (Area, 743 sq. mi.)								
1.—THAMES—Cherwell. 30 sq. mi.								
2.—THAMES—Thame. 158 sq. mi.								
Butlers Cross	G. Eland, Esq., <i>per</i> M.O.	5	1	0	399	722	28·41	167
D Wendover (Lanscombe)	C. H. Broodbank, Esq.....	5	1	3	540	792	31·19	180
D „ (Halton Gardens).....	Mr. R. C. Sanders	5	1	10	400	838	32·98	189
D Weston Turville (Yaxley Lodge)	Miss Morris	5	1	1	335	690	27·18	168
Bulbourne [Tring]	Gordon C. Thomas, Esq....	5	2	3	401	872	34·33	148
Mentmore Gardens	Mr. J. MacGregor	5	1	2	400	702	27·63	...
3.—THAMES—Wye & c. 129 sq. mi.								
Eton (Tangier Islands)	C. Sainty, Esq.	5	1	0	67	692	27·23	166
+ Slough (Upton)	M R. Bentley, Esq.	8	2	0	80	656	25·81	...
D ⁺ „ „ „	„ „ „	5	2	0	78	692	27·24	194
Taplow Court	Lord Desborough, K.C.V.O.	8	1	0	217	640	25·19	...
Burnham (Burnham Cottage) ...	G. J. Williams, Esq.....	5	3	0	182	704	27·73	150
Farnham Royal (The Chase).....	F. C. Carr-Gomm, Esq....	5	3	0	169	729	28·70	176
Stoke Poges (Stoke Court) ..	H. Allhusen, Esq.....	8	1	4	196	688	27·07	...
D Greenlands [Henley-on-Thames]	Lord Hambleden	8	1	3	116	658	25·92	156
D Hedsor	Lord Boston	8	1	0	170	823	32·40	155
D Bourne End (The Bourne)	A. Morse, Esq.	5	1	0	240	722	28·42	166
D Marlow (Thames Bank)	S. H. Wright, Esq.	8	2	0	105	817	32·16	189
D High Wycombe	H. S. Wheeler, Esq.	5	0	11	253	767	30·18	187
D Penn (Rayners)	Sir P. F. Rose, Bart.....	5	1	3	547	834	32·83	186
D Bradenham House	Mrs. Tempest	8	0	6	420	773	30·43	166
D Hampden House	The Earl of Buckinghamshire... ..	5	1	0	690	818	32·19	184
4.—THAMES—Colne. 133 sq. mi.								
D Slough (Langley)	R. H. Major, Esq.	8	0	10	85	644	25·36	164
D Chalfont St. Peter (Chalfont Park)	Mr. G. Barrell	5	1	0	201	795	31·31	167
D „ „ „ („ „ Cottage)	Miss Hibbert	5	1	1	265	711	27·98	153
D Chalfont St. Giles (The Stone)....	Col. R. W. Phipps.....	5	1	0	270	806	31·74	184
D „ „ „ („ „ „) M	„ „ „	5	1	0	270	789	31·06?	...
D „ „ „ (Roughwood Barns)	Mrs. Sandford Fawcett ...	8	1	0	365	783	30·84	167
D ⁺ „ „ „ (Woodlands) ...	late A. D. Gordon, Esq... ..	5	0	11	400	837	32·95	180
D ⁺ „ „ „ („ „ „) M	„ „ „	5	0	11	400	834	32·83	...
D ⁺ Amersham (St. Mary's Sch.) No. 1	W. Garton, Esq.	5	1	0	340	758	29·83	171
D „ „ „ („ „ „) No. 2	„ „ „	5	1	0	340	764	30·10	172
D ⁺ „ „ „ (The Plantation) ...	G. Weller, Esq.....	8	1	0	464	809	31·86	182
D „ „ „ (Latimer Ho. Gardens)	Mr. W. Stephens	8	1	7	400	808	31·82	177

DIVISION III.—SOUTH MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.		Depth of Rain.		Days with .01 in. or more
		Diam.	Height Above Ground. SeaLevel	1914		
		in.	ft. in.	feet.	mm.	inches.
BUCKINGHAMSHIRE—(con.)						
4.—THAMES—Colne—(con.)						
Chesham (Chesham Bois Rectory)	Rev. T. H. Fitzpatrick....	5	0 11	530	801	31·53 ...
5.—OUSE. 293 sq. mi.						
Oving House	H. Yates Thompson, Esq..	5	1 0	515	698	27·47 181
" " M.....	" "	5	1 6	515	689	27·14 ...
Wing (Burcott)	Richard H. Ayres, Esq...	5	1 0	400	706	27·78 149
Winslow (Norden House).....	Dr. T. F. Vaisey.....	5	0 9	...	705	27·75 146
Stockgrove Pk. [Leighton Buzzard]	Mr. J. Clues	5	1 2	500	687	27·05 154
Buckingham (Adstock Fields)...	W. Weston, Esq.	5	0 9	352	649	25·55 184
Old Tile House Gardens	Mr. W. Boulton.....	5	1 5	420	690	27·16 165
Stony Stratford (Calverton Limes)	Mrs. Hawkins	5	1 8	230	635	25·01 153
Wolverton (St. George's Vic.)...	Rev. W. L. Harnett	5	1 0	270	660	25·97 177
" (The School House)...	H. J. Hippesley, Esq.....	5	1 0	264	642	25·27 176
" (Council School)	" " "	5	5 0	263	619	24·37 ...
Newport Pagnell (The Croft) ...	F. Littleboy, Esq.....	5	2 0	191	646	25·42 175
" , (Lovat Bank)...	F. J. Taylor, Esq.....	5	2 0	190	623	24·51 165
OXFORDSHIRE. (Area, 756 sq. mi.)						
1.—SEVERN—Upper Avon. 10 sq. mi.						
Sibford Ferris.....	Joshua Lamb, Esq.	5	1 0	590	789	31·07 166
2.—THAMES—Windrush & c. 261 sq. mi.						
Kencot Rectory	Rev. H. E. Cooper	5	1 0	290	846	33·32 185
Witney (Cokethorpe)	Capt. H. G. Feilden .....	...	...	270	748	29·44 ...
" (Ringwood Farm)	J. W. Abraham, Esq.....	5	5 0	400	666	26·20 151
" (Hailey School)	S. Heaton, Esq.	5	2 6	360	828	32·59 159
Wootton Rectory	Rev. F. R. Marriott	5	0 10	370	748	29·47 171
Charlbury (Wyckwood House)...	J. H. Glen, Esq.	5	0 8	450	731	28·78 200
Fifield (Fifield House)	E. W. Bishop, Esq. ....	...	...	480	841	33·12 ...
Lyneham.....	R. de M. Pratt, Esq.....	5	1 7	351	823	32·39 182
Chadlington (Langston House)...	Lt.-Col. F. W. Schofield..	5	0 11	420	792	31·16 155
Sarsden (Estate Office).....(R)	J. M. Blair, Esq.	8	3 0	492	748	29·47 178
" Gardens	Mr. J. E. Vine	5	0 10	538	764	30·08 160
Churchill School.....	W. H. Anson, Esq.	8	1 2	520	792	31·16 176
Chipping Norton (The Bungalow)	T. H. Burbidge, Esq.....	5	1 0	700	850	33·48 182
" (Heythrop) ...	Albert Brassey, Esq.....	10	4 0	700	636	25·06 176
3.—THAMES—Cherwell. 250 sq. mi.						
Nuneham Park Gardens	Mr. C. E. Munday.....	8	3 0	280	586	23·06 ...
† Oxford (Hincksey Pumping Sta.)	W. H. White, Esq., C.E.	8	1 0	187	672	26·45 182
" (Magdalen College)	J. J. Manley, Esq.	5	1 0	186	683	26·90 183
" ("")	" """""	5	33 11	223	620	24·41 ...
† " (Radcliffe Observatory)..	Dr. A.A. Rambaut, F.R.S.	8	1 8	210	750	29·51 194
† " ("")(R)"	" """""	11	2 4	210	757	29·80 184
" (Banbury Road)	Miss E. M. Tawney	5	1 1	211	732	28·80 184
Headington (Warneford Asylum)	Dr. J. Neil	5	1 0	300	662	26·05 161
" (Charlton Lea)	Mr. L. Dawes.....	5	1 0	300	730	28·74 173
Elsfield Manor House	Miss M. J. Parsons	5	1 0	355	710	27·96 183
Islip.....	Col. G. E. Eliot	5	3 0	200	641	25·24 ...
Kidlington School	S. Heaton, Esq.	5	1 0	210	756	29·75 ...

DIVISION III.—SOUTH MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more
		Diam.	Height Above			1914		
			Ground	Sea Level		mm.	inches.	
OXFORDSHIRE—(con.)		in.	ft.	in.	feet.			
3.—THAMES—Cherwell—(con.)								
D Hampton Poyle Rectory	Rev. S. T. Gwilliam	5	1	0	201	692	27·26	166
Charlton-on-Otmoor School	E. Cartwright, Esq.	6	1	3	197	764	30·06	...
Bicester (Launton School).....	S. Heaton, Esq.	6	1	0	212	756	29·76	171
D „ (Middleton Park)	The late Earl of Jersey...	5	2	6	326	704	27·72	169
Steeple Aston School	S. Heaton, Esq.	6	1	6	445	759	29·88	189
D „ „ (The Grange)	Miss Bradshaw	8	1	0	400	742	29·23	193
D Swerford	W. Hall, Esq.	5	1	0	500	824	32·45	202
West Adderbury (St. Amand's)..	Miss M. M. Bradford.....	8	1	0	320	735	28·93	169
D Adderbury (Cross Hill).....	G. H. Norris, Esq.....	5	1	1	338	663	26·11	175
D Bloxham Grove	W. H. Warriner, Esq....	8	3	10	387	827	32·57?	162
D Bodicote House	J. F. Starkey, Esq.	8	1	3	388	693	27·29	172
„ (Draycott House)	F. B. Judge Baldwin, Esq..	5	1	8	391	688	27·10	166
D „ Vicarage	Rev. H. N. Fowler	5	1	0	390	676	26·61	178
Broughton Rectory	Rev. B. W. Bradford.....	5	0	6	370	703	27·66	185
Wroxton	Hon. Mrs. FitzGerald.....	12	2	6	700	653	25·72	183
D Shenington School Gardens	Rev. A. Blythman.....	5	1	3	540	799	31·44	189
4.—THAMES—Thame & c. 210 sq. mi.								
D Caversham (Rectory Road)	W. Simpson, Esq.....	5	1	0	129	698	27·49	183
„ (Eastfield)	C. M. Powell, Esq.....	5	1	0	180	676	26·60	177
D „ (St. Benet's Home)...	Mr. H. Hall	5	1	3	300	698	27·47	176
D „ (Kidmore End School)	T. F. Higgins, Esq.	5	0	11	330	872	34·32	166
D Harpsden (Cray)	B. E. D. Kilburn, Esq....	5	4	6	230	712	28·05	165
D „ „ „	„ „ „	5	0	8	230	706	27·80	170
D Goring (Elmcroft).....	Major E. Gambier Parry	5	0	10	160	779	30·67	188
Henley-on-Thames (Peppard) ...	Rev. Hubert Shears	5	1	0	336	696	27·42	...
D „ „ „ (Hart Street)	A. Edward Hobbs, Esq...	5	1	6	110	693	27·28	179
D „ „ „ (Greys Green)	Miss Mary Davis	5	2	0	350	754	29·69	190
D „ „ „ („ Lane)	G. Potter, Esq.	5	0	9	123	706	27·79	159
D Nettlebed (Joyce Grove) Gauge A	Mr. A. Johnstone	5	1	0	590	846	33·31	176
D „ „ „ „ „ „ „ „ Gauge B	„ „ „ „ „ „ „	5	1	0	590	852	33·55	191
D „ (School Gardens)	S. Heaton, Esq.	5	1	0	607	828	32·60	162
D Dorchester (Bishops Court)	T. Latham, Esq.	5	2	0	169	591	23·26	188
D Abingdon (Culham School House)	F. Mitchell, Esq.	5	0	10	180	647	25·48	173
D „								

NORTHAMPTONSHIRE. (Area, 1003 sq. mi.)

1.—SEVERN— Upper Avon. 60 sq. mi.

D	Winwick Warren	Col. R. H. Ainsworth....	S	1	5	648	684	26.93	172
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DIVISION III.—SOUTH MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more
		Diam.	Height Above		1914			
			Ground.	Sea Level	mm.	inches.		
NORTHAMPTONSHIRE—(con.)		in.	ft.	in.	feet.			
1.—SEVERN—Upper Avon—(con.)								
D Welford (Salford House)	Major C. A. Markham ...	5	1	3	566	613	24·12	176
2.—THAMES—Cherwell. 77 sq. mi.								
D King's Sutton (Astrop).....	E. Browne, Esq.	5	1	0	338	687	27·06	175
" " School	A. H. Tilbury, Esq.	5	1	0	300	655	25·78	170
D Grimsbury (Banbury W.W.) ...	W. E. Wood, Esq.	5	1	3	320	604	23·80	187
3.—OUSE. 148 sq. mi.								
D Brackley House	J. Allen, Esq.	5	1	0	425	713	28·08	177
Hargrave Hall	C. K. Murchison, Esq.	5	1	0	273	604	23·79	...
4.—NENE. 622 sq. mi.								
Grafton Regis (Manor House) ...	Mr. W. Alexander	5	0	7	300	680	26·79	158
D Hartwell Vicarage	Rev. C. Ryder-Macnally..	5	1	10	403	714	28·09	203
Salcey Forest	Thomas Jones, Esq.	8	1	0	...	610	24·01	...
D Courteenhall Grange	Capt. G. M. Archdale	5	0	11	280	549	21·61	157
D Blisworth (Crieff House)	A. Westley, Esq.	5	5	0	330	609	23·98	179
D "	T. W. Millner, Esq.	5	1	6	300	568	22·36	172
D Litchborough Hall	Major C. A. Markham	5	1	10	500	646	25·43	176
D Castle Ashby	R. G. Scriven, Esq.	5	1	0	263	630	24·82	183
D Little Houghton House	Christopher Smyth, Esq.	5	2	2	271	622	24·50	173
D Northampton (Dallington Av.)...	Major C. A. Markham	5	1	0	265	591	23·28	178
D " (Kingsley Road)...	" " " " .....	...	...	...	...	614	24·17	188
D " (Berry Wood)	" " " "	8	1	4	399	626	24·63	176
D " (" ") ... M	" " " " .....	...	...	...	399	623	24·53	...
D " (General Hospital)	Mr. O. Soden .....	...	...	...	...	585	23·02	166
"	Northampton Mercury .....	...	...	...	...	640	25·18	...
Hazelborough Woods	H. Gulliver, Esq., per M.O. ....	...	...	...	241	660	26·00	158
D Great Billing Rectory	Rev. G. H. Mullins	8	1	6	275	595	23·41	193
D Daventry (Tunnel End)	T. W. Millner, Esq.	5	1	6	394	687	27·04	208
D Great Brington	Major C. A. Markham	5	2	9	448	602	23·68	165
D Althorp House	Mr. C. F. Crump	5	1	0	400	639	25·14	173
D Sywell Hall	T. A. Dickson, Esq.	5	1	0	371	622	24·50	169
D Pitsford (Sedgebrook)	Major C. A. Markham	5	1	0	311	628	24·73	178
D " (" ")	" " " "	5	1	0	311	624	24·57	...
D Rushden (Alfred Street School)...	S. Saddler, Esq.	5	1	3	200	508	20·00	174
Wellingborough (Swanspool) ...	N. P. Sharman, Esq.	5	0	2	155	584	22·99	181
D " (Bushfield W.W.)	R. S. Henshaw, Esq., C.E.	8	0	11	272	582	22·91	166
Watford Court	Major C. A. Markham	9	1	2	380	648	25·52	...
D Ravensthorpe (Coton Mill)	G. S. Eunson, Esq.	5	1	0	355	635	25·00	179
D Brixworth Hall	Mr. J. Sutherland	8	0	8	400	630	24·80	177
Scaldwell	Capt. R. Soames	5	1	0	404	610	24·00	...
D Raunds (Day School)	Léon G. H. Lee, Esq.	8	1	0	205	551	21·71	166
D Cranford (Woodford House)	E. N. Plevins, Esq.	8	1	0	252	538	21·16	164
D Kettering W.W. (Cransley)	T. R. Smith, Esq., C.E.	8	0	6	275	558	21·99	160
D " (Sewage Works)	" " " "	8	1	0	199	560	22·03	171
D " (George Street)	the late C. W. Lane, Esq.	5	1	0	288	566	22·30	174
D " W.W. (Thorpe Malsor) ...	T. R. Smith, Esq., C.E.	5	0	11	352	596	23·45	195
D " " (Clover Hill) ...	" " " "	5	0	7	344	575	22·65	165
" (Warkton)	Mr. R. H. Brett	5	1	3	275	545	21·46	...
Rothwell (Loddington)	Mr. J. Oliff	5	1	0	400	609	23·96	148
Thrapston (Islip)	J. Edmonds, Esq.	5	1	6	145	576	22·67	152

DIVISION III.—SOUTH MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ≥ 0.1 in. or more
		Diam.	Height Above		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
NORTHAMPTONSHIRE—(con.)								
4.—NENE—(con.)								
Thrapston (Drayton House).....	J. Edmonds, Esq.	5	1	6	220	645	25.40	157
D Clopton Manor	Mrs. Buckley	6	0	11	245	659	25.95	194
D Aldwinkle St. Peter Rectory ...	Major C. A. Markham ...	5	0	11	175	566	22.30	160
Rushton Manor	R. A. Willows, Esq.	5	1	0	400	584	22.98	...
Rothwell (Shotwell Mill)	A. Harris, Esq.	5	1	6	320	588	23.17	148
D Desborough.....	T. F. Parker, Esq.....	5	3	0	457	600	23.61	149
Barnwell (Lilford Hall)	Mr. F. W. Gallop	5	1	0	...	541	21.29	...
Oundle (Milton Road)	J. M. Siddons, Esq.	5	3	4	131	558	21.99	...
D „ Waterworks	N. E. Dixon, Esq., C.E....	5	1	0	147	578	22.77	170
D Corby (Weldon Grange)	John Rooke, Esq.	8	1	0	342	582	22.90	176
D Peterborough (Westbourne Ho.)	E. H. Colman, Esq.	8	1	0	38	494	19.46	153
D „ (Ashfield)	J. A. Percival, Esq.	5	0	7	30	499	19.64	169
D „ (Abbeyfields)	J. Shipley Ellis, Esq.....	5	0	6	49	527	20.76	166
D „ (Milton House) ...	Major C. A. Markham ...	...	...	...	...	572	22.54	160
D Wittering Rectory.....	Rev. S. B. Warde	5	1	0	180	596	23.47	176
D Eye (Northolm).....	S. W. Egar, Esq.	5	1	0	17	526	20.69	198
D „ (Newborough)	R. Williams, Esq.....	5	1	0	8	549	21.61	181
5.—WELLAND. 96 sq. mi.								
D Marston Trussell Rectory ... (R)	Rev. J. Knight Law.....	10	2	6	314	637	25.07	162
D Dingley Hall [Market Harboro']	Maj.-Gen. Lord Downe...	5	1	6	400	620	24.39	147
Carlton Park Gardens	Mr. R. W. Thatcher	5	1	1	400	562	22.12	...
Rockingham Castle Gardens.....	Major C. A. Markham ...	5	4	4	300	655	25.78	...
D Gretton (Gretton House)	Mr. J. Rogers	5	1	0	354	572	22.54	161
„ School	W. Leeson, Esq.	5	0	6	363	578	22.76	165
Kings Cliffe (Fineshade Abbey)..	Major C. A. Markham ...	5	0	9	200	538	21.20	...
D Etton [Market Deeping]	J. C. Gill, Esq., C.E.....	8	1	0	25	574	22.61	144
HUNTINGDONSHIRE. (Area, 366 sq. mi.)								
1.—OUSE. 327 sq. mi.								
D St. Neots (Waresley Park)	Col. Duncombe	5	0	11	190	621	24.45	168
D „ (Great Paxton)	Rev. A. G. Cane.....	5	1	0	100	592	23.30	155
D Fenstanton	Rev. N. Roysds	5	0	8	50	583	22.96	161
D Huntingdon (Brampton Grange)	Rev. A. T. Thompson.....	5	1	6	47	628	24.73	165
D „ (Bosworth House)..	H. Lucas, Esq.	5	5	9	40	618	24.33	176
D „ (Hinchingsbrooke)(R)	Earl of Sandwich	10	6	0	74	570	22.43	158
D St. Ives (Slepe House)	Dr. W. R. Grove	5	1	0	25	595	23.42	162
Catworth.....	Miss Pashler	5	0	9	210	576	22.66	178
Whittlesea Mere	A. Lunn, Esq., C.E.	8	1	6	10	513	20.18	...
2.—NENE. 39 sq. mi.								
BEDFORDSHIRE. (Area, 467 sq. mi.)								
1.—THAMES—Colne. 20 sq. mi.								
Dunstable (Kensworth Vicarage)	Mrs. Litle	5	1	3	585	796	31.32	176
Luton (Stockwood)	E. R. Crawley, Esq.....	5	3	0	539	685	26.97	174
2.—THAMES—Lea. 32 sq. mi.								
D Luton (Pumping Station).....	J. W. Tomlinson, Esq., C.E.	5	1	0	343	622	24.47	184
D „ (Tennyson Road)	Harold F. Smith, Esq....	5	1	1	530	705	27.75	177

DIVISION III.—SOUTH MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more
		Diam.	Height Above Ground		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
BEDFORDSHIRE—(con.)								
2.—THAMES—Lea—(con.)								
D Luton (The Downs)	G. W. Pryer, Esq.	5	1	0	479	751	29·55	155
D Dunstable (The Grammar School)	W. D. Coales, Esq.	5	0	8	480	744	29·31	188
3.—OUSE. 408 sq. mi.								
D Woburn (Milton Bryant)	Mr. C. J. Kilby	5	1	0	510	716	28·20	162
D Harlington Vicarage	Rev. A. G. Hodgson	5	1	0	400	664	26·13	186
D Shillington	Kilham Roberts, Esq.	5	1	0	182	654	25·75	160
D Ampthill (Higham Bury)	E. J. Jekyll, Esq.	5	1	0	310	652	25·66	168
Shefford (Upper Stondon)	R. Long, Esq.	5	1	0	241	633	24·93	...
Apsley Guise (Oaklands)	Mrs. Dymond	5	1	0	410	580	22·82	168
D† Woburn (Crawley Mill Farm) ...	E. J. Hobbs, Esq.	8	1	0	292	654	25·73	180
D† „ (Fruit Farm, Ridgmont)	W. H. Neild, Esq.	5	1	0	270	691	27·21	196
D Stotfold (Three Counties Asylum)	Dr. L. O. Fuller	5	1	0	220	630	24·82	171
Shefford (Clifton Bury)	A. Inskip, Esq.	5	2	1	150	575	22·64	...
D „ Council School	G. F. Alldritt, Esq.	5	1	0	134	639	25·14	183
„ Hardwicke	H. Inskip, Esq.	5	2	6	90	632	24·88	...
D Cranfield School	Alfred Death, Esq.	5	1	6	365	641	25·22	168
D Biggleswade (Waterworks)	H. Carne, Esq., C.E.	5	1	6	170	597	23·50	167
D „ (Old Warden Park)	Mr. W. C. Modral	8	1	2	90	730	28·73	157
Sandy (The Lodge)	R. Ll. Farley, Esq.	5	1	0	200	612	24·08	...
D „ (Beeston Grange)	Col. Maunsell Bowers	5	1	0	85	602	23·70	188
D Bedford (The Park)	(R) N. Greenshields, Esq.	8	5	8	123	506	19·92	158
„ (Castle Road)	Miss M. E. Newbery	5	7	0	108	584	22·98	167
Goldington (Castle Mills)	W. H. Rogers, Esq.	5	1	6	90	541	21·30	...
D Great Barford House	J. Arnold Whitechurch, Esq.	5	1	0	120	572	22·52	162
Milton Ernest Vicarage	Rev. E. L. Holmes	5	1	0	190	582	22·92	...
Sharnbrook (Castle Close)	L. Stileman-Gibbard, Esq.	5	0	4	210	643	25·32	172
„ (Colworth Gardens)	Mr. J. Hoad	5	2	0	250	581	22·88	...
4.—NENE. 7 sq. mi								
CAMBRIDGESHIRE. (Area, 859 sq. mi.)								
1.—STOUR. 17 sq. mi.								
Brinkley Hall	R. W. King, Esq.	11	1	0	380	640	25·18?	...
2.—OUSE. 740 sq. mi.								
D Odsey [Ashwell]	Sir H. G. Fordham	5	1	0	256	650	25·57	167
Abington Pigotts	Mr. J. N. Woodham	5	0	8	130	603	23·74	...
Shudy Camps Vicarage	H. Satchell, Esq.	5	1	0	375	596	23·47	...
D Melbourne Vicarage	Mrs. de Courcy-Ireland	5	1	2	78	650	25·58	155
D Meldreth (Chiswick Farm)	A. Howard, Esq.	5	1	1	70	613	24·15	158
D „ (Belmington Close) ...	G. Warren Bindloss, Esq.	5	1	0	65	590	23·24	160
D Foxton (The Bury)	J. Gifford, Esq.	5	1	0	60	616	24·24	175
D Great Abington (Abington Hall)	Mr. F. Ripley	3	0	7	90	560	22·06	166
D Whittlesford (Sawston Hall) ...	D. L. Huddleston, Esq.	5	1	1	86	582	22·90	163
D Harston Vicarage	Mrs. C. M. Baldwin	5	0	8	47	623	24·52	159
D Wimpole Hall	Mr. W. J. Snell	5	1	0	141	661	26·03	165
D Little Shelford Manor House ...	Miss M. C. Walton	5	1	0	52	604	23·76	156
D Stapleford House	J. H. H. Linton, Esq.	5	2	3	64	579	22·80	151
Balsham Rectory	Rev. H. J. E. Burrell	5	1	6	399	581	22·86	...
D West Watting Park	J. O'N. Martin, Esq.	5	1	0	385	629	24·76	175

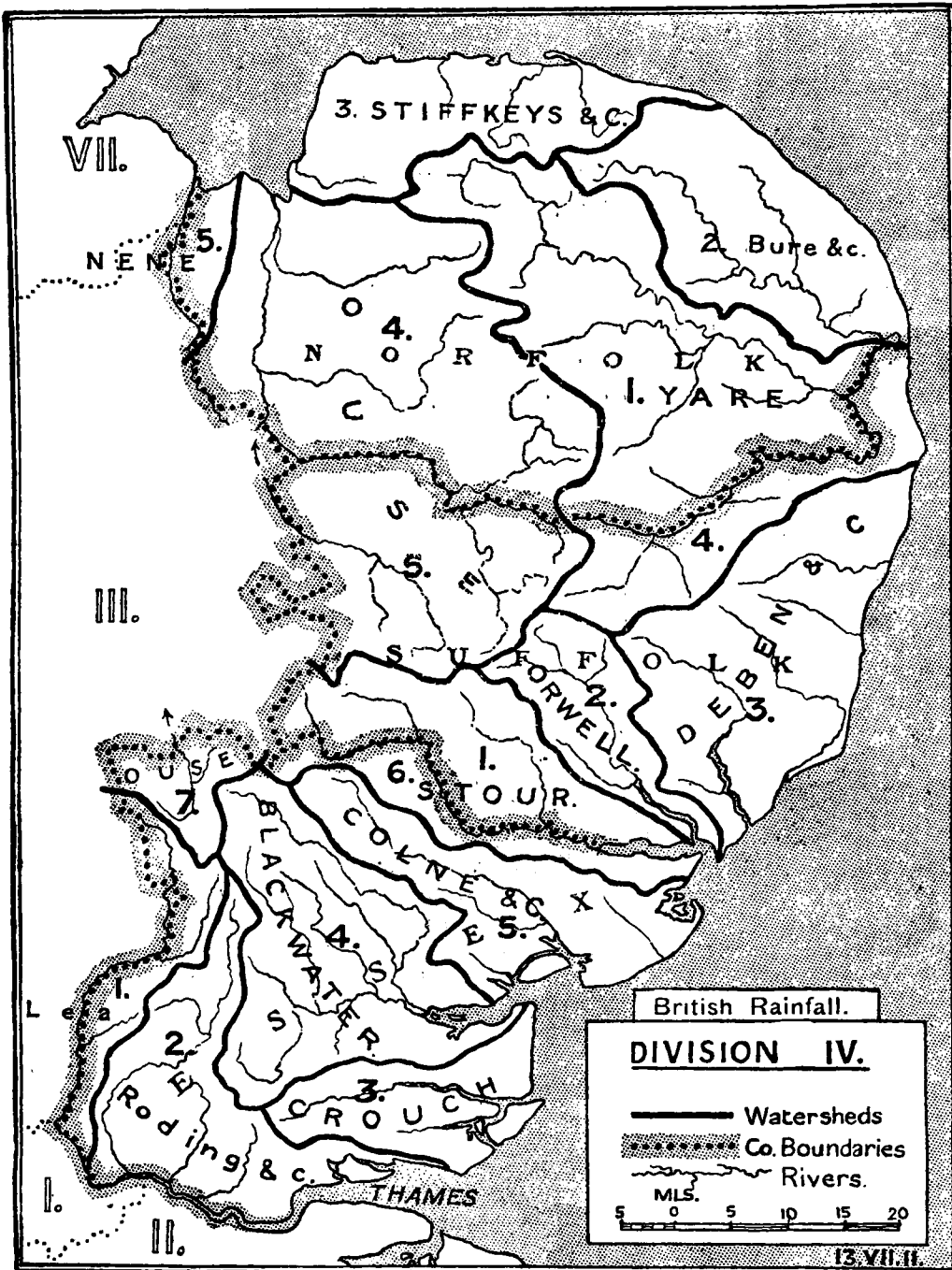
DIVISION III.—SOUTH MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0.1 in. or more	
		Diam.	Height Above		1914				
			Ground.	Sea Level					
		in.	ft.	in.	feet.	mun.	inches.		
CAMBRIDGESHIRE—(con.)									
2.—OUSE—(con.)									
	Weston Colville.....	Gerald H. Long, Esq.....	5	1	0	327	556	21.89	...
D	Trumpington	C. Parsons, Esq.	5	1	0	60	624	24.56	160
	Grantchester Mill	J. Nutter, Esq.	5	5	0	31	570	22.45	...
	Cambridge W.W. (Fleam Dyke)	W. W. Gray, Esq., C.E.	5	1	5	99	544	21.40	170
D	„ „ (Fulbourne) ...	„ „ „	5	1	0	37	554	21.80	182
D	„ „ (Cherryhinton)	„ „ „	5	1	0	35	572	22.52	180
D	„ „ (Mount Pleasant).....	W. F. Hicks, Esq.....	5	1	3	26	573	22.56	181
D	„ „ (Hills Road, South)...	Smith Nutter, Esq.	8	0	10	40	623	24.52	178
†	„ „ (Herschel House) ...	C. N. H. Lock, Esq.	5	1	0	36	573	22.57	...
D†	„ „ (Sidney Street)	Messrs. W. E. Pain & Sons	8	53	0	83	546	21.51	169
	„ „ (Cavendish Avenue)...	Charles Hankins, Esq. ...	5	1	1	...	626	24.64	...
D	„ „ (Corporation Store Yd.)	Julian Julian, Esq., C.E.	5	1	0	52	562	22.14	159
D†	„ „ (Tenison Avenue) ...	W. B. Parsons, Esq.	8	1	2	40	614	24.19	173
D†	„ „ (Pinehurst)	C. F. Foster, Esq.	5	0	10	36	616	24.24	182
D†	„ „ (Botanic Gardens) ...	R. Irwin Lynch, Esq.....	8	1	1	43	590	23.25	169
D	„ „ (Corporation Pumping Sta.)	Julian Julian, Esq., C.E.	5	1	0	28	599	23.58	191
D	„ „ (Quy Hall)	T. Musgrave Francis, Esq.	5	0	5	24	580	22.82	182
D	Croxton Park.....	G. D. Newton, Esq.	5	2	6	200	673	26.51	153
D	Boxworth [St. Ives]	E. H. Thornhill, Esq.....	5	1	0	76	627	24.67	170
D	Swaffham Prior Vicarage	Rev. L. Fisher	5	1	0	44	530	20.85	157
D	Burwell	R. Stephenson, Esq.....	5	2	0	58	608	23.93	155
D	Conington Hall [St. Ives]	Philip T. Gardner, Esq....	8	0	5	50	678	26.71	173
	Cottenham (Bernard House).....	A. Bull, Esq.	5	2	0	30	593	23.35	...
	Fordham	W. V. Bloom, Esq.	5	1	0	30	532	20.96	...
	Soham	T. Everett, Esq.	5	2	0	25	593	23.36	...
	Stretham (Dimocks Cote).....	H. Nightingale, Esq.....	5	13	7	...	663	26.12	...
	„ „ Engine	Mr. J. Housley	9	4	9	13	604	23.79	...
	„ „ (Orchard House)	C. Wright, Esq.....	8	5	0	42	592	23.32	...
D	Wilburton Manor	Albert J. Pell, Esq.	5	1	5	50	609	23.98	151
D	Ely (The Palace)	Mr. A. Sewell.....	5	1	0	64	629	24.75	180
D	„ „ (The Red House)	Capt. J. H. Mander	5	1	6	85	588	23.17	169
	Chatteris (Holwood Farm)	Mr. G. Argent	5	0	10	12	550	21.67	...
	„ „ (The Ferry)	B. J. Walker, Esq.	5	0	10	23	548	21.57	...
	Mepal Engine.....	Mr. J. Goodman.....	5	20	6	25	419	16.48	...
D	Littleport (Highfield House) ...	H. G. Martin, Esq.	8	2	7	67	568	22.35	149
	Chatteris (Aylesby House)	A. H. Ruston, Esq.	8	0	6	31	585	23.02	...
D	„ „ (The Priory)	H. F. Fryer, Esq.....	5	0	7	31	573	22.56	152
D	March	A. Lunn, Esq., C.E.	9	2	0	10	559	22.02	153
D	Upwell (Marmont Priory Lock)...	„ „ „	8	1	1	...	522	20.54	190
D	„ „ (Euximoor House)	H. West, Esq., jun.	5	0	8	15	558	21.95	161
3.—NENE. 102 sq. mi.									
D	Stanground Sluice	A. Lunn, Esq., C.E.	8	1	6	15	514	20.25	152
D	Thorney (Bedford Office)	Hugh R. Brodie, Esq.....	8	3	6	9	529	20.84	153
D	Parson Drove (Clows Cross)	F. Ashworth, Esq.....	8	3	0	13	512	20.15	159
	Wisbech (Bank House).....	Lord Peckover of Wisbech	8	0	8	6	510	20.07	...
D	„ „ (Monica Road)	F. W. Climenso, Esq.....	8	1	2	6	562	22.12	163

MAP OF DIVISION IV.

EASTERN COUNTIES

Showing the River-Divisions.



DIVISION IV.—EASTERN COUNTIES.

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with ·01 in. or more	
		Diam.	Height Above Ground SeaLevel		1914			
		in.	ft.	in.	feet.	mm.	inches.	
ESSEX. (Area, 1532 sq. mi.)								
1.—THAMES—Lea. 132 sq. mi.								
d West Ham (Abbey Mills).....	London County Council...	8	1	0	11	595	23·44	169
d Leyton (Town Hall)	E. H. Essex, Esq.	5	1	0	22	556	21·91	163
d Leytonstone	Miss G. Lister	5	1	6	100	655	25·78	152
d† Lea Bridge (Waterworks).....	Met. Water Board.....	8	0	6	23	605	23·81	149
d Whipp's Cross(West End Avenue)	J. R. James, Esq.	5	1	6	76	671	26·40	181
d† Walthamstow (Ferry Lane).....	Met. Water Board.....	8	0	10	30	572	22·51	153
d† Woodford (Haggar Lane)	" " "	8	0	8	176	614	24·18	156
d† Buckhurst Hill Reservoir.....	" " "	8	1	7	275	656	25·81	160
d " " (Ardmore)	Mrs. Eliot Howard	8	1	0	270	692	27·26	154
d† Chingford Mill	Met. Water Board.....	8	0	6	40	596	23·48	163
" (Sewardstone Lodge)..	Mr. F. Goody	8	0	10	200	603	23·73	...
d† Loughton (High Beech Reservoir)	Met. Water Board.....	8	1	0	376	672	26·44	159
d† Waltham Abbey (Rammey Marsh)	" " "	8	1	0	60	615	24·23	161
d† " " Pumping Station	" " "	8	5	0	66	655	25·78	156
" " (Gunpr. Factory)	The Superintendent	5	2	0	64	563	22·16	...
d Hatfield Broad Oak (Barrington Hall)	A. H. Gosling, Esq.	5	0	10	300	686	27·01	164
d Hassobury [Bishop Stortford] ...	L. D. Gosling, Esq.	5	0	10	290	670	26·38	193
d Elsenham (Gaunts End)	H. Cotterell, Esq.	5	1	0	363	658	25·89	167
2.—THAMES—Roding & c. 316 sq. mi.								
d Grays (Stanley Road)	A. C. James, Esq., C.E....	5	3	3	21	565	22·26	167
d " Sewage Works	L. D. Holgate, Esq.	8	2	3	9	513	20·19	161
Stifford (Coppid Hall)	the late Miss Scott ...	5	2	0	75	488	19·23	...
East Ham (Central Park).....	W. L. Garrett, Esq., per MO	5	1	0	13	569	22·40	156
d† " " Well	Met. Water Board.....	8	0	11	17	541	21·30	172
Barking Cemetery	H. Hargreaves, Esq.....	5	1	0	18	486	19·12	...
d Ilford Sewage Works	H. Shaw, Esq.	5	1	1	31	552	21·72	166
d Bulvan (Pear Tree Corner)	Mrs. Read-Andrews	5	1	0	12	552	21·75	171
Vange Pumping Station	Southend Water Wks. Co.	5	1	0	43	526	20·69	...
Pitsea " "	" " "	5	1	0	29	527	20·74	...
d Upminster (High House)	J. Reilly, Esq.	5	1	0	...	574	22·60	147
d Hornchurch	W. J. Grant, Esq.....	8	1	9	46	595	23·44	186
d† Wanstead (Red Bridge)	Met. Water Board.....	8	4	0	33	588	23·16	150
d Manor Park (Albany Road).....	A. J. Wilmshurst, Esq....	5	3	0	40	596	23·48	168
d Romford (Harold Wood)	J. G. Broodbank, Esq....	5	4	0	120	580	22·83	182
d Havering Grange	G. P. Hope, Esq.	5	1	0	255	649	25·55	207
d " -atte-Bower (Fernside)	Benjamin Smith, Esq....	5	1	0	341	684	26·93	202
d Chigwell (Grange Court)	Hon. Cecil Baring	5	1	0	190	652	25·66	150
d Theydon Bois (Thriffs Hall) ...	H. B. Debenham, Esq....	5	0	9	200	650	25·58	205
Epping (The Hemnalls)	A. Nicholl, Esq.....	8	0	8	345	772	30·39	149
d North Weald (Canes)	H. W. Hart, Esq.	5	1	11	250	679	26·75	147
3.—CROUCH. 186 sq. mi.								
d Shoeburyness	Superintendt. of Expts....	8	1	0	13	505	19·89	172
" " M	" " "	5	1	0	13	505	19·88	...
Southend (Corporation Obsy.) ...	E. J. Elford, Esq., C.E....	8	1	0	90	479	18·85	...
" (Broadway)	H. J. G. Ralph, Esq.....	5	1	0	85	497	19·55	164
d " (Water Works).....	Southend Water Wks. Co.	8	1	0	112	544	21·40	179
Leigh Reservoir	" " "	5	1	0	117	540	21·28	...
d Eastwood Pumping Station	" " "	8	1	0	50	533	21·00	157
Thundersley Reservoir	" " "	5	1	0	277	547	21·52	...

DIVISION IV.—EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with ·01 in. or more	
		Diam.	Height Above		1914			
			Ground	Sea Level				
		in.	ft.	in.	feet.	mm.	inches.	
ESSEX—(con.)								
3.—CROUCH—(con.)								
D Rayleigh (Wheatley's Lane).....	A. H. Goodall, Esq.	5	1	0	275	546	21·48	158
Nevendon Pumping Station	Southend Water Wks. Co.	5	1	0	43	524	20·62	...
D Billericay (Service Tank)	" " " "	5	1	0	310	578	22·76	171
D " (Ramsden Hall)	T. W. Bacon, Esq.	5	0	9	260	641	25·23	161
D Wickford (Runwell Hall).....	Lt.-Col. H. Kemble	5	1	0	75	670	26·37	159
D Rettendon Place	Miss M. Meeson	8	0	10	120	563	22·15	142
" Rectory	Rev. G. Evans-Gwynne...	5	0	5	120	544	21·43	...
Southminster (The New Moor)...	E. J. Attenborough, Esq.	...	...	...	...	657	25·88	...
D " (North End)	Mrs. Owen	5	1	0	60	623	24·53	162
D Bradwell-on-Sea (Bradwell Hall)	J. C. Chillingworth, Esq.	5	1	1	27	607	23·90	140
4.—BLACKWATER. 425 sq. mi.								
D Brentwood (Shenfield, The Lodge)	H. P. Landon, Esq.	5	0	7	303	666	26·24	153
South Hanningfield	W. Hill, Esq., <i>per</i> M.O. ....	...	...	...	134	590	23·23	...
D Ingatestone (Fryerning)	A. E. Christy, Esq.	5	1	0	291	611	24·07	180
D Maldon (Hazeleigh Rectory) ...	Rev. G. H. Raynor	7	1	1	161	538	21·18	146
D Danbury Rectory	Rev. J. Bridges Plumptre	5	1	0	365	594	23·37	151
Maldon	R. H. Eve, Esq.	5	0	8	10	590	23·24	...
" (Heybridge)	E. E. Bentall, Esq.	5	0	9	16	596	23·48	...
D Writtle (Melbourne).....	the late E. Rosling, Esq.	5	0	9	140	642	25·29	169
"	R. Woodhouse, Esq.	8	2	0	100	634	24·97	...
" (The House).....	Miss Usborne	5	4	0	110	641	25·23	...
Chelmsford (High Street).....	F. Chancellor, Esq.	8	1	0	92	632	24·88	167
Roxwell	R. W. Christy, Esq.	5	1	0	180	566	22·29	...
Great Waltham (Chartham Hall)	Col. R. Egerton	5	1	0	156	670	26·39	150
D Witham (Terling Vicarage).....	H. C. Boutflower, Esq.	5	1	0	115	653	25·70	169
D Great Leighs (Lyons Hall)	J. H. Tritton, Esq.	5	3	0	130	630	24·80	144
Witham (Faulkbourne Hall) ...	Miss C. L. Parker	5	0	8	100	621	24·46	165
D Hartford End (Leez Priory).....	M. E. Hughes-Hughes Esq.	5	1	0	170	671	26·41	168
D Kelvedon (Lawn House)	F. Randolph-Symmons Esq.	5	1	0	96	636	25·02	148
D " (White Barn)	W. & H. J. Sheldrake, Esqs.	5	1	5	135	590	23·24	150
D " (Feering Vicarage) ...	Rev. A. F. Curtis	5	1	0	100	690	27·17	166
D Felsted School	J. H. Owen, Esq.	5	...	...	248	628	24·71	147
Little Dunmow Council School...	Miss M. G. Archer	5	1	0	258	653	25·71	...
Great Dunmow	Messrs. Hasler & Clapham	5	0	6	230	652	25·66	...
Little Dunmow (Throws)	Miss Webb	5	1	4	283	641	25·23	...
Pattiswick Hall.....	Harris Smith, Esq.	5	0	10	220	642	25·26	...
Braintree (Bocking, Fennes).....	H. S. Tabor, Esq.	5	1	0	240	570	22·43	...
Great Saling (Saling Grove).....	M. Harrison, Esq.	8	1	0	290	566	22·30	146
" " (Woolpits)	Joseph Smith, Esq.	5	0	9	284	599	23·58	...
D Shalford (Littles)	W. F. Hart, Esq.	5	1	8	260	634	24·96	169
D Great Bardfield	G. W. Worfolk, Esq.	5	1	3	253	695	27·35	169
5.—COLNE & C. 283 sq. mi.								
Mersey Island (Waldegraves) ...	<i>E. Anglian Daily Times</i> ...	...	...	...	55	551	21·68	...
Clacton-on-Sea	Mr. A. W. Shadick	8	1	2	55	560	22·04	...
St. Osyth (Warren Farm).....	A. E. Dale, Esq.	5	3	0	...	533	20·98	...
D Walton-on-the-Naze.....	A. G. Bloomfield, Esq.	8	1	0	70	570	22·45	163
D Colchester (Berechurch)	R. P. Blyth, Esq.	5	1	3	120	620	24·39	152
D " (King's Ford)	Hon. Lady Digby	5	1	0	103	610	24·01	176

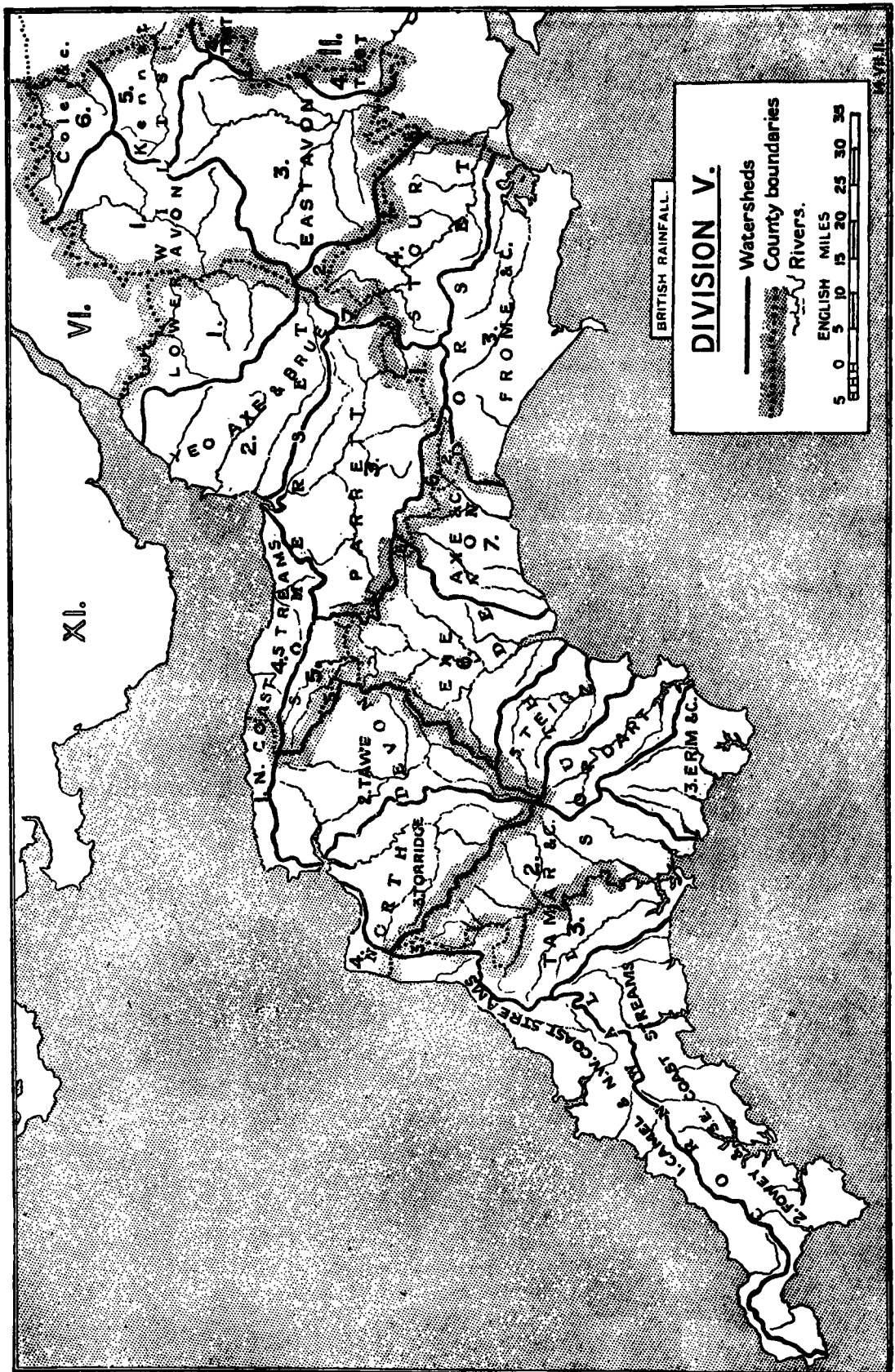
DIVISION IV.—EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more
		Diam.	Height Above Ground			1914		
		in.	ft.	in.	feet.	mm.	inches.	
ESSEX—(con.)								
5.—COLNE & C—(con.)								
d Colchester (Boro' Surveyor's Office)	H. Collins, Esq., C.E.	8	17	0	82	579	22·81	164
d " (Hill House, Lexden)	S. F. Hurnard, Esq.....	5	1	0	90	597	23·49	169
" " " ")M	" " " " " "	5	1	0	90	593	23·34	...
" " (Home Farm, ")	Mr. W. Bird	5	1	0	125	599	23·58	...
d Great Bromley (Broughton).....	W. Arnold Roberts, Esq.	5	1	3	115	675	26·59	149
Earls Colne (Chalkney House)...	H. F. Hills, Esq.	5	1	3	188	650	25·60	141
d Manningtree (Bradfield Lodge)..	G. Hempson, Esq.....	5	1	0	113	618	24·35	141
d Halstead (The Brewery)	E. T. Adams, Esq.....	5	1	0	140	653	25·70	159
d " (Grammar School).....	Miss Coles	5	1	0	220	594	23·37	143
Great Maplestead (Monk's Lodge)	T. F. Miller, Esq.	5	0	9	230	583	22·97	...
d Great Yeldham (The Oak House)	G. A. Goodchild, Esq....	5	1	6	150	620	24·43	142
d Ridgewell (Ridgewell Hill)	Miss E. E. W. Gurney...	5	1	0	269	681	26·80	168
6.—STOUR. 110 sq. mi.								
Harwich (Coastguard Station)...	Mr. W. Bevan	5	1	0	40	512	20·16	...
d Lawford (Dale Hall).....	W. H. Richardson, Esq....	5	1	0	110	593	23·35	147
d Dedham (Dalethorpe)	J. D. Tremlett, Esq.....	5	1	1	54	600	23·61	168
d Bulmer Lodge [Sudbury].....	Miss Burke.....	5	1	3	200	682	26·83	163
Walter Belchamp (Eyston Hall)	Capt. J. A. Daniell	5	1	0	187	588	23·13	...
7.—OUSE. 80 sq. mi.								
Widdington Rectory.....	Rev. J. W. Court	5	1	6	340	652	25·67	...
Arkesden (Wood Hall)	Charles Beadle, Esq.....	5	1	0	380	723	28·46	229
d Wendens Ambo.....	W. C. Wood, Esq.....	5	0	10	250	606	23·86?	156
Saffron Walden (Market Place)..	<i>Herts & Essex Observer</i>	5	1	5	201	702	27·65	...
d Great Chesterford Mills	Ernest H. King, Esq.....	5	1	0	130	623	24·52	183
" " (Boro' Farm)..	" " " "	5	1	0	125	553	21·78?	...
SUFFOLK. (Area, 1489 sq. mi.)								
1.—STOUR. 271 sq. mi.								
d East Bergholt (Ackworth House)	A. Harwood, Esq.	8	1	6	145	583	22·94	167
Capel St. Mary School	B. B. Taylor, Esq.....	5	1	0	135	600	23·62	160
Sudbury (Great Cornard).....	A. B. Legard, Esq.....	5	1	0	100	616	24·25	...
d " (Lunt Fall Reservoir)...	W. I. Tait, Esq., C.E....	5	1	3	194	570	22·44	162
d " (Friars Street)	E. Ransom, Esq.	5	1	7	93	619	24·36	188
d Haverhill Vicarage	Rev. H. C. Newbery.....	5	...	...	...	628	24·72	160
Hitcham Rectory	Rev. R. R. Cobbold	5	1	5	255	566	22·27	165
Stansfield (Cordell Hall)	J. Slater, Esq.	5	1	0	300	685	26·98	...
Hartest (Hop Hall)	Sheriff A. Long, Esq.....	5	1	6	300	696	27·42	199
d Hawkedon Rectory	Rev. B. P. Oakes	5	3	4	305	688	27·10	211
d Wickhambrook Schools.....	W. Brown, Esq.	5	1	3	390	638	25·11	153
d Cockfield Rectory	Canon Rev. Edwin Hill...	5	1	0	305	640	25·18	174
2.—ORWELL. 166 sq. mi.								
d Trimley (The Avenue)	G. Binyon, Esq.....	8	1	0	80	650	25·59	164
d Ipswich (Woolverstone Park) ...	C. H. Berners, Esq.	8	1	0	100	624	24·55	179
d " (Orwell Park)	E.G. Pretymann, Esq., M.P.	8	1	0	60	627	24·69	184
" (Belstead Hall)	R. Wilson, Esq.....	5	1	0	100	648	25·51	154
d " (Rookwood, Copdock)..	F. L. Bland, Esq.	8	1	0	164	625	24·59	175
d " (Museum).....	F. Woolnough, Esq.....	8	0	10	72	580	22·83	148
d " (Dale Hall)	Percy Turner, Esq.....	8	1	0	135	592	23·30	167

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with "01 in or more
		Diam. in.	Height Above Ground. Sea Level			1914		
			ft.	in.	feet.	mm.	inches.	
SUFFOLK—(con.)								
2.—ORWELL—(con.)								
Elmsett (Laurel Cottage)	A. E. Ladbroke, Esq.	5	3	0	210	565	22·26	...
Ash Bocking Vicarage..... No. 1	Rev. M. B. Cowell	5	1	0	231	596	23·45	145
" " " No. 2	" " " " "	5	3	4	231	602	23·72	145
Needham Market (Hurstlea) ...	R. G. Wylde, Esq.	5	6	0	95	565	22·23	...
Haughley (Haughley House) ...	Mr. E. Quinton	5	1	0	188	574	22·62	164
3.—DEBEN & C. 466 sq. mi.								
Felixstowe (Wireless Tel. Station)	M. Humphrey, Esq. per MO	8	1	0	10	586	23·09	175
Waldringfield Old Rectory	Rev. T. H. Waller	8	1	2	60	538	21·16	...
Hollesley Manor	G. P. Hope, Esq.	5	1	0	65	557	21·93	...
" School	F. Bell, Esq.	5	1	3	50	534	21·03	167
Woodbridge Abbey	Col. R. J. Carthew	8	1	2	46	646	25·45	190
" (Melton Asylum) ...	A. F. Philpott, Esq.	8	1	4	74	609	23·98	157
Orford (The Gables)	A. E. Rope, Esq.	5	0	9	30	614	24·18	146
Woodbridge (Boulge Cottage) ...	A. H. Bowles, Esq.	5	1	0	150	644	25·34	166
Rendlesham Hall	Lord Rendlesham	5	1	0	88	551	21·68?	168
Otley Rectory	Rev. H. W. C. Geldart ..	5	0	4	180	631	24·86	162
Charsfield (Red House)	Hugh P. Youngman, Esq. .	5	150	612	24·08	...
Snape	G. H. Garrett, Esq.	5	2	5	50	584	22·99	161
Parham (The High House)	H. R. Smith, Esq.	5	1	0	93	604	23·77	...
Campsea Ashe (High House) ...	Rt. Hon. The Speaker, M.P.	8	2	6	60	551	21·68	155
Aldborough (Aldringham Ho.).	F. Garrett, Esq.	8	4	5	50	640	25·20	180
Great Glemham (Glemham Grove)	late Col. A. Bloomfield ..	5	1	2	80	620	24·42	167
Leiston (Lower Abbey)	M. K. Rope, Esq.	5	0	7	30	631	24·86	...
Westleton (St. Helena)	J. R. Grimsey, Esq.	8	2	0	65	703	27·68	...
Halesworth (Estate Office)	H. S. R. Stanford, Esq. ...	5	2	0	25	675	26·59	176
Wangford (Reydon Grove)	C. P. Runnacles, Esq.	5	1	5	20	590	23·21	150
" (Ford House)	Hon. Agnes Eden	5	0	10	25	675	26·56	144
Beccles (Sotterley Hall)	Capt. Miles Barne	5	0	11	50	674	26·55	173
Wrentham (Henstead Hall)	Rev. Canon R. V. Barker ..	5	1	3	20	658	25·89	...
4.—YARE & C. 208 sq. mi.								
Bacton	W. R. Church, Esq.	5	2	0	186	618	24·34	178
Horham Rectory	Rev. J. E. Soden	5	1	4	180	704	27·71	156
Halesworth (Rumburgh Vic.) ...	Rev. W. Linton Wilson ..	5	3	0	148	556	21·89	160
Lowestoft (Mill Road)	Mark Bean, Esq.	8	1	1	18	669	26·33	177
" (Belle Vue Park)	C. W. Edwards, Esq.	5	1	0	86	622	24·50	157
Blundeston House	L. J. Peto, Esq.	30	616	24·25	...
Herringfleet (The Gables)	G. H. Wyllys, Esq.	5	0	8	52	699	27·53	164
Lound Pumping Station	Lowestoft Water & Gas Co.	8	1	0	34	627	24·68	...
Fritton Hall	Mrs. H. E. Buxton	8	0	10	40	649	25·55	159
" Warren	Gen. R. Upcher, C.B.	5	0	6	42	697	27·43	164
St. Olave's Priory (Paddock) ..	Surg.-Gen. W.A.S. Wynne ..	8	1	2	10	668	26·29	181
" " " (Boat House) ..	" " " " "	5	1	0	9	684	26·95	184
Burgh Hall [Yarmouth]	H. P. Frederick, Esq.	8	0	6	45	687	27·05	177
5.—OUSE. 378 sq. mi.								
Bradfield St. George School	R. W. Thompson, Esq.	5	0	10	300	584	22·99	148
Drinkstone	J. E. Townsend, Esq.	5	3	0	220	587	23·10	...
Little Saxham Rectory	Rev. H. I. Kilner	8	0	10	220	683	26·88	167
Bury St. Edmunds (Westley) ...	R. Burrell, Esq.	5	1	0	226	677	26·66	153
" " " (Northgate St.)	Rev. J. S. Pratt	5	1					

DIVISION IV.—EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with "0.1 in. or more
		Diam.	Height Above Ground. Sea Level			1914		
		in.	ft.	in.	feet.	mm.	inches.	
SUFFOLK—(con.)								
5.—OUSE—(con.)								
Herringswell Rectory	Rev. E. H. Wright	5	0	6	...	568	22.38	...
D Barton Mills (Holland Ho. Gdns.)	Mr. J. Reynolds	8	1	0	40	604	23.79	171
†Barningham (The Beeches) ... M	Miss A. K. Lingwood.....	8	0	9	136	647	25.48	...
D Elveden Hall	Viscount Iveagh, K.P.....	5	1	0	130	615	24.21	185
Brandon (North Court Lodge) ...	Mr. T. Caiger.....	5	2	0	50	503	19.82?	160
NORFOLK. (Area, 2044 sq. mi.)								
1.—YARE. 658 sq. mi.								
Diss (The Cedars)	Dr. H. M. Speirs	5	0	9	108	594	23.39	162
D Pulham St. Mary (Hill House)...	W. G. Rutter, Esq.	5	1	2	...	703	27.68	222
„ Market School.....	W. H. Pumfrey, Esq.....	5	1	0	131	646	25.44	159
D Geldeston [Beccles]	Miss S. S. Dowson	5	1	0	38	621	24.45	197
Long Stratton (Gt. Moulton Rec.)	Rev. T. D. Chute	5	0	6	150	633	24.92	...
D „ „ (Fritton Rectory) ..	Mrs. Howes	5	1	0	120	675	26.59	186
D Ditchingham	W. G. Rutter, Esq.	5	1	0	...	657	25.87	173
D Hedenham Rectory ...	Ven. Dr. T. H. Bindley...	5	1	0	104	625	24.61	185
D Toft Monks School.....	W. B. Alexander, Esq....	5	1	0	60	683	26.90	200
Spoooner Row (Wattlefield Hall)	E. F. Routh Clarke, Esq.	5	1	5	165	678	26.68	170
D Ravingham Hall [Beccles] ...	N. H. Bacon, Esq.	8	1	3	75	640	25.20	153
D Saxlingham Nethergate	Mrs. Pitt.....	5	1	5	...	658	25.89	184
D Wymondham	J. B. Pomeroy, Esq.	8	1	3	118	725	28.53	175
D Hingham Hall	E. Noel, Esq.	5	1	1	190	616	24.26	182
D Dunston Hall.....	A. W. Preston, Esq.	5	4	0	100	719	28.31	176
D†Kewick Old Hall	E. Knight, Esq.....	5	1	0	90	702	27.64	180
D Hethersett (Cedar Grange)	F. A. Bainbridge, Esq....	5	0	9	150	687	27.04	188
„ (Thickthorn)	A. S. Leslie Melville, Esq.	5	0	9	100	645	25.38	...
Yarmouth (Sailors' Home)	Meteorological Office.....	8	4	0	17	690	27.17	172
D „ (Northgate St.) <i>Snowdon g.</i>	G. W. Hughes, Esq.....	5	1	0	7	685	26.98	187
D „ „ „ } <i>Glaisher g.</i>	„ „ „	8	0	11	7	693	27.28	187
D „ „ „ } <i>Howard g.</i>	„ „ „	5	1	0	7	661	26.01	183
D†Norwich (Christ Church Rd. Eaton)	A. W. Preston, Esq.	5	1	0	98	702	27.62	200
D „ (Carrow House)	Miss Colman	5	1	3	35	688	27.08	153
D Brundall (Blofeld Road)	A. W. Preston, Esq.....	5	1	0	55	670	26.39	157
D Norwich (Ipswich Road)	J. H. Willis, Esq.....	5	1	0	110	702	27.64	166
D „ (Heigham Cemetery)...	A. W. Preston, Esq.....	5	3	2	37	680	26.77	176
D Honingham Hall	„ „ „	10	4	10	100	610	24.00	169
D Drayton Rectory .....	„ „ „ .....	...	...	...	...	729	28.69	208
„ Hall.....	J. H. F. Walter, Esq. ....	...	...	...	...	709	27.92	...
D Bylaugh Park Gardens	Mr. G. Beeton	5	1	0	130	696	27.39	181
D Swanington Rectory	Rev. G. B. Atkinson.....	5	2	7	90	665	26.18	185
D Reepham (Old Brewery House) ..	S. Bircham, Esq. ....	...	...	...	150	735	28.92	159
D Cawston Rectory	A. W. Preston, Esq.	5	1	0	120	698	27.47	175
D East Rudham	Miss F. E. Mays	5	2	0	140	747	29.41	212
2.—YARE—Bure & c. 368 sq. mi.								
Moulton	Miss H. S. Gillett	4	...	...	...	656	25.82	...
D Acle.....	A. W. Preston, Esq.....	5	0	6	51	753	29.64	208
D Sprowston Hall	Sir Eustace Gurney	5	1	0	90	704	27.73	178
D Yarmouth (Ormesby St. Michael)	Gt. Yarmouth W.W. Co.	8	1	0	21	738	29.04	227



DIVISION V.—SOUTH WESTERN COUNTIES.

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with .01 in. or more
		Diam.	Height Above Ground		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
WILTSHIRE. (Area, 1375 sq. mi.)								
1.—LOWER AVON. 386 sq. mi.								
Corsley (Sturford Mead)	H. Theodore Cookson, Esq.	5	0	9	460	1095	43.10	193
D Edington Vicarage	Rev. E. C. Alexander.....	5	0	8	334	930	36.62	174
D Erlestoke Vicarage	Rev. H. S. Travers	5	0	6	320	938	36.92	174
Market Lavington	Miss A. P. Bouverie	5	0	10	290	903	35.56	177
D Trowbridge W.W. (Biss Bottom)	W. W. Gray, Esq., C.E....	5	1	0	311	1033	40.66	181
D „ (Rood Ashton)	Mr. W. Strugnell	8	1	6	250	1049	41.30	218
D „ (Wingfield)	T. H. Clark, Esq.	5	1	0	190	877	34.51	163
D Bradford (Winsley Manor)	E. W. Knatchbull, Esq....	5	0	6	400	855	33.67	173
„ (Bearfield House)	G. A. R. FitzGerald, Esq.	5	1	10	290	837	32.97	152
„ (Woolley Grange)	P. K. Stothert, Esq., C.E.	5	0	8	216	867	34.13	185
D „ (Manvers House)	Dr. C. E. S. Flemming...	5	0	9	130	867	34.13	174
D Seend (Cleeve House)	(R) W. Heward Bell, Esq....	1	0		160	840	33.05	190
D Holt (The Retreat)	A. V. H. Beaven, Esq....	5	2	6	145	861	33.90	173
D Devizes (Wilts Co. Asylum) ...	Dr. S. J. Cole	8	2	3	385	840	33.07	161
D Calne (High Street)	E. W. Brown, Esq.	4	1	0	242	887	34.92	180
D „ (Compton Bassett Gardens)	Lt.-Col. A. W. H.H. Drake	5	1	0	500	954	37.57	187
D Chippenham	Charles Garnett, Esq.	8	1	0	270	838	32.98	173
D Lyneham	G. E. Willoughby, Esq....	5	1	3	425	893	35.14	159
D Wroughton (Basset Down House)	Mrs. Story Maskelyne....	5	1	0	500	907	35.70	159
D Wootton Bassett (The Lime Kiln)	Mrs. H. Bevir	5	1	6	422	858	33.76	172
Malmesbury (Cowbridge House).	CEdeBertodano Esq. per MO	5	1	0	236	850	33.45	183
D „ (Charlton Cottage).	Countess of Suffolk	9	0	9	400	865	34.05	172
2.—STOUR. 33 sq. mi.								
D Mere (Charnage)	A. R. White, Esq.	5	1	0	426	1046	41.18	198
D Stourhead	Sir H. Hoare, Bart.	5	1	0	583	1078	42.43	172
D Kilmington Rectory	Rev. H.G. Fox Strangways	5	1	6	710	1301	51.23	247
3.—EAST AVON. 554 sq. mi.								
D Donhead St. Mary (Charlton Ho.)	Dowager Lady Wynford...	5	0	7	515	1274	50.15	179
D Longford Castle	The Earl of Radnor	5	1	0	141	1001	39.41	193
D Tisbury (The Academy)	J. Bristol, Esq.	5	0	9	380	1122	44.18	188
D East Knoyle (Slades)	E. H. Miles, Esq.	5	1	0	590	1119	44.05	184
D Fonthill House Gardens	Hugh Morrison, Esq.	5	0	10	400	1178	46.39	195
D Salisbury	W. J. Goodwin, Esq., C.E.	5	2	2	153	929	36.57	182
D „ (Fowlers Hill)	Mrs. T. Awdry	5	1	0	225	998	39.30	168
D† „ (Brown Street)	Mrs. T. H. Baker	5	1	0	155	962	37.89	242
D „ (Castle Street)	C. H. De Mello, Esq.	5	3	6	150	880	34.66	152
D „ (Atherton House)	Wilfred Fletcher, Esq....	5	0	11	250	1006	39.59	209
„ (Wilton House)	Mr. T. Challis	8	4	0	180	1148	45.18	202
D Stratford-sub-Castle (Manor Ho.)	J. Carpenter, Esq.	5	0	9	165	878	34.55	192
Woodford (Court House)	Mrs. Chetwynd Stapylton	5	0	10	200	986	38.82	185
D Codford St. Mary (Stockton Ho.)	G. Knowles, Esq.	5	1	0	260	1093	43.04	205
D Maiden Bradley	The Duke of Somerset....	5	2	0	626	1226	48.26	195
Sutton Veney (Greenhill)	R. W. Pretor-Pinney, Esq.	5	1	0	390	1073	42.23	166
D Warminster (Rye Hill)	A. E. Jefferys, Esq.	8	2	0	466	1134	44.63	199
† Warminster (Bishopstrow)	P. Benton, Esq.	5	0	10	380	1039	40.92	174
D Cholderton Rectory	Rev. A. E. Brisco Owen...	8	1	0	320	934	36.79	207
Salisbury Plain (Chitterne House)	Joseph Hayward, Esq. ...	11	4	0	319	902	35.50	164
D† „ „ (Shrewton)	F. J. Wardale, Esq.	5	0	9	322	945	37.21	194
Collingbourne Kingston	Baldwin Latham, Esq., C.E.	5	1	0	470	954	37.55	...

DIVISION V.—SOUTH WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0·1 in. or more
		Diam.	Height Above		1914			
			Ground.	Sea Level.	mm.	inches.		
WILTSHIRE—(con.)								
3.—EAST AVON—(con.)								
D Chirton Old Manor House.....	Mr. T. Selfe	5	3	0	374	952	37·47	188
D Pewsey (Wilcot)	W. R. Wilbraham, Esq....	5	0	6	415	930	36·61	190
„ (Stowell Park)	J. H. Smith-Barry, Esq..	5	1	0	470	893	35·16	...
D Bishops Cannings	Mrs. H. H. Mogg	5	1	0	446	867	34·14	186
4.—TEST. 77 sq. mi.								
Landford (Northlands)	Mrs. Wigram	5	1	10	167	931	36·67	201
D Ludgershall (Conholt Park)...(R)	E. A. Wigan, Esq.	8	1	0	800	1266	49·86?	172
5.—THAMES—Kennet. 169 sq. mi.								
D Grafton (Wexcombe)	K. A. MacAndrew, Esq....	5	1	0	570	1071	42·17	185
Shalbourne Manor.....	Mr. J. H. Brown	5	1	0	580	900	35·45	...
D Little Bedwyn Vicarage	Rev. Dr. C. J. Ferguson...	...	...	...	400	951	37·45	170
D Devizes (Shepherd's Shore)	Mr. A. Carter	5	1	6	555	835	32·86	180
D Marlborough College.....	Meddows Taylor, Esq....	5	1	0	425	1030	40·54	186
D „ (Mildenhall).....	Rev. Gordon Soames	5	1	0	456	962	37·86	168
D Ramsbury (Eastridge)	Mr. A. Staniford	5	0	6	600	912	35·89	194
D Aldbourne (The Warren)	Henry Brown, Esq.	5	1	0	550	981	38·63	191
D „ (Upham House)	Mr. E. A. Patch.....	5	1	6	875	910	35·82	183
6.—THAMES—Cole & c. 156 sq. mi.								
D Wroughton (Burdorpe Park) ...	A. Ashford, Esq.	5	0	9	570	874	34·41	163
D New Swindon.....	H. J. Southwell, Esq....	8	0	11.	378	882	34·74	201
D South Marston Vicarage	Rev. A. Macdonald	5	1	0	310	739	29·11	172
D Highworth (Hannington Hall)...	Mrs. Hussey-Freke	5	1	0	375	808	31·79	182
DORSETSHIRE. (Area, 988 sq. mi.)								
1.—PARRETT. 61 sq. mi.								
D Evershot (Melbury House)	Mr. R. Rintoul	5	1	6	500	1306	51·42	181
D Chedington Court	Sir Henry Peto, Bart....	5	1	0	605	1289	50·75	194
Leigh Vicarage	Rev. T. L. Jenkins .....	...	1	0	250	1240	48·82	187
D Sherborne Castle	Mr. T. Turton	5	1	0	195	1073	42·26	207
2.—AXE. 25 sq. mi.								
D Broadwindsor Vicarage	Mrs. Brown	5	0	7	535	1514	59·60	202
D „ (Blackdown House)	C. E. M. Pinney, Esq....	5	0	9	515	1360	53·56	211
3.—FROME & C. 502 sq. mi.								
Portland Bill (New Lighthouse).	Meteorological Office	8	1	0	19	862	33·95	187
D „ (Easton)	R. S. Henshaw, Esq., C.E.	5	1	6	265	968	38·11	191
„ (H.M. Naval Depôt) ..	H. A. Brain, Esq., C.E....	8	1	5	23	1009	39·73	184
D Weymouth (Westham)	J. H. Bolam, Esq.	5	1	0	25	916	36·07	177
D „ (Springfield)	Major J. H. C. Devenish..	5	1	9	90	932	36·68	179
Swanage (Craigendoran)	P. Lennox Wright, Esq...	8	0	9	45	978	38·51	167
D Chickerell (Montevideo)	Mrs. N. M. Richardson...	5	1	0	100	964	37·95	204
East Fleet (Fleet House)	Dorset Field Club	5	1	2	40	910	35·84	...
D† West Lulworth Vicarage.....	late Rev. W. P. Schuster	5	1	0	128	1001	39·41	157
D East Lulworth Vicarage	Dorset Field Club	5	0	9	173	1104	43·46	181
D Creech Grange	J. W. G. Bond, Esq....	5	1	0	240	1146	45·13	156
D Abbotsbury (New Barn)	J. C. P. White, Esq....	5	1	6	111	955	37·61	211
„ Castle Gardens.....	Mr. H. Kempshall	8	1	0	...	958	37·70	...
D Upwey (Portland W. W.).....	A. S. Lilley, Esq., C.E....	8	1	0	290	1027	40·45	199
D Warmwell (Warmwell House)...	Lord Wynford	5	0	4	155	1158	45·58	189

DIVISION V.—SOUTH WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0·1 in. or more
		Diam.	Height Above Ground SeaLevel			1914		
		in.	ft.	in.	feet.	mm.	inches.	
DORSETSHIRE—(con.)								
3.—FROME & C.—(con.)								
D Wareham (East Holme)	G. D. Bond, Esq.	5	1	0	24	1185	46·64	171
Stoborough (King Barrow)	L. G. Pike, Esq.....	5	0	9	14	1091	42·95	...
D Wareham (South Street)	S. W. Bennett, Esq.	5	2	6	18	1138	44·80	194
D „ (Binnegar Hall)	Lt.-Col. P. Farrer	5	1	0	65	1163	45·78	184
D „ (Trigon)	Mrs. L. Sturdy	8	1	4	60	1104	43·47	180
D Abbotsbury (Littlebredy).....	Rev. A. C. Moule	5	0	9	355	1174	46·20	182
D Dorchester Water Works.....	H. D. Strange, Esq.	8	1	0	315	1146	45·13	176
D „ (Wollaston House) ...	Capt. J. E. Acland.....	5	1	0	200	1158	45·58	177
Branksome Park (Kingsfield) ...	Miss M. Rigden .....	...	...	...	...	996	39·20	...
D Poole (Parkstone)	W. H. Symes, Esq.	5	1	3	160	988	38·90	180
D† Branksome (Bourne Valley).....	H. W. Woodall, Esq.....	8	1	3	84	988	38·88	155
D „ (Alderney Reservoir)	„ „ „	8	1	3	213	853	33·59?	161
D Broadstone (Lypiatt Cottage) ...	F. W. Beckford, Esq....	5	1	0	220	1149	45·24	198
D Lyme Regis	J. W. Jones, Esq.	5	1	0	55	1019	40·13	168
D „ „ (Holme Cleve)	Mrs. Cave	5	1	0	230	1017	40·03	186
„ „ (Boat Close)	Henry Ellis, Esq.	5	1	6	498	1119	44·05	...
D „ „ (Highcliff)	Miss G. Lister	5	1	3	330	1069	42·08	175
D Charmouth (Leslie Cottage).....	M. E. Mills, Esq.	8	1	3	120	998	39·29	198
„ „ „ „ „ weekly	„ „ „	5	1	0	120	988	38·88	...
„ „ (Hammond's Mead)..	A. Barrow, Esq.....	5	0	9	50	992	39·07	...
D Bridport (Coneygar)	H. Gordon, Esq., C.E....	5	1	0	110	1102	43·39	183
Bradford Peverell House	Mrs. Middleton	6	1	1	381	1201	47·29	182
Moreton (Oaker's Wood)	Miss Fetherstonhaugh ..	5	1	0	160	1127	44·38	...
D Charminster (Brooklands).....	Capt. R. Dymond	8	1	3	...	1202	47·33	173
Puddletown Vicarage.....	Rev. A. L. Helps	5	2	8	195	1037	40·81?	159
Wynford House Gardens.....	Mr. F. Hansford.....	5	0	6	410	1397	55·01?	175
D „ Eagle	Mrs. Walter	5	0	11	...	1163	45·80	196
D Bere Regis (Barrow Hill).....	Mr. A. C. Lucas	5	1	0	120	1095	43·10	166
„ „ (Bloxxworth Rectory). ..	Rev.O.P.CambridgeF.R.S.	5	1	6	205	1119	44·07	152
D „ „ („ „ House)...	F. G. A. Lane, Esq.	5	1	6	118	1217	47·90	176
D Netherbury.....	B. J. T. Stott, Esq.....	5	1	0	143	1234	48·58	192
D Maiden Newton(CattistockLodge)	Major H. H. F. Fagan...	5	1	0	361	1369	53·88	196
D Bere Regis (Longthorns)	Dorset Field Club	5	1	0	350	1179	46·40	195
D Cattistock (Bell Cottage)	C. E. Davies, Esq.	8	1	0	365	1330	52·35	187
D Beaminster Vicarage.....	Rev. H. A. Boys	5	1	0	216	1299	51·13	203
D „ (Hamilton Lodge) ...	Fiennes Trotman, Esq....	5	1	0	210	1286	50·65	203
D Piddletrenthide	J. F. Homer, Esq.	5	2	0	...	1320	51·99	177
D Milton Abbas (Milton Abbey) ...	Dorset Field Club	5	0	10	333	1343	52·89	201
4.—STOUR. 388 sq. mi.								
Kinson (Eglington)	W. C. Keevil, Esq.	5	0	6	44	1103	43·43	179
D Wimborne (Corfe Mullen)	G. V. Sparrow, Esq., C.E.	5	1	6	82	1068	42·04	170
D „ („ „ „ ForestHill)	E. Philip Belben, Esq....	8	2	0	300	1029	40·50	185
D Winterbourne Whitechurch Vic..	Rev. H. H. T. Bassett....	8	0	6	241	1192	46·93	171
D Sturminster Marshall (BaileHo.)	Rev. J. Cross	5	0	6	85	1030	40·54	177
„ „ „ „ „ „ )	„ „ „ .....	...	...	...	85	1014	39·94	...
Wimborne (Westfield)	Countess of Moray.....	5	...	...	...	1050	41·36	...
D „ (St. John's Hill).....	E. H. Widnell, Esq.....	5	1	0	146	1137	44·77	200
D „ (Codford House).....	G.H.Batterbury, Esq.M.D.	5	0	9	69	1100	43·32	202
D „ (Stoneham)	H. J. Tuck, Esq.	5	1	0	200	1072	42·20	174

DIVISION V.—SOUTH WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0.1 in. or more
		Diam.	Height Above Ground		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
DORSETSHIRE—(con.)								
4.—STOUR—(con.)								
West Moors (Inglewood Nursery)	F. Lansdell, Esq.	5	1	0	110	979	38.55	...
D Witchampton	Miss A. L. Homer	5	1	0	130	1054	41.48	153
D Blandford (Bryanstone Gardens)	Mr. J. Jaques	5	1	0	155	1334	52.54	177
D Turnworth	Col. Parry Okeden	5	1	0	473	1390	54.72	196
D Horton Vicarage	Rev. G. Wellington	5	1	0	133	862	33.94	195
D Holwell (Westrow House)	W. Warry, Esq.	5	1	0	252	1100	43.31	170
D Wimborne St. Giles (St. Giles Ho.)	Earl of Shaftesbury	5	1	0	165	1081	42.55	185
D Gussage St. Michael Manor	Miss Ellen Good	5	1	3	200	1120	44.10	184
D Sturminster Newton (Riverside).	A. R. Hallett, Esq.	5	5	0	205	956	37.63	171
D " " Vicarage..	Dorset Field Club	5	2	7	180	1040	40.96	184
D Iwerne Minster House Gardens..	J. H. Ismay, Esq.	5	1	0	244	1120	44.11	191
D " " " " (R)	" " " "	8	1	1	244	1088	42.85	180
D Fontmell Magna	Dr. J. Appleyard	8	1	8	260	966	38.04	192
Ashmore Rectory	Rev. A. J. Reed	8	1	3	700	1186	46.69	195
D Shaftesbury	Rev. F. Ehlers	5	1	2	722	941	37.05	189
D Buckhorn Weston Rectory	Rev. W. Hughes D'Aeth	5	1	0	285	899	35.40	195
D Gillingham	S. H. Stephens, Esq.	5	1	2	244	1009	39.72	192
5.—EAST AVON. 12 sq. mi.								
SOUTH DEVON. (Area, 1707 sq. mi.)								
1.—PARRETT. 7 sq. mi.								
2.—TAMAR & C. 395 sq. mi.								
D† Plymouth (The Hoe)	H. Victor Prigg, Esq., C.E.	8	1	0	116	1165	45.88	195
D " (Drake's Reservoir) ..	F. Howarth, Esq., C.E.	5	1	0	149	1213	47.74	188
D " (Hartley Reservoir) ..	" " " "	5	1	0	321	1306	51.41	190
D " (Freedom Fields)	H. Victor Prigg, Esq., C.E.	8	1	0	208	1281	50.44	191
D Devonport (Rowdens Res.)	F. W. Lillierap, Esq., C.E.	5	1	0	201	1096	43.14	203
D Plympton (Leigham)	Vere Cholmondeley, Esq.	5	1	0	50	1354	53.31	203
D " (Elfordleigh)	Mrs. R. C. Bainbridge .....	...	...	...	250	1335	52.56	204
D Bickley (Roborough Reservoir) ..	F. Howarth, Esq., C.E.	5	1	0	548	1477	58.14	215
Lee Moor Clay Works	R. Martin, Esq.	8	1	0	900	2018	79.47	...
D Bere Alston (Mount Tamar)	T. Ching, Esq.	5	2	0	350	1275	50.21	211
D " " (Runleigh)	Sir A. W. Croft, K.C.I.E.	5	1	6	125	1323	52.07	203
Sheepstor Vicarage	Rev. H. H. Breton per M.O.	8	1	0	749	2089	82.23	218
D " " " " M	F. Howarth, Esq., C.E.	5	1	0	1024	1715	67.52	...
D " (Red Stone)	" " " "	5	1	0	763	2107	82.95	225
D " (Burrator)	" " " "	5	1	0	755	2027	79.82	225
D " (Head Weir)	" " " "	5	1	0	720	1816	71.48	224
D Dousland Reservoir	F. W. Lillierap, Esq., C.E.	5	1	0	721	1740	68.51	213
D Dartmoor (Deancombe Farm) ...	F. Howarth, Esq., C.E.	5	1	0	830	1821	71.70	187
D " (Leather Tor Farm) ..	" " " "	5	1	0	910	1850	72.85	221
D " (Siwards Cross)	M " " " "	5	1	0	1200	1901	74.84	...
D " (Cramber Tor)	M " " " "	5	1	0	1435	1716	67.56	...
D Whitchurch (Ashbrook)	Rev. H. B. Grylls	5	1	0	400	1551	61.07	229
Tavistock (Langstone, Moortown)	Col. H. F. Coleridge	5	1	0	700	1651	65.00	212
D " (Public Library)	John Quick	8	20	0	283	1298	51.09	212
D " " " "	W. J. Monk, Esq.	5	1	0	375	1457	57.35	223
Dartmoor (Leeden Tor)	M F. Howarth, Esq., C.E.	5	1	0	1270	1596	62.82	...

DIVISION V.—SOUTH WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ≥ 0.1 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
SOUTH DEVON—(con.)								
2.—TAMAR & C—(con.)								
Dartmoor (N. Hessay Tor) No. 1	F. Howarth, Esq., C.E....	5	1	0	1625	1750	68.91	...
" " " " No. 2	" " " " " " " "	5	1	0	1502	1812	71.35	...
Marytavy Rectory.....	Rev. Irvine K. Anderson...	8	1	0	560	1511	59.49	...
Milton Abbot (Endsleigh).....	Mr. F. Yole	5	1	0	180	1306	51.40	...
D Lifton (Kelly House).....	Rev. Maitland Kelly.....	8	2	6	462	1343	52.89	211
D Coryton Manor	R. L. Newman, Esq.....	5	1	2	...	1400	55.10	195
D Lydford (Long Ridge)	H. Pollock, Esq.	5	0	6	800	1625	63.99	188
D Polapit Tamar [Launceston] ...	R. C. Coode, Esq.	5	1	0	315	1249	49.18	218
3.—ERM & C. 217 sq. mi.								
D† Salcombe (Sandhills).....	W. H. Pike, Esq.	5	1	0	118	997	39.26	189
D† " (The Park)	Capt. J. Partridge	5	1	0	40	1082	42.62	182
D† " (Springfield)	Dr. A. Pearce.....	5	1	0	100	1096	43.17	178
† South Huish	W. Balkwill, Esq.....	5	5	6	68	1258	49.54	...
D† Kingsbridge (Collapit Creek) ...	A. A. Froude, Esq., C.M.G.	5	0	9	50	1048	41.24	200
D† Slapton (Higher Start House) ...	Horace G. Morgan, Esq. .	5	1	0	130	1270	49.99	213
Revelstoke (Membland)	Mr. G. Baker.....	5	1	0	180	1268	49.90	...
D† East Allington (Fallapit Gardens)	W. H. Tucker, Esq.	5	1	0	305	1482	58.36	186
D† Dartmouth (Stoke Fleming).....	C. F. Selby, Esq.	5	0	9	356	1261	49.66	211
Ermington (Strode)	H. Gore Hawker, Esq....	5	1	0	100	1305	51.38	193
D Ivybridge (Woodhay).....	H. Alger, Esq.	5	1	0	300	1573	61.92	208
D South Brent (Blackadon Asylum)	H. Victor Prigg, Esq., C.E.	5	1	0	607	1623	63.90	235
D " " (Great Aish).....	Miss Kingwell	5	1	0	500	1904	74.96	202
4.—DART. 197 sq. mi.								
Kingswear	<i>Gardener's Chronicle</i> ...	...	...	...	...	1470	57.87	...
D Paignton (Queen's Park)	A. J. Holman, Esq.....	8	1	0	11	1044	41.10	189
Totnes (Rosabelle).....	Dr. H. R. Allingham....	8	1	0	...	1441	56.73	181
D " (Berry Pomeroy)	C. Barran, Esq.	5	1	0	185	1280	50.39	187
D " (" " Vicarage)	Rev. H. Cooper	5	2	1	130	1278	50.32	175
D " (Staverton).....	J. A. Devenish, Esq.	5	0	11	50	1194	47.00	167
D " (Broadhempston)	Charles Mole, Esq.....	5	1	0	135	1243	48.93	185
D Buckfastleigh (Harewood)	J. S. Trelawny, Esq.....	5	1	0	230	1742	68.57	180
D Holne Vicarage	Rev. J. Gill.....	5	1	6	650	1781	70.12	195
D Ashburton (West Street)	Wilfred J. O. Evans, Esq.	5	1	0	240	1539	60.60	202
D " (Dolbear)	Mrs. W. W. Battiscombe	5	1	0	300	1615	63.58	191
D " (Druid House).....	J. S. Amery, Esq.	5	1	0	584	1647	64.84	201
D " (Leusdon Vicarage)...	Rev. A. Woolcombe	5	1	0	900	1861	73.27	195
D Princetown (Huccaby House) ...	Capt. H. H. Joll, R.A. ...	5	0	11	900	1671	65.78	196
D " (H.M. Prison).....	George Perry, Esq.	5	1	0	1359	2707	106.58	213
D " (Two Bridges)	T. C. Bridges, Esq.	5	0	9	1170	2327	91.60	215
† Dartmoor (Cowsic Valley).....	F. W. Lillicrap, Esq., C.E.	8	1	6	1352	2222	87.50	...
† " (Black Dunghill) No.5	" " " " " " " "	8	1	0	1590	1615	63.60	...
† " (Beardown Tor) No.3	" " " " " " " "	8	1	0	1550	1520	59.85	...
† " (White Tor) No.1	" " " " " " " "	8	1	0	1640	1645	64.75	...
† " (Devil's Tor)..... No.2	" " " " " " " "	8	1	0	1785	1540	60.65	...
† " (Cowsic Head) ... No.4	" " " " " " " "	8	1	0	1580	2017	79.40	...
5.—TEIGN. 209 sq. mi.								
† Torquay (Princess Gardens).....	F. March, Esq.	5	1	0	12	945	37.21	173
D† " (Cary Green)	" " " " " " " "	5	1	0	12	973	38.30	173
D " (Roby Hall)	Sir J. Edwards-Moss, Bt.	5	1	0	500	1116	43.94	194

DIVISION V.—SOUTH WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with '01 in or more
		Diam.	Height Above Ground		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
SOUTH DEVON—(con.)								
5.—TEIGN—(con.)								
D Torquay (Stoodley Knowle)	Col. C. R. Burn, M.P.	5	1	0	...	931	36·65	168
D Kingskerswell (South Hill)	E. A. Foster, Esq.	5	1	0	270	1085	42·72	190
D Abbotskerswell (Court Grange)..	Mrs. Marcus Hare	5	1	1	150	1295	50·97	174
D Newton Abbot (The Chestnuts)..	E. D. Wylie, Esq.	5	0	6	100	1022	40·24	195
Teignmouth (Woodlands)	G. Rossiter, Esq.	8	1	2	98	931	36·67	173
D „ (Den Gardens)	„ „ „	5	1	0	20	951	37·45	174
D „ (Landscape Res.) ...	„ „ „	8	1	0	136	1000	39·36	171
D „ (Hazledown Res.)...	„ „ „	8	2	0	425	1000	39·35	169
D „ (Shaldon)	„ „ „	5	1	0	213	1072	42·20	161
D „ (Bonnicliff)	Miss M. Horner.....	5	1	0	260	1192	46·91	181
D „ (The Shrubbery) ...	E. A. Norton, Esq.	8	1	0	275	982	38·64	187
D „ (Benton)	W. C. Lake, Esq., M.D. ...	5	1	0	320	870	34·25	194
D „ (Holcombe)	G. Rossiter, Esq. ....	...	...	...	122	978	38·49	...
D Dawlish (The Lawn)	S. F. C. Churchward, Esq. ...	5	1	0	18	996	39·20	153
„ (Thorns Reservoir).....	„ „ „	5	1	0	550	1201	47·27	...
„ (Burrows Reservoir) ...	„ „ „	5	1	0	420	990	38·99	...
D Chudleigh (Ideford Rectory) ...	Rev. G. J. Ford.....	5	1	0	300	1000	39·35	183
D Ilsington.....	W. J. J. H. Burnett, Esq.	5	1	0	650	1481	58·32	204
D Bovey Tracey (Blenheim House)	Mr. E. E. Underdown.....	5	1	0	350	1368	53·85	183
D Hennock Vicarage	Rev. A. H. Skipper	5	1	0	615	1135	44·68	175
D Lustleigh (Rockmead)	Rev. W. A. Jones	5	1	0	300	1428	56·21	199
Chudleigh (Trusham)	Rev. Offley H. Cary	5	0	6	322	1144	45·05	180
D Moretonhampstead (Bullaton) ...	S. C. Chapman, Esq., C.E. ...	8	1	0	928	1330	52·35	219
D „ (Mardon) ...	„ „ „	8	1	0	835	1371	53·97	221
North Bovey (Manor House) ...	Mr. G. Laurence	5	1	0	700	1568	61·75	207
D Christow (Kennick)	S. C. Chapman, Esq., C.E. ...	8	1	0	836	1296	51·04	214
D „ (Smithacott)	„ „ „	5	1	6	861	1317	51·85	210
D Moretonhampstead (Blackingstone)	„ „ „	8	1	0	1158	1380	54·31	211
D Christow (Laployd)	„ „ „	5	1	6	1041	1482	58·34	210
D Moretonhampstead Rectory	Rev. S. D. Dewey	5	1	0	600	1287	50·68	214
D Chagford (Dartmoor Sanatorium)	D. L. McCullough, Esq. ...	5	1	3	760	1244	48·96	195
„ (Millholme)..... (R)	A. S. Fleming, Esq.	8	3	6	600	1556	61·27	...
6.—EXE. 445 sq. mi.								
D Mamhead	A. F. Parbury, Esq.	5	1	0	201	1115	43·88	190
D Starcross (Cofton Vicarage)	Rev. C. F. Benthall	5	1	9	60	890	35·02	171
Exmouth (Douglas Avenue).....	Rev. S. G. Gillum	5	0	10	80	873	34·38	184
D „ (Nidderdale)	Mrs. Herbert Stewart.....	5	1	0	51	833	32·78	189
„ (Manor Grounds)	S. Hutton, Esq., C.E.....	5	1	0	13	897	35·31	176
„ (Filters, Salterton Rd.)	„ „ „	8	8	6	195	980	38·58	200
„ „ (Capel Lane)...	„ „ „	5	8	0	240	917	36·09	190
„ (Marpool Hall)	Mrs. Chichester	5	1	0	87	806	31·73?	...
D Kenton	E. J. Pitt, Esq.	5	1	0	85	1034	40·71	188
D Aylesbeare (Rosamondford)	A. T. Loram, Esq.	5	0	10	220	926	36·45	170
D Exeter (Ide)	Mr. H. Payne	8	1	0	130	1057	41·60	189
† „ (Franklyn, St. Thomas)	E. N. Snow, Esq.	5	0	8	65	1006	39·61	174
D† „ (Devon & Exeter Inst.)...	J. E. Coombes, Esq.	5	13	7	155	854	33·63	188
D „ (The Close)	Rev. Canon D. McLaren...	5	1	1	140	930	36·63	188
D† „ (Elmfield House)	W. B. Heberden, Esq., C.B. ...	5	1	0	100	872	34·31	173
„ (Hele's School)	W. Littler, Esq.	8	6	4	160	926	36·46	...
† Broad Clyst (Brockhill)	W. T. Bayne, Esq. LL.D. ...	5	1	0	80	901	35·46	219

DIVISION V.—SOUTH WESTERN COUNTIES—(continued).

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		in.	ft.	in.	feet.	mm.	inches.	
SOUTH DEVON—(con.)								
6.—EXE—(con.)								
D Newton St. Cyres (Sherwood) ...	Capt. A. L. Cave	5	1	0	400	953	37·53	183
D Upton Pyne (The Parsonage) ...	Rev. A. Hillyard	5	1	0	213	950	37·40	192
D† Brampford Speke Station	Mr. A. Tucker	5	1	0	79	808	31·79	175
D Crediton (Trobridge House).....	R. Stanley Clarke, Esq....	8	1	2	250	941	37·03	202
D Silverton (Killerton)	Mr. J. Wilson	5	1	0	161	944	37·18	180
D Crediton (Okefield)	Seymour F. Pope, Esq....	5	1	0	325	963	37·92	201
D Copplestone (Coplestone House)..	Miss Pope	5	0	11	315	995	39·18	200
D Cullompton	M. T. Foster, Esq.	5	1	0	202	1064	41·87	224
D Tiverton (Southwood)	P. P. Miers, Esq.	5	0	6	550	1085	42·71	193
D† „ (Broomhill)	late Rev. J. Dickinson ..	5	1	0	380	1045	41·15	196
D „ (St. Peter Street)	Miss Gill	5	6	0	245	1064	41·89	206
D „ (Hartnolls).....	Maj.-Gen. F. A. Bowles..	5	1	6	226	1129	44·44	187
D Halberton	Capt. G. Izat, R.N.	5	0	6	240	998	39·28	177
D Uffculme (Bullmoor).....	Miss M. E. Gowring	5	1	0	280	1142	44·94	215
D Tiverton (Lythecourt)	A. L. Sadler, Esq.	5	1	3	230	1249	49·17	181
D Bampton (Huntsham Court) ...	H. Acland Troyte, Esq....	8	1	0	640	1115	43·91	169
D „ (Wonham)	Mrs. J. R. Holland	5	1	0	530	1236	48·67	196
7.—AXE & C. 237 sq. mi.								
D Budleigh Salterton (Lindenwood)	Lt.-Col. J. H. Hamersley	5	1	0	230	954	37·57	188
D „ „ (Squabmoor).	S. Hutton, Esq., C.E.	5	1	0	267	988	38·90	202
D† East Budleigh (Bicton Gardens)	Mr. E. H. High	5	1	0	90	988	38·89	185
D „ „ („ Common)	S. Hutton, Esq., C.E.	5	1	0	300	1026	40·38	...
D† Sidmouth (Sidmount)	Miss C. M. Radford	5	1	0	149	1049	41·30	195
D „ „ „ „ „ „ „ „	„ „ „ „ „ „ „ „	5	1	0	186	1030	40·55	195
D „ (Winslade Cottage) ...	Miss G. Collins	5	1	0	150	1117	43·97	...
D† Seaton	Mrs. Pattinson	5	0	10	25	1021	40·19	198
D Axmouth (Millmead).....	E. H. Waters, Esq.	5	4	9	20	1049	41·31	200
D Rousdon [Lyme Regis]	Mr. C. Grover	5	1	0	516	1080	42·52	191
D Pinhay [„ „ „ „ „ „ „ „	Mr. J. F. Stobo	5	1	11	465	1138	44·79	198
D† Ottery St. Mary (West Hill) ...	B. Stansbury, Esq.	5	1	6	340	1034	40·70	209
D† „ „ „ „ (Broad Street)..	H. D. Badcock, Esq.	5	4	0	170	1098	43·22	194
D† „ „ „ „ (Manor House).	W. A. Willock, Esq.	5	1	2	200	1097	43·19	196
D Northleigh Rectory	Mrs. W. Champernowne..	5	0	6	335	1296	51·02	224
D Kilminster (Haddon Corner) ...	A. Hitchcock, Esq.	5	1	0	400	1242	48·90	193
D „ „ „ „ „ „ „ „	„ „ „ „ „ „ „ „	...	1	0	400	1240	48·84	...
D Axminster (Lea Combe House)...	Maj. A. C. F. Luttrell ..	5	2	0	170	1078	42·45	181
D Honiton (Combe Raleigh).....	Lt.-Col. M. James	5	2	4	500	1146	45·12	207
D Chardstock Vicarage.....	Rev. A. Lewis	5	0	8	317	1228	48·34	200
NORTH DEVON. (Area, 898 sq. mi.)								
1.—NORTH COAST STREAMS. 77 sq. mi.								
D† Branton (Sands Hotel, Saunton)	A. V. Youings, Esq.	5	1	0	75	889	35·01	171
D† Woolacombe (Hotel Grounds) ..	Miss Chichester	5	1	0	60	974	38·36	188
D† Morthoe (Twitchen House)	Dr. G. B. Longstaff	8	1	0	430	1150	45·28	200
D Parracombe	Rev. J. F. Chanter	5	1	0	795	1509	59·40	198
D† Ilfracombe (Reservoir)	O. M. Prouse, Esq., C.E....	5	1	0	395	1344	52·92	198
D† „ „ (Bickleighscombe) ...	Mrs. Slade King	5	1	0	300	1255	49·41	207
D† „ „ (Higher Co. School)	R. Barrett, Esq.	5	1	2	245	1158	45·57	191
D† „ „ (Meteorological Station)	O. M. Prouse, Esq., C.E....	5	1	0	25	1155	45·48	194

DIVISION V.—SOUTH WESTERN COUNTIES—(continued).

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		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
NORTH DEVON—(con.)								
1.—NORTH COAST STREAMS—(con.)								
D Martinhoe Rectory.....	Rev. R. W. Oldham	5	2	3	808	1310	51.57	201
Lynton (Lee Abbey)	C. F. Bailey, Esq.	5	0	6	320	1272	50.09	...
D Lynmouth (Gwynallt)	A. L. Ford, Esq.	8	0	8	284	1437	56.57	203
D „ (Rock House)	T. H. Mead-Briggs, Esq.	5	0	11	22	1329	52.34	210
2.—TAW. 442 sq. mi.								
D Spreyton Vicarage.....	Rev. T. G. Blackwood Price	5	1	0	...	1057	41.60	194
Winkleigh	<i>Devon & Exeter Gazette</i> .....	...	...	...	...	1100	43.31	226
D Chumleigh (Leigh House).....	Mr. W. Gillies	5	1	0	420	1053	41.45	201
D Witheridge.....	H. J. Mansfield, Esq.	5	1	2	600	1150	45.26	178
D Warkleigh Rectory	Rev. J. H. Thompson.....	5	1	0	439	1100	43.29	226
D South Molton	F. Day, Esq.	5	1	0	450	1354	53.32	200
D Filleigh (Castle Hill Gardens)...	The Countess Fortescue.....	12	3	6	367	1261	49.66	223
D Molland	S. J. Case, Esq.	5	1	9	674	1387	54.59	220
D East Anstey (Rhyll Manor)	Mrs. Hancock.....	5	1	0	850	1465	57.67	195
West Buckland (County School)	T. Wainwright, Esq. ....	...	...	...	680	1227	48.32	171
D† Barnstaple (N. Devon Athenæum)	„ „ „	8	1	0	25	1049	41.31	208
D† „ (Fort Hill)	Rev. F. Sterry	5	2	3	300	1058	41.66	204
† „ (Pilton)	Capt. G. F. Hibbert	5	1	0	87	1062	41.79	223
Heanton Punchardon (Chivenor)	Maurice E. Yonge, Esq.	5	1	8	18	939	36.97	...
Stoke Rivers (Higher Davies) ...	Mrs. Chamings	5	1	0	670	1241	48.85	215
D Braunton (Tyspane)	A. M. Norton, Esq.	5	...	...	95	1073	42.23	199
D Arlington Court	No. 1 Miss Chichester	5	1	0	613	1492	58.72	200
„ „	No. 2 „ „	5	1	0	613	1292	50.88	199
D Challacombe	O. M. Prouse, Esq., C.E.	5	1	2	815	1844	72.59	213
3.—TORRIDGE. 342 sq. mi.								
D Okehampton (Oaklands)	Maj.-Gen. E. H. Holley ...	5	1	0	500	1461	57.53	191
D Iddesleigh (Ash)	Mr. C. J. Medland.....	6	1	0	340	1145	45.08	189
D Petrockstow (Heanton Satchville)	Mr. A. Eames	5	1	0	332	1036	40.77	183
Dolton (Hilliers)	A. Smythies, Esq.	5	1	3	380	1054	41.50	174
D Beaford (Abbots Hill)	J. Stuckey, Esq.	5	5	0	380	967	38.08	172
D Roborough (Ebberly).....	J. S. C. Davis, Esq.	5	1	0	506	925	36.42	199
D Torrington (Enfield)	G. M. Doe, Esq.	5	1	0	336	1141	44.91	206
D Parkham (Melbury Moor).....	Baldwin Latham, Esq. C.E.	5	1	0	623	1478	58.21	227
D „ („ Reservoir)...	„ „ „	5	1	0	516	1527	60.12	227
D Abbotsham (Riccard's Down) ...	Mrs. Hibbert	5	1	0	87	1106	43.53	212
D Bideford (Gammaton W. W.)...	Baldwin Latham, Esq. C.E.	5	1	0	335	1161	45.72	216
D „ (Webbery)	Mrs. C. E. Boyd.....	5	1	10	355	1101	43.34	199
D „ Rectory	Rev. T. Newton Leeke....	5	1	2	150	1143	45.00	202
„ (Northam Road).....	Mr. W. Littlejohns	5	0	6	20	1087	42.79	185
„ (Slade Park)	J. C. T. Heriz-Smith, Esq.	5	1	6	188	1064	41.87	188
„ (Horwood House)	Rev. J. Dene	5	1	0	288	941	37.04	214
Northam (St. Helens)	T. Wainwright, Esq.	5	1	0	67	1075	42.34	174
D „ Vicarage.....	Rev. Preb. Dimond-Churchward	5	1	3	173	1057	41.61	217
D „ (Fairlea)	Col. F. W. Bennet.....	5	2	6	200	1005	39.56	200
D Westward Ho! (Bellevue)	A. H. Boyd, Esq.	8	1	0	200	981	38.61	206
„ „ (Royal Golf Club)	The Secretary.....	5	1	6	20	954	37.55	177
D Instow.....	Miss Lock	5	1	0	100	939	36.96	188
4.—WEST COAST STREAMS. 32 sq. mi.								
D Hartland Abbey.....	Mr. G. Sleep	5	1	6	222	1047	41.23	178

DIVISION V.—SOUTH WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with .01 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
NORTH DEVON—(con.)								
4.—WEST COAST STREAMS—(con.)								
D Clovelly Court	Mr. H. Tuke	5	0	11	350	1401	55.15	190
5.—EXE. 5 sq. mi.								
CORNWALL. (Area, 1357 sq. mi.)								
1.—CAMEL & N.W. COAST STREAMS. 458 sq. mi.								
Phillack Rectory	Rev. A. P. Hockin	5	1	0	70	1005	39.55	189
St. Ives (Penwyn)	Cornwall County Council	5	6	6	60	1159	45.63	208
Camborne	" " "	...	...	...	...	1202	47.32	211
† Redruth (Tolvean)	" " "	5	0	9	365	1307	51.45	212
D† " (Trewirgie)	A. P. Jenkin, Esq.	5	1	0	399	1314	51.73	217
D " (Tehidy Park)	Mr. F. J. Clark	5	1	5	187	1189	46.82	173
† St. Agnes	W. Whitworth, Esq.	5	3	8	318	980	38.59	224
D† Newquay (Tresillian House)	Lt.-Col. E. Gully-Bennet	5	2	0	290	1153	45.38	183
† " (Reservoir)	Dr. C. C. Vigurs	5	1	0	210	994	39.12	...
D† " (Mount Wise) ... No. 1	" " "	5	1	0	190	996	39.22	204
† " (" ") ... No. 2	" " "	5	1	0	190	986	38.81	...
D St. Wenn Vicarage	Rev. J. G. Addenbrooke	8	1	3	431	1355	53.35	208
D Withiel Rectory	Rev. W. S. Cruddas	5	0	11	360	1474	58.04	222
D Bodmin (Polgwin)	H. D. Foster, Esq.	5	1	0	300	1484	58.43	198
D " (Castle Hill House)	W. G. Wales, Esq., C.E.	5	1	0	484	1483	58.38	228
D Camelford (Stannon Clay Works)	N. Cornwall China Clay Co.	8	1	0	800	1646	64.80	216
D Tintagel (Trenowan House)	Priestley Hogbin, Esq.	5	1	0	350	1178	46.36	204
D Bude (The School House)	Karl Durston, Esq.	5	1	0	51	947	37.27	201
D " (Bramble Hill)	J. E. Barclay Bevan, Esq.	6	1	0	80	986	38.82	206
D Morwenstow Vicarage	Rev. H. Lynne Jones	5	0	10	331	1098	43.22	225
D " (Torracombe Manor)	W. W. Martin, Esq.	5	1	0	450	1096	43.14	194
2.—FOWEY & S.E. COAST STREAMS. 620 sq. mi.								
Lizard	A. P. Jenkin, Esq.	5	1	0	244	943	37.11	...
D Cadgwith (Coastguard Houses)	Miss H. F. Shepherd	5	1	0	180	1086	42.75	206
Mullion (Polurrian Hotel)	Mr. R. Thomas	5	1	0	230	794	31.27	...
St. Keverne (Lanarth)	P. D. Williams, Esq.	5	0	10	290	1336	52.59	221
D " (Rosuick Cottage)	G. W. Jevons, Esq.	5	1	0	250	1329	52.33	226
Bosahan	Cornwall County Council	...	...	...	240	938	36.91	174
Helston (Tenderah)	J. Walker Tyacke, Esq.	5	1	0	220	1208	47.56	195
D† Penzance (Morrab Garden)	C. H. Benn, Esq.	5	1	0	55	1214	47.80	210
" (Rosehill)	(R) David Howell, Esq.	10	3	0	212	1078	42.42	205
† " (Trengwainton House)	T. Robins Bolitho, Esq.	10	1	0	400	1376	54.17	181
D " (" Gardens)	" " "	10	0	10	300	1469	57.84	214
D " (County School)	Lance Webb, Esq.	8	0	6	55	1094	43.09	223
Marazion	T. Field Michell, Esq.	5	2	0	30	1159	45.64	183
" (Porth-en-alls)	F. F. Page, Esq.	...	...	...	...	1113	43.82	176
D Falmouth (New Observatory) (R)	Meteorological Office	11	2	0	169	1247	49.09	198
" (St. Mawes, Place)	late J. S. Spry, Esq.	5	1	0	12	1006	39.61	182
D Penryn (Ashfield)	J. G. Stephens, Esq.	5	1	1	100	1168	45.97	190
D Redruth (Pencoy's Vicarage)	Rev. L. C. Carpenter	5	1	0	701	1335	52.57	225
D† " (Trevince)	E. B. Beauchamp, Esq.	8	1	0	240	1379	54.28	214
D Truro (Killiow)	late J. C. Daubuz, Esq.	5	1	0	230	1167	45.94	191
D† " (Bosvigo)	Miss C. L. Rashleigh	5	1	0	100	1208	47.55	211

DIVISION V.—SOUTH WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ≥ 0.1 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
CORNWALL—(con.)								
2.—FOWEY & S.E. COAST STREAMS—(con.)								
† Truro (Pencalenick)	H. H. Williams, Esq.	5	0	7	100	1116	43.93	180
† „ W.W. (Lower Tregurrow)	W. J. Lean, Esq.	5	1	0	71	1204	47.41	204
D Probus (Lamellyn)	H. Tresawna, Esq.	5	0	6	230	1104	43.47	161
D Talland (Polperro)	H. E. Butler, Esq.	5	1	0	120	1191	46.88	211
Fowey (St. Willow)	Dr. W. H. Boger <i>per</i> M.O. ....	...	...	...	51	963	37.92	176
† „ (Torfrey)	Mrs. Mills	5	0	6	250	1300	51.16	175
† St. Austell (Trevarna)	W. M. Coode, Esq.	5	1	0	300	1348	53.06	201
Looe (Bray)	Mrs. G. Sneyd	5	1	0	530	1392	54.80	205
† Lostwithiel (Lanwithan)	Miss Foster	5	1	0	80	1369	53.90	198
D Roche (Glencoe)	Miss Browne	5	0	9	602	1282	50.47	224
† Liskeard (Trevillis)	L. C. Foster, Esq.	5	1	0	320	1259	49.56	211
„ (Dean Terrace)	Cornwall County Council	5	1	1	375	1288	50.72	...
„ (St. Cleer Down)	W. A. Jenkin, Esq.	5	1	1	620	1238	48.76	...
Cardinham (Glynn Valley)	F. Bowen, Esq.	5	0	10	742	1691	66.56	198
3.—TAMAR & C. 279 sq. mi.								
D Empacombe [Devonport]	J. Sandercock, Esq.	5	1	0	20	1182	46.52	209
Cremyll [Devonport]	Cornwall County Council	5	10	0	25	1169	46.03	...
D St. Germans (Fairfield)	Dr. J. Wallis Gill	5	1	6	170	1268	49.90	174
D Antony Vicarage	Rev. Alan Clover	5	1	0	195	1169	46.03	195
D Torpoint (Merifield Vicarage) ..	Rev. Leonard A. Williams	5	0	8	160	1238	48.75	207
Saltash (Pentillie Castle)	Cornwall County Council	5	2	4	150	1510	59.46	189
D St. Mellion Rectory	Rev. F. T. Wintle	5	1	0	400	1311	51.60	214
D Callington (Pencrebar)	Miss Horndon	5	1	9	450	1380	54.33	205
D „ (Mount Lodge)	G. Brown, Esq.	8	6	0	400	1351	53.19	200
D Albaston	N. R. Rosekilly, Esq.	5	4	0	600	1206	47.50	191
D Launceston (Landue)	Miss S. E. Tregoning	5	0	11	225	1381	54.38	220
D „ (Hexworthy)	R. B. Rogers, Esq.	5	1	0	270	1303	51.30	209
D Altarnon Sanctuary	Rev. A. H. Malan	5	1	0	620	1655	65.14	231
D Launceston (Old Tree House) ..	Mrs. Saunders	8	1	6	600	1194	46.99	189
D „ (Tamar Terrace) ..	Captain L. Ching, R.N.	5	0	10	446	1260	49.59	206
Egloskerry (Tregeare)	E. G. B. Lethbridge, Esq.	5	1	0	575	1320	51.98	...
North Tamerton (Davies)	Mr. W. Bray	5	4	0	390	1014	39.94	183
4.—INSULAR—Isles of Scilly.								
St. Mary's	Meteorological Office	8	1	6	131	872	34.31	212
Tresco Abbey	T. A. Dorrien Smith, Esq.	11	3	0	40	941	37.06	217
SOMERSETSHIRE. (Area, 1630 sq. mi.)								
1.—LOWER AVON. 300 sq. mi.								
D Wanstrow (The Manor Cottage) ..	P. E. B. Warburton, Esq.	5	1	0	465	1130	44.48	164
D Cranmore Hall	E. B. Whish, Esq.	8	1	9	600	1340	52.76	199
Shepton Mallet (Pondsmead, Oakhill) ..	Mr. J. Fletcher	8	1	0	710	1308	51.48	175
D „ „ (Hillylands, „) ..	Mr. E. Stock	5	0	10	659	1317	51.86	188
† Frome W.W. (Egford)	F. W. Jones, Esq., C.E.	8	2	0	270	1111	43.73	205
† „ (Selwood School)	Miss E. M. Coombs	5	0	9	310	1055	41.55	189
D Mells (Wadbury House)	Mrs. Sykes	5	1	0	394	1167	45.93	181
D „ (Selwood)	Miss E. G. Horner	5	1	0	344	1155	45.47	199
D Binegar (Gurneyslade)	Very Rev. G. A. Kindersley	5	1	0	588	1275	50.18	183
D Stratton-on-the-Fosse (Downside Abbey)	„ „ „	8	1	0	600	1225	48.22	183

DIVISION V.—SOUTH WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with .01 in. or more	
		Diam.	Height Above Ground. Sea Level		1914			
		in.	ft.	in.	feet.	mm.	inches.	
SOMERSETSHIRE—(con.)								
1.—LOWER AVON—(con.)								
	Frome (Orchardleigh)	8	0	10	303	1020	40.15	...
D	„ (Beckington)	8	1	3	270	953	37.53	188
D	Chewton Mendip (The Priory) ...	5	1	0	550	1327	52.25	194
	Ston Easton	5	3	0	480	1258	49.54	193
D	Midsomer Norton (Island House)	5	1	6	300	1108	43.63	174
D	„ „ (Dymboro) ...	5	1	0	357	1095	43.11	176
D	Radstock	8	8	0	330	1163	45.77	154
D	E. Harptree (Sherborne Res., Litton)	5	1	0	338	1289	50.76	188
D	„ „ (Harptree Court) ...	5	1	0	346	1282	50.46	191
	„ „ „ („ Hill) ...	8	1	0	784	1172	46.13	...
D	Temple Cloud	5	1	0	340	1133	44.60	198
D	Clutton (Council School)	5	1	6	427	984	38.73	187
D	Pensford (Sutton Court)	8	1	0	280	1021	40.18	194
D	Dunkerton Rectory	5	1	0	300	930	36.63	178
D	Bath (Crossways, Monkton Combe)	5	1	0	180	934	36.79	164
D	„ (Combe Down)	5	5	0	500	967	38.07	197
	Chew Magna	5	1	4	180	1037	40.84	189
D	Pensford (Publow School House)	5	1	0	230	883	34.75	178
D	„ (Norton Court)	5	1	0	300	1010	39.78	216
D	Bath (Claverton Manor)	5	1	0	238	900	35.45	162
†	„ (Royal Institution)	6	8	0	74	843	33.19	161
D†	„ (Henrietta Park)	5	1	0	67	823	32.41	171
D	„ (Statutory Hospital)	5	1	0	520	893	35.16	159
D	„ (Somerset Place)	5	0	10	350	882	34.72	216
D	„ (Charlcombe)	8	2	0	325	889	35.01	183
D	Saltford House	8	0	8	100	814	32.05	181
D	Batheaston Reservoir	6	2	0	248	847	33.34	198
	Barrow Gurney Reservoir	5	1	6	300	1052	41.42	201
	Keynsham (West View Road) ...	5	1	0	102	812	31.95	...
	Long Ashton (Agric. Station) ...	8	0	9	165	986	38.83	187
D	„ „ (Estate Office)	8	1	0	134	1038	40.86	172
	Bristol (Coronation Road)	5	0	10	50	932	36.69	...
D†	Failand House	5	1	0	385	964	37.96	199
	Portishead (Woodside Cottage) ...	5	1	2	150	918	36.16	...
2.—YEO, AXE & BRUE. 405 sq. mi.								
D	Castle Cary (Alford House)	5	1	6	98	995	39.17	199
D	Somerton (Butleigh Court)	8	1	2	95	954	37.56	177
D	Bruton (King's School)	5	1	2	200	1110	43.71	203
	Ditcheat .....	...	...	...	200	1010	39.76	...
D	Street (Overleigh House)	5	0	8	100	856	33.69	181
D	„ (Hind Hayes)	5	1	5	78	880	34.64	180
D	„ (Millfield)	8	1	0	100	882	34.71	195
D	Evercreach Vicarage	5	1	0	284	1007	39.65	192
	Edington	5	2	0	90	906	35.68	183
D	Shepton Mallet (Pilton)	5	1	3	354	1030	40.53	191
D†	„ „ (Charlton)	5	1	0	481	1122	44.19	194
D†	„ „ (Field House) ...	5	1	0	500	1109	43.66	191
D†	„ „ (Grammar School)	5	1	0	475	1108	43.62	193

DIVISION V.—SOUTH WESTERN COUNTIES—(continued)

STATIONS.	AUTHORITIES.	Rain Gauge.		Depth of Rain.		Days with 0.1 in. or more		
		Diam.	Height Above Ground. Sea Level	1914				
		in.	ft.	in.	feet.	mm.	inches.	
SOMERSETSHIRE—(con.)								
2.—YEO, AXE & BRUE—(con.)								
D Shepton Mallet (The Cloisters)...	Frank Dell, Esq.	5	1	0	388	1076	42.37	196
D " " (Sewage Farm)...	W. Reader, Esq.	5	0	8	310	1089	42.88	188
D Wells (Dinder Cottage).....	Miss I. L. Joseph	5	1	0	150	1062	41.82	193
D " (Somerset & Bath Asylum)	J. E. P. Shera, Esq., M.D.	5	1	0	300	811	31.94	196
D† " (Wookey Hole Paper Mills)	W. S. Hodgkinson & Co...	5	1	4	180	1025	40.35	177
D Burnham (Dunstan Ho., Chalbury)	H. A. Smith Spark, Esq.	5	1	0	20	847	33.36	180
D "	W. H. Chowins, Esq., C.E.	8	0	9	24	815	32.08	176
D " (Brent Knoll).....	Miss FitzGerald.....	5	2	0	26	874	34.41	196
Compton Martin	J. A. McPherson, Esq., C.E.	8	1	0	276	1242	48.89	...
Ubley (Rookery Farm).....	" " " "	8	1	0	525	1269	49.95	...
D Blagdon (Nordrach-on-Mendip)...	R. Thurnam, Esq., M.D.	5	0	4	862	1215	47.83	177
D Winscombe (The Down)	J. Grubb, Esq.	5	1	0	295	984	38.74	193
D Banwell (Eversley)	Kenneth Anderson, Esq...	5	1	6	50	990	38.98	189
Blagdon Hill	J. A. McPherson, Esq., C.E.	8	1	0	550	1128	44.43	...
" (Pumping Station).....	" " " "	8	0	8	112	1047	41.23	185
" (Coombe Lodge).....	" " " "	8	1	0	388	1116	43.95	...
Ubley (Pixey Hole)	" " " "	8	1	0	300	950	37.38	...
Nempnett (West Town)	" " " "	8	1	0	263	1010	39.78	...
Burrington (Burrington Link)...	" " " "	8	1	0	335	1057	41.63	...
D " (Langford).....	Miss M. B. Smith	5	1	8	40	1006	39.62	193
D " (" Hylsbroke)	P. T. Marshall, Esq.	5	0	5	75	990	38.98	192
D† Weston-spr.-Mare (Leycroft Ho.)	C. Brown, Esq.	8	1	0	15	836	32.91	173
D† " " " (Kewstoke) ...	W. H. Allen, Esq.....	5	1	2	30	863	33.97	173
" " " "	H. Ruddle, Esq.....	5	1	0	40	931	36.64	...
Butcombe (Cholwell).....	J. A. McPherson, Esq., C.E.	8	1	0	370	1053	41.47	...
D Wrington (The Cottage)	H. C. Bristowe, Esq., M.D.	5	6	0	100	921	36.27	184
D " (The Rectory)	Rev. G. M. Ashdown. ...	5	5	0	68	1002	39.43	184
Yatton (Chelvey)	J. A. McPherson, Esq., C.E.	8	0	8	60	884	34.80	174
D Flax Bourton (Backwell Hill Ho.)	W. Garnett, Esq.	8	1	10	490	1005	39.55	178
" " " (" House)...	<i>Western Daily Press</i>					965	38.00	...
D " " (The Grange)	C. Onslow Master, Esq....	5	1	0	180	967	38.06	152
D† Clevedon W.W. (Old Street)	J. Harger Pye, Esq.	5	1	10	28	888	34.94	180
D† " " (Tickenham Rd.)	" " " "	5	1	6	70	890	35.03	196
D† " (Bowling Green)	Maj. A. B. Trestrail	5	0	11	126	929	36.58	180
Wraxall (Boys' School).....	Ebenezer Brown, Esq....	5	1	2	...	933	36.73	191
" Rectory	Mrs. Vaughan	8	3	0	...	875	34.44	...
3.—PARRETT. 568 sq. mi.								
D Crewkerne (The Reservoir)	E. H. Munford, Esq.....	8	1	0	426	1136	44.71	188
D " (Bincombe House) ...	Miss Sparks	5	1	2	294	1174	46.22	200
D " (Merefield House) ...	J. Tompsett, Esq.	8	1	1	231	1222	48.09	187
Coker Court Gardens	Mr. T. H. Gilham	8	1	0	250	1086	42.76	167
D West Coker	G. F. Deedes, Esq.....	5	1	6	265	984	38.72	186
D " "	Arthur Scratton, Esq....	5	1	6	230	1075	42.31	179
D Ilminster (Laurel Bank)	W. Beckwith, Esq.	5	1	0	180	1103	43.41	203
D " (Whitelackington Ho.)	S. Creed, Esq.	5	3	0	200	1115	43.88	193
D " (Dillington Park)...(R)	Mr. W. Goldthorpe	8	2	0	161	1169	46.03	182
Montacute (Odcombe Rectory)...	Rev. H. A. Boys	5	1	0	379	1103	43.41	...
D Yeovil (Gas Works)	E. Howell, Esq.	5	22	0	122	898	35.36	192
D " (Pen Mill Sew. Works)...	Dr. A. E. Remmett Weaver	5	1	0	102	1015	39.96	225

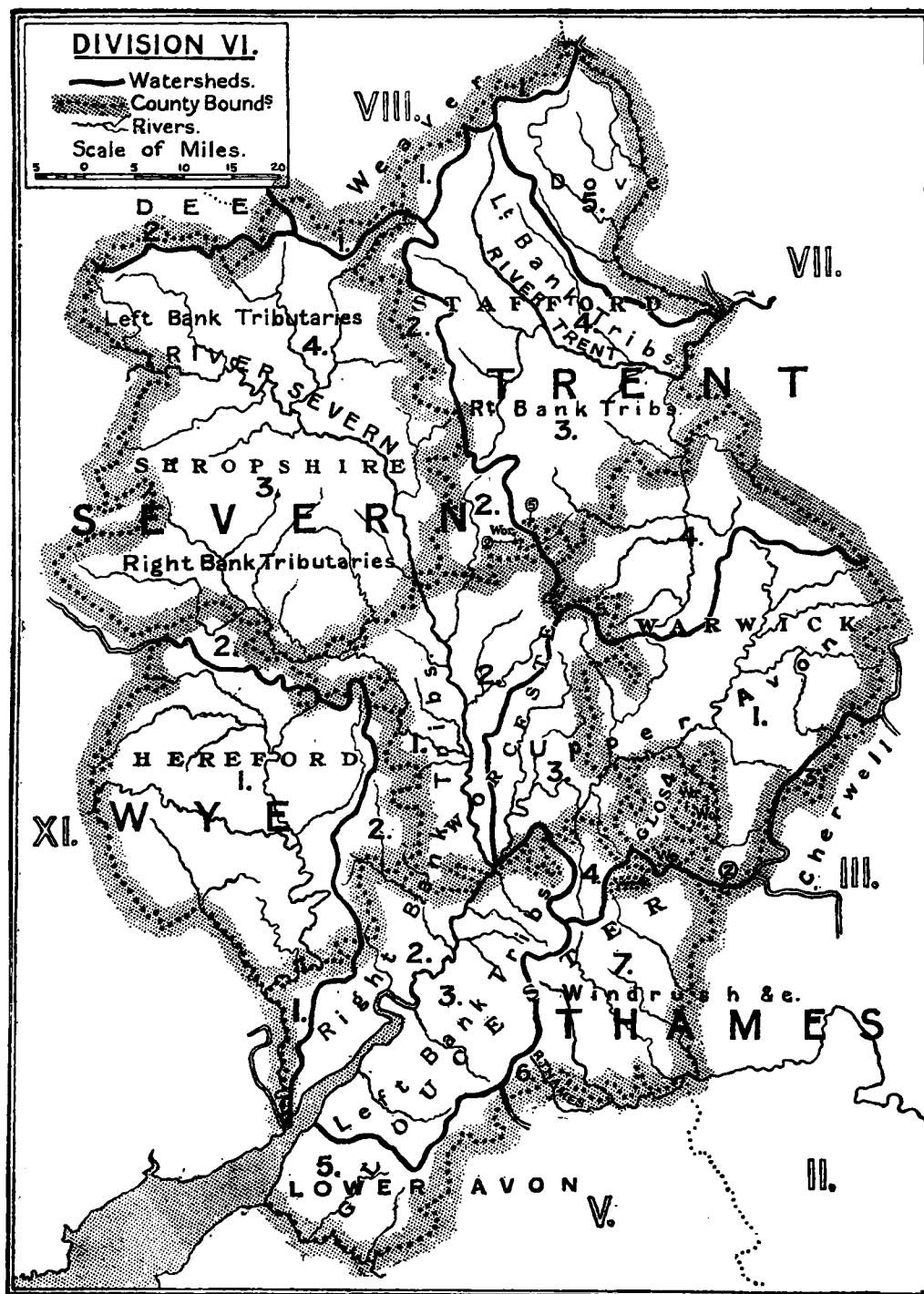
DIVISION V.—SOUTH WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more
		Diam.	Height Above		1914			
			Ground	Sea Level				
		in.	ft.	in.	feet.	mm.	inches.	
SOMERSETSHIRE—(con.)								
3.—PARRETT—(con.)								
D South Petherton (Yeabridge) ...	Miss D. F. Blake	8	0	9	100	927	36·48	199
D Wellington (Old Way House) ...	T. Fox, Esq.	5	1	1	300	1085	42·70	214
D Stoke-under-Ham	Miss Gillett	8	1	0	80	1028	40·48	190
D Tintinhull (Manor House)	Rev. Dr. S. J. M. Price...	5	0	10	145	980	38·59	180
D Angersleigh (Blagdon Reservoir)	H. T. Coles, Esq.	8	1	6	590	1172	46·16	167
D „ (Leigh Hill Reservoir)	„ „ „	8	1	6	525	1143	44·99	167
D „ („ Court)	A. Eastwood, Esq.	8	1	0	360	1106	43·54	204
D Langford Budville (Ritherdens)	Miss Rodd	5	0	10	380	1078	42·43	196
D „ „ (Bindon) ...	Major T. G. C. Reynolds...	5	6	0	406	1076	42·36	192
D Milverton (Spring Grove)	C. Roberts Gawen, Esq.	5	0	8	500	1176	46·31	212
† Taunton (Linden Grove)	H. Le B. Gunner, Esq.	5	1	0	70	919	36·18	...
D „	Dr. H. J. Alford	5	1	0	70	1010	39·78	189
D Wiveliscombe (Culverhead)	T. R. Marsh, Esq.	5	1	0	450	1267	49·87	191
D Langport (The Grange)	Dr. H. Markant Page	5	1	0	50	931	36·64	216
D „ (Huish Episcopi)	Miss A. M. Kelway	8	1	1	30	880	34·64	188
D Milverton (The Mount, Halse) ...	Miss S. C. Smith	5	1	2	254	1022	40·25	221
D Wincanton (Maperton Ho. Gdns.)	Mr. L. G. Read	5	1	3	...	1105	43·50	227
D North Cadbury Rectory	Rev. H. A. Boys	8	1	3	256	979	38·56	207
D Somerton (Kingweston)	Rev. G. de Y. Aldridge...	5	2	6	200	1034	40·69	206
Cothelstone House	C. E. J. Esdaile, Esq.	5	1	0	430	1096	43·15	205
D North Petherton (Shovell)	A. M. Wilson, Esq.	8	1	0	206	880	34·63	191
D „ „ (The Old Rectory)	E. Constable Curtis, Esq.	8	0	6	136	974	38·36	181
D Bridgwater (Fore Street)	J. T. Rainforth, Esq.	5	1	3	41	877	34·52	177
D „ (Nurseries)	Mr. H. Corder	5	0	6	30	861	33·88	200
D „ (Blake Gardens) ...	F. Parr, Esq., C.E.	5	3	1	27	870	34·26	183
D „ (Ashford)	„ „ „	5	1	5	102	1030	40·54	195
D „ (Northfield)	H. C. Salmon, Esq.	5	4	10	50	890	35·04	193
D Fiddington (Keenthorne)	T. W. Cuffe, Esq.	5	1	0	220	1023	40·28	179
D Cannington (Brymore)	H. H. P. Bouverie, Esq.	5	1	6	65	951	37·44	191
4.—NORTH COAST STREAMS. 158 sq. mi.								
Williton (Aller Farm)	T. Hosegood, Esq.	5	2	6	175	1048	41·24	183
D „ (Capton)	Rev. H. H. Tripp	5	1	0	300	1034	40·70	176
Holford (Dythe School)	J. E. Overend, Esq.	5	1	0	260	1035	40·75	177
D Quantockshead (St. Audries) ...	Mr. F. S. Hayne	8	1	0	260	953	37·53	169
D† Minehead (Mariansleigh)	T. F. Twist, Esq.	5	1	0	45	1089	42·86	192
D† „ (Clanville)	Sir R. Shafto Adair, Bt. ...	5	1	0	105	1036	40·79	182
Porlock (Lynch Mead, Allerford)	J. Dyke Acland, Esq.	5	1	3	100	1139	44·83	206
5.—EXE. 122 sq. mi.								
D Dulverton (Exebridge Fishery) ..	T. F. Tracy, Esq.	5	1	0	410	1350	53·15	191
D Brushford Rectory	Rev. B. J. du Boe	5	1	0	450	1296	51·03	197
D „ Nurseries	Mr. G. Ruff	5	1	2	400	1347	53·04	212
D Hawkrigde (Liscombe)	Mr. E. W. Darby	5	3	6	980	1666	65·59	235
D Winsford School	W. Dicker, Esq.	5	1	2	685	1642	64·65	193
D Cutcombe (Wheddon Cross)	H. H. P. Bouverie, Esq. ...	5	1	2	945	1532	60·32	202
Exford (North Ley)	F. G. Heal, Esq.	5	5	0	1000	1676	65·97	...
D Simonsbath	Rev. H. F. Ramsay	5	1	3	1080	1972	77·63	224
6.—AXE. 42 sq. mi.								
D Chard Vicarage	Rev. Preb. Walter Farrer	5	1	0	380	1388	54·66	206

DIVISION V.—SOUTH WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with ·01 in. or more	
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
SOMERSETSHIRE—(con.)								
6.—AXE—(con.)								
D Cricket St. Thomas (Cricket Ho.)	Mr. H. M. Harvey.....	5	1	0	444	1307	51·45	201
D Otterhead	W. Black, Esq. ....	...	...	...	...	1318	51·88	192
7.—STOUR. 35 sq. mi.								
D Henstridge (Inwood Ho. Gardens)	Mr. W. Hester	5	1	0	350	989	38·93	185
D Temple Combe Rectory	Rev. J. C. Fox	5	0	6	215	1069	42·08	204
D " " (Cheriton House).	Rev. H. A. Boys .....	...	...	...	...	1014	39·94	184
D Horsington (Home Farm).....	F. R. Wadman, Esq.....	5	0	9	220	988	38·89	204
D Wincanton (Roundhill Grange)..	General C. H. P. Ducat...	5	1	9	380	1025	40·37	192
D Pen Selwood Rectory.....	Rev. Newton Parsons....	5	0	10	680	1058	41·66	163

MAP OF DIVISION VI.
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 WEST MIDLAND COUNTIES,
 Showing the River-Divisions.



DIVISION VI.—WEST MIDLAND COUNTIES.

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with "01 in. or more
		Diam.	Height Above		Sea Level	1914		
			Ground	feet.		mm.	inches.	
GLOUCESTERSHIRE. (Area, 1243 sq. mi.)		in.	ft.	in.	feet.	mm.	inches.	
1.—WYE. 50 sq. mi.								
D Castleford [Chepstow]	Mrs. W. R. Lysaght	5	0	8	146	1008	39·70	191
D Pen Moel ["]	W. R. Price, Esq.	5	1	0	240	1055	41·54	187
D Forest of Dean (Mailscoth Lodge)	Frank Johnson, Esq.	8	1	0	630	939	36·97	180
D " " (Ruardean Hill Lo.)	C. O. Hanson, Esq.	8	1	0	932	961	37·83	164
D Lydbrook	G. S. Damsell, Esq.	5	1	0	95	901	35·48	198
2.—SEVERN—Right Bank Tributaries. 176 sq. mi.								
Sedbury Park [Chepstow]	Col. P. S. Marling, V.C., C.B.	8	1	0	175	962	37·86	...
D Lydney (Clanna)	Captain W. B. Marling ..	5	1	0	260	1058	41·64	186
D Forest of Dean (Whitemead Park)	C. O. Hanson, Esq.	8	1	0	200	992	39·06	161
D " " " (Blakeney Hill Lo.)	" " "	8	1	0	500	870	34·27	172
D " " " (Worcester Lodge)	" " "	8	0	11	712	871	34·30	152
D " " " (Edgehills Lodge)	" " "	8	1	0	914	869	34·21	155
D Westbury-on-Severn (Chaxhill)	Mrs. Grant	5	3	0	122	888	34·94	189
Mitcheldean (Blaisdon)	Colin MacIver, Esq.	5	1	0	117	872	34·35	...
Tibberton Court	W. R. Price, Esq.	5	1	0	109	818	32·21	156
D Tewkesbury (Forthampton Court)	Mr. H. French	5	1	0	48	682	26·84	157
D " (Upper Lode)	E. J. Bradley, Esq.	5	1	0	41	650	25·59	176
D Bromsberrow Pumping Station	W. Osborne Thorp, Esq. C.E.	5	1	0	181	663	26·12	169
3.—SEVERN—Left Bank Tributaries. 372 sq. mi.								
D Wickwar	F. G. Ansell, Esq.	5	1	0	260	839	33·04	154
D Thornbury (Thornbury House)	Rev. H. H. Gillett	5	2	1	125	1004	39·51	160
Tortworth Court	The Earl of Ducie	8	1	0	264	882	34·73	186
" School	E. A. Smith, Esq.	5	2	0	264	890	35·03	186
" (Marsten)	G. W. Blanchard, Esq.	5	0	9	264	884	34·82	172
Dursley (Woodmancote)	E. Fryer Smith, Esq.	5	1	0	257	881	34·68	159
Avening House	late Maj. Hon. L. Byng ..	8	1	3	350	887	34·91	167
Berkeley Castle Gardens	Mr. S. Wathen	5	1	6	62	922	36·30	...
D " (Sharpness Docks)	F. A. Jones, Esq., C.E.	5	3	6	50	834	32·82	182
D Nailsworth (Dunkirk Manor)	Miss M. C. Meade-King ..	5	1	3	400	940	37·02	185
D Minchinhampton (Camp Field)	Piers F. Legh, Esq.	5	1	6	650	892	35·13	172
Chalford (Hyde Grange)	C. J. Bowstead, Esq.	5	2	6	527	903	35·54	...
D Stroud (Stanley Park)	Sir W. H. Marling, Bart.	8	1	0	365	902	35·50	176
D " (Upfield)	Miss E. R. Stanton	5	1	0	226	803	31·60	190
D Stonehouse (Wycliffe College)	W. A. Sibby, Esq.	5	1	0	130	792	31·18	178
" (Parklands) No. 1 (R)	W. Grey Robinson, Esq.	8	2	6	103	788	31·04	178
" " " No. 2	" " "	5	2	6	103	781	30·74	176
Stroud (Park Farm, Lypiatt)	E. Armitage, Esq.	5	0	11	720	905	35·62	...
D Whitminster (Junction Lane)	F. A. Jones, Esq., C.E.	5	1	0	32	860	33·85	188
Haresfield Court	R. I. Tidswell, Esq.	5	1	0	100	920	36·23	202
D Harescombe Grange	Stamford Hutton, Esq.	5	1	0	545	800	31·49	197
D Brookthorpe (Chambers Farm)	Mr. H. C. Prinsep	8	1	0	157	745	29·32	186
Quedgeley House	Col. T. Curtis Hayward ..	5	1	0	65	794	31·26	157
D Witcombe Reservoir	R. Read, Esq., C.E.	8	3	0	297	803	31·63	168
Gloucester (Denmark Road)	Harley Butt, Esq.	5	1	5	79	688	27·09	...
D " (Barnwood Vicarage)	Rev. F. H. Fowler	5	1	0	80	792	31·16	193
D " (Llanthony Lock)	E. J. Bradley, Esq.	5	1	2	39	711	27·99	190
D " (Wotton Asylum)	Dr. E. F. Kough	8	0	9	93	743	29·24	170
D " (Maisemore Lock)	E. J. Bradley, Esq.	5	1	1	39	704	27·70	189
D Churchdown (Barrow Hill)	Mrs. J. H. Jones	5	1	0	225	733	28·85	188

DIVISION VI.—WEST MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ≥ 0.1 in. or more
		Diam.	Height Above			1914		
			Ground.	Sea Level				
		in.	ft.	in.	feet.	mm.	inches.	
GLOUCESTERSHIRE—(con.)								
3.—SEVERN—Left Bank Tributaries—(con.)								
D Dowdeswell Reservoir	J. S. Pickering, Esq., C.E.	5	1	3	357	896	35.27	171
Cheltenham (Thirlestane Hall (R))	J. Player, Esq.	8	2	6	240	726	28.58	182
D† Charlton Kings (The Grange)	Miss E. M. Heberden	5	0	9	300	832	32.75	189
D Cheltenham (Hewletts Reservoir)	J. S. Pickering, Esq., C.E.	8	1	6	419	751	29.56	183
D† „ (Sandford Mead)	„ „ „	5	2	6	210	753	29.66	175
† „ (Kemerton Lodge)	Rev. Percy Burd	5	1	0	211	715	28.14	200
† „ (Elmfield)	Major F. Fawkes	5	1	2	220	703	27.67	176
D „ (Oxford Lawn)	Miss G. Jones	5	1	4	230	710	27.97	191
D „ (Prestbury)	J. W. Guy, Esq.	5	0	10	258	778	30.63	202
D „ (Brookville, Swindon)	J. C. M. Stanton, Esq.	8	1	2	137	698	27.46	195
D Tewkesbury Pumping Station	J. S. Pickering, Esq.	5	0	9	47	602	23.70	188
Beckford Hall	Capt. A. H. Case <i>per</i> M.O.	...	...	...	130	633	24.91	...
4.—SEVERN—Upper Avon. 99 sq. mi.								
D Winchcombe	Dr. J. Halliwell	5	1	2	295	810	31.91	203
Wormington Grange (R)	late R. E. S. Thomas, Esq.	8	2	0	200	738	29.06	...
Chipping Campden	W. Godson, Esq.	5	0	8	493	678	26.70	...
D† „ „ (Hidcote)	Major W. Wright	5	1	0	525	673	26.50	168
D† Mickleton (Bank House)	M. J. Salter, Esq.	5	1	0	233	641	25.23	187
5.—LOWER AVON & C. 198 sq. mi.								
D Monkswood Reservoir [Bath]	J. Dent Young Esq., C.E.	5	2	0	365	830	32.67	189
D Bristol Docks (Underfall Yard)	Engineer, Bristol Docks	8	19	6	45	811	31.92	191
„ (Telephone Avenue)	J. A. McPherson, Esq., C.E.	5	50	0	80	909	35.77	187
Clifton (Oakfield Road)	„ „ „	5	1	0	200	925	36.41	179
D „ (Harley Place)	Miss Hooper	5	1	5	260	987	38.86	199
D „ (Pembroke Road)	late R. F. Sturge, Esq.	8	0	10	215	1006	39.60	205
D „ College	D. Rintoul, Esq.	8	1	2	230	1007	39.63	186
D „ (Stoke Bishop)	H. L. P. Lowe, Esq.	8	1	3	230	973	38.29	206
D Stapleton (Milton Cottage)	R. C. Sikes, Esq., C.E.	5	1	0	114	864	34.00	188
D Horfield (Gloucester Road)	F. H. Robbins, Esq.	8	1	6	310	980	38.59	186
Westbury-on-Trym (Cote House)	Mrs. H. St. V. Ames	8	1	3	243	916	36.07	171
D Filton	F. W. Gayner, Esq.	5	2	0	202	794	31.28	176
D Winterbourne (Kendleshire)	J. Marsh, Esq.	5	1	0	170	811	31.94	173
D „ Down (Elm Croft)	Hugh T. Coles, Esq.	5	1	0	250	859	33.83	196
D Frampton Cotterell (Park House)	H. H. Harding, Esq.	5	1	0	158	828	32.60	185
D Chipping Sodbury (The Ridge)	Lt.-Col. P. Burges	5	1	4	375	813	32.01	188
Almondsbury (Over Court, Field)	R. C. C. Lippincott, Esq.	5	1	0	260	842	33.16	...
D „ „ „ „ Park	„ „ „	5	1	0	147	907	35.72	184
D „ „ „ „ „ M	„ „ „	5	1	0	240	898	35.34	...
D „ „ „ „ „ Garden	„ „ „	8	1	0	137	899	35.41	184
Badminton Gardens	Mr. J. Pearce	5	1	0	407	991	39.00	186
6.—THAMES—Right Bank Tributaries. 15 sq. mi.								
7.—THAMES—Windrush & c. 333 sq. mi.								
D Fairford (Dunfield, Kempsford)	A. T. Iles, Esq.	5	0	8	260	754	29.68	195
D „ (The Close)	W. Cobbett Arkell, Esq.	5	1	9	...	785	30.90	163
D „ (Draycott)	C. W. Edmonds, Esq.	5	2	0	200	821	32.32	175
D Lechlade (St. John's Lock)	R. A. Swarbrick, Esq.	5	3	2	239	666	26.23	169
D „ (Claydon House)	T. T. S. Metcalfe, Esq.	5	1	0	250	757	29.81	190
D „ (Southrop)	Thomas Arkell, Esq.	...	1	0	...	742	29.23	...
† Cirencester (Roy. Agricult. Coll.)	late Prof M Kershaw <i>per</i> MO	5	0	10	443	836	32.91	182

DIVISION VI.—WEST MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with '01 in. or more
		Diam.	Height Above Ground		SeaLevel	1914		
		in.	ft.	in.	feet.	mm.	inches.	
GLOUCESTERSHIRE—(con.)								
7.—THAMES—Windrush & c—(con.)								
† Cirencester (Waterloo)	W. Griffith, Esq.	5	1	0	350	861	33·88	..
D† „ (Cripps Mead).....	Mrs. Wilfred Cripps	5	0	8	366	851	33·51	186
D† „ (Dollarward House) ..	C. P. Hooker, Esq.	5	1	6	366	884	34·80	188
D† „ („ „ „) ..	„ „ „ „ „ „ „ „ „	8	1	6	366	873	34·36	188
D Fairford (Hatherop Castle)	Mrs. Bazley	5	1	0	410	876	34·49	176
D Great Barrington	H. J. Barrett, Esq.	5	1	6	430	824	32·43	174
D Northleach (Sherborne House) ...	Mr. A. Mitchell.....	5	1	0	420	907	35·72	170
D „ (The Vicarage)	Rev. R. C. S. Jones	5	0	9	545	834	32·85	181
D „ (Leygore Manor).....	Arthur E. Moss, Esq.....	5	1	0	650	815	32·07	207
D Bourton-on-the-Water(Eastfield)	E. W. Kendall, Esq.....	5	1	6	434	849	33·43	171
D „ „ „ (Chardwar)	G. F. Moore, Esq.	5	2	6	430	864	34·01	203
D „ „ „ „ Rectory ...	Rev. W. E. White	5	0	10	433	862	33·92	171
D Wyck Rissington Rectory	Rev. P. H. Kempthorne...	5	1	0	500	859	33·81	188
Stow-on-the-Wold (Icomb Place)	G H SimpsonHaywardEsq	8	1	3	500	834	32·82	184
D „ „ „ (Quar Wood) ...	Mrs. Bryant	5	1	0	690	840	33·06	189
D „ „ „ (Maugersbury)...	D. W. Horner, Esq.	5	1	0	590	808	31·81	193
D „ „ „ (DuncombHouse)	R. I. Arkell, Esq.	5	0	9	700	740	29·15	...
Temple Guiting	Major G. T. Noel	5	1	2	665	882	34·74	...
HEREFORDSHIRE. (Area, 840 sq. mi.)								
1.—WYE. 685 sq. mi.								
D† Walford-on-Wye Vicarage	Rev. Kentish Bache	5	3	0	112	836	32·90	192
D Weston-under-Penyard	Dr. G. W. Prevost	5	0	6	290	754	29·68	163
Ross (Chasedale Observatory) ...	F. J. Parsons, Esq.	5	1	0	202	750	29·52	169
D† „ (The Graig)	H. Southall, Esq.	5	1	0	213	794	31·27	171
D Kentchurch Rectory	Rev. R. P. Dansey.....	5	1	0	215	901	35·48	191
† Ross (Perrystone Court)	General Clive	5	1	3	450	627	24·67	175
† Much Dewchurch (Bryngwyn)...	late Sir J. Rankin, Bt., M.P.	5	0	9	416	835	32·86	...
Brockhampton Court	Capt. A. W. Foster	8	4	0	...	810	31·90	...
D Fownhope (Lower House).....	Miss F. Cresswell	5	1	5	200	738	29·05	177
D Woolhope (The Hyde)	J. A. Thompson, Esq.....	5	1	0	440	689	27·12	180
Vowchurch (Whitehouse).....	Arthur S. Wood, Esq.....	5	5	0	450	1003	39·48	184
D Bullingham Manor	M. G. Hewins, Esq.	5	1	0	166	676	26·63	181
D† Hereford (St. Michael's Priory) ..	Rev. E. C. Williams, o.s.B.	8	1	0	291	691	27·19	180
D „ (Breinton Court)	H. A. Wadworth, Esq....	5	3	0	238	625	24·62	168
D† „ (Richmond Place).....	W. Cooke, Esq.	8	0	8	184	666	26·24	178
D „ (Broomy Hill).....	W. R. Bufton, Esq.	5	1	0	200	641	25·23	169
D „ (Quarry House).....	late Rev. Preb. W. Selwyn	5	1	0	180	691	27·22	177
D† „ (Broadlands)	Miss Ida M. Lea.....	5	1	0	280	661	26·04	170
† „ (Hinton Court)	A. Battiscombe, Esq.....	5	1	0	185	720	28·33	175
D† „ (Holmer Hall)	Rev. Preb. M. Hopton....	8	1	3	241	644	25·36	189
D Credenhill (Stretton Sugwas) ...	S. H. Armitage, Esq.....	5	1	0	226	695	27·35	171
D† „	F. E. Whiting, Esq.	5	1	5	275	736	28·99	182
† Yarkhill Vicarage.....	Rev. A. G. Jones	8	1	0	200	622	24·50	176
D† Burghill Court	Miss E. D. Woodhouse...	5	1	2	293	652	25·66	181
D† Ocle Pychard (Ocle Court) ..	G. Cresswell, Esq.	8	1	2	298	710	27·97	192
D Marden (Fruit Farm)	M. Piper, Esq.	8	0	9	270	636	25·05	158
D Whitney-on-Wye	Mr. W. Burgess	8	1	0	428	969	38·15	196
D Brilley Vicarage	Rev. W. Head	5	1	0	590	948	37·31	210

DIVISION VI.—WEST MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ≥ 0.1 in. or more
		Diam.	Height Above		1914			
			Ground	Sea Level				
		in.	ft.	in.	feet.	mm.	inches	
HEREFORDSHIRE—(con.)								
1.—WYE—(con.)								
† Sarnesfield Rectory	Rev. W. Marshall	5	0	11	400	728	28.64	171
D Almeley	B. G. Ronalds, Esq.	5	1	0	396	772	30.38	187
D Weobley School	A. J. Dean, Esq.	5	1	0	320	769	30.28	177
D† Bodenham (Pigeon House)	R. C. Bailey, Esq.	5	1	0	215	658	25.89	184
† Pencombe Rectory.....	Rev. J. Seymour St. John	5	1	0	520	734	28.88	184
D Huntington Court.....	E. Radclyffe Crump, Esq....	5	1	1	833	1072	42.19	227
D† Pembridge (Dilwyn).....	Dr. T. Lambert Hall.....	5	0	8	290	739	29.10	184
† „ (Burton Court)	Col. P. L. Clowes	5	1	0	400	832	32.74	164
D Bromyard (Dumbleton Cottage) ..	T. V. Philpott, Esq.	5	1	0	393	712	28.05	173
„ (The Royal Oak, Norton) ..	C. Day, Esq.	5	1	0	630	710	27.97	...
D† „ (Rowden Abbey).....	H. J. Bailey, Esq.	5	1	0	450	755	29.71	183
D† „ (Buckenhill).....	Mrs. Phipps	8	1	6	410	722	28.44	157
D† Kington (Lynhales) ..	S. Robinson, Esq.	5	1	0	566	935	36.82	192
D† „ (Gravel Hill)	Col. G. F. Pearson.....	5	0	8	535	921	36.25	226
D† Pembridge (Marston)	H. Langston, Esq.	5	1	5	347	833	32.80	193
D „ (Byletts)	Gen. Sir E. Wood, K.C.B.	5	1	5	350	802	31.56	179
D Kimbolton (Grantsfield)	Mrs. Hutchinson	5	1	0	424	771	30.37	188
D Eyton (The Old Hall)	R. M. Thornely, Esq.	5	1	0	300	663	26.11	152
2.—SEVERN—Right Bank Tributaries. 155 sq. mi.								
D Much Marcle (The Mount)	Miss A. M. Charles	5	0	8	240	650	25.57	160
D† Ledbury (Orchardleigh)	Miles A. Wood, Esq.	5	3	6	180	652	25.69	167
D† „ (Underdown)	S. H. Bickham, Esq.	5	1	0	307	681	26.81	178
† „ („)	M. „ „ „	5	1	0	306	658	25.91	...
„ (Putley Court)	J. Riley, Esq.	5	1	0	290	758	29.85	179
D „ (Wellington Heath Vic.) ..	Rev. F. S. Stooke-Vaughan	5	1	2	505	765	30.11	189
D Old Colwall	T. W. Binyon, Esq.	5	0	6	450	724	28.50	189
† Whitbourne Court.....	late Dow. Lady Harington	5	1	0	130	694	27.32	...
D Leintwardine	E. Charnock, Esq.	5	1	6	430	918	36.16	197
SHROPSHIRE. (Area, 1343 sq. mi.)								
1.—MERSEY—Weaver. 27 sq. mi.								
2.—DEE. 30 sq. mi.								
D Whitchurch (Fenns Bank)	M. W. Sowden, Esq., C.E.	8	1	0	271	784	30.87	204
Sodylt Hall	W. H. Horsfall, Esq.	5	1	0	267	855	33.65	162
3.—SEVERN—Right Bank Tributaries. 722 sq. mi.								
D Ludlow (Ashford House)	W. Downes Hall, Esq.	5	0	5	315	899	35.38	224
D Bromfield (Oakley Park)	Mr. J. R. Francis	5	1	0	300	826	32.53	202
D „ (Warwick House) ..	F. Brayshaw, Esq.	5	1	0	320	822	32.36	205
D Bitterley (Clee Hill Quarry) ..	Messrs. Field & Mackay... ..	8	1	0	1510	776	30.57	187
D „ Rectory.....	Rev. Preb. J. R. Burton... ..	5	1	3	509	808	31.80	221
D Craven Arms (Stokesay Court)...	Mr. F. J. Powell	5	0	9	432	783	30.81	151
D Clun (Trinity Hospital)	Rev. H. J. Scott.....	5	1	0	665	1020	40.14	188
D Wistanstow Rectory	Rev. W. M. D. La Touche	5	1	0	480	792	31.18	208
Lydbury North (The Lodge) ..	Richard Parry, Esq.	5	1	0	662	861	33.91	166
Bishops Castle (Totterton)	W. H. Whitaker, Esq.	5	1	0	700	791	31.13	...
D „ „ (Castle Street) ..	E. Griffiths, Esq.	5	2	0	720	844	33.22	187
D „ „ Vicarage	Rev. C. E. Warner	5	1	6	596	909	35.78	218
D „ „ (More Rectory) ..	Rev. Ridley Relton	6	0	11	600	896	35.27	...
D Church Stretton (Sewage Works)	E. J. Marsh, Esq.	5	1	0	582	894	35.18	202

DIVISION VI.—WEST MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0·1 in. or more	
		Diam.	Height Above			1914			
			Ground.	SeaLevel					
		in.	ft.	in.	feet.	mm.	inches.		
SHROPSHIRE—(con.)									
3.—SEVERN—Right Bank Tributaries—(con.)									
D	Bridgnorth (Cantreyn)	W. Bayliss, Esq.	5	3	0	290	730	28·76	182
D	„ („)	„ „ „ „	5	0	3	287	765	30·12	182
D	„ (Aldenham Park)	Mr. T. Canning.....	5	3	9	430	757	29·82	171
D	Church Preen (Preen Manor) ...	Mr. J. Hopkins	5	1	0	700	832	32·74	178
D	Church Stretton (Wolstaston) ...	Mrs. E. D. Carr	5	1	5	800	886	34·90	183
D	Much Wenlock (Willey Park)...	Lord Forester.....	5	3	0	492	769	30·27	184
	Dorrington (Netley Hall)	Miss Hope-Edwardes....	5	1	7	351	815	32·07	207
D	Minsterley (Wallop)	Mrs. Severne	8	1	8	700	1096	43·13	199
†	Shrewsbury (Ordnance Surv.Off.)	Capt. C. S. Reid per M.O.	8	1	0	191	670	26·36	160
D†	„ (The Abbey House)	Miss F. H. Rouse Boughton	8	1	3	171	739	29·08	170
D	„ (Highfield).....	T. M. Howells, Esq.	5	4	6	250	719	28·29	171
4.—SEVERN—Left Bank Tributaries. 564 sq. mi.									
	Bridgnorth (Coton Hall)	Lt.-Col. E. M. Wakeman	5	1	6	460	810	31·89	161
D	Worfield (School House)	Frank Turner, Esq.	5	1	0	200	672	26·47	186
D	Shifnal (Hatton Grange)	Mr. G. Risebrow	5	4	4	262	762	30·00	212
D	„ (National Schools)	F. W. Haswell, Esq.....	5	1	1	279	773	30·43	196
D	„ (Haughton Hall)	W. J. Brooke, Esq.....	5	3	0	320	728	28·65	175
D	Shrewsbury (Roden)	J. W. Nowell, Esq.	8	1	3	208	702	27·65	165
D	„ (Fitz Rectory)	Rev. W. Brewster... ..	5	1	2	238	715	28·16	181
	„ („ Manor).....	Major J. F. Ll. Horner..	5	1	4	253	686	26·99	181
D	Newport (Aston Hall)	Col. R. Leeke.....	5	1	4	280	719	28·30	194
D	„ (Agricultural College)..	P. Hedworth Foulkes, Esq.	5	1	0	220	643	25·32	181
D	„ (Edgmond).....	J. Bodenham, Esq.	8	1	0	261	696	27·41	209
	„ { „ }.....weekly	„ „ „ „	5	1	0	261	698	27·50	...
D	„ { Chetwynd Park)	Mrs. Burton Borough....	5	1	0	240	730	28·72	196
D	„ { „ Gardens)....	Mr. N. Sherwood	5	1	0	250	727	28·63	197
D	Cheswardine (Knighton Res.) ...	G. R. Jebb, Esq., C.E....	5	1	0	351	882	34·73	185
D	Oswestry (The Mount Reservoir)	G. W. Lacey, Esq., C.E...	5	1	0	698	957	37·68	217
	Ellesmere	G. R. Jebb, Esq., C.E. ...	8	1	0	308	828	32·60	...
D	„ (The Grange)	Mrs. Ashton	5	0	10	340	802	31·57	177
STAFFORDSHIRE. (Area, 1165 sq. mi.)									
1.—MERSEY—Weaver. 50 sq. mi.									
	Betley Hall.....	Graham C. Lawson, Esq.	5	0	8	270	825	32·48	182
2.—SEVERN—Left Bank Tributaries. 160 sq. mi.									
D	Dudley (Shavers End)	H. A. Hill, Esq., C.E....	5	1	0	744	768	30·23	186
D	Wombourne (The Bratch)	Baldwin Latham, Esq.C.E.	5	0	9	271	689	27·11	183
†	Wolverhampton (Town Hall) ...	G. Green, Esq., C.E.....	5	15	6	481	724	28·52	183
†	„ (West Park) ...	„ „ „ „	5	1	4	432	728	28·65	186
D	Patshull Park.....	The Earl of Dartmouth...	8	1	3	273	699	27·51	175
D	Weston Park [Shifnal].....	Julius White, Esq.	5	1	6	400	763	30·05	200
D	Norbury Junction	G. R. Jebb, Esq., C.E....	8	1	0	332	776	30·57	178
	Loynton Hall.....	Col. S. T. H. Burne	5	0	10	390	727	28·63	...
D	Market Drayton (Old Springs)...	F. E. Harding, Esq.	5	1	0	423	886	34·89	195
	Maer Hall Gardens	late F. J. Harrison, Esq...	8	1	6	390	966	38·04	171
3.—TRENT—Right Bank Tributaries. 512 sq. mi.									
D	West Bromwich	A. D. Greatorex, Esq., C.E.	8	1	7	546	714	28·13	189
D	Wednesbury (Ocker Hill).....	A. W. Willet, Esq., C.E.	5	0	8	474	671	26·43	186

STATIONS.	AUTHORITIES.	Rain Gauge.		Depth of Rain.		Days with '01 in. or more
		Diam.	Height Above Ground Sea Level	1914		
		in.	ft. in.	feet.	mm.	inches.
STAFFORDSHIRE—(con.)						
3.—TRENT—Right Bank Tributaries—(con.)						
Walsall (Brockhurst Sew. Farm)	J. Taylor, Esq.	8	0 11	376	738	29.04 201
„ (Wednesbury Sewage Wks.)	T. Wicks, Esq.	5	2 8	381	689	27.14 182
Bilston (The Lunt Outfall)	Vincent Turner, Esq., C.E.	8	1 0	422	632	24.88 181
Wolverhampton (Coton House)	H. Rudge, Esq.	6	0 4	...	826	32.51 178
„ (Graiseley)	K. C. Berrington, Esq.	6	0 9	506	743	29.24 188
„ (Wrottesley)	Mr. E. Simpson	8	1 0	500	761	29.96 180
Bloxwich (Sneyd Reservoir)	A. W. Willet, Esq., C.E.	5	1 0	507	657	25.88 196
Hammerwich (Cannock Chase Res.)	„	5	1 0	475	718	28.25 208
Brewood (Belvide Reservoir)	G. R. Jebb, Esq., C.E.	5	1 0	367	701	27.61 185
Lichfield (St. John Street)	Dr. F. M. Rowland	5	0 10	269	704	27.70 201
„ (Maple Hayes)	A. O. Worthington, Esq.	5	0 11	380	675	26.58 ...
Penkridge (Rodbaston)	G. E. Ward, Esq.	5	0 9	324	770	30.30 184
Hednesford (Scout House)	H. A. Hill, Esq., C.E.	5	1 0	750	660	25.97 172
Rugeley (Beau Desert)	Marquis of Anglesey	8	1 0	680	773	30.45 197
Milford Waterworks	W. Plant, Esq., C.E.	5	1 0	246	745	29.32 177
Shugborough	The Earl of Lichfield	5	1 0	260	824	32.42 219
Stafford (Rising Brook)	W. Fred. Wright, Esq.	5	1 0	273	688	27.09 190
„ (Corporation Dépôt)	W. Plant, Esq., C.E.	5	1 6	249	735	28.94 176
„ (West Bank, Doxey)	M. Leslie Wilson, Esq.	5	0 6	250	729	28.71 ...
Little Ingestre	Capt. Cecil Gardner	8	1 6	...	742	29.22 180
Ingestre Park	M. H. H. Goddard, Esq.	5	1 8	320	664	26.15 ...
Eccleshall (Walton Hall)	Sir H. A. Wiggin, Bart.	5	1 0	344	848	33.40 192
„ („ „) Weekly g.	„	5	1 3	362	846	33.30 ...
Stone (Meece House)	E. J. W. Wood, Esq.	5	1 6	331	870	34.24 184
Standon (Hatton W.W.)	R. C. Frain, Esq., C.E.	5	1 8	355	900	35.42 203
4.—TRENT—Left Bank Tributaries. 193 sq. mi.						
Burton (Hoar Cross)	F. W. Lycett, Esq.	8	1 0	400	752	29.60 171
„ (Rangemore)	Mr. H. Barson	5	5 6	424	697	27.43 ...
„ (Shobnall)	Messrs. Bass & Co.	5	5 6	156	634	24.97 179
Longton (The Meir)	R. C. Frain, Esq., C.E.	5	1 0	618	835	32.88 183
„ High School	H. O. Smith, Esq.	5	0 8	500	900	35.42 186
5.—TRENT—Dove. 250 sq. mi.						
Utoxeter (Greenfields)	W. Ellaway Smith, Esq.	5	1 0	387	854	33.61 188
Cheadle (The Heath House)	Mr. Rufus Horne	5	0 6	647	958	37.73 182
Oakamoor (Woodbank)	M. A. Bolton, Esq.	5	1 6	550	1026	40.40 202
Mayfield House [Ashbourne]	Graham C. Lawson, Esq.	8	1 0	374	950	37.40 190
„ (Doveside)	Mr. T. Bridge	8	1 0	421	908	35.75 185
Ipstones (Sharpcliffe Hall)	A. S. Boucher, Esq.	5	0 4	925	1043	41.08 ...
Leek (Wall Grange)	R. C. Frain, Esq., C.E.	5	1 0	458	995	39.18 193
„ (Hillesdon)	J. Wilson, Esq.	5	1 0	750	1107	43.57 218
„ (Haregate)	Mr. G. Sweetmore	5	0 9	680	1075	42.34 205
WORCESTERSHIRE. (Area, 717 sq. mi.)						
1.—SEVERN—Right Bank Tributaries. 231 sq. mi.						
Redmarley (Haselden)	Miss F. L. Newbury	5	0 5	280	666	26.23 168
Upton-on-Severn (Willow Bank)	J. Selwyn Cowley, Esq.	5	1 3	42	695	27.37 174
„ „ „ (The Eades)	Major E. W. Tennant	5	0 9	100	707	27.83 187
Hill Croome (Glebe House)	Henry Arkell, Esq.	5	1 0	50	705	27.76 191

DIVISION VI.—WEST MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more
		Diam.	Height Above Ground/Sea Level		1914			
		in.	ft.	in.	feet.	mm.	inches.	
WORCESTERSHIRE—(con.)								
1.—SEVERN—Right Bank Tributaries—(con.)								
D Malvern (British Camp Res.)	W. Osborne Thorp, Esq. C.E.	5	0	11	677	766	30·14	171
D† „ (Church Street)	„ „ „	5	1	0	350	784	30·87	167
D† „ (Belle Vue House)	A. Mander, Esq.	5	4	0	520	789	31·05	183
D „ (High School)	E. W. Harris, Esq.	8	1	0	377	766	30·14	175
D „ (Clarence Road)	S. Bottomley, Esq.	5	1	0	300	744	29·28	...
D „ (Davenham Gardens)	Mr. C. A. Bayford	5	2	0	300	687	27·03	182
D† „ (Hornbold Road)	Rev. T. Wolseley Lewis	5	1	0	492	733	28·85	181
D „ (Madresfield Court)	Mr. W. Crump	8	2	6	125	700	27·55	181
D Knightwick Sanatorium	H. Gordon Smith, Esq.	5	1	0	300	654	25·74	160
D† Worcester (Diglis Lock)	E. J. Bradley, Esq.	5	1	0	49	617	24·29	170
D „ (Bromwich House)	Rev. Manley Power	5	1	3	200	656	25·84	184
D Martley Rectory	Rev. J. F. Hastings	5	1	0	220	685	26·96	178
D Ombersley (Holt Lock)	E. J. Bradley, Esq.	5	1	1	55	592	23·32	151
Clifton-on-Teme	Mrs. H. Tayleur	5	0	10	640	669	26·34	160
D Shelsley Grange	Lady Hughes	5	1	0	270	690	27·16	156
D Tenbury (St. Michael's)	Miss Hewitt	5	0	8	343	793	31·23	181
D „ („ Roseland Cott.)	Frederick Lowe, Esq.	5	1	0	313	771	30·36	186
D „ (Rochford Rectory)	Rev. J. Tomson	5	1	0	317	737	29·02	170
D Stockton-on-Teme (Eardiston)	Miss M. Wallace	5	0	8	200	711	27·99	168
D† Bewdley (Winterdyne)	Miss K. M. Sturt	5	1	0	100	627	24·70	168
2.—SEVERN—Left Bank Tributaries. 194 sq. mi.								
D Kempsey (Draycott House)	Maj. H. Berkeley Hill	5	3	0	55	665	26·19	163
D „ (The Lodge)	Mrs. Isaac	5	0	9	80	648	25·51	175
D† Worcester (Belmont Road)	G. B. Wetherall, Esq.	5	1	1	180	640	25·18	178
D† „ (Water Works)	T. Caink, Esq., C.E.	5	0	9	56	612	24·11	174
D „ (Barbourne)	B. Brotherton, Esq.	5	1	0	92	652	25·68	182
D „ (Hindlip Gardens)	Worcester Daily Times	...	...	...	...	666	26·24	...
D „ (Bever Lock)	E. J. Bradley, Esq.	5	1	1	52	665	26·18	172
D „ (Hawford Lodge)	F. Ames, Esq.	5	1	1	70	733	28·86	...
D Droitwich (Friar Street Dépôt)	H. Hulse, Esq., C.E.	12	2	9	98	654	25·74	193
D Bromsgrove (Tardebigge Res.)	F. A. Jones, Esq. C.E.	5	4	6	455	756	29·78	189
D „ (Burcot)	W. J. Skinner, Esq.	8	1	4	440	870	34·27	212
D Barnt Green (Upwood)	Miss M. Gibbins	5	0	9	650	716	28·18	188
D Stourport (Lincombe Lock)	E. J. Bradley, Esq.	5	1	0	62	696	27·38	159
D† Kidderminster (Brinton Park)	Mr. J. T. Cowderoy	5	1	0	160	611	24·06	183
D „ (Honeybrook Ho.)	Col. R. Talbot Watson	5	0	9	75	720	28·35	...
D Stourbridge	W. Fiddian, Esq.	8	0	11	210	733	28·86	208
D Netherton (Lodge Farm Res.)	A. W. Willet, Esq., C.E.	5	1	0	445	695	27·37	196
D Dudley (Borough Cemetery)	J. Gammage, Esq., C.E.	5	1	3	591	732	28·81	195
3.—SEVERN—Upper Avon. 260 sq. mi.								
D Blockley (Upton Wold)	E. W. Arkell, Esq.	5	1	0	800	866	34·09	188
D Evesham (Bengeworth)	Messrs. Ross Bros., Ltd.	5	1	0	128	641	25·25	185
D† „ (Lansdowne)	R. Burlingham, Esq.	5	5	0	108	627	24·67	174
D „	H. S. Harvey, Esq.	8	3	0	86	647	25·48	185
D „ (Great Hampton)	H. C. Boutflower	5	1	0	150	604	23·79	177
D „ (Port Street)	A. Fowler, Esq.	5	2	0	80	636	25·06	184
D Pershore (The Poplars)	Col. J. F. Miller	5	1	6	104	650	25·61	156
D Shipston (Armscote)	W. L. Stanton, Esq.	5	1	1	241	691	27·19	189
D „ (Talton)	Capt. G. Lainson Field	8	1	0	160	628	24·74	159

DIVISION VI.—WEST MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more
		Diam.	Height Above Ground. SeaLevel			1914		
		in.	ft.	in.	feet.	mm.	inches.	
WORCESTERSHIRE—(con.)								
3.—SEVERN—Upper Avon—(con.)								
Shipston (Cookhill Co. School)...	T. Barber, Esq.	5	1	0	400	692	27·23	182
D Redditch (Hewell Gardens)	Mr. A. A. Pettigrew	5	1	0	469	762	30·02	210
D Alvechurch (Bordesley Hall) ...	A. H. Wiggin, Esq. ....	...	4	0	490	767	30·18	177
D „ (High Croft)	D. B. Grubb, Esq.....	5	1	0	580	780	30·71	183
D „ (Fairfield)	D. McMichael, Esq.	8	0	8	400	778	30·63	170
D Bromsgrove (Lower Bittal Res.)	F. A. Jones, Esq., C.E....	5	3	0	457	762	30·01	178
4.—THAMES—Windrush & c. 10 sq. mi.								
5.—TRENT—Right Bank Tributaries. 22 sq. mi.								
D Halesowen (Frankley)	E. Antony Lees, Esq.....	5	0	10	570	853	33·59	184
WARWICKSHIRE. (Area, 942 sq. mi.)								
1.—SEVERN—Upper Avon. 603 sq. mi.								
Long Compton (Weston Park)...	H. A. Warriner, Esq.....	8	3	0	510	744	29·28	172
Shipston (Honington Vicarage)...	Rev. E. H. Boddington...	5	0	10	215	664	26·14	170
D Bidford (Moor Hall)	E. H. Cubberley, Esq.....	5	1	0	125	643	25·31	188
D Wormleighton Hall	F. W. Burnett, Esq.....	5	4	9	515	675	26·57	172
Stratford-on-Avon (Avonfield) ..	G. W. Everard, Esq.....	5	0	10	120	595	23·42	172
D „ „ „ (K. Edwd. VI. Sch.)	E. T. Hiron, Esq.....	5	1	0	133	582	22·91	173
D „ „ „ (High Street) ...	O. G. Wright, Esq.	8	1	2	134	653	25·72	169
D „ „ „ (Shottery Hall) ..	R. C. Carter, Esq.....	5	0	8	140	644	25·35	169
Alcester (Ragley Hall)	Mr. C. Harding	5	1	0	270	709	27·92	...
D Ashorne	Mr. G. T. Osborn	5	1	0	160	644	25·36	179
„ „ „ weekly gauge	„ „ „	5	1	3	160	649	25·56	...
Snitterfield	Roden Dixon, Esq.....	8	1	6	274	736	28·98	...
D Studley College	Miss E. H. Ekins	5	0	9	235	740	29·12	202
D Radford Semele (Radford House)	C. E. G. Hatherell, Esq....	5	1	2	240	688	27·09	192
D Warwick (Castle Gardens) ...	Mr. H. F. Smale.....	8	1	2	197	609	23·99	162
Leamington(PumpRoomGardens)	A. M. Harrison, Esq.....	8	1	0	166	614	24·19	174
D „ (Binswood Avenue)...	Rev. A. Corbet	5	1	2	...	663	26·11	170
„ „ (West Hill, Cubbington)	Mrs. Robins	5	1	0	282	584	23·00	...
D Hatton House	Mrs. J. P. Arkwright ...	10	5	0	380	664	26·15	179
Lapworth (Ardenhill)	A. R. Walker, Esq.	8	4	8	420	608	23·94	...
„ Croft	T. Birkett Barker, Esq....	5	2	0	410	731	28·79	180
Tanworth-in-Arden	F. Davies, Esq.	6	4	0	508	730	28·72	...
D Rugby (Bilton Grange).....	W. H. G. Southcomb, Esq.	5	1	0	400	586	23·08	165
„ (Temple Observatory) ...	B. B. Dickinson, Esq. ...	5	1	1	383	636	25·05	166
Stretton-on-Dunsmore	Mrs. Lister-Kaye	5	0	9	290	600	23·64	...
Ryton-on-Dunsmore (Ryton Ho.)	Charles Browett, Esq.....	5	1	2	260	703	27·68	...
D Kings Newnham	H. L. Brierly, Esq.	5	1	0	300	634	24·97	168
D Coventry (City Hospital)	E. H. Snell, Esq., M.D....	8	1	0	269	639	25·16	180
D „ (St. Paul's Road)	J. B. Morris, Esq.	5	1	0	341	674	26·54	175
D „ (Kingswood)	R. B. Caldicott, Esq.....	5	1	0	340	624	24·57	...
D Foleshill (Foxford School)	A. F. Smith, Esq.	5	10	9	311	688	27·07	156
D Coventry (Keresley Grange).....	Miss H. Rotherham	5	0	10	413	684	26·93	213
D Bedworth Cemetery	Mr. G. O. Bosworth	5	1	0	385	706	27·81	156
2.—THAMES—Windrush & c. 2 sq. mi.								
3.—THAMES—Cherwell. 15 sq. mi.								
D Farnborough	Miss C. A. Prater	5	1	0	515	782	30·77	187

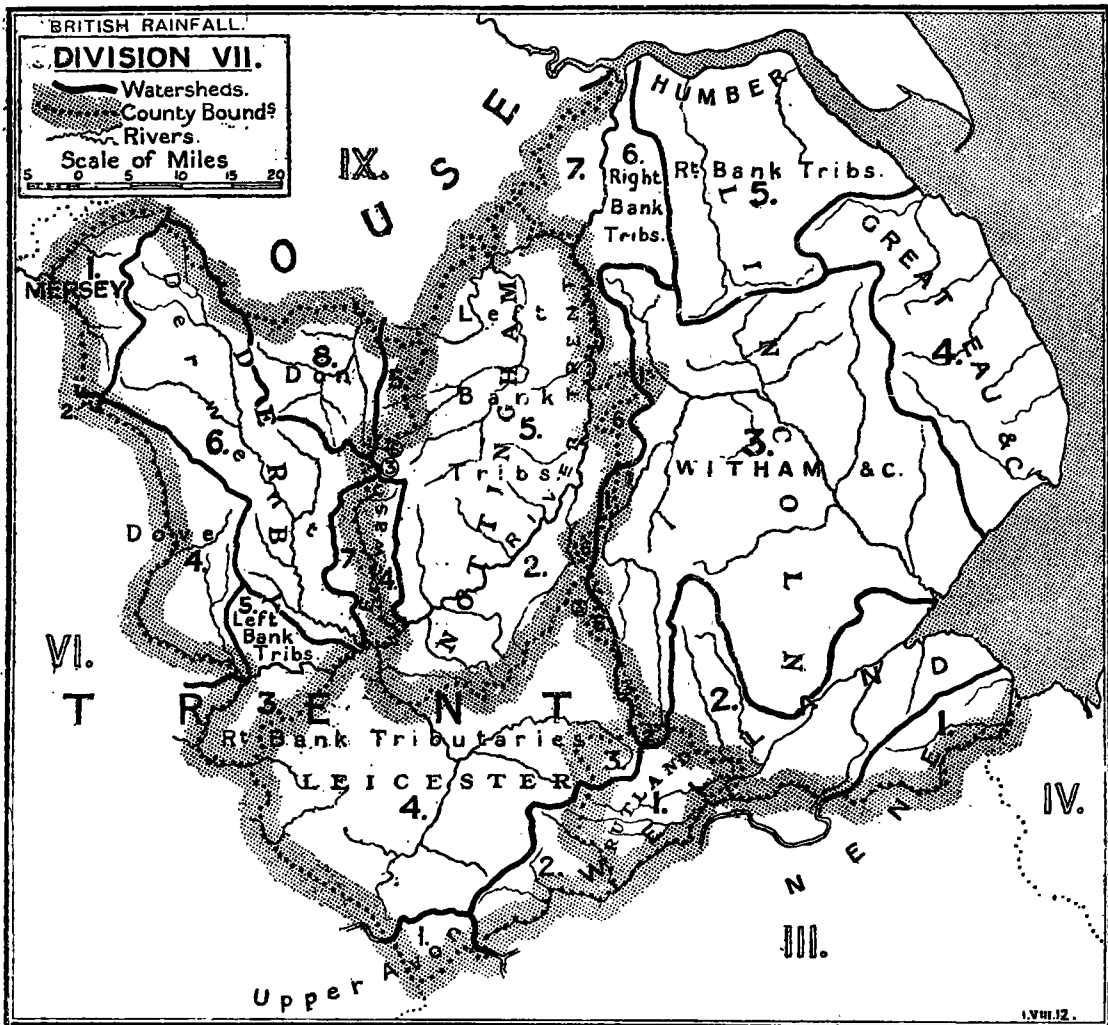
DIVISION VI.—WEST MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more
		Diam.	Height Above Ground. Sea Level			1914		
		in.	ft.	in.	feet.	mm.	inches.	
WARWICKSHIRE—(con.)								
4.—TRENT—Right Bank Tributaries. 322 sq. mi.								
	Hockley Heath (Packwood)	5	1	2	400	701	27·60	169
D	Hampton-in-Arden (Estcote) ...	5	1	0	340	661	26·03	181
D	Solihull (Marsh Cottage)	5	1	0	420	698	27·47	184
D	Northfield (West Heath House)	5	1	0	590	748	29·46	198
D	Hampton-in-Arden(HamptonManor)	8	0	7	345	744	29·28	196
D	Selly Oak (Bournville)	5	1	0	434	824	32·42	195
	„ „ (Lodge Hill Cemetery)	5	1	4	540	760	29·93	165
D	„ „ (South Hill)	5	0	9	450	719	28·30	191
	Moseley (Prospect Road)	5	1	0	550	726	28·60	...
D	„ (Highfield Road)	8	1	9	550	762	29·99	191
D	„ (Chantry Road)	5	1	0	472	767	30·20	192
D	Birmingham (Sparkhill)	5	1	0	426	772	30·41	205
D	„ (Edgbaston)	8	1	0	515	732	28·81	186
D	„ (Hagley Road).....	5	0	9	612	817	32·15	187
	„ (The Crescent)... M	5	7	0	480	733	28·87	..
D	„ (Sewage Works, Saltley)	5	1	5	293	634	24·95	174
D	„ (Gravelly Hill).....	5	3	0	470	756	29·76	161
D	„ (Erdington)	5	1	3	472	660	25·97	183
D	Castle Bromwich Hall	5	0	10	364	814	32·04	196
D	Minworth	8	0	6	286	630	24·82	171
D	Nuneaton (Chilvers Coton Vic.)..	5	0	10	283	660	26·00	155
D	Whitacre (Birmingham W.W.)...	5	1	5	269	647	25·46	188
D	Sutton Coldfield (The Park).....	5	1	0	371	702	27·62	174

MAP OF DIVISION VII.

NORTH MIDLAND COUNTIES,

Showing the River-Divisions.



DIVISION VII.—NORTH MIDLAND COUNTIES.

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with .01 in. or more
		Diam.	Height Above Ground		Above Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
LEICESTERSHIRE. (Area, 824 sq. mi.)								
1.—SEVERN—Upper Avon. 41 sq. mi.								
Lutterworth (Walcote).....	Major Corbet Smith	5	0	6	290	714	28·09	...
d Bitteswell School Gardens	M. Smith, Esq.	5	0	9	401	671	26·42	188
2.—WELLAND. 96 sq. mi.								
d Market Harborough (Rose Hill).....	G. O. Nicholson, Esq.	5	1	0	350	602	23·69	157
East Langton Grange	J. W. Logan, Esq., M.P.	5	1	0	300	620	24·39	...
d Kibworth Beauchamp	E. V. Phillips, Esq.	9	2	6	390	684	26·94	162
Hallaton Hall.....	S. N. Bankart, Esq.	8	1	3	366	590	23·22	...
Horninghold House <i>Snowdong</i> M.....	Mr. B. Inchley	5	1	6	380	574	22·62	...
" " <i>Flout g.</i> M.....	" " " "	6	2	0	380	531	20·90	...
d Loddington (The Cottage)	Major N. H. Matthews... ..	5	1	0	452	682	26·86	190
Witcote Hall Gardens.....	Mr. W. Rouse	5	0	9	500	602	23·70	...
3.—WITHAM. 7 sq. mi.								
4.—TRENT—Right Bank Tributaries. 680 sq. mi.								
Wistow Hall Gardens	Hon. T. F. Fremantle.....	5	1	0	307	607	23·88	...
d Countesthorpe (Wigston Sew. Fm.).....	W. G. J. Clark, Esq., C.E.	8	0	9	257	603	23·75	169
d Blaby (Whetstone Road)....No. 1	G. F. Shoults, Esq.	5	0	6	239	653	25·71	182
d " " " "....No. 2	A. F. Shoults, Esq.	5	0	6	239	625	24·60	171
d Leicester (Stoneygate Road) ...	T. Spencer Smithson, Esq.	5	0	6	258	597	23·51	161
d " (De Montfort Street)....	Dr. Bernard Stracey	5	1	0	240	628	24·74	165
d " (Town Hall Square)....	E. G. Mawbey, Esq., C.E.	5	0	6	211	612	24·11	175
d† " " " " (R).....	" " " "	7	2	0	213	608	23·95	172
d Market Bosworth (Osbaston Hall).....	Thomas Cope, Esq.	8	1	0	393	763	30·03	218
Desford (Industrial School)	C. Oxley, Esq.	5	1	0	370	756	29·76	...
Scraptoft (Nether Hall)	W. R. Kendall, Esq.	5	2	0	350	563	22·16	...
Humberstone Asylum	S. C. Leak, Esq.	8	1	0	266	639	25·14	173
d Leicester (Gilroes Cemetery) ...	E. G. Mawbey, Esq., C.E.	5	1	0	285	586	23·08	169
d " (Anstey Pastures).....	W. P. Viccars, Esq.	5	1	1	280	599	23·60	...
d Thornton Reservoir	G. T. Edwards, Esq., C.E.	8	1	2	371	724	28·51	172
d Cropstone (Bradgate Reservoir)....	" " " "	8	1	0	246	735	28·92	180
d Barkby Hall	Victor R. Pochin, Esq.	5	0	6	217	638	25·10	162
Syston	S. K. Daniels, Esq.	5	1	6	180	650	25·60	...
d Coalville W.W. (Bardon Hill)....	L. L. Baldwin, Esq., C.E.	8	1	0	520	764	30·09	176
d Swithland (The Brand)	G. T. Edwards, Esq., C.E.	8	1	0	172	681	26·80	167
d Ratcliffe-on-Wreake College ...	Rev. J. Cremonini	5	1	0	288	670	26·39	159
d Ashby-de-la-Zouch (Coleorton Hall).....	Mr. H. T. Wilson	5	2	0	540	730	28·74	157
Barrow-upon-Soar (The Mount).....	Mrs. C. Stuart Thomson... ..	5	1	6	...	628	24·72	...
d Melton Mowbray	Gerald Walsh, Esq.	5	0	11	345	560	22·05	175
d Charnwood Forest (Blackbrook Res.).....	A. H. Walker, Esq., C.E.	8	1	0	367	708	27·88	175
d Loughborough (Nan Pantan Res.).....	" " " "	8	1	0	269	723	28·45	170
d " (The Widenings).....	Adrian Young, Esq.	5	0	7	197	640	25·19	173
d " (Sewage Farm)....	A. H. Walker, Esq., C.E.	8	1	0	134	657	25·87	159
d Burton-on-the-Wolds (Burton Hall).....	Lord Ernest St. Maur.....	5	1	0	270	650	25·59	167
d Prestwold Hall	E. H. Packe, Esq.	8	1	0	209	661	26·02	179
d Waltham-on-the-Wolds	G. Higgins, Esq.	5	1	0	568	665	26·18	166
d Croxton Kerrial	C. J. Prowse, Esq.	5	1	0	480	691	27·19	209
d Belvoir Castle Gardens	W. H. Divers, Esq.	8	1	0	260	702	27·62	203

DIVISION VII.—NORTH MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more
		Diam.	Height Above Ground. Sea Level			1914		
		in.	ft.	in.	feet.	mm.	inches.	
RUTLAND. (Area, 152 sq. mi.)								
1.—WELLAND. 125 sq. mi.								
	Liddington (Uppingham W.W.)	5	1	0	152	571	22·48	...
D	Uppingham (Ridlington)	5	4	7	527	641	25·24	188
	Wing (The Cottage)	5	1	1	370	582	22·93	169
	Oakham (Fritham House)	5	1	0	300	699	27·52	165
D	Whitwell Rectory	5	0	11	320	606	23·85	187
	Great Casterton Rectory	8	1	0	126	552	21·72	...
	„ „ (Walk Farm) ...	5	1	8	330	553	21·77	...
2.—WITHAM. 5 sq. mi.								
3.—TRENT—Right Bank Tributaries. 22 sq. mi.								
D	Market Overton	8	0	11	475	742	29·23	200
LINCOLNSHIRE. (Area, 2646 sq. mi.)								
1.—NENE. 100 sq. mi.								
	Tydd (North Level Sluice)	5	3	6	10	660	25·99	...
2.—WELLAND. 341 sq. mi.								
	Stamford (St. George's Square) ..	5	4	0	88	552	21·72	148
	Crowland (Bank House) .....	...	...	...	10	462	18·17?	...
D	Market Deeping (Wilthorpe) ...	8	3	10	55	572	22·50	156
	Holywell Hall	5	0	6	190	622	24·48	169
D	Bourne (Council School)	5	1	0	23	607	23·88	147
D	„ (Guthram)	8	1	6	19	466	18·34?	166
D	Spalding (Pode Hole)	8	1	3	13	555	21·85	179
3.—WITHAM & C. 1085 sq. mi.								
D	Stainby Rectory	4	0	9	496	621	24·46	162
	Stroxton Rectory	5	0	10	350	668	26·31	...
D	Little Ponton Rectory	5	1	0	250	735	28·94	199
D	Denton Manor	5	3	0	310	676	26·60	206
D	Grantham (Saltersford)	5	0	6	188	657	25·86	163
D	„ (Guildhall)	5	13	6	202	594	23·40	169
D	„ (High Street)	5	1	0	202	658	25·91	165
D	Boston (Black Sluice, Skirbeck) ..	8	1	3	11	561	22·09	192
D	„ (Sleaford Road)	5	1	2	9	551	21·70	163
D	„	8	1	0	13	552	21·75	171
D	„ (Grand Sluice)	8	8	0	18	524	20·65	163
	„ (Bargate End)	8	1	0	9	535	21·05	167
D	Sleaford (Kesteven County Asylum) ..	5	0	9	100	555	21·84	165
D	„ (Rauceby Hall)	5	1	0	125	618	24·31	179
D	Claypole Rectory	8	2	0	70	545	21·46	183
D	Fulbeck Hall	5	0	8	180	643	25·30	221
D	Welbourn	5	3	6	120	580	22·83	163
	Temple Bruer	5	1	0	300	639	25·15	179
	New Leake (Lade Bank Engines) ..	8	1	0	10	496	19·54	...
D	Carrington Grange	5	6	0	15	560	22·06	161
	Navenby Rectory	5	1	0	218	623	24·54	151
D	Carlton-le-Moorland	5	1	2	49	609	23·97	150
	Mareham-le-Fen	5	3	0	11	554	21·82	184
	Revesby	5	2	0	135	579	22·80	...
	Woodhall Spa (Petwood)	5	11	0	50	566	22·27	...

DIVISION VII.—NORTH MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more
		Diam.	Height Above		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
LINCOLNSHIRE—(con.)								
3.—WITHAM & C—(con.)								
D Woodhall Spa (Galm House) ...	J. Collins, Esq.	5	1	6	72	528	20·78	185
D Spilsby (Hagnaby Priory)	Miss Pocklington	8	1	8	47	653	25·70	180
Lincoln (Branston Hall)	A. S. Leslie Melville, Esq.	5	1	0	122	501	19·72	...
D Bardney Railway Station	A. Burridge, Esq.	8	7	6	25	492	19·35	152
D Bucknall	Mr. Joshua Bint	5	1	0	33	585	23·03	176
D Horncastle	H. R. Maynard, Esq.	5	1	6	110	602	23·71	167
Lincoln (Boultham Pumping Sta.)	C. Horobin, Esq., C.E.	5	1	0	19	496	19·51	...
„ (Skellingthorpe Hall) ...	A. H. B. Coupland, Esq.	5	1	0	40	546	21·50	152
„ (Station)	Great Central Rly. Co. *	9	3	6	26	512	20·14	158
D „ (Sessions House)	H. Hoe, Esq.	5	1	0	59	519	20·42	157
„ (D'Isney Place)	A. H. Leslie Melville, Esq.	4	1	0	215	568	22·36	194
D „ (Cottesford Place)	F. A. Peacock, Esq.	5	0	9	220	583	22·95	178
D „ (Monks Tower)	Miss Allanby	5	1	6	100	559	22·00	157
Scampton House	Mrs. G. E. Sandars	5	1	11	80	506	19·93	...
D Hackthorn Hall	E. W. Cracroft, Esq.	5	4	6	105	510	20·10	168
Willingham-by-Stow	R. C. Bacon, Esq.	8	2	0	70	578	22·74	189
Springthorpe Rectory	Rev. B. Davies	5	1	0	75	552	21·75	145
4.—GREAT EAU & C. 443 sq. mi.								
D Wainfleet (Bridge House)	G. Booth Walker, Esq.	5	1	0	17	546	21·49	197
D Skegness (Estate Offices)	R. H. Jenkins, Esq.	8	1	0	13	556	21·87	172
D East Keal Rectory	Rev. R. H. Simpson	5	0	7	180	520	20·46	177
D Halton Holgate	G. Rattenbury, Esq.	5	1	0	89	586	23·05	180
Spilsby	Dr. L. Thompson Dean ...	5	2	0	150	546	21·51	...
D „ (Ashby Road)	J. Jarvis Rainey	5	1	0	160	526	20·70	155
D Hagworthingham	Mr. R. Wright	5	1	1	252	680	26·78	159
Harrington Hall	Mr. E. Burgess	5	0	4	163	630	24·82	...
D Alford Vicarage	Rev. Canon C. W. Baron ..	5	0	8	25	569	22·41	154
D Mablethorpe (Trusthorpe Hall) ..	I. N. Woodiwiss, Esq.	8	1	3	10	562	22·14	163
D Louth (Westgate)	Dr. F. Fawcett	5	0	9	120	686	26·99	162
D Kirmond	C. Fieldsend, Esq.	5	1	2	309	701	27·59	195
5.—HUMBER—Right Bank Tributaries. 428 sq. mi.								
Market Rasen	F. C. Burrell, Esq.	5	0	8	84	562	22·13	...
„ „	Great Central Rly. Co.	9	3	6	100	550	21·66	151
D Waltham Hall Gardens	Mr. C. Frankish	5	1	1	80	610	24·01	175
Brigg Station	Great Central Rly. Co.	9	3	6	16	518	20·40	154
„ (Grammar School)	H. E. Bryant, Esq.	5	1	0	32	574	22·61	...
D „	A. Atkinson, Esq., C.E.	8	1	2	11	578	22·75	184
Grimsby (Abbey Road)	W. J. Wood, Esq., C.E.	5	3	0	23	616	24·26	...
„	Great Central Rly. Co.	9	15	0	42	564	22·19	...
Barnetby	„ „ „ „	9	3	6	51	582	22·93	148
D Brocklesby Park	Mr. F. C. Stainsby	5	2	0	108	698	27·48	177
D Burton-upon-Stather (Normanby) ..	A. G. Wilkes, Esq.	5	0	10	185	623	24·52	156
D Thornton Curtis Vicarage	Rev. C. B. Goodacre	8	1	4	66	626	24·63	182
D „ „ School	W. Dove, Esq.	5	4	0	70	604	23·77	163
D Horkstow	E. J. Turton, Esq.	5	0	10	75	730	28·72	160
Ferriby Sluice	A. Atkinson, Esq., C.E.	5	1	0	18	588	23·16	177
New Holland	Great Central Rly. Co.	9	3	6	18	546	21·51	163

* Kept for the Canal Department of the Great Central Railway Company. Returns supplied by T. Chappell, Esq.

DIVISION VII.—NORTH MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0.1 in. or more
		Diam.	Height Above Ground. Sea Level			1914		
		in.	ft.	in.	feet.	mm.	inches.	
LINCOLNSHIRE—(con.)								
6.—TRENT—Right Bank Tributaries. 172 sq. mi.								
Woolsthorpe	A. Brown, Esq., C.E.....	...	1	3	182	618	24.31	149
D Swinderby (Ling Moor).....	Cecil H. Wray, Esq.....	5	0	9	50	624	24.57	156
D Lincoln (Doddington Hall)	G. E. Jarvis, Esq.	8	1	2	92	540	21.28	166
Gainsborough	Great Central Rly. Co.....	9	...		76	448	17.65	...
„ (N. Sandsfield).....	Mr. J. Creed	5	1	5	23	478	18.82	...
D Burton-upon-Stather Vicarage...	Rev. Canon F. A. Jarvis...	5	1	6	212	574	22.60	148
7.—TRENT—Left Bank Tributaries. 77 sq. mi.								
Wroot (S. Level Pumping Station)	Mr. F. S. Trafford.....	10	5	0	13	484	19.07	...
Crowle (N. „ „ „)	Mr. H. G. Trafford.....	5	2	6	10	563	22.16	...
„ (Keadby)	Great Central Rly. Co....	9	3	6	17	547	21.55	160
NOTTINGHAMSHIRE. (Area, 843 sq. mi.)								
1.—WITHAM. 10 sq. mi.								
2.—TRENT—Right Bank Tributaries. 218 sq. mi.								
D Plumtree (Normanton-on-Wolds)	T. A. Hill, Esq.	8	1	0	170	668	26.29	198
D Nottingham (Wilford Hill Res.)	F. W. Davies, Esq.	8	0	11	296	623	24.54	183
Cropwell Bishop (Cropwell Grove)	H. Smith, Esq., jun.....	5	1	1	160	618	24.35	...
D Newark Castle Gardens.....	Mr. W. York	5	0	8	63	564	22.21	159
North Collingham (Markham Ho.)	The Misses Turton.....	5	1	0	38	568	22.35	193
3.—TRENT—Derwent. 2 sq. mi.								
4.—TRENT—Erewash. 42 sq. mi.								
D Beeston (West End)	Dr. F. Rothera	5	1	0	104	698	27.48	188
D Nottingham (Strelley)	T. L. K. Edge, Esq.	8	1	0	396	648	25.52	188
D „ („ Hall)	„ „ „	5	1	0	378	642	25.29	186
D „ („ „)	„ „ „ „	5	1	0	379	652	25.67	...
D Bulwell (Watnall Reservoir) ...	F. W. Davies, Esq.....	8	0	11	472	778	30.63	208
D Eastwood Colliery	J. W. Fryar, Esq.....	5	1	0	245	767	30.21	211
D „ (Moorgreen Reservoir)...	Great Northern Ry. Co....	5	6	0	301	734	28.90	195
Annesley (Selston W.W.).....	S. Maylan, Esq.	5	1	0	475	711	27.98	160
5.—TRENT—Left Bank Tributaries. 569 sq. mi.								
Nottingham (Lenton Hall)	A. Brown, Esq., C.E.....	5	0	7	188	639	25.17	149
„ (Trent Lane) ... (R)	„ „ „	8	0	10	85	600	23.63	166
D „ (The Castle)	„ „ „	8	1	2	192	628	24.74	200
D „ („ „)	„ „ „ „	8	7	0	268	580	22.84	169
D „ (Carisbrook Ho., The Park)	W. Bradshaw, Esq.	5	0	6	247	647	25.47	191
„ (Stoke Bardolph) ...	A. Brown, Esq., C.E.....	8	1	0	66	643	25.33	158
D „ (Mapperley Hill) ...	E. Powell, Esq.	8	1	0	400	641	25.25	178
Bagthorpe (Isolation Hospital)...	P. Boobbyer, Esq., M.D...	8	2	0	189	676	26.60	189
D Nottingham (Basford W.W.) ...	F. W. Davies, Esq.	8	1	0	169	665	26.17	168
D Burton Joyce Water Works.....	„ „ „	8	0	9	64	671	26.42	170
Bulcote (Corporation Farm).....	A. Brown, Esq., C.E.....	10	1	3	65	624	24.57	171
Lowdham (Chilwell Nurseries)...	Mr. J. D. Pearson	5	1	7	90	578	22.76	...
D Bulwell (Bestwood W.W.)	F. W. Davies, Esq.	8	1	2	317	658	25.91	162
D Daybrook (Ramsdale Hill Res.)	„ „ „	8	0	10	495	772	30.39	213
Bulwell Hall Park	A. Dale, Esq.	8	1	0	252	724	28.50	179
Hucknall Torkard (Forge Mills)	J. D. Walker, Esq.....	5	4	3	200	646	25.44	...
D Papplewick (Water Works)	F. W. Davies, Esq.	8	0	10	317	734	28.91	196
D Southwell (Elmfield).....	Dr. H. Handford	5	1	0	132	624	24.57	173

DIVISION VII.—NORTH MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0.1 in. or more
		Diam.	Height Above Ground		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
NOTTINGHAMSHIRE—(con.)								
5.—TRENT—Left Bank Tributaries—(con.)								
Southwell (Elmfield)..... M	Dr. H. Handford	5	1	0	132	616	24.27	...
D „ (Halam House)	Rev. Canon J. Singleton..	5	1	0	170	654	25.74	163
D† Farnsfield	Dr. C. Wills	5	1	0	210	680	26.79	183
D† Sutton-in-Ashfield W.W.	Messrs. G. & F. W. Hodson	5	1	1	462	758	29.83	159
D† Mansfield (W.W. Rainworth) ...	„ „ „	5	1	0	360	722	28.43	157
D „ (Berry Hill)	W. Hollins, Esq.	8	1	0	528	819	32.24	206
D „ (High Oakham)	P. J. Shacklock, Esq.	5	1	0	425	799	31.45	200
D† „ (West Bank)	W. Pickard, Esq.	8	1	0	405	714	28.10	178
D Clipstone Water Works	Messrs. G. & F. W. Hodson	5	1	0	236	649	25.54	153
D Ollerton (Boughton W.W.)	F. W. Davies, Esq.	8	0	7	141	613	24.13	166
D „ (Thoresby Gardens)	Mr. A. Simmons	8	0	9	125	690	27.18	169
Clumber Gardens	A. P. Elliott, Esq.	5	4	0	164	517	20.37?	...
Elkesley Pumping Station	C. Horobin, Esq., C.E.	5	1	0	118	547	21.55	186
D Worksop (Carlton Road)	J. Edeson, Esq.	5	1	1	154	570	22.44?	167
„	Great Central Rly. Co.	9	3	6	127	535	21.06	...
D „ (Osberton Gardens) ..	Mr. J. B. Allan	5	3	6	70	584	23.00	177
D Retford	Great Central Rly. Co.	9	3	6	52	513	20.21	159
D „ (Grammar School)	G. R. Davies, Esq.	8	0	11	53	565	22.26	185
D „ (Morton Hall)	W. H. Mason, Esq.	5	1	0	140	533	20.98	155
D „ (Babworth Hall)	Col. H. Denison	5	1	0	92	538	21.20	...
D „ (Sewage Disposal Works) ..	J. D. Kennedy, Esq.	5	1	0	74	646	25.45	185
D Sturton-le-Steeple	S. Ingham, Esq.	5	1	6	40	516	20.31	155
D Worksop (Wigthorpe Hill)	R. C. Ramsden, Esq.	5	1	0	100	570	22.46	165
D† „ (Hodsock Priory)	Lt.-Col. H. Mellish	8	1	0	56	549	21.60	173
D† „ { „ „ } ... M	„ „ „	5	1	0	56	540	21.24	...
D† „ { „ „ } ... (R)	„ „ „	11	1	6	56	547	21.54	175
D Scrooby	Mr. J. Mallender	5	1	0	44	542	21.33	189
D The Gardens [Bawtry Hall]	Mr. F. E. Hogbin	5	1	3	31	514	20.25	167
Stockwith	Great Central Rly. Co.	9	3	6	21	527	20.76	179
D Bawtry (Hesley Hall)	B. I. Whitaker, Esq.	8	0	11	61	500	19.69	159
6.—OUSE—Don 2 sq. mi.								
DERBYSHIRE. (Area, 1029 sq. mi.)								
1.—MERSEY, UPPER. 93 sq. mi.								
Comb's Reservoir	Great Central Rly. Co.	9	3	6	710	1106	43.55	240
Chapel-en-le-Frith	„ „ „	9	3	6	965	1077	42.40	209
D Whaley Bridge (Mosley Hall) ...	S. Arrowsmith, Esq.	9	1	2	760	1169	46.02	214
Mellor (Manor House)	W. Jowett, Esq.	5	1	0	544	879	34.60	...
D Glossop W.W. (Swineshaw)	Mr. J. Garner	12	3	0	733	1113	43.83	210
Woodhead Station	Great Central Rly. Co.	9	3	6	878	1282	50.47	214
2.—MERSEY—Weaver. 2 sq. mi.								
3.—TRENT. Right Bank Tributaries. 68 sq. mi.								
D Repton (The Croft)	H. C. Hayward, Esq.	5	1	4	170	694	27.32	199
Stanton-by-Bridge	F. Worrall, Esq., C.E.	8	1	2	144	645	25.38	...
4.—TRENT—Dove. 156 sq. mi.								
D Snelston Rectory	Rev. A. Evans	8	1	6	450	962	37.89	168
Osmaston (Yeldersley Hall)	H. F. Wright, Esq., M.P.	5	1	0	635	887	34.93	200

DIVISION VII.—NORTH MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more
		Diam	Height Above Ground Sea Level			1914		
		in.	ft.	in.	feet.	mm.	inches.	
DERBYSHIRE—(con.)								
4.—TRENT—Dove—(con.)								
d Ashbourne Water Works.....	Mr. J. W. Twigg	5	1	0	582	99·5	39·19	190
5.—TRENT—Left Bank Tributaries 84 sq. mi.								
Willington W.W. (Milton)	Messrs. G. & F. W. Hodson	5	1	0	134	62·3	24·51	...
d Chellaston	H. Chambers, Esq.	5	1	0	170	62·5	24·59	197
Findern (The Longlands).....	Mrs. B. W. Spilsbury....	5	0	9	186	64·2	25·27	173
Etwall (Blakeley Lodge)	Mr. R. Giles	5	1	0	190	68·7	27·03	...
d „ (Sewage Farm).....	Mr. B. Hydes	5	13	0	201	62·5	24·62	154
Mickleover (County Asylum) ...	R. Legge, Esq., M.D.	5	3	0	300	65·5	25·77	169
d „ Manor.....	Mr. J. Campbell	5	2	0	280	74·1	29·16	195
Littleover (The Knoll)	W. B. Robotham, Esq.	5	2	6	315	74·1	29·16	178
„ Old Hall	E. McInnes, Esq.	5	2	6	346	76·4	30·10	192
6.—TRENT—Derwent. 428 sq. mi.								
d Spondon (Derby Sewage Works)	J. Ward, Esq., C.E.	5	1	3	135	65·8	25·89	190
d „ (The Homestead)	H. Fowler, Esq.	5	1	6	255	63·4	24·96	188
d Derby (Wild Street).....	Messrs. J. Davis & Son... 5	1	0	174	74·3	29·26	198	
d† „ (Midland Railway).....	J. Sayers, Esq.	5	1	5	156	68·4	26·94	183
d „ (Royal Infirmary)	E. Forster, Esq.	5	1	0	195	67·9	26·74	205
d „ (The Arboretum)	J. Ward, Esq., C.E.	8	1	0	196	71·2	28·03	184
„ (Duffield Road)	Dr. W. G. Copestake.....	5	1	2	190	77·3	30·44	...
Kirk Langley (Langley Hall) ...	G. W. Peach, Esq.	5	1	10	396	83·6	32·91	201
d Breadsall Lodge.....	Col. W. B. Woodforde....	5	1	3	280	72·8	28·67	189
d „ Priory	Miss H. A. Haslam	5	0	6	360	68·3	26·89	168
d Duffield (Castle Hill House).....	Messrs. J. Davis & Son... ..	...	...	...	...	78·5	30·90	204
d „ (Kirkstyles).....	W. B. Worthington, Esq. CE	5	1	0	235	75·5	29·71	187
Belper (Herbert Strutt School)...	W. W. Tunncliffe Esq. per MO	8	1	0	223	80·1	31·54	187
d „ (Quarry Bank)	J. Hunter, Esq., C.E.	5	0	8	281	82·3	32·40	185
d „ (Highfield)	Lt.-Col. M. Hunter	8	0	8	310	83·2	32·74	194
d Wirksworth (Greengates).....	Thomas Gibbs, Esq.	5	1	0	495	100·2	39·43	187
d „ (Manor House).....	T. Atkinson, Esq.	5	1	0	498	99·8	39·30	190
Alderwasley	Rev. C. E. B. Deacon....	5	0	8	540	96·9	38·16	194
d Whatstandwell (Meerbrook Sough)	Messrs. G. & F. W. Hodson	5	1	0	246	91·3	35·95	192
d Brackenfield (Lindway Reservoir)	R. F. Ward, Esq.	5	1	0	595	88·6	34·90	175
Matlock Bath	Miss E. Chadwick	5	1	1	500	94·8	37·33	...
d „ (The Gables)	Mrs. R. Wildgoose.....	5	1	0	450	94·8	37·34	197
d „ (Rockside).....	J. D. Evans, Esq.	5	1	0	637	88·8	34·95	196
d Darley Dale (Whitworth Inst.)..	G. Evans, Esq.	5	1	6	361	80·7	31·77	173
d „ Hall.....	A. Clay, Esq.	5	1	0	400	88·8	34·96	204
d Clay Cross (Press Reservoir).....	G. Frith, Esq., C.E.	8	1	0	810	87·1	34·28	177
d Bakewell (Catcliff).....	Dr. T. Fentem	12	3	1	411	102·2	40·24	178
d† Chatsworth Gardens	Mr. F. Jennings.....	5	1	0	436	103·9	40·90	225
d Buxton (Portobello Bar)	F. Langley, Esq., C.E....	8	1	0	1600	155·6	61·24	246
d „ (Stanley Moor).....	„ „ „	8	1	0	1340	145·5	57·27	245
d „ (Burbage Edge)	„ „ „	8	1	0	1400	148·5	58·45	245
d „ (Devonshire Hospital)...	W. Pilkington, Esq.	5	1	0	988	127·6	50·23	214
d† Holmesfield (Barbrook Reservoir)	Gilbert Frith, Esq., C.E....	8	1	0	1080	96·0	37·78	261
d† Eyam (The Rectory)	Rev. F. L. Shaw	8	1	0	856	103·1	40·60	210
„ (The School)	R. Owen, Esq.	8	1	6	856	100·2	39·44	201
d „ (Eyam View)	Mr. P. Thorpe.....	5	1	0	945	109·6	43·14	209
† Grindleford (Grouse Inn) No. 58	S. B. Winser, Esq., C.E....	5	1	0	990	92·8	36·52	189

DIVISION VII.—NORTH MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with '01 in. or more
		Diam.	Height Above		1914			
			Ground	Sea Level	mm.	inches.		
		in.	ft.	in.	feet.			
DERBYSHIRE—(con.)								
6.—TRENT—Derwent—(con.)								
Hathersage No. 57	S. B. Winser, Esq., C.E....	5	1	0	525	954	37·56	187
Bamford No. 60	„ „ „	8	2	0	680	953	37·51	194
„ (Engineer's Office) No. 36	„ „ „	8	2	1	509	1051	41·37	249
Castleton No. 55	„ „ „	5	1	0	625	1265	49·82	191
Hope School No. 56	„ „ „	5	1	0	545	1158	45·61	203
Edale (Dale Head) No. 54	„ „ „	5	1	0	1015	1403	55·23	215
„ (Upper Booth) No. 53	„ „ „	5	1	0	910	1247	49·11	213
Bamford (Yorkshire Br. Weir) 59	„ „ „	5	1	0	540	1062	41·81	216
Ashopton (Win Hill) No. 34	„ „ „	5	1	0	1240	1116	43·92	...
„ (Cockbridge Farm) No. 33	„ „ „	5	1	0	620	1146	45·12	197
„ (Wooler Knoll) No. 52	„ „ „	5	1	0	1080	1025	40·34	...
„ Inn No. 32	„ „ „	8	1	0	610	1124	44·27	212
„ (Grimbo Carr) ... No. 51	„ „ „	5	1	0	1100	994	39·13	...
„ (Cutthroat Bldg.) No. 31	„ „ „	8	1	0	994	1135	44·70	...
„ (Moscar Flat) ... No. 30	„ „ „	8	1	0	1154	1069	42·08	...
Derwent Bridge End No. 28	„ „ „	5	1	0	624	1174	46·23	203
„ Dam No. 26	„ „ „	5	1	0	790	1158	45·60	215
Ashopton (Haglee) No. 50	„ „ „	8	1	0	783	1101	43·36	211
Blackdean Moor (Crookstone) 49	„ „ „	5	1	0	1460	1349	53·12	...
Derwent (Lockerbrook Fm.) No. 27a	„ „ „	5	1	0	1174	1329	52·34	208
Woodland Dale (Woodlands, S.) 48	„ „ „	8	1	0	1044	1254	49·35	195
„ „ „ (N.) 47	„ „ „	8	1	0	1063	1282	50·49	195
The Peak (Fairbrook) No. 46	„ „ „	5	1	0	1009	1623	63·88	214
„ (Nungrain) No. 45	„ „ „	5	1	0	1320	1500	59·05	...
Hayfield (Ashop Head) ... No. 43	„ „ „	5	1	0	1650	1262	49·70	...
Woodland Dale (Rowlee) No. 24	„ „ „	5	1	0	1540	1215	47·83	...
Derwent Dale (Walker Ho.) No. 22	„ „ „	5	1	0	758	1238	48·74	204
Alport Dale (Alport Castles) No. 42	„ „ „	5	1	0	955	1514	59·60	205
Featherbed Moss (Redgate Clough) 44	„ „ „	5	1	0	1730	1397	55·00	...
Derwent Dale (Birchinlee) No. 23	„ „ „	5	1	0	870	1413	55·62	226
Birchinlee Moor (Cote Ridge) No. 18	„ „ „	5	1	0	1440	1415	55·71	...
Lady Clough Moor No. 41	„ „ „	5	1	0	1720	1295	51·00	...
Coldharbour Moor (Summit) No. 39	„ „ „	8	1	0	1670	1378	54·27	...
Derwent Dale (Howden Dam) 17	„ „ „	8	1	0	829	1402	55·18	227
„ „ (Banktop Hey) 16	„ „ „	8	1	0	1340	1556	61·24	...
„ „ (Ridge Farm) ... 13	„ „ „	5	1	0	1175	1195	47·06	...
Alport Moor (Glethering Clough) ... 40	„ „ „	5	1	0	1640	1304	51·33	...
Westend Moor (Blacklow Cote) 15	„ „ „	5	1	0	970	1471	57·92	...
„ „ No. 10	„ „ „	5	1	0	1560	1389	54·70	...
Alport Moor No. 38	„ „ „	5	1	0	1790	1349	53·10	...
Derwent Dale (Back Dyke) No. 12	„ „ „	5	1	0	1546	1506	59·31	...
„ „ (Mosley Bank) No. 5	„ „ „	5	1	0	1350	1482	58·35	...
Ridgewalk Moor No. 9	„ „ „	5	1	0	1650	1376	54·18	...
Blacklow Stones No. 8	„ „ „	5	1	0	2060	1726	67·95	...
Derwent Dale (Roundhill) No. 4	„ „ „	5	1	0	1675	1454	57·26	...
7.—TRENT—Erewash. 50 sq. mi.								
Codnor (Cross Hill) A. F. Pine, Esq.	5	1	0	372	782	30·77	185	
„ Park Midland Railway Co.	5	1	0	243	814	32·06	208	

DIVISION VII.—NORTH MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with '01 in. or more
		Diam.	Height Above Ground.			1914		
			SeaLevel					
		in.	ft.	in.	feet.	mm.	inches.	
DERBYSHIRE—(con.)								
8.—OUSE—Don. 148 sq. mi.								
Hardwick Hall	Mr. E. Wilson	8	1	6	594	908	35·73	170
Grassmoor Colliery	Mr. J. Norman	5	19	10	370	550	21·66	...
d† Chesterfield (Gas Works).....	Chesterfield Water Co....	5	1	0	279	644	25·35	152
„	Great Central Rly. Co.....	9	3	6	250	671	26·42	165
d „ (Sewage Works) ..	Mr. W. Tomlinson.....	5	2	0	222	630	24·82	157
d† „ (Linacre Reservoir)	Chesterfield Water Co. ...	8	1	0	460	847	33·33	175
d† „ „ „ „ „ „ ..	„ „ „ „ „ „ „ ..	5	1	0	490	758	29·86	175
„ (Tapton Grove).....	Mr. W. R. Bloxham	5	4	3	400	702	27·64	...
d Totley Hall.....	W. A. Milner, Esq.	5	1	0	700	958	37·72	189
d Eckington (Mosbrough C.E. Sch.)	W. H. Holmes, Esq.	5	1	0	330	701	27·60	179
Killamarsh (Norwood)	Great Central Rly. Co.....	9	3	6	226	658	25·89	185
d† Norton.....	Col. Sir N. Creswick, K.C.B.	5	0	8	700	738	29·04	178

MAP OF DIVISION VIII.
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NORTH WESTERN COUNTIES,
Showing the River-Divisions.



DIVISION VIII.—NORTH WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more
		Diam. in.	Height Above Ground.		Sea Level	1914		
			ft.	in.	feet.	mm.	inches.	
CHESHIRE—(con.)								
2.—MERSEY—Weaver—(con.)								
D Chelford (Astle Hall)	G. Dixon, Esq.	5	1	0	250	824	32·42	173
" " " " M	" " " "	8	1	0	250	809	31·86	...
Northwich	Great Central Rly. Co....	9	3	6	76	658	25·91	180
D " (Hunts Lock).....	J. A. Saner, Esq., C.E....	8	1	0	47	773	30·42	203
D " (Winnington).....	Messrs.BrunnerMond&Co.	5	1	0	64	746	29·35	190
D " (Lostock Gralam) ...	" " " "	5	3	6	75	736	28·98	190
3.—MERSEY, LOWER & C. 142 sq. mi.								
Duddon School	Miss L. E. Line	5	5	3	130	759	29·87	...
D Frodsham (Simonsdelf).....	E. H. Lewis, Esq.....	5	1	0	420	772	30·40	212
D Ince Hall.....	Mrs. Park-Yates	5	1	0	80	773	30·45	176
D Hooton Water Works	P. H. Bettie, Esq.	5	1	0	97	748	29·46	179
D Eastham (Mill Hey)	Roger P. Sing, Esq.	5	1	7	125	827	32·55	197
" House	J. H. Vernon, Esq.	5	1	0	100	790	31·09	196
D Wirral W.W. (Prenton)	P. H. Bettie, Esq.....	5	1	0	91	673	26·50	194
D Rock Ferry (Elmhurst).....	Miss Shepherd	8	6	0	110	777	30·60	188
Birkenhead(BidstonObservatory)	W. E. Plummer, Esq.....	8	1	0	189	661	26·02	190
D Hoylake (District Council Office)	R. W. Fraser, Esq.	5	1	0	33	713	28·08	186
D Wallasey (Marine Park)	Dr. T. W. N. Barlow.....	5	1	0	35	764	30·09	193
4.—DEE. 127 sq. mi.								
D Aldford	Miss M. Meredith	5	1	1	46	740	29·13	192
D Eaton Hall Gardens	Mr. N. F. Barnes	5	3	0	72	667	26·25	163
Eccleston	E. Wells, Esq.	5	1	1	94	721	28·38	179
D Rowton (Holly Bank)	R. J. Salmon, Esq.....	5	1	5	123	755	29·71	175
D Chester (Sewage Works)	W. D. Scouller, Esq.....	5	1	0	34	704	27·72	196
D " (Curzon House)	J. H. Howell, Esq.....	5	1	1	78	719	28·30	187
D " (Christleton Hall)	Mr. J. Weaver	5	1	2	142	751	29·55	203
D " (Water Works)	C. Wilfrid Bennett, Esq..	5	0	10	85	687	27·03	189
D " " " "	" " " "	8	2	3	85	699	27·51	198
D " (Northgate Station).....	Great Central Rly. Co....	9	3	6	84	689	27·14	...
D Capenhurst Hall	R. T. Richardson, Esq....	5	5	10	125	774	30·46	183
D Neston (Vine House).....	H. F. Russell, Esq.	5	1	0	111	641	25·25	182
West Kirby (Hilbre House)	Egerton Macdonald, Esq....	5	0	9	25	675	26·57	...
D " " (Greenfield)	H. N. Edge, Esq.....	5	1	0	75	667	26·26	179
" " (The Abbey Manor).....	Cedric R. Boulton, Esq....	5	0	10	200	662	26·08	177
SOUTH LANCASHIRE. (Area, 687 sq. mi.)								
1.—ALT & C. 103 sq. mi.								
D Liverpool (Huyton Vicarage) ...	Mrs. E. M. Sanderson.....	5	0	11	116	807	31·78	208
D " (Knotty Ash)	W. M. Reade, Esq.	5	1	0	100	781	30·75	223
D West Derby (Basil Grange).....	Mr. G. Harris.....	8	1	3	100	847	33·35	187
D " " (Croxteth Hall)	Mr. J. Gibbins	5	1	0	79	824	32·42	182
D Great Crosby (Alexandra Park)..	S. Wilson, Esq.	5	1	0	34	761	29·95	182
D Blundellsands (Myra)	H. Montgomery, Esq.....	5	1	0	35	753	29·64	186
D Ormskirk (Bickerstaffe Pump Sta.)	G. H. Abbott, Esq.	5	1	2	128	879	34·59	192
D " (Springfield Pumping Sta.)	" " " "	5	0	11	70	864	34·02	193
2.—MERSEY, LOWER. 240 sq. mi.								
Garston	J. A. Brodie, Esq., C.E....	10	1	10	84	931	36·66	195
D " (Grassendale Park).....	Miss E. C. Abraham	5	1	0	35	770	30·32	201
D Aigburth (Holmfield)	Miss Maxwell.....	5	1	0	100	810	31·87	207

DIVISION VIII.—NORTH WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with .01 in. or more
		Diam.	Height Above Ground Sea Level			1914		
		in.	ft.	in.	feet.	mm.	inches.	
SOUTH LANCASHIRE—(con.)								
2.—MERSEY, LOWER—(con.)								
D Woolton (Roseleigh Gardens) ...	Mr. J. Stoney	8	1	0	180	825	32.49	196
D Warrington (Howley Yard)	A. M. Ker, Esq.	10	0	10	19	739	29.11	194
„ (Central Station) ...	Great Central Rly. Co.	9	3	6	59	702	27.63	177
† Liverpool (Monument Place) ...	J. A. Brodie, Esq., C.E.	5	1	3	126	712	28.04	193
D† „ „ „ (R) „ „ „ „	„ „ „ „	10	4	6	129	708	27.87	193
„ „ (Smithdown Road) ...	„ „ „ „	10	0	9	135	809	31.86	199
„ „ (Rathbone Road)	„ „ „ „	10	1	0	199	849	33.44	198
„ „ (Lank Lane)	„ „ „ „	10	10	8	101	847	33.34	198
„ „ (Newsham Park)	„ „ „ „	10	1	0	140	806	31.73	196
„ „ (Breeze Lane)	„ „ „ „	5	0	9	135	854	33.61	194
St. Helen's (Eccleston Hill)	J. J. Lackland, Esq., C.E.	12	2	9	268	835	32.89	193
Earlestown (Newton Cemetery) ..	A. Bowes, Esq.	5	1	0	75	942	37.09	...
D Leigh (Leesrigg)	Major T. Hunter, C.E.	5	1	0	71	786	30.93	206
D Tyldesley Gas Works	H. Hoy, Esq.	5	1	0	150	844	33.23	172
3.—MERSEY—Irwell. 299 sq. mi.								
Urmston (Sew. Wks., Davyhulme) ..	G. F. Walter, Esq.	8	2	3	72	806	31.73	186
D Manchester (Whalley Range) ...	J. H. Cooke, Esq.	5	1	0	100	796	31.36	173
D „ „ (Godlee Observatory)	W. C. Jenkins, Esq.	8	1	3	140	842	33.13	195
D „ „ „ „ „ (R) „ „ „ „	„ „ „ „	11	1	6	140	833	32.78	184
„ „ (Piccadilly)	Great Central Rly. Co.	9	40	0	194	817	32.15	197
„ „ (Fairfield)	„ „ „ „	9	6	0	312	891	35.09	202
D† „ „ (Oldham Road)	Dr. J. Niven	5	1	0	191	896	35.29	186
† „ „ (Whitworth Park) ...	Manchester Univ. per M.O.	8	1	5	126	828	32.61	186
D Eccles (Worsley New Hall)	Mr. W. B. Upjohn	8	10	0	80	894	35.19	181
„ „ „ „ „ Old Hall)	„ „ „ „	6	1	6	150	945	37.19	175
D Ashton-under-Lyne (Knott Hill Res.) ..	F. J. Dixon, Esq., C.E.	8	1	3	605	1098	43.25	208
Prestwich Reservoir	G. H. Hill, Esq., C.E.	12	2	0	356	933	36.73	...
D „ „ (Heaton Park)	T. De C. Meade, Esq., C.E.	8	1	0	312	938	36.92	196
D† Oldham (Alexandra Park)	Dr. J. B. Wilkinson	5	1	0	600	1123	44.23	222
„ „ (Honeywell Lane)	Great Central Rly. Co.	8	3	6	553	1085	42.71	224
„ „ (Brushes Clough) <i>old g.</i>	C. J. Batley, Esq., C.E.	5	4	0	930	1258	49.54	227
„ „ „ „ „ <i>new g.</i>	„ „ „ „	5	5	0	955	1280	50.40	227
D† Bolton (Queen's Park)	T. Midgley, Esq.	5	1	0	390	1193	46.96	218
D† „ „ (Heaton Reservoir)	Lewis Mitchell, Esq., C.E.	5	1	0	500	1133	44.60	220
D „ „ (Bloomfield, Heaton) ...	Mrs. F. Taylor	5	1	0	530	1118	44.00	226
D „ „ (Smithills)	R. E. Proffitt, Esq.	5	6	0	492	1174	46.23	216
D† „ „ „ „ „ Hall)	Col. R. H. Ainsworth	8	1	2	510	1229	48.39	176
„ „ „ „ „ Moor)	„ „ „ „	8	1	2	1375	1249	49.19	...
D Bury (Parsons Lane)	R. B. Rigby, Esq.	8	9	8	316	1165	45.87	212
„ „ (Bridge Hall)	Mr. E. Rogers	8	1	0	...	1160	45.69	207
New Hey (Sewage Works)	Mr. J. B. Ogden	5	1	0	514	1145	45.08	...
† Milnrow (Piethorne, Kitcliffe) ...	C. J. Batley, Esq., C.E.	5	4	6	769	1204	47.39	223
D† „ „ „ „ „ Coldgreave)	„ „ „ „	5	4	6	894	1166	45.92	223
† „ „ „ „ „ Norman Hill)	„ „ „ „	5	4	6	1076	1031	40.60	221
† „ „ „ „ „ Rooden Res.)	„ „ „ „	5	4	6	1131	1046	41.16	221
D Rochdale (Roch Mills Sew. Wks.) ..	S. S. Platt, Esq., C.E.	8	1	1	363	1243	48.93	223
D† „ „ (Broadfield Park Obsy.)	Dr. A. G. Anderson	8	0	6	472	1203	47.38	239
D „ „ (Fieldhead Yard)	S. S. Platt, Esq., C.E.	8	12	0	484	1115	43.90	203
D „ „ „ „ „ „ „ „ „ (R)	„ „ „ „	8	12	0	484	1116	43.92	203

DIVISION VIII.—NORTH WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with ·01 in. or more	
		Diam.	Height Above Ground.		1914			
SOUTH LANCASHIRE—(con.)		in.	ft.	in.	feet.	mm.	inches.	
3.—MERSEY—Irwell—(con.)								
† Rochdale (Ashworth Moor Res.)	J. S. Diggle, Esq., C.E....	5	1	2	957	1156	45·50	205
D Bury (Gin Hall) No. 1	J. Woodhead Smith, Esq., C.E.	8	1	0	475	1212	47·72	212
D " " " " No. 2	" " " "	8	1	0	475	1235	48·61	212
† Bolton (Belmont Reservoir)	Lewis Mitchell, Esq., C.E.	5	1	0	800	1410	55·51	236
D Rochdale (Hamer Pasture Res.)..	F. H. Brunt, Esq.	8	1	0	760	1373	54·04	224
D " (Naden Filters).....	J. S. Diggle, Esq., C.E....	5	1	8	761	1266	49·84	203
Norden (Higher Red Lumb)... M	" " " "	5	1	6	1125	1243	48·94	...
" (Far Knowl)..... M	" " " "	5	1	2	...	1367	53·83	...
Rochdale (Naden Dean)...old g. M	" " " "	5	1	7	948	1084	42·66	...
" (" ") new g. M	" " " "	5	1	4	948	1188	46·77	...
† Ramsbottom (Killgate Brook) M	" " " "	5	1	0	978	1291	50·81	...
† " (Cheesden Barn) M	" " " "	5	1	0	997	1238	48·73	...
† " (Shuttleworth Moss) M	" " " "	5	0	11	1076	1258	49·52	...
" (Gt. Lodge, Higher Hill) M	" " " "	5	1	0	1495	1244	48·96	...
D Edenfield (Scout Moor Res.) No. 2	J. Woodhead Smith, Esq., C.E.	8	1	0	1275	1286	50·62	216
D Rochdale (Spring Mill Whitworth)	F. H. Brunt, Esq.	5	1	7	720	1476	58·10	208
D " (Cowm, ")	" " " "	8	1	7	760	1316	51·80	197
† Entwistle Reservoir	Lewis Mitchell, Esq., C.E.	5	1	0	700	1407	55·40	224
Littleborough (Hollingworth Lake)	Rochdale Canal Co.* ...	8	1	5	600	1052	41·42	...
" (Windy Bank) ...	" " " "	8	2	0	605	1038	40·85	...
" (Canal Summit) ...	" " " "	8	2	0	700	994	39·14	...
" (Chelburn)	" " " "	8	2	0	800	1064	41·91	...
" (Byron Edge Drain)	" " " "	8	1	5	1250	1079	42·47	...
" (Lenches).....	" " " "	8	2	0	806	1112	43·79	...
Walsden (Calf Lee)	" " " "	10	1	6	960	1118	44·02	...
" (Warland Drain)	" " " "	8	1	5	1250	1039	40·91	...
" (Whiteholme Drain) ...	" " " "	8	1	5	1250	1048	41·28	...
" (Rishworth Drain).....	" " " "	8	1	5	1200	943	37·13	...
Bacup	J. Holt, Esq.	5	1	0	...	1395	54·92	...
† Haslingden (Holden Wood) No. 1	J. Woodhead Smith, Esq., C.E.	8	1	0	670	1579	62·15	217
D " (" ") No. 2	" " " "	8	1	0	670	1434	56·45	217
† " (Calf Hey)..... No. 1	" " " "	8	1	0	800	1497	58·92	217
D " (" ")..... No. 2	" " " "	8	1	0	800	1228	48·36	217
Rawtenstall Cemetery	J. Johnson, Esq., C.E....	8	1	0	572	1337	52·64	164
† " (Cloughbottom Res.) No. 1	J. Woodhead Smith, Esq., C.E.	8	1	0	1025	1228	48·34	195
D " (" ") No. 2	" " " "	8	1	0	1025	1102	43·37	195
† " (Hapton Reservoir) No. 1	" " " "	8	1	0	930	1470	57·88	235
D " (" ") No. 2	" " " "	8	1	0	930	1496	58·91	235
4.—MERSEY, UPPER. 45 sq. mi.								
D Didsbury (Linden Road)	L. G. King, Esq.	8	1	6	110	828	32·59	213
D Heaton Mersey [Stockport]	W. B. Leigh, Esq.	5	3	11	218	804	31·64	202
D Chorlton-cum-Hardy Sew. Works	G. F. Walter, Esq.	8	4	0	76	787	30·98	176
D " " " " " "	J. H. Casartelli, Esq.	5	2	0	75	770	30·31	185
Withington (Lady Barn Ho. Sch.)	Miss M. S. Beard	5	0	6	122	808	31·83	213
D Fallowfield (Platt Field Park)...	T. de C. Meade, Esq., C.E.	8	3	3	124	812	31·96	196
Denton Reservoir	G. H. Hill, Esq., C.E....	12	2	0	324	809	31·84	...
Gorton "	" " " "	12	2	0	263	849	33·41	...
D Ashton-under-Lyne (Henrietta St. Yard)	F. J. Dixon, Esq., C.E....	7	1	0	394	1036	40·80	216

* Returns supplied by W. A. M'Grath, Esq.

DIVISION VIII.—NORTH WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
SOUTH LANCASHIRE—(con.)								
4.—MERSEY, UPPER—(con.)								
Ashton-und.-Lyne (Waterhouses)	Great Central Rly. Co.....	9	3	6	345	885	34·86	211
D Lower Swineshaw Reservoir.....	F. J. Dixon, Esq., C.E....	8	1	0	886	1144	45·06	225
D Mossley (Manor House Yard) ...	„ „ „	5	1	0	636	1193	46·96	206
CENTRAL LANCASHIRE.								
(Area, 536 sq. mi.)								
1.—RIBBLE & C. 326 sq. mi.								
† Rivington (Higher Hill)	J. Parry, Esq., C.E.	8	1	4	733	988	38·89	...
D Haslingden (Mitchells House Res.)	C. Harrison, Esq.	5	1	6	990	1380	54·32	197
D Darwen (Sunnyhurst Hey Res.)..	R. W. Smith Saville, Esq.	8	1	8	915	1288	50·70	219
D „ (Earnsdale Reservoir)...	„ „ „	8	1	8	705	1290	50·79	219
D „ (Sewage Works)	„ „ „	5	1	6	460	1215	47·85	172
D „ (Bold Venture Park) ...	Dr. F. G. Haworth	8	2	4	722	1385	54·54	247
„ (Hoddlesden) No.1	W. Stubbs, Esq., C.E....	8	4	0	680	1295	51·00	211
„ „ „ No.2	„ „ „	8	1	0	675	1337	52·64	211
† „ (Daisy Green) No.1	„ „ „	8	1	0	969	1428	56·20	212
„ „ „ No.2	„ „ „	8	1	0	969	1420	55·92	212
„ (Pickup Bank) No.1	„ „ „	8	1	0	720	1278	50·32	211
„ „ „ No.2	„ „ „	8	1	0	720	1291	50·81	211
D Brindle (Whiteholme)	Victor H. Gatty, Esq....	5	1	8	315	915	36·03	198
† Blackburn (Guide Reservoir) ...	W. Stubbs, Esq., C.E....	8	1	0	650	1115	43·90	194
„ (Witton)	„ „ „	8	2	6	315	1348	53·08	194
„ (Store Yard)	„ „ „	8	30	0	373	900	35·42	152
„ (Water Works Office)	„ „ „	8	60	0	436	836	32·93	169
† „ (Corporation Park) ...	„ „ „	8	0	6	584	1152	45·36	218
† „ (Pumping Station) ...	„ „ „	8	6	0	600	1068	42·04	171
D Accrington (St. James's Vicarage)	Rev. A. Spencer.....	8	1	6	475	1290	50·78	218
D „ (Victoria Hospital) ...	Mr. L. T. Whipp	5	1	2	540	1282	50·46	203
D Hutton (Lancs C.C. Hort. Stat.)	Dr. H. Lloyd Snape	5	1	0	82	892	35·13	196
D Penwortham Hall	Rev. T. R. Finch	5	0	9	100	920	36·24	205
Higher Walton (Bannister Hall)	A. A. Gatty, Esq.	5	0	7	75	931	36·65	...
D Preston (Corporation Offices) ...	J. H. Smethurst, Esq., C.E.	8	18	7	148	914	35·98	206
Blackburn (Samlesbury Sew Wks)	W. Stubbs, Esq., C.E....	8	...	...	240	1020	40·17	202
† Causeway Side (Burnley W.W.)	W. Williamson, Esq.....	8	2	0	1116	1133	44·60	...
† Sheddin („ „)	„ „ „	8	2	0	960	1126	44·32	...
† Cant Clough, S. Side („ „)	„ „ „	8	2	0	900	1156	45·51	234
† „ „ N. Side („ „)	„ „ „	8	2	0	900	1106	43·53	234
Rams Clough Head („ „)	„ „ „	8	2	0	1260	1139	44·84	...
D Huncoat (Burnley Road Res.)...	C. Harrison, Esq.	9	1	6	620	1522	59·92	209
D Great Harwood (Dean Clough)...	„ „ „	12	1	6	540	1302	51·28	219
D Burnley (Queen's Park)	Dr. Thomas Holt	8	1	0	459	1171	46·09	214
„ (Yorkshire Street)	W. Williamson, Esq.....	8	30	0	420	1054	41·48	219
† „ (Swinden)..... Upper g.	„ „ „	8	12	0	820	1207	47·52	235
† „ „ „ Lower g.	„ „ „	8	2	0	745	1229	48·37	235
† „ (Extwistle Moor Top)...	„ „ „	8	2	0	1310	1193	46·98	...
D „ (Gawthorpe Hall)	Lord Shuttleworth.....	8	0	9	316	1187	46·72	209
D „ (Huntroyde).....	N. G. Howsin, Esq.	5	1	0	423	1137	44·77	221
D Fulwood (Haighton).....	A. E. Coupe, Esq., C.E....	5	1	2	255	897	35·31	193
Alston Reservoir	J. H. Smethurst, Esq., C.E.	8	1	2	320	1059	41·70	...

DIVISION VIII.—NORTH WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0.1 in. or more
		Diam.	Height Above Ground, SeaLevel		1914			
		in.	ft.	in.	feet.	mm.	inches.	
CENTRAL LANCASHIRE-(con.)								
1.—RIBBLE & C—(con.)								
†Stonyhurst College	Rev. W. Sidgreaves, S.J.	8	1	10	377	1274	50.14	218
d† " " " (R)	" " "	11	1	10	377	1274	50.17	218
† " " " (M)	" " "	11	1	0	376	1255	49.40	...
Knowle Green (Preston W. W.) M	J. H. Smethurst, Esq., C.E.	8	1	2	400	1038	40.86	...
Loud Scales (" ") M	" " "	8	1	2	400	1029	40.51	...
Spade Mill (" ") M	" " "	8	1	2	400	1054	41.49	...
Jeffrey Hill (" ") M	" " "	8	1	2	900	1194	47.01	...
d Beacon Fell (Barnsfold Reservoir)	A. E. Coupe, Esq., C.E....	5	1	6	506	986	38.80	215
" " (" ") M	" " "	5	1	6	506	992	39.07	...
d†Colne (Cemetery Grounds)... (R)	T. H. Hartley, Esq.	8	2	11	619	922	36.28	194
Barrowford Reservoir	Leeds & L'pool Canal Co.	8	1	0	473	1095	43.10	...
Foulridge (Upper Reservoir) ...	" " "	8	1	0	582	1011	39.80	...
†Clitheroe (Downham Hall)	R. C. Assheton, Esq.....	10	1	6	464	1044	41.12	...
d†Chatburn (Middlewood)	W. King Wilkinson, Esq.	5	1	3	363	1079	42.47	209
2.—RIBBLE—Douglas. 156 sq. mi.								
d Upholland Grammar School	C. H. Cox, Esq.	5	1	0	310	893	35.16	207
d Wigan W.W. (Worthington) ...	T. L. Hughes, Esq.	8	1	6	225	991	39.00	208
Horwich (Wallsuches)	C. E. Barr, Esq.	5	1	0	655	974	38.34	...
d† " (Lower Rivington) ...	J. Parry, Esq., C.E.....	8	1	0	440	1055	41.54	210
† " (Lower Knoll)	" " "	8	1	4	742	1099	43.27	...
d Rivington (Grammar School) ...	Percy R. Bristow, Esq....	5	1	3	510	1110	43.70	206
† " (Brown Hill)	J. Parry, Esq., C.E.	8	1	4	843	1066	41.97	...
d† " (Stoneshouse) ... No. 1	" " " " " " " " " " " "	8	1	4	623	961	37.83	203
† " (") ... No. 2	" " " " " " " " " " " "	8	1	4	623	980	38.57	...
† " (Hurst Hill)	" " " " " " " " " " " "	8	1	10	1029	1051	41.37	...
† " (Coppice Stile)	" " " " " " " " " " " "	8	1	8	879	977	38.45	...
† " (Gamekeeper's)	" " " " " " " " " " " "	8	0	8	850	1210	47.65	...
Rufford	J. G. Heggie, Esq.	5	1	0	41	898	35.36	...
Leyland (Worden Hall)	H. Nowell Harrington, Esq.	5	1	0	125	916	36.08	209
" (" ") ... M	" " "	5	1	0	125	899	35.41	...
Wheelton	Herbert Chadwick, Esq....	5	1	3	425	944	37.17	...
d Bamber Bridge (Cuerden Hall) ..	R. A. Tatton, Esq.....	5	1	0	230	950	37.39	209
3.—COAST STREAMS. 52 sq. mi.								
Southport (Birkdale)..... M	J. Baxendell, Esq.....	5	1	0	27	849	33.43	...
d† " (Hesketh Park)	" " " " " " " " " " " "	5	1	0	38	816	32.14	190
d† " (" ") M.O.g.	" " " " " " " " " " " "	8	1	0	38	816	32.12	192
d† " (" ") ... (R)	" " " " " " " " " " " "	11	1	5	39	813	32.02	194
† " (Lord Street Station)	Great Central Rly. Co.....	9	3	6	21	786	30.96	179
d " (Forest Road)	J. H. Bonny, Esq.....	5	1	6	25	824	32.44	198
4.—OUSE—Aire. 2 sq. mi.								
Worthdale (Watershed Res.)	M. R. Barnett, Esq., C.E.	5	1	0	1115	1334	52.51	...
Foulridge (Canal Office)	Leeds & L'pool Canal Co.	8	1	0	497	1177	46.33	...
" (Cragg Nook Hill) ...	" " "	8	1	0	690	1059	41.70	...
NORTH LANCASHIRE. (Area, 609 sq. mi.)								
1.—DUDDON & C. 77 sq. mi.								
d Barrow-in-Furness	W. Fergusson, Esq.	11	1	6	36	854	33.63	172
d Ulverston (Urswick School Ho.) ..	J. Dobson, Esq.	5	1	3	140	1159	45.62	200

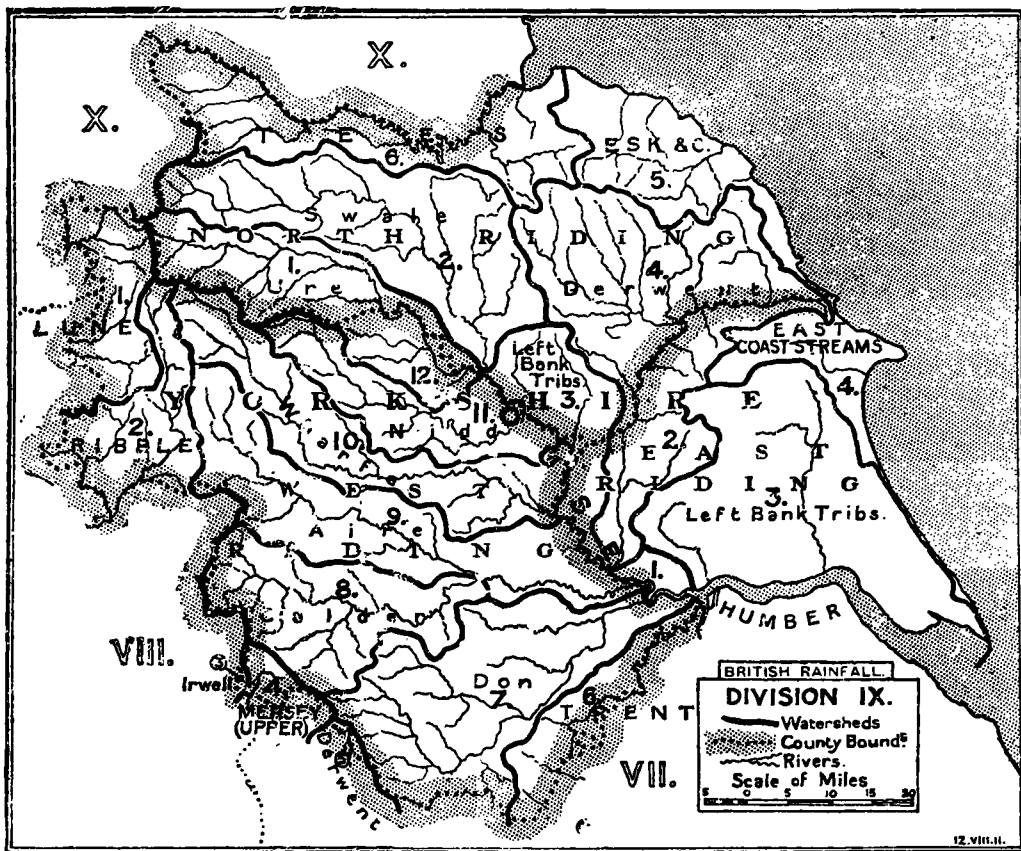
DIVISION VIII.—NORTH WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with .01 in. or more
		Diam.	Height Above		1914			
			Ground	Sea Level				
		in.	ft.	in.	feet.	mm.	inches.	
NORTH LANCASHIRE—(con.)								
1.—DUDDON & C—(con.)								
Lindal (Moor Mines).....	Messrs. Harrison, Ainslie & Co.	5	7	0	400	1188	46·78	...
D Broughton-in-Furness (Syke Ho.)	Miss E. Crossland	5	1	0	100	1369	53·88	192
D Duddon Valley (Seathwaite Vic.)	Rev. C. W. Wakefield...	5	1	0	330	1992	78·43	221
2.—LEVEN & C. 135 sq. mi.								
D† Cartmel (Carke).....	W. R. Nash, Esq.	5	1	0	76	1116	43·95	201
D „ (Holker Hall)	Lord Richard Cavendish	5	0	9	85	1175	46·27	201
D Ulverston (Poaka Beck)	W. Fergusson, Esq.	11	1	6	512	1192	46·92	206
D† Cartmel (Aynsome)	J. Stewart Remington, Esq.	8	2	0	132	1321	52·01	221
D „ W. W. (Newton Res.) (R)	T. Huddleston, Esq., C.E.	10	1	0	586	1375	54·14	249
D Blawith Vicarage	Rev. J. B. Ditchfield.....	5	0	10	185	1479	58·23	212
Rusland Hall	Mrs. Archibald	5	14	0	45	1126	44·34	203
„ (Crossland House)	Miss K. F. Brothers	5	1	6	150	1385	54·51	...
Ulverston (Graythwaite)	H T Gnosspelius Esq per MO	8	1	0	185	1481	58·30	225
D Greenodd (Pennybridge School)..	W. White, Esq.	5	1	0	118	1541	60·68	216
D „ (Summerhill).....	J. L. Altham, Esq.	5	4	6	241	1559	61·37	206
D Coniston (Water Park).....	Miss C. Marshall	6	1	0	165	1604	63·14	205
D† „ (Holywath).....	Mrs. Barratt	8	0	8	170	2427	95·55	215
D† Hawkshead (Tower Bank, Sawrey)	Miss Alcock-Beck	5	2	0	342	1706	67·18	212
† Coniston	Miss C. Marshall	5	1	2	305	2134	84·02	192
Hawkshead (Black Fell)	„ „ „	5	1	6	1055	1853	72·95	...
D† Skelwith Fold [Ambleside]	„ „ „	5	1	0	333	2149	84·61	219
† „ „ [„]	„ „ „	5	1	0	333	2143	84·36	...
3.—KENT & C. 45 sq. mi.								
D Heysham Harbour.....	Midland Railway Co.	5	1	6	28	937	36·90	176
D „ House.....	Miss Tomlinson	5	1	6	80	1171	46·12	231
D Morecambe	Mr. T. B. Lamb.....	8	1	0	24	917	36·10	183
Bolton-le-Sands Vicarage.....	Rev. A. R. Tomlinson....	5	1	2	70	991	39·01	...
D Carnforth (Over Kellet)	W. Farrer, Esq.	8	1	0	192	1000	39·38	201
D Yealand Conyers (Beechfield) ...	W. E. Roper, Esq.	5	1	0	250	1042	41·01	214
D „ „	J. Rawlinson Ford, Esq...	5	1	0	278	1113	43·82	220
D† Grange-over-Sands (Nutwood)	Miss S. M. Arkwright	5	1	0	...	1105	43·50	193
D† Cartmel Fell (The Schoolhouse)..	R. J. Cragghill, Esq.	5	5	0	220	1460	57·49	217
4.—LUNE. 135 sq. mi.								
D† Hampson-in-Ellel	W. G. Welch, Esq.	5	1	6	145	995	39·19	200
D† Lancaster (Bailrigg)	H. L. Storey, Esq.	5	1	3	200	1039	40·90	211
† Quernmore (Brow Top).....	A. G. Bradshaw, Esq.	8	1	0	552	1246	49·07	198
† Bowland Forest (Higher Salter)	J. T. Sanderson, Esq.	5	1	0	1014	1084	42·67?	...
† „ „ (Whiteray).....	„ „ „	5	1	0	1139	1479	58·22	...
D† Lancaster (Strathspey)	A. B. S. Welch, Esq.	5	1	0	87	988	38·91	206
„ „ (Blea Tarn Reservoir)	A. G. Bradshaw, Esq.	8	1	0	330	916	36·07	189
D „ „ (Greg Observatory) ...	Neville Holden, Esq.	8	1	0	312	1061	41·78	213
„ „ (Robert Street).....	A. G. Bradshaw, Esq.	8	1	0	62	1094	43·06	214
D „ „ (Halton Park)	J. G. Wright, Esq.	9	...	...	...	1062	41·79	180
D† Wray Vicarage	Rev. C. L. Reynolds.....	5	1	0	165	1193	46·96	225
D Leck Vicarage	Rev. J. Turner	5	1	1	400	1012	39·85	212
5.—WYRE & C. 213 sq. mi.								
D St. Anne's-on-the-Sea (Whitehall)	M. B. Copland, Esq.	8	1	8	20	882	34·73	201
D „ „ „	Mr. W. E. Procter	5	1	0	25	792	31·19	195
„ „ „ „ (Lawrence Ho.)	C. G. D. Hoare, Esq.	5	1	6	0	792	31·17	...

DIVISION VIII.—NORTH WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with 0.1 in. or more	
		Diam.	Height Above Ground | SeaLevel		1914			
		in.	ft.	in.	feet.	mm.	inches.	
NORTH LANCASHIRE—(con.)								
5.—WYRE & C—(con.)								
N† Weeton Reservoir	No. 1 J. Cook, Esq., C.E.	5	1	0	133	901	35.48	184
N† "								

MAP OF DIVISION IX.—YORKSHIRE,
Showing the River-Divisions.



DIVISION IX.—YORKSHIRE.

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
WEST RIDING. (Area, 2791 sq. mi.)								
1.—LUNE. 178 sq. mi.								
D High Bentham	Mr. Bryan Holmes	5	1	0	412	1046	41·19	213
Ingletton (Kingsdale Head)	Mr. L. Pye	5	0	10	994	1897	74·68	...
D Hawes Junction	Mr. W. H. Bunce	5	1	0	1130	1731	68·15	231
Sedbergh (Dent Post Office)	<i>Skipton Herald</i>	5	1	0	484	1988	78·25	203
D „ (Akay)	C. E. Taylor, Esq.	5	1	0	400	1567	61·70	209
D „ (Cemetery)	Mr. J. Anderson	5	1	0	374	1533	60·34	210
D „ (Bynac)	Mrs. B. Wilson	5	1	0	480	1462	57·54	201
D „ (Howgill School)	W. Woodhead, Esq.	5	1	0	550	1348	53·09	195
2.—RIBBLE. 225 sq. mi.								
D Laneshaw Reservoir [Colne]	J. F. Bedford, Esq.	5	1	0	842	904	35·59	190
D Barnoldswick (Rainhall Road)	Asa Burniston, Esq.	5	0	10	549	1040	40·93	189
D† Bolton-by-Bowland (Bolton Hall)	C. B. C. Wright, Esq.	8	0	6	300	1131	44·51	169
† Slaidburn (Knowlmere Manor)	W. Peel, Esq.	5	1	0	417	1473	58·00	...
„ (Thorneyholme)	R. A. Tatton, Esq.	5	1	6	380	1565	61·60	...

DIVISION IX.—YORKSHIRE—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0.1 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
WEST RIDING—(con.)								
2.—RIBBLE—(con.)								
Slaidburn (Hareden Brook) ... M	J. H. Smethurst, Esq., C.E.	8	1	2	540	1745	68.70	...
† „ (Langden Brook) ... M	„ „ „	8	1	2	556	1735	68.30	...
† „ (Whiteholme)	W. King Wilkinson, Esq.	5	1	3	475	1258	49.54	...
† „ (Dunsop Houses)	W. Stubbs, Esq., C.E.	8	1	0	450	1682	66.22	196
† „ (Middle Knoll)..... M	„ „ „	8	2	6	1298	1444	56.85	...
„ (Brennand)	„ „ „	8	1	0	820	1715	67.51	203
† „ (Whitendale)	„ „ „	8	1	0	830	1825	71.84	200
„ (Cabin Hill)..... M	„ „ „	8	3	1	1559	1638	64.50	...
† „ (Baxton Fell)	„ „ „	8	2	6	1540	1627	64.05	...
D† Settle	J. W. Shepherd, Esq.	8	1	2	450	1194	47.00	219
D† „ (Giggleswick School).....	P. Haswell, Esq.	8	1	0	500	1133	44.59	210
Horton-in-Ribblesdale	Nathaniel Hunt, Esq.	...	1	0	800	1475	58.08	...
3.—MERSEY—Irwell. 2 sq. mi.								
4.—MERSEY, UPPER. 35 sq. mi.								
Greenfield (Upperwood Moor) ...	F. J. Dixon, Esq., C.E.	5	1	0	1518	1347	53.04	...
D „ (Chew Mount)	„ „ „	5	1	0	1621	1340	52.74	222
D „ (Yeoman Hey)	„ „ „	5	1	0	784	1359	53.50	211
„ (Ashway Moss)	„ „ „	5	1	0	1581	1172	46.14	...
„ (Birchen Clough)	„ „ „	5	1	0	1017	1510	59.47	...
Saddleworth Station	E. Prebble, Esq., C.E.	5	4	2	630	1001	39.41?	...
Strinesdale [Oldham]	C. J. Batley, Esq., C.E.	5	4	0	815	1066	41.97	227
D Standedge (Castleshaw, Broadhead)	„ „ „	8	4	6	876	1139	44.85	217
† „ („ Cudworth)	„ „ „	5	4	6	1410	854	33.62?	217
† „ (Redbrook Reservoir) ..	E. Prebble, Esq., C.E.	8	1	6	1150	1255	49.40	...
† Denshaw (Ox Hey)	C. J. Batley, Esq., C.E.	8	4	6	1030	1163	45.79	223
D† „ (New Year's Bridge)...	„ „ „	8	4	0	1012	1261	49.64	223
† „ (Ready Con Dean)	„ „ „	8	4	0	1414	1183	46.56	223
5.—TRENT—Derwent. 7 sq. mi.								
Derwent Dale (Low Seat) No. 21	S. B. Winsor, Esq., C.E.	5	1	0	1565	1188	46.76	...
„ „ (Howden Ho.) 19	„ „ „	8	1	0	775	1218	47.94	...
„ „ (Row Top) No. 20	„ „ „	5	1	0	1260	1392	54.81	...
„ „ (Sandy Lee) No. 7	„ „ „	5	1	0	1340	1246	49.04	...
„ „ (Cranberry Clough) 6	„ „ „	8	1	0	960	1472	57.94	...
„ „ (Crowstones) No. 3	„ „ „	5	1	0	1660	1361	53.58	...
„ „ (Featherbed Moss) 1	„ „ „	5	1	0	1670	1324	52.14	...
6.—TRENT—Left Bank Tributaries. 143 sq. mi.								
D Tickhill (Sandbeck Park)	Mr. G. Summers	8	1	0	150	574	22.58	166
D Doncaster (Wadworth Hall)	Rev. J. C. Ross	8	1	0	190	652	25.67	173
† „ (Carr House Hospital)	Dr. D. L. Anderson	5	1	0	37	570	22.43	...
7.—OUSE—Don. 564 sq. mi.								
D Sheffield (Millhouses)	T. Firth, Esq.	5	1	6	355	762	30.01	190
Woodhouse (Handsworth Sew. Wks.)	Bernard Powell, Esq.	8	0	6	180	753	29.64	...
D Sheffield (Stumperlow Hall)	J. Dixon, Esq.	5	1	0	730	763	30.03	187
D „ („ „)	„ „ „	5	1	0	770	816	32.12	192
D „ W.W. (Redmires Res.) (R)	L. S. M. Marsh, Esq., C.E.	10	5	0	1110	1019	40.13	221
„ „ („ „) weekly	„ „ „	8	4	0	1110	1011	39.79	...
D „ „ (Rivelin)	„ „ „	10	4	0	564	895	35.22	200
„ „ („ „) weekly	„ „ „	8	4	0	564	891	35.07	...
D „ „ (Crookes)	„ „ „	10	2	0	629	712	28.05	188

DIVISION IX.—YORKSHIRE—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0.1 in. or more
		Diam.	Height Above		Ground	Sea Level	1914	
WEST RIDING—(con.)								
7.—OUSE—Don—(con.)								
Sheffield W.W. (Crookes).....	weekly L. S. M. Marsh, Esq., C.E.	8	2	0	629	712	28.03	...
D† „ (Weston Park)	E. Howarth, Esq.	8	1	0	430	731	28.80	189
D Darnall (High Hazels)	„ „ „ „	8	1	0	275	631	24.86	176
Sheffield (Victoria Station)	Great Central Rly. Co.....	9	3	6	188	632	24.90	172
„ W.W. (Broadcar) No.1	L. S. M. Marsh, Esq., C.E.	5	1	0	1004	1195	47.06	...
„ „ (Oaks Fm., Damflask)	„ „ „ „	5	1	0	650	991	39.00	...
Loxley Valley (Loftshaw, Strines)	„ „ „ „	5	1	0	1011	1174	46.22	...
D „ „ (Dale Dyke Res.) (R)	„ „ „ „	10	3	0	715	1110	43.72	215
„ „ „ „ „ „ „ „ weekly	„ „ „ „	8	3	0	715	1094	43.06	...
„ „ „ (Thornseat)	„ „ „ „	5	1	0	1326	1180	46.45	...
„ „ „ (Rocher Flat).....	„ „ „ „	5	1	0	1106	1019	40.11	...
„ „ „ (Mortimer House)	„ „ „ „	5	1	0	1036	1071	42.15	...
Rotherham (Ulley Reservoir) ...	E. B. Martin, Esq., C.E.	5	1	0	184	540	21.27	...
Sheffield (Tinsley Locks)	Great Central Rly. Co.....	9	...	...	117	728	28.68	207
D Rotherham (Sitwell Vale).....	Mr. G. Howard	5	1	0	300	639	25.16	166
D „ (Moorgate Grange)...	F. M. Watson, Esq.	5	1	0	262	670	26.37	151
„ (Aldwarke Sew. Wks.)	James H. Kershaw, Esq.	5	1	4	71	588	23.17	...
D „ (Thrybergh)	F. Oscar Kirby, Esq., C.E.	8	1	0	184	648	25.53	172
D Chapeltown (Potter Hill).....	Mr. C. W. Frost	8	5	0	581	691	27.20	181
D Broomhead Hall Gardens.....(R)	Mr. W. Harrison	8	4	6	950	1168	45.98	207
D Doncaster (Firsby Reservoir) ...	F. Oscar Kirby, Esq., C.E.	8	1	4	189	627	24.70	168
D Wentworth Woodhouse	Mr. A. Third	5	0	10	360	764	30.08	158
„ (High Hoyland)	Miss I. Wintour	5	1	4	610	692	27.25	163
D Mexborough	G. Fenwick Carter Esq. C.E.	5	1	6	77	533	20.98	170
D „	John Thompson, Esq.	5	1	6	76	530	20.88	146
Wortley	Great Central Rly. Co.....	9	3	6	548	683	26.88	174
Elsecar	„ „ „ „ „ „ „ „	9	3	6	181	594	23.39	...
Langsett Moor (Catcleugh) ...	M. L. S. M. Marsh, Esq., C.E.	8	1	6	1516	1275	50.19	...
„ „ (Mickleden) ...	M. „ „ „ „ „ „ „ „	5	1	6	1217	1300	51.16	...
D „ „ (Upper Midhope)	„ „ „ „ „ „ „ „	8	1	6	925	1140	44.88	210
D „ „ (Midhope)	J. H. Taylor, Esq., C.E....	5	1	0	830	1048	41.28	204
Wortley (Service Reservoir).....	„ „ „ „ „ „ „ „	5	1	0	700	773	30.44	...
D Little Don Val. (Underbank Res.)	L. S. M. Marsh, Esq., C.E.	8	1	6	604	947	37.29	203
„ „ (Brockholes) ...	M. „ „ „ „ „ „ „ „	5	1	6	934	948	37.33	...
„ „ (Sheep House) ...	M. „ „ „ „ „ „ „ „	5	1	6	974	962	37.89	...
D† Little Don Valley (Bridge Lane)	„ „ „ „ „ „ „ „	8	4	9	761	1071	42.15	211
D† Langsett Moor (Flouch Road) ...	„ „ „ „ „ „ „ „	8	4	3	960	1178	46.36	212
„ „ (Fiddlers Green) M	„ „ „ „ „ „ „ „	8	1	6	1493	1262	49.70	...
„ „ (Border Hill) ...	M. „ „ „ „ „ „ „ „	5	1	6	1148	1275	50.19	...
D „ „ (Swinden Lodge) ..	„ „ „ „ „ „ „ „	8	1	6	1037	1281	50.42	219
D Wath-upon-Deerne (Chapel St.)	Dr. F. J. Burman	8	2	2	188	579	22.80	165
D Bolton-upon-Deerne	T. Washington, Esq.	5	1	0	130	588	23.14	163
Worsborough	Great Central Rly. Co.....	9	3	6	225	671	26.40	171
Stainborough (Wentworth Castle)	W. J. Fisher, Esq.	8	2	6	520	716	28.20	148
† Doncaster (Hexthorpe Hall) ...	H. Morris, Esq.	5	1	0	25	586	23.08	...
D „ (Littlemoor Terrace) ..	R. F. Moate, Esq.	5	1	6	50	539	21.22	164
„	Great Central Rly. Co.....	9	3	6	32	549	21.60	144
D „ (Pumping Station) ...	F. Oscar Kirby, Esq., C.E.	5	1	6	30	542	21.32	149
D† „ (Avenue Road).....	M. H. Stiles, Esq.	5	4	0	60	586	23.09	170

DIVISION IX.—YORKSHIRE—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with .01 in. or more
		Diam.	Height Above			1914		
			Ground	Sea Level				
WEST RIDING—(con.)		in.	ft	in.	feet.	mm.	inches.	
7.—OUSE—Don—(con.)								
Dunford Bridge (Windleden) ...	H. Dearden, Esq., C.E....	12	2	2	1100	1396	54.94	...
„ „ (Dearden Res.)..	„ „ „ „	12	1	6	1244	1389	54.69	...
„ „ Station	Great Central Rly. Co....	9	3	6	954	1308	51.49	204
D „ „ Reservoir	H. Dearden, Esq., C.E....	12	2	0	1111	1309	51.54	233
Penistone	Great Central Rly. Co....	9	3	6	717	858	33.76	160
„ (Hazlehead)	„ „ „ „	9	3	9	868	1240	48.81	224
„ (Ingbirchworth Res.)..	J. H. Taylor, Esq. C.E....	8	1	3	853	1006	39.61	220
Silkstone (Champany Hill Res.)	„ „ „ „	5	1	0	625	614	24.17	153
Barnsley (Jordan Hill)	„ „ „ „	8	1	0	460	576	22.67	155
„	Great Central Rly. Co....	9	3	6	317	516	20.32	153
Cawthorne	Rev. C. T. Pratt.....	5	1	6	340	719	28.31	192
D „ (Cannon Hall)	Mr. H. G. Kitchen.....	5	0	11	418	743	29.26	186
Cudworth (Lund Lane Sew. Wks.)	J. H. Taylor, Esq., C.E....	5	1	0	150	664	26.13	147
D Burntwood Hall	J. Dymond, Esq.	5	1	0	378	598	23.56	171
Doncaster (Wyndthorpe)	Viscountess Chetwynd....	5	0	11	13	535	21.06	...
D Kirk Bramwith	H. A. Brundell, Esq. C.E....	5	1	0	17	512	20.16	157
Hemsworth Hall	Mr. E. T. Bendall	5	1	0	250	537	21.15	...
D „ Collieries	C. P. Finn, Esq.....	5	1	3	246	562	22.14	162
Campsall (Campsmount)	late G. B. C. Yarborough, Esq.	5	1	0	100	597	23.52	...
D Ackworth School	E. Priestman, Esq.	8	1	0	125	552	21.73	174
D „ (Hillthorpe)	Mrs. F. Hatchard	5	1	5	175	549	21.60	157
„ (Nostell Priory).....	Mr. T. L. Allison	5	4	0	200	572	22.52	...
† Goole (Swinefleet)	Mr. G. Harrison.....	5	5	6	10	703	27.67	...
† „	W. E. Grayburn, Esq....	5	2	0	18	621	24.46	...
8.—OUSE—Aire—Calder. 361 sq. mi.								
D† Holmbridge (Yateholme Res.) ...	J. C. Barrowclough, Esq. CE	5	1	0	...	1695	66.74	224
† „ „ („ „ Fm.) rod g.	„ „ „ „	7	1	0	861	1547	60.90	...
D† „ „ („ „ „)	„ „ „ „	5	1	0	861	1629	64.13	224
† „ „ (Holme Styas Res.)	Mr. B. T. Woodcock.....	7	2	0	830	1171	46.10	...
† „ „ (Boshaw Whams Res.)	„ „ „ „	7	2	0	930	1389	54.70	...
† „ „ (Bilberry Reservoir)	„ „ „ „	7	2	0	820	1392	54.80	...
† Meltham (Harden Moss)	J. W. Armitage, Esq., C.E.	8	1	2	1212	1327	52.23	...
† „ „ („ „ „) new g.	„ „ „ „	8	1	0	1212	1334	52.53	...
† Wessenden Head	„ „ „ „	8	1	0	1270	1253	49.32	...
† „ „ (Hollin Bank Moss)...	„ „ „ „	8	1	0	1360	1841	72.49	...
† „ „ (Butterley Moss)	„ „ „ „	8	1	0	1110	1247	49.10	...
† „ „ (Bobus).....	„ „ „ „	8	1	0	1200	1120	44.11	...
† Meltham (Brow Grains)	„ „ „ „	8	1	0	900	1192	46.93	...
„ „ (Royd Edge) Glaisher g.	C. L. Brook, Esq.	8	1	0	585	1402	55.21	...
„ „ („ „ „) M. O. g.	„ „ „ „	8	1	0	585	1382	54.43	...
D „ „ (Harewood Lodge).....	„ „ „ „	8	1	0	514	1210	47.65	221
† „ „ Grange	J. W. Armitage, Esq., C.E.	8	1	2	850	1137	44.77	...
† Marsden (Deer Hill)	„ „ „ „	8	1	0	1149	1159	45.62	...
† „ „ („ „ „) new g.	„ „ „ „	8	1	0	1149	1212	47.72	...
Wakefield (Woolley Park Gardens.)	Mr. T. Wells	5	1	0	400	600	23.63	...
D† Slaithwaite (Blackmoorfoot).....	J. W. Armitage, Esq., C.E.	8	1	0	800	1186	46.70	252
D „ „ (Inglewood)	J. Woodhead, Esq.	5	1	0	546	1011	39.80	224
D Huddersfield (Carr End, Dalton)	J. W. Robson, Esq.	8	1	0	350	818	32.19	189
„ „ (Bank Field, Golcar)	J. R. Sykes, Esq.	5	1	0	400	1032	40.62	191

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with "01 in. or more
		Diam.	Height Above Ground. Sea Level			1914		
		in.	ft.	in.	feet.	mm.	inches.	
WEST RIDING—(con.)								
8.—OUSE—Aire—Calder—(con.)								
Huddersfield (Cemetery)	Mr. J. Firth	8	1	0	410	908	35.76	203
Rishworth Moor (Gt. Walden Edge)	C. Clemesha Smith Esq., C.E.	5	0	10	1135	1313	51.68	224
" (Stott Hall)	" " " "	5	1	0	935	1113	43.81	229
" (Ringstone Res.)	" " " "	5	1	0	990	1192	46.95	215
" Moor (Greystones) ...	" " " "	5	1	0	1175	1319	51.94	...
Soyland Moor (Summit)	" " " "	5	1	0	1290	1135	44.68	...
" (Baitings Gate) ...	" " " "	5	1	0	935	1375	54.12	241
" (Manshead)	" " " "	5	1	0	1240	1261	49.66	...
Horbury (Durkar)	H. J. Wells, Esq.	5	1	0	140	584	22.98	...
" (Highfields)	J. H. Green, Esq.	5	1	0	226	632	24.89	...
" (Addingford Hospital)	J. H. Horsfall, Esq.	8	2	0	200	611	24.07	187
Mirfield (Cote Wall)	J. Watson-Kaye, Esq.	8	1	2	200	887	34.92	189
Wakefield	Dr. H. Maclean Wilson ...	8	1	0	174	577	22.73	177
" (Clarence Park)	C. Clemesha Smith Esq., C.E.	5	1	0	124	616	24.24	176
" (Field Head Reservoir)	" " " "	5	1	0	250	588	23.14	...
Elland	P. H. Whitwam, Esq.	8	1	0	307	955	37.61	...
Dewsbury (Mitchell Laithes WW)	Dewsbury Corporation	535	21.07	162
Mytholmroyd (Cragg Hall)	W. A. Simpson-Hinchliffe, Esq.	5	1	0	615	1028	40.47	...
Sowerby Bridge (Brockwell, Triangle)	Mrs. MacDougall Rawson	8	1	0	500	1144	45.06	...
" (Haugh End) No. 4	J. Selwyn Rawson, Esq.	5	0	8	450	1151	45.30	227
D Walsden (Ramsden Reservoir) ...	F. H. Brunt, Esq., C.E.	8	1	0	993	1419	55.88	190
" (" Hill)	" " " "	5	1	0	1326	1452	57.18	...
"	E. W. Cockcroft, Esq.	5	1	0	550	1323	52.08	192
Todmorden (Fielden Hospital) ...	Mr. F. Rogers	5	1	0	650	1170	46.08	200
" (Sourhall Hospital) ..	" " " "	5	1	0	1020	1512	59.54	207
D Halifax (Hall Ings, S. Ofram) ..	Rev. G. E. Aspinall	5	0	7	750	767	30.19	211
D Sowerby Bridge (Thorpe) No. 1 ...	J. Selwyn Rawson, Esq.	8	0	8	345	1195	47.06	210
" (") No. 2 M	" " " "	5	0	8	345	1169	46.01	...
D Halifax (Public Library)	E. Green, Esq.	8	1	0	625	964	37.95	207
D Batley (Staincliffe Reservoir) ...	J. C. Barrowclough Esq. C.E.	5	1	0	492	693	27.30	168
" (Woodwell Dépôt)	O. J. Kirby, Esq., C.E.	8	1	0	301	727	28.62	179
D Ardsley Reservoir	C. Clemesha Smith, Esq. C.E.	5	1	2	395	649	25.55	181
" (") No. 2	" " " "	5	1	2	326	652	25.68	182
D Halifax (Jaw Hill Filters)	" " " "	5	1	0	315	591	23.26	166
Halifax W.W. (Albert)	R. J. Hartley, Esq., C.E.	5	1	0	795	986	38.83	...
" (Gibbet)	" " " "	5	3	9	568	1005	39.58	...
" (Ramsden Wood)	" " " "	8	1	2	816	994	39.15	...
Gomersall (Castle House)	A. J. Pyrah, Esq.	5	1	0	480	726	28.57	170
Hebden Bridge (Falling Royd) ..	A. R. Crossley, Esq.	4	1	0	479	1297	51.05	209
" (Summerfield)	J. Hoyle, Esq.	5	1	0	800	1163	45.79	225
D Halifax W.W. (Castle Carr Lodge) ..	R. J. Hartley, Esq., C.E.	5	0	6	1060	1078	42.43	...
" (Midgley Moor) M	" " " "	8	0	9	1350	1203	47.36	...
" (Warley Moor) M	" " " "	8	1	2	1325	1109	43.66	...
" (Ogden)	" " " "	5	0	10	990	1135	44.67	...
" (Ovenden Moor) ...	" " " "	8	0	9	1375	1205	47.44	...
" (Widdop)	" " " "	5	1	3	1050	1135	44.69	...
" (Walshaw Dean Lodge) ..	" " " "	5	1	0	1040	1311	5	

DIVISION IX.—YORKSHIRE—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ≥ 0.1 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
WEST RIDING—(con.)								
9.—OUSE—Aire. 504 sq. mi.								
D Pontefract (Tanshelf Drive).....	T. K. Heseltine, Esq.....	5	1	0	180	540	21.26	146
Castleford Secondary School ...	W. A. D. Lawson, Esq....	5	1	3	76	685	26.96?	171
D Morley (The Secondary School)..	W. E. Burgess, Esq.....	5	1	0	535	643	25.33	158
Pudsey (Fulneck)	Miss E. C. Lawford	5	1	0	490	825	32.49	...
Selby (Brayton W.W.).....	Bruce McG. Gray, Esq. C.E. ....	...	...	...	...	490	19.29	161
D Garforth (Manor Farm)	Prof. R. S. Seton	8	1	2	194	657	25.88	187
Bradford (Grange Road, Horton)	Mr. A. E. Chilton	5	3	0	450	942	37.09	207
„ (Queensbury).....	R. J. Foster, Esq.....	8	2	2	1050	993	39.11	220
„ (Brayshaw Reservoir) ..	J. Watson, Esq., C.E.....	5	1	0	982	979	38.55	189
D „ (Lister Park).....	Mr. H. Lander	8	1	0	440	927	36.50	183
„ (Thornton Moor Filters)	J. Watson, Esq., C.E.....	5	1	0	1218	1180	46.47	253
„ (Stubden Res.)	A „ „ „	8	1	0	1075	1323	52.07	225
„ („ „)	B „ „ „	8	1	0	1075	1318	51.88	227
„ („ „)	„ „ „	5	1	0	1071	1247	49.11	224
„ (Nan Scar, Oxenhope) M	„ „ „	5	1	0	1101	1343	52.86	...
„ (Stairs Top, „) M	„ „ „	5	1	0	1401	1320	51.96	...
„ (Leeming Reservoir) M	„ „ „	5	1	0	850	1049	41.31	227
„ (Doe Park Reservoir) ...	„ „ „	8	1	0	810	1153	45.39	212
„ („ „ „)	„ „ „	5	1	0	811	1070	42.13	211
„ (Leeshaw Res.)	M „ „ „	5	1	0	875	1322	52.05	...
„ (Chellow Dean Res.) ...	„ „ „	5	1	0	645	955	37.61	202
„ („ Heights Res.) ..	„ „ „	5	1	0	848	983	38.69	208
„ (Hewenden Res.) . old g.	„ „ „	5	1	0	700	1084	42.68	197
„ („ „ „) new g.	„ „ „	5	1	0	701	1020	40.14	198
„ (Heaton Reservoir) ...	„ „ „	8	1	0	530	897	35.33	191
„ („ „ „)	„ „ „	5	1	0	531	881	34.69	191
Leeds (Wortley Reservoir)	C. G. Henzell, Esq., C.E.	8	0	9	307	681	26.82	179
„ (Knoctrop)	„ „ „	8	0	9	72	534	21.03?	...
D „ (Holbeck W.W. Depot)...	„ „ „	8	0	9	93	660	25.99	192
D „ (Museum).....	H. Crowther, Esq.....	10	46	0	177	630	24.82	162
„ (Woodhouse Moor)	C. G. Henzell, Esq., C.E.	8	0	9	307	682	26.86	179
„ (Weetwood Reservoir) No.1	„ „ „	8	0	9	328	687	27.05	192
„ („ „ „) No.2	„ „ „	8	0	9	328	699	27.52	192
„ („ „ „ Garth)	Frank Gott, Esq.	5	0	10	300	729	28.70	...
„ (Allerton Hill)	T. Harding Churton, Esq.	5	0	7	418	684	26.94	...
Shipley (Cragg End).....	Leeds & L'pool Canal Co.	8	1	0	304	867	34.12	...
D Haworth (Harbour Lodge)	M. R. Barnett, Esq., C.E.	8	1	0	1187	1393	54.85	214
D „ (Lower Laithe)	„ „ „	5	0	10	772	1253	49.33	210
D „ („ „ „)	(R) „ „ „	6	1	7	772	1288	50.69	210
D Oakworth (Oldfield Filters).....	„ „ „	5	1	0	1008	1178	46.39	210
Bingley (Gilstead Filters)	J. Watson, Esq., C.E.....	5	1	0	572	813	32.01	174
Rawdon (Barningham)	H. Killick, Esq.....	5	0	9	525	802	31.57?	...
D Adel (Lawns Wood Cemetery) ...	Mr. S. R. Dyson.....	5	1	0	475	773	30.42	181
Bingley (Oakwood)	T. Garnett, Esq.	5	1	0	525	912	35.92	...
D Keighley (The Knowle)	P. Clough, Esq.	8	1	0	385	959	37.75	193
„ (Victoria Park)	Mr. R. Butterfield.....	5	1	0	305	904	35.57	189
Bingley (Sunnydale Reservoir)...	J. Watson, Esq., C.E.....	5	1	0	825	920	36.23	207
Barnoldswick Waterworks	J. W. Thompson, Esq. ....	...	...	...	832	1174	46.21	...
D Earby (Sewage Works).....	J. E. Aldersley, Esq.....	8	1	0	425	1039	40.92	201

DIVISION IX.—YORKSHIRE—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more
		Diam.	Height Above		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
WEST RIDING—(con.)								
9.—OUSE—Aire—(con.)								
D Silsden (Bolton Road)	Mr. A. Elder	5	1	0	432	869	34·22	174
„ Reservoir	J. Watson, Esq., C.E.	5	1	0	560	839	33·03	182
„ (Cringles Reservoir Site) ..	„ „ „ „	5	1	0	760	861	33·90	183
Carleton (Beech Hill)	W. Cyril Empson, Esq.	8	5	3	425	1036	40·79	...
Skipton (Sewage Works)	A. E. W. Aldridge, Esq.	8	0	9	315	974	38·33	...
D „ (Whinnygill Reservoir) ..	„ „ „ „	8	2	6	425	980	38·60	174
D† „ (Town Hall)	(R) „ „ „ „	6	1	6	367	910	35·82	184
D „ „ „ „ .....	„ „ „ „ .....	...	...	...	367	922	36·28	183
„ (Hawthorne Cottage) ...	Leeds & L'pool Canal Co. ..	8	1	0	380	832	32·74	...
Gargrave (Banks Hill Bank Newton)	„ „ „ „	8	1	0	545	900	35·43	...
„ (Ray Bridge Hill)	„ „ „ „	8	0	10	459	890	35·06	...
D Skipton (Embsay)	J. A. Edmondson, Esq.	5	6	0	560	1051	41·37	205
D „ „ „ „ „ Moor Reservoir) ..	A. E. W. Aldridge, Esq.	8	1	3	670	923	36·35	202
Gargrave (Great Scarnber Hill) ...	Leeds & L'pool Canal Co. ..	8	0	9	676	897	35·32	...
Winterburn (Long Hill)	„ „ „ „	8	0	9	705	1012	39·83	...
„ „ „ „ „ (Brown Hill)	„ „ „ „	8	1	0	961	1154	45·42	...
D† Malham Tarn	Mr. John Winskill	8	1	0	1296	1479	58·22	230
D† „ „ „ „	„ „ „ „	5	1	0	1296	1501	59·09	230
10.—OUSE—Wharfe. 408 sq. mi.								
D Aberford (Lotherton Hall) ... (R)	Mrs. Trench Gascoigne ...	8	1	0	200	616	24·27	170
D Saxton Vicarage	Rev. C. D. Ash	5	2	6	95	610	24·03	164
Adel (Eccup, South)	C. G. Henzell, Esq., C.E. ..	8	0	9	390	789	31·06	191
„ „ „ „ „ East)	„ „ „ „	8	0	9	375	842	33·13	199
Harewood (Arthington)	„ „ „ „	8	0	9	139	960	37·81	168
„ „ „ „ „ House	Countess of Harewood ...	5	0	10	300	792	31·17	...
D Otley (Sewage Works)	C. F. Hodgson, Esq.	5	1	0	172	701	27·60	171
D† Ilkley (Silverwell Cottage)	Mr. T. C. Gill	5	1	0	904	991	39·01	194
D† „ „ „ „ „ (Glen Rosa)	F. A. Aykroyd, Esq.	8	1	1	450	1021	40·21	186
D† „ „ „ „ „ (St. James' Road)	Miss F. Brown	5	1	0	325	910	35·82	174
D „ „ „ „ „ (Spence's Garden)	Ilkley U.D.C.	5	1	0	314	898	35·37	179
Leathley (Lindley Wood, S.) ...	C. G. Henzell, Esq., C.E. ..	8	0	9	312	828	32·60	215
„ „ „ „ „ „ „ „ N.) ...	„ „ „ „ „ „ „ „ ..	8	0	9	320	820	32·30	215
D Ilkley (March Gill Reservoir) ...	C. F. Hodgson, Esq.	5	0	9	665	925	36·40	162
D† York (Mount Villas)	Mrs. Rowntree	5	1	0	70	739	29·11	207
† „ „ „ „ „ (Cherry Hill)	Messrs. H. Richardson & Co. ..	5	1	6	50	668	26·30	169
† „ „ „ „ „ (Museum Gardens)	O. Grabham, Esq., per M.O. ..	9	1	0	57	644	25·34	173
D „ „ „ „ „ (The Retreat)	Dr. H. J. Mackenzie	5	1	0	74	615	24·21	179
„ „ „ „ „ (Acomb Landing)	W. H. Humphreys, Esq.	5	1	0	40	644	25·36	153
Skipton (Counter Hill)	M J. Watson, Esq., C.E.	5	1	0	951	806	31·72	...
„ „ „ „ „ (Chelker Reservoir) ... M	„ „ „ „ „ „ „ „ ..	5	1	0	730	902	35·53	...
Fewston (Broad Dubb)	M A. S. West, Esq., C.E.	5	1	0	725	849	33·44	...
„ „ „ „ „ (John o' Gaunts)	M „ „ „ „ „ „ „ „ ..	5	1	0	600	840	33·07	...
„ „ „ „ „ (Timble Ings)	C. G. Henzell, Esq., C.E. ..	8	0	9	912	906	35·69	198
„ „ „ „ „ „ „ „ „ „ ..	„ „ „ „ „ „ „ „ ..	8	0	9	720	811	31·92	175
„ „ „ „ „ (Swinsty, E.)	„ „ „ „ „ „ „ „ ..	8	0	9	460	895	35·23	216
„ „ „ „ „ „ „ „ „ „ ..	„ „ „ „ „ „ „ „ ..	8	0	9	425	899	35·38	216
„ „ „ „ „ South	„ „ „ „ „ „ „ „ ..	8	0	9	525	860	33·84	203
„ „ „ „ „ North	„ „ „ „ „ „ „ „ ..	8	0	9	525	873	34·37	203
„ „ „ „ „ (Blubberhouses)	„ „ „ „ „ „ „ „ ..	8	0	9	575	967	38·06	205

DIVISION IX.—YORKSHIRE—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ≥ 0.1 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
WEST RIDING—(con.)								
10.—OUSE—Wharfe—(con.)								
Bolton Abbey Estate Office	A. Downs, Esq.....	5	1	2	368	942	37.09	191
Barden Reservoir	J. Watson, Esq., C.E.....	8	1	0	746	1128	44.39	239
" "	" " " "	5	1	0	746	1141	44.91	239
" " Upper	" " " "	5	1	0	1250	981	38.63	216
Burnsall (Thorpe Fell)	M " " " "	5	1	0	1661	1053	41.47	...
" (Sandbed Beck)	M " " " "	5	1	0	676	1082	42.59	...
D " Rectory	Rev. W. J. Stavert	8	4	7	503	1169	46.02	219
Grimwith Reservoir	J. Watson, Esq., C.E.....	8	1	0	890	1190	46.86	210
" "	" " " "	5	1	0	893	1172	46.13	210
Hawkswick.....	M Harold Wager, Esq. F.R.S.	5	1	6	650	1602	63.07	...
D† Arncliffe Vicarage.....	Rev. Canon W. A. Shuffrey	5	1	0	732	1570	61.81	209
D Wharfedale (Oughtershaw Hall)	Miss Woodd	5	1	6	1175	1768	69.61	180
11.—OUSE—Nidd. 254 sq. mi.								
Spofforth (Sewage Works)	C. E. Rivers, Esq., C.E....	5	1	0	184	683	26.88	186
Wetherby (Ribston Hall)	Mr. W. Simpson.....	5	1	2	130	685	26.96	...
Harrogate (Ling Cottage).....	A. S. West, Esq., C.E....	5	1	0	740	801	31.53	...
" (Cobblers Cottage) M	" " " "	5	1	0	730	829	32.65	...
" (Ten Acres Reservoir)	" " " "	8	1	6	620	812	31.98	186
D " (Scargill Reservoir)...	" " " "	8	1	0	646	904	35.57	193
" (Beaver Dyke Res.)...	" " " "	8	0	11	575	896	35.28	196
" (Long Stoop)	M " " " "	5	1	0	700	839	33.02	...
" (Knab's Moor).....	M " " " "	5	1	0	700	806	31.75	...
D " (Harlow Moor Obsy.)...	C. E. Rivers, Esq., C.E....	5	1	0	480	793	31.22	188
" (" Hill Res.)	A. S. West, Esq., C.E....	8	1	0	589	760	29.94	190
" (Irongate Bridge Res.)	" " " "	8	1	6	455	821	32.31	189
D " (The Stray)	Mr. G. W. Gledhill	5	1	0	380	712	28.04	177
D " (Park Parade)	" " " "	5	1	0	400	727	28.63	175
" (Kent Road).....	H. F. Pinder, Esq.....	5	0	9	390	819	32.25	...
D Goldsborough Hall.....	Mr. R. Goodall	5	1	0	118	679	26.73	169
Knarborough (Water Tower)...	A. S. West, Esq., C.E....	8	1	0	240	676	26.60	181
D " (Grammar School)	C. W. H. Greaves, Esq....	5	1	0	230	619	24.37	177
Harrogate (Bilton Sewage Works)	C. E. Rivers, Esq., C.E....	5	1	0	208	765	30.11	182
D Birstwith (Swarcliffe)	Capt. C. S. Greenwood....	5	1	0	510	910	35.82	166
D Ouseburn (Thorpe Underwood Hall)	F. W. Slingsby, Esq.....	5	1	1	60	696	27.38	168
D Pateley Bridge (Castle Stead) ..	Mr. C. May.....	5	1	0	410	1106	43.53	184
Ramskill (Raygill House)	J. Watson, Esq., C.E.....	5	1	0	925	1263	49.72	170
" "	" " " "	5	1	0	450	863	33.97	169
Nidderdale (High Riggs)	" " " "	5	1	0	1010	1213	47.75	169
" (East Gill Head) ...	M " " " "	5	1	0	1710	1722	67.81	...
" (New Houses)	" " " "	5	1	0	755	1218	47.97	...
" (Lodge)	" " " "	5	1	0	1150	1307	51.46	209
12.—OUSE—Ure. 110 sq. mi.								
† Dallow Moor (Harper Hill)	C. G. Henzell, Esq., C.E....	5	0	9	858	885	34.83	205
D Ripon (Studley Royal Gardens)...	O. H. Wade, Esq.	5	1	6	250	773	30.42	194
D " (The Red House)	F. D. Wise, Esq.	5	1	0	120	692	27.24	152
† Kirkby Malzeard (Drovers' Inn) ..	C. G. Henzell, Esq., C.E.	8	0	9	576	887	34.91	194
† " (Hawset)	" " " "	8	0	9	820	1002	39.44	208
" (Hambleton Hill)	" " " "	8	0	9	1106	1050	41.36	...
† " (Bagwith Brae)	" " " "	5	0	9	703	890	35.03	214

DIVISION IX.—YORKSHIRE—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with "01 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
WEST RIDING—(con.)								
12.—OUSE—Ure—(con.)								
Kirkby Malzeard (Stone & Ears Wham)	C. G. Henzell, Esq., C.E.	8	0	9	1118	1030	40.57	...
d Ripon (High Bank, Mickley) ...	Miss Harrison	5	1	6	225	704	27.70	166
EAST RIDING. (Area, 1176 sq. mi.)								
1.—OUSE—Left Bank Tributaries. 82 sq. mi.								
Deighton Grove [York]	Miss M. L. Whitehead....	5	2	0	47	583	22.97	181
d Heslington [„]	Hon. L. de Yarburgh-Bateson..	8	0	7	35	621	24.44	178
d Dunnington Hall [„]	Miss Hildyard	8	1	2	110	593	23.35	190
2.—OUSE—Derwent. 248 sq. mi.								
d Warter	Mrs. J. Coxon	5	1	10	230	797	31.38	184
d Birdsall Gardens	Mr. J. Anderson.....	5	1	3	303	722	28.42	184
d Malton (The Leat House).....	W. R. Innes Hopkins, Esq.	5	0	10	60	728	28.66	183
d Rillington (Scampston Hall) ...	Mr. F. C. Puddle	5	1	6	102	776	30.55	172
Hunmanby (Holly Bank).....	Miss Ackland	5	1	2	...	662	26.08	...
3.—HUMBER—Left Bank Tributaries. 675 sq. mi.								
Pattrington (Spurn Head)	Meteorological Office	8	1	0	27	521	20.50	158
„	Miss H. Kirman.....	5	2	6	46	574	22.62	...
d Hull (Pearson Park).....	H. B. Witty, Esq.....	5	0	10	12	629	24.75	190
d „ (Springhead).....	C. B. Newton, Esq., C.E.	5	1	0	16	586	23.06	217
d Cottingham (Water Works).....	„ „ „	5	1	1	26	553	21.77	170
North Cave (The Croft)	Major W. H. Carver.....	8	1	6	35	659	25.94	...
d Holme-upon-Spalding-Moor.....	C. J. Pybus, Esq.	8	4	0	35	602	23.72	165
Beverley (East Riding Asylum).	Dr. E. S. Simpson ...	5	1	0	175	681	26.82	202
„ (New Walk)	W. Evans, Esq., C.E.....	5	3	0	38	663	26.09	211
„ (Hull Bridge).....	„ „ „	5	2	6	11	597	23.50	180
d Market Weighton (Dalton Holme)	Mr. J. P. Jobling	8	6	0	150	746	29.35	186
„ „ (Cleaving Grange)	George Cobb, Esq.....	4	1	6	150	686	27.01	191
Brandesburton (Hempholm Lock)	W. Evans, Esq., C.E.....	5	2	6	11	599	23.57	194
Driffild (York Road)	W. E. Lovel, Esq.	5	1	0	76	792	31.17	160
„ (Highfield)	Mr. R. Marson	5	1	0	80	740	29.15	...
d Lowthorpe (The Elms)	F. K. Hawes, Esq.....	5	1	0	63	677	26.64	181
4.—EAST COAST STREAMS. 171 sq. mi.								
d Hornsea (Public Gardens)	F. Lord, Esq.....	8	1	0	40	615	24.20	201
d Bridlington.....	S. R. Crofts, Esq.	5	1	0	59	622	24.49	183
d Helperthorpe (West Farm)	H. D. Birdsall, Esq.	5	1	0	250	760	29.91	176
d Filey (Deepdene)	A. V. Machin, Esq.	5	0	8	44	596	23.46	178
NORTH RIDING. (Area, 2155 sq. mi.)								
1.—OUSE—Ure. 273 sq. mi.								
Masham Moor (Benjy Guide).....	C. G. Henzell, Esq., C.E.	5	0	9	1411	1032	40.61	...
† „ „ (Somerside)	„ „ „	5	0	9	928	1022	40.22	157
„ „ (Autherlands) ...	„ „ „	5	0	9	1237	1136	44.72	...
† „ „ (High Sour Mire)	„ „ „	5	0	9	884	771	30.36	...
„ „ (Spruce Gill).....	„ „ „	5	0	9	1187	1186	46.70	...
„ „ (Leighton Res.)...	„ „ „	5	0	9	634	973	38.31	205
„ „ (Thorney Grane)..	„ „ „	5	0	9	1175	1256	49.43	...
„ „ (Bracken Hill) ...	„ „ „	5	0	9	1450	1153	45.41	...
„ „ (Towler Hill)...	„ „ „	8	0	9	820	990	38.98	203
„ „ (Spruce Gill, East)	„ „ „	5	0	9	915	1031	40.60	...

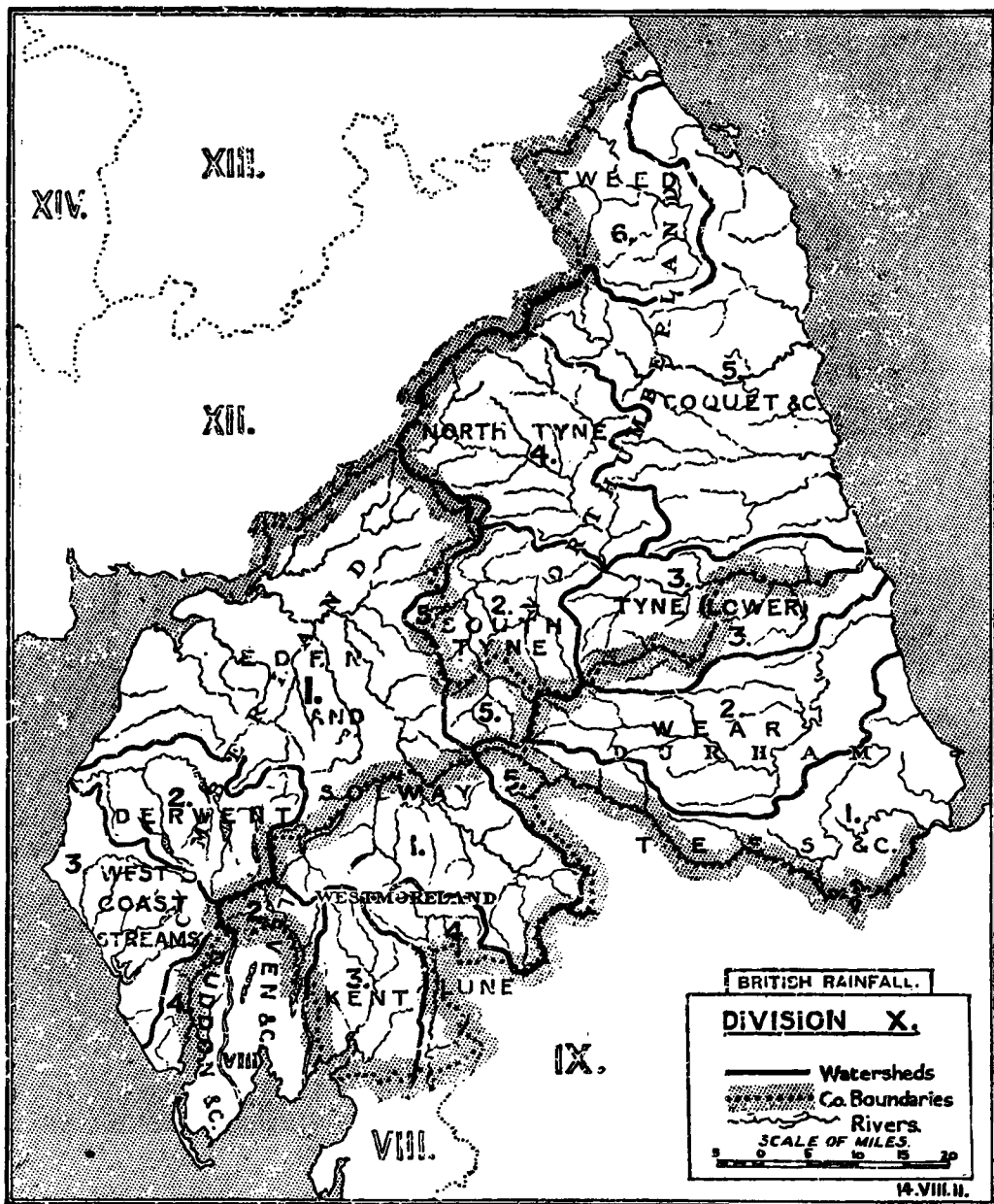
DIVISION IX.—YORKSHIRE—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ≥ 0.1 in. or more
		Diam.	Height Above Ground, Sea Level			1914		
		in.	ft.	in.	feet.	mm.	inches.	
NORTH RIDING—(con.)								
1.—OUSE—Ure—(con.)								
Masham Moor (Spruce Gill, North)	C. G. Henzell, Esq., C.E.	5	0	9	883	976	38.41	...
† " " (Breary Bank) ...	" " "	5	0	9	600	993	39.08	201
" " (Healey).....	" " "	5	0	9	542	890	35.05	189
† " " (Low Houses).....	" " "	5	0	9	693	1044	41.10	221
" " (Black Brunt) ...	" " "	5	0	9	1160	1160	45.68	...
" " (Brown Beck) ...	" " "	5	0	9	1150	1074	42.28	...
D " " (Roundhill Res.)...	A. S. West, Esq., C.E.	8	1	0	743	950	37.42	201
D Clifton Castle Gardens	Mr. J. R. Gardiner.....	5	0	10	380	728	28.68	153
D Middleham (Castle Hill)	Col. P. H. Hammond.....	5	1	0	470	894	35.21	191
D " (The Deanery)	Rev. H. G. Topham	5	1	0	430	874	34.40	170
D West Witton (Ivy House)	J. B. Espiner, Esq.	5	1	0	606	1024	40.32	205
D Leyburn (Bolton Hall)	Mr. F. Scrivener	8	1	0	420	930	36.62	204
Hawes (The Stone House).....	H. Arden Crallan, Esq....	5	1	6	845	1434	56.47	201
2.—OUSE—Swale. 569 sq. mi.								
D Dalton Parsonage	Rev. G. H. Chilman	5	1	0	79	558	21.99	157
D Thirsk (Baldersby Park)	Mr. J. E. Hathaway	10	2	0	100	538	21.17	174
D " (Spital Hill)	C. H. Gill, Esq.	5	1	0	117	679	26.72	177
" (Sowerby)	William Brown, Esq.....	5	1	0	110	610	24.02	...
D " (Brynkellhow)	A. B. Hall, Esq.....	8	1	0	115	615	24.22	174
D " (The Hall).....	Reginald Bell, Esq.	5	1	10	121	566	22.27	164
D " (Brook House, Sutton)...	F. R. Hansell, Esq.	5	1	0	246	637	25.09	167
" (Thirlby)	A. J. Walker, Esq.	5	1	0	339	700	27.58	...
D " (Mount St. John)	" " "	5	1	0	523	626	24.66	181
D " (" " ")	" " "	5	1	10	542	675	26.58	190
" (" " ")	M " " "	5	1	10	542	648	25.52	...
" (Bolthby, West).....	" " "	5	1	0	484	738	29.07	...
" (" East)	" " "	5	1	0	480	760	29.90	...
" (" Cliff Head) No. 2M	" " "	5	1	4	772	730	28.75	...
" (" " ") No. 3M	" " "	5	1	4	772	721	28.38	...
" (Newbuilding)	G. S. Thompson, Esq. .	8	1	3	611	693	27.30	166
D Bedale (Burneston Vicarage) ...	Rev. Canon J. T. Hartley	5	1	0	110	577	22.70	167
" (Thorpe Perrow)	Mr. W. Pattison	5	1	0	140	617	24.28	206
Maunby Hall	Maj. A. Hill-Walker.....	5	1	0	90	506	19.92	...
Bedale (Park House).....	Miss M. Greenwood	5	1	1	180	588	23.17	190
" (Leeming Garth)	Capt. D. A. G. Lascelles...	5	2	0	...	512	20.14	...
D Thornton-le-Moor	Col. R. W. Peckitt	5	1	0	136	618	24.31	165
D " " " (Pasture Ho.)	Col. B. A. Satterthwaite...	5	1	0	225	605	23.83	178
Scruton Hall	Rev. A. T. Coore	5	1	6	110	532	20.93	168
Muker (Gunnarside Lodge) ... M	W. M. Christy, Esq.....	5	1	0	900	1396	54.96	...
Northallerton (Brompton).....	J. P. Yeoman, Esq.	5	0	6	160	616	24.24	...
" (Osmotherley) ..	T. Yeoman, Esq.	8	0	8	660	701	27.59	...
" (Harsley Hall) ...	J. Constantine, Esq.	5	...	...	320	683	26.88	...
Scorton Grammar School	W. G. Shannon, Esq.....	5	1	3	230	580	22.84?	...
D Rounton Grange.....	Mr. J. Hanagan	8	1	0	249	643	25.33	193
D Richmond (Sedbury Park)	G. Gilpin Brown, Esq....	5	1	0	450	736	28.98	212
D " (Gilling West).....	G. Roper, Esq.	5	1	3	303	840	33.07	158
Middleton Tyas	J. F. B. Baker, Esq.	5	0	10	380	645	25.39	...
3.—OUSE—Left Bank Tributaries. 153 sq. mi.								
Haxby (Moorlands)	E. G. Tew, Esq.....	8	0	8	58	573	22.55	...

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with "01 in. or more
		Diam.	Height Above Ground. SeaLevel			1914		
		in.	ft.	in.	feet.	mm.	inches.	
NORTH RIDING—(con.)								
3.—OUSE—Left Bank Tributaries—(con.)								
Alne	E. N. Weighell, Esq.....	5	0	10	80	663	26·10	...
Sutton-on-the-Forest (Sutton Hall)	Mrs. Grey	5	1	0	125	617	24·28	...
4.—OUSE—Derwent. 509 sq. mi.								
Huttons Ambo (Minster Hill) ...	J. W. Procter, Esq.	5	1	3	75	635	25·00	...
Terrington Hall.....	Mr. T. Suffield	5	1	5	300	655	25·78	218
Malton (Broughton Rise).....	C. C. Laverack, Esq.	5	1	0	164	722	28·42	177
Hovingham Hall	Sir W. H. A. Worsley, Bt.	5	0	6	120	817	32·18	163
Ampleforth Abbey.....	Rev. H. de Normanville, O.S.B.	8	1	0	351	697	27·44	185
Helmsley (Duncombe Park Gdns.)	Mr. D. Williams	5	3	0	176	835	32·86	155
Thornton-le-Dale (Beckside) ...	Miss E. M. Priestman.....	5	0	8	125	762	30·01	189
Pickering (Hungate Hall).....	Dr. J. L. Kirk	5	1	0	90	751	29·58	200
Seamer (Irton Pumping Station)	W. Millhouse, Esq. C.E.	8	1	0	94	749	29·50	188
Scarborough (Osgodby).....	" " "	8	1	0	166	706	27·78	...
5.—ESK & C. 278 sq. mi.								
Scarborough	W. W. Larkin, Esq.....	5	1	0	101	629	24·78	172
" (Scalby)	Mrs. J. W. Rowntree.....	5	0	11	300	825	32·48	162
" (St. Philips, Scalby)	Rev. W. E. Stewart	5	1	0	130	712	28·04	175
Glaisdale (The Gables Gardens)..	Mr. H. Hope	5	0	9	400	974	38·35	186
Fylingdales Vicarage	Rev. R. Jermyn Cooper...	6	0	10	125	536	21·12	...
Sleights (Brook Park)	E. Isle Hubbard, Esq.....	5	1	0	80	721	28·37	177
Whitby (Park Hall, Aislaby) ...	Rev. J. H. Richardson....	5	1	0	500	772	30·38	188
" (Ocean Road)	T. W. Parkinson, Esq....	8	1	0	125	626	24·66	172
" (Mulgrave Castle)	Mr. J. Corbett	5	1	0	410	746	29·35	197
Guisborough (Lockwood Beck Res)	W. I'Anson, Esq., C.E....	8	1	0	632	982	38·66	176
" " " " M	" " " " "	8	1	0	632	978	38·50	...
Skelton-in-Cleveland Rectory ...	Rev. H. Mackworth Drake	5	1	0	300	766	30·16	173
Saltburn-by-the-Sea (Skelton Castle)	W. H. A. Wharton, Esq....	5	0	9	272	809	31·84	164
" " " "	J. H. Stanton, Esq.	8	4	6	200	624	24·56	162
6.—TEES. 373 sq. mi.								
Ingleby Manor	Lord De L'Isle	5	0	11	460	971	38·24	183
" Greenhow Vicarage	Rev. M. A. Horsfall	5	0	10	420	960	37·81	183
" (The School House)	P. Huntington, Esq.....	5	1	0	430	937	36·90	205
Croft (Dalton-on-Tees).....	Mr. W. Wrather	8	2	0	170	621	24·45	184
Forcett Park	Capt. P. M. French	11	1	0	351	810	31·91	204
Hutton Magna Vicarage	Rev. A. W. M. Close.....	5	0	4	450	834	32·85	...
Kildale Hall	Major R. B. Turton	5	1	2	600	1057	41·60	204
Stokesley (Seamer).....	J. Pounder, Esq.	5	1	4	315	761	29·96	155
Great Ayton (Friends' School)...	J. T. Marsh, Esq.	5	5	1	288	806	31·73	...
Middlesbrough (Ormesby)	W. Stewart Tailyour, Esq.	5	1	0	100	723	28·45	185
" (Linthorpe)	late Mrs. C. L. Bell	8	1	0	48	657	25·86	188
" (Albert Park)	J. M. Parnaby, Esq.	8	1	0	30	677	26·66	168
Baldersdale (Blackton Reservoir)	Hugh Wilson, Esq.	5	1	0	935	1158	45·60	...
" (Balderhead)	" " " "	5	1	0	1360	1234	48·60	...
" (Hury Reservoir) ...	" " " "	5	1	0	866	961	37·84	202
Lunedale (Lunehead).....	" " " "	5	1	0	1450	1534	60·40	...
" (Selset)	" " " "	5	1	0	924	1174	46·20	...
" (Grassholme Reservoir)	" " " "	5	1	0	936	1116	43·95	194
†Mickleton (Lime Kiln Pasture) M	Mr. J. Harvey	8	1	0	1175	1035	40·75	...

MAP OF DIVISION X.

NORTHERN COUNTIES,
Showing the River-Divisions.



DIVISION X.—NORTHERN COUNTIES.

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0.1 in. or more	
		Diam.	Height Above Ground.		Sea Level.	1914			
		in.	ft.	in.	feet	mm.	inches.		
DURHAM. (Area, 1011 sq. mi.)									
1.—TEES & C. 396 sq. mi.									
D	Darlington (Hurworth Grange) ..	Mr. J. Simpson	5	1	0	161	630	24.79	188
	„ (Public Park)	North Star	5	1	0	150	690	27.16	177
D	„ (Cleveland Parade) ..	W. W. Willmott, Esq. ..	5	1	3	160	627	24.69	178
	„ (Hummersknott) ..	Mr. J. Short	5	1	0	200	604	23.79	...
	Piercebridge (Carlbury Hall) ...	J. H. Pease, Esq.	5	1	0	235	643	25.30	...
D†	Barnard Castle (County School) ..	R. C. Hitchcock, Esq.	5	1	6	540	767	30.21	186
D	Stockton (Ropner Park)	W. A. Jenkins, Esq.	5	1	9	61	565	22.25	154
D	Staindrop (Raby Gardens)	Lord Barnard	5	1	6	460	814	32.05	232
D	Hurworth Burn (Crookfoot Res.) ..	A. W. Branson, Esq., C.E.	10	1	6	293	624	24.56	191
D	West Hartlepool (Lynn Street) ..	Mr. H. Lamb	5	65	0	84	413	16.27	168
	„ „ (Water Works) ..	A. W. Branson, Esq., C.E.	10	1	0	35	624	24.56	...
D	Hurworth Burn Reservoir	„ „ „	10	1	0	357	619	24.37	169
D	Hartlepool (Hart Reservoir)	„ „ „	10	1	0	172	610	24.03	169
	Seaham (Dalton Pumping Sta.) ..	A. B. E. Blackburn, Esq.	8	1	0	345	690	27.15	200
2.—WEAR. 464 sq. mi.									
	Wolsingham (Dryderdale)	Mr. G. Cranston	5	1	0	700	867	34.13	...
D	Willington Rectory	Rev. T. Urmson	5	1	0	285	700	27.54	166
D	Wolsingham (Martagon House) ..	Miss F. E. Stobbs	5	1	0	464	901	35.47	171
	Stanhope (Parson Byer's Quarry) ..	Messrs. Bell, Bros., Ltd.	5	6	8	846	880	34.63?	...
D	Wearhead Station	Mr. R. Rust ..	5	0	6	1104	1498	58.96	167
	Durham Observatory	F. C. H. Carpenter Esq. <i>per mo</i>	12	4	0	336	658	25.89	196
D	Ushaw (St. Cuthbert's College) ..	Rev. T. L. Baines	5	0	9	600	706	27.81	178
	Pittington (Elemore Hall)	Miss Baker Baker	8	0	6	323	776	30.54	...
D	Weardale W. W. (Tunstall Res.) ..	R. Askwith, Esq., C.E.	8	1	2	724	859	33.81	179
	„ „ (Waskerley 6) ..	„ „ „	8	4	2	1229	814	32.04	...
	„ „ („ 3) ..	„ „ „	8	4	6	1433	916	36.06	...
	„ „ („ 4) ..	„ „ „	8	4	7	1321	794	31.26	...
	„ „ („ 5) ..	„ „ „	8	4	2	1244	844	33.25	...
D	„ „ („) ..	„ „ „	8	0	11	1179	833	32.80	210
	„ „ („ 2) ..	„ „ „	8	4	5	1367	837	32.96	...
	„ „ („ 1) ..	„ „ „	8	4	4	1317	849	33.41	...
	Fence Houses (Chilton Moor) ...	V. W. Corbett, Esq.	5	1	4	186	664	26.15	...
	Chester-le-Street (Biddick Hall) ..	Mr. A. Bentley	5	1	0	150	740	29.15	193
	Ryhope Pumping Station	A. B. E. Blackburn, Esq.	8	1	1	228	645	25.41	187
D†	Sunderland (W. Hendon Ho.) No. 5	T. W. Backhouse, Esq.	5	1	0	130	634	24.94	187
†	„ „ „ „ „ No. 6	„ „ „ „ „ ..	5	1	0	130	640	25.19	187
D	„ „ (Mowbray Park)	H. Renney, Esq., M.D.	5	1	0	105	622	24.47	159
	„ „ (Claxheugh Grove) ...	J. P. Cornett, Esq.	5	2	6	90	585	23.02	...
D	„ „ (The Cedars)	W. F. Vint, Esq.	5	1	0	115	605	23.81	171
	„ „ (Southwick Cemetery) ..	Mr. J. R. Hodgson	8	1	0	171	625	24.62	170
3.—TYNE, LOWER. 151 sq. mi.									
D	Weardale W. W. (Smiddy Shaw) ..	R. Askwith, Esq., C.E.	8	1	3	1128	821	32.33	192
	Consett Park Farm	J. D. Brown, Esq.	5	4	3	641	667	26.26	160
D	Burnopfield (Priestfield)	H. F. Bulman, Esq.	5	1	0	532	692	27.25	162
D	Rowlands Gill (Armstrong College) ..	J. McLaren, Esq.	12	1	0	446	765	30.13	176
D†	Washington (Usworth School) ...	H. W. Walbank, Esq.	5	1	0	284	603	23.74	189
D	Gateshead (Low Fell)	L. J. Nicholson, Esq.	5	1	0	...	734	28.88	169
	Sunderland (Cleadon Pumpg. Sta.) ..	A. B. E. Blackburn, Esq.	8	1	0	216	611	24.06	229

DIVISION X.—NORTHERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0.1 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
DURHAM—(con.)								
3.—TYNE, LOWER—(con.)								
d Ryton-on-Tyne (Balgonie House)	J. W. Smith, Esq., M.D.	5	1	6	258	695	27.37	171
d South Shields	Dr. D. M. Mathieson	5	7	6	30	593	23.33	181
NORTHUMBERLAND. (Area, 2015 sq. mi.)								
1.—EDEN. 20 sq. mi.								
2.—SOUTH TYNE. 232 sq. mi.								
Allenheads	J. W. Metcalfe, Esq.	8	1	0	1353	1253	49.33	...
d Haltwhistle (Featherstone Castle)	J. Hope Wallace, Esq.	...	...	...	480	1065	41.92	184
Bardon Mill (Allans Green)	J. B. Lowes, Esq.	5	0	6	1000	923	36.34	201
d Haltwhistle (Bellister Castle)	J. M. Clark, Esq.	5	1	0	380	1008	39.68	193
3.—TYNE, LOWER. 227 sq. mi.								
d Corbridge (Howden Dene)	J. H. Straker, Esq.	5	0	9	200	718	28.25	191
d „ (Monksholme)	H. Palmer, Esq.	5	1	0	127	702	27.64	187
d Hexham (St. Eilan's)	Mr. W. C. Oliver	5	1	0	250	694	27.31	182
d „ (Beaufront Castle)	Capt. J. H. Cuthbert, D.S.O.	8	1	0	400	721	28.38	178
Newcastle (Lit. and Phil. Soc.)	H. Richardson, Esq.	8	55	0	160	741	29.17	...
„ (Westgate Street)	Newcastle Chronicle	8	30	0	148	656	25.83	...
„ (Northumberland Rd.)	N. H. Martin, Esq.	8	45	0	200	570	22.46	161
„ (Leazes Park)	W. J. Steele, Esq., C.E.	5	1	0	255	717	28.22	...
d „ (Town Moor)	D. C. Baldie, Esq.	5	2	0	201	708	27.89	205
„ (Wellburn, Jesmond)	J. H. Holmes, Esq.	5	1	6	163	611	24.04	...
d Gosforth (Woodbine Road)	L. J. Nicholson, Esq.	5	...	...	...	686	27.02	172
d Tynemouth (Tyne Pier Works)	N. G. Gedy, Esq., C.E.	5	1	8	65	693	27.29	185
Whittle Dean (Newcastle W.W.)	A. L. Forster, Esq., C.E.	5	0	6	380	655	25.77	205
„ „ Filters („ „)	„ „ „	5	1	1	353	686	26.99	199
4.—NORTH TYNE. 433 sq. mi.								
Humshaugh (Wester Hall)	Miss M. Gandy	5	1	3	268	741	29.17	...
N. Tyne (Green Crag) (Newcastle W.W.)	A. L. Forster, Esq., C.E.	5	1	6	896	794	31.28	...
Hallington Village („ „)	„ „ „	5	1	0	467	787	30.98	...
„ Reservoirs („ „)	„ „ „	5	1	0	470	767	30.18	194
„ (Fawcett) („ „)	„ „ „	5	1	2	537	751	29.57	...
„ (Cheviot) („ „)	„ „ „	5	1	2	576	771	30.35	...
Gunnerton Burn (Camphill) („ „)	„ „ „	5	1	1	650	812	31.97	...
Colt Crag („ „)	„ „ „	5	1	0	654	731	28.79	188
d Bellingham (High Green Manor)	Sir C. Morrison-Bell, Bt.	5	1	0	849	967	38.07	218
Otterburn Tower	Miss Audrey Pease	5	0	11	550	854	33.62	166
d „ (Horsley Vicarage)	Miss M. Stephens	5	1	2	700	945	37.21	184
Redewater (Catcleugh)	A. L. Forster, Esq., C.E.	5	1	0	819	1219	47.98	209
5.—COQUET & C. 840 sq. mi.								
Stamfordham	Hexham Courant	...	...	...	...	828	32.60	...
Whittington (Newcastle W.W.)	A. L. Forster, Esq., C.E.	8	0	9	528	738	29.05	...
Burnside („ „)	„ „ „	5	0	9	419	692	27.25	...
Ryal Cottage („ „)	„ „ „	10	0	9	463	747	29.42	...
d Scots Gap (Wallington Gardens)	Mr. E. Keith	8	2	9	446	1058	41.65	191
† Morpeth	T. Matheson, Esq.	8	1	6	100	719	28.30	...
d† „ (Bothalhaugh Garden)	Hon. & Rev. W. C. Ellis	5	1	10	35	684	26.95	202
† „ („ „)	„ „ „	5	1	10	35	682	26.86	...
d† „ („ „ Lawn)	„ „ „	5	1	10	137	663	26.10	206

DIVISION X.—NORTHERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0·1 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
NORTHUMBERLAND—(con.)								
5.—COQUET & C—(con.)								
†Morpeth (Bothalhaugh Lawn) M	Hon. & Rev. W. C. Ellis	5	1	10	137	683	26·88	...
D „ (Longwitton Hall)	E. A. Perceval, Esq.	5	0	6	570	988	38·89	201
D „ (Ashington)	W. Wilson, Esq.	5	1	0	110	613	24·13	172
D „ (Cockle Park) ..	DBJohnstone-WallaceEsq	8	1	0	325	760	29·90	200
D Font Res. (Tynemouth W.W.)..	J. W. McKerrow, Esq....	10	1	0	614	832	32·76	217
D†Acklington (Broomhill Colliery)	Broomhill Collieries, Ltd.	5	7	0	92	616	24·26	183
†Rothbury (Brinkburn Priory) ...	Mrs. Hugh Fenwick	8	1	2	257	823	32·39	...
D† „ (Cragside)	W. Bertram, Esq.	8	1	0	405	887	34·93	179
D Felton (Newton-on-the-Moor) ...	J. A. Charlton, Esq.	5	1	6	500	733	28·87	179
Alnwick Castle	Mr. R. Kyle, <i>per</i> M.O. ...	5	0	4	210	720	28·35	187
Bamburgh	T. W. Little, Esq.	5	1	0	75	614	24·16	...
Belford (Middleton Hall) ... (R)	Major G. F. T. Leather...	10	4	10	200	566	22·30	...
6.—TWEED. 262 sq. mi.								
D Glanton (Glanton Pyke Gardens)	Mr. J. Henderson	8	4	2	521	800	31·48	179
D Ilderton (Lilburn Tower)	A. B. Collingwood, Esq....	10	6	0	300	737	29·02	172
D „ („ Cottage)	N. D. Cowans, Esq.	5	1	0	340	783	30·84	190
Wooler (St. Ninians)	Dr. R. Walker	8	0	10	176	857	33·74	...
„ (Victoria House)	Miss E. M. Dodds	5	1	0	176	644	25·37?	...
„ (Glendale)	Col. J. M. W. Anderson...	5	2	0	...	680	26·78	...
D „ (Doddington Vicarage) ..	Rev. J. G. Shotton	8	1	0	140	745	29·34	152
D Pawston [Coldstream]	B. P. Selby, Esq.	5	1	0	327	739	29·09	181
D Berwick-on-Tweed (Church St.)	Lt.-Col. A. W. Pennyman	5	2	0	95	574	22·61	171
7.—INSULAR. 1 sq. mi.								
CUMBERLAND. (Area, 1516 sq. mi.)								
1.—EDEN & SOLWAY. 887 sq. mi.								
Ullswater (Hallsteads)	Miss C. Marshall	5	2	0	497	1706	67·16	198
D Watermillock (Mell Fell House)	Gerald Spring-Rice, Esq.	5	1	0	980	1446	56·92	201
D Penrith (Lowther Street)	H. Lester, Esq.	5	1	0	575	892	35·11	178
„ (Nandana)	J. C. Varty Smith, Esq...	5	1	0	625	880	34·66	259
„ (Sandath House)	G. Varty-Smith, Esq.	5	1	0	575	956	37·64	190
D „ (Benson House)	A. B. Sinclair, Esq.	5	0	8	480	1000	39·38	197
„ (Newton Rigg)	W. T. Lawrence, Esq....	8	1	0	559	1045	41·14	207
„ (Greystoke Castle)	H. Walker, Esq.	5	1	3	650	1182	46·54	...
„ (Ennim)	Mrs. Hamlet Riley	8	0	6	660	1045	41·14	177
Uldale (Chapel House Reservoir)	J. Smith Hill, Esq.	8	1	0	600	1231	48·46	191
D Penrith (Nunwick Hall)	Mrs Heywood Thompson	5	1	0	278	853	33·60	178
Aspatria (Agricultural College) ..	J. Smith Hill, Esq., <i>per</i> M.O.	8	1	0	251	1039	40·91	191
„ (Brayton Hall)	Sir Wilfrid Lawson, Bart.	8	0	8	200	1035	40·76	...
D Renwick (Ravenwood)	W. Salkeld, Esq.	5	2	0	680	1080	42·52	189
Kirkoswald (Staffield Hall)	Mrs. A. L. Payne	5	0	9	368	853	33·60	...
D Wigton (Brookfield)	J. Ransom Marsh, Esq....	5	1	6	124	824	32·46	189
D „ (Dacre House)	J. H. Walker, Esq.	5	4	6	134	856	33·71	200
D Wreay Vicarage	Rev. Canon A. R. Hall...	5	2	0	310	720	28·36	187
D Geltsdale	H. C. Marks, Esq., C.E....	5	1	2	778	1013	39·88	229
D Carlisle (Spital Cemetery)	J. T. Charlton, Esq.	8	1	6	115	719	28·31	201
„ (Denton Holme)	W. Eggleston, Esq.	5	2	0	57	640	25·19	...
„ (Stanwix)	Sir Benjamin Scott	8	1	6	100	703	27·66	168

DIVISION X.—NORTHERN COUNTIES—(continued).

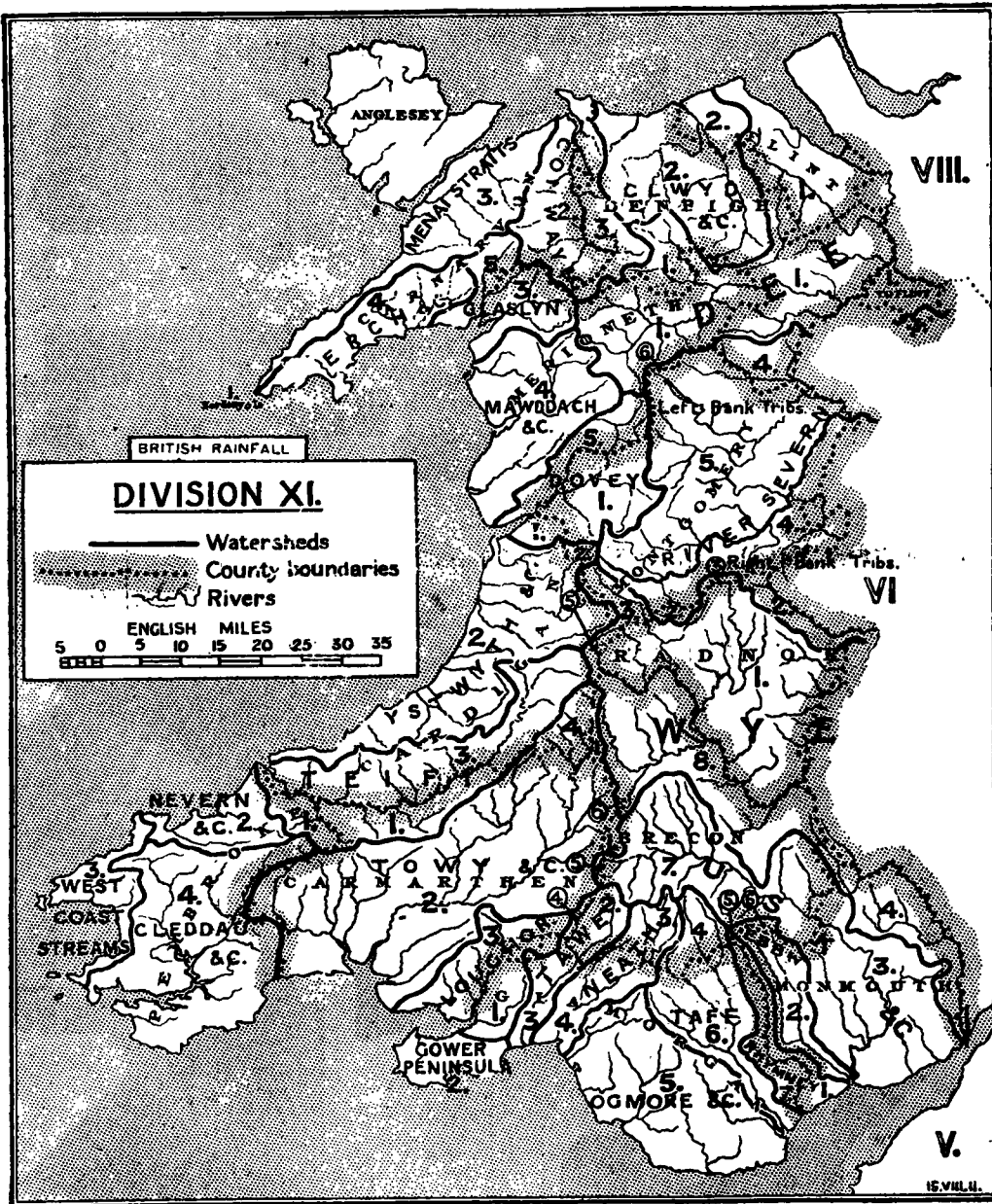
STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more
		Diam.	Height Above Ground. Sea Level			1914		
		in.	ft.	in.	feet.	mm.	inches.	
CUMBERLAND—(con.)								
1.—EDEN & SOLWAY—(con.)								
D Carlisle (Newby Grange)	T. H. Hodgson, Esq.	5	0	8	64	652	25·67	189
D „ (Brunstock)	M. T. Scott, Esq.	5	1	6	86	731	28·77	176
D „ (Scaleby Hall)	Sir R. A. Allison	5	1	0	112	811	31·92	222
D Penton (Warwickland School) ..	W. Roden, Esq.	5	1	0	250	848	33·39	186
2.—DERWENT. 257 sq. mi.								
Sprinkling Tarn	M Dr. H. R. Mill	5	1	6	1985	3725	146·67	...
Styehead Tarn	M „ „ „	4	0	6	1472	3703	145·80	...
† The Sty B	M „ „ „	4	1	0	1077	4681	184·30	...
„ B ... <i>Seathwaite g.</i>	M „ „ „	5	1	6	1070	4787	188·45	...
† „ C	M „ „ „	4	1	0	1077	4588	180·65	...
† „ D	M „ „ „	4	1	0	1077	3454	136·00	...
† Borrowdale (Seathwaite)	M „ „ „	4	0	6	422	3266	128·60	...
† „ („) <i>weekly</i>	„ „ „	5	1	0	422	3270	128·76	...
D† „ („)	„ „ „	5	1	0	423	3274	128·91	223
Ullscarf	M G. H. Hill, Esq., C.E.	7	1	8	2100	3432	135·10	...
Helvellyn (Birkside)	M „ „ „	7	1	3	1900	2327	91·60	...
Wythburn	M „ „ „	7	1	4	580	2342	92·20	...
D† Borrowdale (Rosthwaite)	J. Reay, Esq.	5	0	9	...	2572	101·24	209
Buttermere (Hassness)	Miss C. Marshall	5	1	0	355	2933	115·46	228
D† Borrowdale (Grange)	Mr. J. Threlkeld	5	0	9	271	2459	96·81	178
Armboth Fells (The Pewitts)	G. H. Hill, Esq., C.E.	7	1	6	1650	1880	74·00	..
Helvellyn (Whiteside)	„ „ „	7	1	6	2100	2131	83·90	...
Thirlmere (Dale Head Hall) ..	„ „ „	7	1	5	620	2271	89·40	...
D „ (Derwent Island) <i>old g.</i> ..	Miss C. Marshall	5	0	7	280	1586	62·45	210
D „ („ „) <i>new g.</i> ..	„ „ „	5	0	6	290	1546	60·88	209
† „ (The Bank)	Mr. A. Campbell	5	1	6	265	1413	55·63	197
D† „ (Shu-le-crow)	A. Mitchell Dawson, Esq. ..	5	0	7	296	1692	66·62	222
D† „ (Crosthwaite School) ..	H. Swinburn, Esq.	5	1	0	254	1525	60·05	202
D „ (Mirehouse)	Miss Spedding	5	1	1	300	1432	56·37	209
D Cockermouth (Whinfell Hall) ..	Mrs. Peile	5	0	1	255	1545	60·82	206
D „ (Lorton Hall)	Sir J. T. Hutchinson	5	1	0	270	1513	59·58	208
D „ (Brandlingill)	Mrs. Sewell	5	1	0	320	1689	66·49	...
D „ (Shatton Hall)	Miss Irwin	5	4	5	300	1115	43·91	...
D Threlkeld (Blencathra Sanatorm.)	Dr. W. Goodchild	5	1	0	885	1661	65·41	212
Brigham (Ellerbank)	R. M. Lidbetter, Esq.	5	0	8	250	947	37·28	192
Camerton Vicarage	Rev. E. C. Bennett	5	1	0	200	918	36·14	...
Bassenthwaite (Higham)	Joseph Fisher, Esq.	5	0	9	500	1222	48·13	194
D Cockermouth (Broughton Grange)	G. S. Wilson, Esq.	5	1	3	209	1102	43·39	204
D „ (Dovenby Hall) (R)	H. B. Dykes, Esq.	4	4	0	255	1100	43·32	176
3.—WEST COAST STREAMS. 235 sq. mi.								
D Ravenglass (The Grove)	A. Watt, Esq.	5	2	8	77	1092	42·98	195
Esldale Green (Gatehouse)	Miss C. Marshall	5	0	10	150	1430	56·32	217
Beckfoot	„ „ „	5	1	0	180	1537	60·50	188
D Seascale (Whinthwaite)	Dr. R. Hellon	5	1	0	52	984	38·74	193
Netherwasdale Vicarage	Rev. J. Hodgson	5	1	0	182	1507	59·33	163
Gosforth (Ellerslie)	G. L. McKelvie, Esq.	5	1	6	185	1234	48·59	...
Braystones	H. H. Watson, Esq.	10	3	6	36	948	37·32	...
D Egremont (The Grange)	J. Sherwen, Esq.	8	1	0	351	1292	50·86	216
D „ (Ringingstone)	Harold Adair, Esq.	5	1	0	260	1109	43·67	203

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0·1 in. or more
		Diam. in.	Height Above Ground. Sea Level			1914		
			ft.	in.	feet.	mm.	inches.	
CUMBERLAND—(con.)								
3.—WEST COAST STREAMS—(con.)								
d Cleator Moor W.W. (Dent Res.)	R. Robertson, Esq., C.E.	5	1	0	395	1380	54·34	179
d Whitehaven (Scragill Reservoir)	E. E. Stiven, Esq., C.E.	8	1	0	188	986	38·84	215
d „ (Irish Street)	Dr. Eldon Pratt.....	5	1	1	21	1074	42·27	203
Distington (Gilgarran).....	Mr. A. Kydd	5	4	9	470	1123	44·21	203
d Workington (Winscales House)..	J. A. Trench, Esq.	5	1	6	440	908	35·75	182
4.—DUDDON & C. 50 sq. mi.								
5.—SOUTH TYNE. 87 sq. mi.								
d Alston (Nenthead).....	Caldwell Harpur, Esq....	8	2	6	1463	1960	77·19	203
d „ (Samuel King's School)...	J. G. McIntosh, Esq.....	5	1	0	1060	1304	51·34	232
WESTMORLAND. (Area, 783 sq. mi.)								
1.—EDEN. 373 sq. mi.								
Ravenstonedale (The Chantry)...	J. R. Highmoor, Esq.....	5	1	11	900	1387	54·60	204
d Kirkby Stephen (Redman House)	Mrs. T. Mason	5	1	0	574	1255	49·42	193
Hayes Water (High Street) No. 2	Baldwin Latham, Esq., C.E.	5	1	0	2000	2464	97·00	...
„ „No. 1	„ „ „	5	1	0	1750	2644	104·10	...
Grizedale (Ruthwaite Lodge) ...	Miss C. Marshall	8	1	6	1750	2851	112·26	...
Patterdale Hall	„ „ „	5	1	3	490	2596	102·19	224
„ (Greenside Mine)	W. H. Borlase, Esq.	7	1	6	1000	2525	99·40	...
d Appleby (Castle Bank).....	C. R. Rivington, Esq.....	5	1	2	440	1042	41·01	218
Ullswater (Sharrow Bay)	Mr. G. Robinson	5	0	7	600	998	39·31	...
d Great Strickland (Greencroft) ...	Mrs. Whiteside	5	2	0	648	1117	43·99	193
d Morland [Penrith].....	Miss M. F. Markham.....	5	1	0	456	1016	40·01	204
Lowther Castle [Penrith]	Mr. J. Jeffrey.....	8	4	0	760	1057	41·63	185
2.—LEVEN. 60 sq. mi.								
† Bowness (Lindeth Howe)	Captain F. G. Senior.....	5	1	0	250	1647	64·83	206
d „ (Dawstone)	A. M. Sing, Esq.	5	1	2	550	1672	65·81	209
d† „ (Fallbarrow)	Miss E. F. Rawson	8	1	0	155	1632	64·25	194
† Windermere (Hammer Bank) ...	Miss C. Marshall	5	1	0	290	1614	63·55	227
d† Bowness (Fellside)	T. D. Lingard, Esq.	5	0	6	310	1692	66·63	205
d† Windermere (Holebird)	W. G. Groves, Esq.	5	1	0	483	1821	71·68	220
d† „ (Brockhole)	W. Gaddum, Esq.....	5	1	6	145	1780	70·06	217
d† Ambleside (Wansfell)	Miss C. Marshall	5	1	0	150	1889	74·38	220
d† „ (Skelwith Bridge) ...	A. J. Adams, Esq.....	5	1	9	190	2186	86·06	209
Little Langdale (Fell Foot) ...M	Miss C. Marshall	5	2	2	380	2762	108·74	...
d† Ambleside (White Craggs)	„ „ „	5	2	4	252	1915	75·41	236
d „ (Gale House)	G. A. Johnston, Esq., M.D.	5	1	0	180	2012	79·20	219
„ (Lesketh How).....	Miss C. Marshall	5	2	6	175	2110	83·07	236
d „ (Tweenway House) ..	A. E. Huddleston, Esq...	5	1	0	175	1976	77·80	224
Elterwater Hall	Miss C. Marshall	5	1	1	200	2302	90·61	...
d† Rydal (The Stepping Stones) ...	Gordon Wordsworth, Esq.	5	1	0	190	2169	85·39	236
† „ („ „ „) M	„ „ „	5	1	3	190	2086	82·13	...
† Loughrigg Fell ... Gauge A. M	„ „ „	5	1	3	690	1834	72·19	...
† „ „ „ Gauge B. M	„ „ „	8	1	3	690	1967	77·45	...
d Rydal	Miss M. Yates	5	0	7	390	2133	83·96	231
d „ (High Close)	F. E. T. Jones Balme, Esq.	8	0	9	553	2182	85·89	206
d „ (Silverthwaite) No. 1	Miss A. Sharp	5	1	0	292	1966	77·42	210
Ambleside (Rydal Farm)	Ralph Fletcher, Esq.....	5	1	4	160	2039	80·28	216

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 01 in. or more
		Diam. in.	Height Above Ground. Sea Level			1914		
		ft.	in.	feet.	mm.	inches.		
WESTMORLAND—(con.)								
2.—LEVEN—(con.)								
Dungeon Ghyll	Miss C. Marshall	5	1	0	310	2828	111·36	236
† " "	" "	5	1	0	311	2814	110·80	...
† Mickleden	" "	5	1	6	490	3795	149·41	...
D Grasmere (The Wray)	Miss G. M. Simpson	5	1	0	221	2354	92·69	232
3.—KENT. 188 sq. mi.								
D Milnthorpe (St. Anthony's House)	G. E. Clayton, Esq.	5	3	0	...	1103	43·44	182
D Heversham (Plumtree Hall).....	T. Carrick Watson, Esq.	5	0	8	115	1210	47·62	207
D " (Leasgill)	T. A. Argles, Esq.....	5	0	8	130	1155	45·49	227
D Kendal (Crosthwaite Vicarage)...	Rev. T. Heelis	5	1	0	200	1463	57·59	197
D " (Vicarage Terrace)	Mrs. Braithwaite	8	0	6	160	1352	53·22	201
D† " (Holmcroft)	R. Rhodes, Esq.....	5	1	3	170	1357	53·43	225
† " (Birchfield)	H. W. Baron, Esq.....	5	1	6	175	1452	57·16	219
† " (Low Slack).....	A. W. Wilson, Esq.	5	1	0	350	1394	54·88	204
† " (Ellergreen)	C. J. Cropper, Esq.	5	1	6	270	1637	64·44	207
" (Potter Fell).....	Messrs. J. Cropper & Co. Ltd.	...	0	4	800	1999	78·71	...
Long Sleddale (Low House)... M	R. Martindale, Esq.	5	1	0	550	1849	72·78	...
4.—LUNE. 122 sq. mi.								
Kirkby Lonsdale	J. R. Picard, Esq.....	7	0	8	215	1219	47·98	...
D " " (Casterton).....	R. A. Clarke, Esq.....	8	1	0	305	1276	50·24	230
D " " (").....	Miss Williams	8	1	0	320	1340	52·77	204
Barbon (Underfell)	Miss C. E. Wilson	5	1	5	405	1225	48·23	201
D "	W. Wilkinson, Esq.	5	1	0	310	1294	50·93	180
5. TEES. 40 sq. mi.								

MAP OF DIVISION XI.

MONMOUTH, WALES, AND THE ISLANDS,
Showing the River-Divisions.



DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS.

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with .01 in. or more
		Diam.	Height Above Ground, Sea Level			1914		
			in.	ft.	in.	feet.	mm.		inches.
MONMOUTH. (Area, 534 sq. mi.)		in.	ft.	in.	feet.	mm.	inches.	
1.—RHYMNEY. 39 sq. mi.								
D Rumney (Witla Court).....	Mr. J. F. Matthyssens.....	5	1	3	168	1228	48·36	181
D Marshfield Vicarage	Rev. H. G. Stanley .....	...	...	...	50	1139	44·85	185
D Coedkernew (Cefnlllogell)	T. Hillier, Esq.	5	3	6	225	1185	46·64	177
2.—EBBW. 88 sq. mi.								
D Newport (Tredegar Park).....	Mr. J. Bone	5	0	10	0	1183	46·56	192
Bassaleg (Bryn Hedydd)	Blethyn T. Rees, Esq., C.E.	5	8	0	333	1245	49·03	176
D Rogerstone (Rhiwderin)	L. Forestier-Walker, Esq.	5	1	3	259	1230	48·42	192
Blackwood	H. Caldwell, Esq., C.E....	8	1	6	620	1270	50·01	...
D Abertillery (The Park)	Dr. T. B. Smith.....	5	1	0	700	1835	72·26	204
D „ (Cwmtillyery)	W. Y. Hobkirk, Esq.....	5	1	0	970	1928	75·90	199
D Tredegar (Llyswedog)	Mrs. L. Whitehead	5	1	3	1050	1717	67·59	201
„ Laboratory	W. Morgan, Esq.	5	1	3	950	1811	71·31	...
D „ (Redesdale)	D. W. Davies, Esq.	5	1	6	963	1444	56·87	208
D Ebbw Vale (Iron Works)	D. S. Whitehead, Esq. ...	8	1	0	902	1701	66·96	191
D Nant-y-bwch (Shon Sheffrey's Well)	D. W. Davies, Esq.	5	1	5	1204	1562	61·51	208
3.—USK & C. 290 sq. mi.								
Goldcliff (Porton)	Blethyn T. Rees, Esq., C.E.	5	1	3	27	848	33·37	169
Portskewett (Sudbrook)	W. K. Laurence, Esq., C.E.	8	0	10	22	928	36·52	...
D Newport (Friar Street Yard) ...	Newport Corporation.....	5	6	0	32	1170	46·08	194
„ (Ynis-y-fro Reservoir)..	„ „	5	1	0	130	1231	48·47	212
D „ (Pant-y-reos Res.).....	„ „	5	1	0	435	1582	62·29	214
„ W.W. (Llanvaches) ..	„ „	5	0	10	456	1075	42·32	200
„ (Nantypriidd, Wentwood)	„ „	5	1	0	500	1196	47·08	191
D Chepstow (Itton Court)	E. Curre, Esq.	5	1	0	390	1042	41·03	175
D Llanfrehfa Grange	Brig.-Gen. W. F. Cleeve	5	4	0	326	1196	47·07	169
Tredunnoch Rectory	Rev. C. T. Salusbury	5	2	3	170	1012	39·83	160
D Newport W.W. (Newchurch) ...	Newport Corporation	5	1	0	525	1236	48·64	197
Panteg Rectory	Rev. A. W. Addams-Williams	5	3	5	300	1471	57·90	...
D Devauden (Tredean)	W. W. Hood, Esq., C.E....	5	3	6	700	1020	40·15	166
D Griffithstown (Shirley)	T. P. Holmes Watkins, Esq.	5	1	0	473	1558	61·32	187
Abersychan (The Hawthorns)...	J. W. Mulligan, Esq., M.D.	5	1	0	755	1548	60·96	202
„ (Glansychan).....	W. P. James, Esq., per M.O.	3	2	0	698	1578	62·11	217
Usk (Brynderwen).....	E. H. M. Luckock, Esq....	5	1	0	136	1078	42·42	186
Blaenavon	H. G. Steel, Esq.	8	1	6	1150	1784	70·24	...
Abergavenny (Larchfield)	Dr. N. R. Phillips	5	1	0	240	1084	42·66	198
D† „ (The Chain).....	W. Baker Gabb, Esq.....	5	1	3	300	1165	45·88	192
D† Grwyne Fawr (Coed Dias)	„ „ „ „	5	1	0	900	1284	50·56	201
D† „ „ (Ffwydd Fwthog)	Baldwin Latham, Esq., C.E.	5	0	8	1380	1274	50·14	266
4.—WYE. 117 sq. mi.								
D Chepstow (Piercefield Park).....	H. Clay, Esq.....	5	1	6	310	1030	40·57	176
Tintern	J. Roberts, Esq., per M.O.	...	...	...	99	1173	46·17	195
Monmouth (The Elms)	Mrs. Hall	5	1	1	91	808	31·82	...
D „ (The Hendre)	Mr. T. Coomber ..	8	1	0	176	779	30·68	193
D „ (Pentwyn)	Rev. Canon J. Harding...	5	1	0	191	883	34·75	186
Llantilio Court	Sir H. Mather-Jackson, Bt.	5	0	11	231	912	35·89	...
D† Llanthony Abbey	Baldwin Latham, Esq., C.E.	5	1	0	792	1468	57·81	217

DIVISION XI. - MONMOUTH, WALES, AND THE ISLANDS—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in or more
		Diam.	Height Above		1914			
			Ground.	Sea Level				
		in.	ft.	in.	feet.	mm.	inches.	
GLAMORGAN. (Area, 808 sq. mi.)								
1.—LOUGHOR. 55 sq. mi.								
D Gorseinon (Penllergaer).....	Sir J. T. D. Llewelyn, Bt.	5	3	0	240	1429	56·25	202
D Felindre (Lower Lliw Reservoir)	R. H. Wyrill, Esq., C.E.	8	1	3	426	1472	57·94	199
D „ (Upper „ „ „)	„ „ „ „	8	1	0	610	1714	67·46	207
2.—GOWER PENINSULA. 62 sq. mi.								
D Penmaen (Cefn Mor).....	R. A. Bostock, Esq.	5	1	5	300	1245	49·02	199
Mumbles (Bristol Ch. Yacht Club)	A. Whitman, Esq.	5	1	0	20	1268	49·91	189
D Swansea (Killay House)	Mrs. M. B. Williams.....	5	0	6	265	1387	54·59	199
3.—TAFE. 47 sq. mi.								
D Swansea (Victoria Park)	Mr. D. Bliss	8	1	0	26	1378	54·25	210
D „ (The Knoll)	E. H. Perkins, Esq.	5	1	0	150	1385	54·52	202
Morriston (The Vicarage).....	Dr. E. Rice Morgan	5	1	0	236	1561	61·46	204
D Ystalyfera (Wern School)	J. Williams, Esq.	5	1	3	240	1850	72·82	212
4.—NEATH. 82 sq. mi.								
D Briton Ferry (Brynsiriol).....	H. A. Clarke, Esq. C.E....	5	1	0	33	1345	52·95	192
D „ „ (Cefn Court)	„ „ „ „	5	1	0	503	1481	58·32	199
D Neath	D. M. Jenkins, Esq., C.E.	5	1	0	204	1683	66·26	194
D „ (Maesmelyn)	Maj. E. Ll. Green	5	1	6	115	1434	56·45	208
„ (Glynfeln)	T. Gibbins, Esq.....	5	1	4	180	1543	60·75	175
„ (Longford Court).....	J. G. Moore-Gwyn, Esq....	5	2	6	250	1400	55·10	152
D Glyn Neath (Aberpergwm)	F. Stoten, Esq.	5	1	6	74	1631	64·22	196
5.—OGMORE & C. 350 sq. mi.								
Cowbridge (Fonmon Castle).....	O. H. Jones, Esq.	8	1	2	130	1054	41·50	179
D Barry W. W. (Biglis)	T. E. Franklin, Esq., C.E.	5	1	0	20	1031	40·60	174
„ „ (Merthyr Dyfan Res.)	„ „ „ „	5	1	0	300	1151	45·33	...
„ „ (Pencoedtre Res.).....	„ „ „ „	5	1	0	200	901	35·46	...
„ „ (Dinas Powis Res.).....	„ „ „ „	5	1	0	165	970	38·17	...
D Lower Penarth	E. I. Evans, Esq., C.E....	5	1	0	67	1014	39·91	196
D Penarth	„ „ „ „	5	5	0	160	1111	43·73	202
D Cardiff (Cogan Pill, Llandough).	C. H. Priestley, Esq., C.E.	5	1	0	121	1153	45·38	185
D „ (Ely Pumping Station).....	„ „ „ „	5	1	0	53	1273	50·11	236
D „ (St. Fagans)	Mr. H. A. Pettigrew	5	0	11	100	1345	52·96	205
Cowbridge (Ash Hall)	E. Tudor Owen, Esq.....	8	3	0	315	1312	51·66	169
Merthyr Mawr	J. D. Nicholl, Esq., per M.O. ....	...	...	...	74	1193	46·98	186
Bridgend.....	Dr. A. D. Low	5	1	0	116	1206	47·49	189
D Llantrisant (Talygarn).....	G. L. Clark, Esq.	5	4	3	250	1682	66·22	201
„ (S. Rhondda Colliery).....	W. W. Hood, Esq., C.E....	5	15	0	480	1765	69·49	...
„ (Llanilid Reservoir).....	T. Saunders, Esq.	8	1	3	582	1706	67·15	168
D Port Talbot (Twyn-yr-hydd, Margam)	G. Lipscomb, Esq.....	5	1	0	180	1214	47·78	195
D Glyncorwg Colliery	Mr. C. Stephens	5	4	6	725	2255	88·78	179
6.—TAFF. 157 sq. mi.								
D Cardiff (Trade Street Depot) ...	C. H. Priestley, Esq., C.E.	5	1	0	45	1252	49·30	193
D Llandaff (Howell's School)	Miss A. G. Winny	5	1	4	86	1171	46·12	192
D „ (West Hill)	J. E. Gladstone, Esq.....	5	1	0	110	1292	50·87	208
Pontypridd (Maesderwen, Graig)	T. Bowen, Esq.	5	10	0	425	1751	68·95	200
D „ (Lan Wood Reservoir).....	T. W. Coates, Esq., C.E.	5	1	0	300	1658	65·26	198
Porth (Cemetery Road).....	D. Hawkins, Esq.	5	1	0	500	1993	78·46	...
D Penygraig (Hendrecapn House).....	F. D. Llewelyn, Esq.....	5	1	0	668	2281	89·82	197
D† Ystradyfodwg (Tyntyla Hospital)	J. D. Jenkins, Esq., M.D.	5	1	0	590	1783	70·21	199

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0·1 in. or more
		Diam.	Height Above Ground. Sea Level			1914		
		in.	ft.	in.	feet.	mm.	inches.	
GLAMORGAN—(con.)								
6.—TAFF—(con.)								
D Treharris Service Reservoir	T. F. Harvey, Esq., C.E.	5	1	0	865	1642	64·65	195
Rhondda (Ferndale)	G. Childs, Esq.	5	1	0	830	2056	80·94	...
D† Mountain Ash (Maesydderwen) ..	M. Morgan, Esq.	5	1	0	483	1760	69·31	208
D† " " (Darranlas Res.) ..	W. G. Thomas, Esq.	5	0	11	540	1942	76·46	209
D† Treherbert (Tyn-y-waun)	O. Thomas, Esq.	5	1	0	801	2508	98·72	221
D† " " " ")	M "							

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with '01 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
PEMBROKE—(con.)								
4.—CLEDDAU & C. 407 sq. mi.								
Pembroke (Stackpole Court).....	Mr. W. B. Fisher ...	6	1	6	60	918	36.15	194
Tenby (Glendower)	J. T. C. Burgess, Esq.....	5	1	6	20	1089	42.88	191
"	Miss Truscott, <i>per</i> M.O....	...	...	...	79	1130	44.50	202
St. Ann's Head	Meteorological Office	8	0	8	150	916	36.06	190
^D Pembroke Dock (Admiralty Res.)	H. F. Bowen, Esq.....	8	1	0	90	936	36.87	178
^D " " (County School)	G. H. West, Esq.	5	1	0	85	1113	43.81	206
^D Saundersfoot (Hean Castle)	Lord Merthyr.....	5	1	11	206	908	35.73	187
^D Templeton (Hill)	Mrs. E. L. B. Allen	5	1	0	550	1385	54.54	220
Haverfordwest (Picton Castle)...	Sir C. E. G. Philipps, Bt.	5	0	10	138	1208	47.54	202
" (Poyston)	Dr. Henry Owen .....	...	...	...	..	1130	44.50	...
^D " (Portfield)	J. W. Phillips, Esq.	5	1	0	220	1157	45.56	209
^D "	" " " " " " " " " " " "	5	1	0	95	1284	50.53	188
Penfford Council School	Thomas H. Davies, Esq....	5	1	0	310	1204	47.38	...
Treffgarne Hall	Col. R. O. Lloyd, R.E....	5	1	1	286	1184	46.63	208
^D Fishguard (Langton, Dwrbach)..	J. C. Yorke, Esq.	5	1	0	320	1121	44.15	205
CARDIGAN. (Area, 688 sq. mi.)								
1.—DOVEY. 20 sq. mi.								
2.—YSTWYTH & C. 347 sq. mi.								
^D Lampeter (Llanlear)	Miss Lewes	5	1	1	226	1177	46.35	206
^D Strata Florida (Hafod)	T. J. Waddingham, Esq.	5	1	0	580	1534	60.40	246
Aberystwyth (N. Parade).....	Dr. A. Thomas	8	2	6	15	917	36.12	202
^D " (Gogerddan)	Mr. W. Penwill.....	5	1	1	83	1255	49.41	214
Ynys-lâs (Sandling)	Wyndham Deedes, Esq....	5	1	6	20	930	36.63	173
3.—TEIFI. 260 sq. mi.								
^D Lampeter (Falcondale)	Mr. W. Taylor	5	1	10	498	1376	54.17	218
4.—TOWY. 46 sq. mi.								
^D Nantneuadd [Abergwesyn]	Mr. W. Roberts	5	1	0	1290	1856	73.05	194
Tregaron (Maes-y-bettws) ...	Dr. H. R. Mill	5	1	0	910	1986	78.20	...
Strata Florida (Towy-fechan) M	" " " " " " " " " " " "	5	1	0	1330	2136	84.10	...
5.—WYE. 15 sq. mi.								
Birmingham W.W. (Llyn Gynon) M	E. Antony Lees, Esq.....	5	1	0	1500	1799	70.83	...
[†] " " (Bwlchyrhendre) M	" " " " " " " " " " " "	5	1	0	1585	1830	72.05	...
" " (Claerddu) ... M	" " " " " " " " " " " "	5	1	0	1500	1961	77.20	...
" " (Gwngu)..... M	" " " " " " " " " " " "	5	1	0	1650	1881	74.05	...
^D " " (Abergwngu)....	" " " " " " " " " " " "	5	1	0	1200	1684	66.30	197
Plynlimon	Dr. H. R. Mill	5	1	0	1740	2601	102.40	...
BRECON. (Area, 733 sq. mi.)								
1.—TOWY. 17 sq. mi.								
2.—TAWE. 41 sq. mi.								
^D Swansea W.W. (Nantyrwydd)...	R. H. Wyrill, Esq., C.E.	5	1	0	920	2391	94.15	217
" " (Blaen Tawe) M	" " " " " " " " " " " "	5	1	0	1375	2814	110.77	...
3.—NEATH. 48 sq. mi.								
[†] Pont Neath Vaughan [Glyn Neath]	W. N. Hogben, Esq.	5	1	5	297	1822	71.75	203
4.—TAFF. 48 sq. mi.								
^D Nanthir Reservoir [Aberdare] ..	O. Williams, Esq., C.E....	5	1	0	860	1823	71.76	227
" " ["] M	" " " " " " " " " " " "	5	1	0	860	1831	72.09	...

DIVISION XI.—MONMOUTH, WALES AND THE ISLANDS—(continued).

STATIONS.		AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with "01 in. or more
			Diam.	Height Above Ground. SeaLevel		1914			
			in.	ft.	in.	feet.	mm.	inches.	
BRECON—(con.)									
4.—TAFF—(con.)									
	Penderyn	J. R. Fox, Esq., C.E.....	5	1	0	1003	1526	60.06	...
D	Taff Fechan (Pontsticill) No. 12	T. F. Harvey, Esq., C.E.	5	1	0	1031	1609	63.33	212
	" " (") No. 12 M	" " "	5	1	0	1031	1619	63.75	...
	" " (") West) .14	" " "	5	1	0	1254	1754	69.04	...
	" " (") East) .13	" " "	5	1	0	1763	1693	66.65	...
D†	Cardiff W.W. (Llwynon Res.)	C. H. Priestley, Esq., C.E.	5	1	0	860	1668	65.68	226
D	" " (Pont-ar-daf) ..	" " "	5	1	0	850	1928	75.92	231
	" " (Garw-nant)	" " "	5	1	0	1100	1941	76.43	...
	" " (Nant Gwineu)	" " "	5	1	0	1275	1528	60.14	...
	" " (Nant-y-gou-garn) ..	" " "	5	1	0	...	2138	84.16	...
D†	Taff Fechan (Pentwyn Res.)	T. F. Harvey, Esq., C.E.	5	1	0	1120	1959	77.14	231
†	" " (")M	" " "	5	1	0	1120	1963	77.27	...
	Cardiff W.W. (Nant Goch)	C. H. Priestley, Esq., C.E.	5	1	0	...	1579	62.17	...
	" " (Nant Ddu)	" " "	5	1	0	1560	1999	78.70	...
†	" " (Pentwyn Uchaf, No. 5)	" " "	5	1	0	1143	1850	72.85	...
†	" " (Storey Arms, No. 4)	" " "	5	1	0	1430	2047	80.58	...
	" " (Tyle Brith, No. 1)	" " "	5	1	0	2350	2462	96.94	...
D†	" " (Cantref Res., No. 2)	" " "	5	1	0	1120	2052	80.77	227
D†	" " (Beacons Res., No. 6)	" " "	5	1	0	1340	2302	90.63	228
	" " (Nant Penig, No. 3) ..	" " "	5	1	0	2000	2131	83.91	...
D†	Taff Fechan (Neuadd Res.) No. 1	T. F. Harvey, Esq., C.E.	5	1	0	1462	2192	86.32	237
†	" " (") No. 1 M	" " "	5	1	0	1462	2100	82.66	...
D†	" " (") No. 4	" " "	5	1	0	1487	2462	96.94	237
D†	" " (") No. 4A	" " "	5	1	0	1487	2444	96.23	237
†	" " (") No. 2M	" " "	5	1	0	1993	2012	79.22	...
†	" " (") No. 5M	" " "	5	1	0	1515	2425	95.48	...
†	" " (") No. 10M	" " "	5	1	0	1700	2167	85.30	...
D†	" " (") No. 11	" " "	5	1	0	1524	2013	79.26	237
†	" " (") No. 7M	" " "	5	1	0	2017	2582	101.65	...
†	" " (") No. 8M	" " "	5	1	0	1723	2618	103.05	...
†	" " (") No. 3M	" " "	5	1	0	1843	1816	71.48	...
	" " (") No. 3AM	" " "	5	1	0	1843	1822	71.72	...
†	" " (") No. 9M	" " "	5	1	0	1997	1605	63.18	...
†	" " (") No. 6M	" " "	5	1	0	2099	2841	111.85	...
5.—RHYMNEY. 2 sq. mi.									
6.—EBBW. 7 sq. mi.									
D†	Ebbw Vale W.W. (Llangunider Res.)	T. J. Thomas, Esq., C.E.	5	1	0	1413	1820	71.65	216
†	" " (") W. 3	" " "	5	1	0	1468	1984	78.12	216
†	" " (") N. W. 2	" " "	5	1	0	1471	1870	73.64	216
	" " (Carno, S.)	" " "	5	1	0	1236	1960	77.18	215
†	" " (") E.)	" " "	5	1	0	1391	1865	73.43	215
†	" " (") W.)	" " "	5	1	0	1412	1991	78.38	215
†	" " (") N.)	" " "	5	1	0	1533	1857	73.12	215
7.—USK. 299 sq. mi.									
	Crickhowell (Glanusk Park)	Lord Glanusk	5	1	0	290	1396	54.94	180
D†	" " (Gwernvale)	E. Pirie Gordon, Esq.	5	1	0	393	1223	48.15	204
D	" " (") Garden)	" " "	5	1	3	443	1315	51.76	204
	" " (Penmyarth)	J. H. Furmedge, Esq.	5	1	0	330	1208	47.54	178
	Llanbedr (Wernbystack)	Dr. H. R. Mill	5	1	0	...	1080	42.54	...

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with 0.1 in. or more	
		Diam.	Height Above Ground, Sea Level		1914			
		in.	ft.	in.	feet.	mm.	inches.	
BRECON—(con.)								
7.—USK—(con.)								
D Swansea W.W. (Bwlch)	R. H. Wyrill, Esq., C.E.	8	1	0	1246	2837	111.68	224
D " " (Cray Res.) No.1	" " " "	5	1	0	1032	1993	78.45	220
D " " (" ") No.2	" " " "	5	1	0	1015	2547	100.27	...
D Bwlch (Buckland Gardens)	Mr. E. Beckett	8	0	9	486	1364	53.69	193
Talybont (Cui)	Lt.-Col. H. Jones Williams	5	1	0	490	1584	62.35	...
† Brecon (New Inn)	Mr. W. Williams	5	1	0	810	1627	64.04	...
† Cray Station	Mr. J. Jones	5	1	0	930	2370	93.30	...
† Crickhowell (Cwmdu)	Mr. J. P. Edwards	5	1	0	430	1135	44.70	...
D " (Ffordlas Farm) ...	Dr. H. R. Mill	5	1	0	1170	1353	53.26	162
† Llanfrynach (Tymawr)	Miss D. de Winton	5	1	0	450	1380	54.34	...
† Crickhowell (Tal-y-maes)	Dr. H. R. Mill	5	1	0	1250	1481	58.30	...
D Treacastle (Blaenau-hydfer)	" " " "	5	1	0	1070	2391	94.13	202
Brecon (Ffrwdgrech)	J. D. D. Evans, Esq.	8	1	0	570	1518	59.78	195
D " (The Laurels)	C. J. E. Large, Esq.	5	1	0	492	1301	51.21	219
" (" ")	" " " "	8	1	0	492	1307	51.45	...
† Black Mountains (Waun Fach)	{ The Referees, Aber- }	5	1	0	2650	1535	60.44	...
† " " (" ") unfenced	{ tillery Water Bd. Act }	5	1	0	2650	1631	64.21	...
D† " " (Cwm Grigus Uchaf)	" " " "	5	1	0	1980	1706	67.15	216
D† " " (Dam Site, Grwyne Fawr)	" " " "	5	1	0	1620	1784	70.23	214
D† " " (Aber Clyd)	" " " "	5	1	0	1880	1519	59.82	213
† " " (Pen-y-Manllwyn)	" " " "	5	1	0	2512	1475	58.08	...
† " " (" ") unfenced	" " " "	5	1	0	2512	1564	61.58	...
D† " " (Taren-yr-Esgob)	" " " "	5	1	0	2039	1394	54.89	209
D† " " (" ") unfenced	" " " "	5	1	0	2039	1499	59.00	209
D† " " (" " Top) ...	J. R. Gethin Jones, Esq.	5	1	0	2100	1576	62.06	208
D† " " (Twyn Tal-y-Cefn)	{ The Referees, Aber- }	5	1	0	2130	1420	55.92	206
D† " " (Blaen Grwyne Fawr)	{ tillery Water Bd. Act }	5	1	0	2150	1399	55.08	205
D† Llanfihangel Nant-Bran (Cwmcyrog)	Dr. H. R. Mill	5	1	0	790	1497	58.95	197
† Upper Chapel (Tymawr)	Mrs. Probert	5	1	0	945	1436	56.55	...
8.—WYE. 271 sq. mi.								
D† Cathedine Rectory	Rev. D. H. Picton	5	1	0	660	1123	44.20	193
† Capel-y-ffin [Llanthony]	{ The Referees, Aber- }	5	1	0	1047	1616	63.62	...
" " (Waun Goch)	{ tillery Water Bd. Act }	5	1	0	1260	1697	66.82	...
D Talgarth (Dan-y-garth)	F. Morgan, Esq.	5	4	0	404	922	36.29	183
D Gwernyfed Park [Glasbury] ...	Mrs. Glen Kidston	5	1	0	375	863	33.97	207
Hay (Waunderwen)	Mrs. Garnons-Williams	5	1	4	400	975	38.40	197
Llanwrtyd Wells (Llandulas) ...	Mr. W. Price	5	1	0	790	1476	58.10	...
" " (Brynonen) ...	Rhys D. Jones, Esq.	5	1	0	702	1560	61.43	224
D† Llangammarch Wells	Dr. W. Black Jones	8	1	0	551	1489	58.62	218
D Builth Wells (Tyn-y-berllan) ...	Dr. W. W. Baldock Fry ...	5	1	0	430	1177	46.34	176
† Abergwesyn (Trallwn)	Dr. H. R. Mill	5	1	0	1000	2249	88.55	...
† Pen-graig [Newbridge]	" " " "	5	1	0	960	1694	66.70	...
D† Llysddinam [" "]	C. Venables Llewelyn, Esq.	5	1	3	646	1354	53.32	228
Birmingham W.W. (Cors-yr-hwch) M	E. Antony Lees, Esq.	5	1	0	1775	2484	97.80	...
" " (Esgair Ceiliog) M	" " " "	5	1	0	1525	2007	79.00	...
" " (Llyn-Carw) M	" " " "	5	1	0	1775	2242	88.25	...
† " " (Nant-y-car) ... M	" " " "	5	1	0	1545	2232	87.87	...
† " " (Esgair Garthen) M	" " " "	5	1	0	1600	1872	73.70	...
D† " " (Elan Village) ...	" " " "	5	1	0	...	1706	67.18	222

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(continued).

STATIONS.		AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more
			Diam.	Height Above		1914			
			in.	ft.	in.		feet.	mm.	inches.
RADNOR. (Area, 474 sq. mi.)			in.	ft.	in.	feet.	mm.	inches.	
1.—WYE. 424 sq. mi.									
D	Boughrood Castle (R)	Hon. F. J. Morgan.....	8	1	0	400	1100	43·31	200
D	Glasbury-on-Wye	D. C. Lloyd, Esq.	5	1	0	274	1030	40·55	198
	Welfield [Builth]	E. A. Thomas, Esq.	5	1	10	740	1290	50·80	...
	Builth Road (St. John's Vicarage)	Rev. J. L. Bryans	5	0	11	550	1179	46·41	219
D	Llandrindod Wells (Kimberley)..	W.B.de Winton Esq., C.I.E.	5	1	0	699	1072	42·21	208
	New Radnor (Ednol)..... M	Dr. H. R. Mill	5	1	0	951	1197	47·11	...
	Radnor Forest (Great Rhos) ... M	H. Langston, Esq.....	5	1	6	2150	1372	54·01	...
D	Presteign (St. Davids)	Dr. N. Y. Lower	5	1	0	500	1000	39·37	206
	„ (Norton Manor Gdns.)	Mr. Wilson Palliser	5	1	6	650	1109	43·65	...
D†	Birmingham W.W. (Tyrmynydd)	E. Antony Lees, Esq.....	5	1	0	832	1808	71·19	236
D†	„ „ (Nantgwillt) ..	„ „ „ „	5	1	0	845	1881	74·06	238
†	„ „ (Dwfnant) ...	„ „ „ „	5	1	0	...	1979	77·90	...
†	„ „ „ (Esgair Gader) No1 M	„ „ „ „	5	1	0	1500	1878	73·95	...
	„ „ „ „ „ („ „) No2 M	„ „ „ „	5	1	0	1500	1849	72·80	...
D†	„ „ „ (Claerwen) ...	„ „ „ „	5	1	0	1250	1864	73·40	219
D†	„ „ „ (Tynant) ...	„ „ „ „	5	1	0	1250	1975	77·77	235
	Rhayader	„ „ „ „	5	1	0	...	1308	51·49	...
	„ (Vicarage)	Rev. George Roberts	5	1	0	740	1450	57·10	195
†	Birmingham WW (Cerrigllwydion) M	E. Antony Lees, Esq.....	5	1	0	1700	1956	77·00	...
†	„ „ „ (Pen-y-gareg) M	„ „ „ „	5	1	0	1500	1613	63·50	...
†	„ „ „ (Calettwr) ... M	„ „ „ „	5	1	0	1500	1897	74·70	...
	„ „ „ (Figin) No. 1 M	„ „ „ „	5	1	0	1700	2153	84·75	...
	„ „ „ „ „ („ „) No. 2 M	„ „ „ „	5	1	0	1700	2153	84·75	...
	„ „ „ (Aberhenllan) M	„ „ „ „	5	1	0	1250	1656	65·20	...
D	Abbey Cwmhir	Rev. W. F. B. Ward	5	1	0	912	1101	43·36	201
	Llanbister (Llananno)	Dr. H. R. Mill	5	1	0	900	1219	48·00	...
2.—SEVERN—Right Bank Tributaries. 50 sq. mi.									
MONTGOMERY. (Area, 797 sq. mi.)									
1.—DOVEY. 120 sq. mi.									
D	Machynlleth (The Plas).....	<i>The County Times</i>	5	1	0	41	1457	57·36	210
2.—YSTWITH. 7 sq. mi.									
3.—WYE. 37 sq. mi.									
D	Llangurig (Dernol)	Dr. H. R. Mill	5	1	0	870	1591	62·64	205
4.—SEVERN—Right Bank Tributaries. 154 sq. mi.									
D	Llandinam (Plas Dinam)	Mr. D. Bowen	5	3	0	504	1030	40·57	194
D	Newtown (Penarth Weir)	G. R. Jebb, Esq., C.E....	8	1	0	321	1011	39·79	224
	Welshpool (Edderton)	Miss A. M. Howell Evans	5	1	0	...	814	32·03	195
5.—SEVERN—Left Bank Tributaries. 479 sq. mi.									
D	Berriew (Rhiewport Gardens) ...	Mr. E. Jones	5	1	0	370	986	38·80	186
D	Welshpool (Llwynderw) ..	<i>The County Times</i>	8	1	0	243	963	37·90	190
D	„ „ (County School)	P. W. Carter, Esq.	5	1	0	263	899	35·41	199
D	„ „ (Fron Llwyd)	<i>The County Times</i>	5	1	0	540	972	38·25	185
	Garthbibio (Bwlch Tomlyd) ... M	Dr. H. R. Mill	5	1	0	1370	1836	72·30	...
D	Llandysilio Rectory	Rev. H. G. Dickinson ...	5	1	6	225	778	30·61	174
D	Lake Vyrnwy	E. J. Bradley, Esq.	5	0	7	770	1338	52·68	196
	„ „ „ (Bryn Gwyn)	J. R. Davidson, Esq., C.E.	8	1	0	1311	1712	67·38	...

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ≥ 0.1 in. or more
		Diam.	Height Above		1914			
			Ground.	Sea Level				
MONTGOMERY—(con.)		in.	ft.	in.	feet.	mm.	inches.	
5.—SEVERN—Left Bank Tributaries—(con.)								
n Lake Vyrnwy (Bank Cynon Isaf)	J. R. Davidson, Esq., C.E.	8	1	0	750	1684	66.30	198
„ „ (Ty Uchaf)	„ „ „ „	8	1	0	860	1657	65.24	...
„ „ (Heol-y-ffridd) No.1	„ „ „ „	8	1	0	912	2190	86.24	...
„ „ „ „ „ No.2	„ „ „ „	8	1	0	912	2086	82.14	...
„ „ (Tyn-y-ffridd) ...	„ „ „ „	8	1	0	1010	1611	63.41	...
„ „ (Lluestwen).....	„ „ „ „	8	1	0	1667	1937	76.26	...
„ „ (Llwynrhiw)	„ „ „ „	8	1	0	1428	2391	94.15	...
„ „ (Craig-y-Gribbin)..	„ „ „ „	8	1	0	1100	1781	70.11	...
„ „ (Eunant Bridge)...	„ „ „ „	8	1	0	830	2196	86.46	...
„ „ (Carreg Goch).....	„ „ „ „	8	1	0	1750	2181	85.87	...
„ „ (Fawnog).....	„ „ „ „	8	1	0	1315	1637	64.45	...
FLINT. (Area, 256 sq. mi.)								
1.—DEE. 198 sq. mi.								
n Hanmer (Gredington)	Lord Kenyon, K.C.V.O....	5	0	10	300	810	31.91	207
n Overton (Fairleigh)	B. J. E. Wright, Esq.....	5	1	8	220	749	29.49	175
n The Elms [Gresford].....	P. L. Rooper, Esq.....	8	1	0	200	749	29.49	209
Buckley	W. Simmons, Esq.....	5	1	0	555	809	31.85	...
Cilcain.....	„ „ „ „	5	1	0	790	695	27.35	203
Hawarden	Great Central Rly. Co....	9	3	6	35	733	28.86	189
Northop (Soughton Hall)	Sir John E. Bankes	5	1	0	418	877	34.54	190
n „ (Highfield)	Rev. Canon A. Atkinson...	5	1	0	400	800	31.48	186
n Hawarden Bridge	J. E. Griffiths, Esq.	9	1	0	15	810	31.87	196
n Mostyn Vicarage	Rev. W. Vaughan-Jones	5	1	0	100	955	37.59	221
2.—CLWYD. 51 sq. mi.								
Bodfari (Nantlys)	D. F. Pennant, Esq.	5	1	4	200	763	30.03	169
n „ (Cae Gwyn)	Mrs. Morgan	5	0	5	542	790	31.11	196
Dyserth Castle	J. B. Price, Esq.	5	0	6	350	638	25.13	...
Rhyl (Sewage Works)	Dr. A. Eyton Lloyd	8	1	0	31	671	26.42	203
Prestatyn (Victoria Avenue) ...	F. Wilkinson, Esq.	5	1	6	30	644	25.34	...
3.—SEVERN—Left Bank Tributaries. 7 sq. mi.								
DENBIGH. (Area, 668 sq. mi.)								
1.—DEE 270 sq. mi.								
Chirk (Penisarglyn Lodge)	Prof. Fraser Story .....	...	...	...	500	1064	41.88	174
n „ Castle Gardens	Mr. James Vert	6	1	2	625	1008	39.70	167
n Ruabon (Whitehurst)	„ „ „ „	5	1	1	327	869	34.21	184
n Cerrig-y-Druidion (Garthmeilio)	Col. S. Parr Lynes.....	5	1	0	925	1265	49.80	178
n† „ „ „ „ „ No.2	Col. C. S. Mainwaring....	5	1	0	1050	1403	55.24	196
Wrexham (Ty Mawr Reservoir).	F. Storr, Esq., C.E.	5	0	9	805	1006	39.62	177
„ (Pack Saddle Res.) ...	„ „ „ „	5	0	9	370	833	32.79	170
„ (Cae Llwyd Res.) ...	„ „ „ „	8	0	9	918	1037	40.84	179
„ „ „ „ „ „	„ „ „ „	5	0	9	918	1022	40.22	179
n „ (Broughton).....	J. Hall, Esq.	5	1	0	500	877	34.53	204
„ (Gwersyllt)	S. H. V. Simmons, Esq....	5	1	0	283	675	26.58	...
n† Cerrig-y-Druidion (Hafod-llan-isaf)	J. H. Parkin, Esq.....	5	1	2	1200	1258	49.51	178
†Pentre Voelas (Nant Heilyn) ...	„ „ „ „	5	1	0	1225	1494	58.82	...

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with '01 in. or more
		Diam.	Height Above		1914			
			Ground.	Sea Level				
		in.	ft.	in.	feet.	mm.	inches.	
DENBIGH—(con.)								
1.—DEE—(con.)								
D† Cerrig-y-Druidion (Hafod-yr-Onen)	J. H. Parkin, Esq.....	5	1	0	1175	1283	50.50	209
† Nantglyn (Pant-y-maen)	„ „ „	8	1	0	1320	1362	53.63	...
† Llyn Bran	„ „ „	8	1	0	1428	1590	62.60	...
2.—CLWYD & C. 267 sq. mi.								
D Gyffylliog (Fachlwyd Hall)	Elliott S. Currey, Esq.....	5	1	0	640	1131	44.51	228
D Ruthin (Tymawr)	Maj.-Gen. C. L. Cary.....	5	1	0	400	873	34.36	194
D „ (Llanbedr Hall).....	Dr. G. A. Crace-Calvert...	5	1	0	451	839	33.02	191
D Llangerniew (Hafodunos).....	Col. T. Gee	5	2	6	512	1428	56.23	174
Llanefydd (Rhyl W.W., S.)...M	L. G. Hall, Esq., C.E.....	5	1	0	600	885	34.83	...
„ „ „ (W.)...M	„ „ „ „	5	1	0	580	827	32.56	...
D „ (Plas Uchaf Res.) ...	„ „ „ „	5	1	0	485	753	29.63	175
D „ (Glascoed Reservoir)..	„ „ „ „	5	1	0	360	757	29.80	186
D Llangynhafal (Plas Drâw)	Col. C. J. Bromhead, C.B.	5	1	0	419	908	35.74	227
D† Denbigh (Asylum).....	W. Barker, Esq.	5	0	10	316	934	36.77	201
D „ (Garn).....	W. D. W. Griffith, Esq....	5	1	0	447	947	37.29	213
„ (Gallt-faenan).....	Mr. J. B. Pritchard	5	0	5	400	942	37.10	...
Trefnant (Maes Elwy)	Major R. F. Birch.....	5	1	3	150	853	33.58	173
Wygfair [St. Asaph]	Col. H. R. L. Howard, C.B.	8	2	6	250	826	32.52	...
D Colwyn Bay (Four Crosses)	W. Jones, Esq., C.E.....	5	1	0	400	864	34.01	175
D „ „ (Council Offices) ...	„ „ „ „	8	1	0	82	756	29.76	164
3.—CONWAY. 84 sq. mi.								
D Pentre Foelas (Voelas Hall).....	Mr. T. Dickie	5	1	3	640	1607	63.28	205
D† Llanrwst (County School).....	Rev. J. I. Farr	5	1	4	55	1453	57.22	207
D „ (Poplar Grove)	J. O. Gethin Jones, Esq....	5	0	8	35	1413	55.64	202
D Tal-y-cafn (Bodnant Hall)	Mr. George Gurney	8	1	6	120	986	38.82	206
4.—SEVERN—Left Bank Tributaries. 47 sq. mi.								
D Llangadwaladr (Penygwely Res.)	G. W. Lacey, Esq., C.E....	5	1	0	1094	1108	43.63	206
MERIONETH. (Area, 661 sq. mi.)								
1.—DEE. 218 sq. mi.								
D† Bala (Eryl Aran)	Mrs. Burton	8	1	0	600	1863	73.33	207
† Llanderfel (Palé Gardens)	Mr. E. J. Edwards	8	1	0	606	1480	58.27	211
Llandrillo (Tyddysillan)	Hon. R. Henley Eden.....	8	1	6	515	1340	52.77	208
2.—CLWYD. 7 sq. mi.								
3.—GLASLYN. 92 sq. mi.								
D Tan-y-bwlch (The Gardens) ...	Mr. J. Roberts	5	1	0	50	1691	66.58	217
D Festiniog (Morwynion Lake)..(R)	E. Lewis Evans, Esq.....	4	10	0	1320	1870	73.63	233
† Blaenau Festiniog (Oakley Quarries)	R. H. Jones, Esq.	5	10	0	1100	2670	105.13	206
D „ „ (Llechwedd „)	Messrs J. W. Greaves & Sons	5	1	0	...	2583	101.68	230
4.—MAWDDACH & C. 262 sq. mi.								
Aberdovey (Plas Penhelig)	J. M. Howell, Esq.....	5	1	6	150	1042	41.01	...
„ (Froneithyn)	G. M. S. Farmer, Esq. ...	5	1	0	200	939	36.96	...
Pennal (Talgarth Hall).....	Mrs. Bennet	5	0	5	125	1626	64.00	160
D Towyn (Peniarth).....	Mrs. Wynne	8	1	0	25	1351	53.18	203
D Dolgelly (Bryntirion)	E. P. Beale, Esq.	5	0	10	50	1608	63.32	192
„ (Hafod Fawr) ...	G. H. Richards, Esq. per MO	...	...	...	900	2123	83.57	235

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ≥ 0.1 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
MERIONETH—(con.)								
5.—DOVEY. 82 sq. mi.								
D Aberdovey	W. J. Eves, Esq.	5	1	0	15	1032	40.63	205
6.—SEVERN—Left Bank Tributaries.								
CARNARVON. (Area, 572 sq. mi.)								
1.—[BARDSEY ISLAND.]								
[Bardsey Island]	Hon. F. G. Wynn	5	1	0	30	884	34.81	...
2.—CONWAY & C. 146 sq. mi.								
D Snowdon (Pen-y-Gwryd) No. 13	A. Lockwood, Esq.	5	1	0	916	3918	154.26	234
D† Bettws-y-Coed (Tyn-y-bryn) ...	Dr. Hugh W. Fox.	8	2	6	153	1520	59.84	196
D† Lake Cowlyd (Llethyr Gwyn) Clate	T. B. Farrington, Esq.	5	1	0	1700	2497	98.29	221
D† „ „ (Gors-y-Llithrig) D	„ „ „ „	5	1	0	1900	2259	88.92	221
D† „ „ (Ffrith Fawr) ... B	„ „ „ „	5	1	0	1700	2375	93.52	221
D† „ „ („ „ Carreg Wen) A	„ „ „ „	5	1	0	1168	2707	106.56	221
D Lake Eigiau (Dam Site)	H. J. Jack, Esq.	5	1	0	1245	2396	94.31	205
Llanbedr-y-Cennin (Plasdulyn).	W. T. Ward, Esq.	8	1	0	509	1506	59.28	...
„ „ „ „ (Llyndulyn)	„ „ „ „	8	1	6	1632	2026	79.77	...
Deganwy (Y Berlfa).....(R)	Willoughby Gardner, Esq.	8	1	0	30	710	27.96	..
„ „ (Bryn Estyn)	Miss A. M. Simpson	5	1	0	100	700	27.55	...
D† Llandudno	W. Little, Esq.	5	1	0	72	794	31.26	175
3.—MENAI STRAITS. 221 sq. mi.								
D Madryn Castle (Farm School) ...	A. Turner, Esq.	5	1	0	285	1148	45.19	169
Nantlle (Dorothea Quarries) ... M	W. J. Griffith, Esq.	8	1	6	350	1670	65.73	...
† Llandwrog (Glynllivon Park) ...	Hon. F. G. Wynn.....	5	1	0	100	1208	47.55	...
† „ „ („ „ Nursery) „ „ „ „	„ „ „ „	5	1	0	180	1312	51.64	192
† „ „ („ „ Garden). „ „ „ „	„ „ „ „	5	1	0	100	1242	48.90	...
† „ „ („ „ Fort) ... „ „ „ „	„ „ „ „	5	1	0	180	1270	50.00	195
Carnarvon (Belan Fort).....	„ „ „ „	5	1	0	12	954	37.55	...
D Llanberis (Mount Pleasant).....	Mr. H. J. Jones	5	2	0	369	1880	74.03	213
D Carnarvon (Glangwna)	J. E. Greaves, Esq.	8	1	2	202	1142	44.96	206
D Llanberis (Brynrefail School) ...	J. Rees Foster, Esq.	5	1	0	356	1683	66.26	210
„ „ (Llandinorwig School)	John Roberts, Esq.	5	1	0	850	1630	64.17	219
D Llanrug (Llys Eiddon)	J. Rees Foster, Esq.	5	1	0	400	1211	47.66	193
D Bethesda (St. Ann's Vicarage) ..	Rev. W. Morgan	5	2	6	500	1670	65.76	210
D „ „ (Penrhyn Quarries) ...	W. D. Hobson, Esq.	8	1	0	528	1751	68.95	230
D Bangor (Penrhyn Castle Gdns.)..	Mr. W. Speed.....	5	1	0	150	1030	40.54	190
D Llanfairfechan	Mr. W. Timmins	5	1	0	144	955	37.61	183
Penmaenmawr (Mountain Res.)..	R. J. Hughes, Esq.	5	1	6	1200	1272	50.06	...
D „ „ (Council Offices). „ „ „ „	„ „ „ „	5	1	6	100	884	34.81	171
4.—ERCH & C. 155 sq. mi.								
D Abersoch.....	W. H. Winterbotham, Esq.	8	1	0	100	1131	44.52	188
D Bryn croes (Schoolhouse)	E. R. Williams, Esq.	5	0	11	320	1094	43.05	189
† Criccieth (Cefn-Maen)	J. E. Greaves, Esq.	8	1	0	220	1057	41.60	...
Pwllheli (Bodfean Hall)	Hon. F. G. Wynn	5	3	0	200	1152	45.35	...
5.—GLASLYN. 50 sq. mi.								
† Portmadoc (Wern Gardens)	R. M. Greaves, Esq.	5	1	0	90	1270	50.00	...
Beddgelert (Council School)	David Jones, Esq.	5	1	0	133	2307	90.82	...
Snowdon (Wenallt) .....No. 6	A. Lockwood, Esq.	5	1	2	1050	3902	153.61	...
„ „ (Cwm Dyli).....No. 11	„ „ „ „	5	1	0	310	3374	132.82	...

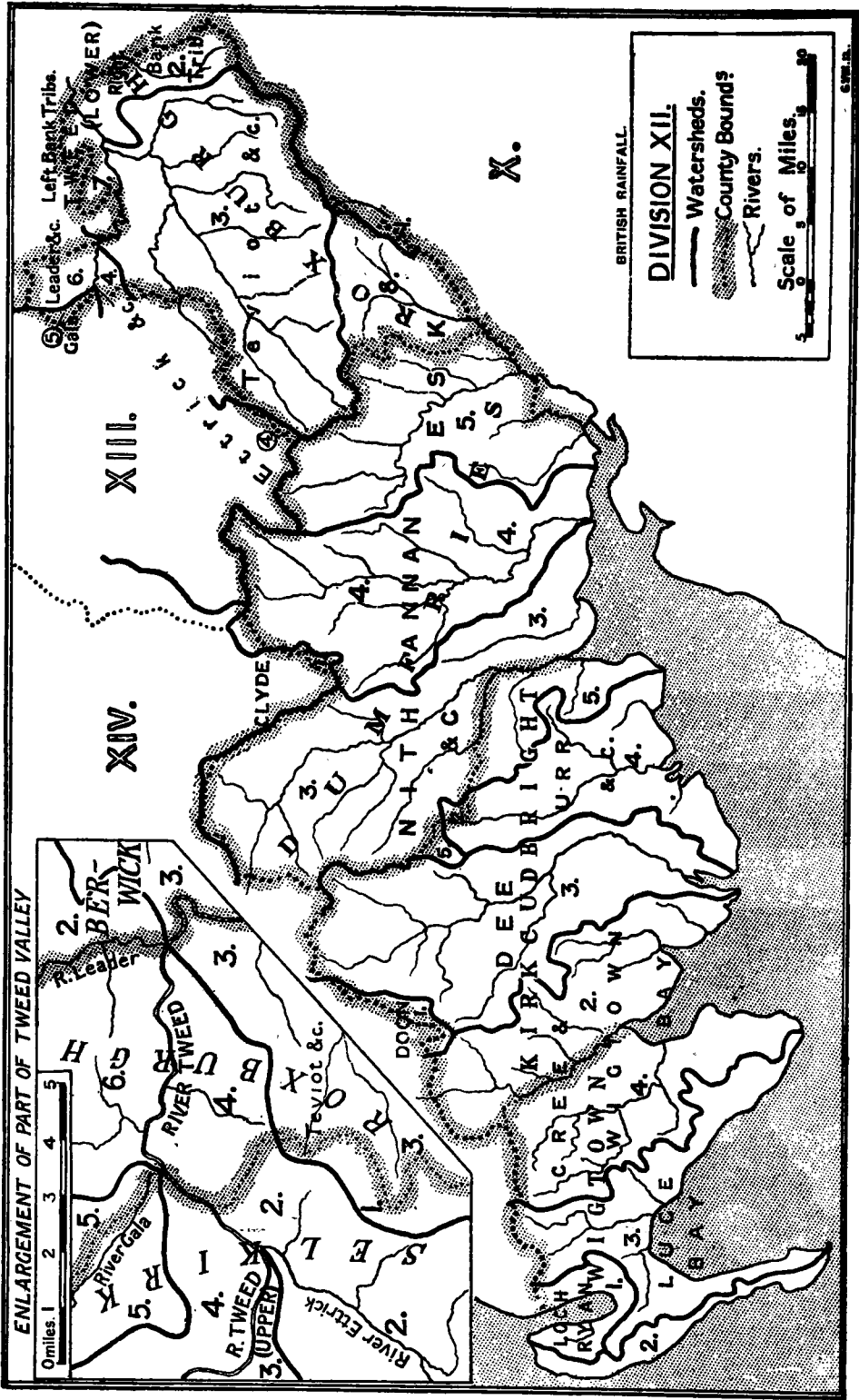
DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ≥ 0.1 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
CARNARVON—(con.)								
5 — GLASLYN—(con.)								
Snowdon (Old Road) No. 14	A. Lockwood, Esq.....	5	0	10	325	3120	122.82	...
„ (Lliwedd) No. 2	„ „ „	5	1	3	1485	3929	154.69	...
„ (Delta) No. 7	„ „ „	5	1	0	1435	4132	162.69	...
„ (Glaslyn) No. 3	„ „ „	5	0	8	2050	3382	133.13	...
„ (Lluchfa) No. 4	„ „ „	5	0	10	2500	3773	148.55	...
„ (Teyrn) No. 1	„ „ „	5	1	0	1080	4088	160.94	...
„ (LlynLlydawIntake) No.10	„ „ „	5	1	0	1480	3648	143.64	...
„ („ „ „ CopperMill) No.9B	„ „ „	5	1	5	1480	4136	162.85	...
„ (Crib Goch) No. 8	„ „ „	5	1	3	2340	4801	189.02	...
„ (Llyn Llydaw, N.) No.5	„ „ „	5	1	0	1470	3755	147.85	...
ANGLESEY. (Area, 275 sq. mi.)								
Llanddwyn Island.....	Hon. F. G. Wynn	8	1	0	40	916	36.05	...
Dwyran (Menaifron).....	W. E. Sotheby, Esq.....	5	1	0	17	979	38.56	172
D Llanddaniel-Fab (Porthamel) .	Hon. Cecil S. Irby.....	5	0	9	70	982	38.66	203
D†Llangadwaladr (Bodorgan)	Mr. W. Pilgrim.....	5	1	0	100	990	38.99	195
D Llangwilog (Trescawen)	J.H.Pritchard-RaynerEsq	5	1	0	239	1023	40.28	189
†Holyhead (Sailors' Home)	Meteorological Office	5	1	0	15	838	32.98	175
D Bodedern (Pressaddfed)	Lt.-Col. W. A. Fox-Pitt..	5	0	11	150	913	35.95	176
D Llantrisant Rectory	Rev. Daniel Morgan	5	1	6	300	905	35.64	217
D LlanerchymeddLlwydiarthEsgob	T. Prichard, Esq.	5	1	0	175	881	34.70	224
D Lligwy	Lord Boston	5	1	0	170	798	31.43	188
D Amlwch (Dyffryn Adda)	T. Fanning Evans, Esq....	5	1	2	178	890	35.06	193
ISLE OF MAN. (Area, 227 sq. mi.)								
Castletown (Langness)	Board of Northern Lights	8	1	0	75	705	27.74	...
Santon Vicarage	Rev. R. Jones	5	0	10	245	858	33.79	192
Douglashead	Board of Northern Lights	...	...	...	...	788	31.04	...
D†Douglas (Borough Cemetery) ..	F. Cottle, Esq.	8	1	0	284	990	38.99	204
D† „ (Clype Res., Onchan) ..	Mr. W. Crebbin.....	8	1	0	420	1089	42.88	207
„ (Baldwin)	F. Cottle, Esq.	8	1	0	720	1267	49.89	...
D†Ramsey (Town Hall).....	G. W. Kewin, Esq.	8	15	0	18	1236	48.65	183
Point of Ayre.....	Board of Northern Lights	3	4	6	116	945	37.19	...
CHANNEL ISLANDS.								
JERSEY. (45 sq. mi.)								
D†St. Helier W. W. (Millbrook Valley)	A. J. Jenkins, Esq., C.E.	5	0	11	52	989	38.93	176
D St. Saviours (Clifton)	C. V. Hawksford, Esq....	5	2	2	200	1082	42.58	215
D†St. Helier (St. Louis Obsy.)... (R)	Rev. M. Dechevrens, S.J.	8	5	9	180	916	36.05	190
†St. Aubins (Railway Station) ...	Meteorological Office	8	1	9	25	966	38.05	182
† „ (Belle Vue)	Miss M. M. Sumner	5	1	0	220	922	36.31	154
D St. Ouen's Manor	R. Malet de Carteret, Esq.	5	2	0	270	914	35.99	164
GUERNSEY. (25 sq. mi.)								
D StPeters-in-the-Wood(LesMenages)	F. J. Lilley, Esq.	5	2	0	...	969	38.15	202
D†St. Martins (Les Blanchés)	B. T. Rowsell, Esq.....	5	1	0	310	1018	40.07	208
† „ (Hautnez)	A. Collenette, Esq.	5	0	8	343	1015	39.97	218

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with '01 in. or more
		Diam.	Height Above Ground.			1914		
CHANNEL ISLANDS—(con.)		in.	ft.	in.	feet.	mm.	inches.	
GUERNSEY—(con.)								
† Villiaze	A. Collenette, Esq.	5	0	6	337	1000	39·35	218
d† St. Saviours (Le Mont Saint) ...	S. Carey Curtis, Esq.....	5	1	0	105	975	38·38	173
d† St. Peter Port (St. Martin's Rd.)	A. Collenette, Esq.....	5	1	0	295	1084	42·67	219
d† „ „ (Market Street)...	B. T. Rowswell, Esq.....	5	52	8	100	1112	43·77	200
d† „ „ (Villa Carey).....	Dr. F. E. Carey ...	8	1	6	180	1094	43·09	201
† „ „ (Rohais).....	A. Collenette, Esq.....	5	1	0	145	1107	43·59	219
Castel (St. George)	„ „ „	5	0	10	120	1007	39·66	230
SARK. (2 sq. mi.)								
d† Vallée du Creux	B. T. Rowswell, Esq.....	5	1	0	320	904	35·61	187
HERM. (1 sq. mi.)								
ALDERNEY. (3 sq. mi.)								
d Le Huret	B. T. Rowswell, Esq.....	5	1	0	245	943	37·11	172

MAP OF DIVISION XII.
SOUTHERN COUNTIES, showing River-Divisions.



SCOTLAND.

DIVISION XII.—SOUTHERN COUNTIES.

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more
		Diam.	Height Above Ground. SeaLevel			1914		
		in.	ft.	in.	feet.	mm.	inches.	
WIGTOWN. (Area, 488 sq. mi.)								
1.—LOCH RYAN. 46 sq. mi.								
Loch Ryan Lighthouse	Board of Northern Lights	...	...		46	989	38·94	95
2.—WESTERN GALLOWAY. 44 sq. mi.								
Mull of Galloway	Board of Northern Lights	...	...		327	695	27·35	163
Logan House	K. McDouall, Esq.....	7	0	8	80	878	34·57	201
Lochnaw Castle ..	Mr. G. S. Hay, <i>per</i> S.M.S.	5	0	8	230	1101	43·36	...
Corsewall	Board of Northern Lights	...	3	4	112	1210	47·65	...
3.—LUCE BAY. 186 sq. mi.								
^D Stoneykirk (Ardwell House).....	Sir M. McT. Stewart, Bt.	8	3	9	65	1022	40·22	191
^D Glenluce (Crews)	Peter Taylor, Esq.....	5	1	9	218	1026	40·41	203
4.—CREE & WIGTOWN BAY. 212 sq. mi.								
^D Whithorn (Cutroach)	J. G. Martin, Esq.....	5	0	6	120	922	36·28	189
^D „	Dr. J. F. Smith	5	0	8	207	1043	41·05	191
Garliestown (Galloway House)...	Mr. J. R. Crosbie	5	3	9	20	784	30·87?	...
KIRKCUDBRIGHT. (Area, 902 sq. mi.)								
1.—DOON. 16 sq. mi.								
2.—CREE & WIGTOWN BAY. 222 sq. mi.								
Gatehouse (Cally)	Col. F. M. Baillie, <i>per</i> M.O.S.	5	1	0	120	1149	45·24	193
Creetown (Cassencary)	J. A. Henryson-Caird, Esq.	5	0	8	50	1030	40·56	192
^D Palnure (Bargaly)	Mrs. Stewart, <i>per</i> S.M.S.	...	...		...	1293	50·92	176
Glenhead of Trool.....	J. McMillan, Esq.	5	0	11	320	1880	74·00	...
3.—DEE. 377 sq. mi.								
Kirkcudbright (Balmae)	The Countess of Selkirk	5	0	8	150	821	32·34	...
^D „ (St. Mary's Isle)	Mr. J. Jeffrey	5	1	0	20	1057	41·62	185
^D Dalry (Glendarroch)	Miss M. Barbour	5	0	11	192	1461	57·52	220
3.—DEE—(con.)								
^D Carsphairn (Shiel)	Mr. S. Wilson	5	1	0	850	1944	76·52	230
^D „ (Knockgray)	Miss Clark Kennedy	8	0	11	641	1581	62·23	219
4.—URR & C. 196 sq. mi.								
Auchencairn (Torr House)	W. Ovens, Esq.	5	0	8	50	1122	44·19	...

DIVISION XII.—SOUTHERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with '01 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
KIRKCUDBRIGHT—(con.)								
4.—URR & C—(con.)								
D Dalbeattie (Kirkennan).....	Wellwood Maxwell, Esq.	5	0	9	30	1126	44·35	212
„ (Little Richorn)	Mr. W. Kerr	5	0	9	54	1057	41·60	184
D Kirkpatrick Durham (Glenlair)..	Major J. A. W. Maxwell	5	0	6	250	1387	54·59	193
D Corsock (Monybuie)	Miss Dickson, per S.M.S.	5	0	9	580	1315	51·77	204
5.—NITH & C. 91 sq. mi.								
D Cargen [Dumfries]	R. F. Dudgeon, Esq.....	5	0	10	80	1186	46·71	197
Lochrutton (Dumfries W.W.)...	J. Smellie, Esq.	5	1	0	273	1116	43·92	224
D Lincluden House [Dumfries] ...	Miss Young.....	5	1	0	60	1045	41·14	206
D Jardington [Dumfries].....	J. Rutherford, Esq.	5	1	0	70	977	38·45	189
DUMFRIES. (Area, 1074 sq. mi.)								
1.—CLYDE—Right Bank Tributaries. 5 sq. mi.								
2.—URR. 6 sq. mi.								
3.—NITH & C. 421 sq. mi.								
D Ruthwell (Comlongan Castle) ...	Mr. W. Brown	5	1	0	74	943	37·11	171
D Dumfries (Crichton Roy. Inst.)..	Mr. E. Joss.....	6	5	0	155	794	31·26	192
Moniaive (Glencrosh)	Miss Macmillan	5	1	2	350	1436	56·55	215
D „ (Maxwelton House) ...	Rev. Sir E. Laurie, Bt....	5	1	6	400	1342	52·83	222
„ (Jarbruck).....	Cecil E. Laurie, Esq.....	8	1	2	350	1494	58·82	218
D Durrisdeer (Drumlanrig Gardens)	Mr. D. Inglis	5	0	9	191	1292	50·86	159
4.—ANNAN. 367 sq. mi.								
D Dalton (Whitercroft)	W. Maitland-Heriot, Esq.	5	0	6	240	1010	39·76	192
D Hoddam Castle	E. J. Brook, Esq., per S.M.S.	5	1	4	150	926	36·45	186
Ecclefechan (Knockhill)	A. Johnson-Fergusson, Esq.	5	0	9	170	912	35·92	...
D „ (Burnfoot)	Major H. C. Irving	5	0	10	160	1011	39·82	201
D Dalton (School House)	P. C. Copland, Esq.	5	1	0	175	952	37·50	178
D „ (Kirkwood)	Arthur J. Steel, Esq.....	5	0	8	245	1106	43·56	205
D Lockerbie (Castle Milk)	Mr. J. T. Jeffrey	5	1	6	199	1029	40·51	187
D Lochmaben (Esthwaite)	W. J. Halliday, Esq.....	5	1	0	166	1006	39·60	193
Beattock (Kinnelhead)	J. Bartholomew, Esq.....	5	1	0	820	1586	62·46	...
Moffat (Craigielands).....	Mr. L. Fraser.....	5	1	0	331	1404	55·27	...
D „ (Auchen Castle).....	Mr. J. Macgregor	5	0	6	500	1428	56·21	219
D „ (Hope Lodge).....	Mrs. Anstruther-Ritchie..	5	1	0	450	1144	45·06	203
5.—ESK. 275 sq. mi.								
D Rigg	Mr. D. McGregor	5	1	0	65	864	34·02	171
Canonbie (Byreburnfoot)	Mr. David Crabbe	3	0	9	160	880	34·63	...
D „ (Irvine House)	J. H. Milne Home, Esq....	5	0	6	200	1211	47·66	207
Langholm (Drove Road)	Mrs. Jackson	5	0	9	270	1282	50·48	...
„ (Ewes, Burnfoot).....	Miss H. C. Little	5	0	6	541	1256	49·43	...
„ „ „ School).....	Mrs. Lyall	5	1	0	445	1269	49·97	...
Eskdalemuir Observatory	Meteorological Office	11	2	0	799	1479	58·24	221
ROXBURGH. (Area, 666 sq. mi.)								
1.—NORTH TYNE. 6 sq. mi.								
2.—TWEED, LOWER—Right Bank Tributaries. 57 sq. mi.								
Kelso (Springwood Nurseries) ...	Messrs. Laing & Mather...	5	1	0	200	681	26·80	208

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with '01 in. or more
		Diam.	Height Above		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
ROXBURGH—(con.)								
3.—TWEED—Teviot & c. 431 sq. mi.								
Teviothead (Skelfhill)	Miss Grieve.....	3	1	2	950	1308	51·50	...
Hawick (Wolfelee)	W. Steedman Esq. <i>per</i> MOS	5	0	10	587	987	38·86	232
D „ (Bransholme)	J. G. Winning, Esq.	5	0	6	457	833	32·81	211
D Ancrum (Monteviot)	Bertram Talbot, Esq.	5	3	0	300	634	24·97	191
D Jedburgh (Ploughlands)	J. Scott, Esq.	5	1	0	301	533	20·97	189
St. Boswells (Monksford)	Col. A. Mitchell	5	0	11	320	605	23·81	...
D „ „ (The Fens)	J. J. Fairbairn, Esq.	5	0	9	260	645	25·41	167
Kelso (Springwood Park)	Mr. W. Chaplin	5	1	3	130	629	24·78	179
4.—TWEED—Ettrick & c. 10 sq. mi.								
D Melrose (Asylum)	Mr. A. C. Pattman	5	0	6	480	796	31·34?	226
D „ („)	„ „ „	5	1	0	480	717	28·22	226
5.—TWEED—Gala. 6 sq. mi.								
6.—TWEED—Leader & c. 25 sq. mi.								
Melrose (Drygrange)	T. J. S. Roberts, Esq.	5	1	0	360	666	26·24	...
7.—TWEED, LOWER—Left Bank								
Tributaries. 25 sq. mi.								
D Kelso (Broomlands)	J. C. Scott, Esq.	5	1	0	193	617	24·29	176
Smailholm (Sandyknowe)	Mr. J. E. Templeton	5	1	2	500	538	21·19	...
8.—ESK. 106 sq. mi.								

MAP OF DIVISION XIII.—SOUTH EASTERN COUNTIES,
Showing the River-Divisions.



DIVISION XIII.—SOUTH EASTERN COUNTIES.

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with 0.1 in. or more	
		Diam.	Height Above Ground Sea Level		1914			
		in.	ft.	in.	feet.	mm.	inches.	
SELKIRK. (Area, 268 sq. mi.)								
1.—TWEED—Teviot & c. 34 sq. mi.								
D Selkirk (Whitmuir Hall)	C. W. Dunlop, Esq.	5	1	0	800	748	29.46	173
2.—TWEED—Ettrick & c. 192 sq. mi.								
Edinburgh W. W. (Meggat Head) No. 1	Messrs. Leslie & Reid, C.E.	5	1	3	1496	1584	62.38	...
Meggat Water (Cramilt Lodge) ...	Mr. C. S. Allan	5	0	4	1005	1331	52.41	...
D Selkirk (The Hangingshaw)	Miss Johnstone of Alva ...	6	0	6	670	800	31.49	160
3.—TWEED, UPPER—Right Bank	Tributaries. 17 sq. mi.							
4.—TWEED, UPPER—Left Bank	Tributaries. 19 sq. mi. ...							
D Caddonfoot (Fairnilee)	Mr. T. Brown	5	1	0	450	785	30.89	177
Galashiels (The Peel, Clovenfords)	W. R. Ovens, Esq.	6	1	6	500	846	33.31	...
5.—TWEED—Gala. 6 sq. mi.								
D Galashiels (Abbotsford Rd.)	Dr. J. W. Somerville	5	0	8	416	709	27.93	181
„ (Stantling Craigs) ...	Mr. J. Murray	12	1	3	800	854	33.64	...
PEEBLES. (Area, 348 sq. mi.)								
1.—TWEED, UPPER—Right Bank	Tributaries. 127 sq. mi.							
Edinburgh W. W. (Ravenscraig) No. 3	Messrs. Leslie & Reid, C.E.	5	1	3	2258	2204	86.79	...
„ „ (Gameshope Loch) No. 4	„ „ „	5	1	3	1860	2006	78.97	...
D „ „ („ Farm) No. 5a	„ „ „	5	1	3	1538	1958	77.10	258
„ „ („ „) No. 5	„ „ „	8	1	3	1538	1911	75.23	...
D „ „ (Talla Linns Foot) No. 6a	„ „ „	5	1	3	966	1867	73.50	249
„ „ („ „ „) No. 6	„ „ „	8	1	3	966	1830	72.05	...
D „ „ (Quarter Hill) No. 7a	„ „ „	5	1	3	1196	1347	53.04	228
„ „ („ „) No. 7	„ „ „	8	1	3	1196	1322	52.03	...
D „ „ (Victoria Lodge) No. 8	„ „ „	5	1	3	904	1312	51.65	228
„ „ („ „ „) No. 8a M	„ „ „	8	1	3	904	1275	50.19	...
D Stobo (Dawyck Gardens)	Mr. J. Simpson	5	1	1	600	1122	44.17	201
2.—TWEED, UPPER—Left Bank	Tributaries. 192 sq. mi.							
Stobo Castle	J. Ainslie, Esq., per S.M.S.	3	1	0	600	1069	42.09	...
Innerleithen (Glen)	Mr. A. Black, per M.O.S.	750	1068	42.04	193
D Castlecraig [Dolphinton]	James Mann Esq., per S.M.S.	820	904	35.59	217
D West Linton (Woodlee Cottage)	Messrs. Leslie & Reid, C.E.	5	1	0	801	731	28.79	215
D „ „ (Dalziel House) ...	Dr. J. R. Jeffrey	5	1	0	770	848	33.37	223
3.—ESK. 23 sq. mi.								
D Eddlestone (Portmore Reservoir)	Messrs. Leslie & Reid, C.E.	11	1	0	1000	881	34.67	201
„ „ („ „ „) M	„ „ „	11	1	0	1007	874	34.40	...
N. Esk Reservoir [Penicuik] ...	Mr. W. Tod	11	0	6	1150	944	37.15	...
4.—CLYDE—Right Bank Tributaries.	es. 6 sq. mi.							
BERWICK. (Area, 457 sq. mi.)								
1.—TWEED—Gala. 6 sq. mi.								
2.—TWEED—Leader. 92 sq. mi.								
D Earlston (Cowdenknowes)	Mr. J. Robertson	5	0	10	360	691	27.21	160
3.—TWEED, LOWER—Left Bank	Tributaries. 115 sq. mi.							
Coldstream (Lochton)	J. Aitchison, Esq.	5	1	0	151	588	23.15	...
D „ „ (The Hirsell)	Mr. P. MacAndrew	5	1	0	94	624	24.56	168
D Swinton House	Snowdon A. E. Swinton, Esq.	5	1	0	200	542	21.33	182
D „ „	„ „ „	5	0	10	200	552	21.72	188

DIVISION XIII.—SOUTH EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ≥ 0.1 in. or more
		Diam.	Height Above Ground		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
BERWICK—(con.)								
4.—TWEED—Whiteadder. 164 sq. mi.								
D Marchmont House	Mr. J. A. Wood.....	5	1	0	498	739	29.11	181
D Duns Castle	Mr. P. Smith	5	1	0	500	727	28.61	149
D „ (Manderston)	Mr. F. J. Marshall.....	5	1	6	356	690	27.16	151
West Foulden	J. Hewat Craw, Esq.....	5	1	0	240	613	24.15	...
5.—EAST COAST STREAMS. 80 sq. mi.								
St. Abb's (Northfield)	J. A. Morrison, Esq.....	5	0	8	130	520	20.48	...
„ „ Head.....	Board of Northern Lights	8	4	3	224	614	24.16	...
HADDINGTON. (Area, 267 sq. mi.)								
1.—TWEED—Leader. 1 sq. mi.								
2.—TWEED—Whiteadder. 35 sq. mi.								
3.—EAST COAST STREAMS. 69 sq. mi.								
Garvald (Donolly Reservoir) ...	A. G. Merriles, Esq., C.E.	5	1	6	600	720	28.34	...
„ (Thorster Reservoir).....	„ „ „ „	5	1	6	700	649	25.55	...
Prestonkirk (Beil)	W. S. Curr, Esq., per S. M. S.	5	1	6	180	596	23.47	...
Dunbar (Broxmouth Park)	Mr. W. Johnson.....	5	0	3	50	646	25.42	...
4.—TYNE & C. 114 sq. mi.								
Prestonkirk (Smeaton)	Sir A. Buchan-Hepburn Bt. per S. M. S.	7	7	10	100	623	24.51	...
5.—FIRTH OF FORTH. 48 sq. mi.								
Drummore [Musselburgh]	Miss Aitchison, per S. M. S.	5	1	0	75	601	23.65	...
Gosford House Gardens.....	Mr. W. Galloway	5	1	0	24	636	25.03	...
D Gullane (The Warren)	H. E. Meek, Esq.	8	1	0	115	600	23.62	203
North Berwick Reservoir ...	A. G. Merriles, Esq., C.E.	5	1	6	150	554	21.83	...
6.—INSULAR.								
MIDLOTHIAN. (Area, 369 sq. mi.)								
1.—TWEED—Gala. 68 sq. mi.								
2.—TYNE. 28 sq. mi.								
3.—FIRTH OF FORTH. 3 sq. mi.								
Oxenford Castle Gardens	Mr. A. C. Scott	5	1	2	450	524	20.63	...
D Musselburgh (Levenhall)	Miss C. Husband	5	1	0	15	572	22.51	204
4.—ESK. 129 sq. mi.								
Moorfoot Hills (Bowbate).....	Messrs. Leslie & Reid, C.E.	11	0	6	1260	1125	44.29	...
D „ „ (Gladhouse Res.)	„ „ „ „	5	0	8	915	958	37.70	237
„ „ „ „ „ „ „ „	„ „ „ „	8	1	0	915	934	36.78	...
D „ „ „ (Rosebery)	„ „ „ „	4	0	9	750	800	31.51	221
„ „ „ „ „ „ „ „	„ „ „ „	11	0	9	750	764	30.10	...
D „ „ „ „ (Edgelaw)	„ „ „ „	4	0	10	654	826	32.53	222
„ „ „ „ „ „ „ „	„ „ „ „	11	0	10	654	760	29.90	...
D Penicuik (Brunstane Cottage)...	„ „ „ „	5	1	0	800	841	33.12	221
„ „ „ „ (Bridge Street) ... (R)	J. M. Howden, Esq. ....	...	...	...	604	723	28.48	...
Pentland Hills (Harehill)	Messrs. Leslie & Reid, C.E.	11	1	7	1297	1046	41.17	...
D „ „ „ (Martyrs Cross)...	„ „ „ „	5	1	0	750	831	32.71	226
D „ „ „ (Loganlea)	„ „ „ „	5	1	0	811	931	36.65	221
„ „ „ „ „ „ „ „	„ „ „ „	8	1	4	813	819	32.25	...
D „ „ „ „ (Glencorse Filters)	„ „ „ „	5	1	0	639	863	33.98	216
„ „ „ „ „ „ „ „	„ „ „ „	11	1	0	639	899	35.40	...

DIVISION XIII.—SOUTH EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with '01 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
MIDLOTHIAN—(con.)								
4.—ESK—(con.)								
D Pentland Hills (Glen Cottage) ...	Messrs. Leslie & Reid, C.E.	5	1	2	739	880	34·64	216
" " " " M	" " " "	8	1	2	738	852	33·55	...
D Loanhead (Elmswood)	H. B. Dunlop, Esq.	5	1	0	520	649	25·56	173
D Pentland Hills (Swanston)	Messrs. Leslie & Reid, C.E.	5	0	6	550	715	28·16	194
" " " " M	" " " "	11	0	6	550	703	27·68	...
D " " (Fairmilehead) ...	" " " "	5	1	0	590	778	30·64	175
D Dalkeith Gardens	Mr. J. Whytock	5	1	0	144	591	23·26	155
D Liberton (Alnwick Hill)	Messrs. Leslie & Reid, C.E.	5	1	0	407	543	21·37	191
" " " " M	" " " "	8	1	0	407	538	21·20	...
" " " " M	Mr. J. Harris, per M.O.S.	...	...	...	...	591	23·27	...
5.—ALMOND & C. 140 sq. mi.								
D Pentland Hills (Crosswood)	Messrs. Leslie & Reid, C.E.	5	1	0	950	912	35·92	200
" " " " M	" " " "	8	1	0	950	902	35·50	...
D " " (Harperrig)	" " " "	5	1	0	900	1004	39·51	243
" " " " M	" " " "	8	1	0	900	989	38·92	...
D " " (Morton)	" " " "	5	1	0	749	853	33·60	231
West Calder (Addiewell)	John Fyfe, Esq.	5	0	6	600	903	35·54	...
D Balerno (Cockburn Hill)	R. Cross, Esq.	5	1	0	767	899	35·41	180
D Pentland Hills (Harlaw Res.) ...	Messrs. Leslie & Reid, C.E.	5	1	0	800	794	31·24	216
" " " " M	" " " "	11	0	9	800	783	30·82	...
" " (Bonally Res.)* ..	" " " "	11	0	6	1112	874	34·40	...
" " (Clubbiedean Res.) ..	" " " "	4	0	6	773	764	30·08	...
" " " " M	" " " "	11	0	9	773	766	30·14	...
D " " (Firhill Tank) ...	" " " "	5	0	6	412	704	27·72	198
D† Edinburgh (R. Obs., Blackford Hill)	Prof. R.A. Sampson, F.R.S.	8	1	0	442	578	22·77	179
D " (Napier Road)	A. Harrison, Esq. per S.M.S.	...	...	...	...	591	23·27	160
D† " (Univ. Engin. Lab.) ..	Prof. T. Hudson Beare ...	5	1	0	227	598	23·54	189
† " " " " M	" " " "	5	1	0	227	571	22·47	...
D " (City Observatory) ...	W. Peck, Esq.	8	1	0	349	501	19·74	172
† " (Charlotte Square) ...	Messrs. Leslie & Reid, C.E.	11	1	6	190	566	22·30	...
Leith	Meteorological Office	8	1	8	18	537	21·14	172
" (Navigation School)	J. Bolam, Esq., per S.M.S.	5	0	5	76	572	22·53	...
D Davidson's Mains (Broomfield) ...	Mr. C. Comfort	5	0	10	42	581	22·88	180
6.—CLYDE—Right Bank Tributaries. 1 sq. mi.								
LINLITHGOW. (Area, 120 sq. mi.)								
1.—ALMOND & C. 60 sq. mi.								
Uphall (near Bangour) No. 7 M	Messrs. Leslie & Reid, C.E.	8	1	4	790	810	31·88	...
" " " " No. 8 M	" " " "	8	1	5	577	816	32·14	...
" " " " No. 6 M	" " " "	8	1	4	680	753	29·65	...
" " " " No. 3 M	" " " "	8	1	2	711	764	30·06	...
" (Bangour Asylum)	Dr. J. Keay	5	1	0	586	687	27·03	207
" " " " "	John Fyfe, Esq.	5	0	10	380	773	30·44	...
D Dalmeny House	Mr. D. T. Johnston	4	0	8	55	624	24·57	191
2.—FORTH—Right Bank Tributaries. 59 sq. mi.								
D Bathgate (Boghead House)	Mr. A. Ferguson	5	2	0	500	940	37·00	190

* Formerly called Harbour Hill.

DIVISION XIII.—SOUTH EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.		Depth of Rain.		Days with 01 in. or more		
		Diam.	Height Above Ground, Sea Level	1914				
		in.	ft.	in.	feet.	mm.	inches.	
LINLITHGOW—(con.)								
2.—FORTH—Right Bank Tributaries—(con.)								
D Bathgate (Filters)	No. 1 A. L. Reid, Esq.	5	0	9	640	859	33·83	195
„ (Petershill Res.) No. 2	„ „ „	5	0	9	710	758	29·86	...
„ (Ballencrieff Res.) No. 3	„ „ „	5	0	9	730	758	29·84	...
Torphichen (Lochcote)	John Louden, Esq.	5	0	4	550	918	36·13	...
Carribber Reservoir	M „ „ „	5	0	4	400	890	35·02	...
D Linlithgow (Grange)	H. M. Cadell, Esq.	5	0	6	430	761	29·97	192
„ (Preston House).....	Mr. C. Blair	5	0	8	380	850	33·48	176
D „ Academy	J. Beveridge, Esq.....	5	1	0	170	977	38·48	225
„ „ „.....M	„ „ „	5	1	0	170	1003	39·48	...
Queensferry (Hopetoun)	John Fyfe, Esq.....	8	7	10	304	610	24·02	...
Bo'ness (Neidpath Cottage)	Mr. J. Grant	5	3	0	200	700	27·55	...
3.—CLYDE—Right Bank Tributaries. 1 sq. mi.								

MAP OF DIVISION XIV.

SOUTH WESTERN COUNTIES,

Showing the River-Divisions.



DIVISION XIV.—SOUTH WESTERN COUNTIES.

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with .01 in. or more
		Diam.	Height Above Ground		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
LANARK. (Area, 881 sq. mi.)								
1.—TWEED, UPPER—Left Bank Tributaries. 20 sq. mi.								
D Biggar	J. Eunson, Esq.	8	1	0	691	866	34·09	209
D „ (Cambus Wallace).....	T. W. M. Watson, Esq....	6	0	6	748	976	38·44	168
2.—ALMOND. 14 sq. mi.								
3.—FORTH—Right Bank Tributaries. 9 sq. mi.								
Airdrie (Forrestburn Reservoir)	J. Frew, Esq., per S.M.S.	8	0	6	720	864	34·00	...
4.—CLYDE—Right Bank Tributaries. 378 sq. mi.								
Coulter Reservoir.....No. 2	W. Ross, Esq., C.E.	11	1	0	...	1432	56·37	...
„ „								

DIVISION XIV.—SOUTH WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with '01 in. or more
		Diam.	Height Above		Sea Level	1914		
		in.	ft.	in.		feet.	mm.	inches.
LANARK—(con.)								
6.—IRVINE. 2 sq. mi.								
7.—AYR. 1 sq. mi.								
8.—NITH. 2 sq. mi.								
9.—ANNAN. 7 sq. mi.								
AYR. (Area, 1135 sq. mi.)								
1.—CLYDE—Left Bank Tributaries. 20 sq. mi.								
d Glengarnock (Chemical Works) ..	G. Harrower, Esq.	8	1	6	100	1284	50·54	167
2.—FIRTH OF CLYDE. 60 sq. mi.								
Largs (Curling Hall)	J. Clark-Neill, Esq. ....	...	...	...	...	1034	40·69	...
Shaws Water Works (Kelly Dam) ..	D. Macalister, Esq., C.E.	6	1	0	640	1407	55·40	...
„ „ (Knockencorsan) ..	„ „ „	6	1	0	1040	1641	64·60	...
3.—IRVINE & C. 283 sq. mi.								
d Kilmarnock (Agricultural College) ..	Prof. R. A. Berry	8	1	2	80	966	38·03	204
„ (North Craig Res.) ..	R. Blackwood, Esq.	12	1	0	319	1052	41·40	...
d Kilwinning (Eglinton Castle) ..	Mr. W. Priest	5	1	0	50	974	38·34	166
d Stevenston (Greenhead Filters) ..	Gilbert Christie, Esq., C.E.	5	1	0	186	930	36·60	206
d Dalry (Blair Gardens)	Mr. W. Mair	5	1	3	155	1213	47·76	183
d „ (Munnoch Reservoir)	Gilbert Christie, Esq., C.E.	5	1	0	325	1178	46·39	188
d „ (Caaf Reservoir)	„ „ „	5	1	3	515	1246	49·04	187
„ (Camphill Reservoir)	James Lee, Esq., C.E.	12	1	6	611	1459	57·45	...
Beith (Filter Station)	W.C. Dale, Esq., per S.M.S.	5	6	0	384	1012	39·86	...
4.—AYR. 222 sq. mi.								
Ayr (Glendrishhaig)	Miss Jean Murdoch	10	3	0	42	832	32·74	...
d „ Cemetery	J. Young, Esq., C.E.	5	1	0	40	842	33·14	172
5.—DOON. 119 sq. mi.								
Loch Finlas	J. Young, Esq., C.E.	5	1	0	849	1509	59·42	...
d Dalmellington (Benwhat)	A. Gillespie, Esq.	5	...	...	1177	1232	48·49	199
Maybole (Knockdon Farm)	Mr. W. Muir	5	1	6	352	912	35·92	...
Ayr (Doonside)	Mr W McConnochie per SMS ..	5	1	0	90	1008	39·68	...
d „ (Doonholm)	J. Kennedy, Esq.	5	1	0	90	1047	41·22	180
6.—CULZEAN BAY & C. 32 sq. mi.								
Turnberry (Lighthouse)	Board of Northern Lights .....	...	...	...	...	836	32·93	165
„ (Hotel)	Mr. J. Richards	5	1	0	97	690	27·17	174
d Maybole (Culzean Gardens)	Mr. R. G. Hepburn	7	1	0	150	805	31·71	178
7.—GIRVAN. 105 sq. mi.								
Girvan (Glendoune Gardens) ..	Mr. J. Simons	5	1	0	100	1117	43·98	173
d „ (Sunnyside, Golf Course) ..	D. Macdonald, Esq.	5	1	0	27	989	38·95	195
Loch Bradan	Messrs. J. & H. V. Eaglesham, C.E.	11	1	0	991	1368	53·85	...
8.—STINCHAR & C. 155 sq. mi.								
Barrhill (Dochroyle)	Mr. J. Scott	6	1	0	548	968	38·10	...
Colmonell (Knockdolian)	Mr. A. Ogg, per M.O.S.	5	1	0	170	1160	45·67	204
d Girvan (Pinmore) ..	Miss Hamilton	5	0	5	207	1304	51·36	225
Barr Manse	Rev. G. Dods	5	1	0	330	1358	53·46	204
9.—LOCH RYAN. 12 sq. mi.								
0.—LUCE BAY. 15 sq. mi.								
Ballantrae (Lagafater Lodge) ...	C. R. Boulton, Esq.	5	0	11	792	1696	66·76	207
11.—CREE. 40 sq. mi.								
2.—DEE. 9 sq. mi.								

DIVISION XIV.—SOUTH WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more
		Diam.	Height Above Ground		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
AYR—(con.)								
13.—NITH. 62 sq. mi.								
d New Cumnock (Ayr Sanatorium)	Dr. E. E. Prest	5	1	0	850	1532	60·30	210
„ „ (Power Station)...	James Jack, Esq.	5	1	0	764	1736	68·36	...
14.—INSULAR. 1 sq. mi.								
RENFREW. (Area, 241 sq. mi.)								
1.—CLYDE—Right Bank Tributaries. 3 sq. mi.								
2.—CLYDE—Left Bank Tributaries. 194 sq. mi.								
Lochwinnoch (Garthland).....	H. Macdowall, Esq.	5	0	11	150	1650	64·94	220
Gorbals Dist. W.W. (Ryat Lynn)	J.R. Sutherland, Esq., C.E.	8	0	5	310	1181	46·50	...
„ „ „ (Waulk Glen)	„ „ „	12	0	5	280	1146	45·10	...
„ „ „ (Middleton)	„ „ „	12	0	5	550	1278	50·30	...
„ „ „ (Nether Cairn)	„ „ „	12	0	5	700	1359	53·50	...
Paisley W.W. (Stanely)	James Lee, Esq., C.E.	12	1	0	190	1047	41·21	...
„ „ (Back Thornley Muir)	„ „ „	12	1	0	646	1256	49·45	...
„ „ (Muirhead).....	„ „ „	12	1	0	482	1367	53·83	...
„ „ (Springside)	„ „ „	12	1	0	532	1567	61·71	...
d Pollokshaws (Pollok House).....	Sir J. Stirling-Maxwell, Bt.	5	1	0	45	893	35·14	194
d Glasgow (Queen's Park)	J. Whitton, Esq.	8	0	9	144	864	34·01	200
„ (Maxwell Park)	„ „ „	5	0	6	69	901	35·48	...
d Kilbarchan (Glentyan).....(R)	R. H. Hunter, Esq.	8	3	9	285	1395	54·90	228
d† Paisley (The Coats Observatory)	J. Woodrow, Esq.	8	1	0	107	1090	42·90	218
Kilmacolm Water Works.....	D. S. Carson, Esq.	5	1	0	500	1743	68·62	...
Shaws W.W. (Duchall Moor) ...	D. Macalister, Esq., C.E.	6	1	0	1150	1834	72·20	...
„ „ (Creuch Hill)	„ „ „	6	1	0	1350	1511	59·50	...
„ „ (Green Water) ...	„ „ „	6	1	0	788	1648	64·90	...
Kilmacolm (St. Oswald's) ... (R)	D. S. Carson, Esq.	5	1	0	350	1470	57·88	...
d Shaws W.W. (Gryfe Reservoir)..	D. Macalister, Esq., C.E.	6	1	0	640	1569	61·77	222
d „ „ (Mansfield)	„ „ „	5	1	0	573	1561	61·46	222
„ „ (Darndaff Moor)....	„ „ „	6	1	0	850	1687	66·40	...
Bishopton (Ingliston)	D. Cross, Esq.	5	1	0	195	1123	44·23	...
3.—FIRTH OF CLYDE. 34 sq. mi.								
Shaws W.W. (Largs Road)	D. Macalister, Esq., C.E.	5	1	0	910	1232	48·49	...
Dougliehill Filters (Pt. Glasgow WW)	James Murray, Esq.	8	1	6	540	1544	60·79	...
Parkhill „ „ „	„ „ „	8	1	6	275	1308	51·50	...
d Shaws W.W. (Compensation Res.)	D. Macalister, Esq., C.E.	5	1	0	600	1677	66·01	245
d „ „ (Loch Thom)	„ „ „	5	1	0	643	1663	65·47	245
„ „ (Shielhill)	„ „ „	6	1	0	962	1709	67·30	...
„ „ (Spango Burn) ...	„ „ „	6	0	9	757	1598	62·90	...
d „ „ (Hole Glen).....	„ „ „	5	1	0	603	1561	61·47	251
d „ „ (New Yetts Dam)..	„ „ „	5	1	0	800	1628	64·08	251
d Port Glasgow (Broadfield)	J. P. Harrington, Esq.	8	1	0	250	1527	60·12	226
d „ „ (Elmworth)	A. F. Gray, Esq.	5	1	3	107	1535	60·43	214
d Greenock (Prospect Hill)	D. Macalister, Esq., C.E.	5	1	0	233	1593	62·72	217
Langbank (East Bank Gardens).	A. Cross, Esq.	5	2	6	150	1183	46·57	...
4.—IRVINE. 10 sq. mi.								

MAP OF PART OF DIVISION XV.

WEST MIDLAND COUNTIES,

Showing the River-Divisions.



STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with "01 in. or more	
		Diam.	Height Above Ground (SeaLevel)		1914			
		in.	ft.	in.	feet.	mm.	inches.	
DUMBARTON. (Area, 270 sq. mi.)								
1.—FORTH—Right Bank Tributaries. 10 sq. mi.								
2.—FIRTH OF CLYDE & COWAL. 52 sq. mi.								
D Cardross (Kilmahew).....	Claud A. Allan, Esq.....	5	1	0	130	1149	45·24	214
" (Darleith)	Mr. J. Wilson.....	8	1	0	400	1288	50·70	209
D Helensburgh (Fernigair)	J. N. Stirling, Esq., C.E.	8	1	0	22	1417	55·77	218
D " (Valve House).....	" " "	8	1	0	293	1407	55·39	230
D Roseneath (Achnashie)	R. S. Campbell, Esq.....	6	1	0	25	1499	59·00	186
Garelochhead (Aikenshaw)	Mr. W. S. Turnbull	6	1	0	32	1364	53·70	...
3.—CLYDE—Leven. 149 sq. mi.								
D Dumbarton (Leven Shipyard) ...	Messrs. W. Denny & Bros.	5	1	0	9	1077	42·41	186
Kilpatrick Hills (Burncrooks Res.) No.1	T. L. Rae, Esq., C.E.....	5	1	0	835	1214	47·79	...
" " { " " } No.2	" " "	5	1	0	959	1588	62·50	...
" " { " " } No.6	" " "	5	1	0	905	1394	54·88	...
D Renton (Carman Filters)	Mr. Chas. Brown	8	4	0	292	1210	47·64	210
Alexandria (The Rectory)	Rev. J. Eldon Ellison	5	1	0	58	1202	47·34	...
D Glen Finlas Reservoir	Mr. D. Murray	12	2	6	820	1990	78·35	194
4.—CLYDE—Right Bank Tributaries. 59 sq. mi.								
D Drumchapel (Wasdale)	F. C. Thomson, Esq.	5	1	0	68	849	33·41	216
D Duntocher (Cochno Filters)	T. L. Rae, Esq., C.E.....	5	1	0	400	1016	40·01	203
Milngavie (Dougalston).....	Capt. R. M. Ker, per S.M.S.	5	1	4	150	1030	40·57	...
Kilpatrick Hills (Greenside Res.)	T. L. Rae, Esq., C.E.....	5	1	0	876	1325	52·17	...
" " (Loch Cochno)...	" " "	5	1	0	909	1377	54·23	...
" " (Jaw Reservoir)	" " "	5	1	0	912	1435	56·49	...
STIRLING. (Area, 463 sq. mi.)								
1.—FORTH—Right Bank Tributaries. 263 sq. mi.								
Muiravonside Ho. [Linlithgow].	Mr. C. Leeder.....	5	4	8	175	878	34·58	...
D Polmont (Vellore).....(R)	W. Brown, Esq.....	8	4	6	320	799	31·47	215
D Falkirk (Inglewood, Laurieston)	W. Ballantine, Esq.	5	1	3	133	959	37·77	175
D " (Westbank)	A. Nimmo, Esq.....	5	0	9	75	935	36·80	197
D " (Burgh Buildings)	W. Gibson, Esq.....	5	1	0	107	927	36·51	189
" (Ardenlea)	J. Aitken, Esq., F.R.S....	5	1	0	105	934	36·78	190
" (Kerse)..... No. 1	C. Brown, Esq.	8	1	0	18	897	35·30	...
Little Denny Reservoir	C. Massie, Esq.	8	1	0	326	1032	40·62	...
" " Filters.....	" " "	8	1	0	268	1076	42·38	...
Kilsyth (Faughlin Res.)	" " "	8	1	0	707	1522	59·91	...
Earlsburn Reservoir	" " "	8	1	0	1202	1512	59·51	...
D Stirling (Touch Reservoir) No. 1	A. H. Goudie, Esq.	8	1	0	455	1380	54·34	219
D " (" ") No. 2	" " "	8	1	4	707	1357	53·43	219
" (Polmaise Castle).....	C. Stirling, Esq.....	6	1	3	220	1130	44·48	172
" (Touch House).....	" " "	5	1	0	35	1290	50·79	...
" (Victoria Place)	R. Kidston, Esq., F.R.S.	5	2	10	100	1060	41·75	...
D† Buchlyvie (The Manse).....	Rev. J. A. Macdonald....	5	1	3	118	1118	44·03	236
Gargunnoch House	Mr. D. McNeill	5	1	6	85	1056	41·59	...
Kippen (Arngomery)	Mr. P. McCowan	5	4	2	150	1217	47·93	...
Ben Lomond	J. R. Sutherland, Esq., C.E.	8	0	6	1800	2433	95·80	...
2.—FORTH—Teith. 5 sq. mi.								

DIVISION XV.—WEST MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0.1 in. or more
		Diam.	Height Above Ground		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
STIRLING—(con.)								
3.—FORTH—Left Bank Tributaries. 15 sq. mi.								
† Bridge of Allan (The Lea)	Laurence Pullar, Esq.....	5	1	0	80	1033	40.68	212
4.—CLYDE—Leven. 128 sq. mi.								
Strathblane (The Manse)	Rev. W. B. Moyes.....	5	0	6	235	1377	54.23	215
Kilpatrick Hills (Burncrooks Res.) No. 7	T. L. Rae, Esq., C.E.....	5	1	0	955	1327	52.25	...
Kilsyth (Achnagowan).....	Miss Guthrie-Smith	5	0	10	332	1462	57.54	203
Loch Arklet (Corriehichon)	J. R. Sutherland, Esq., C.E.	8	0	6	870	2325	91.55	...
„ „ (Corriearklet)	„ „ „	8	0	6	950	2347	92.40	...
5.—CLYDE—Right Bank Tributaries. 52 sq. mi.								
Torrance (Glenorchard)	Miss Bartholomew	5	1	6	200	973	38.29	200
Strathblane (Mugdock Reservoir)	J. R. Sutherland, Esq., C.E.	8	0	6	320	1222	48.10	...
„ (Craigend Castle) ...	Mr. A. Davidson	5	0	9	665	1022	40.23	...
„ (Craigbarnet).....	Capt. Miller Stirling, R.N.	5	0	6	300	1323	52.10	...
Kilsyth (Innsbridge)	J. I. Little, Esq.	5	11	0	202	1131	44.53	207
„ (Corrie Reservoir) .....	„ „ „	...	...	...	...	1313	51.70	...
BUTE. (Area, 218 sq. mi.)								
1.—ISLE OF BUTE. 50 sq. mi.								
Rothsay (Crichton Road)	H. Lauder, Esq., jun.....	5	4	0	97	1414	55.66	237
„ (Ardencraig)	J. Davidson, Esq.	5	1	0	85	1315	51.78	211
Port Bannatyne (Ettrickdale) ...	Col. M. R. Gray Buchanan	5	1	0	190	1354	53.31	239
2.—CUMBRAES. 4 sq. mi.								
3.—ARRAN. 164 sq. mi.								
Pladda.....	Board of Northern Lights	...	...	...	130	1037	40.82	180
Holy Island (Pillar Rock)	„ „ „	3	0	3	46	932	36.71	...
ARGYLL. (Area, 3181 sq. mi.)								
1.—TAY—Tummel. 36 sq. mi.								
2.—SOUND OF ARISAIG, SOUND OF MULL & C. 317 sq. mi.								
Morvern (Ardtornish)	Mr. R. Brooks	5	1	0	48	2097	82.57	234
„ (Drimnin)	Mrs. Gordon	5	1	0	225	1682	66.24	236
Loch Sunart (Glenborrodale) ...	C. D. Rudd, Esq.	5	0	2	60	1771	69.71	233
Ardnamurchan	Board of Northern Lights	8	4	3	180	1061	41.76	187
3.—LOCH LINNHE—Right Bank Tributaries. 139 sq. mi.								
Morvern (Kingairloch)	G. Herbert Strutt, Esq....	5	1	0	40	2630	103.54	216
Ardgour House	Capt. A. J. N. Maclean...	5	0	10	60	2717	106.97	251
4.—LOCH LINNHE—Left Bank Tributaries. 165 sq. mi.								
Duror (The Rectory).....	Rev. E. J. Benwell	5	1	0	120	2041	80.35	217
Ballachulish House	Mr. W. D. Stewart	5	1	0	56	2094	82.43	211
„ (Glencoe Gardens) ...	J. D. Sutherland, Esq....	8	1	0	20	2618	103.06	224
Glenleven (Blackwater Ho.) No. 4	British Aluminium Co....	8	1	0	1069	2209	86.98	...
„ „ („ Dam, S.) 2	„ „ „	8	1	0	1072	2440	96.05	252
„ (Invercann).....No. 6	„ „ „	8	1	0	1070	2241	88.23	...
„ (Kinlochleven).....No. 1	„ „ „	8	1	0	140	2375	93.49	245
Loch Eil (Corran)	Board of Northern Lights	3	1	6	38	2282	89.86	230
5.—LOCH ETIVE. 197 sq. mi.								
Taynuilt (Barguilean)	T. Macdonald Esq. per SMS	...	...	...	230	1947	76.66	199
Connel Ferry (Ach-na-cloich) ...	T. A. Nelson, Esq. per S.M.S.	...	...	...	...	1654	65.10	216

DIVISION XV.—WEST MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 01 in. or more
		Diam.	Height Above Ground		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
ARGYLL—(con.)								
5.—LOCH ETIVE—(con.)								
D Glen Etive	Ian T. Nelson Esq. <i>per</i> S.M.S.	...	...		50	2855	112·40	213
6.—LOCH ETIVE—Loch Awe. 319 sq. mi.								
D Loch Awe (Ford)	J. Boyd, Esq.	8	1	0	148	1895	74·62	244
D „ „ (Dalavich*)	„ „ „	8	1	0	283	2187	86·12	230
7.—FIRTH OF LORNE. 112 sq. mi.								
D Kilmelfort (Arduaine)	J. A. Campbell, Esq.	5	0	10	23	1548	60·94	215
D† Oban	Dr. E. Bailly	8	1	0	17	1341	52·80	221
8.—SOUND OF JURA. 163 sq. mi.								
D Lochgilphead (Poltalloch)	Mr. D. S. Melville	5	1	2	135	1574	61·95	228
D Ardfert (Innisaege)	Mr. James Strang	5	3	7	100	1284	50·54	218
9.—KINTYRE, WEST. 146 sq. mi.								
Mull of Kintyre	Board of Northern Lights	...	...		279	1067	42·01	188
D Muasdale (Killeen Manse)	Rev. D. J. Macdonald	5	1	0	30	1276	50·25	212
D Largie Castle	J. R. M. Macdonald, Esq.	5	1	0	160	1408	55·42	243
D Carse	J. Birkmyre, Esq., jun.	6	1	6	20	1003	39·48	229
10.—KINTYRE, EAST. 177 sq. mi.								
D† Campbelltown (South Park)	J. A. Gardiner, Esq.	8	0	10	20	1385	54·51	222
D† „ (Witchburn)	Mr. John Giffen	5	1	6	75	1277	50·26	230
„ (Devaar)	Board of Northern Lights	...	3	4	120	1208	47·57	186
D Skipness Castle ...	R. F. Graham, Esq.	5	1	6	14	1160	45·67	207
11.—LOCH FYNE. 264 sq. mi.								
Kilbride (Craig Cottage)	Philip Barne, Esq.	5	1	0	9	1270	50·01	...
D Otter Ferry (School House)	Mrs. Stewart	5	1	0	37	1244	48·98	218
D Ardrishaig (Canal Office)	L. J. Groves, Esq., C.E.	5	1	0	48	1693	66·67	218
D Loch Fyne (Furnace)	W. Nicol, Esq.	5	3	0	15	1854	72·98	228
„ „ („ Brenchoillie)	A. E. Lewis, Esq.	5	1	0	240	1964	77·33	179
D† Inveraray (Newtown)	Mrs. Little	5	1	0	17	1835	72·24	239
D† „ Castle Gardens	A. E. Lewis, Esq.	5	1	0	40	2141	84·30	210
D Ardkinglas	Sir Andrew Noble, Bt.	8	1	6	37	2075	81·69	236
Glen Shira (Drimlie)	Mr. Dugald McIntyre ...	5	1	6	400	2275	89·57	...
12.—FIRTH OF CLYDE & COWAL. 242 sq. mi.								
Innellan	Miss Mair, <i>per</i> S.M.S. ...	...	...		15	1322	52·04	...
D Tighnabruaich (Wellpark) ...	R. Paton, Esq.	12	5	0	50	1441	56·72	186
D Dunoon (Castle Gardens)	W. Rodger, Esq., C.E.	12	35	0	56	1912	75·26	207
D „ (Reservoir)	„ „ „	12	3	6	245	2097	82·56	224
D „ (Redhurst)	Dr. J. Banks	5	1	6	60	1916	75·44	221
D Holy Loch (Ardnadam)	Rev. J. Cairns Mitchell ...	5	1	0	66	1963	77·28	216
D Loch Eck (Benmore)	Mr. R. Greenlaw	5	1	3	40	2261	89·01	198
D† Lochgoilhead (Nuthill)	G. Murray Knox, Esq.	5	1	0	15	1940	76·39	229
13.—CLYDE—Leven. 4 sq. mi.								
14.—INSULAR. 900 sq. mi.								
D Islay (Ardbeg)	Colin E. Hay, Esq.	5	7	0	46	1177	46·33	237
„ (Rhinn)	Board of Northern Lights	7	3	6	150	963	37·92	186
„ (Lochindaal)	„ „ „	3	0	6	52	1263	49·73	160
„ (McArthur's Head)	„ „ „	3	0	4	128	1616	63·64	...
D „ (Eallabus)	J. Forbes, Esq.	5	1	0	68	1340	52·75	234
„ (Rhuvaal) ...	Board of Northern Lights	3	1	3	147	1121	44·13	190
D Jura (Ardfin)	Colin Campbell, Esq.	5	1	0	160	1460	57·50	233

* Formerly called Cruachan.

DIVISION XV.—WEST MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with '01 in. or more
		Diam.	Height Above Ground.			1914		
		in.	ft.	in.	feet.	mm.	inches.	
ARGYLL—(con.)								
14.—INSULAR—(con.)								
Jura (Fladda)	Board of Northern Lights	3	1	0	42	1471	57·91	188
Lismore (Mousedale).....	„ „ „	7	3	10	105	1282	50·48	200
D Eriska (Ledaig)	Mr. J. B. Trotter, <i>per</i> S.M.S.	5	1	6	30	1594	62·75	219
+ Mull (Iona Manse).....	Rev. A. Macmillan.....	5	1	2	45	1251	49·26	...
D† „ (Bunessan)	Duncan Cameron, Esq....	5	1	4	50	1307	51·44	229
„ (Lochbuie Castle)	Mr. E. Lovesey, <i>per</i> S.M.S.	8	1	4	20	2279	89·73	...
D „ (Ulva)	F. W. Clark, Esq.....	5	1	0	30	1729	68·08	248
D† „ (Knock)	Duncan Cameron, Esq....	5	1	4	50	2213	87·12	190
D „ (Glencannel)	„ „ „ „ „	5	1	3	140	2953	116·25	218
D† „ (Gruline)	J. W. Melles, Esq.	8	1	0	101	2130	83·85	257
D „ (Quinish)	J. N. Forsyth, Esq.	5	1	3	35	1427	56·18	238
„ Sound of	Board of Northern Lights	3	1	4	55	1528	60·15	...
D† Tiree (Cornaigmore)	J. Ross, Esq.	5	1	0	25	1163	45·79	245
Sanda	Board of Northern Lights	...	...	...	165	797	31·37	188

MAP OF DIVISION XVI.

EAST MIDLAND COUNTIES,

Showing the River-Divisions.



DIVISION XVI.—EAST MIDLAND COUNTIES.

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
CLACKMANNAN. (Area, 55 sq. mi.)								
1.—FORTH, LOWER—Left Bank Tributaries. 55 sq. mi.								
D Alloa House Gardens	Earl of Mar & Kellie, K.T.	5	2	6	40	955	37·59	188
„ W.W. (Gartmorn Res.) ...	Andrew Mackie, Esq., C.E.	11	1	0	172	822	32·35	...
D Dollar (Wellhall, Dollarbeg) ..	James Bleloch, Esq.	5	0	9	265	1036	40·78	22
D „ Academy	Mr. T. Aitken	9	1	0	178	1025	40·36	167
KINROSS. (Area, 87 sq. mi.)								
1.—FORTH, LOWER—Left Bank Tributaries. 15 sq. mi.								
Blairingone Manse [Dollar]	Rev. J. F. Cameron	5	1	6	300	1022	40·22	199
2.—LEVEN & C. 67 sq. mi.								
Blairadam Wood [Kelty]	D. Mackenzie, Esq., C.E.	8	0	5	761	1192	46·91	169
D Loch Leven Sluice	Mr. W. Hay	8	0	9	360	919	36·18	179
D Milnathort (Ledlanet)	Mr. H. Young, <i>per</i> S.M.S.	...	...	...	700	1275	50·21	169
3.—EDEN. 2 sq. mi.								
4.—TAY—Earn. 3 sq. mi.								
FIFE. (Area, 505 sq. mi.)								
1.—FORTH, LOWER—Left Bank Tributaries. 66 sq. mi.								
D Rosyth (H.M. Dockyard)	H. Cartwright Reid, Esq. C.E.	8	1	0	53	616	24·25	191
Dunfermline (Broomhall Gardens) ..	Mr. J. Mitchell	5	1	0	15	688	27·07	...
D „ (Keavil)	J. J. Dalgleish, Esq.	5	0	2	150	642	25·27	162
D „ (Victoria Place) ...	J. Blyth, Esq.	5	1	2	365	895	35·22	202
D Culross (Westgrange)	J. J. Dalgleish, Esq.	5	0	2	116	822	32·38	197
Carnock (Luscar House) ...No. 1	Col. A. Mitchell	5	0	10	430	629	24·77?	...
„ „ „ „ „No. 2	„ „ „ „ „	5	0	10	430	638	25·10?	...
„ (Craigluscar)	P. C. Smith, Esq.	12	0	4	280	869	34·20	...
2.—LEVEN & C. 208 sq. mi.								
D Dunfermline (Fordell House) ...	Earl of Buckinghamshire	5	1	0	250	770	30·30	156
Kirkcaldy (St. Peter's Rectory) ..	Rev. John S. Begg	5	1	0	85	621	24·45	184
D Cowdenbeath (Northbank)	J. S. Rae, Esq.	5	1	0	473	1050	41·35	218
D Cleish Hills (Deanhead Farm) .	„ „ „ „	5	1	0	725	858	33·76	173
„ „ (Craigaverral) ... M	„ „ „ „	5	1	0	760	986	38·81	...
„ „ (Roscobie Reservoir) „	„ „ „ „	5	1	0	660	969	38·15	...
„ „ (Loch Glow Res.) ...	D. Mackenzie, Esq., C.E.	8	0	7	897	1163	45·80	169
Leslie (Lothrie Reservoir)	Mr. R. Ritchie, <i>per</i> S.M.S.	5	0	5	702	865	34·06	...
D Elie House (The Gardens)	Mr. A. A. Law	5	0	10	55	566	22·29	158
D „ (The Castle)	Miss E. E. Scott Moncrieff	5	0	9	...	554	21·83	175
Largo (Carlton)	Mr. E. Tate	5	2	6	150	736	28·96	189
D Colinsburgh Manse	Rev. Robert Dick	5	2	0	130	650	25·59	174
D „ (Balcarres)	Mr. J. M. Paul	5	1	0	300	664	26·15	163
„ (Lathallan)	Dr. W. H. Bryce, <i>per</i> M.O.S.	...	...	...	505	711	28·00	160
Carnbee (Ovenstone W.W.)	A. P. Watson, Esq.	5	1	0	168	572	22·50	...
3.—EDEN & C. 205 sq. mi.								
Cupar (Clatto Reservoir)	Dr. Douglas, <i>per</i> S.M.S.	...	...	...	500	793	31·21	...
Ceres (Woodburn)	Ralph Richardson, Esq. ...	3	...	...	300	757	29·79	...
Cupar (Rankeillour)	Mr. J. McLaren, <i>per</i> S.M.S.	...	...	...	240	719	28·29	...
D „ „ „ „ „	Capt. J. Kerr	5	1	0	240	740	29·14	168
D „ (Fife & Kinross Asylum) ..	Mr. J. Ness	5	1	0	210	793	31·22	207

DIVISION XVI.—EAST MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0.1 in. or more
		Diam.	Height Above Ground. Sea Level			1914		
		in.	ft.	in.	feet.	mm.	inches.	
FIFE—(con.)								
3.—EDEN & C—(con.)								
D St. Andrews (Water Works).....	W. Watson, Esq.	5	1	0	217	688	27.10	180
D „ „ (Brownhills)	G. Cheetham, Esq.....	5	0	10	188	692	27.23	169
D „ „ (Queen's Gardens) ..	Miss Macadam	5	1	0	55	667	26.25	163
„ „	W. Watson, Esq. per M.O.S. ...	...	...	...	20	671	26.43	...
4.—FIRTH OF TAY. 25 sq. mi.								
D Newport (Tayfield)	W. Berry, Esq.	5	0	7	100	684	26.93	153
D Tayport (Lighthouse).....	J. H. Thompson, Esq., C.E.	5	1	0	27	652	25.67	184
5.—TAY—Earn. 1 sq. mi.								
6.—INSULAR.								
Inchkeith	Board of Northern Lights	...	...	...	160	498	19.59	...
Isle of May	„ „ „	6	3	0	...	417	16.40	162
PERTH. (Area, 2535 sq. mi.)								
1.—FORTH—Right Bank Tributaries. 17 sq. mi.								
2.—FORTH, UPPER—Left Bank Tributaries. 64 sq. mi.								
D Doune (Gartincaber)	G. Burn Murdoch, Esq....	5	1	0	200	1039	40.90	211
D Port of Menteith (Manse).....	Rev. T. Burnett Peter ...	4	0	8	75	1226	48.25	214
†Aberfoyle (The Inn)	J.R. Sutherland, Esq., C.E.	8	0	6	60	1496	58.90	...
†Loch Dhu	„ „ „	8	0	6	325	2236	88.05	...
Ledard	„ „ „	8	0	6	1500	1694	66.70?	...
3.—FORTH—Teith. 276 sq. mi.								
Ochertyre [Stirling].....	Mr. H. Montgomerie	5	1	0	18	1075	42.31	...
Loch Drunkie.....	J.R. Sutherland, Esq., C.E.	8	0	6	420	1526	60.10	...
†Loch Venachar	„ „ „	8	0	6	275	1433	56.40	...
†Bridge of Turk	„ „ „	8	0	6	275	1615	63.60	...
Doune (Cauldhame)	J. Forbes, Esq.	5	1	0	830	1276	50.22	175
†Loch Katrine (Tunnel Hill Top)	J.R. Sutherland, Esq., C.E.	8	0	6	830	2238	88.10	...
Ben Ledi	No. 1 „ „ „	8	0	6	1800	1723	67.85?	...
„ „	No. 2 „ „ „	8	0	6	1400	1779	70.05	...
Callander (Leny House)	J. H. Buchanan, Esq.....	5	0	6	340	1526	60.10	...
†Glengyle.....	J.R. Sutherland, Esq., C.E.	8	0	6	380	2433	95.80	...
†Balquhiddy (Blaircreach)	J. Carnegie, Esq.	5	1	0	460	2613	102.89	...
D† „ (Stronvar)	„ „ „	5	1	0	422	1933	76.10	173
4.—FORTH, LOWER—Left Bank Tributaries. 107 sq. mi.								
Dunblane (Kippenross)	A. H. Anderson, Esq.....	8	1	3	237	1215	47.85	...
„ (Kippendavie)	„ „ „	8	2	9	300	1178	46.39	...
Glendevon (Glenquey Reservoir)	D. Mackenzie, Esq., C.E.	11	0	11	945	1524	60.00	...
D „ (Tormaukin)	Mr. W. Phillips	5	1	6	770	1573	61.94	188
„ (Glensherup)	P. C. Smith, Esq.	12	0	4	945	1744	68.64	...
Braco (Nether Cambushinnie) ...	J.W. Stirling, Esq. per SMS	5	0	10	380	1216	47.87	...
5.—LEVEN. 1 sq. mi.								
6.—EDEN. 4 sq. mi.								
7.—TAY—Earn. 376 sq. mi.								
Slateford Burn (Shire End)	Messrs. Leslie & Reid, C.E.	8	...	...	930	1164	45.82	...
„ „ (Whitehill)	„ „ „	8	...	...	810	1140	44.87	...
Upper Farg (Plains)	„ „ „	8	...	...	900	986	38.82	...
„ „ (Heatherieleys Quarry)	„ „ „	8	...	...	715	989	38.94	...
Auchterarder (Belhie)	Miss D. Cairns	5	0	10	100	829	32.65	161

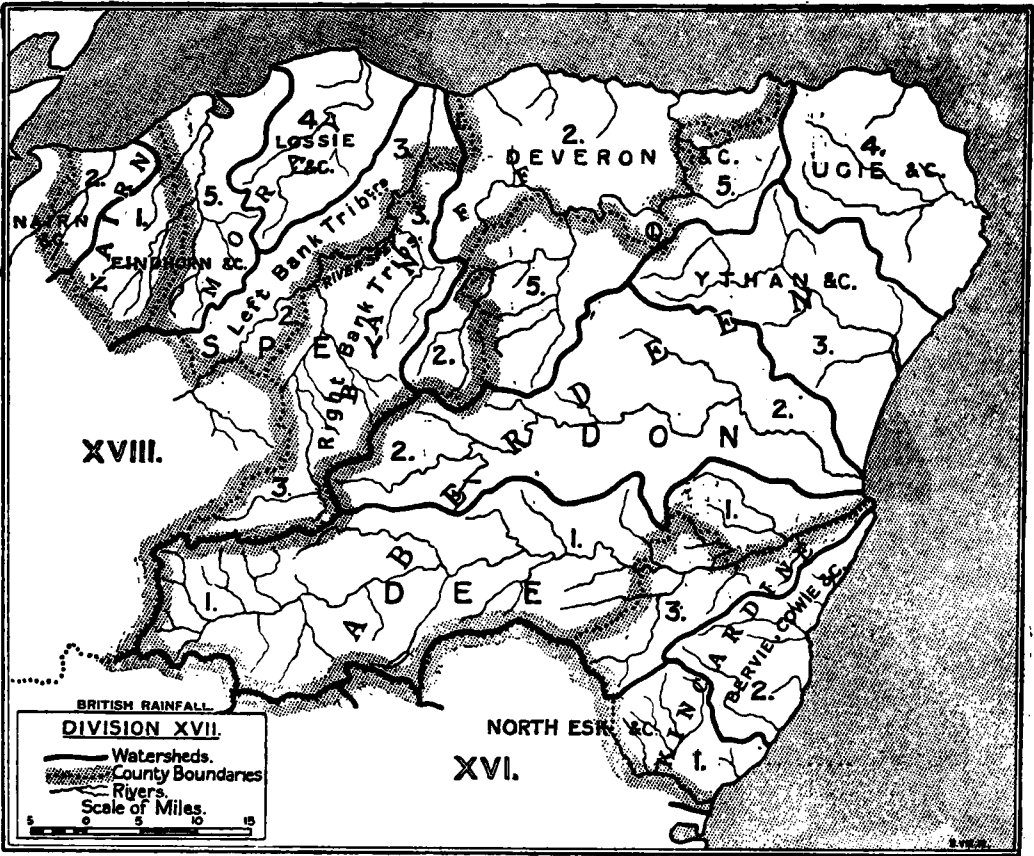
DIVISION XVI.—EAST MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with '01 in. or more
		Diam.	Height Above Ground.		1914		
				Sea Level			
PERTH—(con.)		in.	ft.	in.	feet.	mm.	inches.
7.—TAY—Earn—(con.)							
Dunning (Duncrub Park).....	Mr. R. Matthews	8	1	0	165	1149	45·24 199
Abernethy (Ayton House)	Mr. J. Leslie, <i>per</i> S.M.S.	5	0	11	120	827	32·57 ...
Bridge of Earn (Ballendrick) ...	Capt. Taylor, <i>per</i> S.M.S. ....	...	...	...	50	883	34·78 ...
D „ „ (Gateside)	John Ellis, Esq.	5	1	0	26	797	31·39 152
D† Lochearnhead (Edinchip)	Sir Malcolm MacGregor, Bt	5	1	0	542	1808	71·19 217
D Comrie (Clathick)	Mr. T. Elvidge, <i>per</i> S.M.S.	5	1	0	300	1196	47·07 ...
D Crieff (Strathearn Hydro.)	Mr. G. Reid	5	1	0	436	1097	43·18 203
D „ (Glenturret)	Mr. D. S. Murray	10	3	0	1145	1686	66·39 232
8.—TAY—Almond & c. 149 sq. mi.							
D Perth (Craigie Road)	Sydney Wilson, Esq.	5	1	0	56	774	30·47 190
9.—TAY—Strathtay below Dunkeld. 33 sq. mi.							
Murthly (Douglasfield)	W. A. Rae, Esq.	5	0	6	237	947	37·29 ...
D† Dunkeld (Snaigow)	W. H. Cox, Esq.	5	1	0	370	993	39·10 203
10.—TAY—Bran. 81 sq. mi.							
D Dunkeld (Inver)	Charles McIntosh, Esq.	5	1	0	183	1146	45·11 206
11.—TAY—Strathtay above Dunkeld. 95 sq. mi.							
Dalguise Gardens	late J. H. Tempest, Esq. <i>per</i> S.M.S. ....	...	...	...	200	1159	45·62 ...
D† Aberfeldy (Dall Avon)	Dr. N. D. Mackay	5	1	0	320	1040	40·96 197
D† „ (Dunros)	H. W. Johnston, Esq.	5	1	0	400	926	36·47 205
12.—TAY—Loch Tay. 186 sq. mi.							
D Kenmore (The Manse)	Rev. W. A. Gillies	5	1	0	550	1278	50·32 187
13.—TAY—Lyon. 142 sq. mi.							
D Glenlyon (Meggernie Castle) ...	Mr. W. Taylor	5	1	0	760	1756	69·12 204
14.—TAY—Tummel. 587 sq. mi.							
Pitlochry (Torrdarach)	W. Briggs, Esq. ....	...	...	...	480	966	38·04 ...
D „ (Bonskeid)	G. F. Barbour, Esq.	5	1	0	540	1013	39·88 207
D† Blair Atholl	Mr. D. McLachlan	5	1	0	420	1024	40·31 187
15.—TAY—Isla. 282 sq. mi.							
D† Coupar Angus	Mr. J. Robertson	5	1	3	183	799	31·47 185
D Blairgowrie (Kinloch Manse) ...	Ian Milne, Esq.	5	1	0	280	810	31·88 187
D† „ (Ballintuim House)	Miss M. A. Macdonald	5	1	4	700	1134	44·66 213
16.—TAY—Left Bank Tributaries. 51 sq. mi.							
D Perth (Laurelbank)	H. Coates, Esq.	5	1	0	85	805	31·70 182
Dunsinnan	J. Mackay Bernard, Esq. ....	...	...	...	400	802	31·57? ...
17.—FIRTH OF TAY. 45 sq. mi.							
18.—SPEY. Right Bank Tributaries. 1 sq. mi.							
19.—LOCH LINNHE. Left Bank Tributaries. 2 sq. mi.							
20.—CLYDE—Leven. 36 sq. mi.							
FORFAR. (Area, 875 sq. mi.)							
1.—TAY—Isla. 211 sq. mi.							
D Kettins School	W. Andrew, Esq.	5	1	0	218	903	35·55 184
Glamis Castle	Mr. T. Wilson	5	1	6	250	708	27·87 ...
D Forfar (Lilyfield)	D. M. Mackie, Esq.	5	0	5	225	824	32·46 181
„ (Orchardbank Sew. Farm)	A. Watterston, Esq.	4	0	9	214	768	30·24 ...
D Kirriemuir (Lintrathen)	G. Baxter, Esq., C.E.	8	1	0	700	903	35·54 176
„ („)	M „ „ „	8	1	0	700	858	33·80 ...
„ („ „ Balnakeilly) M „ „ „	M „ „ „	8	1	0	700	894	35·20 ...
„ („ „ Creich Hill, S.) M „ „ „	M „ „ „	8	1	0	1482	792	31·20 ...

DIVISION XVI.—EAST MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0.1 in. or more
		Diam.	Height Above		Sea Level	1914		
			Ground.	feet.		mm.	inches.	
FORFAR—(con.)								
1.—TAY—Isla—(con.)								
Kirriemuir (Lintrathen, Creich Hill) M	G. Baxter, Esq., C.E.....	8	1	0	1500	810	31.90	...
„ („ „ „ N.) M	„ „ „ „	8	1	0	1491	886	34.90	...
2.—FIRTH OF TAY. 80 sq. mi.								
D Buddonness (Low Light)	J. H. Thompson, Esq., C.E.	5	1	0	27	740	29.14	175
D Dundee (Harbour)	„ „ „ „	5	0	10	14	666	26.23	165
„ (Eastern Necropolis) ...	Mr. A. Macrae	3	1	0	199	672	26.45	...
D „ („ „ „) ...	„ „ „ „	5	1	0	199	680	26.78	172
„ (Dens Works) ... roof g.	Messrs. Baxter Bros., Ltd.	5	...	...	119	677	26.67	183
„ (Camperdown Works) ...	Messrs. Cox, Bros., Ltd.	5	1	2	290	779	30.66	194
„ (Inniscarra)	H.G. Walker, Esq. per SMS	...	...	...	130	698	27.48	...
„ (Balruddery)	J. Martin White, Esq.	5	1	0	266	748	29.47	...
Murroes Schoolhouse	H. A. Forsyth, Esq.	5	1	0	425	602	23.70?	...
3.—SOUTH ESK & C. 371 sq. mi.								
D Carnoustie	D. Maxwell, Esq., C.E....	8	1	0	39	687	27.03	194
D Craigton	G. Baxter, Esq., C.E....	8	1	0	484	761	29.95	167
„	M „ „ „ „	11	3	0	484	748	29.43	...
„ (Hillhead)	M „ „ „ „ „	11	3	0	370	769	30.28	...
Crombie Reservoir	M „ „ „ „ „	11	3	0	522	824	32.46	...
D Arbroath (Dishland Hill)	Mr. J. Campbell	5	1	0	69	526	20.71	181
„ (Muirheads Reservoir)	T. L. Brown, Esq., C.E....	5	1	0	251	666	26.20	...
Forfar (Pitscandly)	W. T. Farquhar, Esq. ...	5	1	9	300	813	32.02	...
Montroseness	Board of Northern Lights	3	1	0	124	606	23.84	...
Montrose (Melville Gardens) ...	S. L. Christie, Esq.	5	9	0	20	592	23.32	...
D Forfar W.W. (Den of Ogil)	A. Watterston, Esq.	12x4	0	3	633	1024	40.32	168
D Glenogil W.W.	T. L. Brown, Esq.	5	1	0	700	1012	39.85	158
„ „	M „ „ „ „	5	1	0	700	1011	39.79	...
D Glen Prosen (Pearsie House) ...	E. M. Wedderburn, Esq., per SMS	5	1	0	600	971	38.22	205
„ „ (Lednathie)	Mr. W. G. Lindsay	5	1	0	720	1210	47.65	163
D „ „ (Balnaboth Gardens)	Mrs. Ogilvie	5	1	0	965	1306	51.43	151
4.—NORTH ESK & C. 213 sq. mi.								
D Montrose (Sunnyside Asylum) ...	Dr. J. G. Havelock	10	4	6	200	690	27.17	170
D „ (Kinnaber W.W.)	S. L. Christie, Esq.	5	1	0	38	666	26.23	167
Logie Pert (Loanhead of Craigo) ..	Mr. G. D. Cramond	5	0	9	200	697	27.43	...
Brechin (Stracathro Gardens) ...	Mr. A. Dunlop	5	1	0	200	676	26.63	...

MAP OF DIVISION XVII.—NORTH EASTERN COUNTIES,
Showing the River-Divisions.



DIVISION XVII.—NORTH EASTERN COUNTIES.

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
KINCARDINE. (Area, 382 sq. mi.)								
1.—NORTH ESK & C. 99 sq. mi.								
Laurencekirk (Johnstone Lodge)	Mr. G. Hampton, <i>per</i> S.M.S.	5	1	0	400	860	33·87	...
+ Fettercairn (The Burn)	Col. C. McInroy, C.B.	5	0	11	250	862	33·95	178
„ (Police Station)	Mr. A. Mackenzie	5	1	0	230	847	33·35	164
+ „ (Fasque Gardens) ..	Sir J. R. Gladstone, Bart.	5	1	0	320	838	32·98	171
2.—BERVIE, COWIE & C. 139 sq. mi.								
Todhead	Bd. of Northern Lights...	3	4	0	135	725	28·53	...
+ Stonehaven (Mains of Cowie) ...	John Hart, Esq.	5	1	0	93	624	24·55	184
Girdleness	Board of Northern Lights	7	4	0	185	623	24·54	...
3.—DEE. 144 sq. mi.								
+ Strachan (Bridge of Dye)	Sir J. R. Gladstone, Bart.	5	1	0	515	1165	45·88	194
Crathes (Spyhill)	James Smith, Esq.	5	1	0	510	984	38·73	...
+ „ (Crossroad, Durris)	A. Macdonald, Esq.	5	1	0	420	904	35·59	198

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0·1 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
KINCARDINE—(con.)								
3.—DEE—(con.)								
Durris House [Drumoak].....(R)	Mr. A. Reid	5	3	6	200	654	25·76?	...
+Banchory (Invercannie)	Cecil H.Roberts, Esq., C.E.	12	0	10	205	835	32·88	172
+Crathes (Pinewood)	James Smith, Esq.....	5	1	0	145	877	34·51	185
" Castle	" " "	5	1	0	240	778	30·65	...
Banchory (Hirn)	Mr. W. Caird.....	5	1	0	287	754	29·68	...
ABERDEEN. (Area, 1974 sq. mi.)								
1.—DEE. 672 sq. mi.								
+Braemar (Canmore)	M.A. M. Shirran, Esq.	8	0	9	1114	1015	39·95	...
+ " (Bank)	" " "	5	1	0	1114	985	38·77	198
+ " (Derry Lodge) ... No. 6	Cecil H.Roberts, Esq., C.E.	5	1	0	1400	990	38·99	...
+Balmoral Castle Gardens	Mr. J. M. Troup.....	8	1	0	927	1008	39·70	177
Abergeldie Castle	Mr. R. F. Chalmers	5	1	0	...	978	38·50	194
Ballater (Irrigation Farm)	Cecil H.Roberts, Esq., C.E.	5	1	0	637	976	38·42	179
+Glen Gairn (Gairn Shiel Lo.) No14	" " "	5	1	0	1100	1036	40·79	182
+ " " (Corndavon Lodge) No13	" " "	5	1	0	1500	1121	44·12	...
Torphins (Cairnaquheen)	G. Davidson, Esq., M.D.	5	1	6	450	760	29·93	154
+Cromar (Logie Coldstone School)..	J.B. Anderson, Esq. per MOS	5	1	0	608	814	32·04	194
+ " (" " Loanhead)	Mr. A. Farquharson	5	1	0	743	858	33·79	185
Aberdeen (Mannofield Reservoir)	Cecil H.Roberts, Esq., C.E.	8	1	0	171	710	27·95	198
" (" ")	" " "	5	1	0	171	735	28·93	198
+ " (Cranford House)	D. McHardy, Esq.	5	1	0	120	776	30·54	186
" (Cornhill Road)	J. B. Innes, Esq.	5	1	0	150	759	29·87	183
" (Richmondhill Road)..	Mrs. Roberts	5	1	0	208	774	30·46	...
2.—DON. 512 sq. mi.								
+Aberdeen (King's College)	Meteorological Office	11	2	0	44	729	28·71	184
+Strathdon (Estates Office)	C. Christie, Esq.	5	1	2	990	999	39·33	181
Alford (Lynturk Manse)	Rev. J. B. Duncan.....	5	1	0	600	856	33·68	180
Dyce (Parkhill House)	J. E. Crombie, Esq.	8	0	11	200	753	29·65	192
Insch (Thornhill)	Iain J. Bisset, Esq.....	8	1	0	430	803	31·61	180
3.—YTHAN & C. 285 sq. mi.								
Ellon (Esslemont)	Col. Wolrige Gordon	5	1	8	100	714	28·11	192
Haddo House	Mr. John McKinnon	5	0	7	180	702	27·64	158
House of Schivas	Lord Haddo	5	0	9	200	722	28·44	185
Fyvie Castle	Col. C. R. Burn, M.P.....	5	0	6	200	858	33·80	156
4.—UGIE & C. 257 sq. mi.								
Buchanness.....	Board of Northern Lights	3	3	0	130	601	23·66	...
New Deer Schoolhouse	H. Cowie, Esq.	5	1	0	397	802	31·59	198
Peterhead (Thunderton)	Miss Oldman	5	1	1	150	645	25·39	189
" (Mains of Buthlaw)... ..	W. Johnston, Esq.....	5	1	6	120	683	26·90	177
Kinnairdhead.....	Board of Northern Lights	3	2	6	120	570	22·43	...
5.—DEVERON & C. 248 sq. mi.								
Huntly (Union Bank)	Alex. Smith, Esq.	5	1	0	450	833	32·79	...
" (Cruchie)	John Joss, Esq.	5	4	0	400	757	29·79	168

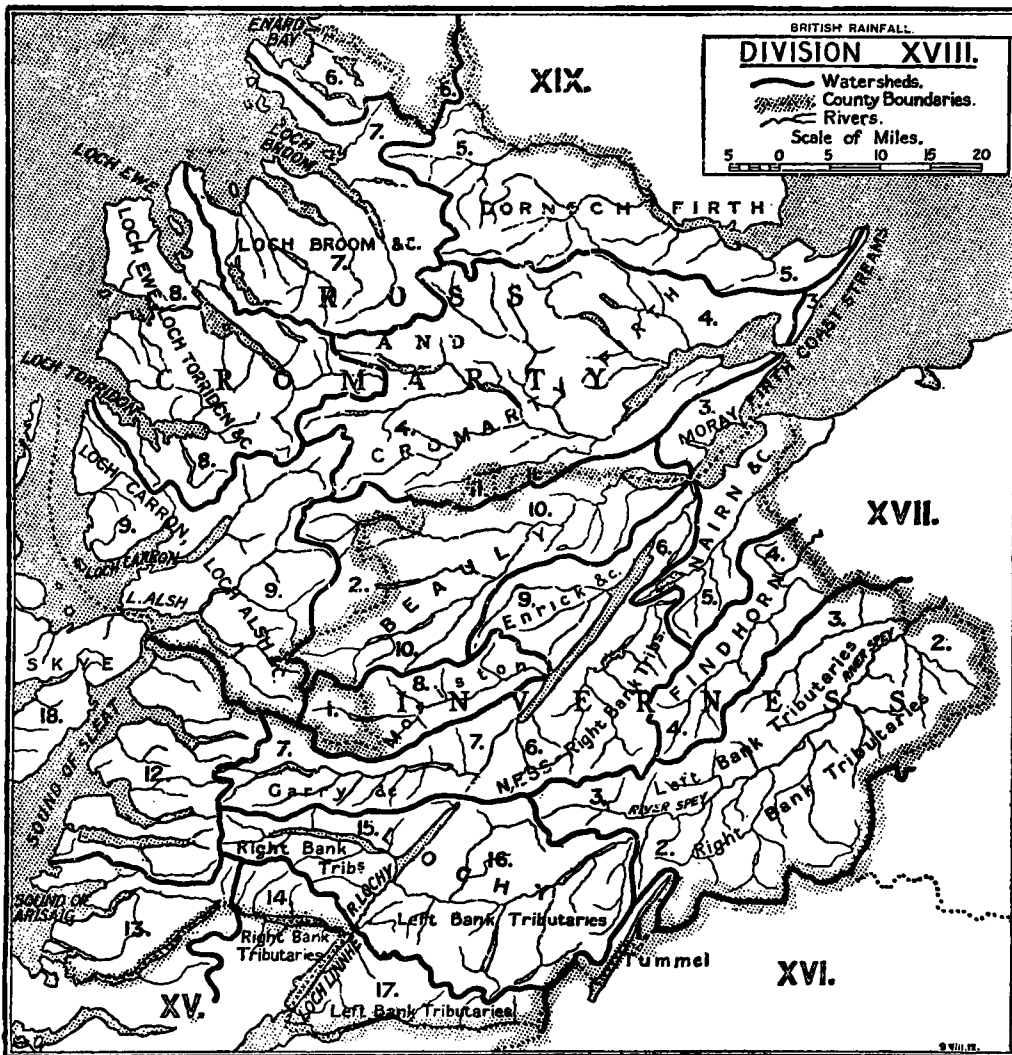
DIVISION XVII.—NORTH EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with .01 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
BANFF. (Area, 630 sq. mi.)								
1.—YTHAN. 1 sq. mi.								
2.—DEVERON & C. 344 sq. mi.								
D Drummair	T. Gordon Duff, Esq.....	5	1	0	605	960	37·79	202
D Keith Station	Mr. A. Kennedy	5	1	0	364	950	37·38	210
Buckie (Rockomline)	W. Hendry, Esq.	5	1	4	385	708	27·86	...
„	„ „ „	5	...		76	704	27·73	...
3.—SPEY—Right Bank Tributaries. 285 sq. mi.								
D Dufftown (Victoria Terrace) ...	Miss Walker	5	2	0	579	1009	39·72	210
Aberlour	J. F. McGowan, Esq.....	5	1	0	298	871	34·29	...
„ Orphanage	J. G. White, Esq.	5	1	0	320	861	33·88	...
Craigellachie	J. Shearer, Esq., per S.M.S.	3	0	1	339	865	34·05	...
MORAY. (Area, 477 sq. mi.)								
1.—DEVERON & C. 7 sq. mi.								
2.—SPEY—Right Bank Tributaries. 35 sq. mi.								
D Gordon Castle	Mr. C. Webster	5	1	0	107	725	28·56	200
3.—SPEY—Left Bank Tributaries. 133 sq. mi.								
D Grantown-on-Spey	Mr. W. Duncan	5	1	1	700	812	31·96	189
4.—LOSSIE & C. 154 sq. mi.								
Elgin (The Manse)	Rev. Dr. R. Macpherson...	6	1	3	38	717	28·22	...
D Duffus House	Mr. W. Ogg	5	1	0	55	691	27·20	169
Cove sea Skerries	Board of Northern Lights	7	3	6	52	498	19·61	...
5.—FINDHORN & C. 148 sq. mi.								
D Darnaway Castle Gardens	Mr. A. Dow	5	1	3	200	697	27·44	176
D Brodie (Earlsmill House)	James Fenwick, Esq.....	5	0	10	140	660	25·97	204
Forres (Knockonnie)	W. Fraser, Esq.	6	0	10	100	660	26·00	...
Kinloss House	Mrs. Mackessack	5	1	3	23	631	24·84	...
NAIRN. (Area, 163 sq. mi.)								
1.—FINDHORN & C. 102 sq. mi.								
D Ardelach (Glenferness)	Mr. A. McKenzie	8	1	6	750	917	36·10	163
2.—NAIRN & C. 61 sq. mi.								
D Cawdor Castle	(R) Mr. D. Chapman	8	4	3	225	756	29·75	186
D Nairn (Achareidh)	H. A. Clarke, Esq.....	8	1	0	59	628	24·73	217
„ (Delnies)	Meteorological Office	8	1	9	84	648	25·52	217

MAP OF DIVISION XVIII.

NORTH WESTERN COUNTIES,

Showing the River-Divisions.



DIVISION XVIII.—NORTH WESTERN COUNTIES.

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 01 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
INVERNESS. (Area, 4146 sq. mi.)								
1.—TAY—Tummel. 28 sq. mi.								
2.—SPEY—Right Bank Tributaries	s. 437 sq. mi.							
D Nethy Bridge (U.F. Manse)	Rev. A. Sutherland	5	1	0	750	714	28·09	163
3.—SPEY—Left Bank Tributaries.	257 sq. mi.							
D Cluny Castle	Mr. A. Macdonald	5	1	5	800	1198	47·18	217
Kingussie	Dr Wde Watteville <i>per</i> MOS	5	1	0	840	855	33·66	208
"	"	5	1	0	828	744	29·27	...
D Aviemore (Rothiemurchus)	W. Dempster, Esq.	5	1	0	706	851	33·49	210
Carrbridge Manse	Rev. A. Doag, <i>per</i> S.M.S.	5	0	11	850	811	31·94	...
Muckerach Lodge [Grantown]...	Mr. J. Fraser	5	1	3	760	847	33·34	203
4.—FINDHORN. 164 sq. mi.								
5.—NAIRN & C. 131 sq. mi.								
Croy (Dalcross Castle)	The Mackinnon of Mackinnon	4	0	6	400	709	27·92	190
6.—NESS—Right Bank Tributaries	252 sq. mi.							
D Fort Augustus (St. Benedict's)...	Rev. C. von Dieckhoff....	5	1	0	68	1078	42·44	209
Loch Ness (Killin, Whitebridge).	British Aluminium Co....	8	1	0	1200	1698	66·84	...
D " " (Garthbeg)	" " "	8	1	0	645	1006	39·59	205
" " (Foyers)	" " "	8	1	6	52	1088	42·84	168
" " (Aberchalder)	" " "	8	1	0	700	962	37·87	...
7.—NESS—Garry & c. 185 sq. mi.								
D Glen Kingie (Lochan)	W. N. McLean, Esq., C.E.	5	1	0	520	2810	110·62	233
Loch Quoich (Loan)	W. M. Christy, Esq.	5	1	6	650	4430	174·40	...
D " " (Kinlochquoich) ...	Col. D. W. Cameron	5	1	0	560	3234	127·32	219
D " " (Bunchoalie)	W. N. McLean, Esq., C.E.	5	1	0	650	2781	109·50	200
D " " (Glenquoich)	T. MacKenzie, Esq. <i>per</i> SMS	5	1	2	569	2992	117·79	239
Laddie Burn (Greenfield)	W. N. McLean, Esq., C.E.	5	1	0	670	1968	77·50	...
Glen Garry (Inchlaggan)	Mr. M. Matheson	5	1	0	370	1789	70·44	...
D Invergarry Gardens	Mr. G. Robertson	5	1	0	130	2045	80·51	182
D " (Schoolhouse)	W. N. McLean, Esq., C.E.	5	1	0	180	1808	71·17	241
Loch Loyne (Bealach-nah-Imrich)	" " "	5	1	0	835	2057	81·00	...
Invergarry (Loch Lundie)	" " "	5	1	3	480	1429	56·25	...
" (Loch a' Bhainne) ...	" " "	5	1	6	1225	1392	54·81	...
8.—NESS—Moriston. 120 sq. mi.								
9.—NESS—Enrick. 131 sq. mi.								
D Drumnadrochit	Mr. Angus Grant	5	1	0	138	973	38·30	205
Dores	John B. Anderson, Esq. ...	5	0	9	100	787	31·00	...
D Inverness (High School)	W. G. MacConnachie, Esq.	5	1	0	98	674	26·53	186
10.—BEAULY. 341 sq. mi.								
11.—CROMARTY FIRTH. 13 sq. mi.								
12.—SOUND OF SLEAT. 259 sq. mi.								
Loch Morar (Meoble Lodge)	E. M. Crofield, Esq.	8	1	3	140	2518	99·12	...
D Loch Nevis (Inverie Gardens) ...	Mr. J. Huggins	5	0	6	10	2196	86·44	231
D Glenelg Manse	Rev. A. Mactaggart	5	1	0	85	1365	53·73	229
13.—SOUND OF ARISAIG. 126 sq. mi.								
D Moidart (Kinlochmoidart)	J. C. Stewart, Esq.	5	1	3	13	1809	71·22	219
D " (Roshven)	Mrs. Blackburn	5	1	0	40	1720	67·70	246
D Arisaig (Point of Rhue)	Mr. D. McVarish	5	1	0	100	1300	51·19	202
D " (Faire-na-Sguir)	Miss C. C. Astley	5	1	10	30	1411	55·56	231
D " House	Mr. W. Grant	5	1	0	30	1534	60·38	236
14.—LOCH LINNHE—Right Bank T	ributaries. 48 sq. mi.							

DIVISION XVIII.—NORTH WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain		Days with ≥ 0.1 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
INVERNESS—(con.)								
15.—LOCHY—Right Bank Tributaries. 143 sq. mi.								
D Loch Arkai (Achnacarry)	Col. D. W. Cameron	5	1	0	120	2516	99.04	231
D " " (Glen Dessary)	" " " "	5	1	0	300	3089	121.63	227
Clunes	Charles Mackenzie, Esq.	5	1	0	...	1996	78.58	227
16.—LOCHY—Left Bank Tributaries. 362 sq. mi.								
Spean Bridge (Spean Lodge) ...	Miss W. Davy	5	1	5	204	1713	67.43	229
Loch Lochy (Invergloyle)	Major G. I. Bailey	5	1	0	210	1469	57.84	206
17.—LOCH LINNHE—Left Bank Tributaries. 120 sq. mi.								
D North Ballachulish (Alltshellach)	B. Chinnery-Haldane, Esq.	5	2	1	80	2053	80.83	237
Glenleven (Blackwater Dam, N.) 7	British Aluminium Co.	8	1	0	1072	2430	95.67	249
D " (Kinlochmore Gardens)	Brian Bibby, Esq.	5	1	0	115	2610	102.76	248
" (Chiaron House) No. 3	British Aluminium Co.	8	1	0	1200	2407	94.77	...
" (Cam Bridge) ... No. 5	" " " "	8	1	0	1260	1892	74.47	...
D Fort William (Atholl Bank)	W. T. Kilgour, Esq.	5	1	0	171	2152	84.71	240
18.—INSULAR, INNER HEBRIDES. 786 sq. mi.								
Hyskier	Board of Northern Lights .....	...	...	...	...	826	32.53	197
Skye (Oronsay) .....	" " " " .....	...	0	6	58	1490	58.67	214
" (Kyleakin)	" " " "	5	4	6	53	1249	49.17	227
D " (Scalpay Island)	Mr. D. Gunn	5	1	0	4	1947	76.66	226
" (Glendrynoch, L. Harport) ..	Mr. A. Macaskill	5	1	0	40	1768	69.61	...
" (Neist Point)	Board of Northern Lights .....	...	...	...	...	1181	46.49	194
D " (Portree)	D. Dewar, Esq.	5	1	0	65	1439	56.66	228
D " (Dunvegan)	Mrs. Mackenzie	5	3	0	47	1891	74.45	248
D " (Lynedale)	Lord Napier of Magdala ...	5	1	0	30	1826	71.87	242
Rona	Board of Northern Lights	3	1	3	212	902	35.53	201
19.—INSULAR, OUTER HEBRIDES. 243 sq. mi.								
Barra (Barrahead)	Board of Northern Lights	7	3	0	683	857	33.74	204
" (Castle Bay)	Meteorological Office	8	1	0	38	961	37.83	238
South Uist (Ushenish)	Board of Northern Lights	3	1	0	178	1300	51.19	211
North Uist (Monach)	" " " "	8	5	6	20	1134	44.66	220
D " (Bayhead, Lochmaddy) ..	J. McInnes, Esq. ....	...	...	...	...	1198	47.18	179
Harris (Island Glass) ...	Board of Northern Lights	7	4	2	130	1109	43.66	214
" (West Tarbert)	A. M. Fletcher, Esq.	5	1	6	33	2024	79.67	216
ROSS & CROMARTY. (Area, 3237 sq. mi.)								
1.—NESS—Moriston. 35 sq. mi.								
2.—BEAULY. 109 sq. mi.								
Achnashellach (Glenuaig)	W. M. Christy, Esq.	5	1	0	1150	3118	122.75	...
3.—MORAY FIRTH COAST STRATH. 64 sq. mi.								
D Fortrose	A. Thom, Esq.	5	1	0	69	552	21.72	179
4.—CROMARTY FIRTH. 714 sq. mi.								
Strathpeffer	H. W. Kaye, Esq., per MOS ..	8	1	0	210	776	30.53	210
Cromarty House	Brig.-Gen. W. C. Ross, C.B. ..	5	1	0	60	648	25.50	179
"	Board of Northern Lights	3	1	0	28	617	24.29	164
D Alness (Fyrish)	Oswald B. Cowan, Esq.	8	1	0	351	820	32.28	182
D Invergordon (The Ord)	W. G. Paterson, Esq.	5	0	9	50	627	24.67	173
D Alness (Ardross Castle)	Mr. W. L. Minty	5	1	0	450	1031	40.60	215
5.—DORNOCH FIRTH. 355 sq. mi.								
D Fearn (Lower Pitkerrie)	R. Gordon, Esq., C.E.	5	1	0	95	570	22.42	154

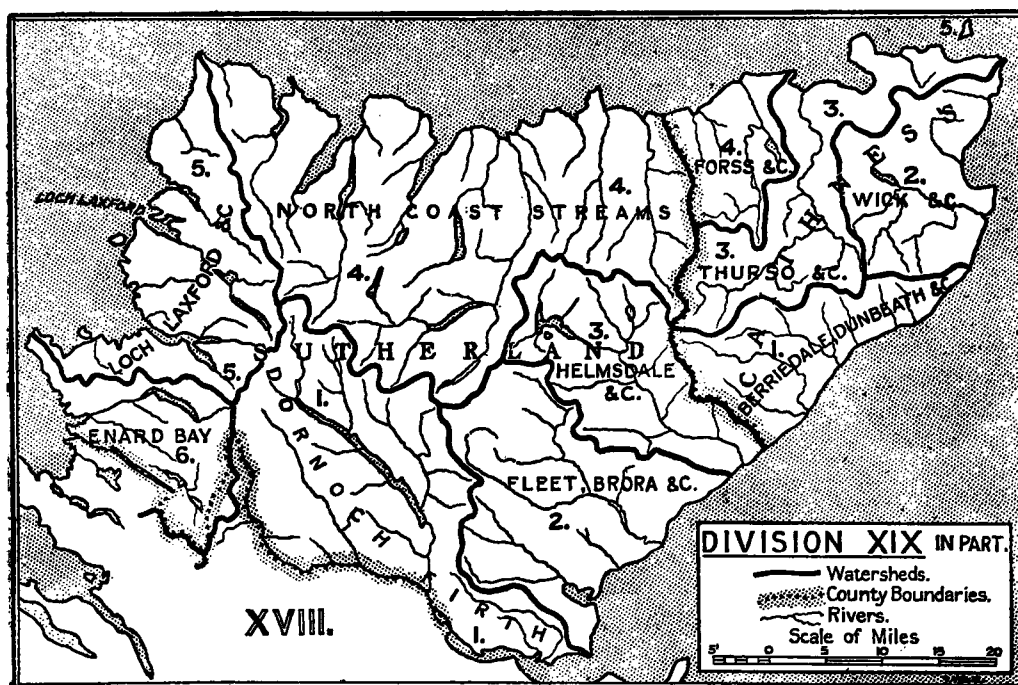
DIVISION XVIII.—NORTH WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with '01 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
ROSS & CROMARTY—(con.)								
5.—DORNOCH FIRTH—(con.)								
Tarbatness	Board of Northern Lights	8	4	0	175	570	22·45	...
D Ardgay (Gledfield House Gardens)	William Morrison, Esq....	8	1	0	180	882	34·73	183
6.—ENARD BAY. 78 sq. mi.	...							
7.—LOCH BROOM & C. 367 sq. mi.								
Loch Vhraoin	Lady Fowler	8	0	7	750	2120	83·45	...
Loch Drome	" "	8	0	7	850	1698	66·83	...
Braemore House.....	" "	8	0	7	750	1685	66·35	...
8.—LOCH EWE, LOCH TORRIDON & C. 423 sq. mi.								
D Loch Torridon (Bendamph)	The Earl of Lovelace	5	0	5	20	2413	94·99	220
D Poolewe (Inverewe Gardens) ...	Mr. R. B. Campbell	5	0	6	20	1627	64·06?	...
9.—LOCH CARRON, LOCH ALSH & C. 401 sq. mi.								
Glen Shiel (Shiel House)	M Mr. Colin Campbell	5			...	1911	75·22	...
D Loch Carron (Plockton)	Mrs. Anstruther Mackay	5	1	0	4	1174	46·20	218
Applecross Gardens	Mr. D. McCowan	5	1	0	70	1551	61·08	...
D Glencarron Lodge	Mr. D. D. Munro	5	1	0	504	2282	89·83	252
" "	M " " "	5	1	0	504	2581	101·60	...
10.—INSULAR, OUTER HEBRIDES. 691 sq. mi.								
Stornoway	Meteorological Office	8	1	0	52	1269	49·97	261
" (Tiumpanhead)	Board of Northern Lights	...			170	1030	40·55	188
" (Butt of Lewis)	" " "	8	4	6	170	1088	42·85	200

MAP OF DIVISION XIX.—(MAINLAND).

NORTHERN COUNTIES.

Showing the River-Divisions.



STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with ·01 in. or more	
		Diam. in.	Height Above Ground. Sea Level		1914			
			ft.	in.	feet.	mm.	inches.	
SUTHERLAND. (Area, 2080 sq. mi.)								
1.—DORNOCH FIRTH. 413 sq. mi.								
d Invershin	G. Young, Esq.	5	4	0	20	723	28·47	174
2.—FLEET, BRORA & C. 309 sq. mi.								
d Dornoch	G. J. Campbell, Esq.	5	1	0	80	699	27·52	168
Golspie (Technical School)	The Head Master	6	1	9	105	969	38·15	...
d Dunrobin Castle.....	Mr. D. Melville	5	1	6	14	808	31·82	168
" " M	" " "	5	1	0	14	833	32·79	...
d Brora (Gordonbush)	Mr. J. MacRae	5	0	11	30	965	37·99	161
3.—HELMSDALE & C. 226 sq. mi.								
4.—NORTH COAST STREAMS. 736 sq. mi.								
Strath More (Altnacaillich)	Mr. Duncan Fraser	5	1	0	60	1462	57·56	227
d Tongue Manse	Rev. David Lundie	5	1	0	180	1093	43·02	272
d Bettyhill.....	Mr. Evander Mackay.....	5	1	0	100	1019	40·13	255
d Melvieh Schoolhouse.....	Mr. A. MacIntosh	5	1	0	...	1053	41·47	187
Cape Wrath	Board of Northern Lights	7	4	8	400	1343	52·89	194
5.—LOCH LAXFORD & C. 256 sq. mi.								
d Loch More (Achfary).....	Mr. J. Munro	5	1	0	137	2116	83·31	257
6.—ENARD BAY. 138 sq. mi.								
7.—INSULAR. 2 sq. mi.								
CAITHNESS. (Area, 696 sq. mi.)								
1.—BERRIEDALE, DUNBEATH & C. 169 sq. mi.								
d Berriedale (Langwell Gardens)...	Mr. M. MacKenzie	5	1	6	100	892	35·12	193
2.—WICK & C. 184 sq. mi.								
d Wick	Meteorological Office.....	8	1	9	77	731	28·77	236
Nosshead.....	Board of Northern Lights	7	4	7	175	615	24·21	167
d Watten (Stanstill)	Miss Davidson	5	1	0	127	734	28·89	191
3.—THURSO & C. 238 sq. mi.								
d Thurso (Buckies)	J. H. M. Davidson, Esq....	5	0	11	240	1021	40·20	230
Castletown (WestGreenland Fm.)	P. Finlayson, Esq.	5	1	0	150	858	33·76	...
d " (The Clett)	Mrs. Calder.....	5	1	0	73	928	36·52	243
Thurso (Holburn Head)	Board of Northern Lights	3	0	8	75	830	32·69	210
Dunnet Head	" " "	3	1	0	246	724	28·50	...
4.—FORSS & C. 104 sq. mi.								
d Reay (The Manse)	Rev. Dugald Carmichael	8	1	0	50	853	33·60	232
5.—INSULAR. 1 sq. mi.								
Stroma	Board of Northern Lights	104	831	32·73	156
Pentland Skerries	" " "	7	3	9	170	668	26·32	161
ORKNEY. (Area, 389 sq. mi.)								
Hoy (Cantickhead)	Board of Northern Lights	3	1	0	115	851	33·51	...
" (Graemsay Sound, High)...	" " "	5	0	4	115	808	31·80	196
" (" Low) ...	" " "	8	4	3	55	829	32·65	205
Pomona (Deerness)	Magnus Spence, Esq.	5	4	0	161	901	35·49	220
d " (Kirkwall)	A. G. Spence, Esq.	5	1	0	72	962	37·89	229
Hellyar Holm.....	Board of Northern Lights	3	1	0	60	737	29·02	211
Shapinsay (Balfour Castle)	Mr. W. Liddell	5	0	6	50	704	27·70	...
Auskerry	Board of Northern Lights	3	2	6	10	845	33·28	183

DIVISION XIX.—NORTHERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with '01 in. or more	
		Diam.	Height Above		1914			
			Ground.	Sea Level	mm.	inches.		
ORKNEY—(con.)		in.	ft.	in.	feet.			
Sanday (Start Point).....	Board of Northern Lights	3	1	0	80	842	33·14	180
Westray (Noup Head)	„ „ „	3	1	0	260	827	32·57	223
North Ronaldshay	„ „ „	3	0	4	140	854	33·62	195
Sule Skerry	„ „ „	3	0	6	113	994	39·14	237
SHETLAND. (Area, 558 sq. mi.)								
Bressay	Board of Northern Lights	3	1	0	105	956	37·65	...
Lerwick (Fort Charlotte)	Meteorological Office	8	1	0	54	1142	44·96	260
Northmavine (Lochend)	late R. C. Haldane, Esq. per S. M. S.	5	1	10	10	1171	46·10	...
Fetlar (The Manse)	Rev. J. A. Campbell	5	1	0	30	813	32·00	235
Unst (Balta Sound, Halligarth) ..	T. E. Saxby, Esq., per MOS	5	1	0	31	1072	42·20	287

IRELAND.

MAP OF DIVISION XX.—MUNSTER,

Showing the River-Divisions.



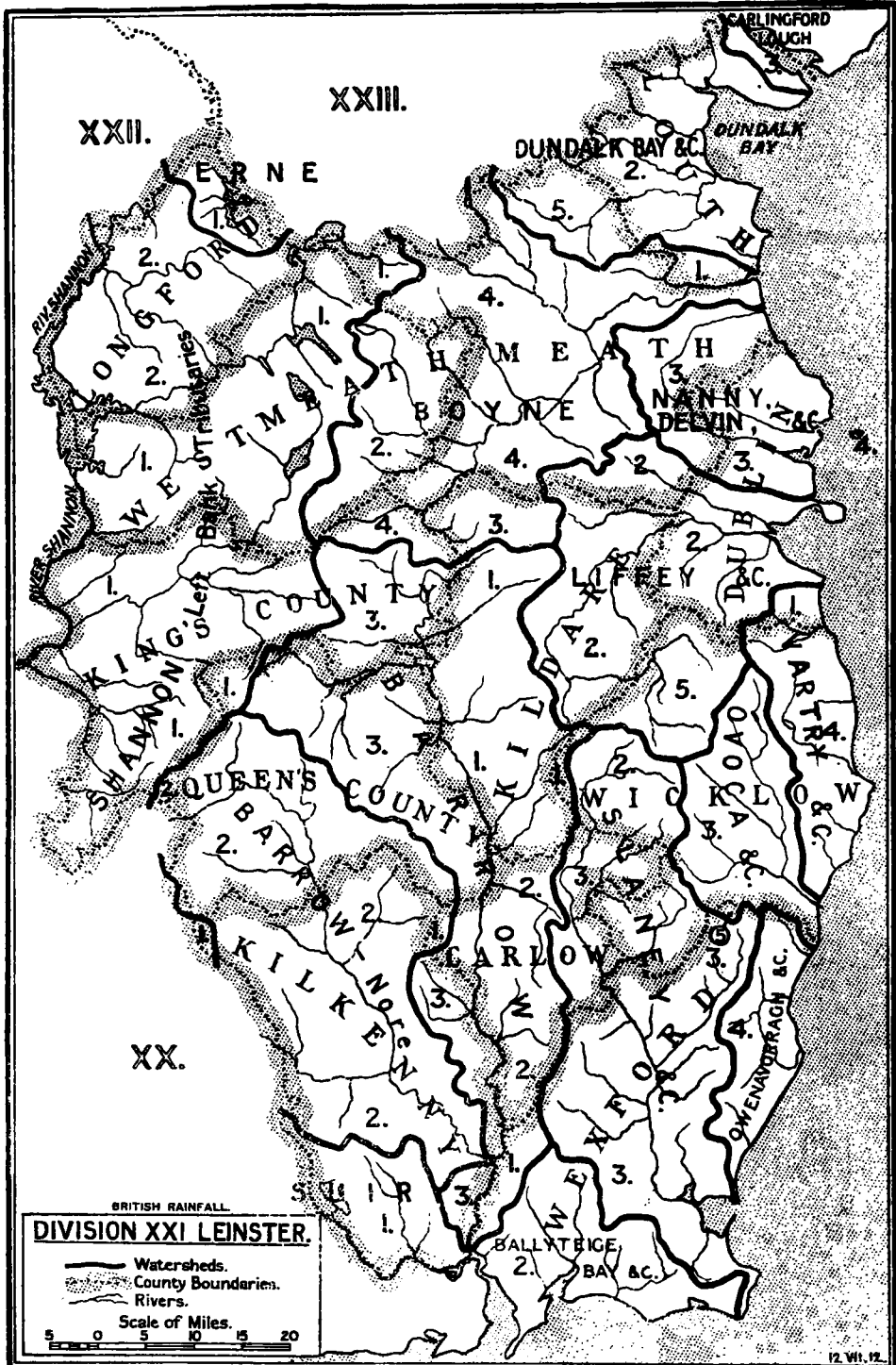
DIVISION XX.—MUNSTER—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0.1 in. or more
		Diam.	Height Above Ground		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
CORK—(con.)								
9.—BLACKWATER—(con.)								
D Mitchelstown Castle	W. D. Webber, Esq.	8	3	0	340	1137	44.76	194
10.—SUIR. 3 sq. mi.								
11.—INSULAR. 26 sq. mi.								
KERRY. (Area, 1851 sq. mi.)								
1.—SHANNON—Left Bank Tributaries. 372 sq. mi.								
2.—TRALEE BAY & C. 221 sq. mi.								
3.—DINGLE BAY. 789 sq. mi.								
+ Cahirciveen (Valencia Observatory)	Meteorological Office	11	2	8	30	1756	69.12	253
D+ " " " "	" " " "	8	1	0	30	1756	69.15	250
+ Gap of Dunloe (Gearahameen) M	Dr. H. R. Mill	8	3	0	75	2708	106.60	...
D+ Killarney (District Asylum)	E. W. Griffin, Esq., M.D.	5	0	10	178	1659	65.31	242
4.—KENMARE & C. 426 sq. mi.								
D+ Darrynane Abbey	D. O'Connell, Esq.	5	1	1	13	1619	63.75	258
D Kenmare (Derreen)	Mr. W. H. Arrowsmith	5	1	0	74	2394	94.24	232
D " (Dunkerron Castle)	Miss L. Palmer	5	1	6	70	1755	69.10	236
" (Dromquinna)	Mr. Robert Reid	5	1	0	60	1744	68.67	225
D " (Dromore)	E. Hood, Esq.	5	1	2	90	1750	68.91	236
5.—BLACKWATER. 30 sq. mi.								
6.—INSULAR. 13 sq. mi.								
Valencia (Glanleam)	Meteorological Office	8	1	0	12	1847	72.71	234
WATERFORD. (Area, 715 sq. mi.)								
1.—BLACKWATER. 243 sq. mi.								
D Lismore Castle	J. E. Penrose, Esq.	5	2	9	115	1127	44.37	174
2.—COLLIGAN & C. 259 sq. mi.								
D Tramore (Midvale)	E. B. Jacob, Esq.	11	6	0	130	801	31.55	170
3.—SUIR. 213 sq. mi.								
D Knockaderry	No. 1 J. J. Fleming, Esq., C.E.	5	7	7	247	1140	44.89	186
D " " " "	No. 2 " " " "	5	7	7	247	1144	45.02	186
D+ Waterford (Brook Lodge)	C. P. Bolton, Esq., C.E.	5	1	0	104	1059	41.71	190
" (Mt. Congreve Gdns.)	Mr. D. E. Smart	5	1	0	...	1021	40.18	168
D+ " (Tycor Waterworks)	J. J. Fleming, Esq., C.E.	5	0	7	171	990	38.97	164
D " (De La Salle College)	Prof. M. J. Healy	8	1	0	17	1054	41.48	194
+ " (St. Andrew's Terrace)	E. A. White, Esq.	5	1	0	18	949	37.36	183
D+ " (Rocklands)	J. N. White, Esq.	5	2	0	30	1042	41.01	188
D Portlawn (Mayfield)	J. Anderson, Esq.	5	4	0	70	1198	47.17	218
" (The Gardens, Curraghmore)	Mr. D. Crombie	5	1	0	95	1244	48.96	159
D Seskin [Carrick-on-Suir]	J. Ernest Grubb, Esq.	8	1	4	542	1235	48.61	245
TIPPERARY. (Area, 1660 sq. mi.)								
1.—SHANNON—Left Bank Tributaries. 582 sq. mi.								
D Ballina [Killaloe]	Office of Works	5	2	0	...	1286	50.64	214
D Templederry Rectory	Rev. C. W. McDowell	5	1	0	440	1080	42.53	204
D Nenagh (Traverston)	Miss Norris	5	1	0	...	1196	47.09	241
" (Kilboy)	The Lady Dunalley	8	1	0	326	1235	48.63	226

MAP OF DIVISION XXI.

LEINSTER,

Showing the River-Divisions



DIVISION XXI.—LEINSTER.

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with 0.1 in. or more	
		Diam.	Height Above Ground SeaLevel		1914			
		in.	ft.	in.	feet.	mm.	inches.	
WEXFORD. (Area, 902 sq. mi.)								
1.—BARROW. 43 sq. mi.								
2.—OWENDUFF & C. 240 sq. mi.								
D Fethard-on-Sea Rectory	Rev. W. F. A. Ellison.....	5	1	0	40	851	33.50	199
D Foulkesmill (Longraigue).....	Miss J. Deane.....	5	1	1	220	1098	43.22	183
3.—SLANEY & C. 487 sq. mi.								
D Wexford (Johnstown Castle) ...	Mr. Edward Slavin	8	1	2	200	1060	41.72	167
D „ (Tate School)	C. Bain, Esq.	5	1	0	117	993	39.08	176
D Templeudigan (Ballindoney) ...	Janssen Budgen, Esq.....	5	1	0	434	1075	42.32	185
D Enniscorthy (Ballyhyland)	Mrs. Moffat.....	5	1	0	365	1120	44.08	257
D „ (Summerville)	W. Waring, Esq.	5	6	10	106	899	35.39	190
D „ (Monksgrange).....	Goddard H. Orpen, Esq....	5	1	0	565	1230	48.42	170
D „ (Woodbrook)	E. C. Blacker, Esq.	5	1	0	370	1257	49.49	188
4.—OWENAVORRAGH & C. 146 sq. mi.								
D Oulart (Wells)	C. M. Doyne, Esq.....	5	1	0	220	974	38.36	188
D Gorey (Courtown House)	The late Earl of Courtown	5	3	0	60	939	36.96	178
5.—OVOCA & C. 6 sq. mi.								
KILKENNY. (Area, 798 sq. mi.)								
1.—SUIR. 162 sq. mi.								
D Rockenham [Waterford]	A. E. Graves, Esq.....	5	1	0	140	1010	39.78	186
D Piltown (Bessborough)	Mr. T. E. Tomalin.....	8	3	7	60	1141	40.97	214
2.—BARROW—Nore. 527 sq. mi.								
D Inistioge (Woodstock)	E. K. B. Tighe, Esq.	6	1	0	400	893	35.14	168
D Thomastown (Ballyduff)	Lt.-Col. Hon. F. Shore....	5	1	5	65	1091	42.97	201
D „ (Grennan Lodge)...	W. T. Pilsworth, Esq.	5	1	3	98	974	38.34	173
Kilkenny Castle	Mr. E. Sutton, <i>per</i> M.O.	8	1	0	212	916	36.08	227
† „ (Lavistown House) ...	Miss F. E. Butler	5	2	5	170	824	32.42	182
D Castlecomer House.....	R. H. Prior-Wandesforde, Esq.	5	1	5	380	1006	39.60	190
3.—BARROW. 109 sq. mi.								
D Goresbridge (Barraghcore House)	H. de M. Fleming, Esq....	5	1	0	130	842	33.15	200
WICKLOW. (Area, 781 sq. mi.)								
1.—BARROW. 12 sq. mi.								
2.—SLANEY. 200 sq. mi.								
D Shillelagh (Coollattin Gardens)...	Duncan Brough, Esq.....	5	0	7	383	1189	46.81	216
3.—OVOCA & C. 241 sq. mi.								
D Rathdrum (Avondale)	A. C. Forbes, Esq.....	5	0	6	414	1026	40.39	178
† Laragh (Glendalough)	J. B. Wynne, Esq.....	5	2	9	460	1230	48.42	...
4.—VARTRY & C. 193 sq. mi.								
Arklow (The Sycamores)	Mrs. Udal	5	3	0	60	762	29.98	...
D Wicklow (Leitrim Place)	Rev. H. Ellison	5	0	7	0	840	33.05	180
D Rathnew (Clonmannon)	Rev. W. H. A. Truell.....	5	1	0	27	795	31.29	163
D Roundwood (Vartry Lo. Filters)	M. J. Buckley, Esq., C.E.	5	1	6	720	1142	44.96	200
D „ („ „).....(R)	„ „ „	8	1	9	740	1176	46.28	198
D „ „ „	„ „ „	5	1	6	800	1221	48.06	206
D „ (Knockatemple).....	„ „ „	5	1	6	760	1186	46.69	201
D Newcastle (Killadreenan)	Dr. C. D. Hanan	8	1	2	260	809	31.85	167

DIVISION XXI.—LEINSTER—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with .01 in. or more
		Diam.	Height Above Ground. Sea Level			1914		
		in.	ft.	in.	feet.	mm.	inches.	
WICKLOW—(con.)								
4.—VARTRY & C—(con.)								
Tithewer	M. J. Buckley, Esq., C.E.	5	1	6	1000	1041	41·00	...
Annacarter Schoolhouse	" " "	5	1	6	750	1169	46·01	...
Greystones (Auburn).....	Sir J. W. Moore, M.D....	5	1	4	50	776	30·57?	178
" (Coolagad)	Dr. J. H. Armstrong...	5	0	9	190	984	38·75	189
Kilmacanoge (Carrigoona).....	Sir W. F. Barrett, F.R.S.	5	1	0	460	930	36·63	...
+Bray (Fassaroe) ...	R. M. Barrington, Esq....	10	5	0	250	1004	39·53	188
d " (")Snowdon	" " " "	5	1	0	250	980	38·60	185
5.—LIFFEY & C. 135 sq. mi.								
CARLOW. (Area, 346 sq. mi.)								
1.—BARROW—Nore. 9 sq. mi.								
2.—BARROW. 216 sq. mi.								
Bagnalstown (Fenagh House) ...	D. R. P. Beresford, Esq...	5	1	0	340	880	34·63	194
()" ") M	" " " "	5	1	0	340	816	32·13	...
Carlow "(Browne's Hill).....	Major Browne Clayton....	5	1	0	291	869	34·23	...
3.—SLANEY. 121 sq. mi.								
Hacketstown Rectory	Rev. C. S. S. Ellison	5	1	2	600	1008	39·67	214
QUEEN'S COUNTY. (Area, 664 sq. mi.)								
1.—SHANNON—Left Bank Tributaries. 25 sq. mi.								
2.—BARROW—Nore. 339 sq. mi.								
d Abbey Leix (Blandsfort)	H. Bland, Esq.	5	2	6	532	974	38·34	211
Mounthrath (Donore)	W. G. Despard, Esq.....	5	1	6	227	844	33·22	179
" (Castletown)	Dr. T. E. Dunne	5	4	9	452	890	35·02	163
" (Deerpark)	James Paterson, Esq.....	8	1	0	500	963	37·92	182
" (Ballyfin).....	Mr. R. Bower.....	8	1	0	600	1016	39·98	183
" (Baunreagh)	A. C. Forbes, Esq.....	...	...	...	800	1202	47·34	...
3.—BARROW. 300 sq. mi.								
Sunnyside [Carlow]	E. Shackleton, Esq. . . .	5	1	0	178	826	32·52	181
Mountmellick (Summer Grove)...	W.A.RobinsonEsq.perMO	8	1	0	252	962	37·86	204
KING'S COUNTY. (Area, 772 sq. mi.)								
1.—SHANNON—Left Bank Tributaries. 560 sq. mi.								
Birr Castle	Dr.O.Boeddicker,perM.O.	8	1	0	175	828	32·60	218
d Victoria Lock [Meelick]	Office of Works	5	2	0	119	796	31·33	206
d Tullamore (Rathrobin)	Lt.-Col. M. W. Biddulph	5	1	0	400	825	32·48	207
" (St. Catherine's)	Rev. R. S. Craig.....	5	1	0	201	807	31·76	196
d Ferbane (Turraun)	R. H. Georghegan, Esq...	8	1	0	167	780	30·70	202
d Ballycumber (Moorkock Lodge)...	H. P. Mullock, Esq.	5	1	0	210	840	33·06	176
d " (").....	Mr. Michael Glasheen....	5	1	0	261	790	31·11	179
2.—BARROW—Nore. 5 sq. mi.								
3.—BARROW. 156 sq. mi.								
4.—BOYNE. 51 sq. mi.								

DIVISION XXI.—LEINSTER—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0.1 in. or more	
		Diam.	Height Above Ground.		Sea Level	1914			
		in.	ft.	in.	feet.	mm.	inches.		
KILDARE. (Area, 654 sq. mi.)									
1.—BARROW. 332 sq. mi.									
	Castledermot	Very Rev. M. Walsh.....	5	2	8	...	861	33.90	...
D	„ (Millbrook)	T. Westland Greene, Esq.	8	1	4	225	823	32.41	201
D	Monasterevan (Moore Abbey) ...	Mr. C. Pilgrim	5	1	0	236	846	33.30	193
	„ (Umeras).....	J. Cockburn, Esq.	5	3	6	247	662	26.06	...
2.—LIFFEY. 246 sq. mi.									
	Sallins (Palmerstown)	The Countess of Mayo.....	5	1	0	321	825	32.49	197
D	Straffan House	Mr. F. Bedford	5	1	0	240	780	30.73	187
D	Clongowes Wood College	Rev. J. Gubbins, S.J. ...	8	1	0	246	781	30.76	195
3.—BOYNE. 76 sq. mi.									
DUBLIN. (Area, 354 sq. mi.)									
1.—VARTRY & C. 23 sq. mi.									
	Carrickmines (Claremont).....	John Read, Esq.	5	0	11	250	801	31.55	168
D	Ballybrack (Marino)	Mr. W. J. McCabe	5	3	6	...	624	24.58	157
	Killiney (Williams Park).....	J. C. Larminie, Esq., C.E.	5	1	3	30	737	29.00	...
2.—LIFFEY & C. 188 sq. mi.									
D	Glen-na-Smoel (Rathmines W.W.) ..	W. R. Stephens, Esq., C.E.	5	1	0	510	1226	48.25	229
D	Ballyboden (Rathmines W.W.)..	„ „ „ „ ..	5	1	0	344	972	38.26	206
D†	Blackrock (Charleville).....	S. Harold Pim, Esq.	5	1	0	260	662	26.06	154
D	Dundrum (Manor Mill Lodge)...	G. B. Edmondson, Esq.	5	1	3	192	789	31.05	205
	„ (Belfort House)	Sir J. W. Moore, M.D.	5	...	...	...	756	29.76	217
D	Kingstown (Harbour Yard)	C. S. McNeill, Esq.	8	1	0	52	645	25.39	155
	Rathmines (Terenure)	F. P. Dixon, Esq., C.E.	5	0	6	125	670	26.37	175
D	„ (Leinster Road)	E. H. Cannon, Esq.	5	0	11	125	712	28.05	184
D	„ (Ormond Road)	W. R. Stephens, Esq., C.E.	5	1	0	99	677	26.66	179
	„ (Dartrey Road)	T. Mason, Esq.	5	6	0	...	680	26.78	...
	Donnybrook (Belmont Avenue)...	Douglas Waring, Esq.	5	0	9	100	716	28.19	179
	Clondalkin (Cheeverstown)	Sir J. W. Moore, M.D.	5	1	4	350	851	33.51	171
	Dublin (Leeson Park)	„ „ „ „ ..	5	1	4	75	653	25.71	184
D†	„ (FitzWilliam Square) ...	„ „ „ „ ..	8	1	6	54	674	26.52	198
D†	„ (Trinity College)	Prof. W. E. Thrift... ..	8	1	0	13	646	25.45	158
†	„ (Phoenix Park)	Ordnance Survey Office... ..	5	1	0	159	737	29.02	188
D	„ (Ringsand Pumping Sta.) ..	M. J. Buckley, Esq., C.E.	10	1	1	25	631	24.83	182
D	Clontarf (Pumping Station)	„ „ „ „ ..	5	4	9	22	576	22.69	177
	Lucan (Esker Gardens).....	<i>Irish Times</i> .....	...	...	...	...	804	31.64	184
D	Dublin (Drumcondra Road).....	A. Roycroft, Esq.	5	4	9	76	679	26.74	196
D	Glasnevin (Roy. Botanic Gardens)	Sir F. W. Moore	8	1	0	55	675	26.59	187
	Howth (Balkill Reservoir)	D. Morris, Esq.	8	1	0	304	677	26.67	...
D	„ Castle	J. G. St. Lawrence, Esq.	5	1	6	25	637	25.09	178
3.—NANNY, DELVIN & C. 142 sq. mi.									
D	Malahide (Seamount)	J. G. Jameson, Esq.	5	1	0	150	708	27.87	190
D	„ (The Green)	T. Bateman, Esq.	5	1	7	25	658	25.91	171
D†	Skerries (Milverton Hall).....	Capt. E. G. Woods.....	5	1	6	190	693	27.29	189
D†	Balbriggan (Ardgillan) ... No. 1	Capt. E. R. Taylor.....	5	1	0	211	724	28.50	181
†	„ („) ... No. 3	„ „ „ „ ..	5	1	0	211	730	28.76	...
4.—INSULAR. 1 sq. mi.									
D	Lambay Island	Hon. Cecil Baring	5	1	0	20	666	26.23	167

DIVISION XXI.—LEINSTER—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with .01 in. or more
		Diam.	Height Above Ground.			1914		
		in.	ft.	in.	feet.	mm.	inches.	
MEATH. (Area, 909 sq. mi.)								
1.—SHANNON—Left Bank Tributaries. 32 sq. mi.								
D Dunboyne (Stirling, Clonee).....	Mr. J. Pilkington	8	1	0	231	831	32·71	190
3.—NANNY, DELVIN & C. 150 sq. mi.								
D Drogheda (Mullacroghan).....	W. Brydon Hill, Esq.....	5	1	6	300	699	27·52	171
4.—BOYNE. 560 sq. mi.								
D Summerhill House.....	Lord Langford	5	1	0	372	878	34·56	202
D Athboy (Mitchelston)	W. J. Hopkins, Esq.....	5	1	0	260	872	34·33	204
D „ (Frankville)	C. P. Coghill, Esq.....	8	1	3	227	922	36·28	186
D Navan (Durhamstown)	Miss M. Roberts.....	5	0	8	...	859	33·83	174
D „ (Staffordstown)	R. J. Butler, Esq.....	5	1	0	250	787	30·98	199
D Kells (Headfort).....	The Marquis of Headfort	8	0	6	227	889	35·00	207
5.—DUNDALK BAY. 95 sq. mi.								
D Drumconrath (Aclare House) (R)	Mrs. Singleton	10	1	0	119	740	29·14	204
WESTMEATH. (Area, 712 sq. mi.)								
1.—SHANNON—Left Bank Tributaries. 517 sq. mi.								
D Athlone	Office of Works	5	2	0	128	716	28·18	195
D „ (Twyford)	J. P. Hodson, Esq.....	5	5	0	188	1038	40·87	218
D Moate (Coolatore)	H. A. S. Upton, Esq.....	5	1	6	369	1000	39·39	218
D Mullingar (Belvedere)	Mr. J. Bayliss	5	1	0	367	988	38·91	207
D „ (Ballynegall Gardens)	Mr. W. Wood.....	5	2	0	300	951	37·44	220
D Rathowen (Cromlyn)	Maj.-Gen. J. P. Battersby	8	1	6	250	893	35·14	223
D Castlepollard (Gillardstown Ho.)	W. Hardy, Esq.	5	1	0	290	892	35·11	195
D „ (Pakenham Hall)...	Mr. G. Bogie	5	1	6	300	934	36·78	203
D Coole (Mayne Rectory)	Rev. R. Butler	5	1	0	300	889	34·99	208
2.—BOYNE. 195 sq. mi.								
LOUTH. (Area, 316 sq. mi.)								
1.—BOYNE. 32 sq. mi.								
2.—DUNDALK BAY & C. 264 sq. mi.								
D Drogheda (Black Hall)	G. H. Pentland, Esq.....	5	1	0	170	651	25·64	...
D Dundalk (Town Hall)	M. Sellars, Esq., C.E.....	8	...	...	...	696	27·42	198
D „ (Mount Pleasant)	Telford Macneill, Esq.....	5	1	0	60	840	33·06	221
D „ (Aughneskea Reservoir)	M. Sellars, Esq., C.E.....	5	1	3	205	957	37·69	...
3.—CARLINGFORD LOUGH. 20 sq. mi.								
D Greenore.....	T. Chambers, Esq., C.E.	5	1	0	20	790	31·10	204
LONGFORD. (Area, 424 sq. mi.)								
1.—ERNE. 61 sq. mi.								
2.—SHANNON—Left Bank Tributaries. 363 sq. mi.								
D Ballymahon (New Castle).....	Col. W. H. King-Harman	5	2	5	250	923	36·33	213
D Cloondrah	Office of Works	5	2	0	130	730	28·72	224
D Castle Forbes Gardens	The Earl of Granard.....	8	1	0	168	1047	41·21	219

MAP OF DIVISION XXII.

CONNAUGHT,

Showing the River-Divisions.



DIVISION XXII.—CONNAUGHT.

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with .01 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
GALWAY. (Area, 2377 sq. mi.)								
1.—ERIFF & C. 141 sq. mi.								
2.—GALWAY BAY, NORTH. 277 sq. mi.								
D Knockboy House	D. H. Thompson, Esq.....	5	0	10	150	1248	49.14	233
3.—CORRIB. 846 sq. mi.								
D Ballynahinch Castle	R. Berridge, Esq.	5	1	9	41	1648	64.87	242
Tuam (Castle Hacket)	Capt. D. K. Bernard	5	1	0	..	1159	45.63	...
„ (Gardenfield)	R. J. Kirwan, Esq.....	5	1	0	155	1251	49.26	...
„ („)	„ „ „	5	6	0	161	1232	48.52	...
4.—GALWAY BAY, SOUTH. 281 sq. mi.								
D Woodlawn	Mr. C. Farmer	5	3	6	300	1088	42.84	228
5.—SHANNON—Right Bank Tributaries. 808 sq. mi.								
D Ahascragh (Clonbrock)	Lord Clonbrock, K.P.....	10	5	6	200	1326	52.22	185
6.—INSULAR. 29 sq. mi.								
ROSCOMMON. (Area, 961 sq. mi.)								
1.—SLIGO BAY. 6 sq. mi.								
2.—MOY. 11 sq. mi.								
3.—CORRIB. 16 sq. mi.								
4.—SHANNON—Right Bank Tributaries. 928 sq. mi.								
D Strokestown (Castlenode)	W. J. Walpole, Esq.....	5	1	0	160	941	37.06	175
D Albert Lock [Jamestown]	Office of Works	5	2	0	146	866	34.10	192
MAYO. (Area, 2149 sq. mi.)								
1.—SLIGO BAY. 10 sq. mi.								
2.—MOY & C. 797 sq. mi.								
D Castlebar House	A. C. Larminie, Esq.....	5	3	4	...	1328	52.27	253
D Crossmolina (Enniscoe)	J. Pratt, Esq.....	5	0	11	74	1399	55.09	250
3.—BLACKSOD BAY & C. 411 sq. mi.								
4.—CLEW BAY. 254 sq. mi.								
D Westport House	Marquis of Sligo	5	1	0	35	1334	52.52	233
D „ (St. Helen's)	Miss Kelly	6	0	11	35	1276	50.22	242
D Newport (Burrishoole House) ..	H. M. Anketell Jones, Esq.	5	1	10	30	1395	54.92	242
5.—ERIFF & C. 121 sq. mi.								
D Aasleagh House	Marquis of Sligo	5	1	0	35	2337	92.01	244
6.—CORRIB. 432 sq. mi.								
D Cong (The Glebe)	Rev. Canon R. Y. Lynn...	5	1	11	112	1395	54.91	217
7.—SHANNON—Right Bank Tributaries. 35 sq. mi.								
8.—INSULAR. 89 sq. mi.								
D Dugort (Slievemore Hotel)	Mrs. J. R. Sheridan	5	1	0	50	1684	66.31	224
SLIGO. (Area, 716 sq. mi.)								
1.—DROWES & C. 49 sq. mi.								
2.—SLIGO BAY. 444 sq. mi.								
D Collooney (Markree Observatory)	J. R. Armstrong, Esq.....	5	1	0	127	1202	47.32	234
„ („)	„ „ „	5	16	6	143	1164	45.83	234
D Sligo	R. J. Kirwan, Esq.	5	1	0	90	1103	43.43	221
3.—MOY & C. 166 sq. mi.								

DIVISION XXIII.—ULSTER.

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with 0.1 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
CAVAN. (Area, 753 sq. mi.)								
1.—ERNE. 489 sq. mi.								
D Killeshandra (Castle Hamilton)...	Major W. J. Hamilton...	5	1	0	251	714	28.13?	...
D „ (Drom Mullac) ...	Miss Prudence M. Lough	5	1	0	280	948	37.34	210
D Cootehill Workhouse.....	T. Conolly, Esq.....	5	0	9	306	876	34.49	198
D „ (Errigle).....	Dr. T. H. Moorhead	5	0	9	273	810	31.88	205
D Belturbet (Cloverhill)	Mrs. Sanderson	5	1	0	202	938	36.91	210
2.—SHANNON—Right Bank Tributaries. 34 sq. mi.								
3.—SHANNON—Left Bank Tributaries. 91 sq. mi.								
4.—BOYNE. 122 sq. mi.								
5.—DUNDALK BAY. 17 sq. mi.								
FERMANAGH. (Area, 713 sq. mi.)								
1.—ERNE. 667 sq. mi.								
D Newtownbutler (Crom Castle) ...	Mr. A. Reid	5	0	9	174	1013	39.87	264
Enniskillen (Portora)	W. N. Tetley, Esq.	5	1	0	251	1080	42.51	...
Belleek (Heronshaw).....	J. Beacom, Esq.....	5	1	5	150	1229	48.38	233
2.—DROWES & C. 46 sq. mi.								
MONAGHAN. (Area, 498 sq. mi.)								
1.—ERNE. 208 sq. mi.								
D Dartrey [Cootehill]	The Earl of Dartrey	5	2	6	265	938	36.93	209
2.—DUNDALK BAY. 132 sq. mi.								
3.—BANN—Lough Neagh, West. 158 sq. mi.								
D Monaghan (Rowantree House)...	Dr. J. Campbell Hall.....	5	5	6	240	762	30.01	204
ARMAGH. (Area, 514 sq. mi.)								
1.—DUNDALK BAY. 118 sq. mi.								
2.—CARLINGFORD LOUGH. 23 sq. mi.								
Bridge Street [Newry]	A. L. D. Meares, Esq.....	5	0	9	22	819	32.26	194
D Bessbrook (Deramore)	Mr. W. Smith.....	5	1	6	252	939	36.98	173
3.—BANN—Lough Neagh, East. 37 sq. mi.								
D Lurgan (Belle Vue)	S. A. Bell, Esq.....	5	0	5	200	689	27.12	184
4.—BANN, UPPER. 144 sq. mi.								
D Tanderagee.....	Dr. J. Taylor	5	1	6	198	843	33.18	200
„ „ „ „ (R) „ „ „ „	„ „ „ „	8	1	6	198	838	32.98	...
5.—BANN—Lough Neagh, West. 192 sq. mi.								
D Armagh Observatory.....	Dr. J. L. E. Dreyer	8	1	0	210	814	32.06	217
D Loughgall (Manor House)	Mrs. Sowter	5	1	0	210	700	27.57	190
DOWN. (Area, 961 sq. mi.)								
1.—CARLINGFORD LOUGH. 104 sq. mi.								
D Warrenpoint (Clonallon)	Lt.-Col. A. W. Mansergh	5	1	3	15	951	37.44	203
2.—DUNDRUM BAY & C. 173 sq. mi.								
Newcastle (R. Co. Down Golf Club)	J. Howden, Esq.	5	1	8	10	989	38.94	...
D „ (Tullymore Park).....	The Earl of Roden.....	5	1	0	276	1404	55.29	185
D Seaforde	Major W. G. Forde	8	0	5	180	986	38.83	197

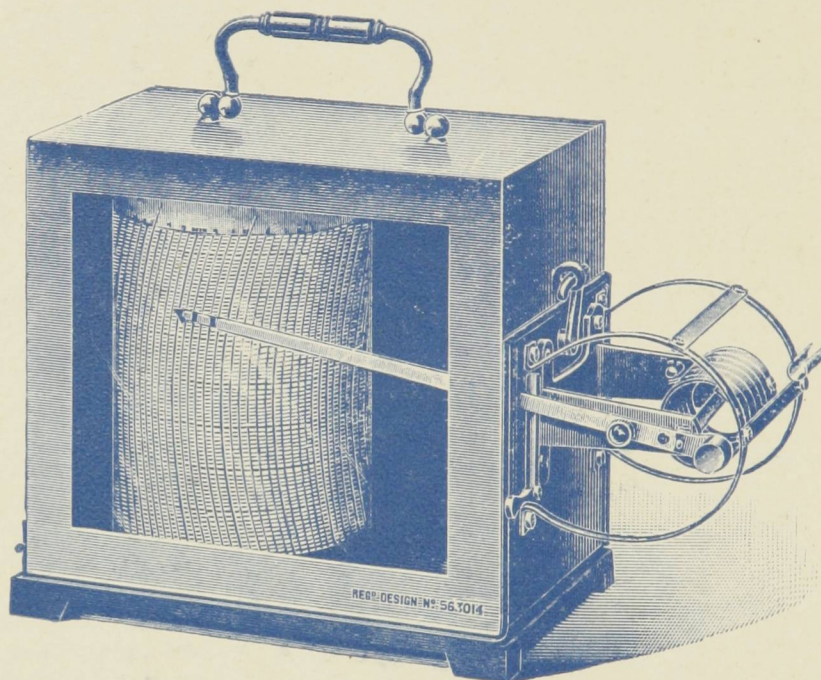
DIVISION XXIII.—ULSTER—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with '01 in. or more
		Diam.	Height Above		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
DOWN—(con.)								
3.—STRANGFORD LOUGH. 260 sq. mi.								
4.—COAST STREAMS. 47 sq. mi.								
Donaghadee	Meteorological Office.....	8	1	6	40	715	28·14	199
5.—BELFAST LOUGH. 206 sq. mi.								
6.—BANN—Lough Neagh, East. 7 sq. mi.								
7.—BANN, UPPER. 162 sq. mi.								
D Mourne Mountains (Fofanny Res.)	J. H. H. Swiney, Esq., C.E.	5	1	0	938	2037	80·20	172
Rathfryland (Ballynagappoge)...	Mr. W. Henning	5	1	0	300	835	32·86	...
Castlewellan (Lough Island Res.)	Mr. J. Byrne	5	0	8	443	1216	47·86	197
Banbridge (Corbet Reservoir) ...	Mr. W. Ervin.....	5	0	9	234	685	26·96	...
„ Observatory	Mr. H. D. Fleming	5	1	6	210	789	31·05	152
D „ (Milltown)	W. Haughton Smyth, Esq.	5	1	0	200	654	25·74	169
D Moyallon House [Portadown] ...	Mr. J. Lynas	5	0	5	130	710	27·95	195
8.—INSULAR. 2 sq. mi.								
ANTRIM. (Area, 1193 sq. mi.)								
1.—BELFAST LOUGH. 107 sq. mi.								
D Lisburn (Ulster Provincial School)	J. Ridges, Esq.	5	1	6	208	973	38·31	188
D† Belfast (Queen's University) ..	Mr. G. Robinson	5	1	0	62	888	34·98	214
D „ (Cave Hill Road)	Miss Firth	5	1	0	200	973	38·29	237
D „ (Sewage Outfall Works) (R)	H. A. Cutler, Esq.....	8	2	11	19	822	32·36	190
„ (Oldpark Filters)	F. W. McCullough, Esq. C.E.	5	3	6	203	1002	39·46	199
Carrickfergus (Dorisland)	„ „ „	5	3	0	250	825	32·49	205
„ (South Woodburn)	„ „ „	5	3	0	640	899	35·40	217
„ (North „)	„ „ „	5	1	0	735	1071	42·17	225
„ (Copeland)	„ „ „	5	3	0	424	815	32·08	212
„ (Lough Mourne) ...	„ „ „	5	3	0	596	974	38·36	213
2.—GLENARM & C. 186 sq. mi.								
D Glenarm Castle	The Earl of Antrim	5	1	0	70	1077	42·40	187
3.—BUSH & C. 193 sq. mi.								
D† Bushmills (Dundarave)	Mr. J. Hatty	5	1	0	162	898	35·37	212
4.—BANN, LOWER. 112 sq. mi.								
Ballymoney (Balamore)	George Smyth, Esq.	5	1	5	50	807	31·76	221
5.—BANN—Lough Neagh, East. 590 sq. mi.								
Stonyford (Belfast W. W.)	F. W. McCullough Esq. C.E.	5	1	6	437	833	32·80	179
Antrim (Ardnaveigh)	H. B. Murray, Esq.	5	1	0	210	774	30·48	185
D Ballymena (Harryville)	J. R. Williams, Esq.	5	1	5	150	1260	49·62	232
D Broughshane (Quolie)	H. O'Hara, Esq., C.E.....	5	1	4	893	1126	44·35	225
6.—INSULAR. 5 sq. mi.								
LONDONDERRY. (Area, 816 sq. mi.)								
1.—LOUGH SWILLY. 6 sq. mi.								
Londonderry (Dunruadh)	J. H. Welch, Esq.....	5	0	6	130	1070	42·12	225
2.—BUSH & C. 9 sq. mi.								
3.—BANN, LOWER. 240 sq. mi.								
4.—BANN—Lough Neagh, West. 196 sq. mi.								
5.—FOYLE & C. 365 sq. mi.								
D Londonderry (Creggan Res.)	Mr. W. Hutchison.....	8	1	0	320	1044	41·12	260

DIVISION XXIII.—ULSTER—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more
		Diam.	Height Above Ground.		Sea Level	1914		
		in.	ft.	in.	feet.	mm.	inches.	
LONDONDERRY—(con.)								
5.—FOYLE & C—(con.)								
Limavady (Drenagh).....	M. M. McCausland, Esq.	5	1	6	80	920	36·21	230
D „ (Culmore Ho., Myroe)	J. B. Martin, Esq.....	8	1	0	13	904	35·58	223
D Bellarena.....	Sir F. G. Heygate, Bart...	5	1	3	7	937	36·89	226
TYRONE. (Area, 1257 sq. mi.)								
1.—ERNE. 46 sq. mi.								
2.—BANN—Lough Neagh, West. 442 sq. mi.								
D Dungannon (Killyman Rectory)..	Rev. E. F. Campbell	5	0	11	150	818	32·21	229
D Cookstown (Lissan House)	J. H. Staples, Esq.....	5	0	10	310	877	34·54	183
3.—FOYLE. 769 sq. mi.								
D Omagh (Edenfel)	Lt.-Col. J. B. Buchanan...	8	1	0	280	1056	41·59	226
D Newtown Stewart (Baron's Court)	Mr. R. Bell.....	5	1	0	250	1068	42·06	195
D Sion Mills (Sion House)	Miss G. I. Herdman	5	3	0	100	988	38·90	221
DONEGAL. (Area, 1875 sq. mi.)								
1.—DONAGH & C. 146 sq. mi.								
2.—LOUGH SWILLY. 273 sq. mi.								
D Letterkenny (District Asylum)..	E. E. Moore, Esq., M.D....	5	1	0	183	1168	46·00	243
Rathmullen (Fort Royal)	Col. C. Montgomery	5	1	4	35	1193	46·98	...
3.—SHEEPHAVEN & C. 307 sq. mi.								
D Milford (The Manse)	Rev. W. J. Young.....	5	1	6	150	1041	41·00	244
Dunfanaghy (St. Helen's).....	J. J. MacGrath, Esq., M.D.	8	1	0	55	1199	47·19	238
D „ (Horn Head)	C. F. Stewart, Esq.	5	2	0	163	1197	47·11	247
4.—GWEEBARRA & C. 341 sq. mi.								
5.—DONEGAL BAY. 322 sq. mi.								
D Killybegs (Rockmount).....	Comm. G. G. Philipps, R.N.	5	1	0	65	1501	59·08	231
6.—ERNE. 68 sq. mi.								
7.—DROWES & C. 10 sq. mi.								
8.—FOYLE. 396 sq. mi.								
D Convooy	Rev. Preb. K. Thompson	5	0	9	150	1214	47·79	231
9.—INSULAR. 12 sq. mi.								

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