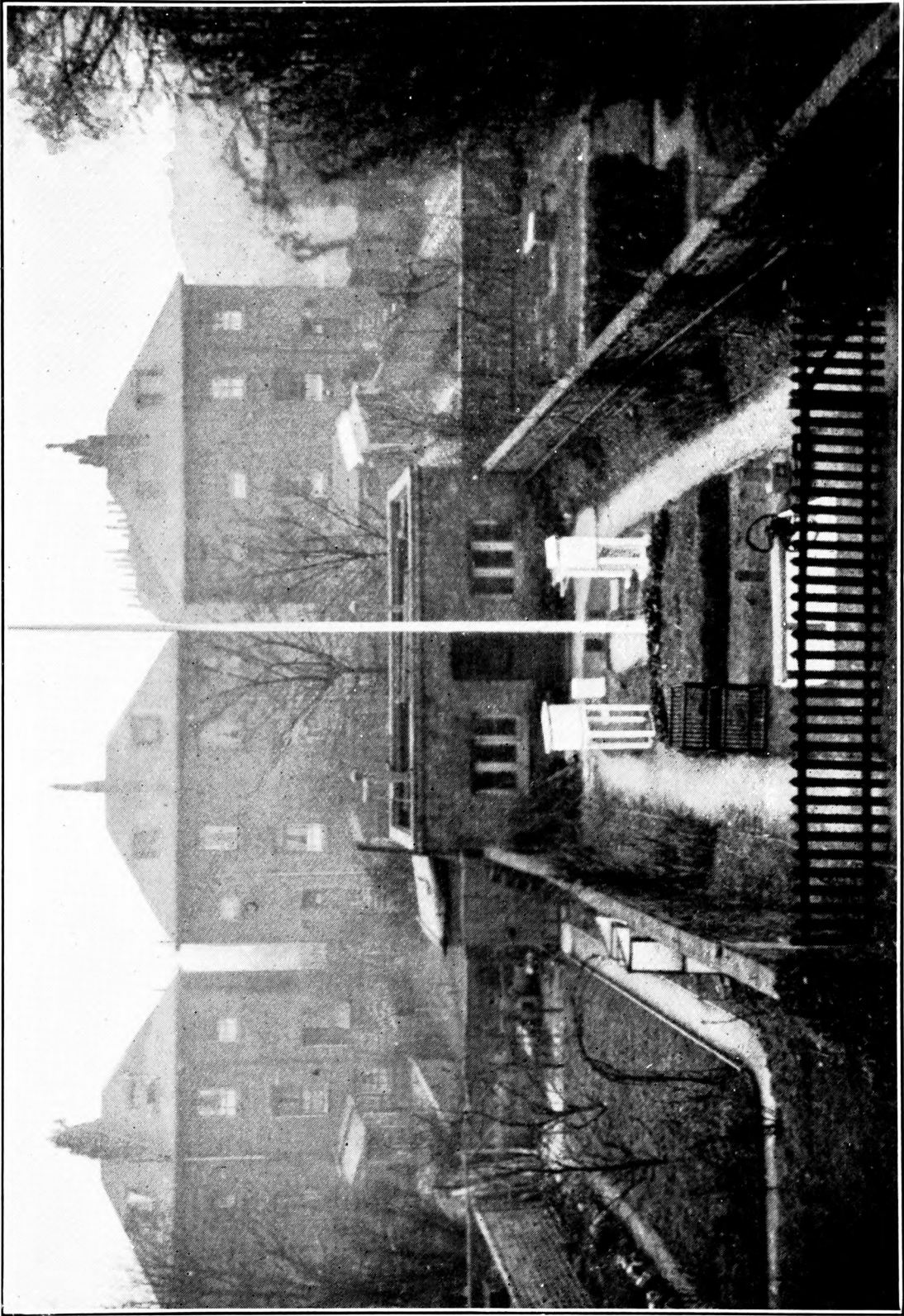


BRITISH RAINFALL,
1921.



Photograph by Mr. H. E. Carter
View of the Meteorological Station at 62, Camden Square, London, N.W.1, the Headquarters of the British Rainfall Organization until March, 1922. The Station, which was established by the late Mr. G. J. Symons F.R.S. in 1858, has now been taken over by the Royal Meteorological Society, and it is hoped that the continuity of the observations has been secured.



FOR OFFICIAL USE

METEOROLOGICAL OFFICE—AIR MINISTRY.

BRITISH RAINFALL, 1921.

THE SIXTY-FIRST ANNUAL VOLUME OF THE
BRITISH RAINFALL ORGANIZATION.

REPORT ON
THE DISTRIBUTION OF RAIN
IN SPACE AND TIME OVER
THE BRITISH ISLES
DURING THE YEAR
1921
AS RECORDED BY MORE THAN 5,000 OBSERVERS
IN GREAT BRITAIN AND IRELAND.

WITH MAPS AND ILLUSTRATIONS.

ISSUED BY THE AUTHORITY OF THE METEOROLOGICAL COMMITTEE.

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1922.

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ERRATUM IN "BRITISH RAINFALL, 1892."

p. [172], Hereford (St. Michael's Priory) *for* 27·44 *read* 23·18.

ERRATUM IN "BRITISH RAINFALL, 1908 to 1920."

Derbyshire, *for* Mickleover Manor *read* Mickleover (Clyde House).

ERRATA IN 'BRITISH RAINFALL, 1915-1917.'

1915. p. [238], Ushaw (St. Cuthbert's College) *for* 805, 31·71 *read* 645, 25·40.

1916. p. [207], Ushaw (St. Cuthbert's College) *for* 1011, 39·82 *read* 810, 31·90.

1917. p. [192], Ushaw (St. Cuthbert's College) *for* 950, 37·39 *read* 759, 29·90.

ERRATA IN "BRITISH RAINFALL, 1918."

p. [123], Camden Square, *for* 740, 29·12 *read* 744, 29·30.

p. [196], Ushaw (St. Cuthbert's College) *for* 904, 35·61 *read* 724, 28·50.

ERRATA IN "BRITISH RAINFALL, 1919."

p. 204, Ushaw (St. Cuthbert's College) *for* 935, 36·81 *read* 747, 29·40.

p. 209, Swansea (Victoria Park) *for* 1,113, 43·81 *read* 1,136, 44·73.

p. 262, Two Lines from bottom, *for* Min. in January, February, November, December, *read* [116], (116), [117], [117] respectively.

ERRATA IN "BRITISH RAINFALL, 1920."

p. 4, Percolation at Timsbury in July, *for* ·22 *read* 2·22 ?

p. 36, Kew Observatory, *for* May *read* 38·3, 19·1, 2·00.

p. 36, Kew Observatory, *for* Year *read* 616·7, 437·9, 1·41.

p. 155, Richmond (Kew Observatory), *for* 600, 23·62 *read* 617, 24·28.

p. 168, High Wycombe (R. Gram. Sch.) *for* 720, 28·36 *read* 745, 29·35.

p. 195, Ollerton (Boughton W. W.) *for* 411 *read* 141.

p. 201, Sabden (Churn Clough Res.) *for* 840 *read* 790.

p. 201, Sabden (Stainscomb) *for* 1,070 *read* 990.

p. 206, Leeds (Weetwood Garth) *for* 840, 33·05 *read* 865, 34·05.

p. 216, Swansea (Victoria Park) *for* 1,468, 57·81 *read* 1,477, 58·13.

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BRITISH RAINFALL, 1921.

PART I.

THIRD ANNUAL REPORT OF THE SUPERINTENDENT OF THE BRITISH RAINFALL ORGANIZATION TO THE DIRECTOR OF THE METEOROLOGICAL OFFICE, FOR THE YEAR ENDED JUNE 30th, 1922.

Removal of Headquarters.—On March 20th, 1922, the headquarters of the British Rainfall Organization were removed from 62, Camden Square, London, N.W.1., to the Meteorological Office, Exhibition Road, South Kensington, S.W.7. This change had become necessary in order to facilitate the co-operation with other Departments of the Meteorological Office, both at South Kensington and Kingsway, consequent on the transfer of the Organization to Government control in 1919. It has enabled a substantial economy to be effected in the routine work, by making it possible for the staff to take increased advantage of the Air Ministry central organization in respect of accounting and correspondence, thereby releasing the assistants specially trained for handling rainfall returns from purely clerical work. In this connection the stocks of publications and blank forms, registers, etc., have been transferred to H.M. Stationery Office and the Publications Department of the Air Ministry. In future all issues will be made by one or other of these Departments.

The library at Camden Square, consisting very largely of works on rainfall and kindred subjects, has been incorporated with the Meteorological Office Library at South Kensington. A large number of duplicate volumes were distributed to the Observatories.

Meteorological Observations at 62, Camden Square.—It will be remembered that the Trustees of the British Rainfall Organization, when arranging for the transfer of the work of the Organization to the Meteorological Office, retained in their own hands the Endowment Fund of the Organization and also the lease of the historic Rainfall House at 62, Camden Square. The removal to Exhibition Road has necessitated the termination of the sub-lease which the Trustees had granted to H.M. Office of Works for the use of the building by the Meteorological Office, and has also made it impossible for the staff to continue the meteorological observations which had been carried on without break for sixty-four years. These observations, which constituted one of the finest series of meteorological records extant,

were commenced by the late Mr. Symons in 1858, in the garden of No. 136, Camden Road, about 250 yards south-west of the present site. The instruments were moved to Camden Square in 1869. Besides full records, either once or twice daily, of pressure, temperature, rainfall and numerous other elements, the observations included a continuous autographic rainfall record since 1881 and a unique unbroken record of daily evaporation since 1885.

The responsibility for continuing the observations thus reverted to the Trustees, and it is gratifying to be able to record that they have been able to arrange for the continuance of this work on a satisfactory basis. At a meeting of the Royal Meteorological Society on March 15th, 1922, Dr. H. R. Mill, on behalf of the Trustees, announced that it had been resolved unanimously to offer as a gift to the Society the unexpired portion of the lease of 62, Camden Square, together with the accumulated funds held by the trust, expressing the hope that the Society would use every endeavour to carry on the observations; would consider the possibility of securing the freehold of the house; and would utilize the income for the purpose of encouraging the study of rainfall. The Royal Meteorological Society has accepted this generous offer. The observations are being carried on provisionally by the voluntary assistance of the staff and pupils of the North London Collegiate School for Girls. They have been to a slight extent remodelled to meet the altered conditions, the most important change being the substitution of a standard Stevenson thermometer screen for the old open Glaisher screen previously in use. A photograph of the station as it now appears is reproduced as a frontispiece to this volume.

Rainfall observers, and more particularly those whose association with the Organization extends back to the lifetime of its Founder, will be gratified to know that the meteorological observations which were his special pride, and which Dr. Mill carried on with so much fidelity, have every promise of permanence, so long at least as the site remains sufficiently open to render them of scientific value.

The Water Resources Committee of the Board of Trade.—The final Report of this Committee, which was published towards the end of 1921, has an important bearing on the work of the Organization. The Committee was originally appointed to examine the possibility of developing the existing water resources of the country for hydro-electric purposes. The terms of reference were subsequently enlarged to include the consideration of the allocation of water supplies, so that its purview covered the whole field of water economy in its broadest aspects.

The Committee recommend that a complete hydrological survey of the British Isles be commenced forthwith, and lay special stress upon the desirability of completing at the earliest possible date the map

of the average rainfall on the scale of two miles to one inch, a considerable part of which has been carried out by Dr. Mill. The completion of this map will, of necessity, occupy several years, but the incompleting portion has already been mapped in a provisional way on a smaller scale. Copies of the reduced map, and of the maps of the average monthly rainfall on the scale of nineteen miles to one inch, an account of which was given in "*British Rainfall, 1920*" (pp. 254-271),* have already been supplied to the Ministry of Health with a view to this project. Arising out of the report of the Committee, the Ministry of Health has appointed an Inter-departmental Committee, on which the Director of the Meteorological Office acts as representative of the Air Ministry, in order that full advantage may be taken of the data and experience accumulated by the British Rainfall Organization in connection with water schemes.

The Staff of Observers.—The recovery in the numbers of rainfall observers reporting to the Organization continues. The interest stimulated by the very dry year has undoubtedly brought the Organization into contact with a good many Observers who had not previously sent in their records, but the most gratifying improvement is in the mountain areas of Scotland, where a substantial increase has occurred. An extremely valuable acquisition this year is a group of records from stations recently established in carefully chosen sites on the central Grampians, in connection with the Grampian Electricity Supply Scheme. Most of the stations in question are at the various shooting lodges in the Forest of Atholl, and we are indebted to His Grace the Duke of Atholl for his good offices in the matter.

The future of rainfall observing in Ireland gives cause for anxiety, and a number of important records have come to an end, but several schemes for increasing the representation of the country have been recently put forward, and there is cause for hope that some improvement will soon take place in this respect.

The number of rainfall stations inspected during the year was 272. This number includes, in addition to the records inspected by the staff of the British Rainfall Organization, all those visited by other members of the staff of the Meteorological Office.

London	11	Wiltshire	2	Nottinghamshire .	3
Surrey	5	Dorsetshire.....	5	Derbyshire	1
Kent	10	Devonshire	12	Lancashire	5
Sussex	20	Cornwall	5	Yorkshire	9
Berkshire	4	Gloucestershire	3	Durham	1
Middlesex	11	Herefordshire.....	2	Northumberland ..	3
Hertfordshire	7	Shropshire	8	Cumberland	4
Oxfordshire	1	Staffordshire	2	Monmouth	1
Essex	6	Worcestershire.....	9	Pembroke	3
Suffolk	1	Warwickshire.....	3	Cardigan	2

* See also *Q. J. R. Met. Soc.* Vol. XLVII, 1921, pp. 101-116.

Number of Rainfall Stations inspected—*continued*.

Brecon	2	Haddington	1	Kincardine	1
Montgomery.....	17	Lanark	1	Aberdeen	3
Flint	1	Ayrshire	3	Banff	1
Denbigh	1	Dumbarton	2	Moray	1
Merioneth	1	Stirling	1	Nairn.....	3
Carnarvon	1	Bute	1	Inverness	7
Channel Islands ...	22	Argyll	18	Ross	1
Kirkcudbright	1	Fife	3	Caithness	1
Dumfriesshire	4	Perth	1	Shetland	2
Peebles	2	Forfarshire	9	Mayo	1

In addition to the above, twenty-three rain gauge sites were selected or inspected.

London	2	Hertfordshire	1	Channel Islands...	2
Surrey	2	Worcestershire....	1	Dumfriesshire	1
Berkshire	2	Northumberland ..	1	Argyllshire	5
Middlesex	3	Montgomeryshire..	3		

Acknowledgements are due to the Corporation of Liverpool, the Metropolitan Water Board, the Thames and Severn Conservancy Boards, the States Meteorological Department of Guernsey and to Mr. J. W. Melles of Mull for assistance in carrying out portions of the above inspections.

The resumption of active inspection of rainfall stations after the practical cessation caused by the war has proved most beneficial, and it is hoped that it may be possible to develop it further. The Superintendent is always glad to hear from any Observer who desires an inspection of his station to be made, and to make every endeavour to arrange for it when any member of the staff is in the district.

Collection of Rainfall Records in Scotland.—A scheme has been drawn up and partially put into operation for the transference of the work of dealing with the rainfall records for stations in Scotland to the Meteorological Office, Edinburgh.

For many years the Scottish Meteorological Society had collected and published in the Society's Journal statistics of rainfall for nearly all stations in Scotland. It was the practice for the returns received by the Scottish Society in Edinburgh to be carefully compared with those sent to the British Rainfall Organization in London and for the two bodies to collaborate in every possible way, but so long as there was independent control a certain amount of overlapping and duplicating of work was inevitable. In 1920, the Meteorological Office took over from the Scottish Meteorological Society the responsibility for maintaining a Branch Office in Edinburgh, at which climatological statistics for Scotland are prepared. The whole of the work is therefore now done under the general supervision of the Director of the Meteorological Office, and even closer co-operation than in the past has become possible.

Careful consideration was given to the question whether it was preferable to collect the whole of the statistics in London, or to discontinue receiving Scottish returns in London and to delegate this portion of the work entirely to Edinburgh, the Superintendent in London retaining full responsibility. It was ultimately decided to adopt the latter course. A request to post their returns, both annual and monthly, to the Superintendent, Meteorological Office, 10 Rothesay Place, Edinburgh, as from January 1st, 1922, was, therefore, sent to all Observers in Scotland.

It is not the intention to issue separate publications for Scotland. The British Isles must be dealt with as a single unit, if their rainfall is to be studied intelligently. Apart from the general encouragement of rainfall observing in Scotland and the improvement of existing stations, the work of the Edinburgh Office with regard to rainfall will, therefore, consist of the collection and examination of the records, which will be transmitted to London for incorporation in *British Rainfall* and for permanent preservation. The intention is thus to maintain the complete identity of the British Rainfall Organization and not to set up an independent Rainfall Department for Scotland.

It is confidently hoped that this step, which may be regarded as the first attempt at devolution in the work of the Organization, will result in a greater amount of personal touch being maintained with the Observers in Scotland. Facilities for the inspection of rain gauges will be considerably increased and more attention can be given to improving the distribution of stations.

British Rainfall, 1921.—No change has been introduced in the arrangement of the sections. The volume owes its principal interest to the fact that the year 1921 was in some respects the most remarkable since rainfall records for the British Isles first became available, a period of about a hundred years. In London there is no doubt that the year was the driest for practically a century and a half: earlier than this the records are too fragmentary to enable any safe opinion to be formed. A preliminary account of the rainfall of the very dry period, February to July, 1921, was given as a paper before the British Association at their meeting in Edinburgh and a more complete paper by Mr. C. E. P. Brooks, M.Sc. and Mr. J. Glasspoole, B.Sc. was published in the *Quarterly Journal of the Royal Meteorological Society* (Vol. XLVIII, 1922, pp. 139-168). A further article appears in Part IV of this volume, and evidence of the unprecedented nature of the dry weather, more particularly in the south-east of England, will be found in practically every section of the book. Part IV also contains the results of an investigation by Mr. Glasspoole on the fluctuations of annual rainfall in the British Isles, laying special emphasis on the geographical aspects of the question in a manner which does not appear to have been attempted before. The volume also

contains a note from the pen of the eminent authority on public health, Dr. J. Brownlee, discussing the correlation between rainfall and epidemic scarlet fever.

The Book of Normals.—It is proposed to publish as a section of the *Book of Normals of Climatological Elements* the monthly and annual averages of rainfall for the period 1881-1915 computed in connection with the preparation of the series of maps of average monthly rainfall described in *British Rainfall*, 1920, pp. 254-271. These average values, which represent about 600 very well distributed stations in all parts of the British Isles differ from the majority of collated data of average monthly rainfall in being strictly synchronous and therefore intercomparable. In a few cases in which the records did not cover the whole of the 35 years some interpolations were made, but the great majority of the records were complete, homogeneous and carefully tested.

The period selected is that now adopted in computing average values for all climatological elements for official meteorological work, and the rainfall averages are the same as those used in the various sections of *British Rainfall* and in the *Meteorological Magazine*.

It is hoped that the tables will shortly be ready for publication.

Scientific Work and Advice.—The completion of provisional average annual and monthly maps already referred to has made it possible readily to comply with a large number of requests for average rainfall maps. Such maps for either the whole or some part of the British Isles have been supplied during the past year to the Ministry of Health, the Scottish Board of Health, the Huddersfield Technical College, Messrs. Martin & Fenwick, C.E., Capt. W. N. McClean, Mr. M. Kellow, C.E. and numerous others. Copies of these maps were exhibited at the Soirée of the Royal Meteorological Society and at the Royal Agricultural Society's Show at Cambridge.

Data or other information on rainfall have been supplied to the Forestry Commission, the Thames Conservancy, the Metropolitan Water Board, the Glamorgan Agricultural Committee, The National Institute for Medical Research, the Leicestershire County Council, Leeds University, the Midland Agricultural and Dairy College, Messrs. Tawse and Allan, C.E., and numerous other public bodies, firms or individuals.

Inquiries relative to the drought of 1921 were extremely numerous. Special articles on the subject were written for the British Association, the Royal Meteorological Society and others. I supplied a preliminary account of the rainfall of 1921 to *The Times* and several articles on rainfall work to other publications.

I have continued to act as rainfall adviser to the Metropolitan Water Board and the Birmingham Corporation and in a similar capacity

assisted the Promoters of the Grampians Electricity Supply Bill, the Padiham Urban District Council and the engineers engaged upon drafting several hydro-electric schemes. In two cases Parliamentary Committees on Water Bills were attended.

The number of inquiries dealt with may be summarized as follows :—

Professional (Parliamentary Bills, Water Power Schemes, etc.)	10
Supply of rainfall data, maps, etc.	81
Other inquiries	218
Total	<hr/> 309 <hr/>

In addition to the above, advice was given to more than 200 Observers on the selection and placing of rain gauges.

CARLE SALTER,
Superintendent.

British Rainfall Organization,
Meteorological Office,
South Kensington, S.W.7.

1st July, 1922.

THE STAFF OF OBSERVERS.

It is gratifying to be able this year to record a definite resumption of the normal growth in the number of Observers reporting to the Organization. It was pointed out in *British Rainfall, 1920*, that the continual decline in numbers, which had been the natural concomitant of the war years, gave way in 1920 to a small increase. In 1921 the increase has been considerably more than maintained. This is no doubt partly a result of the great interest aroused by the unusual drought which continued throughout the greater part of 1921. It must be remembered, however, that although the drought probably stimulated rainfall observing in this country to an appreciable extent, records commenced after January 1st, 1921, being incomplete, are not included in the volume, so that they do not affect the numbers now given. On the other hand, a good many Observers who had been recording for several years, but who had not previously sent their observations for publication, did so for the first time, wishing to make the official account of this remarkable year as complete as possible.

British Rainfall, 1921, compared with 1920. Number of Records Published.

			Total Gain.	Total Loss.	Difference.	Per cent. change in year.
England	..	..	307	190	.. +117	.. +3·4
Wales, etc.	..	..	33	40	.. - 7	.. -1·5
Scotland	..	..	65	39	.. + 26	.. +3·4
Ireland	..	..	25	35	.. - 10	.. -3·5
British Isles	..	..	430	304	.. +126	.. +2·5

Number of Rainfall Records Published in the Volumes of "British Rainfall" for the undermentioned Years.

Years.	England.	Wales, etc.	Scotland.	Ireland.	British Isles.	Change from previous year.	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
1915	.. 3882	.. 448	.. 794	.. 288	.. 5412	.. - 41	.. 4·5

Number of Rainfall Records—*continued*.

1916	..	3711	..	440	..	772	..	269	..	5192	..	— 220	..	4·3
1917	..	3591	..	446	..	778	..	270	..	5085	..	— 107	..	4·2
1918	..	3532	..	429	..	770	..	268	..	4999	..	— 86	..	4·1
1919	..	3419	..	436	..	766	..	277	..	4898	..	— 101	..	4·1
1920	..	3460	..	454	..	758	..	281	..	4953	..	+ 55	..	4·1
1921	..	3577	..	447	..	784	..	271	..	5079	..	+ 126	..	4·2
Difference														
from														
1920 :														
		}		+ 117..		— 7		.. + 26		.. — 10		.. + 126		.. — .. + 0·1

The most satisfactory feature is the definite increase in the number of stations in Scotland, where there are as many as 65 gains to set against 39 losses. Many of the new stations are in areas where records were badly wanted, including the counties of Argyllshire, Perthshire, Aberdeenshire and Inverness-shire. In Perthshire alone there are as many as 18 gains, and in Inverness-shire 9. Of these a considerable number are stations of first importance, especially the high level gauges at two spots on the slopes of Ben Alder and a group of mountain stations in the central Grampians. Perhaps the most interesting feature of the latter is the resumption of the fine old record at Dalnaspidal on the Highland Railway. A rain gauge was first established at this remote spot in 1872, one of a number erected by the Highland Railway Company at the suggestion of Mr. Symons, and one or two of which still remain in operation.

Wales continues to show a slow decline in the number of observing stations, although as 4 out of the net loss of 7 are due to the Channel Islands which are grouped with Wales for the purpose, the loss is not so real as it appears. A very useful gain is shown in Carmarthenshire, where four valuable mountain records maintained near Llyn-y-fan by the Llanelly Rural District Council have been received for the first time.

In Ireland there is also, as is naturally to be expected, a slight falling off, due almost entirely to the political conditions. Most of the 35 losses are due to old inhabitants being compelled to leave their homes, and in one or two cases the latter have been destroyed. In spite of the extremely disturbed conditions, especially in Southern Ireland, the Irish Rainfall Association has continued to carry on its useful work, and an appreciable number of excellent new records have been started. Among the most useful gains in Ireland may be mentioned records at Waterdale, Galway, and Ramore House in Co. Galway; Castlebar House and Swinford Rectory in Co. Mayo, and Rockdale House, Tullyhogue, in Co. Tyrone.

County.	Records in 1920.	Records] Lost.	Records Gained.	Records in 1921.	Records per 100 sq. mi. of area.	County.	Records in 1920.	Records Lost.	Records Gained.	Records in 1921.	Records per 100 sq. mi. of area.
ENGLAND.						SCOTLAND.					
LONDON	75	4	4	75	64	WIGTOWN	8	1	3	10	2
SURREY	184	13	27	198	27	KIRKCUDBRIGHT..	19	2	2	19	2
KENT	152	12	14	154	10	DUMFRIES	21	3	1	19	2
SUSSEX	132	7	28	153	10	ROXBURGH	15	0	1	16	2
HAMPSHIRE ..	153	8	26	171	11	SELKIRK	9	1	0	8	3
BERKSHIRE ..	49	4	6	51	7	PEEBLES	19	0	0	19	5
MIDDLESEX ..	60	7	10	63	27	BERWICK	12	0	0	12	3
HERTFORDSHIRE..	79	5	5	79	12	HADDINGTON ..	10	0	0	10	4
BUCKINGHAMSHIRE	36	0	3	39	5	MIDLOTHIAN ..	56	3	1	54	15
OXFORDSHIRE ..	58	1	1	58	8	LINLITHGOW ..	18	1	1	18	15
NORTHAMPTON- SHIRE	65	0	3	68	7	LANARK	41	3	1	39	4
HUNTINGDONSHIRE	6	0	1	7	2	AYR	38	4	0	34	3
BEDFORDSHIRE ..	24	1	1	24	5	RENFREW	37	1	4	40	17
CAMBRIDGESHIRE	44	2	1	43	5	DUMBARTON ..	23	0	0	23	9
ESSEX	98	4	9	103	7	STIRLING	34	0	4	38	8
SUFFOLK	48	3	9	54	4	BUTE	8	0	0	8	4
NORFOLK	73	3	15	85	4	ARGYLL	60	1	5	64	2
WILTSHIRE	55	3	5	57	4	CLACKMANNAN ..	4	0	1	5	9
DORSETSHIRE ..	70	2	0	68	7	KINROSS	4	0	0	4	5
SOUTH DEVON ..	134	13	19	140	8	FIFE	36	3	1	34	7
NORTH DEVON ..	42	4	2	40	5	PERTH	62	3	18	77	3
CORNWALL	66	3	11	74	5	FORFAR	41	0	0	41	5
SOMERSETSHIRE..	148	11	11	148	9	KINCARDINE ..	8	3	3	8	2
GLOUCESTERSHIRE	92	5	9	96	8	ABERDEEN	36	2	6	40	2
HEREFORDSHIRE..	47	2	6	51	6	BANFF	9	1	1	9	1.4
SHROPSHIRE ..	53	7	6	52	4	MORAY or ELGIN.	9	0	1	10	2
STAFFORDSHIRE ..	53	6	4	51	4	NAIRN	5	0	0	5	3
WORCESTERSHIRE	60	3	2	59	8	INVERNESS	57	3	9	63	1.5
WARWICKSHIRE ..	40	4	8	44	5	ROSS & CROMARTY	23	3	1	21	0.5
LEICESTERSHIRE..	36	1	1	36	4	SUTHERLAND ..	8	0	0	8	0.4
RUTLANDSHIRE ..	1	0	0	1	0.7	CAITHNESS	9	0	1	10	1.4
LINCOLNSHIRE ..	74	5	4	73	3	ORKNEY	13	1	0	12	3
NOTTINGHAMSHIRE	62	5	2	59	7	SJETLAND	6	0	0	6	1.1
DERBYSHIRE ..	80	5	2	77	8	IRELAND.					
CHESHIRE	77	1	5	81	8	CORK	32	6	3	29	1.0
SOUTH LANCs. ..	103	2	4	105	15	KERRY	11	0	3	14	0.8
CENTRAL LANCs.	86	4	2	84	16	WATERFORD ..	13	1	0	12	1.7
NORTH LANCs. ..	69	3	2	68	11	TIPPERARY	20	3	1	18	1.1
YORKSHIRE, W.R.	327	7	11	331	12	LIMERICK	11	1	0	10	1.0
YORKSHIRE, E.R.	29	1	4	32	3	CLARE	6	1	1	6	0.5
YORKSHIRE, N.R.	107	5	6	108	5	WEXFORD	7	1	0	6	0.7
DURHAM	45	4	1	42	4	KILKENNY	7	1	0	6	0.8
NORTHUMBERLAND	49	3	2	48	2	WICKLOW	13	1	1	13	1.7
CUMBERLAND ..	62	5	7	64	4	CARLOW	4	0	1	5	1.4
WESTMORLAND ..	58	2	8	64	8	QUEEN'S COUNTY	4	0	0	4	0.6
MONMOUTH, WALES, ETC.						KING'S COUNTY..	9	1	0	8	1.0
MONMOUTH	40	4	1	37	7	KILDARE	2	0	1	3	0.5
GLAMORGAN ..	65	4	1	62	8	DUBLIN	34	7	4	31	9
CARMARTHEN ..	15	2	4	17	2	MEATH	7	1	0	6	0.7
PEMBROKE	15	5	2	12	2	WESTMEATH ..	9	0	1	10	1.4
CARDIGAN	22	3	0	19	3	LOUTH	5	1	0	4	0.9
BRECON	87	2	4	89	12	LONGFORD	4	0	0	4	0.2
RADNOR	22	0	2	24	5	GALWAY	4	0	3	7	0.3
MONTGOMERY ..	26	0	0	26	3	ROSCOMMON ..	2	0	0	2	0.2
FLINT	14	1	1	14	5	MAYO	9	1	2	10	0.5
DENBIGH	38	6	4	36	5	SLIGO	4	1	0	3	0.4
MERIONETH ..	14	0	3	17	3	LEITRIM	2	0	0	2	0.3
CARNARVON ..	45	5	9	49	9	CAVAN	3	2	0	1	0.1
ANGLESEY	13	1	0	12	4	FERMANAGH..	4	2	0	2	0.3
ISLE OF MAN ..	10	1	0	9	4	MONAGHAN	1	0	0	1	0.2
CHANNEL ISLANDS	28	6	2	24	32	ARMAGH	7	2	0	5	1.0
						DOWN	12	1	2	13	1.4
						ANTRIM	16	0	0	16	1.3
						LONDONDERRY ..	8	0	0	8	1.0
						TYRONE	4	1	1	4	0.3
						DONEGAL	7	0	1	8	0.4

OBITUARY.

The Obituary list for the twelve months ended on June 30th, 1922, is, we regret to say, the longest ever printed in *British Rainfall*, containing as it does no fewer than 121 names. Among the losses which the ranks of present Observers and the roll of past Observers have sustained are many men of great distinction, not only in meteorology, but in other walks of life. Among these may be mentioned the great statesman Viscount Bryce and the veteran Earl of Ducie, the "father" both of the House of Lords and of the Royal Society. The deaths of two physiographers of high standing, Dr. W. S. Bruce and Dr. H. N. Dickson, of Dr. G. W. Walker and of the late Astronomer Royal are losses which the scientific world has deplored. Among those more closely associated with the work of the Organization were three Observers of over 50 years' standing, Mr. J. J. Dalgleish, Mr. W. C. Stunt, and Mr. Walter Morrison; three of the devoted band of men who took part in the arduous meteorological work at Ben Nevis Observatory; and the oldest member of the office staff, Mr. R. Lamport, who faithfully served the late Mr. Symons and his successors for a period of 34 years, until his retirement in 1919.

The following list of Observers who have died during the year, having records of over 30 years to their credit, is noteworthy:—

Records of Thirty Years and upwards.

Mr. J. J. Dalgleish.....	57 years	Miss E. S. Lomer.....	37 years
Mr. W. C. Stunt.....	55 "	Mr. R. Lamport.....	36 "
Mr. W. Morrison.....	52 "	Mr. E. B. Beauchamp....	34 "
Mr. R. Osmond.....	44 "	Rev. P. R. Worsley.....	34 "
Mr. B. I. Whitaker	44 "	Rev. G. E. Aspinall.....	32 "
Mr. J. A. H. Caird.....	43 "	Rev. T. M. B. Paterson....	32 "
Dr. F. E. Carey.....	42 "	Mr. W. H. Whitaker.....	32 "
Mr. A. Collenette.....	42 "	Lord Ducie.....	31 "
Mr. D. Jones.....	41 "	Sir W. H. M. Christie.....	30 "
Rev. J. H. Thompson....	38 "	Rev. H. C. V. Snowden....	30 "
Mr. J. Thomson.....	38 "	Mr. W. Welch	30 "
Mr. A. H. Leslie Melville..	37 "		

Of the 121 persons whose names appear in the list we have been able to ascertain the age of 81; of these as many as 59 were over 70 years old, 27 were over 80, and 4 over 90, the list being headed by Lord Ducie.

The following brief biographical notes give attention, as far as possible, to the points in which the lives of our friends were most definitely in contact with the work of the British Rainfall Organization.

Rev. JOHN SMITH BEGG, M.A., Rector of St. Olaf's Church, Kirkwall Orkney, who died on December 14th, 1921, at the age of 46, had rendered considerable services to meteorology in Scotland. A native

of Perth, he was educated mainly at Edinburgh, where he entered the University with the high distinction of First Bursar, and graduated with honours in mathematics and natural philosophy. From his student days onwards he took a keen interest in meteorology, and on many vacations he acted as a voluntary observer on Ben Nevis. Mr. Begg's career as a clergyman of the Episcopal Church in Scotland took him successively to West Linton (1907-13) and to Kirkcaldy (1913-18); at each place he established a climatological station and secured its continuance, whilst at West Linton a small research grant enabled him to carry out an investigation into the question of temperature gradients with different types of weather. He resigned his charge at Kirkcaldy in order to accept a commission in the Royal Air Force in 1918, and after a period of training was posted as meteorological officer at Longside Airship Station, Aberdeenshire. On demobilization in September, 1919, and election to his charge at Kirkwall, he took over the duties of climatological Observer at that place.

Mr. Begg was not a physically robust man; but his eager spirit was never daunted, and he will be remembered as representing the highest type of the voluntary worker to whom this country owes so much.

Dr. WILLIAM SPIERS BRUCE at the outset of his career took up the study of medicine, but an opportunity of joining the *Balaena* in 1892 on her voyage to the Antarctic seems to have been the factor which determined the trend of his life, which was thenceforward devoted to oceanography and meteorology, more particularly in their relation to polar exploration. In 1896 he was appointed as naturalist on the Jackson-Harmsworth expedition to Franz-Josef Land, and he spent much time on similar work until, in 1902, he was able to carry out his cherished project of himself organizing an expedition. Bruce's work on the *Scotia* in the Weddell Sea is well known to all interested in Antarctic exploration, not least for the splendid meteorological work, in which he was fortunate in having the co-operation of Mr. R. C. Mossman.

For the purpose of studying his collections, Bruce founded the Scottish Oceanographical Laboratory, and spent the greater part of his remaining years in this work, which was published from time to time. His claim to a place among the great naturalists of the day is well established, and his periodical spells as observer at the Ben Nevis Observatory entitle his name to be enrolled among the Observers of the British Rainfall Organization.

VISCOUNT BRYCE, whose name will probably never be forgotten as statesman, diplomatist, and historian, added to his great achievements in these spheres distinction as a geographer and traveller and a widespread interest in all natural phenomena. During a lifetime

of exceptional activity he found time to carry on for more than 20 years a careful record of rainfall at his home in Sussex, and to give numerous evidences of a keen appreciation of the work of the British Rainfall Organization.

Dr. FRANCIS EDWARD CAREY, of Villa Carey, Guernsey, who died on October 1st at the great age of 86, was a remarkable figure among the many quietly unobtrusive meteorological Observers who have made the standard of voluntary recording in this country so high. Dr. Carey came from a distinguished Guernsey family, and would undoubtedly have made a great name as a medical man but for his devotion to the island of his birth which he could never be brought to leave for any length of time. He commenced meteorological observations in St. Peter Port in 1880, and for more than 40 years maintained a daily register of sunshine, temperature, and rainfall, taking the readings personally to the last in spite of his great age.

Sir WILLIAM CHRISTIE, K.C.B., F.R.S., was appointed chief assistant at the Royal Observatory, Greenwich, in 1870, at the age of 25; and in 1881, whilst still a young man, rose to the high rank of Astronomer Royal, then vacated by Airy. Much of his most brilliant work in this capacity was in connection with photo-heliography and the equipment of the Observatory for solar observation was greatly improved during his term of office. The meteorological work of the Observatory also came under his charge, and during the 30 years over which his responsibility extended, an elaborate tabular statement of the rainfall records at various heights above the ground was regularly prepared and contributed to the pages of *British Rainfall*.

Mr. ADOLPHUS COLLENETTE. The death of Mr. Collenette, in his eighty-first year, following closely upon that of his veteran friend, Dr. Francis Carey, robbed the island of Guernsey of another distinguished meteorologist. Mr. Collenette, whose scientific interests were extremely diverse, spent the whole of his long life in his native island, where he was very widely known and respected. Trained originally to the medical profession, he early adopted the career of a chemist, but from 1880, when he collaborated with the late Dr. Hoskins in studying the climate of Guernsey, meteorology made ever increasing demands on his attention. After the death of Dr. Hoskins in 1888, Mr. Collenette greatly extended the scope of this work. He was appointed director of the States Meteorological Department, and, as well as framing local weather forecasts, published an annual report containing rainfall records from all parts of the island and summaries of his own excellent observations. In the last year of his life he was engaged on the organization of an official observatory designed in order that his work might be carried on after his death, a result which there is every reason to hope will be achieved.

Mr. ALEXANDER CROSS, of Langbank, Renfrewshire, who died at Knockdon, Maybole, in October, 1921, at the age of 71, was a strong believer in the utility of scientific methods, including rainfall observing, as applied to agriculture. He maintained records at several estates in Scotland and England, and sent regular returns to *British Rainfall*. He was a prominent exhibitor at the principal Agricultural Shows, and was for many years a member of the Scottish Meteorological Society.

Mr. JOHN JAMES DALGLEISH, of Brankston Grange, Alloa, appears to have commenced observations of rainfall at West Grange, Culross, Perthshire, as long ago as 1865, and since that date annual returns have never failed to be regularly received, his unbroken record thus covering the remarkable period of 57 years.

Dr. HENRY NEWTON DICKSON was born at Edinburgh in 1866, and, like many prominent meteorologists, began his work rather as a physiographer, oceanographer, and geographer than entirely as a student of the weather. He spent a considerable period as an observer at Ben Nevis Observatory, and carried out an immense amount of work in connection with the *Challenger* expedition, the Scottish Marine station, and the Marine Biological station at Plymouth. He was the author of two extremely lucid text-books, *Elementary Meteorology* and *Climate and Weather*, and in co-operation with the Meteorological Office compiled an important treatise on the *Circulation of the Surface Water of the North Atlantic Ocean*. In 1906 Dickson was appointed professor of geography at University College, Reading, and did much to encourage meteorological research among his students. At Reading he set up a self-recording evaporimeter of his own design, and was obtaining some extremely promising results, when, at the outset of the war, he was called away to assist the Intelligence Division of the Naval Staff in the formation of a geographical section. The greater part of his remaining years were given to the organization of this work for which his experience gave him a special aptitude. After the close of the war he was appointed principal assistant to the Editor of the *Encyclopaedia Britannica*.

Dickson was assiduous in his attendance at the meetings of the Royal Meteorological Society. He was a member of the Council, with a few short breaks, from 1896 to 1916, and was re-elected in 1921. He occupied the Presidential Chair in 1911 and 1912. In this capacity he carried out the difficult task of transferring the collection of records of voluntary climatological stations from the Society to the Meteorological Office, a policy which has had a profound effect on meteorological organization in this country, cementing as it undoubtedly did the recognition of the voluntary observer as an integral part of the official meteorological machinery of the British Isles. This made possible the

conception of an officially conducted organization largely on voluntary lines such as now exists within the Office. The policy has been logically followed in the absorption by the Office of the British Rainfall Organization, for which its adoption did much to smooth the way.

Mr. JOSEPH HENRY GRUBB, of Clonmel, Co. Tipperary, was, like so many of the members of the Society of Friends, an almost life-long student and recorder of the weather, and a faithful supporter of the rainfall work. His observations were of unique value, not only on account of his meticulous care, but also because they constituted one of the comparatively few long and unbroken records from the south of Ireland. We are glad to know that arrangements have now been made for the rainfall records at least to be carried on. The whole of Mr. Grubb's original record books and meteorological papers, dating back to 1864, when the observations were commenced by his aunt, Miss Grubb, were passed over to the Meteorological Office on his death.

Mr. DAVID JONES, of Rhosyferfedd, Montgomeryshire, was chosen by Mr. Symons in 1881 to make an important series of rainfall observations at the remote station known as Bwlch Tomlyd among the Welsh hills, in connection with a water-supply enquiry in which he was consulted. Mr. Jones continued the readings for the remainder of his life, a period of 41 years, and we have the satisfaction of knowing that his son has undertaken to carry on this valuable piece of work.

Mr. RICHARD LAMPORT, whose death occurred on August 25th, 1921, at the age of 79, entered the service of the late Mr. G. J. Symons in 1885, and retired from the staff of the British Rainfall Organization in October, 1919, shortly after the transfer to Government control of the institution to whose history he had contributed during so long a period. After the death of Mr. Symons in 1900, and the retirement of Mr. Sowerby Wallis in 1903, Mr. Lamport's association with the office work had been considerably longer than that of any other member of the staff, and his experience was thus of great value in ensuring the continuity of the routine during the various changes through which the Organization has passed during the last twenty years. Previous experience in legal work fitted him in an especial degree for the place which he filled in the office, and his wonderful accuracy as a computer and copyist enabled him to carry out, with high efficiency, the whole of the work of filling in the permanent files of rainfall records. He was also responsible for the bulk of the checking of the ever increasing number of rainfall returns, and for the compilation of the rainfall and climatological tables appearing each month in *Symons's Meteorological Magazine*. Mr. Lamport's strong sense of duty and loyalty gave him a high place in the affection and esteem of his colleagues.

Mr. WALTER MORRISON, who died on December 18th, 1921, at the age of 85, carried on rainfall observations for 52 years at his residence,

Malham Tarn, in the Craven district of Yorkshire, which records, with characteristic modesty, he preferred to have printed under the name of his gardener. Of immense wealth, Mr. Morrison was, although he preferred that few should know it, one of the most munificent benefactors of learning and science of the day, but his generosity was never reckless, every gift being carefully thought out and wisely directed. Incidentally, he was one of the largest contributors to the funds of the British Rainfall Organization in the working of which he was always greatly interested.

Mr. WALTER CHARLES STUNT, of Lorenden, Ospringe, near Faversham, was one of the comparatively few Observers whose personal records cover more than half a century. Commencing at Brogdale, near Faversham, in 1866, and removing a short distance in 1878 to Ospringe, Mr. Stunt in all sent records for a period of 55 years, and was one of the most faithful of the many thousands of friends who have helped forward the rainfall work.

Dr. GEORGE WALKER WALKER, F.R.S., whose death, at the early age of 47, robbed the scientific world of a brilliant and original worker, was primarily a mathematician and physicist, ranking as fourth Wrangler in 1897 and Smith's Prizeman in 1899. He acted from 1903 to 1908 as lecturer on physics at Glasgow University, and was later appointed in charge of the newly organized observatory at Eskdalemuir, Dumfriesshire, built for the National Physical Laboratory. At Eskdalemuir, Walker's work was principally on magnetism and seismology. He carried out the transfer of the observatory to the Meteorological Office in 1910, and was responsible for the invaluable meteorological observations. Ill-health compelled him to resign in 1912. His most notable work was the magnetic survey of the British Isles carried out for the Royal Society. In 1913 he published *Modern Seismology*, a standard work on the subject.

Observers deceased to June 30th, 1922.

Small Capitals denote Observers with Records of Thirty Years and upwards.

Acocks, Herbert Francis, <i>C.E.</i> (59)	Ashtead, Surrey.
ASPINALL, REV. GEORGE EDWARD, <i>J.P.</i> (79)	South Oram, Halifax.
Bagshawe, Rev. Wm. A. E. Vale (75)	Quarndon, Derby.
Baker, Hugh Meredyth (64)	Ealing, W.
Balkwill, William (77)	South Huish, Kingsbridge.
Bankes, Ralph Vincent, <i>K.C.</i>	St. George's Square, S.W.
BEAUCHAMP, EDMUND BEAUCHAMP (89) . .	Trevince, Redruth.
*Beck, Frank Reginald, <i>M.V.O.</i>	Sandringham.
†Begg, Rev. John Smith (46)	Kirkwall.
Bell, Reginald (73)	The Hall, Thirsk.
Bennett, W. O.	Bawdsey, Woodbridge.
Bonny, J. H.	Southport.
Bridger, F.	Penshurst Place, Tonbridge.
†Bruce, Dr. William Spiers, <i>L.L.D., F.R.S.E.</i>	Edinburgh.

* Killed in Action.

† See Biographical Note *ante*.

Observers deceased to June 30th, 1922.—(con.).

†Bryce, Viscount, <i>O.M., P.C., F.R.S.</i> (84)	Hindleap Lodge, Forest Row.
Brydson, Arthur Paul (62)	Water Park, Coniston.
Burd, Rev. Preb. Frederick	Hookfield House, Bridgnorth.
CAIRD, JAMES ALEXANDER HENRYSON (74)	Creetown, Kirkcudbrightshire.
Campbell, R. B.	Poolewe, Ross-shire.
Canning, T.	Aldenham Park, Bridgnorth.
†CAREY, DR. FRANCIS EDWARD (85)	Villa Carey, Guernsey.
†CHRISTIE, SIR WILLIAM H. M., <i>K.C.B., D.Sc., F.R.S.</i> (77).	Royal Observatory, Greenwich.
Cleeve, Major-General W. F., <i>C.B.</i> (69) . .	Llanfrehfa Grange, Mon.
Cochrane, Vice-Admiral Basil Ed. (80) . .	Windlesham, Camberley.
Coghill, Sir Egerton Bushe, Bart. (69) . . .	Castletownshend, Skibbereen.
†COLLENETTE, ADOLPHUS (80)	Brooklyn, Guernsey.
Coote, Charles Harold (57)	Houghton Grange, Huntingdon.
†Cross, Alexander (70)	Langbank, Renfrewshire.
Cuffe, Thomas Withy (66)	Fiddington, Bridgwater.
†DALGLEISH, JOHN JAMES, <i>D.L.</i> (85)	Brankston Grange, Alloa.
Day, Frederick	South Molton.
Deverell, John Croft (81)	Pixham Firs, Dorking.
Deverell, Miss Frances Anne (87)	Cosham, Hants.
Dick, Rev. Robert (78)	Upper Largo, Fifeshire.
†Dickson, Henry Newton, <i>C.B.E., D.Sc.</i> (55)	University College, Reading.
Dods, Rev. George	Barr, Girvan.
DUCIE, EARL OF, <i>F.R.S.</i> (94)	Tortworth Court, Glos.
Dunlop, Charles Walter (76)	Whitmuir Hall, Selkirkshire.
Dyke, Lt.-Col. George Hart (75)	Shillingford Hill, Wallingford.
Eld, Rev. Francis John (91)	Polstead, Suffolk.
Farrer, Lt.-Col. Phillip (67)	Binnegar Hall, Wareham.
Ferard, Charles Agace (70)	Bracknell, Berks.
Foster, Charles Finch (80)	Pinehurst, Cambridge.
Foster, Mrs. J. H.	Witley, Godalming.
Fox, Sir Charles Douglas, <i>J.P.</i> (81)	Kippington Grange, Sevenoaks.
Frith, J.	Huddersfield.
Gosling, Robert Cunliffe, <i>J.P.</i> (53)	Hassobury, Bishops Stortford.
Grieve, Miss Marion Fisher (90)	Skelfhill, Hawick.
†Grubb, Joseph Henry (82)	Bruce Villa, Clonmel.
Hall, Josiah (71)	Cockermouth.
Harmsworth, J.	Durford, Petersfield.
Hooker, Lady	Pendock, Tewkesbury.
Hose, Rt. Rev. George Frederick (83)	Normandy, Guildford.
Huddleston, Denys Lawlor (76)	Sawston Hall, Cambs.
Hudson, H.	Cragside Gardens, Rothbury.
Hutton, John (74)	Sowber Gate, Northallerton.
Inglis, D.	Drumlarig, Dumfries.
Irvine, Alexander Forbes (41)	Drum Castle, Aberdeenshire.
Johnson, Mrs. E. A.	Scarisbrick, Ormskirk.
†JONES, DAVID	Bwlch Tomlyd, Montgomeryshire.
Jones, Rev. David Secretan (87)	Mumbles, Glamorganshire.
Karslake, Walter	Bovey Tracey, Devon.
Kirkby, W. Horseman	West Kirby, Cheshire.
†LAMPORT, RICHARD (79)	Willesden Green, N.W.
Lanyon, Sydney Howard	Tolvean, Redruth.
Latham, Percy Holland	Haileybury College, Hertford.
LESLIE-MELVILLE, ARTHUR HENRY, <i>O.B.E.</i> (80).	D'Isney Place, Lincoln.

† See Biographical Note *ante*.

Observers deceased to June 30th, 1922.—(con.).

Lidbetter, R. M. (77)	Cockermouth.
Lloyd, Col. R. O., C.B., D.L., J.P. (72) ..	Treffgarne Hall, Pembrokeshire.
LOMER, MISS ELLEN SARAH (78)	Merrow, Guildford.
M'Connell, John Wanklyn (67)	Colmonell, Ayrshire.
MacIntosh, Charles (83)	Inver, Dunkeld.
MacMahon, J.	Pallasgreen, Co. Limerick.
Martin, John G.	Cutroach, Wigtownshire.
Middleton, Lord (78)	Birdsall House, Malton.
† MORRISON, WALTER (85)	Malham Tarn, Yorks.
Napier of Magdala, Lord (76)	Lyndale, Isle of Skye.
OSMOND, RICHARD	Reading.
Palmer, George, C.E.	Suirvale, Cahir.
PATERSON, REV. T. M. B.	Laighstone Hall, Hamilton.
Paul, George (79)	Cheshunt, Hertfordshire.
Peckham, Rev. Harry John (80)	Summersdale, Chichester.
Peckitt, Lt.-Col. Reginald William (79) ...	Thornton-le-Moor, Northallerton.
Penfold, Dr. Frederick Wm. Hy. (62) ...	Rainham, Kent.
Pringle, A. L.	Stow, Midlothian.
Reade, William M.	Knotty Ash, Liverpool.
Richards, W. J.	Stamford, Lincolnshire.
Roberts, T. J. S.	Drygrange, Melrose.
Robinson, Mrs. Frances Jane	Coombe Head House, Chard.
Rolleston, Colonel William Vilett (79) ...	Saltford House, Bristol.
Roper, Mrs. Elizabeth (73)	Gilling West, Richmond, Yorks.
Rosling, Alfred (90)	Wray Lodge, Reigate.
Rosse, Countess of (71)	Womersley Park, Doncaster.
St. John, Rev. John Seymour (74)	Pencombe Rectory, Worcester.
St. Maur, Lord Ernest (75)	Burton Hall, Loughborough.
Salmon, H. C.	Northfield, Bridgwater.
Sanders, John Drysdale (61)	Gate Burton Hall, Gainsborough.
Sanderson, Frederick William	Oundle School, Northamptonshire.
Smith, Peter	Duns Castle Gardens, Berwickshire.
Smith, William Arthur (89)	Colebrooke Park, Tonbridge.
SNOWDON, REV. HARCOURT CHARLES VAUSE (77).	St. Peters, Broadstairs.
Soames, Rev. Henry Aldwin (64)	Bromley, Kent.
Steventon, P. C. (29)	Torquay.
† STUNT, WALTER CHARLES (80)	Ospringe, Faversham.
Sturge, Dr. Caroline (61)	Winscombe, Somerset.
THOMPSON, REV. JOSEPH HUGILL	Warkleigh, Devon.
THOMSON, JOHN (87)	Woodperry, Oxon.
Thomson, William, C.E. (46)	Ramsgate.
Travers, Mrs. Amory (70)	Tortington House, Arundel.
Trench, John Alfred (84)	Winscales House, Workington.
Waithman, Charles (74)	Gomshall, Surrey.
† Walker, Dr. George Walker, F.R.S. (47) ..	Eskdalemuir Observatory.
WELCH, WILLIAM (76)	Cranleigh, Surrey.
Welsh, William (70)	Owslebury House, Winchester.
Wenn, T. H.	Downham Market, Norfolk.
WHITAKER, BENJAMIN INGHAM, J.P. (84) .	Hesley Hall, Nottinghamshire.
WHITAKER, WILLIAM HENRY, D.L., J.P. (88)	Totterton Hall, Shropshire.
Whitehead, Miss M. L.	Deighton Grove, York.
Widnell, Edward Herbert (62)	Royston, Wimborne.
Wilson, John (74)	Hillesdon, Leek.
WORSLEY, REV. PENNYMAN RALPH.	Little Ponton Rectory, Grantham.

† See Biographical Note *ante*.

BRITISH RAINFALL, 1921

PART II

RAINFALL AND METEOROLOGY

OF

1921

EVAPORATION AND PERCOLATION IN 1921.

The amount of information received on these subjects is still extremely meagre, and it is difficult to know how far the few records we are able to publish are representative of the country generally. It is gratifying to be able to add the records from three percolation gauges at Craibstone, near Aberdeen, the experimental farm of the North of Scotland College of Agriculture, which have been set up by Professor Hendrick. The gauges in use at Craibstone are one-thousandth of an acre in superficial area (4·84 square yards) and 40 in. in depth. They are filled with blocks of natural soil in an undisturbed condition, and are, unlike those at Rothamsted, cropped and in two cases manured. The records are the only observations of percolation available for Scotland, and are thus of exceptional interest. They should provide a particularly valuable comparison with the Rothamsted readings.

In examining the returns of percolation in 1921, it should be borne in mind that the stations all lie in the east, and nearly all in the south-east, of Great Britain. The shortage of rainfall for which the year was notable was by far most marked in the east and particularly in the south-east. Insomuch, therefore, as the records depend intimately upon the absolute amount of rainfall, they are for this particular year by no means representative of the country as a whole.

For all the stations except Harrogate, and in this case there is reason to doubt the accuracy of the earlier records, the total amount of water percolating was very pronouncedly less than any annual total previously published in *British Rainfall*. At Grayshott, for example, where the record extends from 1910, the previous lowest was 15·53 in. in 1908 against 5·69 in. in 1921. Even more notable was the fact that the little percolation which did occur during the year took place almost entirely during the first two months, the amounts during the last ten months at the stations in the south being almost negligible. At Timsbury, in fact, no measurable moisture penetrated the soil during the whole of this long period. Further north in England there was a partial recovery in November and December, but at Craibstone the dessication of the soil, though it commenced rather later, was continued until the end of the year.

These records, scanty though they are, form an illuminating supplement to the rainfall returns of this remarkable year. They indicate that the deficiency of rainfall was so great that the replenishment of underground water was not so much insufficient as entirely suspended. Absence of percolation in chalk areas is common in the summer months, but for it to be continued for ten months, from spring well into the winter, is probably unprecedented.

The stations reporting records of direct evaporation are unchanged from those printed in 1920, except that the return for Barnacre Reservoir, Lancashire, is unfortunately no longer available for publication.

We are glad, however, to record the establishment of a tank at Valencia Observatory, Co. Kerry, where records were commenced early in 1921. Owing to various difficulties these observations were incomplete, and cannot take their place in the table. We are able, however, to quote the following data, the first records of direct evaporation, so far as we are aware, taken in Ireland :—

Evaporation at Valencia Observatory, Co. Kerry, 1921.

Months.	Mean Daily Evaporation on days with no rain.		Maximum Daily Evaporation.			
			Days with no rain.		All days.	
1921.	mm.	in.	mm.	in.	mm.	in.
February .. ..	.72	.028	1.5	.06	1.5	.06
March	1.16	.045	1.7	.07	3.1	.12
April	2.39	.094	3.7	.15	3.7	.15
May	2.39	.094	4.2	.17	4.2	.17
June	3.04	.120	4.8	.19	4.8	.19
July	3.61	.142	3.7	.15	6.1	.24
August	2.30	.091	3.6	.14	4.1	.16
September	2.09	.083	3.0	.12	3.0	.12
October	1.27	.050	3.6	.14	3.6	.14
November .. ..	.80	.031	1.4	.06	2.9	.11
December .. ..	.49	.019	0.6	.02	3.5	.14

At every station for which an average for the period 1908–1921 was available the total evaporation in 1921 was in excess, and at five out of the seven stations the excess was more than 4 in.

In the south of England generally, the total was the largest ever recorded, that in 1911 being most nearly comparable, but at Southport and Talla (Peebleshire) 1911 showed a considerably higher value. At Camden Square, London, (see table on p. 7) only one month in the year, November, showed an evaporation lower than the average of 35 years, whilst from May to July inclusive there was an excess of 2.56 in., the largest yet recorded for the period, 1911 following with 2.21 in. This was the only year since observations commenced in 1881 in which the evaporation exceeded the rainfall.

Rainfall, Percolation and Calculated Evaporation in 1921.

1921.	Compton, Sussex. K. M. Langdale, Esq.		Rothamsted, Herts. Sir Edward Russell.			
	Rainfall.	Percolation.	Rainfall.	Percolation.		
				20 in. Soil.	40 in. Soil.	60 in. Soil.
	in.	in.	in.	in.	in.	in.
January	4.81	5.22	2.29	2.10	2.20	2.09
February .....	.38	.79	.19	.02	.07	.05
March	1.85	.51	.97	.01	.03	.03
April	1.15	.07	1.47	.11	.12	.11
May	2.07	.00	1.38	.06	.11	.12
June .....	.08	.00	.17	.00	.00	.01
July .....	.40	.00	.16	.00	.00	.01
August	2.71	.00	1.01	.00	.00	.00
September .....	.94	.00	2.61	.93	.89	.85
October .....	.66	.00	.71	.00	.00	.00
November	2.83	.00	2.21	.97	.97	.79
December	2.50	.00	1.79	1.57	1.59	1.42
Year	20.38	6.59	14.96	5.77	5.98	5.48
Calculated Evaporation } .....	..	13.79	..	9.19	8.98	8.48

1921.	Timsbury, Hants. D. Kitchingman, Esq.		Twyford, Hants. D. Kitchingman, Esq.		Grayshott, Hants. Mrs. Lyndon.		Harrogate, Yorks. Harrogate Corporation.	
	Rainfall.	Percola- tion.	Rainfall.	Percola- tion.	Rainfall.	Percola- tion.	Rainfall.	Percola- tion.
	in.	in.	in.	in.	in.	in.	in.	in.
January	3.35	2.84	3.46	3.57	3.61	4.05	3.96	4.04
February .....	.29	.43	.30	.56	.20	.72	.14	.25
March	1.36	.00	1.40	.31	1.53	.51	1.96	.30
April	1.01	.00	1.39	.04	.96	.18	1.26	.23
May	1.37	.00	1.82	.01	2.45	.23	1.85	.01
June .....	.15	.00	.07	.00	.13	.00	.17	.00
July .....	.87	.00	.66	.00	.51	.00	1.43	.00
August	1.96	.00	2.45	.00	2.34	.00	3.86	.06
September .....	.74	.00	1.06	.00	.94	.00	.92	.00
October .....	.80	.00	.72	.00	.83	.00	1.72	.00
November	1.89	.00	2.51	.00	2.45	.00	2.49	.84
December	1.67	.00	1.45	.00	2.25	.00	3.83	2.27
Year	15.46	3.27	17.29	4.49	18.20	5.69	23.59	8.00
Calculated Evaporation } .....	..	12.19	..	12.80	..	12.51	..	15.59

Rainfall, Percolation and Calculated Evaporation in 1921.

1921.	Craibstone, Aberdeen. Prof. J. Hendrick.			
	Rainfall.	Percolation.		
		† 40 in. Soil. 1	† 40 in. Soil. 2	† 40 in. Soil. 3
	in.	in.	in.	in.
January	1·28	1·21	1·29	1·39
February	·80	·81	·88	·85
March	1·50	1·75	1·87	1·74
April	1·15	·72	·87	·80
May	1·34	·09	·10	·06
June	1·29	·01	·01	·00
July	1·75	·00	·00	·00
August	1·91	·00	·00	·00
September	1·37	·00	·00	·00
October	1·55	·00	·00	·00
November	2·32	·00	·00	·00
December	1·60	·34	·25	·00
Year	17·86	4·93	5·27	4·84
Calculated Evaporation	....	12·93	12·59	13·02

† Unmanured.

‡ Cropped and Manured.

Stations recording Evaporation in 1921.

Station.	County.	Observer.	Particulars of Tank.					
			Height above		Diameter.	Capacity.		
			Ground.	Sea Level.				
			ft.	in.	ft.	ft.	in.	Gals.
Camden Sq. .	London	2 Brit. Rainfall Org.	0	3	111	6	0	450
Otterbourne .	Hampshire	5 E. C. Rodda, Esq.	0	3	112	6	0	450
Ormesby St.	Norfolk	2 Gt. Yarmouth	0	3	21	6	0	450
Michael		W.W. Co.						
Worstead ..	Norfolk	2 R. T. Cross, Esq.	0	4	55	2	6	..
Kennick	South Devon ...	5 S.C. Chapman, Esq.	0	3	835	6	0	450
Revesby	Lincoln	3 J. Shaw, Esq. ...	0	2	130	6	0	450
Southport ..	Cen. Lancashire	3 J. Baxendell, Esq.	0	3	27	3	0	112
Ardley No. 1	Yorkshire, W.R.	8 C. C. Smith, Esq.	0	3	395	6	0	450
„ No. 2	„ „	8 „	0	3	326	6	0	450
Lower Laithe	„ „	9 M.R. Barnett, Esq.	0	6*	772	6	0	450
Harrogate ..	„ „	11 A. S. West, Esq. .	Flush		589	6	0	450
Talla Water .	Peebles	1 Messrs. Leslie and Reid	0	3	904	6	0	450

* Varying from 2½ to 9 in.

Evaporation in 1921.

	Camden Square.	Otter- bourne.	Ormesby St. Michael	Worstead.	Kennick.	Revesby.	Southport.
	in.	in.	in.	in.	in.	in.	in.
January .....	.20	.02	.60	.27	.12	.27	.15
February .....	.28	.59	.68	.24	.56	.29	.20
March .....	.96	1.27	1.51	.95	.92	1.02	.71
April	1.91	2.61	2.38	1.48	2.53	1.48	1.85
May	3.04	3.18	3.38	2.20	3.31	2.71	2.59
June	3.66	4.48	3.90	3.71	4.59	3.16	3.88
July	4.17	5.19	4.23	4.36	4.56	3.66	3.67
August	2.56	3.21	3.53	2.87	2.84	2.11	2.01
September	1.72	2.35	2.23	1.67	2.10	1.57	1.43
October .....	.72	1.30	1.19	.77	1.00	.83	.65
November .....	.19	.40	.67	.23	.28	.39	.30
December .....	.28	.07	.54	.22	c .14	.14	.06
Year	19.69	24.67	24.84	18.97	22.67	17.63	17.50
Average, } 1908-1921	15.40	19.67	...	...	18.53	14.69	...
Difference	+4.29	+5.00	...	...	+4.14	+2.96	...
RAIN. { Year	14.60	16.83	17.65	16.37	21.57	15.50	28.65
Average, } 1908-1921	26.21	31.44	27.99	26.86	41.74	25.35	33.06
Difference	-11.61	-14.61	-10.34	-10.49	-20.17	-9.85	-4.41

	Ardsley. No. 1.	Ardsley. No. 2.	Lower Laithe.	Harrogate.	Talla Water.	Mean of 12 Records.
	in.	in.	in.	in.	in.	in.
January .....	.19	.11	.12	.80	.31	.26
February .....	.38	.34	.25	.38	.28	.37
March	1.30	1.00	.89	1.30	.48	1.03
April	2.14	2.08	1.66	2.02	1.92	2.01
May	3.18	2.97	2.69	3.24	2.38	2.91
June	4.63	4.41	3.85	4.22	3.77	4.02
July	4.27	3.98	3.44	4.26	3.40	4.10
August	2.52	2.45	2.04	2.45	1.81	2.53
September	1.88	1.72	1.97	2.22	1.52	1.87
October .....	.90	.80	.85	1.20	.76	.91
November .....	.37	.35	.19	.33	.62	.36
December .....	.06	.07	.24	.64	.21	.20
Year	21.82	20.28	18.19	23.06	17.46	20.57
Average, } 1908-1921	17.55	...	...	18.59	17.17	...
Difference	+4.27	..	...	+4.47	+ .29	...
RAIN { Year	17.94	18.33	41.67	22.27	47.46	23.35
Average, } 1908-1921	25.69	...	...	28.76	48.35	...
Difference	-7.75	...	...	-6.49	- .89	...

NOTE.—In the Table c indicates condensation.

Evaporation at Camden Square, 1885-1921.

	Jan. in.	Feb. in.	Mar. in.	Apr. 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
1914 ..	·09	·24	·52	1·84	2·56	2·93	2·72	1·99	1·68	·70	·28	·05	15·60
1915 ..	·11	·13	·66	1·65	2·90	3·15	2·50	1·76	1·61	·56	·25	c·03	15·25
1916 ..	·19	·34	·30	1·61	2·32	2·20	2·23	2·34	1·20	·76	·34	c·04	13·79
1917 ..	·11	·17	·53	1·18	3·06	3·01	2·81	1·95	1·16	·75	·34	·12	15·19
1918 ..	·14	·27	·85	·89	2·38	3·01	2·59	2·04	1·69	·40	·24	·16	14·66
1919 .. c·12	·13	·66	1·06	2·94	3·39	1·90	2·78	1·53	·61	·08	·06		15·02
1920 ..	·20	·24	·78	·85	2·71	2·85	2·09	2·00	1·04	·66	·04	·00	13·46
Average 1885-1919	·10	·25	·66	1·51	2·43	2·91	2·97	2·33	1·38	·62	·25	·09	15·50
1921 ..	·20	·28	·96	1·91	3·04	3·66	4·17	2·56	1·72	·72	·19	·28	19·69
Diff. ..	+·10	+·03	+·30	+·40	+·61	+·75	+1·20	+·23	+·34	+·10	-·06	+·19	+4·19

NOTE.—c indicates condensation.

THE DISTRIBUTION OF RAINFALL IN TIME.

The discussion of the greater part of the statistics dealt with year by year in this section of *British Rainfall* sprang from a circumstance which may be recalled on this occasion with peculiar propriety, viz., the systematic study of "Droughts," which took its present form in *British Rainfall*, 1887, the volume dealing with the year of most remarkable drought in the British Isles previous to 1921. It is true that a section on "Droughts" was published in 1886, but the definition then designed was subsequently found to be unsuitable, and the systematic study of droughts on the present lines dates from 1887.

In 1903 the study of droughts was amplified by the addition of a section dealing with "Rain Days," and the treatment of the subject of the incidence of daily rainfall was carried a step farther by the introduction of a new definition, that of a "Rain Spell," the anti-thesis of an "Absolute Drought." It is interesting to recall, although it is a mere coincidence, that 1903 was one of the most remarkable years ever recorded in respect of frequency of rain spells.

In *British Rainfall*, 1919, we discussed at length the possibility of improving the means of discussing the whole problem of daily rainfall frequency and incidence by a modification of the existing definitions. It is unnecessary here to repeat the reasons which made this step desirable, but it will be remembered that it was considered unwise to abandon the older definitions until the new had been fully tested, and that for this reason statistics based on both the old and new definitions have been printed side by side in the two last volumes of *British Rainfall*. In the present volume we are following this course once more. One important reason for continuing to use the old definitions for a short time is that they give some means of comparison with previous years, and such comparison appears to be specially desirable in the case of a year like 1921, in some respects the most remarkable year in the long annals of *British Rainfall*.

Of the other aspects of rainfall dealt with under the general heading of "Rainfall in Time," the study of "Heavy Falls in Short Periods" has been a feature of *British Rainfall* since 1868, whilst the treatment of "Duration of Rainfall" was commenced in 1903. Both have undergone certain modifications in the direction of standardization. In 1908 the classification of intense rainfalls was revised and placed on a proper footing by means of a careful examination of the large amount of collected data. In 1916 first steps towards the standardization of duration records were made: the method tentatively introduced has now been reinvestigated, and it has been decided to bring it into general use. It is hoped that the statistical value of the data will be greatly increased by this means.

DAYS WITH RAIN IN 1921.

(i) A **Rain Day** is a day on which $\cdot 01$ in. of rain or more is recorded. A fall of rain exceeding $\cdot 005$ in. but less than $\cdot 01$ in. is recorded as $\cdot 01$ in. A fall of rain less than $\cdot 005$ in. is ignored.

(ii) A **Wet Day** is a day on which $1\cdot 0$ mm. or $\cdot 04$ in. of rain, or more, is recorded.

The total numbers of days on which rain fell during 1921, according to each of the foregoing definitions, for each month of the year at 100 well-distributed stations, are set out in full in Tables I and IV. The number of wet days during the whole year is also given in cartographical form in the map on p. 16.

Whilst there is no doubt, as has been explained elsewhere, that rainfall frequency is studied in a much more satisfactory manner by means of the "wet day" than the "rain day," the fact that only three years' comparable data exist for the new definition, as against 19 years' data for the old, makes it necessary, especially in discussing a year so remarkable in this respect as 1921, to deal at some length with the number of rain days.

There can be no question that the most unusual feature of 1921 from the point of view of the number of rain days was the occurrence of a patch in the Thames estuary over which less than 100 such days occurred during the year. In making a special point of this phenomenon we are well aware that a large number of instances have occurred in the past of annual returns showing less than 100 rain days. An examination of these records has convinced us in practically every case that either (i) the gauge had not been examined *every* day during the year, or (ii) the lowest graduation mark of the rain measure was not sufficiently accurate for the purpose of measuring $\cdot 01$ in. with a high degree of accuracy. In recent years the number of recorded days when defective from either of the above causes has been omitted from *British Rainfall*. In earlier volumes, before the matter was fully understood, many such records were published. If, however, the geographical distribution is studied in detail the correctness of the above conclusions is amply justified.

Accepting the rain day as defined, with its admitted defects, there appears to be no doubt that in 1921 less than 100 were recorded generally over south-eastern Essex and a strip of the north of Kent, as well possibly as in part of the Fen District between March and Ely. The number of rain days increased gradually towards the north-west. In London the Camden Square record gave 115 days, the smallest number since 1864, when rain was reported to have fallen on only 110 days. In 1858 the number is given as 106. These records were taken personally by Mr. Symons, and a high degree of accuracy is

(continued on page 16).

BRITISH RAINFALL, 1921.

TABLE I.—Number of Rain Days in 1921.

Station.	County.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year.	Total Rain-fall.	Amount per Rain Day.
ENGLAND & WALES.																
St. Pancras, Camden Square	London	20	4	13	10	12	5	3	9	6	8	8	15	113	14.33	.13
Tenterden, View Tower	Kent	1	8	17	9	11	0	4	11	5	6	11	19	121	13.71	.11
Pacham	Sussex	3	25	3	16	15	1	4	10	7	10	8	21	132	17.56	.13
Lymington, The Salters	Hampshire	4	21	3	20	10	4	6	14	5	9	13	17	134	16.81	.13
Petersfield, Ditcham Park	"	5	25	4	17	11	3	8	13	6	9	15	21	148	21.87	.15
Upton	Berkshire	5	21	6	12	14	4	5	11	7	7	17	19	140	15.30	.11
Newport Pagnell, The Croft	Buckinghamshire	5	18	4	20	11	6	6	15	9	7	12	15	139	14.02	.10
Eye, Northolt	Northamptonshire	4	16	3	10	12	6	6	12	3	6	11	14	113	13.23	.12
Fulbourn, Pumping Station	Cambridgeshire	2	21	8	14	12	5	5	15	7	7	14	16	140	12.02	.09
Bradwell-on-Sea, Bradwell Hall	Essex	3	17	7	12	10	2	3	8	7	6	9	15	106	11.21	.11
Haughley, Haughley House	Suffolk	2	18	4	12	10	11	3	8	4	8	8	15	109	11.40	.10
Yarmouth, Burgh Hall	"	4	16	7	13	10	8	6	14	5	11	8	18	126	13.42	.11
Swaffham	Norfolk	3	18	4	12	13	6	3	10	6	12	11	15	122	15.73	.13
Salisbury Plain, Shrewton	Wiltshire	4	23	4	19	13	3	6	11	7	5	13	18	142	16.59	.12
Dorchester, Wollaston House	Dorsetshire	3	24	2	21	9	3	9	12	8	6	18	14	141	21.48	.15
Holne, Church Park Cottage	South Devon	4	28	3	25	9	3	11	15	8	11	17	23	169	41.29	.24
Martinhoe Rectory	North Devon	1	27	4	21	8	15	2	16	9	11	14	23	159	30.91	.19
Morwenstow Vicarage	Cornwall	1	29	6	27	12	4	13	19	11	14	20	27	200	26.06	.13
St. Austell, Trevarna	"	2	30	7	26	11	1	10	20	9	12	17	26	186	27.87	.15
Angersleigh, Leigh Court	Somersetshire	3	21	2	23	8	18	8	15	10	8	20	16	153	18.91	.12
Mickleton, Bank House	Gloucestershire	4	17	5	17	13	6	5	17	6	10	13	16	138	13.84	.10
Clifton, Harley Place	"	5	25	4	26	8	15	3	10	8	13	14	24	167	24.44	.15
Hereford, Holmer Hall	Herefordshire	1	18	6	16	10	8	6	18	6	14	19	18	153	15.90	.10
Shifnal, Hatton Grange	Shropshire	4	23	4	23	13	5	6	23	6	11	16	18	163	18.41	.11
Ashbourne, Mayfield House	Staffordshire	5	25	4	23	10	6	7	19	7	12	11	19	160	24.75	.15
Leicester, Stoughton Drive	Leicestershire	4	19	3	15	9	6	6	15	5	11	10	17	131	17.10	.13
Horncastle	Lincolnshire	3	19	7	16	11	5	7	15	6	10	12	18	142	15.10	.11
Workop, Hodsock Priory	Nottinghamshire	5	18	5	17	12	6	7	16	6	11	10	20	142	16.65	.12
Northwich, Hunts Lock	Cheshire	2	27	9	21	10	8	11	23	11	12	15	23	187	21.57	.12
St. Michael's-on-Wyre Vicarage	North Lancashire	5	26	4	24	9	9	10	22	10	13	14	22	181	31.64	.17
Settle Gas Works	Yorkshire, W.R.	2	27	6	23	9	6	12	21	9	15	14	21	177	40.08	.23
Maltham, Harewood Lodge	"	8	27	8	25	17	5	11	21	8	11	14	25	189	37.99	.20
Hull, Pearson Park	" E.R.	3	18	16	13	12	6	9	17	5	9	19	18	150	16.39	.11
Felixkirk, Mount St. John	" N.R.	2	22	7	19	15	9	13	21	6	8	15	19	169	19.58	.12
Asiaby, Park Hall	"	5	20	9	16	10	9	13	23	10	13	14	18	168	21.48	.13
Sunderland, West Hendon House	Durham	2	17	12	18	12	11	15	21	6	9	12	20	166	21.46	.13
Glanton, Glanton Pyke Gardens ..	Northumberland	6	22	7	20	10	6	14	23	10	12	14	15	169	27.13	.16

TABLE I.—Number of Rain Days in 1921—(con.).

Station.	County.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year.	Total Rain-fall.	Amount per Rain Day
ENGLAND & WALES—(con.).																
Appleby, Castle Bank	Westmorland	26	3	26	14	14	7	16	21	8	11	14	27	187	30.36	.16
Duneon Ghyll	"	31	7	28	9	20	6	13	21	10	17	17	27	206	118.24	.58
Treherbert, Tyn-y-waun	Glamorganshire	29	4	25	11	15	3	14	20	10	10	21	27	189	76.50	.40
Carmarthen, The Friary	Carmarthenshire	31	5	28	8	16	2	14	23	15	14	19	30	205	37.79	.18
Fishguard, Dwrbach	Pembrokeshire	28	6	25	10	19	2	11	21	10	11	18	22	183	39.92	.22
Devil's Bridge	Cardiganshire	31	9	28	11	18	10	15	23	12	15	18	27	217	53.44	.25
Newtown, Penarth Weir	Montgomeryshire	20	4	21	10	16	7	9	19	8	9	16	20	159	25.37	.16
Denbigh, Garn	Denbighshire	27	9	23	12	16	9	15	23	8	12	17	23	194	27.69	.14
Dolgelly, Bryntirion	Merionethshire	27	7	24	11	15	6	13	22	10	16	15	24	190	55.95	.29
Llanerchymedd, Llwydiarth Esgob.	Anglesey	27	3	24	13	17	4	10	22	10	16	16	23	185	36.63	.20
England & Wales	(Mean of 47 Stations)	23	5	20	11	15	5	9	17	8	11	14	20	158	26.79	.17
ISLE OF MAN.																
Douglas, Clippse Reservoir	Isle of Man	26	7	27	11	16	6	15	18	6	18	15	28	193	38.14	.20
CHANNEL ISLANDS.																
St. Martin's, Les Blanchés	Guernsey	26	8	16	12	17	4	6	11	7	8	15	22	152	16.86	.11
SCOTLAND.																
Stoneykirk, Ardwell House	Wigtownshire	27	10	26	9	20	6	17	20	11	21	16	25	208	35.77	.17
Dumfries, Jardington	Kirkcudbrightshire	28	8	27	13	17	8	15	22	12	21	16	25	212	43.46	.21
Canonbie, Irvine House	Dumfriesshire	5	28	6	12	14	7	17	20	11	13	12	25	191	47.30	.25
Swinton House	Berwickshire	3	20	9	10	17	9	16	22	7	12	14	16	173	24.95	.14
Mid-Calder, Calder Hall	Midlothianshire	3	23	6	24	8	16	8	14	22	10	13	21	183	27.34	.15
Strathaven, East Overton House ..	Lanarkshire	5	30	9	28	9	13	10	13	22	20	10	27	203	51.54	.25
Girvan, Pinmore	Ayrshire	3	30	13	28	10	21	12	19	24	25	17	27	242	51.72	.21
Stirling, Touch Reservoir, No. 1 ..	Stirlingshire	1	29	8	27	10	20	10	17	20	23	16	28	226	47.62	.21
Dougarie Lodge	Buteshire	3	30	12	27	9	10	10	14	13	22	16	26	220	55.25	.25
Inveraray Castle Gardens	Douglas	11	29	14	30	13	20	11	18	21	17	18	29	250	101.55	.41
Islay, Eallabus	Argyllshire	14	31	17	30	15	21	15	20	21	24	17	29	262	61.02	.23
Mull, Ulva	"	14	31	18	15	21	15	20	21	21	24	17	29	262	61.02	.23
St. Andrews, Water Works	Fife	3	18	5	16	7	7	8	13	17	19	14	15	156	22.00	.14
Aberfeldy, Dall Avon	Perthshire	11	28	8	11	22	10	15	23	11	19	14	27	213	34.09	.16
Stonehaven, Mains of Cowie	Kincardineshire	2	21	12	12	16	11	12	18	14	18	17	22	191	16.92	.09
Ballater, Irrigation Farm	Aberdeenshire	1	22	7	19	9	14	11	19	13	15	13	19	170	20.73	.12
Peterhead, Forehill Works	"	4	24	14	20	13	15	12	13	21	13	19	22	207	18.59	.09
Dufftown, Fife Street	Banffshire	3	20	9	19	15	17	10	23	16	19	15	23	201	26.78	.13
Cluny Castle	Inverness-shire	3	27	11	15	24	13	18	22	17	27	14	26	245	44.73	.18
Loch Nevis, Inverie	"	12	29	15	12	26	18	20	21	21	28	15	28	263	96.85	.37

TABLE I.—Number of Rain Days in 1921—(con.).

Station.	County.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year.	Total Rain-fall.	Amount per Rain Day.
SCOTLAND—(con.).																
Glenleven, Kinlochmore	Inverness-shire.....	29	14	30	12	21	14	19	20	17	24	13	27	240	109.40	.46
Skye, Portree	"	27	17	30	17	25	18	20	23	24	25	20	28	274	66.23	.24
Barra, Castle Bay	"	29	16	27	14	23	16	19	21	21	26	23	29	264	35.04	.13
Fortrose	Ross & Cromarty	3	20	9	18	9	17	10	14	18	11	20	12	180	19.34	.11
Achnasheen, Ledgowan	"	4	29	16	22	14	20	19	21	26	21	11	28	247	83.61	.34
Stornoway	"	10	28	19	31	14	23	14	20	21	22	27	21	268	52.47	.20
Loch More, Achfary	Sutherlandshire.....	5	29	19	29	15	26	19	21	24	28	16	28	273	97.87	.36
Thurso, Buckies	Caithness-shire.....	3	27	14	24	13	21	17	16	22	20	15	25	239	38.67	.16
Scotland	(Mean of 28 Stations)	27	12	26	12	20	12	16	21	15	22	16	25	224	49.46	.22
IRELAND.																
Castletownshend, Seafeld	Co. Cork	6	7	24	6	12	1	14	20	11	16	22	24	185	37.47	.20
Queenstown, Fota Island	"	17	27	8	5	17	2	11	20	6	16	23	28	189	31.70	.17
Cahiriveen, Valencia Observatory	Co. Kerry	3	28	14	23	5	18	25	13	21	24	24	24	230	46.13	.20
Killarney, District Asylum	"	3	27	11	28	12	14	24	13	19	27	27	27	223	40.51	.18
Waterford, Brook Lodge	Co. Waterford	3	23	7	22	6	1	9	19	7	14	17	20	161	33.73	.21
Nenagh, Castle Lough	Co. Tipperary	1	29	13	27	15	4	14	25	13	20	19	28	227	35.02	.15
Cashel, Ballinamona	"	3	25	10	27	10	17	3	12	9	21	23	23	203	31.94	.16
Fnnistymon House	Co. Clare	2	31	11	27	14	22	9	15	24	12	22	28	236	46.79	.20
Gorey, Courthouse House	Co. Wexford.....	4	21	7	19	5	18	5	13	19	7	16	18	164	29.52	.18
Abbey Leix, Blandsfort	Queen's County	2	26	10	22	11	20	8	13	24	8	18	25	203	36.38	.18
Sallins, Palmerstown	Co. Kildare	2	24	8	22	12	19	6	12	23	8	19	15	192	28.08	.15
Kells, Headfort	Co. Meath	4	27	8	24	11	19	3	11	24	18	16	23	192	28.99	.15
Moate, Coolatore	Co. Westmeath	1	28	10	27	12	20	4	17	24	11	21	24	225	29.22	.13
Ballynabinch Castle	Co. Galway	3	31	18	31	16	25	11	19	28	16	27	26	277	56.63	.20
Woodlawn	"	4	30	13	28	11	24	8	16	24	22	23	30	245	34.05	.14
Crossmolina, Enniscoe	Co. Mayo	2	30	12	30	13	23	7	16	24	25	26	23	246	50.15	.20
Collooney, Markree Observatory	Co. Sligo	2	28	13	29	13	20	8	19	26	12	25	20	241	40.89	.17
Belturbet, Cloverhill	Co. Cavan	1	26	10	26	9	16	4	15	23	11	19	28	206	27.04	.13
Seaforde	Co. Down	2	26	5	26	11	13	5	16	21	6	16	19	185	37.27	.20
Ballymena, Harryville	Co. Antrim	5	29	11	25	12	22	10	17	25	16	21	23	238	38.39	.16
Omagh, Edenfel	Co. Tyrone	3	29	13	31	15	20	7	15	21	11	23	22	236	40.15	.17
Milford, The Manse	Co. Donegal	3	28	12	28	12	20	11	14	23	15	23	23	236	39.96	.17
Killybegs, Rockmount	"	5	29	15	29	11	23	10	16	25	17	24	19	247	57.86	.23
Ireland	(Mean of 23 Stations)	28	10	26	11	20	6	15	23	11	20	21	26	217	38.18	.18
British Isles	(Mean of 100 Stations)	25	9	23	11	17	7	12	20	11	16	16	23	190	35.77	.19

TABLE IV.—Number of Wet Days (Days with 1 mm. or .04 in. of Rain or more) in 1921.

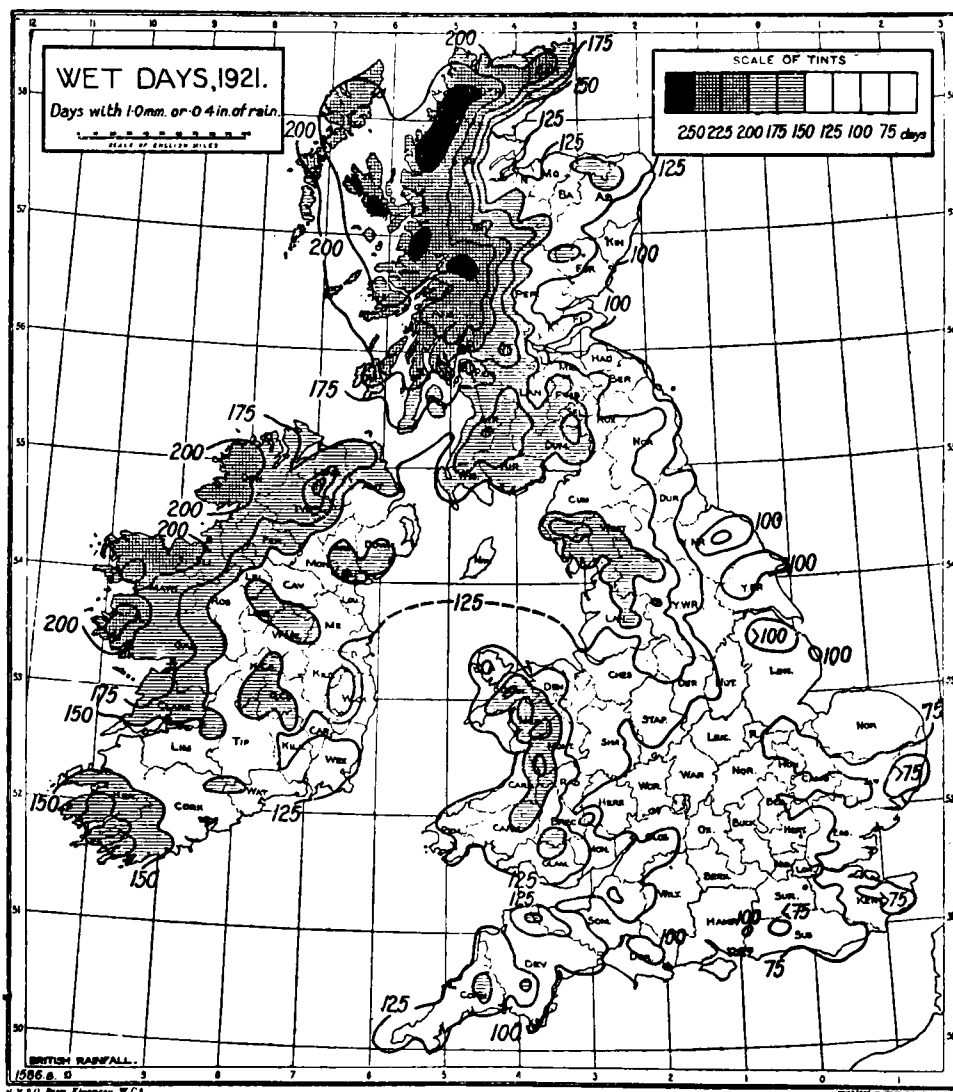
Station.	County.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Total Rain Days.	Days with .04 as % of Rain Days.
ENGLAND AND WALES.																
St. Pancras, Camden Square	London	15	1	8	8	10	2	2	7	3	5	7	11	79	113	70
Tenterden, View Tower	Kent	13	2	8	6	7	0	1	7	4	2	8	17	71	121	59
Patcham	Sussex	15	1	12	7	11	0	3	9	5	6	8	13	94	132	71
Lymington, The Salters	Hampshire	15	3	12	7	8	2	5	10	3	7	10	13	95	134	71
Petersfield, Ditcham Park	"	20	2	12	7	10	2	3	10	5	5	11	14	101	148	68
Upton	Berkshire	12	2	8	7	11	4	3	9	6	6	9	9	86	140	61
Newport Pagnell, The Croft	Buckinghamshire	13	1	7	8	9	5	3	6	6	6	7	11	82	139	59
Eye, Northolm	Northamptonshire	9	1	5	9	8	4	3	11	2	4	7	9	72	113	64
Fulbourn, Pumping Station	Cambridgeshire	11	2	9	6	5	4	2	12	5	6	7	12	81	140	58
Bradwell-on-Sea, Bradwell Hall	Essex	12	2	6	6	5	0	2	4	4	4	7	8	60	106	57
Haughley, Haughley House	Suffolk	13	1	6	8	7	2	4	6	3	6	6	11	73	109	67
Yarmouth, Burgh Hall	"	12	3	8	6	7	4	3	8	2	5	6	14	78	126	62
Swaffham	Norfolk	14	1	6	7	8	5	2	9	5	9	6	12	84	122	69
Salisbury Plain, Shrewton	Wiltshire	16	2	10	7	9	3	4	8	5	10	12	12	92	142	65
Dorchester, Wollaston House	Dorsetshire	16	1	13	6	8	1	6	9	4	5	11	11	91	141	65
Holne, Church Park Cottage	South Devon	21	2	18	7	11	1	8	13	6	10	14	16	127	169	75
Martinhoe Rectory	North Devon	22	1	18	8	9	1	8	16	8	10	21	21	130	159	82
Morwenstow Vicarage	Cornwall	22	3	19	7	12	0	7	17	6	7	14	21	135	200	67
St. Austell, Trevarna	"	26	3	18	9	13	1	6	14	5	7	15	21	139	186	75
Angersleigh, Leigh Court	Somersetshire	14	2	14	4	11	3	3	9	7	7	14	13	104	153	68
Mickleton, Bank House	Gloucestershire	11	1	9	7	7	3	6	14	3	7	8	9	82	138	59
Clifton, Harley Place	"	18	2	15	5	11	2	3	13	8	7	12	16	115	167	69
Hereford, Holmer Hall	Herefordshire	14	2	12	8	10	2	2	11	5	6	10	10	94	153	62
Shifnal, Hatton Grange	Shropshire	15	2	11	10	10	5	5	14	4	8	12	12	108	163	66
Ashbourne, Mayfield House	Staffordshire	18	2	15	12	12	2	4	15	5	8	5	13	106	160	66
Leicester, Stoughton Drive	Leicestershire	12	1	11	8	8	5	1	12	4	8	5	13	88	131	67
Horncastle	Lincolnshire	13	3	7	5	9	4	3	12	5	7	7	14	87	142	58
Workop, Hodsock Priory	Nottinghamshire	11	1	7	7	8	5	3	12	5	7	7	14	87	142	61
Northwich, Hunts Lock	Cheshire	19	3	13	6	8	5	5	18	3	9	10	16	115	187	62
St. Michael's-on-Wyre Vicarage	North Lancashire	23	1	17	5	13	4	10	15	6	9	9	17	129	181	71
Settle Gas Works	Yorkshire, W.R.	25	2	20	8	11	5	7	20	7	11	9	21	147	177	83
Meltham, Harewood Lodge	"	22	3	18	8	14	3	7	16	7	11	11	20	140	189	74
Hull, Pearson Park	"	12	3	10	6	11	3	8	13	4	5	9	12	96	150	64
Felixkirk, Mount St. John	"	2	2	8	11	10	2	9	17	5	8	9	13	106	169	63
Aislaby, Park Hall	"	14	2	8	7	12	4	12	15	6	6	10	12	108	168	64
Sunderland, West Hendon House	"	11	0	8	7	10	8	7	16	4	7	9	16	103	166	62
Glanton, Glanton Pyke Gardens	Northumberland	20	3	15	6	12	4	12	22	7	10	13	11	135	169	80

Station.	County.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Total Rain Days.	Days with .04 as % of Rain Days.
ENGLAND AND WALES—(con.).																
Appleby, Castle Bank	Westmorland..... 1	24	1	22	3	13	3	11	18	4	10	9	17	135	187	72
Dungeon Ghyll	"..... 2	29	4	27	7	16	5	12	19	8	11	12	25	175	206	85
Treherbert, Tyn-y-waun	Glamorganshire..... 6	29	1	21	8	13	2	10	16	9	8	16	22	155	189	82
Carmarthen, The Friary	Carmarthenshire..... 2	25	2	21	7	11	0	11	15	8	8	16	19	143	205	70
Fishguard, Dwrbach	Pembrokeshire..... 4	25	3	17	5	10	0	9	16	7	9	13	18	132	183	72
Devil's Bridge	Cardiganshire..... 2	26	5	23	11	15	6	11	22	8	9	11	22	169	217	78
Newtown, Penarth Weir	Montgomeryshire..... 4	18	2	16	7	11	4	7	18	5	9	12	13	120	159	75
Denbigh, Garn	Denbighshire..... 2	16	4	17	8	12	4	12	18	8	9	11	14	133	194	69
Doigelly, Brynion	Merionethshire..... 4	24	6	21	10	15	4	11	20	9	15	15	21	171	190	90
Llanerchymedd, Llwydiarth Esgob.	Anglesey	23	2	19	8	15	2	10	17	7	10	11	20	144	185	78
England and Wales.....	(Mean of 47 Stations)...	18	2	13	7	10	3	6	13	6	7	10	15	110	158	70
ISLE OF MAN.																
Douglas, Clypse Res., Onchan....	Isle of Man	23	3	17	6	12	4	9	15	3	12	13	20	137	193	71
CHANNEL ISLANDS.																
St. Martins, Les Blanchés.....	Guernsey	17	1	12	6	10	3	4	8	3	5	10	18	97	152	64
SCOTLAND.																
Stoneykirk, Ardwell House.....	Wigtownshire	20	4	20	6	15	3	12	17	7	17	11	20	152	208	73
Dumfries, Jardington	Kirkcudbrightshire..... 5	25	3	25	6	16	5	13	18	5	13	11	21	161	212	76
Canonbie, Irvine House.....	Dumfriesshire	24	4	22	6	13	5	15	20	7	11	10	23	160	191	84
Swinton House	Berwickshire	15	1	11	6	13	6	11	18	3	6	10	11	111	173	64
Mid-Calder, Calder Hall	Midlothianshire..... 5	17	3	18	5	10	3	11	17	6	12	10	16	128	183	70
Strathaven, East Overton House ..	Lanarkshire	29	7	22	6	10	6	12	21	11	18	9	24	175	203	86
Girvan, Pinnore	Ayrshire	26	5	24	8	14	9	13	16	12	18	11	25	181	242	75
Stirling, Touch Reservoir No. 1 ..	Stirlingshire	25	5	26	6	15	3	12	18	10	20	13	24	177	220	81
Dougarie Lodge	Buteshire	27	6	23	6	16	4	13	13	9	19	11	28	175	226	78
Inveraray, Castle Gardens	Argyllshire..... 3	27	12	30	12	19	11	16	19	14	29	15	28	232	250	93
Islay, Eallabus	"..... 11	29	15	27	10	19	11	18	18	16	17	15	27	222	262	85
Mull, Ulva	"..... 14	29	16	30	12	14	12	19	17	17	20	13	27	226	262	86
St. Andrews, Water Works	Fife..... 14	14	4	10	5	15	2	11	13	6	13	11	10	114	156	73
Aberfeldy, Dall Avon	Perthshire	19	2	21	4	10	5	11	14	6	15	12	15	134	213	63
Stonehaven, Mains of Cowie	Kincardineshire..... 11	13	6	8	10	9	6	10	8	5	8	13	11	107	191	56
Ballater, Irrigation Farm	Aberdeenshire..... 2	18	4	15	6	12	9	8	14	8	12	11	13	130	170	76
Peterhead, Forchill Works	"..... 1	11	7	13	6	11	8	9	11	9	10	13	16	124	207	60
Dufftown, Fife Street	Banffshire	4	4	9	10	10	12	10	15	10	15	13	18	142	201	71
Cluny Castle	Inverness-shire..... 3	22	9	28	8	18	9	13	15	15	22	11	24	194	245	79

TABLE IV.—*Number of Wet Days (Days with 1 mm. or .04 in. of Rain or more) in 1921—(con.).*

Station.	County.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Total Rain Days.	Days with .04 as % of Rain Days.
SCOTLAND—(con.).																
Loch Nevis, Inverie	Inverness-shire	27	15	30	11	23	14	18	19	20	27	12	28	244	263	93
Glenleven, Kinlochmore	"	27	13	30	9	21	14	19	18	15	23	10	27	226	240	94
Skye, Portree	"	25	15	29	14	22	12	17	21	19	22	14	27	237	274	86
Barra, Castle Bay	"	24	9	25	10	18	6	10	14	14	18	15	21	184	264	70
Fortrose	"	14	3	11	7	13	8	8	11	5	10	6	19	115	180	64
Achnasheen, Ledgowan	Ross and Cromarty	25	13	29	13	22	13	17	17	17	25	9	28	228	247	92
Stornoway	"	26	15	29	12	18	14	15	16	16	21	18	27	227	268	85
Loch More, Achfary	Sutherlandshire	28	17	28	15	19	15	19	19	22	27	14	27	250	273	92
Thurso, Buckies	Caithness-shire	26	9	16	10	18	15	12	21	15	22	15	25	204	239	85
Scotland	(Mean of 28 Stations) ..	22	8	22	9	15	9	13	16	11	18	12	22	177	224	79
IRELAND.																
Castletownshend, Seafield	Co. Cork	21	7	20	5	9	0	14	16	8	14	18	19	151	185	82
Queenstown, Fota Island	"	19	6	20	5	14	1	9	17	5	12	19	18	145	189	77
Cahiriveen, Valencia Observatory ..	Co. Kerry	21	5	22	7	19	0	13	17	7	18	20	19	168	230	73
Killarney, District Asylum	"	19	7	23	8	14	1	12	17	7	13	18	17	156	223	70
Waterford, Brook Lodge	Co. Waterford	16	7	18	5	11	1	9	16	5	12	15	15	130	161	81
Nenagh, Castle Lough	Co. Tipperary	20	6	22	7	12	3	11	19	6	10	14	17	147	227	65
Cashel, Ballinamona	"	20	7	18	5	12	1	10	17	6	12	16	15	139	203	68
Ennistymon House	Co. Clare	28	6	26	7	17	5	15	23	8	14	14	25	188	236	80
Gorey, Courtown House	Co. Wexford	15	6	12	4	14	2	9	13	3	10	14	10	112	164	68
Abbey Leix, Blandsfort	Queen's County	21	5	21	6	14	5	10	18	6	14	14	17	151	203	74
Sallins, Palmerstown	Co. Kildare	21	5	15	7	16	2	9	18	8	12	13	15	141	192	73
Kells, Headfort	Co. Meath	18	5	17	6	13	3	10	19	6	13	13	16	139	192	72
Moate, Coolatore	Co. Westmeath	21	5	16	6	12	3	11	16	8	15	18	17	148	225	66
Ballynahinch Castle	Co. Galway	29	10	29	10	20	6	16	22	11	24	23	28	228	277	82
Woodlawn	"	18	8	22	8	15	4	15	19	9	16	14	21	169	245	69
Crossmolina, Enniscoe	Co. Mayo	27	11	28	13	20	6	12	24	11	23	21	24	220	246	89
Collooney, Markree Observatory ..	Co. Sligo	25	9	24	9	17	7	14	23	9	20	15	23	195	241	81
Belturbet, Cloverhill	Co. Cavan	19	5	19	9	11	3	13	18	8	12	15	20	152	206	74
Seaforde	Co. Down	21	4	22	10	11	4	14	17	6	14	18	16	157	185	85
Ballymena, Harryville	Co. Antrim	25	9	21	9	20	7	17	17	8	15	19	26	193	238	81
Omagh, Edenfel	Co. Tyrone	26	7	26	10	15	6	14	16	9	19	15	26	189	236	80
Milford, The Manse	Co. Donegal	19	11	23	11	16	4	13	20	10	16	15	23	181	236	77
Killybegs, Rockmount	"	23	12	25	11	21	7	14	21	12	22	15	28	211	247	85
Ireland	(Mean of 23 Stations) ..	22	7	21	8	15	4	12	18	8	15	16	20	166	217	77
British Isles	(Mean of 100 Stations) ..	20	5	17	8	13	5	10	15	7	12	12	18	142	190	75

therefore assured, but measuring glasses were not so well made sixty years ago as now, and there is room for doubt whether the figures may not be somewhat too small. With these exceptions only four years gave fewer than 140 rain days at Camden Square, the lowest being 128 in 1901.



On the average of 20 years less than 150 rain days appear to occur over an area almost exactly coinciding with that which in 1921 had less than 100. In other words, this area had a deficiency of 50 days, or 33 per cent. of the average. The main line of 150 rain days passed from Yorkshire to Devonshire, closely corresponding to the average line of 175 days, so that the deficiency here was only 25 days, or about 15 per cent. More than 200 rain days occurred in England and Wales only in broken areas in the elevated districts of the west and north-west,

but with these exceptions less than 200 rain days occurred in nearly all parts of the British Isles east of a line drawn from Aberdeenshire to Bantry Bay. The position of this line, although well to the west of the average position, was not so abnormal as the divergence from the average in the east would suggest. In the extreme west of Ireland the number of days was close to the average, whilst in the western half of Scotland, where more than 250 rain days occurred between Argyllshire and western Caithness, there was an excess over the average.

The general values for the countries are set out in Table II in comparison with those of the previous 18 years and with the average for the 20 years 1892–1911.

TABLE II.—*Rain Days, 1903–1921, compared with Average, 1892–1911.*

Year.	England and 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
1915	182	— 5	97	206	— 10	95	217	— 6	97	197	— 7	97
1916	205	+ 18	110	232	+ 16	107	239	+ 16	107	220	+ 16	108
1917	185	— 2	99	217	+ 1	100	224	+ 1	100	203	— 1	100
1918	200	+ 13	107	226	+ 10	105	227	+ 4	102	214	+ 10	105
1919	191	+ 4	102	214	— 2	99	213	— 10	96	203	— 1	100
1920	203	+ 16	109	232	+ 16	107	243	+ 20	109	220	+ 16	108
1921	158	— 29	85	224	+ 8	104	217	— 6	97	190	— 14	93

The general number for England and Wales was far below that of any previous year in the period covered. Indeed we have little hesitation in thinking that it was the lowest for a much longer period, giving a deficiency of 29 days or 15 per cent. In considering the degree of abnormality which this represents it must be borne in mind that the area dealt with is very large, and that the percentage fluctuations of rainfall frequency are considerably smaller than those of rainfall amount. For Scotland it will be observed there was an excess of 8 days or 4 per cent., the excess in the west more than counterbalancing the defect in the east; whilst Ireland as a whole showed a moderate deficiency. For the whole of the British Isles there was a defect of 14 rain days, corresponding to 7 per cent. One year, 1911, during the period available for comparison, approached this general deficiency closely, with one more day than 1921 over the country as a whole. In that year, however, the infrequency of rain was much more widespread and no area showed so marked a deficiency as was observed in the south-east of England in 1921.

No data exist, on a sufficiently wide basis, to enable a similar comparison to be made of the monthly values. The most remarkable months in England and Wales were February, June, July and September, each with less than 10 days. In February and June large areas had less than 3 days with rain, and in some districts only about 5 rain days occurred in June and July together. Except January, March, August, and possibly December, every month showed fewer than the average number of rain days in England and Wales. In Scotland the general values for the months were much higher, no month having less than 12 days, and three—January, March and December—as many as 25. Ireland also had great frequency of rain in the winter months, January giving 28 rain days, March 26 and December 26, but the number in June fell to 6 and in February, April and September to 11 or less.

For the British Isles taken as a whole only February and June had less than 10 days, whilst January, March, August and December reached 20 days or more.

Except in Scotland, where it was normal, the mean amount of rain per rain day was below the average. The deficiency of .02 in. for England and Wales has been equalled in previous years and was exceeded in 1905, but for Scotland and Ireland several years have given lower values. The significance of this figure for England and Wales appears to be that it suggests that the droughty conditions of 1921 were marked in part by infrequency of rain, and in part by less heavy rain.

TABLE III.—*Mean Amount of Rain per Rain Day, 1903-1921.*

	<i>General Values</i>			
	England and Wales.	Scotland.	Ireland.	British Isles.
	in.	in.	in.	in.
1903 .....	.21	.24	.20	.22
1904 .....	.17	.20	.18	.18
1905 .....	.16	.19	.16	.17
1906 .....	.19	.21	.17	.19
1907 .....	.18	.20	.17	.18
1908 .....	.17	.20	.17	.18
1909 .....	.19	.21	.18	.19
1910 .....	.20	.22	.19	.20
1911 .....	.20	.22	.20	.21
1912 .....	.21	.24	.19	.21
1913 .....	.19	.22	.20	.20
1914 .....	.20	.23	.20	.21
1915 .....	.22	.22	.20	.21
1916 .....	.19	.24	.20	.21
1917 .....	.19	.22	.19	.20
1918 .....	.20	.22	.21	.21
1919 .....	.20	.21	.19	.20
1920 .....	.20	.22	.20	.21
1921 .....	.17	.22	.18	.19
Average ...	.19	.22	.19	.20

The map on p. 16 shows the geographical distribution of the number of "wet days" or days with $\cdot 04$ in. (1·0 mm.) of rain, during the year. The data are set out in Table IV for 100 stations, but the map has been amplified by the addition of about 700 other records.

The most striking feature is the existence of an area in the south-east of England, where less than 75 wet days occurred. This area was rather more extensive than that with less than 100 rain days, extending from Spalding, in south Lincolnshire, to Lowestoft in the east and to Winchelsea in the south. With certain minor exceptions, everywhere east of a line drawn from Forfarshire to Devonshire less than 100 wet days occurred; from this line to the westward there was a steady increase, certain hilly districts in England and Wales and practically the whole of the west of Scotland and Ireland having more than 150 days. The whole of the western Highlands and a north-western coastal strip in Ireland stretching from Connemara to the Bloody Foreland experienced more than 200 wet days, whilst much of the rainy area in Scotland had as many as 250. There is no doubt that the distribution in relation to the average was somewhat similar to that of rain days and of total rainfall, viz., a heavy deficiency in the south-east, a moderate deficiency in the centre and a moderate excess in the north-west.

In the last column of Table IV the number of wet days is given as a percentage of the number of rain days. The values show considerable irregularity, but in the main indicate that the proportion of rain days which rank as "wet days" increases with total rainfall. Thus the lowest values, in some cases below 60 per cent., are invariably at the driest stations and the highest, exceeding 90 per cent., at the wettest. The percentage values not only serve to demonstrate this fact, but in some cases are a means of testing the accuracy of the numbers of rain days.

The general numbers of wet days for the months of 1921 are shown in the following summary in comparison with those for the two preceding years. The most remarkable months were undoubtedly February and June. In England and Wales the mean values for these two months were respectively 2 and 3 wet days, whilst a considerable area had only 1 such day in each of these months, and a small area in June had none. July also was very noteworthy in this respect in England, some cases occurring where June and July together had only 1 wet day between them. The months of greatest frequency were January and December in all parts, March showed high values in Scotland, whilst August was the month of greatest frequency during the summer.

Number of Wet Days in 1919 to 1921, British Isles.

	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year.
1919 ..	19	9	15	14	8	12	8	12	13	11	15	22	158
1920 ..	20	13	17	19	15	10	19	9	13	9	12	15	171
1921 ..	20	5	17	8	13	5	10	15	7	12	12	18	142

The general values for the countries showed a conspicuous departure from the two previous years in England, but in Scotland and Ireland called for no special comment.

General Number of Wet Days in 1919 to 1921.

		England and Wales.	Scotland.	Ireland.	British Isles.
1919..	..	143	172	171	158
1920..	..	151	185	197	171
1921..	..	110	177	166	142

DROUGHTS AND DRY SPELLS IN 1921.

In opening a volume dealing with statistics of rainfall in 1921 it is probable that the majority of readers will turn in the first place to the section on "Droughts" as likely to give information of a somewhat sensational nature. In the south-east of England, and probably also in the east of Scotland and the south of Ireland the year may be very fairly described as having been more notable for drought, in the ordinary sense of the word, than any year in living memory, and possibly for much longer.

The fact that the "Comparative Summary of Droughts" does not appear to bear this out may be attributed to two causes. In the first place, as we have previously pointed out, the definitions of Drought which have been in use for the last 35 years in *British Rainfall*, and which have become in some measure established in the common currency of meteorology in this country, are inadequate for the purpose for which they were originally intended. The reasons for this inadequacy have been dwelt upon in the two last volumes of *British Rainfall* and it is not necessary to repeat them. In the second place the character of the remarkably dry year 1921 arose rather from long-continued persistence of shortage of rainfall than from the occurrence of extreme dryness for short spells. It is the latter type of weather which gives the greatest number of droughts satisfying the definitions.

Whilst there appears to be no doubt that the old definitions must shortly be abandoned in favour of more workable ones, it must not be forgotten that they form the only means at present available for comparing the year with a long series of preceding years, and in view of the very unusual character of the year 1921 it has been felt to be undesirable to make any change immediately.

The definitions in question are as follows:—

An **Absolute Drought** is a period of *more than* fourteen consecutive days (*i.e.*, fifteen or more), no one of which is a rain day.

A **Partial Drought** is a period of *more than* twenty-eight consecutive days (*i.e.*, twenty-nine or more), the mean rainfall of which does not exceed $\cdot 01$ in. per day.

In addition to the data based on the above we again give a list of the "Dry Spells" based on the new definition introduced in 1919.

A **Dry Spell** is a period of fifteen or more consecutive days, no one of which is a "Wet Day." [A "Wet Day" for the purpose of this definition is a day ending at 9 h. (G.M.T.) on which 1 mm., or $\cdot 04$ in., or more of rain is recorded.]

Comparative Summary of Droughts, 1887-1921.

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	
1914	49	20	25	65	54	33	50	57	
1915	68	18	33	38	56	36	50	57	
1916	52	20	29	51	44	33	43	57	
1917	109	19	28	23	64	33	61	46	
1918	20	16	18	83	14	34	47	87	
1919	33	18	31	68	44	38	50	63	
1920	18	17	22	84	22	37	54	79	
1921	86	19	38	47	109	42	89	30	
Average	64	18	27	52	52	36	56	59	
1921 diff. from Average.	+22	+1	+11	-5	+57	+6	+33	-29	

NOTE.—The values previous to 1910 have been increased to the equivalent of 100 Stations for ready comparison. In the columns headed "Greatest," the figures refer to the selected Stations only.

Dealing first with the older definitions, the following summary shows that, on the average of 35 years, at 100 representative and well distributed stations 64 absolute droughts and 52 partial droughts occur

annually. In 1921 the number of absolute droughts observed at the 100 stations was 86 and of partial droughts 109. Of these figures the latter is by far the more noteworthy, indicating that the year was more marked by long rather dry periods than by short very dry periods. This fact is amply borne out by the year's records generally.

It is to be observed indeed that as many as eight out of the previous 34 years gave higher values for prevalence of absolute drought, while two only—1887 and 1911—were more conspicuous for partial drought. The number of stations without any occurrence of drought during the year, the best guide as to the area affected, showed similar results. Out of the 100 stations 47, representing nearly one half the area of the British Isles, had none; the average being only 52 or rather more than half. Out of the preceding 34 years as many as 10 had more widespread absolute drought. Partial droughts were more widespread than were absolute droughts, only 30 stations out of 100 failing to record at least one. This compares with an average of 59, so that the immune area was only one-half of the normal immune area. Since 1887 only five years have had fewer than 30 stations out of the 100 experiencing no partial drought.

There can be little doubt that the statistics of "dry spells" would bring out the characteristic features of 1921 more prominently than do the above data, if it were possible to carry the comparison back to previous years. This, unfortunately, is not at present practicable on account of the great labour involved.

The following summary shows that at 100 stations 201 dry spells, or an average of two per station, were recorded. This compares with 56 in 1920 and 98 in 1919. The number of stations reporting none was only 21, whilst 36 out of the 100 reported three or more, and seven as many as five or more. These figures are in striking contrast with those for the two previous years.

Dry Spells, 1919-1921.

	Number at 100 Stations.	Duration.		Number of Stations with			
		Mean.	Greatest.	None.	One or two.	Three or four.	Five or more.
		Days.	Days.				
1919	98	19	38	35	62	3	0
1920	56	18	31	55	44	1	0
1921	201	21	58	21	43	29	7

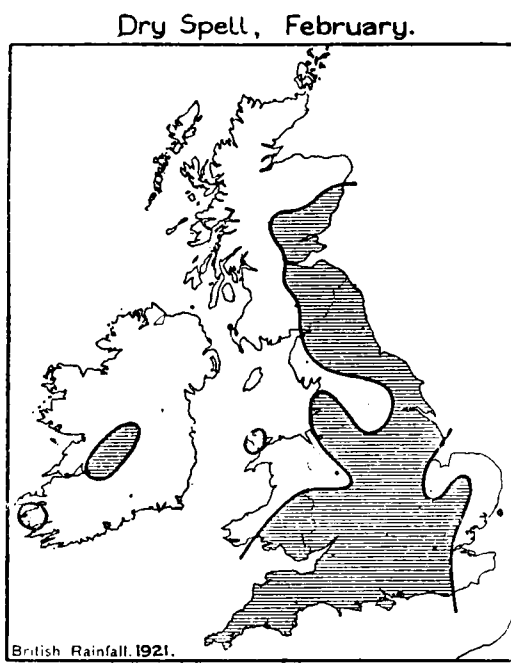
Turning from the consideration of the year as a whole to that of individual dry periods, these are found to fall into a number of well-defined epochs, which may be roughly classified as: (i) February, (ii) April, (iii) June-July, (iv) September (locally August-September), and (v) November. Of these Nos. (ii) and (v) respectively in April and November, were comparatively unimportant.

(i) The dry period of February gave rise to absolute drought only at a few stations in Wessex, one in Northamptonshire, and one in Fife, the period being approximately the first three weeks of the month. Partial drought was considerably more widespread, occurring over a broad belt of country extending from Devonshire to Norfolk, on the east coast from Hull to Dundee, and at one or two isolated stations in other parts of Great Britain. No station in Ireland was affected. The duration was greatest in Essex and Suffolk, where it locally exceeded 40 days, reaching 48 days from 28th January to 16th March at Haughley, near Stowmarket.

The area affected under the definition of a dry spell was somewhat larger, including the whole of England except strips of the east and north-west, part of South Wales, the south-east of Scotland, and a few scattered areas in Ireland. The duration was very uniform in most places, being as a rule from 2nd to 24th February, but at Sunderland the spell ran to the unusual length of 37 days, from 26th January to 3rd March.

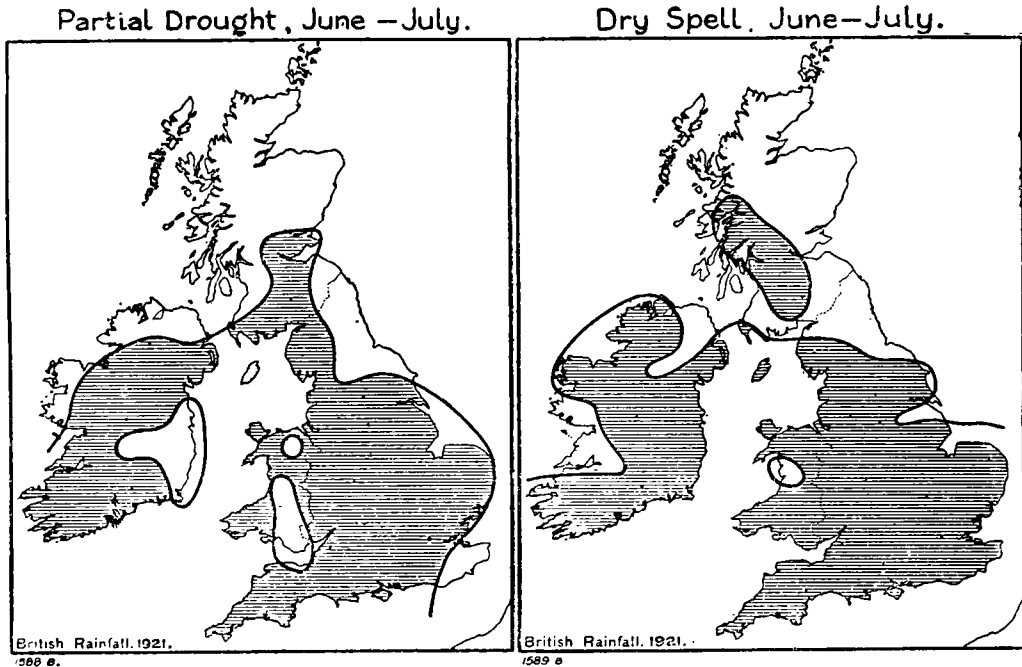
(ii) Whilst the drought of February was one of the most important features of the rainfall of 1921, since but for its occurrence the effects of the remarkably dry summer would probably have been less severely felt, the spring generally was not notably dry, indeed in places it was distinctly wet. Over certain areas, however, the general tendency to dry weather was continued more or less without a break, and at times overstepped the limits of definitive drought. Thus at Eye, near Peterborough, and at St. Andrews, partial drought was recorded from mid-March to mid-April, and at some stations in the south of Ireland absolute drought occurred in early April. A dry spell of short duration coinciding roughly with the first half of April was observed at numerous scattered stations in all parts of the British Isles except the north-west.

(iii) The great summer drought of 1921 was ushered in by a local dry spell in mid-May in the London and East Anglian districts. Over the country at large, however, the drought period commenced at or soon after the beginning of June. Absolute and partial droughts were nearly coincident in respect of area, affecting practically all parts of the British Isles to the south of a line passing from the Shannon



Dry Spells occurred in the shaded area.

estuary north-eastward to Dundee and from thence south-eastward to Kent. Over the greater part of this area absolute droughts occurred



The areas in which Partial Drought and Dry Spells occurred are shaded in the two maps, respectively.

either in June or July, or in both months, whilst partial droughts in most places extended practically throughout the whole period. In parts of South Wales and Sussex June was absolutely rainless, an almost unprecedented phenomenon, and in a small area July was nearly as dry. The longest period of absolute drought observed at any of the selected stations was 38 days, from 9th June to 16th July, at Patcham, near Brighton. At Tenterden, in Kent, the same absolute drought lasted 35 days, and was followed after a single rain day by a further 16 rainless days. The duration of partial drought was variable, exceeding 50 days in many parts of the south of England and Wales. At Tenterden partial drought continued unbroken from 8th May to 4th August, 89 days during which $\cdot 87$ in. of rain fell. At Bradwell-on-Sea the period was 79 days, and at Newport Pagnell 74 days.

These are remarkable figures, and indicate that the severity of the drought was of a high order, but they are far from unprecedented. The great spring drought of 1893, curiously enough, affected much the same districts, and it is worth while to recall that on that occasion partial drought of more than 75 days' duration occurred over the whole of the south-east of England beyond a line drawn from Cornwall to the mouth of the Humber. In the extreme south-east, including the places where the summer partial drought of 1921 was longest, the 1893

partial drought lasted for more than 100 days, reaching 126 days at Eastbourne, 127 days at Dungeness, and 128 days at North Ockendon, near Romford. On the same occasion absolute droughts of 50 and 60 days' duration were widespread in Kent and Sussex, whilst at two London stations the duration was given as 72 and 73 days respectively. These figures compare with a maximum of 37 days in 1921. Some allowance must possibly be made for the less sensitive rain gauges in use 28 years ago, since small falls of rain may possibly have passed unnoticed, but even so the contrast is striking.

Under the "dry spell" definition the dry period of the summer of 1921 is clearly seen to be broken into two halves, nearly all districts having appreciable rain round about 25th June. The area involved was slightly wider than that affected by partial drought, and a well-marked district in the south-west of Scotland was also included. Generally speaking, dry spells lasted, with the break mentioned above, from near the beginning of June to the second or third week in July. In Wales, Scotland and the north of Ireland only the second half of this period was affected, and at one or two stations in the north of England only the first half. The longest unbroken dry spells were from 31st May to 27th July, 58 days, at Tenterden, and from 1st June to 16th July, 46 days, at Patcham.

Dry Spell, September.



(iv) There was a temporary lull in the prevalence of extreme drought during August, but towards the end of that month dry conditions again set in, giving a short local dry spell in the south of England which lasted until the end of the first week of September. At Peterborough and Bradwell (Essex) absolute drought was recorded at this time. The more widespread dry period, however, did not set in until the middle of September, lasting until early October. This period gave an absolute drought only very locally, most of the stations affected being in a strip of country stretching from Kent to the East Riding of Yorkshire. The partial drought, on the other hand, affected chiefly the district between Kent and Dorsetshire. In no case was the duration excessive, but there were again 51 days of partial drought at Tenterden, where it continued from 12th September to 1st November.

Dry Spells occurred in the shaded area.

Other stations in the south-east of England had partial drought until mid-October.

As a dry spell this period was very well marked. It affected the whole of England except the extreme west, and also a number of detached areas stretching from the south of Ireland to the Firth of Forth. The duration in most cases did not exceed 20 days, but at Tenterden it extended to 36 days and at Petersfield to 30 days. At Hull and Horncastle a separate dry spell in mid-October occurred, but at most stations there was no dry spell after the first few days of that month.

(v) The dry period of November gave partial droughts extending well into December at four stations in East Anglia and dry spells at three of these stations. A partial drought also occurred at Fortrose in Ross-shire. Apart from the fact that these entries in the lists give evidence of the protracted nature of the dry weather of 1921 they are not of great importance. Locally, however, the continued absence of rain caused serious water famine.

Reviewing briefly the dry periods of 1921, it may be repeated that they were not precisely of the nature which is most readily emphasized by the definitions in use. They were notable rather for frequency than individual duration, and it would probably be a just summing-up of the situation to say that the list of droughts merely brings into prominence the most notable portions of a period which was in many parts of the country persistently deficient in rainfall to a degree not previously experienced in the British Isles.

In the following lists all the Droughts and Dry Spells which occurred at the 100 selected stations are set out in full. In the case of stations with none the name is omitted. The complete list of stations is given in the tables of rain days on pp. 10-12.

Droughts in 1921.

Station and County.	ABSOLUTE DROUGHTS.			PARTIAL DROUGHTS.			
	Began.	Ended.	Last- ed.	Began.	Ended.	Last- ed.	Rain.
ENGLAND & WALES.			Days			Days.	In.
St. Pancras (Camden Sq.)..	June 27	July 25	29	Jan. 19	Feb. 28	41	·40
London—2.				June 4	Aug. 11	69	·54
				Sept. 14	Oct. 18	35	·31
Tenterden (View Tower) ..	June 1	July 5	35	May 8	Aug. 4	89	·87
Kent—1.	July 7	July 22	16	Sept. 12	Nov. 1	51	·51
	Sept. 19	Oct. 9	21				
Patcham	June 9	July 16	38	May 30	Aug. 3	66	·59
Sussex—3.				Sept. 14	Oct. 18	35	·35
Lymington (The Salterns)..	Feb. 2	Feb. 23	22	Feb. 1	Mar. 5	33	·30
Hampshire—4.	June 26	July 12	17	May 30	July 12	44	·37
				Sept. 12	Oct. 17	36	·35

Droughts in 1921—(con.).

Station and County.	ABSOLUTE DROUGHTS.			PARTIAL DROUGHTS.			
	Began.	Ended.	Last- ed.	Began.	Ended.	Last- ed.	Rain.
ENGLAND & WALES —(con.).			Days.			Days	In.
Petersfield (Ditcham Park) <i>Hampshire—5.</i>	Feb. 3	Feb. 23	21	Feb. 2	Mar. 5	32	.26
	June 9	June 24	16	May 30	July 14	46	.32
	June 26	July 13	18	Sept. 12	Oct. 18	37	.26
	Sept. 26	Oct. 12	17				
Upton <i>Berkshire—5.</i>	June 9	June 24	16	May 30	July 31	63	.63
	June 27	July 14	18	Sept. 14	Oct. 17	34	.34
Newport Pagnell (The Croft) <i>Buckinghamshire—5.</i>	None.			Jan. 19	Feb. 24	37	.37
				May 15	July 27	74	.74
Eye, Northolm <i>Northamptonshire—4.</i>	Aug. 22	Sept. 10	20	Jan. 18	Feb. 24	38	.25
	Sept. 15	Oct. 2	18	Mar. 13	Apr. 12	31	.31
				June 27	Aug. 3	38	.37
Fulbourn (Pumping Statn.) <i>Cambridgeshire—2.</i>	None.			Jan. 19	Feb. 24	37	.35
				June 27	Aug. 3	38	.33
Bradwell-on-Sea (Brdwl Hl.) <i>Essex—3.</i>	May 8	May 24	17	Jan. 17	Feb. 24	39	.38
	June 1	June 19	19	Apr. 24	May 25	32	.24
	July 7	July 22	16	May 29	Aug. 15	79	.74
	Aug. 22	Sept. 9	19	Nov. 6	Dec. 11	36	.32
Haughley (Haughley Ho.).. <i>Suffolk—2.</i>	May 10	May 24	15	Jan. 28	Mar. 16	48	.47
	June 4	June 19	16	May 28	Aug. 6	71	.71
	Sept. 14	Oct. 2	19	Nov. 6	Dec. 11	36	.29
Yarmouth (Burgh Hall).... <i>Suffolk—4.</i>	May 10	May 25	16	Jan. 26	Feb. 28	34	.33
				Apr. 27	May 25	29	.28
				June 21	July 27	37	.33
				Nov. 9	Dec. 11	33	.24
Swaffham <i>Norfolk—4.</i>	July 17	Aug. 2	17	Jan. 27	Feb. 24	29	.22
	Sept. 15	Oct. 1	17	June 4	July 5	32	.26
				Nov. 9	Dec. 21	43	.42
Salisbury Plain (Shrewton) <i>Wiltshire—3.</i>	Feb. 9	Feb. 23	15	May 30	July 12	44	.41
	June 4	June 18	15				
	June 26	July 12	17				
Dorchester (Wollaston Ho.) <i>Dorsetshire—3.</i>	Feb. 1	Feb. 23	23	Jan. 31	Mar. 9	38	.26
	June 4	June 24	21	May 30	July 13	45	.37
	June 27	July 13	17	Sept. 12	Oct. 12	31	.30
Holne (Church Pk. Cottage) <i>South Devon—4</i>	June 10	June 24	15	Jan. 31	Mar. 2	31	.31
	June 27	July 14	18	May 31	July 24	55	.55
Martinhoe Rectory <i>North Devon—1.</i>	May 31	June 24	25	Feb. 1	Mar. 2	30	.29
	June 27	July 12	16	May 31	July 22	53	.48
Morwenstow Vicarage <i>Cornwall—1.</i>	June 26	July 14	19	May 30	July 24	56	.35
St. Austell (Trevarna) <i>Cornwall—2.</i>	June 1	June 24	24	May 30	July 24	56	.46
	June 26	July 14	19				
Angersleigh (Leigh Court).. <i>Somersetshire—3.</i>	Feb. 1	Feb. 23	23	Jan. 31	Mar. 5	34	.32
	June 4	June 24	21				
	June 28	July 13	16				
Mickleton (Bank House) .. <i>Gloucestershire—4.</i>	June 28	July 13	16	Feb. 1	Mar. 5	33	.30
				June 4	Aug. 1	59	.58
Clifton (Harley Place) <i>Gloucestershire—5.</i>	Feb. 2	Feb. 23	22	May 30	July 21	53	.47
	June 4	June 24	21				
	June 28	July 13	16				

Droughts in 1921—(con.).

Station and County.	ABSOLUTE DROUGHTS.			PARTIAL DROUGHTS.			
	Began.	Ended.	Last- ed.	Began.	Ended.	Last- ed.	Rain.
ENGLAND & WALES—(con.).			Days.			Days.	In.
Hereford (Holmer Hall)	June 28	July 14	17	Jan. 31	Mar. 12	41	.40
Herefordshire—1.				May 15	July 24	71	.66
				Sept. 14	Oct. 12	29	.29
Shifnal (Hatton Grange) . .	June 28	July 12	15	June 5	July 24	50	.49
Shropshire—4.							
Ashbourne (Mayfield Ho.) . .	July 7	July 21	15	May 30	July 24	56	.56
Staffordshire—5.							
Leicester (Stoughton Drive)	Feb. 7	Feb. 23	17	June 5	Aug. 3	60	.59
Leicestershire—4.	Sept. 15	Oct. 2	18				
Horncastle	June 4	June 18	15	June 27	Aug. 1	36	.34
Lincolnshire—3.							
Worksop (Hodsock Priory)	Sept. 15	Oct. 1	17	Feb. 1	Mar. 11	39	.39
Nottinghamshire—5.				June 21	July 24	34	.30
Northwich (Hunts Lock) . .	None.			June 5	July 22	48	.46
Cheshire—2.							
S. Michael's-on-Wyre Vic.	June 27	July 13	17	Feb. 1	Mar. 2	30	.27
North Lancashire—5.				May 30	July 13	44	.42
Meltham (Harewood Lodge)	June 13	July 5	23	May 30	July 21	53	.45
Yorkshire, W. R.—8.							
Hull (Pearson Park)	June 5	June 19	15	Jan. 28	Mar. 2	34	.32
Yorkshire, E. R.—3.	Sept. 15	Oct. 1	17	May 30	July 24	56	.50
Felixkirk (Mount St. John)	None.			Jan. 26	Mar. 4	38	.38
Yorkshire, N. R.—2.				Sept. 14	Oct. 12	29	.23
Aislaby (Park Hall)	None.			Jan. 28	Mar. 3	35	.34
Yorkshire, N. R.—5.							
Sunderland (W. Hendon Ho.)	None.			Jan. 26	Mar. 4	38	.36
Durham—2.				Sept. 14	Oct. 20	37	.35
Glanton (Glanton Pyke Gns)	None.			Feb. 1	Mar. 2	30	.30
Northumberland—6.							
Appleby (Castle Bank)	None.			Feb. 1	Mar. 2	30	.23
Westmorland—1.				June 1	July 5	35	.34
Dungeon Ghyll	June 20	July 5	16	June 10	July 14	35	.27
Westmorland—2.							
Treherbert (Tyn-y-waun)	June 26	July 12	17	None.			
Glamorganshire—6.							
Carmarthen (The Friary) . .	May 30	June 25	27	Jan. 31	Feb. 28	29	.28
Carmarthenshire—2.				May 30	July 24	56	.55
Fishguard (Dwrbach)	June 20	July 14	25	June 1	July 23	53	.47
Pembrokeshire—4.							
Newtown (Penarth Weir) . .	None.			June 6	July 13	38	.36
Montgomeryshire—4.							
Denbigh (Garn)	June 27	July 13	17	None.			
Denbighshire—2.							
Dolgelly (Bryntirion)	None.			June 21	July 19	29	.29
Merionethshire—4.							
Llanerchymedd (Llwydiarth Esgob)	June 20	July 14	25	May 30	July 14	46	.29
Anglesey.							
ISLE OF MAN.							
Douglas (Clypse Reservoir)	Sept. 15	Oct. 1	17	May 31	July 14	45	.36
Isle of Man.							

Droughts in 1921—(con.).

Station and County.	ABSOLUTE DROUGHTS.			PARTIAL DROUGHTS.			
	Began.	Ended.	Last- ed.	Began.	Ended	Last- ed.	Rain.
CHANNEL ISLANDS.							
St. Martins (Les Blanchés) . . <i>Guernsey.</i>	June 6	June 24	19	June 4 Sept. 17	July 27 Oct. 19	54 33	·54 ·27
SCOTLAND.							
Stoneykirk (Ardwell House) <i>Wigtownshire—3.</i>	None.			May 31	July 14	45	·41
Dumfries (Jardington) <i>Kirkcudbrightshire—5.</i>	June 23	July 13	21	June 9	July 13	35	·19
Canonbie (Irvine House) . . <i>Dumfriesshire—5.</i>	None.			June 11	July 13	33	·33
Swinton House <i>Berwickshire—3.</i>	None.			Feb. 2	Mar. 3	30	·16
Mid-Calder (Calder Hall) . . <i>Midlothianshire—5.</i>	June 23	July 14	22	May 31	July 20	51	·51
Stirling (Touch Reser. No. 1) <i>Stirlingshire—1.</i>	None.			June 9	July 14	36	·30
Inveraray Castle Gardens . . <i>Argyllshire—11.</i>	June 24	July 9	16	None.			
St. Andrews Water Works . . <i>Fifeshire—3.</i>	Feb. 9 Mar. 30	Feb. 23 Apr. 15	15 17	Mar. 18 June 9	Apr. 15 July 17	29 39	·28 ·32
Aberfeldy (Dall Avon) <i>Perthshire—11.</i>	None.			Jan. 26	Feb. 23	29	·29
Fortrose <i>Ross & Cromarty—3.</i>	None.			Nov. 6	Dec. 4	29	·26
IRELAND.							
Castletownshend (Seafeld) <i>Co. Cork—6.</i>	Mar. 29 May 31 June 28	Apr. 13 June 26 July 13	16 27 16	May 30	July 14	46	·37
Queenstown (Fota Island) <i>Co. Cork—17.</i>	June 1 June 27	June 24 July 13	24 17	May 28	July 13	47	·45
Cahiriveen (Valencia Obs.) <i>Co. Kerry—3.</i>	Feb. 9	Feb. 23	15	May 31	July 14	45	·35
Killarney (District Asylum) <i>Co. Kerry—3.</i>	June 1	June 26	26	May 31	July 14	45	·45
Waterford (Brook Lodge) . . <i>Co. Waterford—3.</i>	June 1 June 28	June 26 July 13	26 16	May 30	July 13	45	·28
Cashel (Ballinamona) <i>Co. Tipperary—3.</i>	June 10 June 28	June 25 July 13	16 16	June 1	July 14	44	·38
Ennistymon House <i>Co. Clare—2.</i>	None.			June 13	July 13	31	·25
Gorey (Courtown House) . . <i>Co. Wexford—4.</i>	Mar. 28	Apr. 15	19	None.			
Abbey Leix (Blandsfort) . . <i>Queen's County—2.</i>	June 28	July 13	16	None.			
Sallins (Palmerstown) <i>Co. Kildare—2.</i>	None.			May 30	July 14	46	·26
Kells (Headfort) <i>Co. Meath—4.</i>	June 12	July 14	33	May 31	July 14	45	·27

Droughts in 1921—(con.).

Station and County.	ABSOLUTE DROUGHTS.			PARTIAL DROUGHTS.			
	Began.	Ended.	Last- ed.	Began.	Ended.	Last- ed.	Rain.
IRELAND— <i>con.</i>							
Moate (Coolatore)	June 14	July 6	Days. 23	May 31	July 13	Days. 44	In. ·29
Co. Westmeath—1.							
Woodlawn	None.			June 1	July 13	43	·40
Co. Galway—4.							
Crossmolina (Enniscoe)	None.			June 12	July 15	34	·30
Co. Mayo—2.							
Collooney (Markree Obser.)	None.			June 12	July 14	33	·25
Co. Sligo—2.							
Belturbet (Cloverhill)	None.			June 13	July 14	32	·30
Co. Cavan—1.							
Seaforde	June 21	July 5	15	June 7	July 5	29	·26
Co. Down—2.							
Omagh (Edenfel)	June 21	July 6	16	June 12	July 15	34	·30
Co. Tyrone—3.							

Dry Spells in 1921.

Station and County.	Began.	Ended.	Last- ed.	Rain- fall.
ENGLAND AND WALES.				
St. Pancras (Camden Square)	Feb. 1	Feb. 24	Days. 24	In. ·03
London—2.	June 4	June 24	21	·04
	June 26	July 27	32	·03
	Aug. 24	Sept. 10	17	·06
	Sept. 14	Oct. 9	26	·04
Tenterden (View Tower)	May 8	May 25	18	·04
Kent—1.	May 31	July 27	58	·06
	Sept. 14	Oct. 19	36	·04
Patcham	Feb. 1	Feb. 24	24	·04
Sussex—3.	June 1	July 16	46	·02
	Sept. 14	Oct. 9	26	·02
Lymington (The Salterns)	Feb. 2	Feb. 23	22	·00
Hampshire—4.	June 4	June 24	21	·03
	June 26	July 12	17	·00
	Aug. 22	Sept. 8	18	·03
Petersfield (Ditcham Park)	Feb. 2	Feb. 24	23	·04
Hampshire—5.	June 4	June 24	21	·01
	June 26	July 14	19	·02
	Aug. 24	Sept. 8	16	·04
	Sept. 18	Oct. 17	30	·05
Upton	Feb. 1	Feb. 23	23	·04
Berkshire—5.	June 9	June 24	16	·00
	June 27	July 14	18	·00
Newport Pagnell (The Croft)	Feb. 1	Feb. 24	24	·03
Buckinghamshire—5.	June 4	June 18	15	·03
	July 7	July 27	21	·06
	Sept. 15	Oct. 2	18	·07

Dry Spells in 1921—(con.).

Station and County.	Began.	Ended.	Last.	Rain-fall.
ENGLAND & WALES—(con.).				
Eye, Northholm	Jan. 31	Feb. 24	25	·02
Northamptonshire—4.	June 4	June 19	16	·02
	Aug. 22	Sept. 10	20	·00
	Sept. 13	Oct. 2	20	·02
Fulbourn (Pumping Station)	May 9	May 25	17	·07
Cambridgeshire—2.	June 4	June 19	16	·06
	July 7	July 28	22	·05
Bradwell-on-Sea (Bradwell Hall)	May 8	May 25	18	·02
Essex—3.	May 30	July 5	37	·04
	July 7	July 27	21	·03
	Aug. 22	Sept. 10	20	·02
	Nov. 6	Nov. 20	15	·04
Haughley (Haughley House)	Jan. 28	Feb. 24	28	·06
Suffolk—2.	Mar. 21	April 4	15	·05
	May 10	May 24	15	·00
	June 4	June 19	16	·00
	June 21	July 5	15	·03
	July 7	July 22	16	·02
	Aug. 24	Sept. 10	18	·04
	Sept. 14	Oct. 2	19	·00
Yarmouth (Burgh Hall)	May 8	May 25	18	·02
Suffolk—4.	July 7	July 27	21	·02
	Sept. 13	Oct. 2	20	·04
	Nov. 9	Nov. 30	22	·04
Swaffham	Jan. 31	Feb. 24	25	·06
Norfolk—4.	July 17	Aug. 2	17	·00
	Sept. 15	Oct. 1	17	·00
	Nov. 9	Nov. 28	20	·06
Salisbury Plain (Shrewton)	Feb. 1	Feb. 23	23	·03
Wiltshire—3.	June 4	June 18	15	·00
	June 26	July 12	17	·00
Dorchester (Wollaston House)	Jan. 31	Feb. 24	25	·03
Dorsetshire—3.	May 30	June 24	26	·04
	June 26	July 13	18	·02
	Aug. 22	Sept. 8	18	·05
Holne (Church Park Cottage)	Jan. 31	Feb. 23	24	·05
South Devon—4.	May 14	May 28	15	·05
	May 31	June 24	25	·05
	June 26	July 21	26	·05
Martinhoe Rectory	Feb. 1	Feb. 23	23	·04
North Devon—1.	May 31	June 24	25	·00
	June 26	July 12	17	·01
Morwenstow Vicarage.....	Feb. 4	Feb. 21	18	·04
Cornwall—1.	May 31	July 14	45	·07
St. Austell, Trevarna	Feb. 4	Feb. 23	20	·03
Cornwall—2.	June 1	June 24	24	·00
	June 26	July 22	27	·05
Angersleigh (Leigh Court)	Jan. 31	Feb. 23	24	·03
Somersetshire—3.	April 17	May 3	17	·06
	June 4	June 24	21	·00
	June 27	July 13	17	·01

Dry Spells in 1921—(con.).

Station and County.	Began.	Ended.	Lasted.	Rain-fall.
ENGLAND & WALES—(con.).				
			Days.	In.
Mickleton (Bank House)	Feb. 1	Feb. 24	24	·07
Gloucestershire—4.	June 4	June 25	22	·06
	June 28	July 13	16	·00
	Aug. 18	Sept. 10	24	·05
	Sept. 15	Oct. 2	18	·03
Clifton (Harley Place)	Feb. 1	Feb. 23	23	·01
Gloucestershire—5.	June 4	June 24	21	·00
	June 26	July 13	18	·03
Hereford (Holmer Hall)	Feb. 1	Feb. 23	23	·05
Herefordshire—1.	May 30	June 24	26	·11
	June 27	July 14	18	·01
	Sept. 18	Oct. 2	15	·03
Shifnal (Hatton Grange)	June 28	July 12	15	·00
Shropshire—4.	Sept. 14	Oct. 2	19	·04
Ashbourne (Mayfield House)	Feb. 1	Feb. 23	23	·03
Staffordshire—5.	June 4	June 25	22	·11
	June 27	July 22	26	·04
	Sept. 15	Oct. 1	17	·02
Leicester (Stoughton Drive)	Feb. 1	Feb. 24	24	·05
Leicestershire—4.	June 27	July 24	28	·07
	Sept. 15	Oct. 2	18	·00
Horncastle.....	Feb. 10	Feb. 24	15	·04
Lincolnshire—3.	Mar. 26	Apr. 12	18	·11
	June 4	June 19	16	·03
	Sept. 15	Oct. 2	18	·03
	Oct. 4	Oct. 18	15	·05
Worksop (Hodsock Priory)	Feb. 1	Feb. 24	24	·05
Nottinghamshire—5.	Sept. 15	Oct. 1	17	·00
Northwich (Hunts Lock)	Feb. 1	Feb. 21	21	·09
Cheshire—2.	June 21	July 14	24	·05
	Sept. 13	Oct. 1	19	·08
S. Michael's-on-Wyre Vicarage	Feb. 1	Feb. 23	23	·06
North Lancashire—5.	June 27	July 13	17	·00
	Sept. 14	Oct. 2	19	·11
Settle Gas Works	June 26	July 14	19	·03
Yorkshire, W. R.—2.	Sept. 16	Oct. 1	16	·03
Meltham (Harewood Lodge)	June 13	July 14	32	·03
Yorkshire, W. R.—8.				
Hull (Pearson Park)	Feb. 8	Feb. 24	17	·05
Yorkshire, E. R.—3.	Mar. 29	Apr. 12	15	·05
	June 5	June 24	20	·07
	Sept. 14	Oct. 1	18	·03
	Oct. 4	Oct. 18	15	·03
Felixkirk (Mount St. John)	June 5	June 21	17	·11
Yorkshire, N. R.—2.	Sept. 14	Oct. 1	18	·03
Aislaby (Park Hall)	Feb. 8	Mar. 2	23	·12
Yorkshire, N. R.—5.				
Sunderland (West Hendon House)	Jan. 26	Mar. 3	37	·31
Durham—2.	Sept. 14	Oct. 1	18	·04
Glanton (Glanton Pyke Gardens)	Feb. 8	Mar. 2	23	·10
Northumberland—6.				

Dry Spells in 1921—(con.).

Station and County.	Began.	Ended.	Lasted.	Rain-fall.
ENGLAND AND WALES—(con.).				
			Days.	In.
Appleby (Castle Bank)	Feb. 1	Feb. 23	23	·04
Westmorland—1.	Mar. 29	Apr. 12	15	·13
	June 20	July 5	16	·05
	Sept. 14	Oct. 1	18	·08
Dungeon Ghyll	June 13	July 14	32	·04
Westmorland—2.				
Treherbert (Tyn-y-waun)	Feb. 1	Feb. 23	23	·03
Glamorganshire—6.	June 26	July 13	18	·03
Carmarthen (The Friary)	Feb. 9	Feb. 23	15	·04
Carmarthenshire—2.	May 30	July 13	45	·07
Fishguard (Dwrbach)	June 1	July 14	44	·03
Pembrokeshire—4.				
Devil's Bridge	June 28	July 13	16	·04
Cardiganshire—2.				
Newtown (Penarth Weir)	Feb. 1	Feb. 23	23	·02
Montgomeryshire—4.	June 28	July 13	16	·02
Denbigh (Garn)	June 1	June 18	18	·08
Denbighshire—2.	June 27	July 13	17	·00
Llanerchymedd (Llwydiarth Esgob)	Feb. 9	Feb. 23	15	·03
Anglesey.	June 13	July 14	32	·02
ISLE OF MAN.				
Douglas (Clypse Reservoir)	Mar. 29	Apr. 12	15	·06
Isle of Man.	June 20	July 5	16	·02
	Sept. 14	Oct. 2	19	·04
CHANNEL ISLANDS.				
St. Martins (Les Blanchés)	Feb. 1	Feb. 24	24	·09
Guernsey.	June 4	June 24	21	·01
	Sept. 17	Oct. 1	15	·02
SCOTLAND.				
Stoneykirk (Ardwell House)	Mar. 29	Apr. 12	15	·05
Wigtownshire—3.	June 23	July 13	21	·03
Dumfries (Jardington)	June 23	July 13	21	·00
Kirkcudbrightshire—5.	Sept. 14	Sept. 30	17	·08
Canonbie (Irvine House)	Feb. 9	Feb. 23	15	·01
Dumfries-shire—5.				
Swinton House	Feb. 2	Mar. 3	30	·16
Berwickshire—3.	Sept. 14	Oct. 1	18	·03
Mid-Calder (Calder Hall)	Feb. 2	Feb. 22	21	·02
Midlothianshire—5.	June 19	July 14	26	·05
	Sept. 14	Sept. 30	17	·07
Strathaven (East Overton House)	June 23	July 14	22	·05
Lanarkshire—5.				
Stirling (Touch Reservoir No. 1)	June 20	July 14	25	·04
Stirlingshire—1.				
Inveraray (Castle Gardens)	June 24	July 9	16	·00
Argyllshire—11.				
St. Andrews Water Works	Feb. 8	Feb. 23	16	·03
Fifeshire—3.	Mar. 30	Apr. 15	17	·00
Aberfeldy (Dall Avon)	Jan. 30	Feb. 23	25	·10
Perthshire—11.	Apr. 18	May 2	15	·06
Stonehaven (Mains of Cowie)	Feb. 8	Feb. 22	15	·06
Kincardineshire—2.				

Dry Spells in 1921—(con.).

Station and County.	Began.	Ended.	Lasted.	Rain-fall.
IRELAND.				
			Days.	In.
Castletownshend (Seafeld)	Mar. 29	Apr. 15	18	.02
Co. Cork—6.	May 31	July 13	44	.02
Queenstown (Fota Island)	June 1	June 24	24	.00
Co. Cork—17.	June 26	July 13	18	.02
	Sept. 14	Sept. 29	16	.03
Cahirciveen (Valencia Observatory)	Feb. 9	Feb. 23	15	.00
Co. Kerry—3.	June 1	July 13	43	.16
Killarney (District Asylum)	June 1	June 26	26	.00
Co. Kerry—3.	Sept. 14	Sept. 30	17	.07
Waterford (Brook Lodge)	Mar. 29	Apr. 12	15	.03
Co. Waterford—3.	June 1	June 26	26	.00
	June 28	July 13	16	.00
Nenagh (Castle Lough)	June 28	July 13	16	.01
Co. Tipperary—1.				
Cashel (Ballinamona)	Mar. 30	Apr. 15	17	.08
Co. Tipperary—3.	June 1	June 25	25	.02
	June 27	July 13	17	.01
Ennistymon House	Feb. 8	Feb. 22	15	.07
Co. Clare—2.				
Gorey (Courtown House)	Mar. 28	Apr. 16	20	.00
Co. Wexford—4.	June 1	June 24	24	.02
	June 28	July 14	17	.02
	Sept. 14	Sept. 30	17	.03
Abbey Leix (Blandsfort).....	June 28	July 13	16	.00
Queen's County—2.				
Sallins (Palmerstown)	June 27	July 14	18	.03
Co. Kildare—2.				
Kells (Headfort)	Mar. 29	Apr. 12	15	.07
Co. Meath—4.	June 12	July 14	33	.00
Moate (Coolatore)	Feb. 9	Feb. 23	15	.05
Co. Westmeath—1.	June 13	July 6	24	.01
Woodlawn	June 27	July 13	17	.01
Co. Galway—4.				
Crossmolina (Enniscoe)	June 26	July 13	18	.03
Co. Mayo—2.				
Collooney (Markree Observatory)	June 26	July 14	19	.05
Co. Sligo—2.				
Seaforde.....	June 21	July 5	15	.00
Co. Down—2.				
Omagh (Edenfel)	June 21	July 14	24	.03
Co. Tyrone—3.				
Milford (The Manse)	June 21	July 5	15	.05
Co. Donegal—3.				
Killybegs (Rockmount)	June 24	July 14	21	.04
Co. Donegal—5.				

RAIN SPELLS AND WET SPELLS IN 1921.

In dealing with a year of such a remarkable deficiency of rain as 1921 it might initially be supposed that the number of rain spells would be fewer than usual, but this was not the case. The "Comparative Table of Rain Spells" given on p. 37 indicates that the number of rain spells at the 100 selected stations in 1921 was 15 more than the average. This somewhat paradoxical result was due to an excess of rain spells in some districts, rather than to their widespread occurrence. The number of stations recording three or four rain spells, was 25 out of the 100 stations, or seven more than the average. This feature was in accord with the general distribution of rainfall during 1921, when the greatest rainfall relative to the average fell in the north-west of the British Isles, that is in the districts which receive the largest annual rainfall and where the rain spells are most frequent.

The definition of a Rain Spell adopted in 1903 is :—

A **Rain Spell** is a period of *more than* fourteen consecutive days (*i.e.*, fifteen or more), every one of which is a Rain Day.

A Wet Spell is the antithesis of a Dry Spell, and the definition adopted in 1919 is :—

A **Wet Spell** is a period of fifteen or more consecutive days, every one of which is a Wet Day. [A "Wet Day" for the purpose of this definition is a day ending at 9 h. (G.M.T.) on which 1 mm., or .04 in., or more, of rain is recorded.]

No change has been made in the definitions used in this section. The particulars of all periods satisfying these definitions at the 100 stations referred to in the foregoing sections are set out on pages 39 to 46, the names of the stations at which no spell occurred being omitted, as in the case of the Drought Tables.

Judged by the average of the period 1903–1921 the area over which no rain spells occurred was slightly larger than usual, approximately three-tenths of the British Isles being immune. At 36 stations, or eight fewer than usual, one or two rain spells occurred during the year, so that roughly one-third of the country was so affected. At 33 stations, that is over about one-third of the country, the number of rain spells was three or more, five stations recorded five or six, and three stations recorded seven, *viz.*, Inveraray in Argyllshire, Stornoway in the island of Lewis, and Ballynahinch in Co. Galway. The areas with rain spells lay almost entirely to the west, England experiencing an unusually small number.

At no selected station in England did the total number of days involved in rain spells exceed 80 the maximum being 78 days at

Comparative Table of Rain Spells at 100 Stations, 1903-1921.

Year.	No. of Rain Spells.	DURATION OF SPELLS.				STATIONS WITH			
		Mean.		Greatest.					
		Days.	Mean rain per day.	Days.	Mean rain per day.	None.	1 or 2.	3 or 4.	5 or more.
1903	282	22	in. .28	52	in. .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
1915	132	20	.27	38	.25	34	47	16	3
1916	231	20	.29	62	.28	19	41	28	12
1917	152	22	.28	52	.19	30	48	17	5
1918	186	23	.30	56	.21	21	51	19	9
1919	143	20	.26	46	.31	29	53	14	4
1920	165	20	.25	45	.24	32	45	12	11
1921	184	21	.29	45	.25	31	36	25	8
Average	169	21	.27	51	.27	30	44	18	8

NOTE.—The values previous to 1910 have been increased to the equivalent of 100 Stations for comparison. In the columns headed "Greatest" the figures refer to the selected Stations only.

St. Austell, in Cornwall. In South Wales, Co. Mayo and Co. Galway and in the north-west of Scotland rain spells involved more than 100 days, while at Ballynahinch the number of days reached 198. At this station the longest individual rain spell of the year occurred, lasting for 45 days from 23rd December, 1920, to 5th February, 1921.

Wet Spells, 1919-1921.

Year.	Number of Wet Spells.	DURATION OF SPELLS.				STATIONS WITH			
		Mean.		Greatest.					
		Days.	Mean rain per day.	Days.	Mean rain per day.	None.	1 or 2.	3 or 4.	5 or more
1919	49	17	in. .29	33	in. .34	66	29	5	0
1920	47	18	.37	31	.61	75	17	8	0
1921	59	20	.41	29	.32	69	22	9	0

The number of wet spells, under the new definition, was larger during 1921 than in either 1919 or 1920. In England, however, only five wet spells were recorded at all the selected stations, and of these three occurred at Dungeon Ghyll, in Westmorland. In Wales only the south

and centre were affected. In Ireland the area concerned was larger and lay entirely in the west. By far the largest area over which wet spells occurred was in Scotland, including nearly the whole of the western Highlands. The number of days involved in wet spells was as much as 85 at Ledgowan, in Ross-shire.

The rain spells of the year were grouped into four well-defined periods. The first of these includes a considerable number of days in December 1920. It has been usual in discussing rain spells to include any which happen to extend from one year to another with the latter of the two years. Should any part have been included in the discussion for the previous year it is not counted in the numbers referring to the later year in the comparative table.

The rain spell of December, 1920, and January, 1921, began generally about 20th December and continued well into January. It affected the west of England and Wales and the greater part of Scotland and Ireland. In some of these districts, especially to the north of Scotland, the rain spell was broken for a few days and then resumed until the end of January. At Treherbert, in Glamorganshire, the mean rate of rainfall was as much as $\cdot 86$ in. per day, a high figure even for so wet a station. This was the most important and widespread rain spell of the year. The rainy period reached the intensity of a wet spell over rather less than half the area previously described, the wet spell being confined to the more westerly and rainier districts, especially the west of Scotland. At Kinlochmore, in Inverness-shire, the mean rate of rainfall for the wet spell from 15th to the 29th January was as much as $\cdot 90$ in. per day.

The spells of March were much more local, being chiefly confined to the rainier districts of the west and occurring hardly anywhere in England. A rain spell lasted generally from about the 7th to nearly the end of the month, but at Stornoway it lasted for 39 days from 22nd February to 1st April. It reached the intensity of a wet spell locally in the English Lake District, in Co. Galway and in Co. Mayo, and over a considerable portion of the north-west of Scotland. The wet spell reached its maximum duration at Portree, in Skye, where it lasted 29 days from 7th March to 4th April.

The rain spell of July to August was about equally widespread though generally short, but at Ballynahinch, in Galway, it reached a duration of 28 days, lasting from 21st July to 17th August. The area concerned was confined to the north-west of England, the western half of Scotland and the greater part of Wales and Ireland. It was only very locally in these areas that the intensity reached that of a wet spell, the most noteworthy areas affected being in Co. Galway and Co. Mayo and in the west Highlands of Scotland. The longest wet spell in this period occurred at Kinlochmore, in Glenleven, Inverness-shire, where it lasted for 24 days from 18th July to 10th August.

The rain spell of December exhibited the normal winter distribution except that, as was the case with the other rain spells of the year, England was exceptionally immune. The area affected was confined to the south of the Devon-Cornwall peninsula, the English Lake district, the south and centre of Wales, and the north-western half of Scotland and of Ireland. Over a considerable portion of the area the rain spell lasted as long as 28 days. The mean fall per day was not very large, the maximum rate being $\cdot 60$ in. at Achfary, near Loch More, in Sutherlandshire. At only one station in England or Wales, viz., St. Austell, in Cornwall, did the rain spell reach the intensity of a wet spell. Wet spells occurred locally in the north-west of Ireland and over a large part of the west Highlands of Scotland, lasting for 28 days from 4th to 31st December, at Inverie, in Invernessshire, and at Ledgowan, in Ross-shire. The mean rate per day was again by no means remarkable.

The most noteworthy feature of the year was the unexpectedly large number of rain and wet spells, due to the rainfall being excessive in the wettest districts of Scotland, and also to the particularly persistent rainfall at the end of December, 1920. The abnormally small number of rain spells and wet spells in England, and the grouping of the spells into four separate and well-defined periods were interesting features of the rainfall of the year.

Rain Spells in 1921.

Station and County.	Began.	Ended.	Lasted.	Total Rain.	Rain per Day.		
					Max.	Min.	Mean.
ENGLAND & WALES.			Days.	In.	In.	In.	In.
Tenterden (View Tower).... <i>Kent</i> —1.	Dec. 21 (1920)	Jan. 4	15	2·13	·33	·01	·14
Patcham <i>Sussex</i> —3.	Dec. 15 (1920)	Jan. 4	21	4·06	·84	·01	·19
Salisbury Plain (Shrewton).. <i>Wiltshire</i> —3.	Dec. 20 (1920)	Jan. 4	16	2·53	·46	·01	·16
Dorchester (Wollaston House) <i>Dorsetshire</i> —3.	Dec. 20 (1920)	Jan. 13	25	7·02	·88	·01	·28
Holne (Church Park Cottage) <i>South Devon</i> —4.	Dec. 20 (1920)	Jan. 12	24	14·99	2·17	·03	·62
	Mar. 7	Mar. 21	15	4·36	1·11	·01	·29
	Dec. 14	Dec. 30	17	4·28	·83	·01	·25
Morwenstow Vicarage <i>Cornwall</i> —1.	Dec. 20 (1920)	Jan. 12	24	5·37	·91	·02	·22
	Jan. 15	Jan. 31	17	1·85	·27	·01	·11
	July 22	Aug. 5	15	3·12	·68	·01	·21
	Dec. 14	Dec. 31	18	2·32	·40	·02	·13
St. Austell (Trevarna)..... <i>Cornwall</i> —2.	Dec. 20 (1920)	Jan. 12	24	6·15	·67	·01	·26
	Jan. 14	Feb. 3	21	2·15	·31	·01	·10
	Mar. 8	Mar. 22	15	2·32	·51	·02	·15
	Dec. 14	Dec. 31	18	2·44	·44	·02	·14

Rain Spells in 1921—(con.).

Station and County.	Began	Ended.	Lasted.	Total Rain.	Rain per Day.		
					Max.	Min.	Mean.
ENGLAND & WALES—(con.)			Days.	In.	In.	In.	In.
Angersleigh (Leigh Court) .. <i>Somersetshire—3.</i>	Dec. 19 (1920)	Jan. 2	15	2·85	·52	·01	·19
St. Michael's-on-Wyre Vcrage <i>North Lancashire—5.</i>	Dec. 20 (1920)	Jan. 4	16	3·02	·60	·01	·19
Settle Gas Works..... <i>Yorkshire, W.R.—2.</i>	July 30	Aug. 14	16	4·82	1·09	·01	·30
	July 30	Aug. 13	15	4·21	·91	·02	·28
Meltham (Harewood Lodge) <i>Yorkshire W.R.—8.</i>	July 28	Aug. 12	16	4·19	1·73	·01	·26
Glanton (Glanton Pyke Gds.) <i>Northumberland—6.</i>	Dec. 23 (1920)	Jan. 6	15	3·28	·83	·02	·22
Appleby (Castle Bank)..... <i>Westmorland—1.</i>	Dec. 21 (1920)	Jan. 6	17	3·79	·88	·02	·22
	July 22	Aug. 12	22	4·99	·86	·01	·23
Dungeon Ghyll	Dec. 12	Dec. 31	20	3·89	·95	·01	·19
<i>Westmorland—2.</i>	Dec. 23 (1920)	Jan. 31	40	32·73	6·10	·01	·82
	Mar. 12	Mar. 30	19	15·18	2·29	·04	·80
Treherbert (Tyn-y-waun).... <i>Glamorganshire—6.</i>	July 27 (1920)	Aug. 12	17	9·70	2·18	·04	·57
	Dec. 20	Jan. 12	24	20·54	2·32	·10	·86
	Jan. 15	Jan. 31	17	7·36	1·63	·04	·43
Carmarthen (The Friary).... <i>Carmarthenshire—2.</i>	Dec. 14 (1920)	Dec. 31	18	8·68	1·97	·01	·48
	Dec. 20	Jan. 31	43	10·30	1·05	·01	·24
	Mar. 3	Mar. 23	21	3·89	·74	·01	·19
	July 22	Aug. 13	23	6·98	1·30	·01	·30
	Dec. 4	Dec. 31	28	3·57	·68	·01	·13
Fishguard (Dwrbach)	Dec. 19 (1920)	Jan. 13	26	8·23	1·09	·01	·32
<i>Pembrokeshire—4.</i>	Mar. 4	Mar. 22	19	4·98	1·22	·01	·26
Devil's Bridge	Dec. 20 (1920)	Feb. 1	44	12·64	1·27	·01	·29
<i>Cardiganshire—2.</i>	Mar. 3	Mar. 25	23	5·81	1·30	·01	·25
	July 27	Aug. 13	18	7·01	1·78	·03	·39
	Dec. 14	Dec. 31	18	5·70	·80	·01	·32
Newtown (Penarth Weir) .. <i>Montgomeryshire—4.</i>	Dec. 20 (1920)	Jan. 13	25	4·32	·78	·01	·17
Denbigh (Garn)	July 27	Aug. 14	19	3·26	·55	·01	·17
<i>Denbighshire—2.</i>	Jan. 16	Jan. 31	16	5·11	·86	·02	·72
Dolgelly (Bryntirion)	July 30	Aug. 13	15	8·08	2·00	·02	·54
<i>Merionethshire—4.</i>	Dec. 14	Dec. 31	18	6·46	1·18	·01	·36
Llanerchymedd (Llwydiarth Esgob) <i>Anglesey.</i>	Dec. 28 (1920)	Jan. 13	17	4·70	·85	·01	·28
	Mar. 12	Mar. 30	19	3·57	·67	·01	·19
ISLE OF MAN.							
Douglas (Clypse Res., Onchan) <i>Isle of Man.</i>	Mar. 11	Mar. 30	20	3·16	·45	·01	·16
	Dec. 4	Dec. 22	19	2·00	·58	·01	·11

Rain Spells in 1921—(con.).

Station and County.	Began.	Ended.	Lasted.	Total Rain.	Rain per Day.		
					Max.	Min.	Mean.
CHANNEL ISLANDS.							
St. Martin's (Les Blanches) .. <i>Guernsey.</i>	Dec. 14	Dec. 30	Days. 17	In. 2·05	In. ·29	In. ·02	In. ·12
SCOTLAND.							
Stoneykirk (Ardwell House) <i>Wigtownshire—3.</i>	Dec. 26 (1920)	Jan. 19	25	5·84	·93	·01	·23
Dumfries (Jardington) <i>Kirkcudbrightshire—5.</i>	July 26 July 21	Aug. 9 Aug. 12	15 23	4·72 6·66	1·22 1·53	·03 ·01	·31 ·29
Canonbie (Irvine House) <i>Dumfriesshire—5.</i>	Mar. 12 July 27	Mar. 28 Aug. 12	17 17	4·84 4·86	·84 1·45	·02 ·05	·28 ·29
Swinton House <i>Berwickshire—3.</i>	Dec. 23 (1920)	Jan. 6	15	2·40	·88	·01	·16
Mid-Calder (Calder Hall) <i>Midlothianshire—5.</i>	July 27	Aug. 12	17	2·52	·68	·01	·15
Strathaven (E. Overton Ho.) <i>Lanarkshire—5.</i>	Dec. 23 (1920)	Jan. 13	22	7·32	1·36	·02	·33
Girvan (Pinmore) <i>Ayrshire—8.</i>	Jan. 15 July 27 Dec. 23 (1920)	Jan. 31 Aug. 10 Jan. 12	17 15 21	5·35 3·72 6·44	·90 ·85 1·20	·04 ·02 ·02	·31 ·25 ·31
Stirling (Touch Res. No. 1) .. <i>Stirlingshire—1.</i>	Jan. 14 Mar. 7 July 21	Jan. 31 Mar. 21 Aug. 10	18 15 21	3·96 3·94 7·14	·70 ·81 1·09	·01 ·01 ·01	·22 ·26 ·34
Dougarie Lodge <i>Buteshire—3.</i>	Jan. 15 Mar. 12	Jan. 31 Mar. 29	17 18	5·31 5·69	·99 1·14	·02 ·02	·31 ·32
Inveraray Castle Gardens .. <i>Argyllshire—11.</i>	Jan. 5 Dec. 12 Dec. 27 (1920)	Jan. 31 Dec. 31 Jan. 11	27 20 16	5·92 5·94 10·23	·79 ·69 1·82	·01 ·06 ·03	·22 ·30 ·64
Islay (Eallabus) <i>Argyllshire—14.</i>	Jan. 14 Mar. 8 July 17 Oct. 1 Oct. 21 Dec. 2	Jan. 31 Mar. 31 Aug. 1 Oct. 19 Nov. 4 Dec. 22	18 24 16 19 15 21	11·39 11·72 4·02 9·42 3·78 11·64	1·37 1·63 ·75 2·96 ·54 1·84	·03 ·08 ·02 ·06 ·03 ·02	·63 ·49 ·25 ·50 ·25 ·55
Mull (Ulva) <i>Argyllshire—14.</i>	Jan. 5 Mar. 7 July 21 Dec. 4 Dec. 30 (1920)	Jan. 31 Apr. 1 Aug. 10 Dec. 31 Jan. 31	27 26 21 28 33	8·13 4·78 4·96 8·65 11·03	1·93 ·61 ·72 1·16 1·34	·06 ·01 ·03 ·02 ·01	·30 ·18 ·24 ·31 ·33
Aberfeldy (Dall Avon) <i>Perthshire—11.</i>	Mar. 7 Dec. 4 Dec. 12	Apr. 5 Dec. 31 Dec. 31	30 28 20	6·60 9·11 4·42	·51 ·73 ·67	·01 ·02 ·02	·22 ·33 ·22
Ballater (Irrigation Farm) .. <i>Aberdeenshire—1.</i>	Dec. 16	Dec. 31	16	1·59	·34	·01	·10

Rain Spells in 1921—(con.).

Station and County.	Began.	Ended.	Lasted.	Total Rain.	Rain per day.		
					Max.	Min.	Mean
SCOTLAND—(con.).			Days.	In.	In.	In.	In.
Cluny Castle	Jan. 15	Jan. 29	15	5·27	1·10	·02	·35
<i>Inverness-shire—3.</i>	Feb. 23	Mar. 31	37	7·72	·89	·01	·21
	Dec. 12	Dec. 31	20	6·87	·91	·02	·34
Loch Nevis (Inverie)	Jan. 13	Jan. 30	18	10·76	1·96	·01	·60
<i>Inverness-shire—12.</i>	Mar. 7	Apr. 5	30	11·47	1·59	·03	·38
	Dec. 4	Dec. 31	28	18·05	2·34	·05	·64
Glenleven (Kinlochmore) ..	Dec. 23	Jan. 12	21	12·41	3·00	·02	·59
<i>Inverness-shire—17.</i>	(1920)						
	Jan. 15	Jan. 31	17	13·52	2·22	·03	·79
	Mar. 7	Mar. 31	25	14·61	1·84	·06	·58
	July 18	Aug. 10	24	9·43	1·15	·05	·39
	Dec. 12	Dec. 31	20	10·87	1·55	·11	·54
Skye (Portree)	Dec. 27	Jan. 10	15	4·08	·83	·03	·27
<i>Inverness-shire—18.</i>	(1920)						
	Jan. 15	Jan. 30	16	7·24	1·32	·02	·45
	Mar. 5	Apr. 5	32	9·53	1·31	·01	·30
	July 18	Aug. 10	24	5·09	·63	·01	·21
	Aug. 23	Sept. 15	24	4·44	·59	·01	·19
	Dec. 4	Dec. 31	28	10·46	1·00	·03	·37
Barra (Castle Bay)	Dec. 19	Jan. 11	24	2·93	·41	·01	·12
<i>Inverness-shire—19.</i>	(1920)						
	Jan. 13	Jan. 30	18	4·18	1·25	·01	·23
	Mar. 7	Mar. 23	17	2·70	·46	·03	·16
	Dec. 4	Dec. 31	28	3·32	·31	·01	·12
Fortrose	Dec. 14	Dec. 31	18	3·61	·52	·01	·20
<i>Ross & Cromarty—3.</i>							
Achnasheen (Ledgowan) ..	Jan. 15	Jan. 29	15	10·92	2·51	·17	·73
<i>Ross & Cromarty—4.</i>	Mar. 13	Apr. 5	24	7·84	·76	·03	·33
	July 18	Aug. 10	24	6·51	·69	·03	·27
	Dec. 4	Dec. 31	28	14·70	2·08	·04	·52
Stornoway	Dec. 19	Jan. 11	24	6·26	·88	·02	·26
<i>Ross-shire—10.</i>	(1920)						
	Jan. 15	Jan. 30	16	5·12	·88	·07	·32
	Feb. 22	Apr. 1	39	7·93	·55	·01	·20
	July 18	Aug. 10	24	4·66	·73	·03	·19
	Oct. 6	Oct. 21	16	3·02	·57	·02	·19
	Oct. 24	Nov. 14	22	3·76	·67	·01	·17
	Dec. 4	Dec. 31	28	8·66	·69	·02	·31
Loch More (Achfary)	Dec. 27	Jan. 11	16	5·75	1·19	·03	·36
<i>Sutherlandshire—5.</i>	(1920)						
	Jan. 15	Feb. 1	18	9·85	2·30	·02	·55
	Mar. 13	Apr. 5	24	8·98	1·06	·06	·37
	Aug. 29	Sept. 15	18	7·72	3·32	·01	·43
	Dec. 4	Dec. 31	28	16·87	2·25	·03	·60
Thurso (Buckies)	Jan. 13	Jan. 29	17	3·66	·96	·04	·22
<i>Caithness-shire—3.</i>	July 18	Aug. 2	16	2·52	·51	·01	·16
IRELAND.							
Castletownshend (Seafield) ..	Dec. 19	Jan. 11	24	7·47	·85	·03	·31
<i>Co. Cork—6.</i>	(1920)						
	July 21	Aug. 7	18	6·56	1·24	·03	·36

Rain Spells in 1921—(con.).

Station and County.	Began.	Ended.	Lasted.	Total Rain.	Rain per Day.		
					Max.	Min.	Mean.
IRELAND—(con.).							
Queenstown (Fota Island) .. Co. Cork—17.	Dec. 19 (1920)	Jan. 12	Days. 25	In. 6·14	In. ·88	In. ·01	In. ·25
	Mar. 8	Mar. 29	22	2·90	·63	·02	·13
	July 27	Aug. 12	17	5·18	·95	·03	·30
	Nov. 19	Dec. 15	27	3·36	·71	·02	·12
Cahirciveen (Valencia Obser.) Co. Kerry—3.	Dec. 19 (1920)	Jan. 4	17	6·45	·79	·02	·38
	July 22	Aug. 13	23	7·54	1·08	·02	·33
Killarney (District Asylum) Co. Kerry—3.	Dec. 18 (1920)	Jan. 12	26	7·62	·92	·01	·29
	Mar. 7	Mar. 29	23	5·00	·69	·01	·22
	July 27	Aug. 13	18	6·20	1·10	·03	·34
Nenagh (Castle Lough) Co. Tipperary—1.	Dec. 19 (1920)	Jan. 13	26	5·75	·67	·01	·22
	Mar. 10	Mar. 30	21	3·04	·52	·01	·14
	July 24	Aug. 9	17	5·17	1·27	·01	·30
	Dec. 12	Dec. 31	20	3·93	1·00	·01	·20
Cashel (Ballinamona) Co. Tipperary—3.	Dec. 19 (1920)	Jan. 12	25	4·86	·74	·01	·19
	Mar. 9	Mar. 30	22	2·26	·38	·01	·10
Ennistymon House Co. Clare—2.	Dec. 19 (1920)	Jan. 31	44	8·00	·69	·01	·18
	July 27	Aug. 10	15	4·45	·91	·02	·30
	Dec. 4	Dec. 31	28	5·43	1·05	·01	·19
Abbey Leix (Blandsfort) Queen's County—2.	Dec. 20 (1920)	Jan. 12	24	4·84	·70	·02	·20
	July 27	Aug. 12	17	6·89	2·25	·01	·41
Sallins (Palmerstown) Co. Kildare—2.	Dec. 27 (1920)	Jan. 11	16	3·30	·51	·04	·21
Kells, Headfort Co. Meath—4.	Dec. 23 (1920)	Jan. 12	21	4·50	·58	·01	·21
	July 27	Aug. 12	17	4·56	1·28	·01	·27
Moate (Coolatore) Co. Westmeath—1.	Dec. 28 (1920)	Jan. 13	17	3·20	·50	·01	·19
	July 26	Aug. 9	15	3·87	·91	·01	·26
Ballynahinch Castle Co. Galway—3.	Dec. 23 (1920)	Feb. 5	45	11·29	·86	·01	·25
	Feb. 28	Apr. 4	36	7·16	·61	·01	·20
	May 6	May 21	16	2·32	·46	·01	·15
	July 21	Aug. 17	28	7·42	·81	·01	·26
	Sept. 30	Oct. 26	27	7·28	1·56	·01	·27
	Oct. 30	Nov. 17	18	5·63	1·04	·02	·31
	Dec. 4	Dec. 31	28	7·53	1·14	·06	·27
Woodlawn Co. Galway—4.	Dec. 23 (1920)	Jan. 12	21	4·09	·73	·01	·19
	Jan. 14	Jan. 31	18	1·89	·44	·01	·11
	July 21	Aug. 10	21	5·17	·90	·02	·25
	Nov. 26	Dec. 10	15	1·93	·47	·01	·13
	Dec. 12	Dec. 31	20	3·70	·68	·02	·19

Rain Spells in 1921—(con.).

Station and County.	Began.	Ended.	Lasted.	Total Rain.	Rain per Day.		
					Max.	Min.	Mean.
IRELAND—(con.).			Days.	In.	In.	In.	In.
Crossmolina (Enniscoe)	Dec. 19	Jan. 19	32	10·10	1·74	·02	·32
Co. Mayo—2.	(1920)						
	Mar. 1	Mar. 30	30	6·62	·86	·03	·22
	July 31	Aug. 16	17	3·41	·46	·04	·20
	Oct. 31	Nov. 16	17	3·38	1·17	·03	·20
	Dec. 17	Dec. 31	15	4·48	·61	·03	·30
Collooney (Markree Obser.) ..	Jan. 2	Jan. 19	18	3·95	1·10	·03	·22
Co. Sligo—2.	Mar. 7	Mar. 21	15	1·88	·26	·02	·13
	July 21	Aug. 16	27	7·78	1·10	·01	·29
	Dec. 12	Dec. 31	20	3·86	·42	·03	·19
Belturbet (Cloverhill)	July 23	Aug. 10	19	4·66	·65	·02	·25
Co. Cavan—1.							
Seaforde.....	July 27	Aug. 12	17	5·68	1·97	·02	·33
Co. Down—2.							
Ballymena, (Harryville) ..	Dec. 17	Dec. 31	15	2·84	·34	·03	·19
Co. Antrim—5.							
Omagh (Edenfel)	Dec. 23	Jan. 19	28	7·08	1·10	·01	·25
Co. Tyrone—3.	(1920)						
	Feb. 28	Mar. 31	32	5·13	·51	·01	·16
	Dec. 4	Dec. 31	28	5·90	·72	·01	·21
Milford (The Manse)	Jan. 5	Jan. 31	27	4·59	·72	·01	·17
Co. Donegal—3.	Mar. 15	Mar. 30	16	3·27	·56	·01	·20
	Dec. 12	Dec. 31	20	5·09	·56	·03	·25
Killybegs (Rockmount)	Jan. 2	Jan. 24	23	5·17	·70	·01	·22
Co. Donegal—5.	Mar. 14	Mar. 31	18	4·54	·83	·02	·25
	Dec. 4	Dec. 31	28	9·76	1·19	·02	·35

Wet Spells in 1921.

Station and County.	Began.	Ended.	Lasted.	Total Rain.	Mean Rain, per day.
ENGLAND & WALES.			Days.	In.	In.
Holne (Church Park Cottage)	Dec. 20	Jan. 4	16	11·55	·72
South Devon—4.	(1920)				
St. Austell (Trevarna)	Dec. 16	Dec. 30	15	2·27	·15
Cornwall—2.					
Dungeon Ghyll	Dec. 23	Jan. 13	22	21·40	·97
Westmorland—2.	(1920)				
	Mar. 12	Mar. 30	19	15·18	·80
	July 27	Aug. 12	17	9·70	·57
Treherbert (Tyn-y-waun)	Dec. 20	Jan. 12	24	20·54	·86
Glamorganshire—6.	(1920)				
	Jan. 15	Jan. 31	17	7·36	·46
Carmarthen (The Friary)	Dec. 26	Jan. 12	18	6·51	·33
Carmarthenshire—2.	(1920)				

Wet Spells in 1921—(con.).

Station and County.	Began.	Ended.	Lasted.	Total Rain.	Mean Rain, per day.
ENGLAND & WALES—(con.).					
Fishguard (Dwrbach)	Dec. 26	Jan. 12	18	6.46	.63
<i>Pembrokeshire—4.</i>	(1920)				
Devil's Bridge	July 28	Aug. 13	17	6.98	.41
<i>Cardiganshire—2.</i>					
SCOTLAND.					
Dumfries (Jardington)	July 21	Aug. 9	20	6.51	.33
<i>Kirkcudbrightshire—5.</i>					
Canonbie (Irvine House)	July 27	Aug. 12	17	4.86	.29
<i>Dumfriesshire—5.</i>					
Strathaven (East Overton Ho.)	Jan. 15	Jan. 31	17	5.35	.31
<i>Lanarkshire—5.</i>					
Dougarie Lodge	Dec. 12	Dec. 31	20	5.94	.30
<i>Buteshire—3.</i>					
Inveraray Castle Gardens....	Jan. 14	Jan. 30	17	11.36	.67
<i>Argyllshire—11.</i>	Mar. 8	Mar. 31	24	11.72	.49
	Oct. 1	Oct. 19	19	9.42	.50
	Dec. 4	Dec. 22	19	11.57	.61
Islay (Eallabus)	Jan. 5	Jan. 31	27	8.13	.30
<i>Argyllshire—14.</i>	July 21	Aug. 7	18	4.42	.25
Mull (Ulva)	Jan. 15	Jan. 31	17	6.81	.40
<i>Argyllshire—14.</i>	Mar. 7	Mar. 31	25	6.05	.24
Loch Nevis (Inverie)	Jan. 15	Jan. 30	16	10.41	.65
<i>Inverness-shire—12.</i>	Mar. 7	Apr. 1	26	10.56	.41
	Dec. 4	Dec. 31	28	18.05	.64
Glenleven (Kinlochmore)	Jan. 15	Jan. 29	15	13.45	.90
<i>Inverness-shire—17.</i>	Mar. 7	Mar. 31	25	14.61	.58
	July 18	Aug. 10	24	9.43	.39
	Dec. 12	Dec. 31	20	10.87	.54
Skye (Portree)	Jan. 15	Jan. 29	15	7.22	.48
<i>Inverness-shire—18.</i>	Mar. 7	Apr. 4	29	9.26	.32
	Dec. 4	Dec. 22	19	6.04	.32
Achnasheen (Ledgowan)	Jan. 15	Jan. 29	15	10.92	.73
<i>Ross & Cromarty—4.</i>	Mar. 13	Apr. 1	20	7.23	.36
	July 20	Aug. 10	22	5.98	.27
	Dec. 4	Dec. 31	28	14.70	.53
Stornoway	Jan. 15	Jan. 30	16	5.12	.32
<i>Ross & Cromarty—10.</i>	Mar. 12	Mar. 31	20	4.31	.22
	Dec. 12	Dec. 31	20	6.69	.33
Loch More (Achfary)	Jan. 15	Jan. 30	16	9.79	.61
<i>Sutherlandshire—5.</i>	Mar. 13	Apr. 5	24	8.98	.37
	Dec. 12	Dec. 31	20	10.93	.55
Thurso (Buckies)	Jan. 13	Jan. 29	17	3.66	.22
<i>Caithness-shire—3.</i>					
IRELAND.					
Castletownshend (Seafeld) ..	Dec. 19	Jan. 3	16	5.53	.35
<i>Co. Cork—6.</i>	(1920)				
Cahirciveen (Valencia Obsery.)	July 22	Aug. 7	17	5.85	.34
<i>Co. Kerry—3.</i>					

Wet Spells in 1921—(con.).

Station and County.	Began.	Ended.	Lasted.	Total Rain.	Mean Rain, per day.
IRELAND—(con.).					
Ennistymon House	Jan. 5	Jan. 26	22	4·13	·19
Co. Clare—2.	Dec. 8	Dec. 30	23	4·71	·20
Gorey (Courtown House)	None.				
Co. Wexford—4.					
Sallins (Palmerstown)	Dec. 27	Jan. 11	16	3·30	·21
Co. Kildare—2.	(1920)				
Ballynahinch Castle	Jan. 13	Jan. 31	19	3·86	·20
Co. Galway—3.	Mar. 7	Mar. 21	15	3·70	·25
	July 21	Aug. 5	16	4·70	·29
	Dec. 4	Dec. 31	28	7·53	·27
Woodlawn	July 21	Aug. 9	20	5·15	·26
Co. Galway—4.					
Crossmolina (Enniscoe)	Mar. 7	Mar. 29	23	4·73	·21
Co. Mayo—2.	July 31	Aug. 16	17	3·41	·20
Collooney (Markree Observty.)	July 22	Aug. 12	22	7·30	·33
Co. Sligo—2.					
Omagh (Edenfel)	Dec. 16	Dec. 31	16	4·64	·29
Co. Tyrone—3.					
Killybegs (Rockmount)	Mar. 14	Mar. 29	16	4·49	·28
Co. Donegal—5.	Dec. 12	Dec. 31	20	6·91	·35

DURATION OF RAINFALL IN 1921.

In *British Rainfall* 1920 (pp. 34 and 45-47) we dealt at some length with the proposal to introduce a new method of measuring the curves of self-recording rain gauges for the purpose of yielding satisfactory records of duration of rainfall. In brief the standardizing method excludes all rainfall *at a rate* of less than 0.1 mm. (.004 in.) per hour, and involves the use of a celluloid or glass template to test the slope of the curve. It was generally recognized by all who have given this subject close attention that some steps were necessary in order, as far as possible, to eliminate the errors caused by personal and instrumental equation; and although the new method may not entirely achieve this purpose it is undoubtedly a step in the right direction.

The details of the proposal were circulated to all Observers known to be keeping such records, and we are glad to be able to report that the response has been extremely satisfactory and that several useful comments have been received.

It is not intended to bring the new method into full operation until 1922, so that many of the records published this year are not standardized. We hope that next year the number so dealt with will form a large proportion of the whole.

Until some time has elapsed it will be very difficult, if not impossible, to form any definite conclusion as to the effect of standardization. The nature of the errors which it is desired to eliminate is such that one cannot easily apply the results of a test generally. In some cases, for example, the standardized values are actually higher than the unstandardized, a result apparently paradoxical, but no doubt due to the greater accuracy derived from the use of the templates.

Mr. A. J. Walker, of Felixkirk, Yorks, who has had more experience than almost any other Observer in this work, has kindly made separate evaluations by the two methods from the curves of his Halliwell gauge. These show a very small decrease when the standardized method is used. By the side of the results we put those by Mr. Walker from his Hyetograph, by the old method, and the standardized totals from this gauge as measured by one of the Meteorological Office staff with a template. Here we find a higher value with the standardized method and an improvement in the agreement between the results for the two gauges, which is in support of the view that personal and instrumental equations are being to some extent eliminated.

Duration of Rainfall at Mount St. John, Felixkirk, 1921.

Months.	HALLIWELL GAUGE.		HYETOGRAPH.	
	Mr. Walker. Unstandardized.	Mr. Walker. Standardized.	Mr. Walker. Unstandardized.	M.O. Computer. Standardized.
	hrs.	hrs.	hrs.	hrs.
January	45·2	45·4	40·2	41·3
February	6·1	6·3	4·2	4·3
March	28·0	27·9	24·1	25·0
April	26·4	25·2	23·0	23·6
May	26·9	25·8	24·2	25·4
June	11·3	11·7	8·4	9·5
July	17·3	16·8	15·1	17·3
August	55·6	53·1	51·0	53·3
September	19·3	17·9	15·9	18·0
October	21·8	21·7	18·1	21·0
November	35·6	37·5	32·6	33·9
December	37·3	37·9	33·2	33·8
Year	330·8	327·2	290·0	306·4

The following table gives the results of three separate measurements made by two trained computers on the staff of the Meteorological Office. They are from a Halliwell rain gauge:—

Duration of Rainfall at Camden Square, 1921.

Months.	UNSTANDARDIZED.		STANDARDIZED.
	Computer. A	Computer. B	Computer. B
	hrs.	hrs.	hrs.
January	60·6	60·3	63·9
February	22·5	23·5	26·2
March	36·6	36·0	38·0
April	72·7	72·5	74·7
May	20·5	20·9	22·9
June	28·6	..	28·6
July	74·4	..	74·3
August	27·7	..	28·5
September	48·2	..	48·3
October	26·5	..	25·4
November	23·0	..	23·1
December	78·9	..	79·4
Year	520·2	..	533·3

It is clearly necessary to await fuller experience before expressing any opinion as to the possibility of applying a correction to unstandardized values.

*The Rectory, Moretonhampstead, Devon.D***Rev. S. D. Dewey.**

N. & Z.'s Hyetograph. 600 ft. above Sea.

1920	Rainfall	Duration	Rate per hour
	in.	hours.	in.
Jan.	8.48	89.5	.095
Feb. ....	.94	19.3	.049
Mar.	4.67	57.4	.081
Apr.	5.24	78.0	.067
May	2.01	28.6	.070
June	2.34	24.6	.095
July	4.47	50.0	.089
Aug. ....	.98	16.1	.061
Sept.	1.89	20.1	.094
Oct.	4.95	49.9	.099
Nov.	2.65	73.3	.036
Dec.	5.33	84.2	.063
Year	43.95	591.0	.074

*Blackwater Dam, Glenleven, Argyll.D****The British Aluminium Co.**

N. & Z.'s Hyetograph. 1,072 ft. above Sea.

1916	Rainfall.	Duration.	Rate per hour.
	in.	hours.	in.
Jan.	20.41	271.5	.075
Feb.	7.66	154.4	.050
Mar.	1.31	49.4	.027
Apr.	5.75	119.9	.048
May	5.61	94.4	.059
June	2.41	54.4	.044
July	4.53	83.1	.055
Aug.	5.87	79.3	.074
Sept.	3.50	53.2	.066
Oct.	16.25	152.1	.107
Nov.	12.99	180.2	.072
Dec.	8.49	160.4	.053
Year	94.78	1452.3	.065

*Blackwater Dam, Glenleven, Argyll.D****The British Aluminium Co.**

N. & Z.'s Hyetograph 1,072 ft. above Sea.

1917	in.	hours.	in.
Jan.	4.30	79.0	.054
Feb.	1.40	38.7	.036
Mar.	3.36	82.9	.041
Apr.	3.31	95.2	.035
May	3.05	68.3	.045
June	5.67	89.6	.063
July	2.18	35.6	.061
Aug.	9.02	117.2	.077
Sept.	8.64	131.6	.066
Oct.	13.34	201.1	.066
Nov.	18.16	227.8	.080
Dec.	4.56	115.6	.039
Year	76.99	1282.6	.060

*Blackwater Dam, Glenleven, Argyll.D****The British Aluminium Co.**

N. & Z.'s Hyetograph. 1,072 ft. above Sea.

1918	in.	hours.	in.
Jan.	9.52	150.0	.063
Feb.	12.95	225.6	.057
Mar.	2.59	57.0	.045
Apr.	1.65	38.2	.043
May	3.00	58.5	.051
June	3.88	62.4	.062
July	5.87	74.2	.079
Aug.	7.01	121.9	.058
Sept.	10.02	135.7	.074
Oct.	14.97	188.2	.080
Nov.	10.96	157.6	.070
Dec.	10.06	184.4	.055
Year	92.48	(1453.7)	.064

*Blackwater Dam, Glenleven, Argyll.D****The British Aluminium Co.**

N. & Z.'s Hyetograph. 1,072 ft. above Sea.

1919	in.	hours.	in.
Jan.	6.26	117.5	.053
Feb. ....	.68	18.7	.036
Mar.	3.65	67.7	.054
Apr.	6.61	153.7	.043
May	2.04	30.9	.066
June	10.37	129.5	.080
July	1.43	19.6	.072
Aug.	7.07	105.8	.067
Sept.	8.08	125.1	.065
Oct.	3.47	74.7	.046
Nov.	6.15	115.5	.053
Dec.	8.81	170.9	.052
Year	64.62	1129.6	.057

*Blackwater Dam, Glenleven, Argyll.D****The British Aluminium Co.**

N. & Z.'s Hyetograph. 1,072 ft. above Sea.

1920	in.	hours.	in.
Jan.	13.15	192.5	.068
Feb.	18.43	232.8	.079
Mar.	9.55	155.6	.061
Apr.	3.48	74.1	.047
May	8.85	145.8	.061
June	3.93	58.4	.067
July	5.79	96.6	.060
Aug.	5.53	96.6	.057
Sept.	4.64	90.7	.051
Oct.	4.88	56.4	.087
Nov.	11.80	189.5	.062
Dec.	8.79	132.5	.066
Year	98.82	1521.5	.065

We are glad to be able to print this year the values for 1916 to 1920 at Blackwater Dam, Glenleven, Argyllshire. These records are among the most interesting in the series on account of the very high and continuous rainfall in the district. We also give the record for 1920 at Moretonhampstead, Devon, received too late last year.

The number of records available for 1921 is 54, the same as last year. The distribution is distinctly improved, but the outlying, and especially the more rainy, regions of the British Isles are still very poorly represented.

The comparative table of annual values for Camden Square, London, shows that the year not only had an unprecedentedly small total rainfall, but that the duration also was lower than any recorded during the previous 40 years. Until this year only once has the number of hours' rainfall during the year fallen so low as 300, there having been 298·5 hours in 1898: in 1921 the total duration was only 269·2 hours, or 167·7 hours below the average. The percentage deficiency of duration was almost exactly the same as that of amount of rainfall, so that the mean rate of fall was normal.

At by far the majority of the stations the duration was the smallest recorded since observations began, in most cases by a surprisingly large margin. The stations at which lower values had previously been recorded in all cases lay in the north, where the rainfall of the year presented no remarkable features. At Blackwater, on the borders of Argyllshire and Inverness-shire, where the year was abnormally wet, the duration was the largest observed in eight years.

Of the records sufficiently long to give an average having any significance the following may be worthy of quoting specially :—

Station.	County.	Period of Observation.	No. of Years	DURATION IN HOURS.			Date of Previous Lowest.
				Average.	1921.	Previous Lowest.	
Camden Square	London . . .	1881–1921	41	446·7	269·2	298·5	1898
Cirencester . . .	Gloucester ..	1912–1921	10	807·5	499·3	658·7	1917
Hodsock Priory	Nottingham	1905–1921	17	444·4	332·8	335·9	1905
Huddersfield ..	Yorks, W.R.	1909–1921	13	799·0	617·9	724·9	1917
Aberclyd	Brecon . . .	1911–1921	11	915·8	484·1	778·8	1919
Aberdeen	Aberdeen ..	1915–1921	7	645·8	444·5	589·4	1915
Valencia	Kerry . . .	1914–1921	8	851·8	670·0	729·7	1919

In the winter months, except February, the duration was not far short of the normal. Practically all the deficiency occurred in the summer, when every month except August was notable for short duration. At Calshot, Hampshire, rain fell for less than four hours during the whole of June and July. On the other hand at Blackwater three months during the year—January, March and December—showed durations exceeding 260 hours each, or roughly nine hours per day.

Comparison of Amount, Duration and Intensity of Rainfall, and Number of Rain Days at Camden Square in 1921 with the Average for 35 Years 1881-1915.

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.		Days.	
1881	27.92	114	486.3	111	.057	102	152	94
1882	27.14	111	480.7	110	.056	100	165	102
1883	24.39	100	393.5	90	.062	111	164	101
1884	20.35	83	336.8	77	.060	107	150	93
1885	26.64	109	470.0	108	.057	102	165	102
1886	27.01	110	427.2	98	.063	112	176	108
1887	19.21	79	300.3	69	.064	114	140	86
1888	27.74	113	435.7	100	.064	114	173	107
1889	23.85	97	428.5	98	.056	100	169	104
1890	21.23	87	409.5	94	.052	93	161	100
1891	28.15	115	490.3	112	.057	102	178	110
1892	22.61	92	372.5	85	.061	109	158	98
1893	19.80	81	388.0	89	.051	91	148	91
1894	27.94	114	477.7	109	.058	104	185	114
1895	21.47	88	380.0	87	.057	102	137	85
1896	23.52	96	404.3	93	.058	104	159	98
1897	22.86	93	371.2	85	.062	111	164	101
1898	17.69	72	298.5	68	.059	105	140	86
1899	22.54	92	337.5	77	.067	120	143	88
1900	23.28	95	366.3	84	.064	114	174	107
1901	22.17	91	310.2	71	M .071	127	128	79
1902	20.84	85	357.8	82	.059	105	162	99
1903	M 38.10	156	M 688.5	158	.055	98	180	111
1904	20.65	84	491.8	113	m .042	75	160	99
1905	22.97	94	456.4	104	.050	89	162	100
1906	24.26	99	420.4	96	.058	104	163	101
1907	23.01	94	418.8	96	.055	98	175	108
1908	23.67	97	500.7	115	.047	84	157	97
1909	26.75	109	576.5	132	.046	82	190	117
1910	25.36	104	491.2	112	.052	93	186	115
1911	24.79	101	473.0	108	.052	93	155	96
1912	27.88	114	517.0	118	.054	96	180	111
1913	22.41	92	453.0	104	.049	87	163	101
1914	25.72	105	513.6	118	.050	89	168	104
1915	32.18	132	568.9	130	.057	102	152	94
1916	34.01	139	627.8	144	.054	96	193	119
1917	30.04	123	476.3	109	.063	112	175	108
1918	29.69	121	520.2	119	.057	102	M 192	119
1919	26.21	107	610.6	140	.043	77	182	112
1920	23.59	96	519.9	119	.045	80	175	108
Average } 1881-1915 }	24.46	100	436.9	100	.056	100	162	100
1921 }	m 14.60	60	m 269.2	62	.054	96	m 115	71
Diff. from } average. }	-9.86	-40	-167.7	-38	-.002	-4	-47	-29

Shad Thames Pump. Stat., London.D
London County Council.

N. & Z.'s Hyetograph. 42 ft. above Sea.

1921	Rainfall	Duration	Rate per hour
	in.	hours.	in.
Jan.	1.52	48.5	.031
Feb. ....	.16	6.8	.024
Mar. ....	.93	24.5	.038
Apr.	1.12	30.5	.037
May	1.08	28.5	.038
June ....	.59	10.5	.056
July ....	.08	7.0	.011
Aug. ....	.81	23.0	.035
Sept.	1.79	16.7	.107
Oct. ....	.73	10.5	.070
Nov.	1.77	46.8	.038
Dec. ....	.92	30.0	.031
Year	11.50	283.3	.041

Croydon Aerodrome, Surrey.D

Air Ministry.

N. & Z.'s Hyetograph. 249 ft. above Sea.

	mm.	hours.	mm.
Jan.	46.6	..	..
Feb.	3.7	..	..
Mar.	35.0	..	..
Apr.	30.3	..	..
May	43.4	..	..
June	4.3	..	..
July	3.4	..	..
Aug.	31.5	25.4	1.24
Sept.	31.4	13.0	2.41
Oct.	16.6	7.4	2.24
Nov.	40.4	46.8	.86
Dec.	31.0	39.9	.78
Year	317.6	..	..

Lympe, Kent.D

Air Ministry.

N. & Z.'s Hyetograph. 348 ft. above Sea.

	mm.	hours.	mm.
Jan.	60.0	61.7	.97
Feb.	15.7	19.6	.80
Mar.	31.1	36.7	.85
Apr.	36.9	36.7	1.01
May	32.7	35.8	.91
June ....	.9	2.7	.33
July	8.0	15.7	.51
Aug.	54.0	48.4	1.12
Sept.	15.7	9.0	1.74
Oct.	6.7	3.6	1.86
Nov.	55.0	43.1	1.28
Dec.	44.8	59.3	.76
Year	361.5	372.3	.97

*Camden Square, London.D**

Air Ministry.

Halliwell Recorder. 111 ft. above Sea.

1921	Rainfall	Duration	Rate per hour
	in.	hours.	in.
Jan.	2.48	59.7	.042
Feb. ....	.19	8.5	.022
Mar.	1.19	28.1	.042
Apr.	1.29	25.1	.051
May	1.03	25.3	.041
June ....	.37	7.9	.047
July ....	.13	3.3	.039
Aug.	1.65	15.0	.110
Sept.	2.50	20.0	.125
Oct. ....	.63	8.5	.074
Nov.	2.01	43.5	.046
Dec.	1.13	24.3	.046
Year	14.60	269.2	.054

Kew Observatory, Surrey.D

Air Ministry.

Beckley Gauge. 20 ft. above Sea.

	mm.	hours.	mm.
Jan.	51.8	45.5	1.14
Feb.	4.9	6.2	.79
Mar.	33.8	34.0	.99
Apr.	26.9	18.7	1.44
May	24.8	21.0	1.18
June	5.6	6.3	.89
July	3.7	3.5	1.06
Aug.	25.2	8.6	2.93
Sept.	44.8	16.1	2.79
Oct.	11.1	8.3	1.34
Nov.	43.2	44.2	.98
Dec.	33.0	25.4	1.30
Year	308.8	237.8	1.30

The Old House, Sevenoaks, Kent.

W. Tattersall, Esq., F.R.Met.Soc.

N. & Z.'s Hyetograph. 510 ft. above Sea.

	mm.	hours.	mm.
Jan.	77.5	95.0	.82
Feb.	21.2	18.5	1.15
Mar.	47.8	56.0	.85
Apr.	39.7	36.5	1.09
May	34.4	51.5	.67
June	2.4	3.0	.80
July	8.1	6.0	1.35
Aug.	44.3	26.0	1.71
Sept.	30.6	16.0	1.91
Oct.	35.6	14.5	2.45
Nov.	50.5	55.0	.92
Dec.	53.9	70.5	.76
Year	446.0	448.5	.99

Calshot, Hants.D Air Ministry. N. & Z's Hyetograph. 11 ft. above Sea.				South Farnborough, Hampshire.D Air Ministry. N. & Z.'s Hyetograph. 234 ft. above Sea.			
1921	Rainfall	Duration	Rate per hour	1921	Rainfall	Duration	Rate per hour
	mm.	hours.	mm.		mm.	hours.	mm.
Jan.	91.0	(75.4)	(1.21)	Jan.	58.8	..	..
Feb.	6.7	(6.0)	(1.12)	Feb.	9.8	..	..
Mar.	23.7	(22.6)	(1.05)	Mar.	23.7	..	..
Apr.	15.8	14.2	1.11	Apr.	17.2	..	..
May	26.5	26.2	1.01	May	31.2	..	..
June	1.7	1.2	1.42	June	3.7	..	..
July	3.7	2.6	1.42	July	14.0	..	..
Aug.	48.4	21.3	2.27	Aug.	32.9	(19.4)	(1.70)
Sept. ...	20.5	8.3	2.47	Sept. ...	35.5	15.4	2.30
Oct.	17.0	7.0	2.43	Oct.	18.8	12.2	1.54
Nov.	43.0	45.2	.95	Nov.	44.4	(34.1)	(1.30)
Dec.	42.4	35.2	1.20	Dec.	33.7	46.7	.73
Year	340.4	(265.2)	1.28	Year	323.7	..	..

Palmers Green, Middlesex.D* R. Phillips, Esq. Casella's Recorder. 138 ft. above Sea.				Chiltern Road, Hitchin, Herts.D A. Latchmore, Esq. N. & Z.'s Hyetograph. 297 ft. above Sea.			
	in.	hours.	in.		in.	hours.	in.
Jan.	2.23	44.3	.050	Jan.	1.87	52.7	.035
Feb. ....	.13	3.0	.043	Feb. ....	.18	5.8	.031
Mar.	1.19	19.8	.060	Mar. ....	.85	20.0	.043
Apr.	1.31	31.9	.041	Apr.	1.03	24.4	.041
May ....	.78	17.3	.045	May	1.10	22.3	.049
June ....	.34	14.5	.023	June ....	.27	9.2	.029
July ....	.10	3.1	.032	July ....	.34	3.0	.113
Aug. ....	.99	12.5	.079	Aug. ....	.81	18.0	.045
Sept. ...	2.75	18.6	.148	Sept. ...	1.35	18.6	.073
Oct. ....	.69	6.1	.113	Oct. ....	.75	12.1	.062
Nov.	1.81	41.3	.044	Nov.	1.67	37.6	.044
Dec. ....	.97	18.3	.053	Dec.	1.23	31.7	.039
Year	13.29	230.7	.058	Year	11.45	255.4	.045

Benson Observatory, Oxfordshire.D W. H. Dines, Esq., F.R.S. Dines Gauge. 186 ft. above Sea.				Rookwood, Copdock, Suffolk. F. L. Bland, Esq. N. & Z.'s Hyetograph. 164 ft. above Sea.			
	mm.	hours.	mm.		mm.	hours.	mm.
Jan.	64.1	51.6	1.24	Jan.	44.5	36.4	1.22
Feb.	7.2	11.7	.61	Feb.	5.1	2.5	2.04
Mar.	19.5	25.8	.76	Mar.	22.4	17.5	1.28
Apr.	22.7	23.1	.98	Apr.	33.0	28.0	1.18
May	27.6	21.2	1.30	May	31.9	21.0	1.52
June	7.7	5.8	1.33	June	4.0	2.0	2.00
July	4.6	4.5	1.02	July	8.9	4.5	1.98
Aug.	36.7	24.0	1.53	Aug.	54.7	14.2	3.84
Sept. ...	50.1	20.8	2.41	Sept. ...	51.9	14.5	3.58
Oct.	28.2	15.3	1.84	Oct.	21.2	9.7	2.18
Nov.	37.6	58.5	.64	Nov.	35.1	26.9	1.31
Dec.	34.7	33.6	1.03	Dec.	36.2	23.1	1.57
Year	340.7	295.9	1.15	Year	348.9	200.3	1.74

*Felixstowe, Suffolk.D***Air Ministry.**

N. & Z.'s Hyetograph. 15 ft. above Sea.

1921	Rainfall	Duration	Rate per hour
	mm.	hours.	mm.
Jan.	38·6	45·6	·85
Feb.	5·8	18·7	·31
Mar.	18·8	24·5	·77
Apr.	25·8	21·2	1·22
May	31·7	18·3	1·73
June	3·6	1·8	2·00
July	12·5	7·2	1·74
Aug.	13·0	10·1	1·29
Sept. ...	53·9	14·2	3·80
Oct.	18·8	7·7	2·44
Nov.	36·3	23·5	1·54
Dec.	27·3	28·4	·96
Year	286·1	221·2	1·29

*Pulham, Norfolk.***Air Ministry.**

N. & Z.'s Hyetograph. 122 ft. above Sea.

1921	Rainfall	Duration	Rate per hour
	mm.	hours.	mm.
Jan.	44·9	57·9	·78
Feb.	5·4	4·7	1·15
Mar.	20·4	18·4	1·11
Apr.	31·4	(26·7)	1·17
May	16·4	(12·0)	1·37
June	13·6	(3·7)	3·67
July	4·9	3·6	1·36
Aug.	117·4	18·2	·65
Sept. ...	32·7	14·6	2·24
Oct.	17·5	14·8	1·18
Nov.	34·5	32·0	1·08
Dec.	35·8	32·4	1·10
Year	374·9	(239·0)	1·57

*Lyngate Cottage, Worstead, Norfolk.D***Robert J. Cross, Esq.**

N. & Z.'s Hyetograph. 50 ft. above Sea.

	in.	hours.	in.
Jan.	1·86	46·1	·040
Feb.	·41	10·9	·038
Mar.	1·01	20·2	·050
Apr.	1·28	24·2	·053
May	1·02	17·7	·058
June	·36	5·3	·068
July	·53	8·9	·060
Aug.	2·00	20·8	·096
Sept. ...	1·00	12·6	·079
Oct.	1·92	23·7	·081
Nov.	2·47	34·7	·071
Dec.	2·51	38·8	·065
Year	16·37	263·9	·062

*Cattewater, Devon.D***Air Ministry.**

N. & Z.'s Hyetograph. 59 ft. above Sea.

	mm.	hours.	mm.
Jan.	104·6	..	..
Feb.	10·2	..	..
Mar.	52·9	..	..
Apr.	22·4	..	..
May	64·4	..	..
June	2·3	1·7	1·35
July	23·1	25·7	·90
Aug.	71·0	(38·5)	1·84
Sept. ...	26·3	11·9	2·21
Oct.	29·5	13·6	2·16
Nov.	107·4	52·7	2·04
Dec.	44·0	66·9	·66
Year	558·1	..	..

*The Hoe, Plymouth, Devon.D****James Paton, Esq., C.E.**

Halliwell Recorder. 117 ft. above Sea.

	in.	hours.	in.
Jan.	3·77	109·6	·034
Feb.	·29	10·5	·028
Mar.	1·96	61·0	·032
Apr.	·89	19·1	·047
May	2·12	58·4	·036
June	·05	4·2	·012
July	·96	27·2	·035
Aug.	2·86	41·6	·069
Sept. ...	·98	18·6	·053
Oct.	1·02	23·9	·043
Nov.	3·98	112·7	·035
Dec.	1·82	102·4	·018
Year	20·70	589·2	·035

*Freedom Park, Plymouth, Devon.D****James Paton, Esq., C.E.**

N. & Z.'s Hyetograph. 208 ft. above Sea.

	in.	hours.	in.
Jan.	5·00	129·6	·039
Feb.	·35	11·2	·031
Mar.	2·37	69·3	·034
Apr.	·97	20·3	·048
May	3·01	65·3	·046
June	·14	6·2	·023
July	1·06	29·3	·036
Aug.	3·11	52·1	·060
Sept. ...	1·14	21·3	·053
Oct.	1·09	35·2	·031
Nov.	4·43	126·7	·035
Dec.	2·18	117·4	·019
Year	24·85	683·9	·036

Falmouth Observatory, Cornwall.
Air Ministry.
 Beckley Gauge. 169 ft. above Sea.

1921	Rainfall	Duration	Rate per hour
	mm.	hours.	mm.
Jan.	106.2	53.9	1.97
Feb.	13.6	9.4	1.45
Mar.	85.4	51.9	1.64
Apr.	25.5	15.0	1.70
May	60.1	36.2	1.66
June	2.8	1.6	1.75
July	54.5	20.4	2.67
Aug.	93.2	45.7	2.04
Sept.	19.4	20.3	.96
Oct.	75.5	17.1	4.42
Nov.	129.5	84.1	1.54
Dec.	68.2	70.4	.97
Year	733.9	426.0	1.72

Dollarward House, Cirencester, Glos.
G. P. Hooker, Esq., F.R.Met.Soc.
 N. & Z.'s Hyetograph. 366 ft. above Sea.

1921	Rainfall	Duration	Rate per hour
	in.	hours.	in.
Jan.	3.23	88.5	.036
Feb. ....	.39	9.3	.042
Mar.	2.00	75.9	.026
Apr.	1.20	22.2	.054
May	1.97	55.5	.036
June ....	.30	3.2	.094
July ....	.55	13.6	.040
Aug.	2.09	62.1	.034
Sept.	1.96	26.9	.073
Oct.	1.68	32.1	.052
Nov.	2.83	68.7	.041
Dec.	1.75	41.3	.042
Year	19.95	499.3	.040

Almeley, Herefordshire.
B. G. Ronalds, Esq., F.R.Met.Soc.
 N. & Z.'s Hyetograph. 396 ft. above Sea.

	in.	hours.	in.
Jan.	2.65	53.1	.050
Feb. ....	.16	4.5	.035
Mar.	2.51	50.0	.050
Apr. ....	.77	14.5	.053
May	1.35	21.8	.062
June ....	.35	5.9	.059
July ....	.62	5.7	.109
Aug.	2.66	37.4	.071
Sept.	1.18	12.6	.094
Oct.	1.82	21.4	.085
Nov.	2.55	41.4	.062
Dec.	1.77	25.1	.071
Year	18.39	293.4	.063

West Bromwich, Staffs.
A. D. Greator, Esq., C.E.
 N. & Z.'s Hyetograph. 543 ft. above Sea.

	in.	hours.	in.
Jan.	2.35	39.2	.060
Feb. ....	.19	4.0	.047
Mar.	1.25	21.5	.058
Apr. ....	.95	21.5	.044
May	1.11	21.5	.052
June ....	.68	6.6	.103
July ....	.62	6.0	.103
Aug.	4.29	53.2	.080
Sept. ....	.99	12.5	.079
Oct.	1.90	30.9	.061
Nov.	1.58	33.4	.047
Dec.	2.33	33.5	.070
Year	18.24	283.8	.065

Mayfield House, Ashbourne, Staffs.
Graham C. Lawson, Esq.
 Casella's Recorder. 374 ft. above Sea.

	mm.	hours.	mm.
Jan.	103.6	119.3	.87
Feb.	7.3	8.2	.89
Mar.	52.0	76.1	.68
Apr.	40.2	37.7	1.06
May	44.2	48.7	.91
June	7.7	16.7	.46
July	23.9	15.3	1.56
Aug.	126.0	86.7	1.45
Sept.	30.1	25.1	1.20
Oct.	74.9	43.5	1.72
Nov.	47.0	65.7	.72
Dec.	71.8	65.8	1.09
Year	628.7	608.8	1.03

Cranwell, Lincolnshire.
Air Ministry.
 N. & Z.'s Hyetograph. 237 ft. above Sea.

	mm.	hours.	mm.
Jan.	51.1	40.6	1.26
Feb.	9.3	20.4	.46
Mar.	20.0	43.0	.46
Apr.	24.8	33.7	.74
May	42.1	37.5	1.12
June	21.1	18.7	1.13
July	10.2	9.5	1.07
Aug.	94.3	76.9	1.23
Sept.	29.7	20.7	1.43
Oct.	63.2	29.6	2.15
Nov.	33.5	46.9	.71
Dec.	34.6	58.3	.59
Year	433.9	435.8	.99

Trent Lane, Nottingham.D
A. Brown, Esq., C.E., F.R.Met.Soc.
Halliwell Recorder. 85 ft. above Sea.

1921	Rainfall	Duration	Rate per hour
	in.	hours.	in.
Jan.	1.85	33.9	.054
Feb. ....	.35	4.7	.074
Mar. ....	.92	28.0	.033
Apr. ....	.80	22.5	.036
May	1.70	26.5	.064
June ....	.64	10.2	.063
July ....	.82	7.1	.115
Aug.	4.61	57.4	.080
Sept.	1.33	15.6	.085
Oct.	2.09	27.3	.077
Nov.	1.31	29.8	.044
Dec.	1.65	30.8	.054
Year	18.07	293.8	.062

Bidston Observatory, Cheshire.D
Mersey Docks and Harbour Board.
Osler's Gauge. 189 ft. above Sea.

	in.	hours.	in.
Jan.	2.94	78.5	.037
Feb. ....	.19	6.9	.028
Mar.	1.39	61.6	.023
Apr. ....	.92	36.3	.025
May	1.80	51.8	.035
June ....	.10	12.1	.008
July ....	.82	26.6	.031
Aug.	4.91	99.8	.049
Sept.	1.43	30.7	.047
Oct.	2.96	50.6	.059
Nov.	2.01	59.2	.034
Dec.	3.00	61.6	.049
Year	22.47	575.7	.039

Queen's Park, Bolton, Lancashire.D
Thos. Midgley, Esq., F.R.Met.Soc.
Casella's Recorder. 342 ft. above Sea.

	mm.	hours.	mm.
Jan.	181.9	136.5	1.33
Feb.	11.1	14.8	.75
Mar.	83.3	98.3	.85
Apr.	61.2	44.2	1.38
May	72.2	53.0	1.36
June	11.1	12.5	.89
July	40.5	26.7	1.51
Aug.	150.4	112.0	1.34
Sept.	34.4	35.5	.97
Oct.	80.0	49.0	1.63
Nov.	95.4	86.3	1.10
Dec.	169.6	120.7	1.40
Year	991.1	789.5	1.25

Hodsock Priory, Nottinghamshire.D
Lt.-Col. H. Mellish, C.B., F.R.Met.Soc.
Halliwell Recorder. 56 ft. above Sea.

1921	Rainfall	Duration	Rate per hour
	in.	hours.	in.
Jan.	1.85	45.3	.041
Feb. ....	.21	4.9	.043
Mar. ....	.85	25.7	.033
Apr.	1.06	30.7	.035
May	1.35	21.2	.064
June ....	.44	10.5	.042
July ....	.50	8.3	.060
Aug.	3.92	57.4	.068
Sept. ....	.62	14.2	.044
Oct.	2.39	33.7	.071
Nov.	1.63	46.1	.035
Dec.	1.83	34.8	.053
Year	16.65	332.8	.050

Blundellsands, Lancashire.D
Hugh Montgomery, Esq., F.R.Met.Soc.
N. & Z.'s Hyetograph. 35 ft. above Sea.

	in.	hours.	in.
Jan.	3.94	89.0	.044
Feb. ....	.22	10.8	.020
Mar.	1.96	60.0	.033
Apr.	1.29	28.2	.046
May	2.46	51.0	.048
June ....	.17	8.3	.020
July ....	.76	21.0	.036
Aug.	4.84	91.2	.053
Sept.	1.73	31.5	.055
Oct.	2.87	51.5	.056
Nov.	2.28	53.5	.043
Dec.	3.59	—	—
Year	26.11	—	—

Manchester Aerodrome, Lancashire.D
Air Ministry.
N. & Z.'s Hyetograph. 100 ft. above Sea.

	mm.	hours.	mm.
Jan.	114.6	113.5	1.01
Feb.	9.2	12.0	.77
Mar.	61.3	61.3	1.00
Apr.	28.5	30.3	.94
May	49.4	50.2	.98
June	6.7	12.1	.55
July	(24.8)	19.3	1.28
Aug.	106.6	(89.1)	1.20
Sept.	23.5	20.2	1.16
Oct.	(56.2)	..	..
Nov. ....	..	..	..
Dec. ....	..	..	..
Year ....	..	..	..

Worden Hall, Leyland, Lancashire.D
H. Nowell ffarrington, Esq., F.R.Met.Soc.
 N. & Z.'s Fernley. 125ft. above Sea.

1921	Rainfall	Duration	Rate per hour
	in.	hours.	in.
Jan.	5.33	116.7	.046
Feb. ....	.20	10.2	.020
Mar.	2.85	84.9	.034
Apr.	1.80	43.4	.041
May	2.20	56.0	.039
June	1.16	20.2	.057
July	1.65	33.6	.049
Aug.	5.11	104.6	.049
Sept. ...	1.97	34.5	.057
Oct.	2.73	50.2	.054
Nov.	2.44	68.2	.036
Dec.	5.07	94.4	.054
Year	32.51	716.9	.045

Hesketh Park, Southport, Lancashire.D
J. Baxendell, Esq., F.R.Met.Soc.
 N. & Z.'s Fernley Gauge. 39 ft. above Sea.

1921	Rainfall	Duration	Rate per hour
	in.	hours.	in.
Jan.	4.31	107.0	.040
Feb. ....	.38	12.8	.030
Mar.	2.79	84.2	.033
Apr.	1.42	38.9	.037
May	1.45	46.4	.031
June ....	.46	15.7	.029
July	1.70	29.2	.058
Aug.	4.91	88.2	.056
Sept. ...	1.84	29.3	.063
Oct.	2.88	52.5	.055
Nov.	2.64	64.3	.041
Dec.	3.87	83.7	.046
Year	28.65	652.2	.044

Greg Observatory, Lancaster, Lancashire.
Neville Holden, Esq.

Beckley Gauge. 312 ft. above Sea.

	in.	hours.	in.
Jan.	7.44	115.5	.064
Feb. ....	.27	10.5	.026
Mar.	4.31	91.1	.047
Apr.	1.69	32.0	.053
May	3.43	53.6	.064
June ....	.66	10.0	.066
July	1.68	28.2	.060
Aug.	7.76	98.0	.079
Sept. ...	2.31	29.6	.078
Oct.	2.81	45.0	.062
Nov.	2.28	46.5	.049
Dec.	6.61	95.2	.070
Year	41.25	655.2	.063

Huddersfield Cemetery, Yorkshire.

J. Firth, Esq.

Halliwell Recorder. 410 ft. above Sea.

	mm.	hours.	mm.
Jan.	148.5	131.8	1.13
Feb.	5.9	7.8	.76
Mar.	69.7	76.1	.92
Apr.	24.9	33.8	.74
May	39.1	36.5	1.07
June	3.8	6.3	.60
July	29.5	21.7	1.36
Aug.	111.7	82.4	1.35
Sept. ...	27.7	25.6	1.08
Oct.	48.9	41.8	1.17
Nov.	50.3	49.4	1.02
Dec.	167.9	104.7	1.60
Year	727.9	617.9	1.18

Lower Laithe Res., Haworth, Yorkshire.D

M. R. Barnett, Esq., M.Inst.C.E.

N. & Z.'s Hyetograph. 772 ft. above Sea.

	in.	hours.	in.
Jan.	8.92	257.3	.035
Feb. ....	.46	33.2	.014
Mar.	4.24	132.0	.032
Apr.	2.08	58.3	.036
May	2.20	75.7	.029
June ....	.20	16.5	.012
July	2.58	58.5	.044
Aug.	5.79	131.3	.044
Sept. ...	1.92	48.7	.039
Oct.	2.76	61.3	.045
Nov.	2.54	67.0	.038
Dec.	7.98	124.7	.064
Year	41.67	1064.5	.039

Earby Sewage Works, Yorkshire.D

J. E. Adersley, Esq.

N. & Z.'s Hyetograph. 426 ft. above Sea.

	in.	hours.	in.
Jan.	8.19	123.4	.066
Feb. ....	.37	12.7	.029
Mar.	3.67	78.6	.047
Apr.	1.44	28.3	.051
May	1.95	35.0	.056
June ....	.62	3.1	.020
July	2.69	36.6	.074
Aug.	5.62	81.3	.069
Sept. ...	2.12	26.4	.080
Oct.	3.06	38.7	.079
Nov.	2.44	26.8	.091
Dec.	6.65	99.0	.067
Year	38.82	589.9	.066

*Town Hall, Skipton, Yorkshire.D***A. E. W. Aldridge, Esq.**

N. & Z.'s Hyetograph. 367 ft. above Sea.

1921	Rainfall	Duration	Rate per hour
	in.	hours.	in.
Jan.	5.98	114.2	.052
Feb. ....	.34	11.8	.029
Mar.	2.33	73.7	.032
Apr.	1.18	28.6	.041
May	1.40	39.0	.036
June ....	.35	2.7	.129
July	2.11	49.3	.043
Aug.	4.25	100.5	.042
Sept.	1.85	46.0	.040
Oct.	2.64	37.5	.070
Nov.	2.51	50.0	.050
Dec.	4.89	135.7	.036
Year	29.83	689.0	.043

*Mount St. John, Felixkirk, Yorkshire.D***A. J. Walker, Esq., F.R.Met.Soc.**

Halliwell Recorder. 542 ft. above Sea.

	in.	hours.	in.
Jan.	2.40	45.4	.053
Feb. ....	.19	6.3	.030
Mar.	1.03	27.9	.037
Apr.	1.17	25.2	.046
May	1.83	25.8	.071
June ....	.40	11.7	.034
July	1.41	16.8	.084
Aug.	4.14	53.1	.078
Sept.	1.31	17.9	.073
Oct.	1.37	21.7	.063
Nov.	2.03	37.5	.054
Dec.	2.11	37.9	.056
Year	19.39	327.2	.059

*Mount St. John, Felixkirk, Yorkshire.D****A. J. Walker, Esq., F.R.Met.Soc.**N. & Z.'s Hyetograph. Mark IV
542 ft. above Sea.

	in.	hours.	in.
Jan.	2.40	41.3	.058
Feb. ....	.19	4.3	.044
Mar.	1.03	25.0	.041
Apr.	1.17	23.6	.050
May	1.83	25.4	.072
June ....	.40	9.5	.042
July	1.41	17.3	.081
Aug.	4.14	53.3	.078
Sept.	1.31	18.0	.073
Oct.	1.37	21.0	.065
Nov.	2.03	33.9	.060
Dec.	2.11	33.8	.062
Year	19.39	306.4	.063

*Howden Airship Station, Yorkshire.D***Air Ministry.**

N. & Z.'s Hyetograph. 20 ft. above Sea.

1921	Rainfall	Duration	Rate per hour
	mm.	hours.	mm.
Jan.	44.5	60.5	.74
Feb.	5.5	16.3	.34
Mar.	26.5	42.7	.62
Apr.	29.9	50.2	.60
May	44.0	40.4	1.09
June	6.4	11.0	.58
July	14.9	28.3	.53
Aug.	86.9	75.8	1.14
Sept.	15.2	11.7	1.30
Oct.	36.8	26.6	1.38
Nov.	43.7	74.4	.59
Dec. ....	..	..	..
Year ....	..	..	..

*Mount St. John, Felixkirk, Yorkshire.D****A. J. Walker, Esq., F.R.Met.Soc.**N. & Z.'s Hyetograph. No. 2.
542 ft. above Sea.

	in.	hours.	in.
Jan.	2.40	42.3	.057
Feb. ....	.19	4.7	.040
Mar.	1.03	22.2	.046
Apr.	1.17	20.2	.058
May	1.83	25.4	.072
June ....	.40	10.8	.037
July	1.41	18.4	.077
Aug.	4.14	56.9	.073
Sept.	1.31	19.5	.067
Oct.	1.37	22.6	.061
Nov.	2.03	40.5	.050
Dec.	2.11	37.4	.056
Year	19.39	320.9	.060

*Mount St. John, Felixkirk, Yorkshire.D***A. J. Walker, Esq., F.R.Met.Soc.**

Casella's Recorder. 542 ft. above Sea.

	in.	hours.	in.
Jan.	2.40	44.1	.055
Feb. ....	.19	5.1	.037
Mar.	1.03	22.5	.046
Apr.	1.17	20.1	.058
May	1.83	27.1	.068
June ....	.40	7.4	.054
July	1.41	17.0	.083
Aug.	4.14	59.3	.070
Sept.	1.31	19.3	.068
Oct.	1.37	20.9	.066
Nov.	2.03	39.0	.052
Dec.	2.11	40.6	.052
Year	19.39	322.4	.060

*Swansea, Victoria Park, Glamorgan.D***Mr. D. Bliss.**

N. & Z.'s Hyetograph. 26 ft. above Sea.

1921	Rainfall	Duration	Rate per hour
	in.	hours.	in.
Jan.	6.29	150.9	.042
Feb.	1.13	6.7	.019
Mar.	4.16	108.8	.038
Apr.	1.13	25.1	.045
May	1.85	52.6	.035
June ....	.23	6.5	.035
July	2.34	39.7	.059
Aug.	5.22	74.2	.070
Sept. ...	2.94	33.9	.087
Oct.	2.62	37.9	.069
Nov.	3.57	75.2	.047
Dec.	3.39	88.5	.038
Year	33.87	700.0	.048

*Cray Reservoir, Breconshire.D***Lt. G. R. Collinson, C.E.**

Halliwell Recorder. 1,044 ft. above Sea.

1921	Rainfall	Duration	Rate per hour
	in.	hours.	in.
Jan.	12.06	298.3	.040
Feb. ....	.18	10.7	.017
Mar.	10.30	223.3	.046
Apr.	1.54	40.1	.038
May	2.95	71.1	.042
June ....	.48	17.5	.027
July	4.20	82.2	.051
Aug.	8.50	143.9	.059
Sept. ...	3.11	49.3	.063
Oct.	3.37	71.5	.047
Nov.	5.09	105.2	.048
Dec.	7.29	170.2	.043
Year	59.07	1283.3	.046

*Aber Clyd, Black Mtns., Breconshire.***J. F. Jupp, Esq., C.E.**

N. & Z.'s Hyetograph. 1,880 ft. above Sea.

	in.	hours	in.
Jan.	6.16	68.7	.090
Feb. ....	.45	5.4	.083
Mar.	5.44	77.2	.071
Apr.	1.32	25.5	.052
May	2.17	35.1	.062
June ....	.41	9.0	.046
July	2.20	25.0	.088
Aug.	5.10	61.5	.083
Sept. ...	2.64	29.2	.091
Oct.	2.35	33.3	.071
Nov.	3.94	43.5	.090
Dec.	3.75	70.7	.053
Year	35.93	484.1	.074

*Eskdalemuir Observatory, Dumfries.***Air Ministry.**

Beckley Gauge. 799 ft. above Sea.

	mm.	hours.	mm.
Jan.	312.7	266.0	1.18
Feb.	20.6	33.4	.62
Mar.	225.1	177.5	1.27
Apr.	48.5	47.6	1.02
May	86.7	84.0	1.03
June	23.0	30.2	.76
July	104.4	73.0	1.43
Aug.	174.5	85.7	2.04
Sept. ...	69.7	32.3	2.16
Oct.	118.5	74.9	1.58
Nov.	80.7	78.4	1.03
Dec.	249.1	139.0	1.79
Year	1513.5	1122.0	1.35

*Renfrew Aerodrome, Renfrewshire.D***Air Ministry.**

N. & Z.'s Hyetograph. 49 ft. above Sea.

	mm.	hours.	mm.
Jan.	167.0	177.0	.94
Feb.	31.6	40.5	.78
Mar.	143.1	125.2	1.14
Apr.	19.4	32.3	.60
May	50.6	61.2	.83
June	10.2	(12.0)	.85
July	101.0	66.0	1.53
Aug.	144.0	85.6	1.68
Sept. ...	43.1	30.8	1.40
Oct.	115.0	85.4	1.35
Nov.	80.9	80.8	1.00
Dec.	138.0	135.3	1.02
Year	1043.9	932.1	1.12

*Blackwater Dam, Glenleven, Argyll.D****The British Aluminium Co.**

N. & Z.'s Hyetograph. 1,072 ft. above Sea.

	in.	hours.	in.
Jan.	21.28	277.5	.077
Feb.	6.82	109.9	.062
Mar.	18.58	268.4	.069
Apr.	2.56	60.4	.043
May	7.75	140.9	.055
June	1.41	51.4	.027
July	5.60	96.1	.058
Aug.	6.13	105.2	.058
Sept. ...	5.91	104.7	.056
Oct.	11.39	175.1	.065
Nov.	4.03	99.3	.041
Dec.	18.79	276.9	.068
Year	110.25	1765.8	.062

<i>King's College, Aberdeen.</i>				<i>University College, Cork.D</i>			
Air Ministry.				H. N. Walsh, Esq.			
Beckley Gauge. 44 ft. above Sea.				N. & Z.'s Hyetograph. 66 ft. above Sea.			
1921	Rainfall	Duration	Rate per hour	1921	Rainfall	Duration	Rate per hour
	mm.	hours.	mm.		in.	hours.	in.
Jan.	32.0	45.8	.70	Jan.	2.57	54.9	.047
Feb.	15.3	21.1	.72	Feb.	2.56	46.8	.055
Mar.	49.5	46.0	1.08	Mar.	2.91	58.2	.050
Apr.	38.4	39.3	.98	Apr. ....	.54	9.0	.060
May	32.9	32.5	1.01	May	1.66	38.5	.043
June	28.1	39.0	.72	June ....	.02	0.0	..
July	35.6	37.0	.96	July	3.77	32.5	.116
Aug.	50.6	38.9	1.30	Aug.	3.59	58.4	.061
Sept.	24.6	28.2	.87	Sept.	1.35	15.3	.088
Oct.	75.5	32.7	2.31	Oct.	2.90	37.8	.077
Nov.	39.1	(54.0)	.72	Nov.	5.16	86.4	.060
Dec.	39.9	30.0	1.33	Dec.	1.84	43.2	.043
Year	461.5	444.5	1.04	Year	28.87	481.0	.060

<i>Valencia Observatory, Co. Kerry.</i>				<i>Baldonnell, Dublin.D</i>			
Air Ministry.				Air Ministry.			
Beckley Gauge. 30 ft. above Sea.				N. & Z.'s Hyetograph. 283 ft. above Sea.			
	mm.	hours.	mm.		mm.	hours.	mm.
Jan.	134.5	76.3	1.77	Jan.	75.3	100.1	.75
Feb.	76.8	47.8	1.61	Feb.	16.3	24.3	.67
Mar.	163.3	92.6	1.76	Mar.	73.4	98.2	.75
Apr.	30.7	19.6	1.56	Apr.	15.8	18.6	.85
May	78.1	51.2	1.53	May	71.9	79.9	.90
June	2.7	4.9	.55	June	4.1	11.0	.37
July	105.0	56.3	1.87	July	93.4	60.3	1.55
Aug.	154.4	68.3	2.26	Aug.	72.7	70.8	1.03
Sept.	36.8	31.2	1.18	Sept.	40.3	30.0	1.34
Oct.	106.3	59.1	1.80	Oct.	60.5	42.0	1.44
Nov.	193.0	98.6	1.96	Nov.	56.6	86.2	.66
Dec.	90.2	64.1	1.40	Dec.	78.3	87.7	.89
Year	1171.8	670.0	1.75	Year	658.6	709.1	.93

<i>Armagh Observatory, Co. Armagh.</i>				<i>Glenedra Lodge, Co. Londonderry.D*</i>			
Air Ministry.				M. A. Robinson, Esq., C.E.			
Beckley Gauge. 196 ft. above Sea.				N. & Z.'s Hyetograph. 950 ft. above Sea.			
	mm.	hours.	mm.		in.	hours.	in.
Jan.	110.2	87.0	1.27	Jan.	7.33	129.7	.056
Feb.	24.9	25.5	.98	Feb.	1.99	48.7	.041
Mar.	66.0	63.0	1.05	Mar.	6.13	120.9	.051
Apr.	23.1	21.1	1.09	Apr.	2.58	53.0	.049
May	52.3	36.6	1.43	May	3.60	48.8	.074
June	7.4	7.0	1.06	June ....	.43	8.1	.053
July	92.9	60.7	1.53	July	4.42	72.6	.061
Aug.	89.7	58.5	1.52	Aug.	4.94	68.4	.072
Sept.	31.2	24.4	1.28	Sept.	2.01	30.9	.065
Oct.	70.9	51.7	1.37	Oct.	4.75	77.2	.062
Nov.	71.4	65.4	1.09	Nov.	4.92	102.6	.048
Dec.	83.6	91.5	.91	Dec.	7.99	150.1	.053
Year	723.6	592.4	1.22	Year	51.09	911.0	.056

NOTE—Standardized values are printed in old style type.

HEAVY RAINS IN SHORT PERIODS IN 1921.

In the section of *British Rainfall* 1919 devoted to this aspect of the rainfall of the year then under discussion we had occasion to remark on the almost unprecedentedly small number of instances of intense rainfalls of short duration which had occurred. In 1920 the number was unusually large, and in putting on record another remarkably short list for 1921 we therefore feel confident that the variation represents a physical fact and is not due to any failure on the part of the observers to report such records as have occurred. This view is supported by the comments of numerous Observers on the notable infrequency of thunderstorms during the year.

The data considered under this heading are provided for the most part by special readings of ordinary rain gauges made at the time of exceptionally intense rain. Such rains are nearly always very local in character and the chance of their occurring in the precise locality of one of the comparatively few self-recording rain gauges in use is not great. Nevertheless an examination of the charts for almost any year's series of autographic records usually gives one or two instances worthy

Table I.—*Limits of Exceptional Falls.*

Minutes.	NOTEWORTHY.		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
70	1.07	.92	1.81	1.55	2.54	2.18
80	1.12	.84	1.85	1.39	2.57	1.93
90	1.15	.77	1.89	1.26	2.60	1.73
100	1.18	.71	1.92	1.15	2.62	1.57
110	1.21	.66	1.93	1.05	2.64	1.44
120	1.23	.61	1.94	.97	2.65	1.33

of mention. The opportunity is always taken to extract such instances from all charts passing through our hands, including, of course, those from the observatories maintained by the Meteorological Office.

The limits within which such records are included in the tables are set by means of an empirical sliding scale based upon all available information. The curves have been published in several volumes of *British Rainfall* and it does not appear to be necessary to reproduce them every year. The table on p. 61 gives the values read off from them up to two hours. The records are divided into four classes: (i) too common to be worthy of record (these are omitted); (ii) Noteworthy; (iii) Remarkable; and (iv) Very Rare. The records in the last two classes are marked by one and two crosses respectively in Table III.

The number of instances reported for all three classes of noteworthy rainfalls up to two hours' duration, each year, provides a rough, though by no means infallible, guide to the relative prevalence of such phenomena. There is no doubt that there is a considerable variation from year to year, as is exemplified by the two years already mentioned, *viz.*, 1919 and 1920, when the numbers were respectively 8 and 59. For the purpose of giving a crude indication of the geographical distribution the British Isles are divided into six large groups.

Number of Noteworthy Rains of Two Hours Duration or less.

		England and Wales.							British	Per cent.
		S.E.	S.W.	N.E.	N.W.	Total.	Scotland.	Ireland.	Isles.	of records
Average	}	15·9	7·4	4·4	2·1	29·8	2·1	1·3	33·2	received.
1868-1920										
1921		9	4	1	2	16	0	4	20	0·4

Very few of the entries call for special comment. The fall of 1·50 in. in 2 hours at Derravoher, near Limerick, on June 26th, was interesting as an episode in the great drought which was prevailing generally in Ireland at the time. On this day, however, a belt of country extending across the British Isles experienced heavy thunderstorms. At Abbey Leix, near Blandsfort, in Queen's Co., 3·10 in. fell, but no record was preserved of the duration of the shower.

The most important group of intense rainfalls, from August 11th to 13th inclusive, yielded nearly all the few instances marked with a cross, indicating that they fell into the class of "remarkable" falls. On 11th August near Peterborough 2·03 in. fell in 2 hours 5 minutes, and of this 1·91 in. fell in 65 minutes. On the following day 2·42 in. fell in 2 hours 30 minutes at Lyminge, near Dover, and noteworthy showers occurred at Crowborough and Deal.

No record which has reached us for 1921 attained the intensity of a "very rare" fall, and the historical list of instances of this kind since 1868 is therefore unchanged from that given last year.

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
1917	July 14	IV.	Norwich, Ipswich Road	·47	0 2½	11·28
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
1912	July 22	VII.	Wirksworth, Manor House	1·00	0 10	6·00
1918	" 16	II.	Purley, Oakwood Avenue	1·10?	0 11	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
1920	May 29	VIII.	Leyland, Worden Hall	1·65	0 20	4·95
1878	June 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
1915	" 4	XI.	Abergavenny, The Chain	2·20	0 30	4·40
1918	" 17	I.	Shad Thames Pumping Station.	2·07	0 30	4·14
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
1920	May 25	IV.	Hatfield Broad Oak, Barrington	2·79	0 45	3·72
1904	July 27	II.	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
1915	" 30	IV.	Mildenhall	2·63	0 50	3·16
1903	July 18	VI.	Crewe, Betley Hall	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*.

Table III.—*Heavy Rains in Short Periods in 1921.*

Date.	Div.	Station.	Amount.		Duration.		Rate per Hour.
			in.	mm.	hr.	min.	in.
Aug. 9 ..	XX.	Cahirciveen, Valencia Obsy.	·08	2·0	0	1	4·80
Nov. 22 ..	XX.	Cahirciveen, Valencia Obsy.	·05	1·3	0	1	3·00
Jan. 18 ..	II.	Richmond, Kew Observatory	·04	1·0	0	1	2·40
Mar. 28 ..	V.	Falmouth, New Observatory	·07	1·9	0	2	2·10
Sep. 11 ..	I.	St. Pancras, Camden Square	·20	5·1	0	4	3·00
Oct. 10 ..	V.	Falmouth, New Observatory	·20	5·0	0	4	3·00
Aug. 17 ..	XXIII.	Glenedra Lodge	·37	9·4	0	5	4·44x
Oct. 9 ..	V.	Falmouth, New Observatory	·20	5·0	0	5	2·40
Sep. 11 ..	I.	St. Pancras, Camden Square	·28	7·1	0	6	2·80
Oct. 22 ..	V.	Falmouth, New Observatory	·31	8·0	0	10	1·86
Sep. 11 ..	III.	Palmer's Gn., Broomfield Pk.	·45	11·4	0	15	1·80
Aug. 23 ..	I.	St. Pancras, Camden Square	·68	17·3	0	26	1·57
July 27 ..	IV.	Thetford, Waterworks	·80	20·3	0	30	1·60
May 12 ..	II.	Heathfield, Tottingworth Pk.	·73	18·5	0	30	1·46
May 12 ..	VIII.	Bramhall, Bramhall Lane ..	2·00	50·8	1	0	2·00x
Aug. 17 ..	VII.	Ratcliffe-on-Wreake College	1·04?	26·4	1	0?	1·04?
May 26 ..	IV.	Sheringham	1·00	25·4	1	0	1·00
Aug. 11 ..	III.	Peterborough, Milton House	1·91	48·5	1	5	1·76x
Aug. 12 ..	II.	Crowborough, Uckfield Ldge.	1·32	33·5	1	45	·75
Oct. 11 ..	VIII.	Newhey Sewage Works	2·28	57·9	2	0	1·14x
June 26 ..	XX.	Limerick, Derravoher	1·50	38·1	2	0	·75
Aug. 11 ..	III.	Peterborough, Milton House	2·03	51·6	2	5	·97x
Aug. 12 ..	II.	Lyninge, Elham Vly. W.W.	2·42	61·5	2	30	·97x
Aug. 12 ..	II.	Great Mongeham Rectory..	1·81	46·0	3	0?	·60?

NOTE—The amounts are printed in ordinary roman type under the unit in which the measurements were made. The figures as converted from inches to millimetres, and from millimetres to inches are printed in old style type.

HEAVY FALLS ON RAINFALL DAYS IN 1921.

The study of heavy individual days' rains has been continued on the same lines as in previous years, but, as in 1919 and 1920, the year 1921 did not yield much of great interest from this point of view. Numerous observers comment on the unusual infrequency of thunderstorms, and, although cyclonic rains were fairly common at certain times of the year, the occasions on which they were of sufficient magnitude to be worthy of detailed investigation were comparatively few. Most of the dates quoted in the Chronicle on which heavy falls took place were days on which ordinary orographical rains fell in the west. Rains of this nature were plentiful, especially in Scotland, where the year was wet. It is not as a rule, however, profitable to study the geographical distribution of such rains very minutely. One of the most interesting phenomena of the year was undoubtedly the cyclonic rain of September 11th. This storm formed a remarkable episode, interrupting the course of the great drought, and its very clearly defined geographical distribution in a narrow strip stretching right across the area principally affected by the drought, caused it to be clearly reflected in the map of the rainfall of the whole year.

The following short summary shows the few instances in which two or more daily falls of 2·50 in. or more occurred at any station during the year.

County.			Number of Stations.	Number of Falls.	Station with largest number.
Derbyshire	..	..	1	2	Derwent Dale (Birchinlee) 2
Westmorland	..	..	6	21	Dungeon Ghyll .. 6
Carmarthenshire	..	..	1	3	Llynfanfach B .. 3
Merionethshire	..	..	1	2	Llechwedd Quarries 2
Carnarvonshire	..	..	1	6	Snowdon (Cwm Dyli) 6
Argyllshire	..	..	5	12	{ Ardgour House .. 3
Inverness-shire	..	..	6	27	{ Kinlochleven .. 3
Ross-shire	..	..	1	2	Kinlochquoich .. 8
					Glencarron .. 2
British Isles	..	..	22	75	Kinlochquoich .. 8

As in several previous years, Kinlochquoich heads the list with eight days on which at least 2·50 in. of rain fell. At the neighbouring station, Glenquoich, there were seven instances. It is possible that the number exceeded six at Cwm Dyli in the Snowdon district, but the gauge was not read quite every day.

Twelve falls need to be added to the historic list of maximum daily rainfalls published in 1910, and revised year by year since.

Div.	County.	Station.	Date.	Rainfall. in.
X.	Westmorland.....	Dungeon Ghyll.....	Jan. 8th, 1921 ..	6·10
XI.	Carmarthenshire	Llynfanfach B.....	Mar. 15th, 1921 ..	5·50
	.....	Llynfanfach C.....	Mar. 15th, 1921 ..	4·95
	.....	Llynfanfach A.....	Mar. 15th, 1921 ..	4·45
	Merionethshire	Blaenau Festiniog, Llechwedd Q	Aug. 5th, 1921 ..	4·67
	.....	Blaenau Festiniog, Oakley Q...	Aug. 5th, 1921 ..	4·25
XVIII	Inverness-shire	Loch Arkaig, Glendessary	Dec. 30th, 1921 ..	4·38
	.....	Loch Quoich, Kinlochquoich ...	Dec. 31st, 1921 ..	4·28
	.....	Invergarry Gardens	Jan. 21st, 1921 ..	4·20
	.....	Loch Quoich, Glenquoich.....	Jan. 21st, 1921 ..	4·15
	.....	Clunes.....	Jan. 21st, 1921 ..	4·00
XX.	Waterford	Portlaw, Mayfield	July 28th, 1921 ..	3·76

The representation of Carmarthenshire has been greatly improved by the four stations near Llynfanfach, three of which recorded a rainfall on March 15th far in excess of any previously measured in the county of Carmarthenshire. The fall at Portlaw on July 28th was the highest ever recorded in County Waterford. Apart from these falls, there is nothing of a very remarkable nature in the list.

In the following Chronicle are set out particulars of the distribution of some of the more interesting heavy daily falls of the year. The lists include daily falls of 2·50 in. or more, or, alternatively, of 7·5 per cent. or more of the year's fall at the station. If the maximum fall for the year, the figure is printed in roman type; if not, in italic.

Part I.—Chronicle.

January 1st—10th.

Unbroken westerly conditions prevailed, bringing a series of orographical rains of the ordinary winter type, and of no great individual significance, to all westerly districts. The only fall of first importance was that in the English Lake District on the 8th and 9th, when at Dungeon Ghyll, in Langdale, 10·22 in. fell during the two days. A line squall occurred in south-east England on the late afternoon of the 9th, but no notable rainfall was reported from this district.

January 1st.

XI. (*Wales*). Llynfanfach, B., 2·55 in. or 3·5 per cent.

January 3rd.

IV. (<i>Eng. S.E.</i>).	in. or %	XI. (<i>Wales</i>).	in. or %
Shenfield (The Lodge)....	1·12 7·6	Llynfanfach B.	2·55 3·5
		XX. (<i>Munster</i>).	
		Ballinageary (Inchibeg) ..	2·79 4·3

January 4th.

XI. (<i>Wales</i>).	in. or %	XVIII. (<i>Scot., N.W.</i>).	in. or %
Snowdon (Cwm Dyli).....	3·31 2·6	Loch Arkaig (Glen Dessary)	3·15 2·4

January 5th.

XV. (<i>Scot., W. Mid.</i>).	<i>in.</i>	<i>or</i>	<i>%</i>	XVIII. (<i>Scot., N.W.</i>).		
Morvern (Kingairloch)....	2·78		2·4	L. Quoich (Kinlochquoich)	3·74	2·5
Ardgour House.....	3·41		2·8	Loch Quoich (Glenquoich)	3·20	2·4
Blackwater Dam, S.....	3·16		2·9	Loch Arkaig (Achnacarry)	2·50	2·4
Glenleven (Kinlochleven).	2·81		2·9	Blackwater Dam, N.....	2·67	2·9
Glen Etive.....	3·12		2·9	Kinlochmore Lodge.....	3·00	2·7

January 8th.

X. (<i>Eng., N.</i>).	<i>in.</i>	<i>or</i>	<i>%</i>	X. (<i>Eng., N.</i>)— <i>con.</i>	<i>in.</i>	<i>or</i>	<i>%</i>
Ambleside (Lesketh How).	2·71		3·4	Dungeon Ghyll.....	6·10		5·2
Rydal (High Close).....	3·08		3·7	Grasmere (The Wray)....	2·60		3·0

January 9th.

X. (<i>Eng. N.</i>).	<i>in.</i>	<i>or</i>	<i>%</i>	X. (<i>Eng. N.</i>)— <i>con.</i>	<i>in.</i>	<i>or</i>	<i>%</i>
Hassness	2·56		2·5	Dungeon Ghyll.....	4·12		3·5
Patterdale (Greenside Mi.)	2·60		3·3	Grasmere (The Wray)....	3·65		3·8
Rydal Hall	2·68		3·2				

January 10th.

XI. (*Wales*), Snowdon (Cwm Dyli), 3·29 in. or 2·6 per cent.

January 12th.

A primary depression passed during the 11th and 12th across central Ireland and the north of England, and was accompanied by widespread though not remarkably heavy rainfall. Over a well defined area, lying entirely in Co. Durham, the total on the 12th slightly exceeded 2 in. Serious flooding occurred in various parts of the north of England.

January 12th.

X. (<i>Eng. N.</i>).	<i>in.</i>	<i>or</i>	<i>%</i>	X. (<i>Eng. N.</i>)— <i>con.</i>	<i>in.</i>	<i>or</i>	<i>%</i>
Darlington (North Villa) ..	1·47		8·2	Biddick Hall Gardens....	2·22		9·0
Hurworth B. (Crookfoot).	1·84		9·4	Sunderland (Claxheugh Gr.)	1·88		8·0
Hurworth Burn Reservoir	1·80		8·9	Consett Park Farm.....	2·03		8·5
Shotton Pumping Station.	2·04		9·0	Chopwellwood	1·76		7·6
Bishop Auckland.....	1·88		8·8	Newcastle (Leazes Park) ..	1·72		7·5

January 13th.

II. (*Eng. S.E.*). Deal and Walmer, W.W., 1·02 in. or 7·5 per cent.

January 16th—28th.

With westerly conditions very strongly developed, orographical rains continued in the west at intervals throughout this period. On 17th the fall was definitely localized in the southern Pennines, more than 2 in. falling between Buxton and Keighley. On the 21st local falls of as much as 4 in. occurred in western Inverness-shire and on the same date heavy rains caused a landslide near Elland in the Calder Valley. On the 24th, heavy snow fell in Scotland. Considerable flooding again took place in Yorkshire and Derbyshire. For the most

part the rains of this period were of the commonplace winter type and call for no special comment from a meteorological point of view.

January 16th.

XI. (*Wales*), Snowdon (Cwm Dyli), 2·68 in. or 2·1 per cent.

January 17th.

VII. (<i>Eng. N. Mid.</i>).	<i>in.</i> or %	IX. (<i>Yorks.</i>)	<i>in.</i> or %
Derwent Dale (Birchinlee)	2·74 6·1	Langsett Moor (Midhope).	3·00 8·7

January 20th.

XVIII. (*Scot. N.W.*) Loch Quoich (Kinlochquoich), 3·08 in. or 2·1 per cent.

January 21st.

XV. (<i>Scot. W. Mid.</i>)	<i>in.</i> or %	XVIII. (<i>Scot. N.W.</i>)— <i>con.</i>	<i>in.</i> or %
Mull (Glencannel)	2·50 2·0	Invergarry Schoolhouse ..	2·50 3·7
XVIII. (<i>Scot. N.W.</i>).		Loch Arkaig (Achnacarry)	2·75 2·6
L. Quoich (Kinlochquoich)	3·48 2·3	Clunes	4·00 4·6
Loch Quoich (Glenquoich)	4·15 3·1	Skye (Kyleakin, Dunringell)	2·95 4·1
Invergarry Gardens	4·20 5·4	Achnasheen (Ledgowan) ..	2·51 3·0

January 22nd.

XVIII. (*Scot. N.W.*), Skye (Scalpay Island), 3·07 in. or 3·5 per cent.

January 27th.

XVIII. (*Scot. N.W.*), Glencarron Lodge, 2·92 in. or 3·1 per cent.

January 28th.

XVIII. (*Scot. N.W.*), Loch Quoich (Glenquoich), 2·62 in. or 2·0 per cent.

February 14th—15th.

Whilst anticyclonic conditions and severe drought were prevailing in the south, depressions passing in the latitude of Iceland caused a steep pressure gradient and strong westerly winds over the northern part of the British Isles. Considerable rainfall resulted in the normally rainy regions of western Argyllshire and Inverness-shire.

February 14th.

XVIII. (*Scot. N.W.*), Loch Arkaig (Glen Dessary), 2·70 in. or 2·0 per cent.

February 15th.

XV. (<i>Scot. W. Mid.</i>).	<i>in.</i> or %	XVIII. (<i>Scot. N.W.</i>)	<i>in.</i> or %
Glenleven (Kinlochleven).	2·90 3·0	Kinlochmore Gardens	3·27 3·0
Glen Etive	2·96 2·7		
Craræ (Kennels)	2·75 3·1		

February 25th.

A secondary depression crossing the north of England brought a local rainfall in the east which formed a welcome interruption to the prevailing dry weather. Two stations in the Thames Estuary just reached the limit for insertion in the list.

February 25th.

II. (<i>Eng. S.E.</i>).	<i>in.</i> or %	II. (<i>Eng. S.E.</i>)— <i>con.</i>	<i>in.</i> or %
Teynham (New Gardens)	1·06 8·4	Eastchurch (Old Rides) ..	·98 8·4

February 28th to March 9th.

Little interruption occurred in the succession of orographical rains in the west and north which were of normal type and intensity for the season. Widespread snow fell in Scotland on March 5th.

February 28th.

XVIII. (*Scot. N.W.*), Loch Quoich (Kinlochquoich), 3·37 *in.* or 2·3 per cent.

March 3rd.

X. (<i>Eng. N.</i>)	<i>in.</i> or %	XI. (<i>Wales</i>).	<i>in.</i> or %
Dungeon Ghyll.....	3·87 3·3	Llechwedd Quarries	2·67 2·5

March 4th.

XI. (*Wales*), Snowdon (Cwm Dyli), 2·60 *in.* or 2·1 per cent.

March 5th.

XVIII. (*Scot. N.W.*), Loch Arkaig (Achnacarry), 2·50 *in.* or 2·4 per cent.

March 8th.

XV. (<i>Scot. W. Mid.</i>).	<i>in.</i> or %	XVIII. (<i>Scot. N.W.</i>).	<i>in.</i> or %
Ardgoir House.....	2·60 2·1	Loch Quoich (Kinlochquoich)	2·73 1·8
		Clunes	3·72 4·3

March 9th.

XVIII. (*Scot. N.W.*), Loch Arkaig (Achnacarry), 2·55 *in.* or 2·5 per cent.

March 15th—16th.

A temporary deepening of the Icelandic low pressure brought about a crowding of the isobars and increased pressure gradient on these days and a somewhat more widespread rainfall. More than 2 *in.* fell in North Wales, the English Lakes and the south of Scotland.

March 15th.

X. (<i>Eng. N.</i>).	<i>in.</i> or %	XI. (<i>Wales</i>).	<i>in.</i> or %
Hassness	3·92 3·9	Llanyfanfach A	4·45 7·6
Keswick (Derwent Island)	2·56 4·4	Llanyfanfach B	5·50 7·6
Keswick (Crosthwaite Sch.)	2·71 5·0	Llanyfanfach C	4·95 7·5
Patterdale (Greenside Mi.)	2·80 3·5	Lake Eigiau (Dam Site) ..	3·18 4·6
Rydal	2·53 3·1	XIII. (<i>Scot. S.E.</i>).	
Rydal Hall	2·55 3·0	Edin. WW. (Gameshope F.)	2·69 4·0
Grasmere (The Wray)....	3·36 3·5	Talla Linns Foot.....	2·82 4·9
		XIV. (<i>Scot. S.W.</i>).	
		Leadhills	2·56 3·4

March 23rd.

XVIII. (<i>Scot. N.W.</i>).	<i>in.</i> or %	XVIII. (<i>Scot. N.W.</i>)— <i>con.</i>	<i>in.</i> or %
Loch Quoich (Glenquoich)	2·50 1·9	Loch Arkaig (Achnacarry)	3·40 3·3

March 28th.

XI. (Wales), Snowdon (Cwm Dyli), 3·50 in. or 2·8 per cent.

May 2nd.

II. (*Eng. S.E.*), Snave (Poplar House), 1·08 in. or 9·0 per cent.

May 12th.

A secondary depression of no great importance crossed the south of England. The only fall of sufficient magnitude to qualify for the chronicle occurred in Sussex; but at Bramhall near Stockport 2·00 in. fell in an hour, an intensity not often attained.

May 12th.

II. (*Eng. S.E.*), Rusper Nunnery, 1·70 in. or 10·3 per cent.

May 26th.

III. (*Eng. S. Mid.*), Standon 1·34 in. or 9·6 per cent.

June 26th.

Over a strip stretching across southern Ireland and the English Midlands a thunderstorm, during which the rain locally reached great intensity, formed an isolated episode in the course of the great summer drought.

The districts in which this fall was most severe were around Limerick, where 1·50 in. fell in two hours, and over a strip of country stretching from the north-eastern borders of Co. Clare into Co. Wicklow. Unfortunately the number of rainfall stations in this district is too small to allow of the accurate delineation of the rainfields in a storm of the true thunder type in which the intense rain is almost invariably extremely local. For this reason we do not reproduce the map.

The storm appears to have been only of slight intensity over the English portion of the strip affected, as much as ·50 in. falling only in areas in Staffordshire, Nottinghamshire, Lancashire and Lincolnshire, and more than 1·00 in. only at Sleaford and at Bardney, about ten miles east of Lincoln.

VII. (<i>Eng. N. Mid.</i>).	<i>in. or %</i>	XXI. (<i>Leinster</i>).	<i>in. or %</i>
Sleaford (Kesteven Asy.).	1·72 11·0	Abbey Leix (Blandsfort) ..	3·10 8·5
Bardney Railway Station.	1·33 9·3		

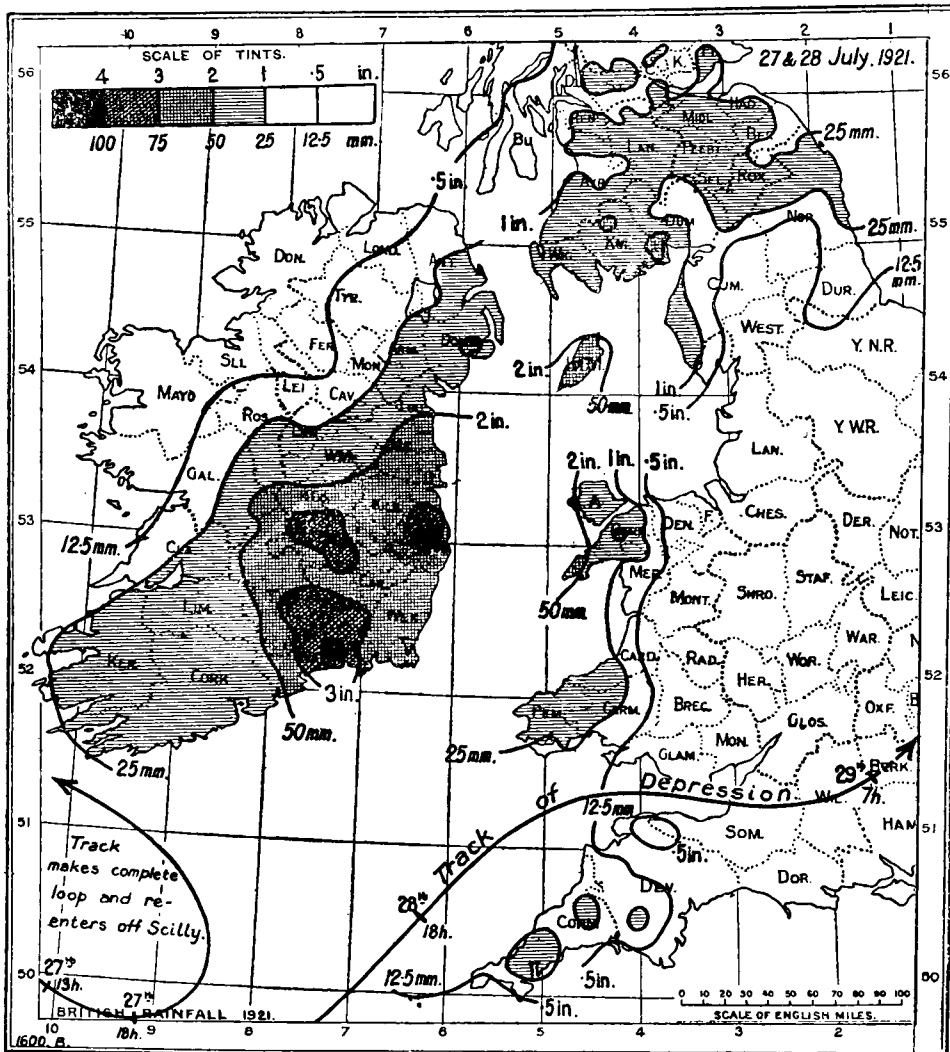
July 16th.

The pressure conditions were of a complex nature with several secondary depressions moving in an irregular manner. Thunder rains of no great intensity occurred locally, the only records of sufficient magnitude to quote being at Swaffham, in western Norfolk.

IV. (<i>Eng. E.</i>).	<i>in. or %</i>	IV. (<i>Eng. E.</i>)— <i>con.</i>	<i>in. or %</i>
Swaffham	1·36 8·6	Swaffham (The Paddocks)	1·55 8·8

July 27th—28th.

A primary depression passed on this day in a north-easterly direction between the north of Scotland and Iceland, whilst a rather involved system of secondaries occupied the south of the British Isles. It appears to have been with the movements of one of these secondaries which formed during the 27th that the principal rainfall of these two days was associated. This depression, which was a slow-moving one, remained off the south of Ireland without changing its position appreciably until the following evening, after which it passed away eastward across the south of England and over the North Sea.

RAINFALL, JULY 27th—28th, 1921.

The map reproduced on this page shows the rainfall of the two days together. It should be remarked that although the large one-inch area

extends unbroken from Bantry Bay to the Firth of Forth, there can be little doubt that the northern portion is to be referred to the movements of the primary cyclone mentioned above rather than to the secondary. Isolated one-inch falls in the centre and north of Scotland bear this out. It is impossible to tell with any precision how far each rainfield extended—no doubt they overlapped—but the narrow neck nearly dividing the one-inch area in Lanarkshire is suggestive of a dividing line.

Falls of as much as 2 in. during the two days were observed over a large block of country nearly coinciding with the province of Leinster, whilst falls of equal magnitude in the Isle of Man and on the coast of North Wales suggest that the heavy rain extended across St. George's Channel. There were three well marked three-inch areas in Ireland, and more than 4 inches probably fell over about thirty square miles to the west of the city of Waterford.

July 28th.

XI. (<i>Isle of Man</i>).			XX. (<i>Munster</i>)—con.		
	<i>in.</i>	<i>or %</i>		<i>in.</i>	<i>or %</i>
Douglas (Clype Res.)....	2.62	6.9	Fethard (Coolmore).....	2.56	7.7
Ramsay (Town Hall).....	2.62	7.0	Clonmel (Bruce Villa)....	2.63	8.0
Ramsay (North Promenade)	2.80	7.0	Fethard (Coolmore).....	2.56	7.7
XX. (<i>Munster</i>).			XXI. (<i>Leinster</i>).		
	<i>in.</i>	<i>or %</i>		<i>in.</i>	<i>or %</i>
Knockaderry Res. No. 1..	2.62	8.4	Enniscorthy (Woodbrook)	2.50	6.0
Knockaderry Res. No. 2..	3.55	13.0	Piltown (Bessborough)...	2.57	8.8
Waterford (Tycor W.W.).	3.00	9.3	Inistioge (Woodstock)....	2.56	7.3
Waterford (De La Salle Col.)	2.53	7.8	Bagnalstown (Fenagh Ho.)	2.31	8.2
Portlaw (Mayfield).....	3.76	10.6	Mountrath (Baureagh) ...	2.61	4.9
Clonmel (Bruce Villa)....	2.63	8.0	Mountmellick	2.66	7.8

July 31st—August 1st.

A depression travelling north-eastward and skirting the north-west coasts of Ireland and Scotland gave semi-orographical rains in the east of Ireland and part of the north of England. The only falls reaching 2 in. on July 31st were in the Wicklow hills.

July 31st.

XXI. (<i>Leinster</i>).			XXI. (<i>Leinster</i>)—con.		
	<i>in.</i>	<i>or %</i>		<i>in.</i>	<i>or %</i>
Tithewer	2.81	8.4	Annacarter Schoolhouse..	2.68	7.7

August 1st.

IX. (<i>Yorks.</i>).			XI. (<i>Wales</i>).		
	<i>in.</i>	<i>or %</i>		<i>in.</i>	<i>or %</i>
Ingleton (Kingsdale Head)	2.64	3.7	Snowdon (Cwm Dyli)	3.07	2.4

August 5th—6th.

Semi-orographical rains associated with the passage of a shallow low pressure system in the north of Scotland, occurred in the Lake District and the uplands of Wales. Near Blaenau Festiniog more than 4 inches fell.

August 5th.

XI. (<i>Wales</i>).	<i>in. or %</i>	XI. (<i>Wales</i>)— <i>con.</i>	<i>in. or %</i>
Blaenau Festiniog (Oakley Quarries).....	4·25 4·5	Blaenau Festiniog (Llech-wedd Quarries)	4·67 4·5

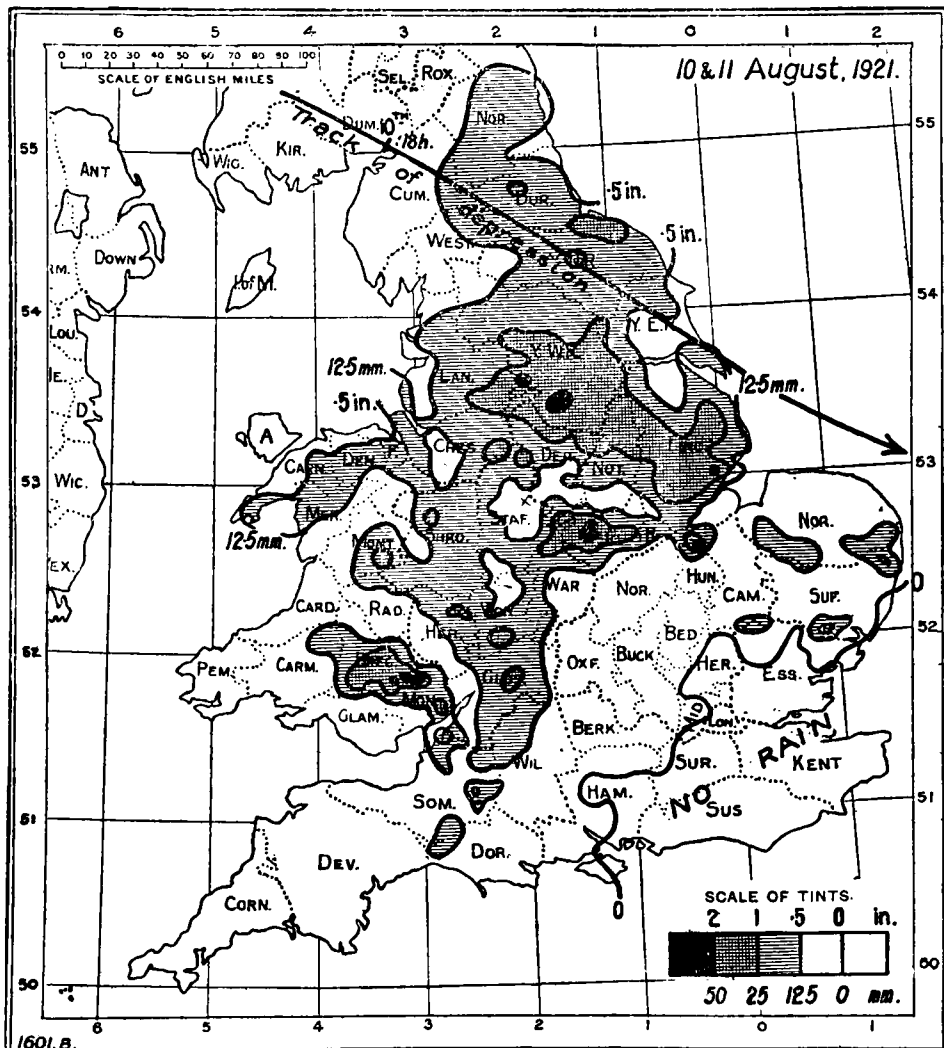
August 6th.

XI. (*Wales*), Snowdon (Cwm Dyli) 3·27 in. or 2·6 per cent.

August 10th—11th.

A primary depression of no great depth moved slowly during the 10th from the west coast of Scotland in a south-easterly direction to the coast of Yorkshire and on the morning of the 11th was centred off the coast of Holland.

RAINFALL, AUGUST 10th—11th, 1921.



The principal rainfall on the 10th occurred in South Wales, upwards of 2 inches falling near Abergavenny and Ebbw Vale. On the 11th widespread heavy rain fell in the English Midlands, the main 1 inch splash extending from Skipton to Boston with subsidiary strips in Co. Durham and the North Riding of Yorkshire in the north, and from Cheshire to Suffolk in the south. Near Peterborough the rain reached a notable intensity, 2·05 in. falling in 2 hours 5 min., of which 1·91 in. fell in 1 hour 5 min. Heavy thunderstorms were general in East Anglia.

The map reproduced is for the total fall of the two days which could not very well be treated separately, though it is not clear that they were both definitely associated with the single barometric depression. The distribution during the two days together gives the effect of a rainfield lying more or less at right angles to the track of the cyclone centre with the heaviest falls lateral to it and thus parallel to the track. Nearly the whole of the important part of the rainfield lay on the right-hand side of the path, an extremely unusual phenomenon.

August 10th.

XI. (<i>Wales</i>).	<i>in.</i> or %	XI. (<i>Wales</i>)— <i>con.</i>	<i>in.</i> or %
Abergavenny (Mansel Pl.)	2·15 8·5	Ebbw Vale (Llangunider, W.)	2·92 5·5
Abergavenny (Larchfield).	2·25 9·4	Crickhowell (Gwernvaley)	2·24 7·9
Abergavenny (The Chain).	2·25 9·6		

August 11th.

III. (<i>Eng. S. Mid.</i>).	<i>in.</i> or %	VII. (<i>Eng. N. Mid.</i>)— <i>con.</i>	<i>in.</i> or %
Peterborough (Abbeyfields)	1·15 8·9	Retford (Grammar School)	1·26 7·7
Peterborough (Milton Ho.)	2·25 13·1	Retford (Morton Hall) . . .	2·51 13·9
Eye (Northolm)	1·55 11·2	Worksop (Wigthorpe Hill)	1·60 9·2
Market Deeping (Etton) . .	1·24 9·5	Worksop (Hodsock Priory)	1·38 8·4
IV. (<i>Eng. E.</i>).		Derwent Dale (Birchinlee)	2·87 6·4
Capel St. Mary School	1·25 8·7	Derwent Dale (Howden D.)	2·92 7·1
Ipswich (Copdock)	1·45 10·6	Grassmoor Colliery	1·30 8·2
VII. (<i>Eng. N. Mid.</i>).		IX. (<i>Yorks.</i>).	
Leicester (Town Hall Sq.)	1·50 8·6	Standedge (Cudworth) . . .	2·18 8·0
Leicester (Gilroes Cem.) . .	1·81 9·5	Woodsetts Grange (Old Vic.)	1·61 8·4
Thornton Reservoir	1·91 9·0	Loxley V. (Dale Dike Res.)	2·69 8·4
Cropstone (Bradgate Res.)	2·32 10·4	Rotherham (Ulley Res.) . .	1·52 9·9
Barkby Hall	1·70 8·3	Wincobank (Sewage Wks.)	1·73 10·6
Nan Panton Reservoir	2·02 9·6	Rotherham (Sitwell Vale) .	1·44 8·2
Grantham (Guildhall)	1·25 8·5	Rotherham (Moorgate Gr.)	1·51 9·2
Boston (Black Sluice)	1·35 9·2	Aldwarke Sewage Works . .	1·58 9·5
Boston (Grand Sluice)	1·90 12·6	Rotherham (Thrybergh) . .	1·66 10·0
Boston (Bargate End)	2·16 14·9	Chapelton (Potter Hill) . .	1·76 9·2
Woodhall Spa (Galm H.)	1·62 10·3	Conisborough (Firsby Res.)	1·96 11·5
Lincoln (Sessions House) . .	1·18 8·0	Wentworth Woodhouse . .	1·68 9·0
Lincoln (D'Isney Place) . .	1·25 8·1	Underbank Reservoir	2·10 7·9
Lincoln (Cottesford Pl.) . .	1·26 7·7	Doncaster Pumping Stn. . .	1·42 9·3
Springthorpe Rectory	1·34 9·5	Doncaster (Avenue Road)	1·60 9·0
Hagworthingham	1·33 8·3	Barnsley (Jordan Hill) . . .	1·65 9·0
Elkesley Pumping Station	1·32 7·6	Ackworth (Hillthorpe) . . .	1·36 8·3
Worksop (Osberton Gdns.)	1·75 9·4		

August 12th and 13th.

The depression referred to in the previous paragraphs appears to have changed its course somewhat abruptly on the morning of the 11th, when centred near Amsterdam, and to have moved away northward to Norway. On the two following days secondary depressions moved on its southern outskirts across south-eastern England, and rain of a somewhat local nature, at places of considerable intensity, occurred. That of the 12th was most prominent in east Kent, where 2·42 in. fell in 2½ hours at Lyminge, and 1·81 in., out of 1·98 in., in three hours at Great Mongeham, near Deal. In the country round about a good deal of damage was done to standing crops, whilst in Deal it was necessary to call out the fire brigade to pump out water from dwelling houses. At Pulham Aerodrome, Norfolk, a fall of 3·15 in. was registered on the 13th. The officers' quarters were flooded to a depth of about 2 feet.

August 12th.

II. (<i>Eng. S.E.</i>).	<i>in.</i> or %	II. (<i>Eng. S.E.</i>)— <i>con.</i>	<i>in.</i> or %
Kearsney (Chilton Farm).	1·86 10·4	Great Mongeham Rectory	1·98 14·4
Lyminge (Elham Val. W.W.)	2·42 14·6	Hildenborough	1·31 7·8
Martin Mill Pumping Stn.	2·30 17·0	Forest Row (Wych Cross Pl.)	1·70 8·3
Deal and Walmer W.W...	1·49 11·0		

August 13th.

IV. (<i>Eng. E.</i>).	<i>in.</i> or %	IV. (<i>Eng. E.</i>)— <i>con.</i>	<i>in.</i> or %
Pulham St. Mary (Hill H.)	1·47 9·0	Pulham Aerodrome	3·15 21·3

August 17th.

II. (*Eng. S.E.*), Frilsham House, 1·27 in. or 7·7 per cent.

August 20th—23rd.

Ill-defined low pressure centres were moving in an irregular manner over the south of England during this period, and a good deal of rain of an uncertain type fell in places, not however calling for any special comment.

August 20th.

X. (<i>Eng. N.</i>).	<i>in.</i> or %	XVI. (<i>Scot. E. Mid.</i>).	<i>in.</i> or %
Wooler (Victoria House) ..	1·90 8·5	Dunkeld (Snaigow)	2·80 8·6

August 21st.

IV. (<i>Eng. E.</i>).	<i>in.</i> or %	X. (<i>Eng. N.</i>).	<i>in.</i> or %
Acle	2·51 14·1	Ford Castle Gardens	1·97 8·2
VII. (<i>Eng. N. Mid.</i>).			
Bitteswell School Gardens	1·69 9·2		

August 23rd.

II. (<i>Eng. S.E.</i>).	<i>in.</i> or %	III. (<i>Eng. S. Mid.</i>)— <i>con.</i>	<i>in.</i> or %
Fernhurst (Blackdown H.)	1·52 8·3	Willesden (Stonebridge F.)	1·44 9·3
Petworth (Roundwyck) ..	1·65 9·7	Sudbury (Stn. Approach).	1·20 8·0
III. (<i>Eng. S. Mid.</i>).		IV. (<i>Eng. E.</i>).	
Willesden Green (Strode Rd.)	1·51 9·3	Cockfield Rectory	1·30 9·0
Willesden (Richmond Av.)	1·19 7·7		

August 28th—29th.

A depression which formed off the west of Ireland on the 28th moved across North Wales and the Midlands on the following day, and was associated with considerable rainfall in the north of England and south-west of Scotland on the left-hand side of the track. Practically no rain fell in the south-east of England.

August 28th.

VII. (<i>Eng. N. Mid.</i>).	<i>in.</i>	<i>or</i>	<i>%</i>	VII. (<i>Eng. N. Mid.</i>)— <i>con.</i>	<i>in.</i>	<i>or</i>	<i>%</i>
Bawtry Hall Gardens....	1.20		7.9	Eckington (Mosbrough S.)	1.58		8.0
Holmesfield (Barbrook R.)	2.05		9.3	IX. (<i>Yorks.</i>).			
				Darnall (High Hazels M.)	1.58		9.1

August 29th.

IX. (<i>Yorks.</i>).	<i>in.</i>	<i>or</i>	<i>%</i>	X. (<i>Eng. N.</i>)— <i>con.</i>	<i>in.</i>	<i>or</i>	<i>%</i>
Guisborough (Lockwood R.)	1.97		7.6	Tynemouth (Coastguard St.)	1.73		8.3
Newcastle (Leazes Park)..	1.85		8.2	Morpeth (Ashington).....	2.07		8.8
Newcastle (Town Moor)..	1.93		7.6				

September 3rd.

A minor secondary depression between two primaries in the north of the British Isles appears to have been the cause of local heavy rain in the west of Sutherlandshire.

XIX. (*Scot. N.*), Loch More (Achfary), 3.32 in. or 3.4 per cent.

September 10th.

The rainfall of this day, which was curiously localized in the neighbourhood of the British Channel, whilst of no individual importance, is of peculiar interest in view of its relation to that of the following day. The latter can be clearly associated with the passage of a definite secondary depression, and at first glance it is natural to assume that the fall of the 10th represented the commencement of the shower. It is possible that this is the case, and the very definite extension of the rain area eastward from Bristol to London so closely coincides with the rainfield of the 11th that the view is strongly supported. If, however, this is the case, we have the curious phenomenon of a well-defined rainfield forming in anticipation of the approach of a depression some twenty-four hours later. It is not improbable, however, that the coincidence of the rainfields is accidental, and that the rainfall of the 10th may be attributed to ill-defined secondary pressure systems in the neighbourhood of Normandy.

September 10th.

V. (<i>Eng. S.W.</i>).	<i>in.</i>	<i>or</i>	<i>%</i>	V. (<i>Eng. S.W.</i>)— <i>con.</i>	<i>in.</i>	<i>or</i>	<i>%</i>
Clevedon (Mt. Heber Cot.)	1.82		7.9	Minehead (The Poplars)..	1.52		8.0

September 11th.

The rainfall of this day, especially when taken in conjunction with that of the previous day, was in some respects the most interesting

fall of the year. It provided the only substantial relief from the prolonged drought over a large area in the south of England. The rain was very clearly associated with the passage of the secondary depression mentioned in the previous paragraph. This depression formed on the flank of a large primary moving in a normal manner from west to east off the north coast of Scotland. The centre of the secondary passed to the south of Ireland during the 11th, and was situated at 18 h. in the neighbourhood of the Scillies. Thence it moved rapidly eastward, reaching London about 1 h. on the 12th, and a point near Amsterdam at 7 h. on that day.

Rain fell in all parts of the south of the British Isles, but was heavy only along a narrow belt extending from the mouth of the Bristol Channel to the coast of Suffolk, conspicuously approaching parallelism with the track, and lying for the most part on its left-hand side. It is not possible to lay down the position of the centre of a secondary depression with a high degree of accuracy, but taking the line as shown, it is worthy of remark that the culminating strip of 2 in. falls lies unusually close to it.

During the day more than 1 inch of rain fell over a tract extending from Bude and Swansea on the west to the east coast between Yarmouth and Clacton-on-Sea, with 2 in. splashes at intervals to the east of Reading. It is probable that the tract was continued over the North Sea, for the maximum fall, 3·44 in., occurred at the most easterly point, near Orfordness.

As is commonly the case with rains of this nature, there is clear evidence of subsidiary belts of rain both on the north and south of the main strip, but beyond these the fall diminished to less than ·50 in. at a distance of from 30 to 40 miles on either side.

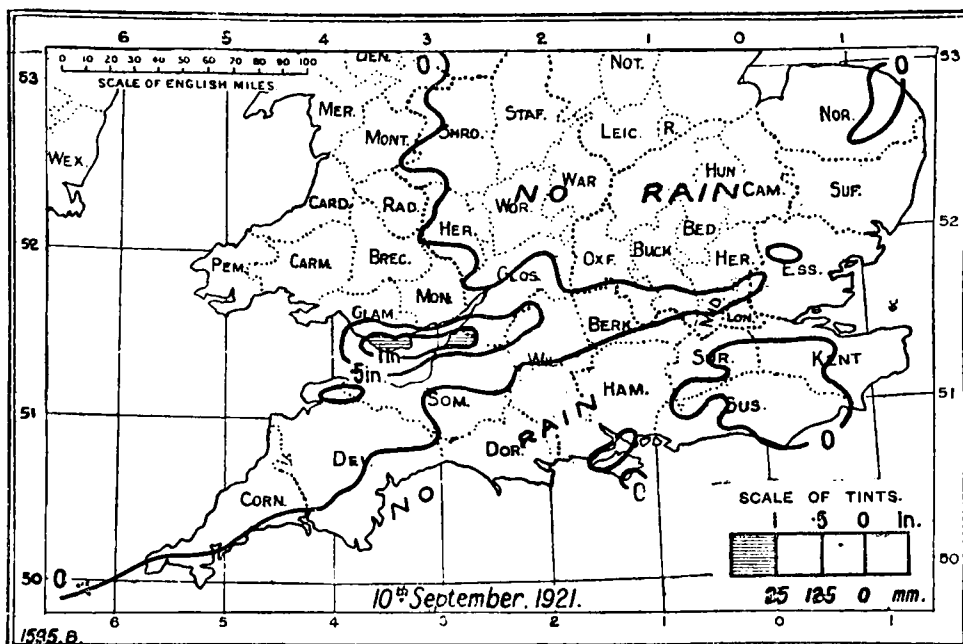
Apart from the time of its occurrence and the interest of its distribution, the rainfall of this day was not intrinsically of prime importance, but in order to preserve a uniform record with similar rains studied in the past, we have measured the area over which the fall exceeded 1 inch, and have worked out the volume of precipitation and general rainfall over the strip as thus defined.

	Area. sq. miles.	General Rainfall. inches.	Volume of Rainfall. sq. miles × inches.
More than 2 in.....	766	2·24	1,716
1-2 in.....	11,444	1·37	15,678
Total more than 1 in. . .	12,210		17,394

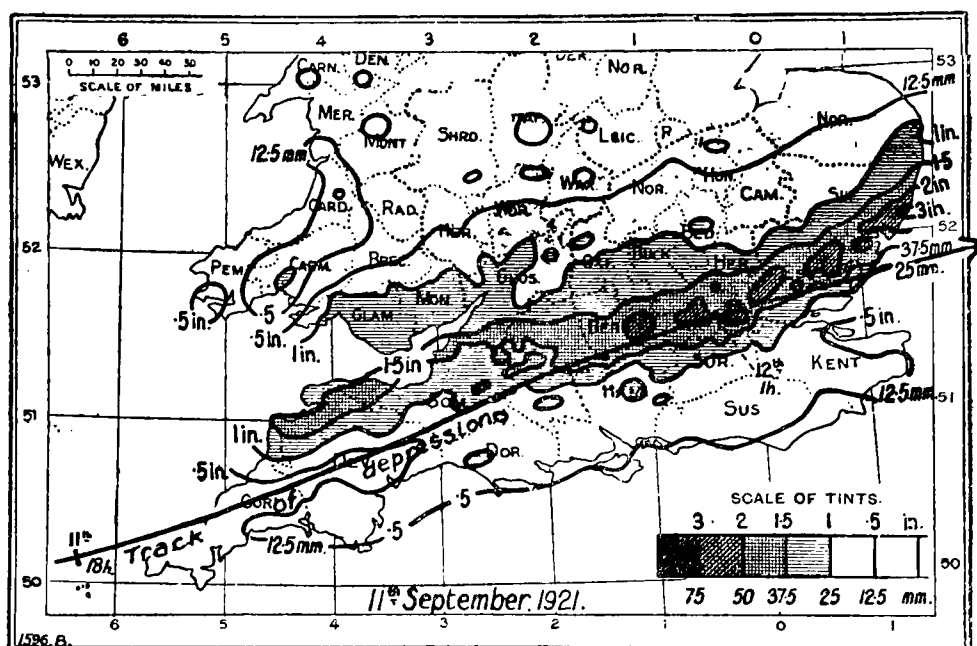
The general rainfall of the 12,210 square miles was 1·42 inches.

Owing to the exceptionally large number of rainfall stations in the district covered by this storm and owing to the very small total fall during the year, the number of records claiming insertion in the Chronicle

RAINFALL, SEPTEMBER 10th, 1921.



RAINFALL, SEPTEMBER 11th, 1921.



as representing more than 7·5 per cent. of the annual fall was the largest ever found for an individual day. Many of the totals qualifying for insertion were actually less than 1·00 in., and are therefore of no very real individual interest. We have, therefore, thought it advisable to

depart from the practice of printing all these falls, and the following list gives those reaching 2·50 in. or, alternately, 15 per cent. of the year's total, with the addition of the great majority exceeding 2·00 in. and a few others selected so as to represent all parts of the area affected.

September 11th.

I. (<i>London</i>).			III. (<i>Eng. S. Mid.</i>)— <i>con. in. or %</i>		
Streatham Hill Reservoir	1·24	10·7	Highgate (North Hill)...	2·10	14·6
Greenwich Observatory .	1·30	10·4	Harrow (Bessborough Rd.)	2·05	13·0
Hammersmith Cemetery .	1·50	11·4	Hendon (Sewage Works)	2·09	15·1
St. Pancras (Camden Sq.)	1·95	13·4	Harefield House.....	2·24	14·1
New River Filter Beds..	2·28	15·2	Northwood (Haslemere) .	2·13	14·3
II. (<i>Eng. S.E.</i>).			Bushey Heath (Highfield)	2·04	13·6
Wallington (Alcester Rd.)	1·08	8·3	Harringay (Wightman Rd. Depôt)	2·12	16·5
Surbiton Sewage Works.	1·29	11·3	Harringay (Wightman Road)	2·06	15·4
Wimbledon (Merton Hall Road)	1·28	11·3	Tottenham (Drayton Rd.)	2·10	15·3
Woking (Northwood) ...	1·10	9·5	Wood Green (Maryland Road)	2·30	16·2
Englefield Green.....	1·66	11·2	Wood Green (Town Hall)	2·35	18·2
Orpington (Lynwood)...	1·13	8·8	Palmers Green	2·18	16·4
Chislehurst (Hawkwood)·	1·37	11·2	Enfield (Carisbrooke)....	2·25	13·8
Dartford (West Hill Ho.)	1·19	8·7	Watford (Park Road)...	2·23	14·8
Hurstbourne Tarrant ...	1·49	7·9	Sarratt (Goldingtons)...	2·07	11·8
Vernham Dean (Rowe H.)	1·50	7·9	Langley Rise.....	2·09	13·5
Wellington College.....	1·30	8·1	Gorhambury	2·24	14·1
Winkfield (Ryemead) ...	1·79	12·6	Childwickbury Gardens..	2·75	16·3
Windsor (Osborne Road)	1·80	13·8	Hoddesden (Westfield Ho.)	1·71	13·2
Maidenhead (Hall Place)	1·93	14·2	Bennington House.....	1·16	7·8
Remenham Hill (Wedmore)	2·10	13·0	Weston Park.....	1·06	7·9
Hambleton Lock.....	2·01	13·6	Offley School House.....	1·10	8·0
Hampstead Marshall....	1·75	10·5	Baldock	·93	8·2
Newbury (Andover Road)	2·02	11·4	Ashwell	·89	7·8
Bucklebury Place.....	1·90	12·4	Stoke Poges (Stoke Court)	2·00	14·5
Reading (Forbury Gdns.)	2·00	12·7	Hedsor.....	2·12	13·4
Lambourn (Clarionville) .	1·52	9·8	High Wycombe	1·81	11·4
Reading (Englefield)	2·04	12·3	Hampden House	1·58	9·9
Farnborough Rectory...	1·67	9·5	Slough (Langley)	2·00	14·9
Upton	1·71	11·2	Chalfont St. Giles.....	2·24	13·2
Snillingford Hill.....	1·84	12·3	Amersham (The Planta- tion)	1·83	11·5
Faringdon (Bleak House)	1·15	8·1	Oxford (Magdalen College)	1·09	7·8
Abingdon (Fitzharris) ...	1·30	9·3	Caversham (Eastfield)...	2·24	15·0
III. (<i>Eng. S. Mid.</i>).			Kidmore End School....	2·62	14·1
Hounslow (S. Stephen's Vic)	1·48	11·8	Nettlebed (Joyce Grove).	2·21	13·7
Uxbridge (Frays Lodge).	2·08	14·3			

III. (<i>Eng. S. Mid.</i>)— <i>con. in. or %</i>			IV. (<i>Eng. E.</i>)— <i>con. in. or %</i>		
Watlington (Pyrton Manor)	1.74	11.7	Earls Colne (Chalkney Ho.)	2.02	14.7
Thame (Tythrop House)	1.25	8.6	Wormingford (The Grove)	2.25	16.7
Woodbury Hall Gardens	.97	8.7	Great Yeldham	1.10	7.9
St. Neots (Waresley Park)	.95	7.7	Hitcham Rectory	1.18	8.2
Luton Pumping Station	1.19	9.0	Ipswich (Tuddenham Rd.)	2.20	15.3
Milton Bryant	1.17	8.5	Ipswich Museum	1.98	15.1
Lidlington (White Lodge)	1.03	8.1	Felixstowe	1.80	16.0
Sandy (Beeston Grange)	1.02	8.6	Orford (The Gables)	3.44	20.9
Bedford (The Park)	1.03	8.9	Melton (St. Audrey's Hos.)	2.01	15.0
Cambridge (Sidney Street)	.91	7.8	Campsea Ashe (High Ho.)	1.82	14.0
Cottenham (Bernard Ho.)	.97	7.9	Leiston (Lower Abbey)	1.75	12.2
IV. (<i>Eng. E.</i>)			Halesworth Rectory	1.34	9.6
Chingford (Crescent Rd.)	2.02	14.4	Wangford (Reydon Grove)	1.52	10.9
Barrington Hall	2.22	16.6	Beccles (Ballygate)	1.34	8.8
Stanstead (Ravens)	1.41	8.8	Yarmouth (Burgh Hall)	1.05	7.8
Elsenham (Gaunts End)	1.43	9.7	Bury St. Edmunds	.91	7.6
Grays Sewage Works	.93	7.8	Beccles (Geldeston)	1.05	8.7
Ilford Sewage Works	1.23	11.7	V. (<i>Eng. S.W.</i>)		
Vauge Pumping Station	1.05	8.8	Bradford (Manvers House)	1.52	8.2
Harold Wood (Longmoor)	1.17	9.2	Calne (High Street)	1.57	8.9
Epping (The Hemnalls)	2.43	12.6	Wroughton (Basset Down House)	1.65	9.1
North Weald (Canes)	2.05	13.9	Marlborough College	1.55	8.5
Southminster (New Moor)	1.10	10.1	Wanborough Vicarage	1.75	10.0
Bradwell Hall	1.27	11.3	Highworth (Hannington)	1.30	7.9
Writtle (Melbourne)	2.15	15.5	Braunton	1.84	8.0
Chelmsford	2.48	17.6	Bath (Statuary Hospital)	1.76	9.0
Faulkbourne Hall	2.00	14.7	Glastonbury (Wyrral)	1.50	9.7
Kelvedon (Lawn House)	2.30	16.4	Weston-super-Mare	1.69	8.5
Kelvedon (White Barn)	1.99	15.4	Worle (Springfield Ho.)	1.59	7.7
Little Dunmow (Throws)	1.85	15.2	Williton (Aller Farm)	1.48	7.9
Pattiswick Hall	1.85	14.0	Dunster (The Schools)	1.68	8.3
Gt. Bardfield (South Lo.)	1.68	11.1	VI. (<i>Eng. W. Mid.</i>)		
Tiptree	2.49	18.6	Winterbourne (Kendle-shire)	2.31	11.8
Colchester (Berechurch)	2.35	18.3	Chipping Sodbury (Ridge)	1.84	9.1
Colchester (King's Ford)	2.47	18.3	Lechlade (St. John's Lock)	1.11	7.9
Lexden (Hill House)	2.52	19.6			
Lexden Rectory	2.66	19.1			
Gt. Bromley (Broughton)	2.39	18.1			

October 3rd.

The pressure conditions at this time became very complex and much rain fell, principally in the north Midlands. This fall was probably chiefly the result of the passage of a shallow secondary depression which lay off the south-west of the British Isles in the evening of the

2nd and travelled across the Irish Sea to near Newcastle-on-Tyne during the 3rd, growing deeper as it progressed. On the west coast of Wales and on the borders of Shropshire more than 2 in. fell at several stations.

III. (<i>Eng. S. Mid.</i>).			VII. (<i>Eng. N. Mid.</i>).— <i>con.</i>		
	<i>in.</i>	<i>or %</i>		<i>in</i>	<i>or %</i>
Peterborough (Ashfield) .	.94	8.5	Gilroes Cemetery	1.61	8.5
March	1.07	7.7	Thornton Reservoir	1.70	8.0
Marmont Priory Lock . . .	.94	7.9	Cropstone (Bradgate Res.)	1.69	7.6
IV. (<i>Eng. E.</i>).			Barkby Hall	1.72	8.4
Blakeney	1.26	7.7	Boston (Sleaford Road) . .	1.50	10.1
Wells (Holkham Hall) . . .	1.70	9.7	Boston (Grand Sluice) . . .	1.38	9.2
Hunstanton Lodge	1.50	11.0	Boston (Bargate End) . . .	1.40	9.6
Wellbreck Sluice	1.00	9.5	Kesteven County Asylum	1.23	7.9
VI. (<i>Eng. W. Mid.</i>).			Fulbeck Hall	1.76	10.1
Whitchurch (Fenns Bank)	1.75	9.2	Cranwell	1.72	10.1
Sodylt Hall	1.72	8.5	New Leake (Lade Bank) .	1.48	11.2
Newport (Edgmond)	1.62	8.5	Carrington Grange	1.46	9.2
Newport (Agricultural Col.)	1.70	9.4	Wellington	1.68	10.6
Newport (Chetwynd Park)	1.99	9.3	Navenby Rectory	1.56	9.2
Newport (Chetwynd Gdns.)	2.00	9.3	Carlton-le-Moorland	1.81	10.5
Knighton Reservoir	1.98	9.6	East Kirkby House	1.14	7.6
Oswestry (Mount Res.) . . .	1.86	8.4	Revesby Reservoir	1.27	8.2
Oswestry (Council School)	2.50	10.7	Annesley (Selston W.W.)	1.70	9.2
Ellesmere	2.27	10.5	Hucknall (Forge Mills) . .	1.38	8.1
Market Drayton (Old Springs)	1.90	9.8	Papplewick Water Works	1.85	9.4
Willoughbridge Lodge . . .	1.54	7.7	Southwell (The Residence)	1.71	9.3
Milford Waterworks	1.40	7.9	Southwell (Elmfield)	1.74	9.8
Shugborough	1.62	8.2	Sutton-in-Ashfield W.W.	1.80	9.0
Stafford (Corpn. Dépôt) . .	1.52	7.7	Mansfield (Rainworth WW)	1.95	10.2
Little Ingestre	1.72	9.1	Belper (Fernslope)	1.72	7.6
Eccleshall (Johnson Hall)	1.54	7.6	Codnor (Cross Hill)	1.74	8.0
Burton (Hoar Cross)	1.75	8.8	XI. (<i>Wales</i>)		
VII. (<i>Eng. N. Mid.</i>).			Ruabon (Whitehurst) . . .	1.79	9.1
Leicester (Town Hall Sq.)	1.71	9.9	Llansilin (Penygwely Res.)	2.10	7.7
Leicester (Westcotes Dr.)	1.68	10.1	Dolgelly (Dr. Williams' School)	2.67	5.3
Osbaston Hall	1.63	8.5	Dolgelly (Bryntirion) . . .	3.08	5.5
Leicester (Mental Hosp.)	1.91	10.0	Trawsfynydd Camp	2.51	3.8

October 4th.

XVIII. (*Scot. N.W.*), Loch Arkaig (Glen Dessary), 2.98 in. or 2.2 per cent.

October 9th—11th.

The passage of secondary depressions gave considerable falls during these three days, the principal centres lying in the west of Ireland on the 9th, and in the centre and east of England on the two following days. The amount reached 3.26 in. on the 9th at Mallarany in Co. Mayo, the fall being the heaviest for 40 years in some parts of this district. At Press Reservoir, in Derbyshire, 2.87 in. was recorded on the 10th, and 1.75 in. at Great Moulton, near Norwich, the latter fall being of an extremely local nature. For the most part the falls were not of an

unusual nature for the time of year. At Brighton during a thunder-storm on the evening of the 10th the occurrence of "ball-lightning" was reported in the press.

October 9th.

XXII. (<i>Connaught</i>).	<i>in.</i>	<i>or</i>	<i>%</i>	XXII. (<i>Connaught</i>)— <i>con.</i>	<i>in</i>	<i>or</i>	<i>%</i>
Mallarany	3·26		4·9	Delphi Lodge	2·80		3·0
Aasleagh House	2·67		3·2				

October 10th.

IV. (<i>Eng. E.</i>).	<i>in.</i>	<i>or</i>	<i>%</i>	VII. (<i>Eng. N. Mid.</i>)— <i>con.</i>	<i>in.</i>	<i>or</i>	<i>%</i>
Halstead (The Brewery) ..	1·24		8·8	Worksop (Hardwick)	1·70		9·3
Great Moulton Rectory ..	1·75		10·9	Press Reservoirs	2·87		10·9
VII. (<i>Eng. N. Mid.</i>).				Chesterfield Gas Works ..	1·80		—
Mansfield (West Bank) ..	1·69		7·9	Mosbrough C.E. School ..	1·50		7·6

October 11th.

IV. (<i>Eng. E.</i>).	<i>in.</i>	<i>or</i>	<i>%</i>	VII. (<i>Eng. N. Mid.</i>)— <i>con.</i>	<i>in.</i>	<i>or</i>	<i>%</i>
Great Leighs (Lyons Hall)	1·21		8·8	Ollerton (Thoresby Gdns.)	2·25		10·2
VII. (<i>Eng. N. Mid.</i>).				Elkesley Pumping Stat.	1·43		8·2
Kibworth Beauchamp ...	1·60		8·2	Worksop (Carlton Road)	1·44		8·7

October 15th—17th.

With high pressure over the continent of Europe and low over Iceland, orographical rains again set in over the west of Scotland and later along the west coast of Ireland.

October 15th.

XV. (*Scot. W. Mid.*), Inveraray Castle Gardens, 2·96 in. or 2·9 per cent.

October 17th.

XXII. (*Connaught*), Blacksod Point, 3·07 in. or 6·7 per cent.

October 20th.

Although the south of England was at this date under the influence of anticyclonic conditions, a small depression passed up the English Channel, bringing a considerable fall of rain in Sussex and Kent, where as much as 2·54 in. fell at Horsmonden, with distant thunder. A local storm of some violence, but unaccompanied by thunder or lightning, was also reported from Shanklin, Isle of Wight, during the early morning of the 20th. Considerable damage was done to roads, and low-lying streets were flooded.

II. (<i>Eng. S.E.</i>).	<i>in.</i>	<i>or</i>	<i>%</i>	II. (<i>Eng. S.E.</i>)— <i>con.</i>	<i>in.</i>	<i>or</i>	<i>%</i>
Charing Pumping Station	1·32		8·2	Goudhurst (Lidwells)	1·96		10·4
Canterbury (Oaten Hill Ho.)	·95		7·6	Horsmonden (Broad Ford)	2·54		13·8
Reculver	1·01		9·2	Ulcombe Place	1·85		12·0
Teynham (Norton Court)	1·25		9·2	Oakwood House	1·56		8·0
Scotney Castle	1·75		9·6	Chichester (West Broyle)	1·62		8·8
Goudhurst (Maypole) ...	1·84		9·2	Lower Cousley Wood	1·63		8·5

October 22nd.

Cyclonic rains again occurred in the north of England and south of Scotland.

X. (<i>Eng. N.</i>).	<i>in.</i> or %	X. (<i>Eng. N.</i>)— <i>con.</i>	<i>in.</i> or %
Alnwick Castle.....	2·30 8·9	Beal (Lowlynn)	2·04 9·2

November 9th.—13th.

Orographical rains again set in in the west.

November 9th.

XX. (*Munster*), Kenmare (Derreen), 3·03 in. or 4·5 per cent.

November 13th.

XXIII. (*Ulster*), Mourne Mts. (Fofanny Reservoir), 2·65 in. or 5·1 per cent.

November 19th.

A local deluge in Hampshire, probably associated with a minor secondary depression.

II. (*Eng. S.E.*), Vernham Dean (Rowe House), 1·50 in. or 7·8 per cent.

November 30th.

Local rains in parts of Devonshire occurred with a pressure gradient for strong south-easterly winds.

V. (<i>Eng. S.W.</i>).	<i>in.</i> or %	V. (<i>Eng. S.W.</i>)— <i>con.</i>	<i>in.</i> or %
Whimple (Ousley)	1·74 9·8	Ottery St. Mary.....	1·94 8·4

December.

During the greater part of December the pressure conditions were again favourable for westerly winds of varying intensity, and orographical rains were frequent, though seldom very heavy, in the western districts generally.

The only fall of outstanding importance occurred on the 26th, when there is some evidence of the passage of a line-squall on a front passing across the borders of England and Scotland. At Falstone, in the upper Tyne Valley, 3·61 in. fell, being especially heavy between 6 p.m. and midnight. In Yorkshire the Ayre and Wharfe rose with astonishing rapidity during the night, and large areas in the lower valleys were flooded. At Falstone a further fall of 2·39 in. occurred on the 30th.

December 5th.

XV. (<i>Scot. W. Mid.</i>).	<i>in.</i> or %	XVIII. (<i>Scot. N.W.</i>).	<i>in.</i> or %
Ardgour House	3·56 2·9	L. Quoich (Kinlochquoich)	4·20 2·8
Mull (Glencannel)	3·40 2·7	Loch Quoich (Glenquoich)	2·52 1·9

December 6th.

X. (*Eng. N.*), Dungeon Ghyll, 2·76 in. or 2·3 per cent.

December 20th.

X. (<i>Eng. N.</i>).	<i>in. or %</i>	X. (<i>Eng. N.</i>)— <i>con.</i>	<i>in. or %</i>
Rydal (The Stepping Stones)	2·74 3·4	Dungeon Ghyll.....	3·64 3·1

December 21st.

X. (<i>Eng. N.</i>).	<i>in. or %</i>	X. (<i>Eng. N.</i>)— <i>con.</i>	<i>in. or %</i>
Rydal (Stepping Stones) ..	2·69 3·3	Dungeon Ghyll.....	3·42 2·9
Rydal Hall	2·55 3·0	Grasmere (The Wray)....	3·46 3·6

December 26th.

X. (<i>Eng. N.</i>).	<i>in. or %</i>	X. (<i>Eng. N.</i>)— <i>con.</i>	<i>in. or %</i>
Falstone Rectory.....	3·61 8·1	Crosthwaite School	2·63 4·9
Hassness	3·62 3·6	Threlkeld (Blencathra) ...	2·59 4·1
Keswick (The Bank).....	2·90 5·1	Grasmere (The Wray)....	2·58 2·9
Keswick (Meteor. Station)	2·63 4·9		

December 27th.

XI. (<i>Wales</i>).	<i>in. or %</i>	XI. (<i>Wales</i>).— <i>con.</i>	<i>in. or %</i>
Rhondda (Pont Lluest Wen Reservoir, <i>Upper</i>)	3·03 3·8	Taff Fechan (Neuadd Reservoir No. 4).....	2·50 3·5
Cardiff W.W.(Beacons Res.)	2·58 3·7		

December 28th.

XV. (*Scot. W. Mid.*), Stronachlachlar (Invergyle), 2·50 in. or 2·7 per cent.

December 29th.

XV. (<i>Scot. W. Mid.</i>).	<i>in. or %</i>	XVIII. (<i>Scot. N.W.</i>).	<i>in. or %</i>
Corran Lighthouse.....	2·89 2·9	L. Quoich (Kinlochquoich)	3·03 2·0
		Loch Quoich (Glenquoich)	2·55 1·9

December 30th.

XVIII. (*Scot. N.W.*), Loch Arkaig (Glen Dessary), 4·38 in. or 3·3 per cent.

December 31st.

XV. (<i>Scot. W. Mid.</i>).	<i>in. or %</i>	XVIII. (<i>Scot. N.W.</i>)— <i>con.</i>	<i>in. or %</i>
Duchray Valley (Comer) ..	2·65 2·7	Loch Quoich (Glenquoich)	3·50 2·6
Blackwater Dam (South) .	2·70 2·4	Skye (Duisdale House)...	2·56 2·6
Kinlochleven Village.....	2·56 2·4	Loch Carron (Dunhulladale)	2·83 3·3
XVIII. (<i>Scot. N.W.</i>)		Glencarron Lodge	3·37 3·5
L. Quoich (Kinlochquoich)	4·28 2·9		

Part II.—Abstract of Heavy Daily Falls.

The following tables give a crude means of comparing the individual heavy rains of the year with those in previous years. Table I sets out the 20 largest daily falls in 1921, including however, only one at any single station. The only fall of great magnitude was that of 6·10 in. at

TABLE I.—*The largest Daily Rainfalls in 1921.*

Date.	Div.	Station.	Depth.	Per cent.	Total.
			in.		in.
Jan. 8	X	Dungeon Ghyll	6·10	5·2	118·24
Mar. 15	XI	Llanddeusant (Llynfanfach, B) ..	5·50	7·6	72·62
Mar. 15	XI	Llanddeusant (Llynfanfach, C)	4·95	7·5	65·65
Aug. 5	XI	Blaenau Festiniog (Llechwedd Q)....	4·67	4·5	104·98
Mar. 15	XI	Llanddeusant (Llynfanfach, A)	4·45	7·6	58·59
Dec. 30	XVIII	Loch Arkaig (Glen Dessary)	4·38	3·3	132·91
Dec. 31	XVIII	Loch Quoich (Kinlochquoich)	4·28	2·9	148·36
Aug. 5	XI	Blaenau Festiniog (Oakley Qrs.)	4·25	4·5	95·01
Jan. 21	XVIII	Invergarry Gardens	4·20	5·4	77·94
Jan. 21	XVIII	Loch Quoich (Glenquoich)	4·15	3·1	133·13
Jan. 21	XVIII	Clunes	4·00	4·6	86·39
Mar. 15	X	Hassness	3·92	3·9	101·27
July 28	XX	Portlaw (Mayfield)	3·76	10·6	35·47
Jan. 9	X	Grasmere (The Wray)	3·65	3·8	96·28
Dec. 26	X	Falstone Rectory.....	3·61	8·1	44·59
Dec. 5	XV	Ardgour House	3·56	2·9	122·10
July 28	XX	Knockaderry Reservoir, No. 2	3·55	13·0	27·23
Mar. 28	XI	Snowdon (Cwm Dyli)	3·50	2·8	125·44
Sept. 11	IV	Orford (The Gables)	3·44	20·9	16·48
Mar. 23	XVIII	Loch Arkaig (Achnacarry).....	3·40	3·3	104·03

TABLE II.—*The largest Daily Percentages in 1921.*

Date.	Div.	Station.	Per cent.	Depth.	Total.
				in.	in.
Aug. 13	IV	Pulham Aerodrome.....	21·3	3·15	14·76
Sept. 11	IV	Orford (The Gables)	20·9	3·44	16·48
Sept. 11	IV	Lexden (Hill House)	19·6	2·52	12·82
Sept. 11	IV	Lexden Rectory	19·1	2·66	13·94
Sept. 11	IV	Tiptree	18·6	2·49	13·37
Sept. 11	IV	Colchester (King's Ford)	18·3	2·47	13·53
Sept. 11	IV	Colchester (Berechurch)	18·3	2·35	12·82
Sept. 11	III	Wood Green (Town Hall)	18·2	2·35	12·94
Sept. 11	IV	Great Bromley (Broughton)	18·1	2·39	13·21
Aug. 12	II	Martin Mill Pumping Station	17·0	2·30	13·51
Sept. 11	IV	Wormingford (The Grove)	16·7	2·25	13·43
Sept. 11	IV	Barrington Hall	16·6	2·22	13·36
Sept. 11	III	Harringay (Wightman Road Depôt)	16·5	2·12	12·90
Sept. 11	IV	Kelvedon (Lawn House)	16·4	2·30	13·98
Sept. 11	III	Palmers Green	16·4	2·18	13·29
Sept. 11	III	Childwickbury Gardens	16·3	2·75	16·90
Sept. 11	III	Wood Green (Maryland Road)	16·2	2·30	14·22
Sept. 11	IV	Felixstowe	16·0	1·80	11·26
Sept. 11	IV	Writtle (Melbourne)	15·5	2·15	13·89
Sept. 11	III	Harringay (Wightman Road)	15·4	2·06	13·39

TABLE III.—*Comparison of Maximum Fall and Maximum Percentage with those in previous Years.*

Year.	ABSOLUTE HIGHEST RAINFALL.				ABSOLUTE HIGHEST PERCENTAGE.				Year.
	Depth.	Per cent.	Station.	Div.	Per cent.	Depth.	Station.	Div.	
	in.					in.			
1865 ..	3·67	6·4	Seathwaite	10	9·9	2·62	Fleckney	7	1865
1866 ..	3·40	4·4	"	"	10·0	2·48	Burton	6	1866
1867 ..	4·71	17·7	Hartlip	2	17·7	4·78	Hartlip	2	1867
1868 ..	3·32	6·1	Camusinas	15	8·6	2·55	Tongue	19	1868
1869 ..	6·07	4·5	Seathwaite	10	10·0	3·40	Tillydesk	17	1869
1870 ..	6·00	17·1	Tongue	19	17·1	6·00	Tongue	19	1870
1871 ..	4·24	9·6	Melbury	5	11·5	3·62	Warter	9	1871
1872 ..	5·82	3·2	Seathwaite	10	10·0	3·70	Hillington Hall	4	1872
1873 ..	4·20	2·9	"	"	11·8	2·77	Oscott	6	1873
1874 ..	5·32	4·4	Bryn Gwynant	11	11·9	2·50	Welwyn	3	1874
1875 ..	5·33	9·7	Newport W.W.	"	13·2	3·95	Letheringsett	4	1875
1876 ..	4·50	5·5	Foffany	23	8·5	3·70	Cragside	10	1876
1877 ..	4·98	5·3	Skye, Portree	18	9·3	3·09	Wellington	6	1877
1878 ..	4·24	8·6	Springfield	11	11·8	3·90	Haverstock Hill	1	1878
1879 ..	4·05	4·1	Little Langdale	10	12·3	3·80	Cambridge, Merton V.	3	1879
1880 ..	4·75	3·9	Seathwaite	"	11·7	3·34	Marmont Priory Lock	"	1880
1881 ..	5·42	4·7	Sligachan	18	10·6	3·20	Aboyne Castle	17	1881
1882 ..	4·51	3·0	Seathwaite	10	9·1	2·80	Bothalhaugh	10	1882
1883 ..	5·27	9·0	Glen-na-Smoel	21	12·3	4·31	Skegness	7	1883
1884 ..	6·78	5·0	Seathwaite	10	13·8	2·66	Diss, Thelveton	4	1884
1885 ..	4·62	3·2	"	"	9·6	2·62	Beccles, Ellough	4	1885
1886 ..	4·20	9·9	Little Bredy	5	11·5	4·10	Leeds, Methley Park	9	1886
1887 ..	4·93	13·0	Galway, Queen's Coll.	22	13·0	4·93	Galway, Queen's Coll.	22	1887
1888 ..	5·20	5·4	Wythburn Vicarage ..	10	11·8	3·24	Rothamsted	3	1888
1889 ..	4·45	16·5	North Ockendon	4	16·5	4·45	North Ockendon	4	1889
1890 ..	7·29	3·7	Ben Nevis Obsy.	18	17·2	3·68	Slough, Langley	3	1890
1891 ..	6·14	4·2	Seathwaite	10	14·4	4·00	Montrose, Sunnyside	16	1891
1892 ..	5·80	4·5	"	"	15·0	4·27	Flax Bourton	5	1892
1893 ..	4·96	3·5	"	"	16·2	4·48	Cranmer Hall	4	1893
1894 ..	7·74	5·1	Ben Nevis Obsy.	18	11·1	3·56	Sidcup	2	1894
1895 ..	4·83	16·1	Mellington Hall	11	16·1	4·83	Mellington Hall	11	1895
1896 ..	4·59	3·7	Seathwaite	10	11·1	2·78	Barkby	7	1896
1897 ..	8·03	5·6	"	"	14·1	2·40	Chatteris, Horseway L.	3	1897
1898 ..	6·70	18·1	Angerton Hall	"	18·1	6·70	Angerton Hall	10	1898
1899 ..	5·21	5·6	Grange	"	14·6	3·10	Wallingford	2	1899
1900 ..	5·40	11·9	Ilkley, Cherry Bank ..	9	13·1	4·50	Gilstead Filters	9	1900
1901 ..	5·66	5·7	Dungeon Ghyll	10	17·9	4·24	Maidenhead, The Firs ..	2	1901
1902 ..	5·92	3·8	Ben Nevis Obsy.	18	15·5	3·51	Esher Sewage Works	"	1902
1903 ..	4·78	2·2	"	"	12·8	4·41	Dartford, West Hill H.	"	1903
1904 ..	5·62	6·0	Skelwith Bridge	10	15·8	3·48	Leamington, Binswd A.	6	1904
1905 ..	5·71	14·0	Glen-na-Smoel	21	14·9	3·98	Cofton Vicarage	5	1905
1906 ..	6·15	4·7	Seathwaite	10	11·9	2·50	C'mbridge, Herschell H.	3	1906
1907 ..	4·86	9·4	Kingsbridge	5	12·5	3·40	Lincoln, St. Botolph's	7	1907
1908 ..	4·80	9·9	Treharris	11	16·0	3·45	Great Glenham	6	1908
1909 ..	6·46	5·7	Kinlochquoich	18	11·1	3·30	Tidworth House	2	1909
1910 ..	4·51	3·4	Seathwaite	10	13·0	3·93	Wheatley, Waterstock	3	1910
1911 ..	7·00	4·7	"	"	14·2	3·25	Haxby, Moorlands	9	1911
1912 ..	7·31	21·3	Brundall	4	22·2	6·67	Norwich, Carrow Ho.	4	1912
1913 ..	6·06?	26·0?	Doncaster W.W.	9	26·0?	6·06?	Doncaster Pump'g Stn.	9	1913
1914 ..	6·35	4·1	Pen-y-Gwryd	11	14·8	3·35	Upminster	4	1914
1915 ..	7·06	19·7	Dalcross	18	19·7	7·06	Dalcross	18	1915
1916 ..	8·20	5·7	Kinlochquoich	18	13·1	3·91	Portland Bill	5	1916
1917 ..	9·56	..	Bruton	5	21·8	8·39	Aisholt	5	1917
1918 ..	4·95	9·2	Douglas	11	12·3	3·36	Woodsetts Grange	9	1918
1919 ..	4·50	5·9	Corran	15	11·1	3·57	Ayr Cemetery	15	1919
1920 ..	6·81	5·4	Dungeon Ghyll	10	15·6	4·69	Elkington Hall	7	1920
1921 ..	6·10	5·2	"	10	21·3	3·15	Pulham	4	1921

The largest entry in each column is shown in heavy type and the smallest in italic type.

Dungeon Ghyll, Westmorland, on January 8th. As is usually the case, practically all the examples in the table are the heavy orographical rains of the West Highlands, the Lake District or the mountains of Wales; the only exceptions this year being two records in Co. Waterford during the cyclonic rain of July 28th, one rather isolated heavy fall at Orford, Suffolk, during the passage of the depression of September 11th, and that at Falstone, Northumberland, on the occasion of the line-squall of December 26th.

Table II, giving the 20 highest percentages of the annual total formed by individual daily rains, is this year of no great interest. With two exceptions the entries refer to the rainfall of September 11th in the south-east of England, and their inclusion is due to the fact that the total rainfall of the year was so small, rather than that the daily falls were large. Two entries, that at Pulham on August 13th and that at Orford on September 11th, already mentioned, exceeded the unusual limit of 20 per cent. of the annual fall.

Table III compares the largest amounts and largest percentages recorded in each year since 1865. It is interesting to note that only in three previous years have daily rainfalls exceeding 20 per cent., or one-fifth of the annual fall, occurred.

Table IV shows the numbers of falls exceeding certain limits observed during the year. The number of records of 7·5 per cent. of the annual total was extremely large, this being due solely to the accident that the rainfall of September 11th occurred in a district which is better supplied with stations than any other and in which the total fall for the year was unprecedentedly low. In Scotland and Ireland, which escaped this fall, the number of recorded instances of 7·5 per cent. was very small.

TABLE IV.—*Comparison of Heavy Daily Rainfalls.*

		No. of Records.	Falls of 7·5 per cent. or more.		Falls of 2·00 in. or more.		Falls of 3·00 in. or more.		Falls of 4·00 in. or more.
			No.	Per cent. of total.	No.	Per cent. of total.	No.	Per cent. of total.	No.
<i>England & Wales.</i>	1915	3,745	112	3·0	748	20·0	41	1·1	1
	1916	3,626	62	1·7	646	17·8	88	2·4	10
	1917	3,426	311	9·1	621	18·1	155	4·5	59
	1918	3,353	54	1·6	469	14·0	60	1·8	7
	1919	3,222	25	0·8	234	7·3	26	0·8	5
	1920	3,381	39	1·2	417	12·3	34	1·1	13
	1921	3,411	747	21·9	341	10·0	28	0·8	7
<i>Scotland.</i>	1915	550	26	4·7	212	38·5	33	6·0	1
	1916	533	17	3·2	353	66·3	60	11·2	12
	1917	558	5	0·9	209	37·5	36	6·5	9
	1918	541	4	0·7	136	25·1	10	1·8	2
	1919	538	21	3·9	142	26·4	19	3·5	3
	1920	538	69	12·8	391	72·6	100	18·6	19
	1921	557	1	0·2	156	28·0	27	4·8	6

TABLE N.—*continued.*

<i>Ireland.</i>	1915	256	0	0	71	27.7	8	3.1	0
	1916	243	3	1.2	118	48.6	21	8.7	7
	1917	239	15	6.3	62	25.9	4	1.7	0
	1918	241	0	0	25	10.4	1	0.4	0
	1919	261	17	6.5	46	17.6	5	1.9	0
	1920	265	0	0	45	17.0	4	1.5	1
	1921	260	13	5.0	46	17.7	7	2.7	0
<i>British Isles.</i>	1915	4,551	138	3.0	1,031	22.6	82	1.8	2
	1916	4,402	82	1.9	1,117	25.4	169	3.8	29
	1917	4,223	331	7.8	892	21.2	195	4.6	68
	1918	4,135	58	1.4	630	15.2	71	1.7	9
	1919	4,021	63	1.6	422	10.5	50	1.2	8
	1920	4,184	108	2.7	853	20.4	138	3.3	33
	1921	4,228	761	18.0	543	12.8	62	1.5	13

MONTHLY RAINFALL IN 1921.

The rainfall of the months of 1921, both when considered individually and in groups, presents some features of unusual interest, and in order to give as complete a record as possible of the facts we have endeavoured further to improve the statistical basis of the maps by increasing the number of data plotted. In the case of the maps of actual rainfall the number of values used this year has been approximately 3,500, or 3 per 100 square miles. For the percentage maps the number of records available, and the number required, is much smaller. In this case about 180 have been plotted, of which 152 nearly equably distributed are given in Table III and utilized in computing the general percentage values. The greater degree of detail and the increased facilities for detecting and rejecting erroneous readings which result from the use of more data should add considerably to the documentary value of the maps. In the case of the percentage maps a further

TABLE I(a).

Variations of General Monthly Rainfall, the Average being taken as 100, ENGLAND AND WALES, 1903-1921.

YEAR.	JAN.	FEB.	MAR.	APL.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1903*	118	81	183	104	148	128	126	143	116	203	72	77
1904*	126	172	88	82	131	59	94	99	68	40	65	88
1905*	45	54	178	131	42	138	39	120	65	61	118	33
1906*	179	122	91	51	137	96	39	69	39	144	123	94
1907*	52	77	70	145	151	138	77	85	25	150	88	128
1908*	66	90	151	142	103	55	102	118	83	48	52	91
1909*	53	40	180	112	77	135	123	94	91	139	36	164
1910†	122	167	48	122	116	110	106	127	26	87	138	161
1911†	60	93	97	86	65	119	18	69	90	85	131	197
1912†	154	101	192	14	89	194	128	220	69	96	88	126
1913†	175	54	173	157	108	62	45	30	76	102	106	57
1914†	65	128	187	58	77	87	124	72	64	62	129	219
1915†	151	200	59	67	117	56	152	83	60	68	89	212
1916†	73	203	169	83	117	102	66	109	74	132	124	108
1917†	86	51	109	100	98	105	87	204	76	126	66	50
1918†	126	96	59	105	98	51	152	70	255	66	78	136
1919†	166	119	198	113	44	57	79	93	77	69	83	164
1920‡	145	70	129	223	125	101	189	58	107	68	48	99
1921‡	144	15	72	63	81	18	42	115	60	53	78	80

* From 1903 to 1909 the Average used was for 1870-1899.

† From 1910 to 1919 the Average used was for 1875-1909.

‡ From 1920 to 1921 the Average used was for 1881-1915.

attempt has been made to increase their usefulness by the interpolation of additional lines showing the distribution more minutely than has been customary. In the maps of actual rainfall the addition of extra lines was found to make the maps difficult to decipher and was therefore abandoned.

The remarkable character of the rainfall of 1921 lay rather in the persistence than in the intensity of the dry weather. Of the individual months only June stands out as probably unprecedentedly dry over the country as a whole. February, the second driest month of the year in relation to the average, was certainly less remarkable than February, 1891, and probably not so dry as February, 1895. April was slightly wetter than in 1912, and considerably wetter than the April of 1893, in which year March was equally dry, so that the two together were far drier than the same two months of 1921. July, 1921, was very dry only locally, and over the country as a whole was far behind July, 1913. July was also appreciably drier in 1911, 1905 and several other recent years. The rainfall of October, again, was certainly smaller over the country as a whole in 1879, 1904, 1908, 1914 and 1919.

It is when the sequence of dry months during 1921 is considered as a whole that its significance becomes apparent, and it is from this point

TABLE I(b).

Variations of General Monthly Rainfall, the Average being taken as 100. SCOTLAND, 1903-1921.

YEAR.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1903*	163	181	191	94	92	79	133	152	90	179	87	74
1904*	97	123	80	196	118	83	67	122	88	55	65	87
1905*	69	106	160	129	80	49	71	108	78	103	133	63
1906*	121	113	101	88	204	48	86	117	53	139	134	92
1907*	78	106	110	121	154	183	75	122	35	126	76	104
1908*	105	114	170	92	98	92	89	91	150	46	82	88
1909*	106	67	123	163	120	71	120	72	61	145	64	105
1910†	118	147	74	172	90	67	115	151	37	65	111	101
1911†	70	146	65	136	100	108	83	68	64	77	141	150
1912†	104	104	128	83	82	158	77	120	73	108	104	156
1913†	102	80	160	143	140	120	26	41	78	71	117	90
1914†	99	149	135	106	106	58	89	84	59	51	136	154
1915†	106	171	84	129	47	58	119	71	77	65	76	148
1916†	140	150	80	137	157	118	123	84	57	163	128	107
1917†	87	36	71	101	99	102	55	128	96	159	147	62
1918†	105	152	48	47	104	68	145	102	159	124	95	101
1919†	105	51	98	144	41	129	36	88	108	59	121	140
1920‡	133	135	127	102	161	66	103	90	95	63	97	85
1921‡	166	40	147	60	105	49	99	111	79	99	60	130

* From 1903 to 1909 the Average used was for 1870-1899.

† From 1910 to 1919 the Average used was for 1875-1909.

‡ From 1920 to 1921 the Average used was for 1881-1915.

of view that the following brief summary based on the general values from Table III should be read.

In **England and Wales** as a whole only two months, January and August, reached their average rainfall, with excesses of respectively 44 and 15 per cent. Of the remaining ten months, seven had deficiencies exceeding 25 per cent. and three, February, June and July, exceeding 50 per cent. By far the driest months of the year were February and June, when the total fall was short of the average amount by 85 and 82 per cent. respectively.

These were by far the driest months of the same name recorded since comparable records became available in 1903, and the only other month of any name in the period with a general deficiency exceeding 80 per cent. was July, 1911.

In **Scotland** five months were wet and seven dry, March, May and December having excesses as well as January and August, which were wet in England and Wales. But for February the winter months were decidedly rainy, January with an excess of 66 per cent. being the wettest January since comparable data became available in 1903. Of the dry months, February and June, with deficiencies of respectively

TABLE I(c).

Variations of General Monthly Rainfall, the Average being taken as 100. IRELAND, 1903-1921.

YEAR.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1903*	154	131	232	76	109	81	139	143	125	150	71	99
1904*	122	166	105	102	110	66	118	117	100	61	77	77
1905*	78	72	189	111	60	76	54	144	60	48	106	72
1906*	144	112	93	86	151	65	80	87	39	133	70	86
1907*	46	86	114	117	153	152	85	92	45	133	95	111
1908*	95	90	154	105	114	78	87	94	167	53	75	117
1909*	90	64	127	185	88	78	94	42	79	141	53	114
1910†	111	185	90	105	97	156	109	150	34	64	106	108
1911†	51	114	70	103	88	87	102	61	72	108	130	176
1912†	117	126	162	59	64	185	129	128	29	87	85	133
1913†	170	66	143	153	155	109	37	36	130	113	117	85
1914†	65	193	168	71	76	47	105	113	71	56	129	195
1915†	117	178	39	96	60	76	154	81	58	109	92	160
1916†	86	157	76	151	184	96	68	83	57	205	145	90
1917†	64	69	106	87	125	86	80	183	71	149	110	71
1918†	105	159	66	56	91	62	123	83	202	124	108	134
1919†	126	66	112	73	111	105	39	79	98	44	79	167
1920‡	153	93	125	146	151	89	136	61	97	133	107	91
1921‡	122	49	125	45	87	18	124	107	54	99	104	87

* From 1903 to 1909 the Average used was for 1870-1899.

† From 1910 to 1919 the Average used was for 1875-1909.

‡ From 1920 to 1921 the Average used was for 1881-1915.

60 and 51 per cent., were the most notable, but both April and November had 40 per cent. less than the average, the latter being the driest in the nineteen years included in the Table.

Ireland, like Scotland, had five wet months, but the excesses were very moderate, and the regime was more like that of England and Wales. March, the wettest month relative to the average, had 25 per cent. excess, and both January and July had rather more than 20 per cent., whilst August and November showed only a trifling surplus. June, with a deficiency of 82 per cent., was by far the driest month; this month and also February and April, each of which had less than half its average, were the driest of the same name in the past nineteen years.

For the **British Isles** as a whole, January, March and August were the only months in which the general rainfall reached the average, and of these March and August had only quite small excesses. It should be noted that in 1919 only four months reached their average rainfall over the country at large, and that even in 1921 there was no unbroken run of dry months so long as the period May to November 1919, during which each month showed a deficit. The driest months in 1921 were February and June with general deficiencies of respectively 70 and 73 per cent., both being by far the driest in the 19 years included in the table.

TABLE I(d).

Variations of General Monthly Rainfall, the Average being taken as 100. BRITISH ISLES, 1903—1921.

YEAR.	JAN.	FEB.	MAR.	APL.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1903*	138	119	196	95	124	105	131	145	111	185	76	81
1904*	119	158	89	115	123	67	92	109	81	48	67	85
1905*	59	71	175	126	56	101	50	122	67	69	119	49
1906*	156	117	94	68	157	77	60	86	43	140	114	92
1907*	57	86	89	133	152	153	78	96	32	140	86	118
1908*	82	96	156	122	104	70	96	106	118	48	64	96
1909*	74	52	154	141	90	106	117	77	81	141	47	138
1910†	118	166	64	131	105	109	109	138	31	77	125	134
1911†	61	112	82	103	79	109	54	67	79	88	133	180
1912†	132	107	168	42	82	182	114	173	61	98	91	135
1913†	154	63	163	152	127	88	38	34	88	96	112	72
1914†	74	148	169	74	85	70	110	84	64	58	131	196
1915†	131	187	61	90	86	61	149	79	63	77	87	183
1916†	94	178	124	113	144	105	82	96	66	157	129	104
1917†	82	51	98	97	105	100	76	179	80	140	97	58
1918†	115	126	58	79	98	58	143	81	218	94	89	127
1919†	141	89	153	112	59	87	58	88	90	61	91	159
1920‡	144	94	127	170	142	89	152	68	101	82	77	93
1921‡	145	30	107	58	89	27	79	112	64	77	79	96

* From 1903 to 1909 the Average used was for 1870-1899.

† From 1910 to 1919 the Average used was for 1875-1909.

‡ From 1920 to 1921 the Average used was for 1881-1915.

The above comments refer, of course, only to the countries generally. The study of the individual maps focusses attention on certain areas where the rainfall was so persistently defective as to carry it far beyond the range of previous experience. It is especially worth while to draw attention to the conditions in the east of Kent and the east of Aberdeenshire, in each of which districts two stations, the records of which are quoted, namely, Tenterden and Margate in one case, and Aberdeen and New Deer in the other, each had rainfall below the average in every month during the year. The subject is again touched upon in an article in Part IV of this volume.

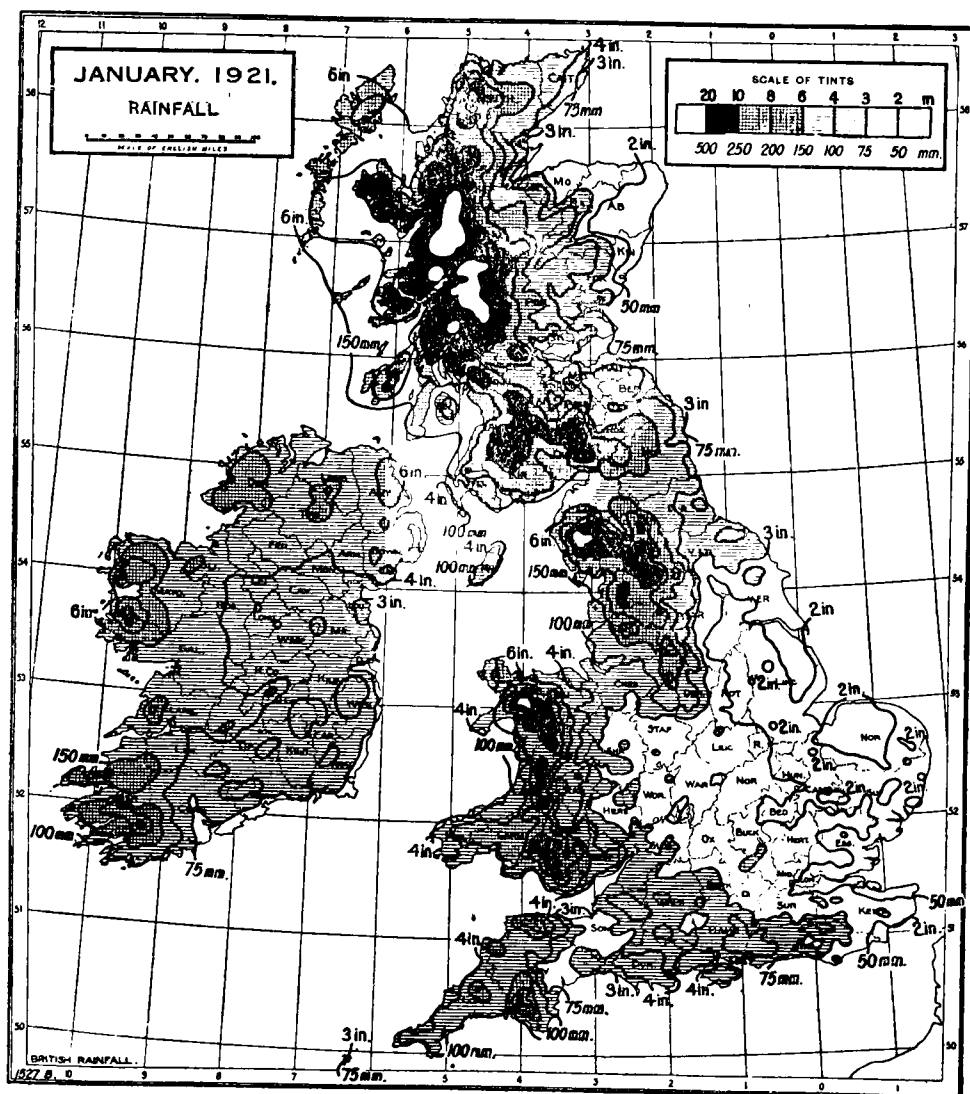
January.—The distribution of atmospheric pressure during the month was normal in type but the gradient was much steeper than usual, the mean pressure in the south being close to the average and that in the north well below it. The month was therefore marked by a preponderance of south-westerly conditions with frequent depressions especially over the northern part of the United Kingdom.

The total rainfall was as a consequence excessive in the north-west, more than 10 in. falling extremely widely in the west Highlands and more than 20 in. over a considerable central area. Falls of more than 10 in. also occurred at numerous stations in the northern Pennines and the central mountains of Wales, but only very locally in Ireland and Devonshire. Practically the whole of the west of Great Britain except Cornwall had more than 6 in. and this was also the case in the western uplands of Ireland, but apart from Co. Antrim so large a fall nowhere extended to eastern districts. In Ireland the minimum fall, slightly less than 3 in., occurred along a narrow coast strip from Dundalk Bay to Kinsale Head. In Scotland less than 2 in. occurred on the coast of Aberdeenshire and in England over the east coast south of the Humber. Whilst the greater part of the Midlands had less than 3 in., falls of more than 4 in. occurred at intervals along the south coast.

Relatively to the average the rainfall was most excessive in the north of England and south of Scotland, patches between Argyllshire and Yorkshire having more than twice the average, whilst the whole of the northern half of the British Isles, save the north-eastern counties of Scotland, had an excess of more than 50 per cent. The south coast of Ireland and parts of the south and east coasts of Great Britain were the only areas with less than the average fall.

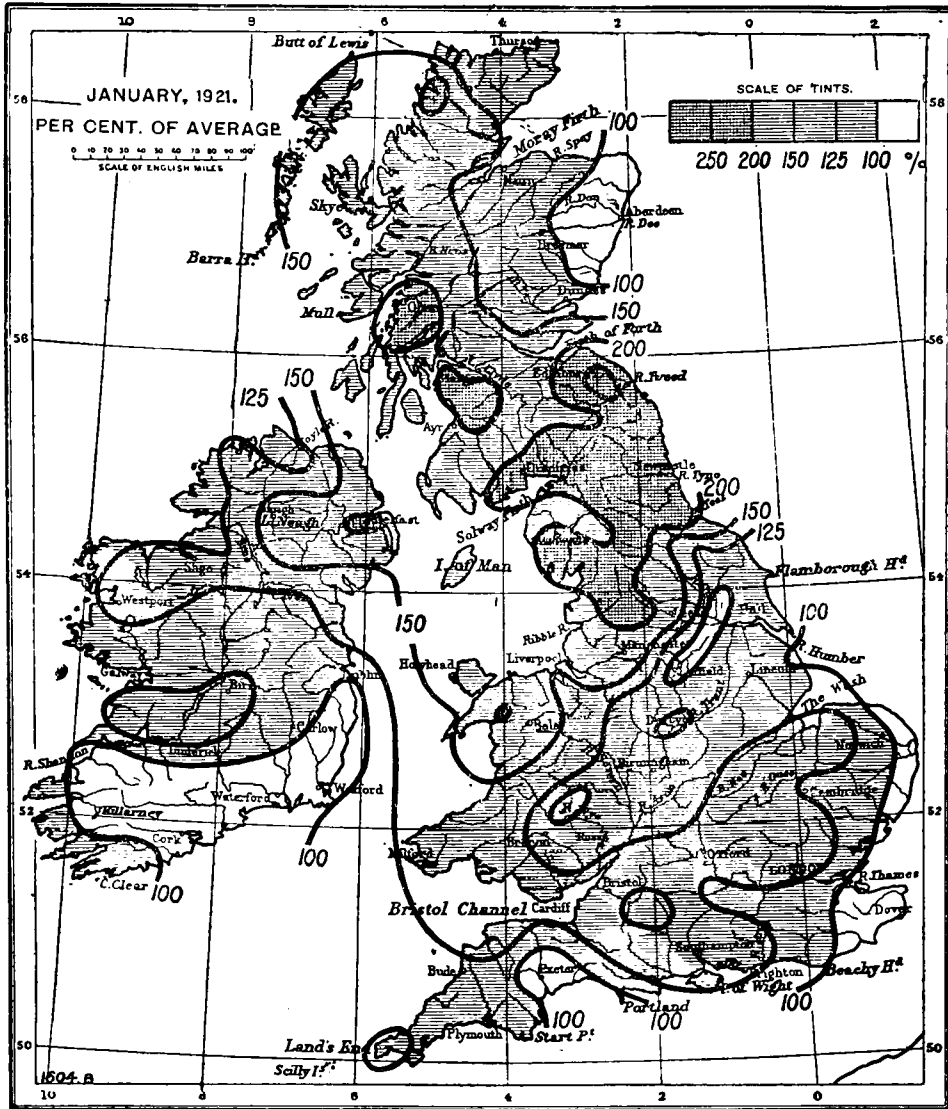
The general rainfall was above the average in all the great divisions of the country, the excess being 66 per cent. in Scotland, 44 per cent. in England and Wales and 22 per cent. in Ireland. For the British Isles as a whole it was 45 per cent.

February.—This month which may be regarded as marking the commencement of the great dry period of 1921 was notable for excessive atmospheric pressure in all parts of the country, the type being weakly



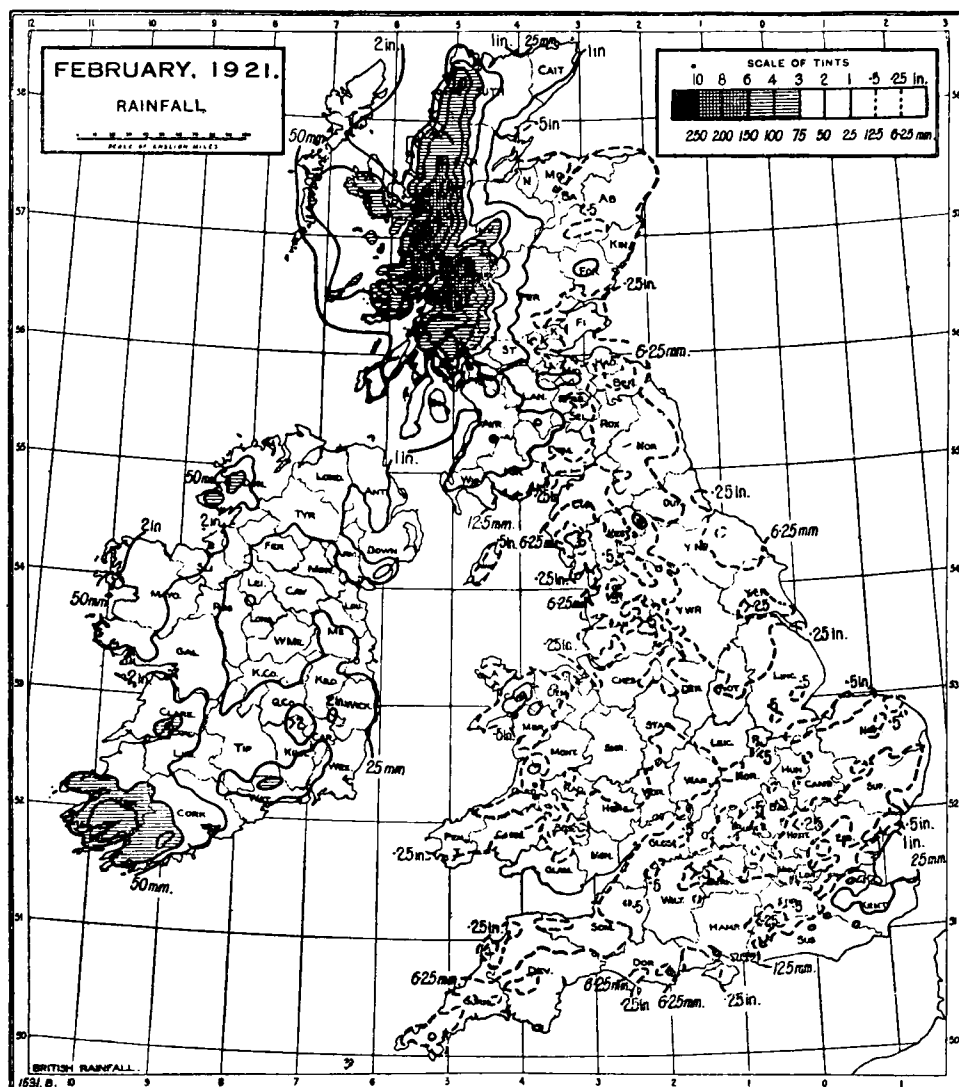
south-westerly in the north and anti-cyclonic in the south. Cyclonic disturbances were almost entirely absent and no primary depression actually crossed the British Isles.

The rainfall distribution was fairly normal in the west of Scotland but the amounts recorded were only about half the average. More than 3 in. fell over a continuous belt stretching from the Clyde estuary to near Cape Wrath with more than 6 in. in the central area and more than 10 in. at the head of Glenquoich. The western districts of Ireland were less wet having generally rather more than 2 in., and in Co. Kerry as much as 4 in. East of an irregular line stretching from Co. Wicklow to Wick, in Caithness-shire, only very small and scattered areas had as much as 1 in. during the month. By far the greater part of this area



had less than $\cdot 50$ in. and very large areas in all parts of England and Wales had less than $\cdot 25$ in. A curious exception occurred in the lower Thames estuary, at other times the driest part of the country, where more than 1 in. was recorded owing to heavy falls on the 25th.

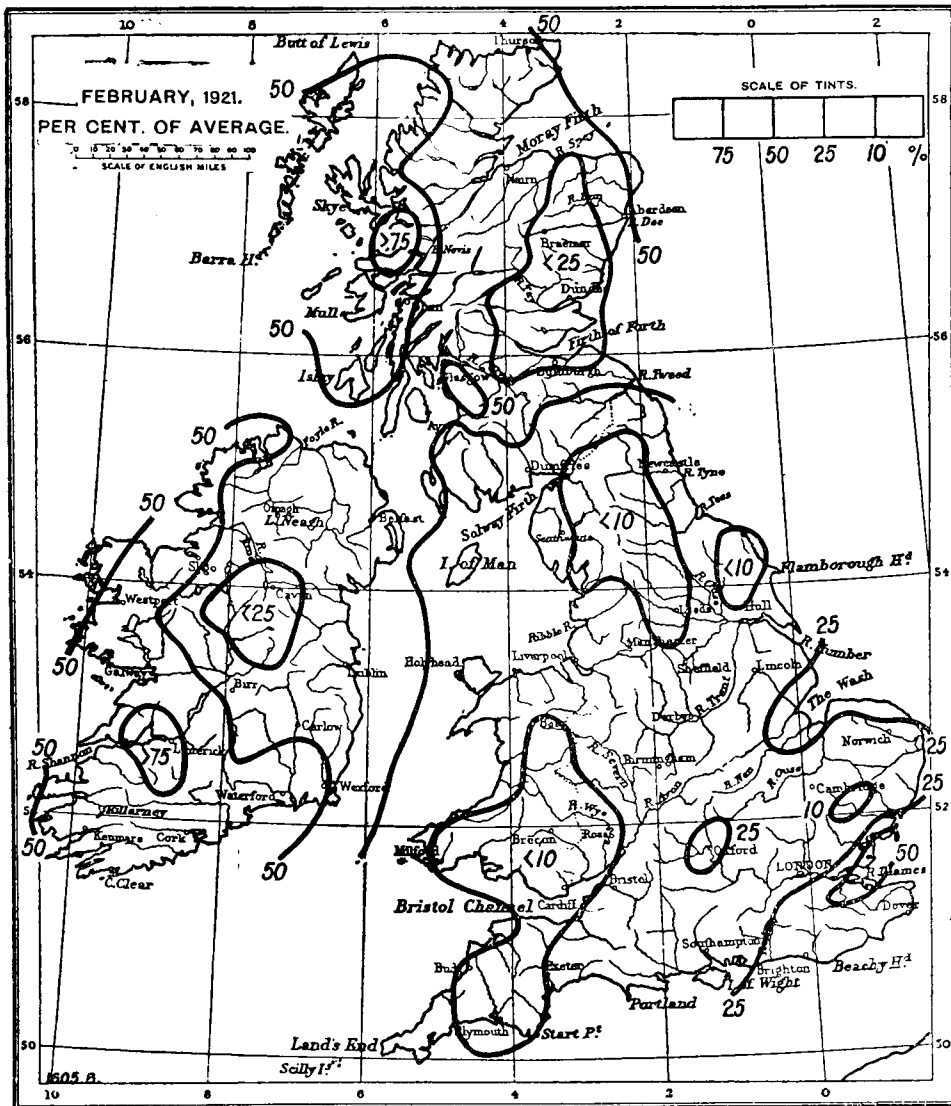
The rainfall does not appear to have reached the average at any station: it exceeded 50 per cent. of the average only over part of the west of Scotland and Ireland, in the north-east of Scotland and possible in the small area in Kent and Essex already mentioned. The whole of Wales, most of England and large areas in the east midlands of Scotland and Ireland had less than a quarter of their average, whilst extensive tracts in the north and south-west of England and Wales had less than 10 per cent.



Wales was relatively the driest of the countries, with a general deficiency of 88 per cent., whilst England had a deficiency of 84 per cent., Scotland of 60 per cent. and Ireland of 51 per cent. The general deficiency for the whole British Isles was 70 per cent.

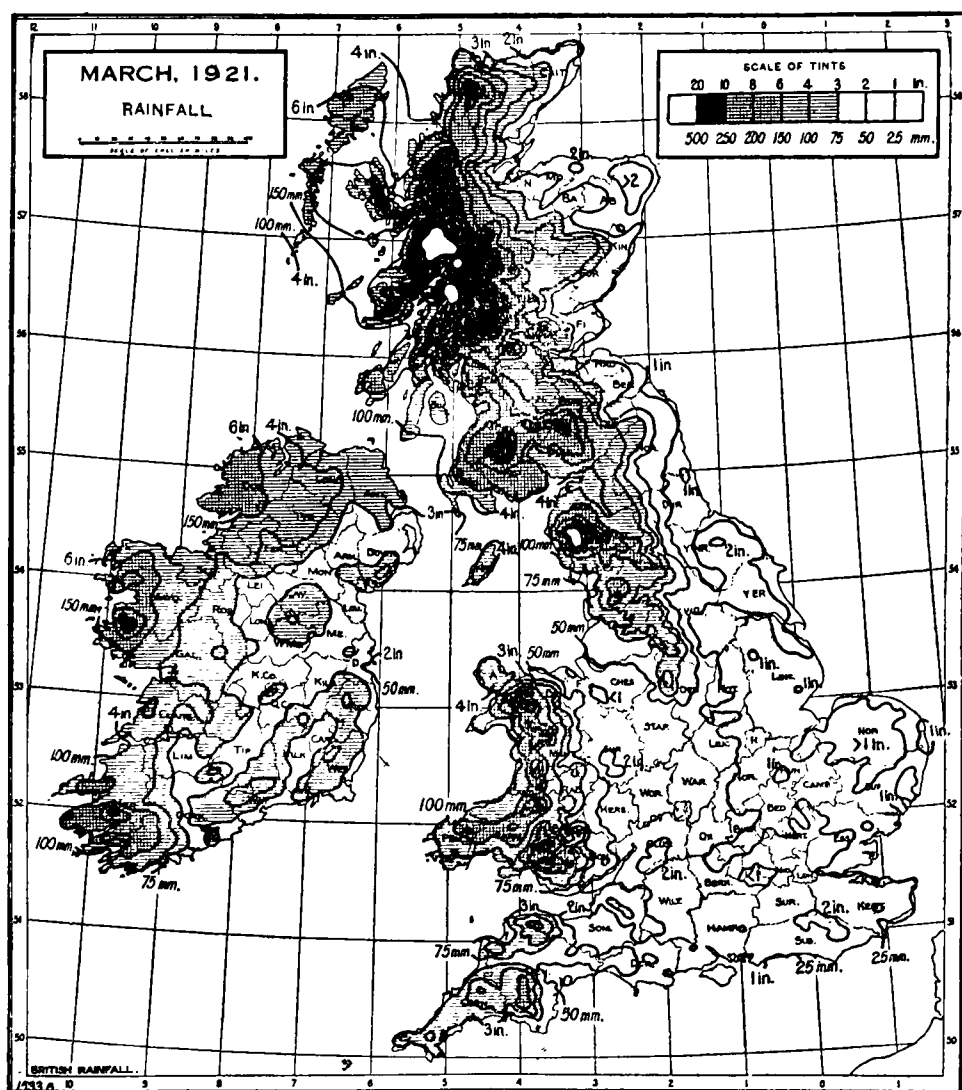
March showed a reversion to a well-marked westerly type with a pressure gradient above the normal. Depressions were numerous, but nearly all well to the north of the British Isles.

The total rainfall was excessive everywhere in the west, but notably so in only the west of Scotland. Falls of more than 10 in. with local occurrences of more than 20 in. were again widespread in the Highlands, and although 10 in. falls were observed at numerous



stations in the wetter districts of England, Wales, and Ireland the areas with so large an amount were quite small. Most of the upland districts of the west had more than 6 in., the only exception being in Cornwall. To the east the amount of rain fell off to less than 2 in. in Scotland and Ireland and to less than 1 in. in England, where the 1 in. line ran from Berwick-on-Tweed to Dungeness. In the district to the east of this line, March formed a part of the long dry period of 1921.

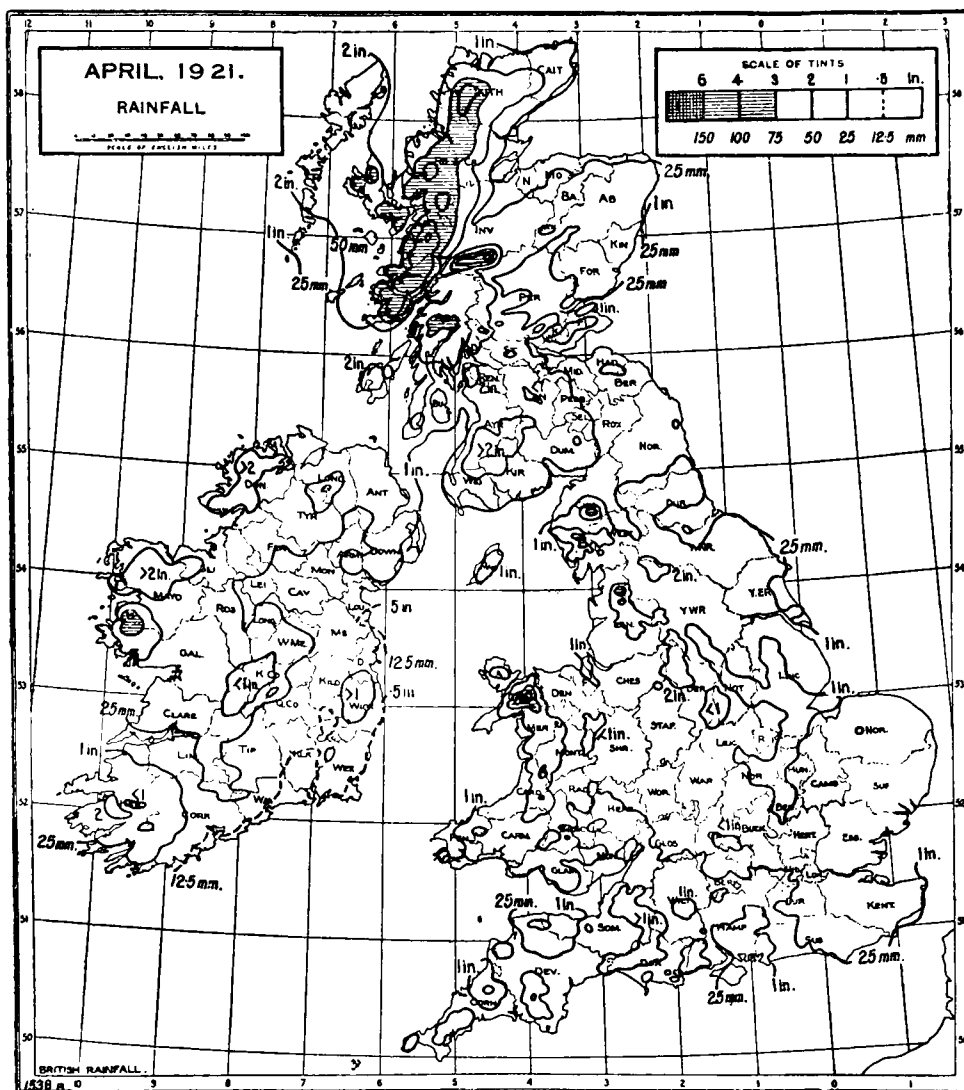
In the east of England considerable areas had less than their average fall but the total relative to the average increased toward the west and beyond a line running from Land's End to the Orkneys the month was wet. More than 50 per cent. excess fell in parts of Wales,



along a narrow strip of the west coast of Ireland, and everywhere in the western half of Scotland. Over most of the western Highlands more than twice the average fell.

England as a whole showed a deficiency of 38 per cent., but Wales had an excess of 23 per cent., the two together falling short of the average by 27 per cent. The excess in Ireland was 25 per cent. and in Scotland 47 per cent. For the British Isles there was an excess of 7 per cent.

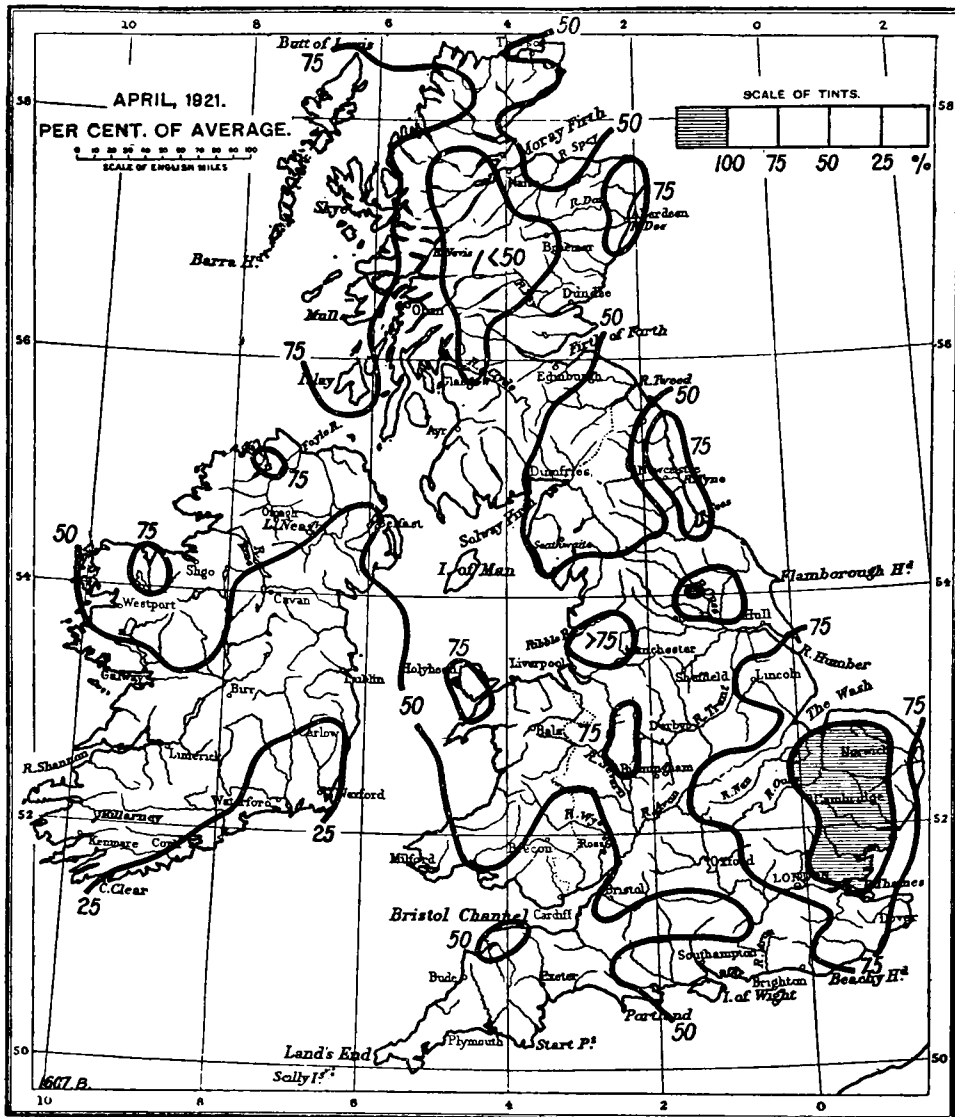
April.—The barometric pressure was abnormally high, especially in the north, and the distribution was anticyclonic in character. Very few depressions occurred and the rainfall was nearly everywhere deficient, as much as 3 in. occurring only extremely locally, except in



The general fall was below the average by 55 per cent. in Ireland, 40 per cent. in Scotland, 37 per cent. in England and Wales, and 42 per cent. for the whole of the British Isles.

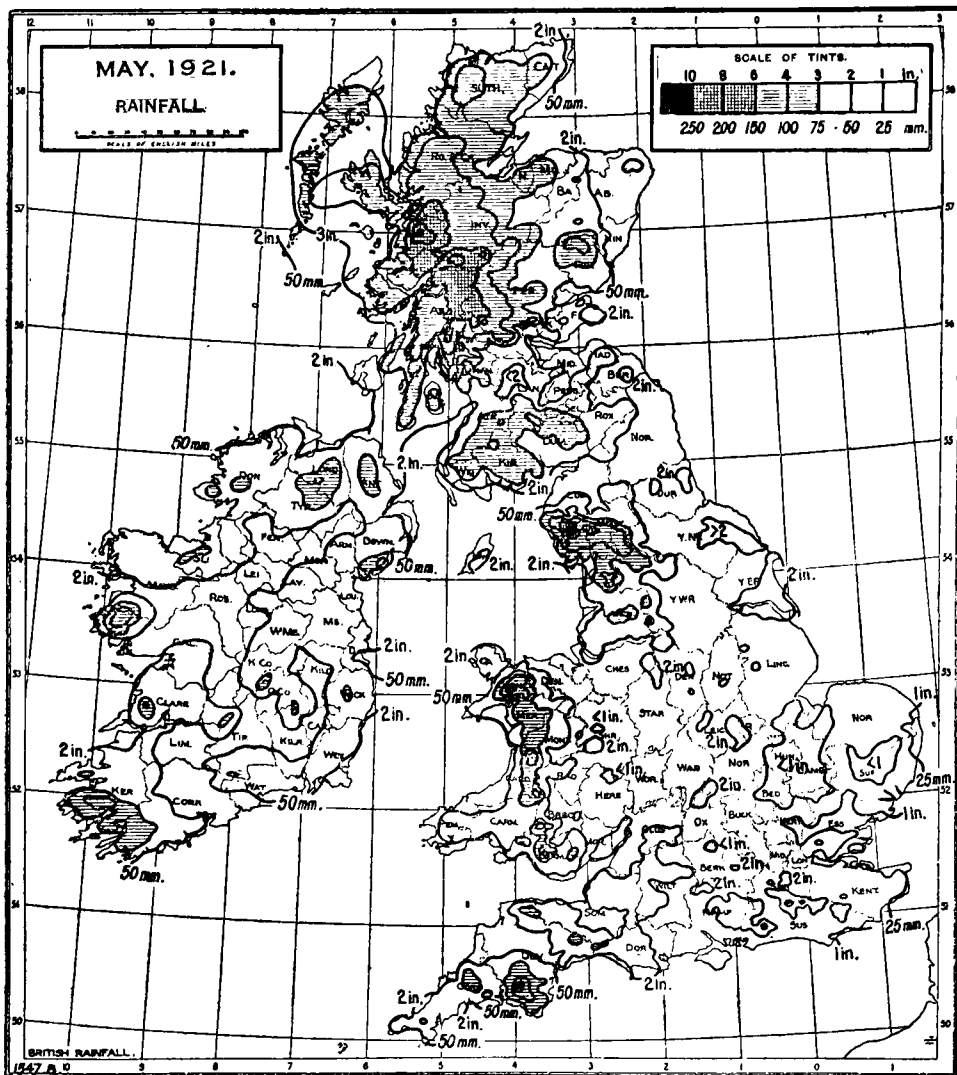
May.—The pressure distribution was normal in type, but whilst the barometric readings were close to the average in the south, in the north they were considerably below it, giving a somewhat steeper gradient than usual. Depressions were rather numerous, most of them passing just beyond the north-west coasts of the British Isles.

The distribution of rainfall was rather irregular. Broadly speaking, excesses again occurred only in the west of Scotland, which was the only district in which very large areas had over 3 in. More than 6 in.



fell fairly widely in the rainy areas of Inverness-shire and Argyllshire. In the west of England, Wales and Ireland, only the upland areas had as much as 2 in., the total rising to 4 in. and occasionally to 6 in. in the normally rainy districts. The east was again dry, though less notably so than in April. Less than 1 in. fell over much of East Anglia and the Fen district.

The percentage map shows that the fall somewhat exceeded the average over the western half of Scotland and locally in the districts surrounding the Irish Sea, round the Humber estuary and in the south of England. Two spots on the east coast had just less than 50 per cent.



Scotland had a general excess of 5 per cent., but in Ireland the general fall was 13 per cent., and in England and Wales 19 per cent., below the average, whilst for the whole country there was a deficiency of 11 per cent.

June.—During this month the atmospheric pressure was extremely high, and the distribution was dominated by an extension of the Azores high pressure belt to the western part of the British Isles giving a tendency for light northerly winds and abnormal dryness.

South of the central plain of Scotland totals of as much as 1 in. during the month were extremely rare, practically the only exceptions



being caused by a well-marked thunderstorm which brought heavy falls in parts of Ireland on the 26th. Over most of England, Wales and Ireland the total fall during the month was in the neighbourhood of $\cdot 50$ in.; enormous areas had less than $\cdot 25$ in., and a few well-marked districts, shown in the map on page 105 in black, had no rain at all. Falls of 1 in. were much more widespread in Scotland, occurring generally in the north and west, whilst as much as 3 in. fell in a few isolated patches in the Highlands.

Over the thunderstorm area in Queen's County the fall locally exceeded the average, but elsewhere only the Orkney Islands experienced an excess, and only the northern half of Scotland had as much as half



its average fall. Except locally, less than 25 per cent. of the average occurred everywhere in England, Wales and Ireland, whilst a coastal fringe from the Shannon estuary to Yarmouth had less than 10 per cent.

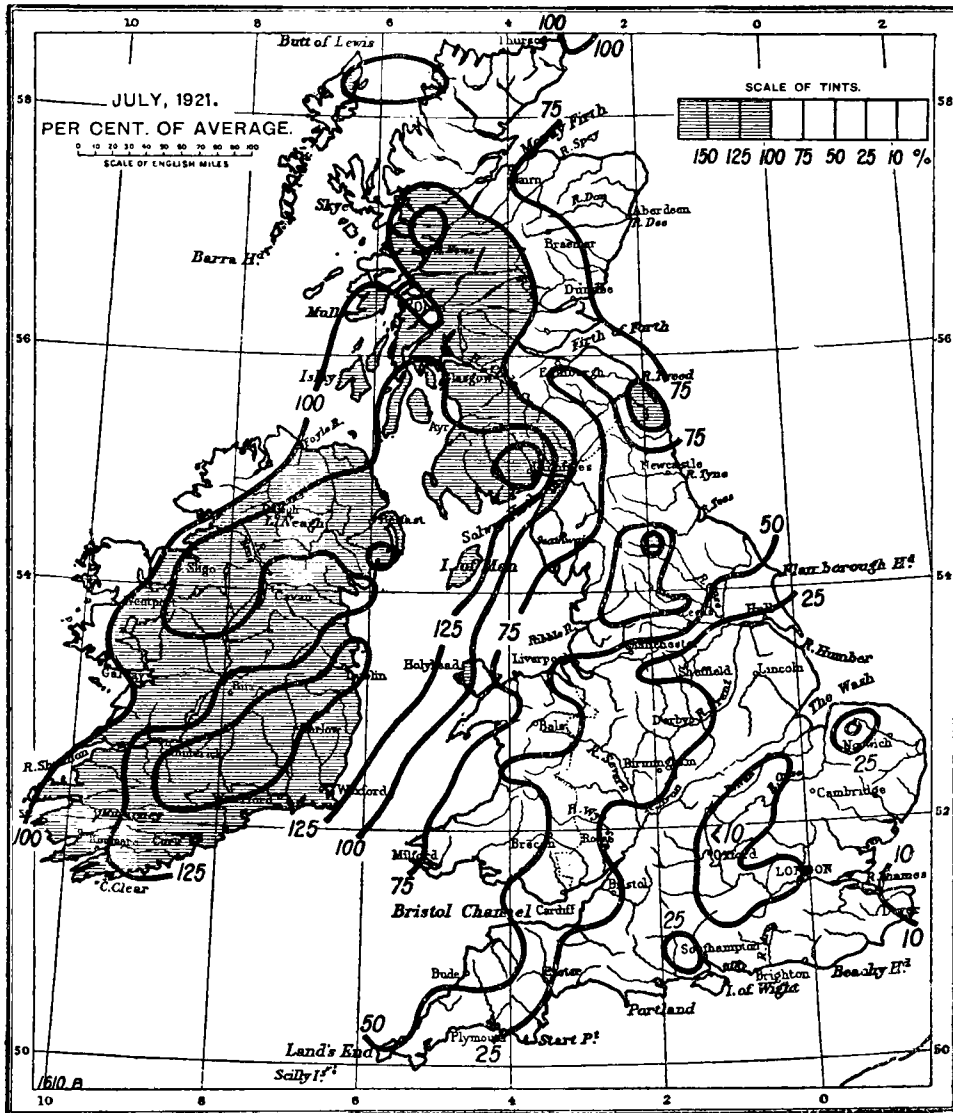
Wales had a general rainfall 87 per cent. below the average, and England and Wales together 82 per cent. In Ireland also the general deficiency amounted to 82 per cent., whilst Scotland was short only by 51 per cent. For the British Isles the deficiency was 73 per cent.

July.—The pressure distribution was fairly normal, but the values were everywhere above the average, more particularly in the north. Depressions were rare, and only one actually crossed the British Isles.



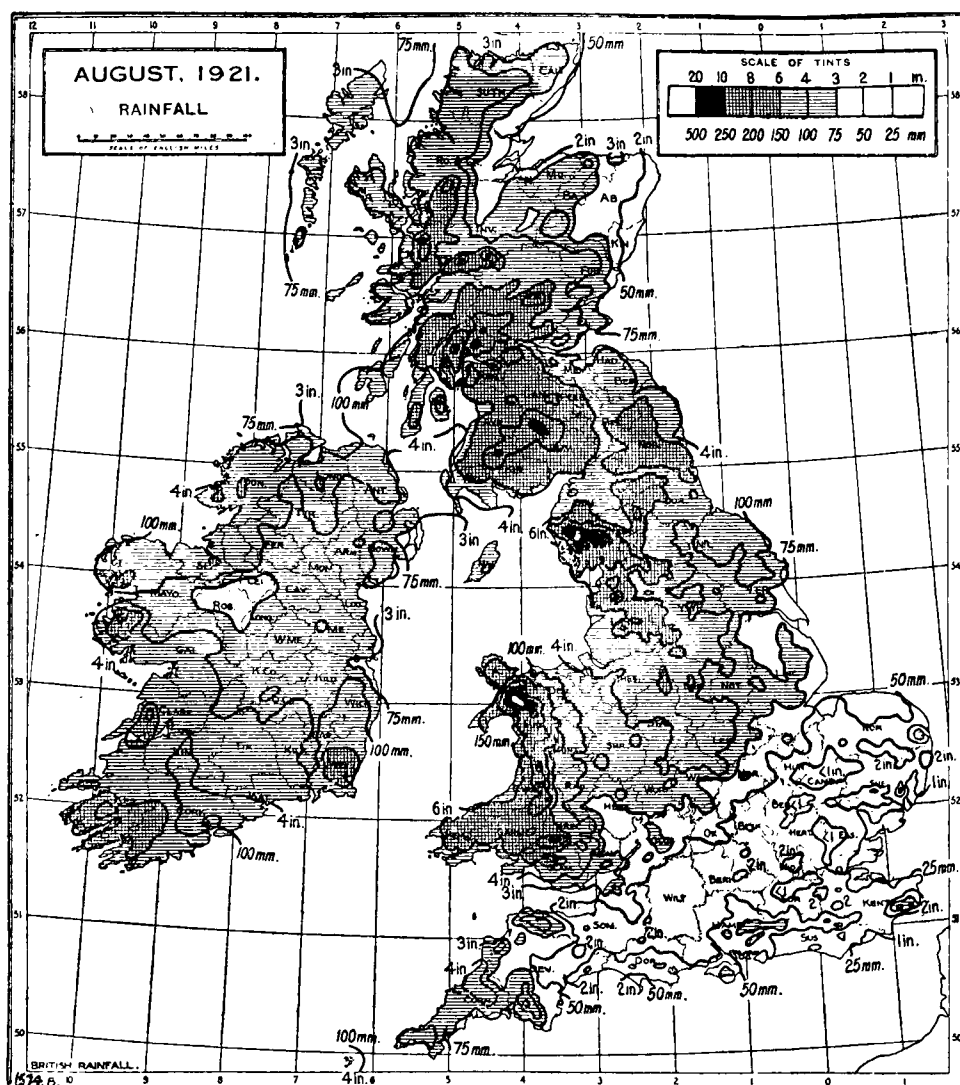
The total rainfall was not, broadly speaking, notably deficient, but in the south-eastern half of England and Wales it was abnormally low, and, taken in conjunction with the extremely dry June, it constituted an important fraction of the great summer drought. Except locally less than $\cdot 50$ in. of rain fell to the south-east of a line passing from Bolt Head to Spurn Head, and in the lower Thames Valley and the Fen District less than $\cdot 25$ in., falling to $\cdot 10$ in., was measured. In the west more than 2 in. fell almost everywhere, and there were appreciable 6 in. areas in all the normally wet areas except Devonshire and South Wales.

Ireland was wet except for a strip along the west coast, where a slight deficiency was observed, and in part of the south-eastern counties



of England. The pressure conditions were close to the average, both in amount and distribution, and there were occasional cyclonic and thunderstorm rains of moderate intensity.

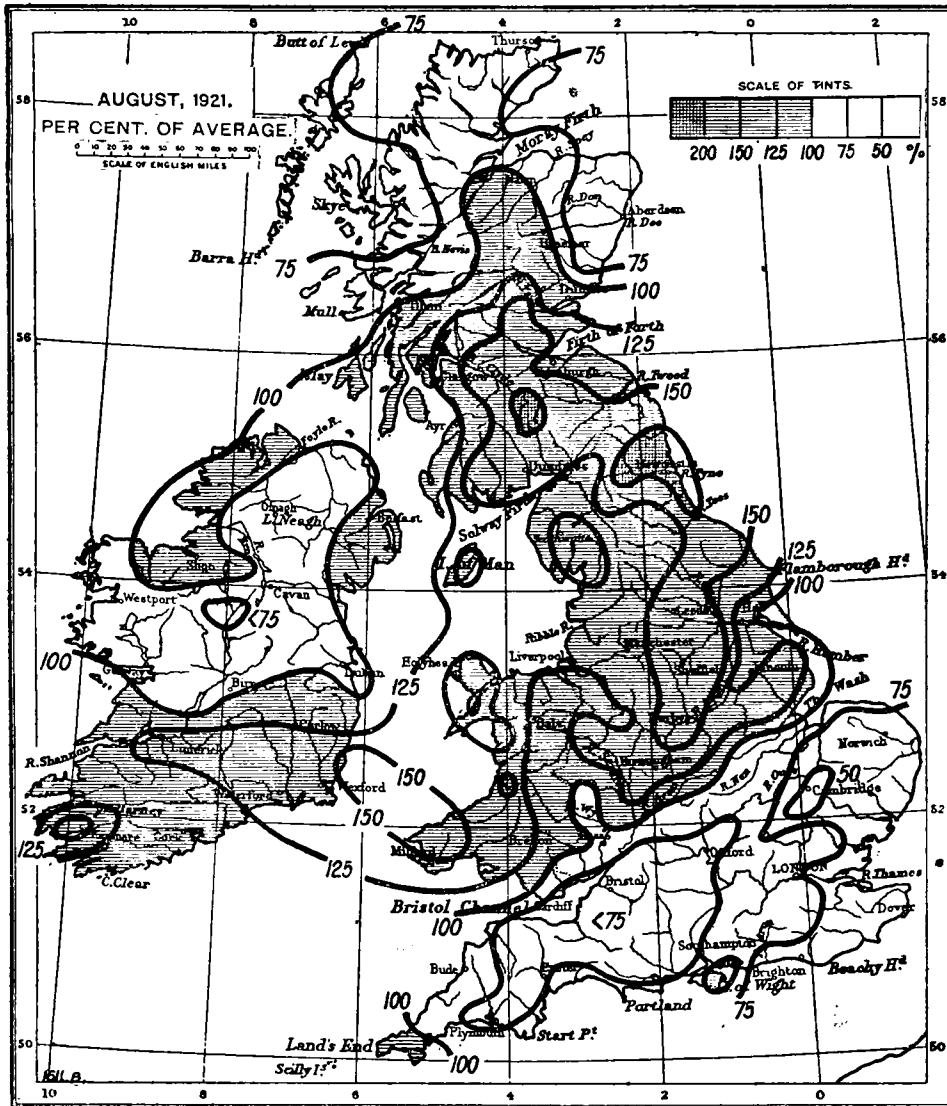
Except in central Ireland and the Devon-Cornwall peninsula more than 4 in. fell practically everywhere in the west of the British Isles, and in Wales, the Pennines, the West Highlands and the western mountains of Ireland more than 6 in. was extremely widespread. Falls of more than 4 in. extended to the east coast from Northumberland to Yorkshire, but in most east coast districts, and nearly everywhere in the south of England, less than 3 in. fell. On the coast of east Sussex, in northern Hertfordshire, and part of Cambridgeshire, the



total was less than 1 in. In these districts the month extended the summer drought to an alarming degree.

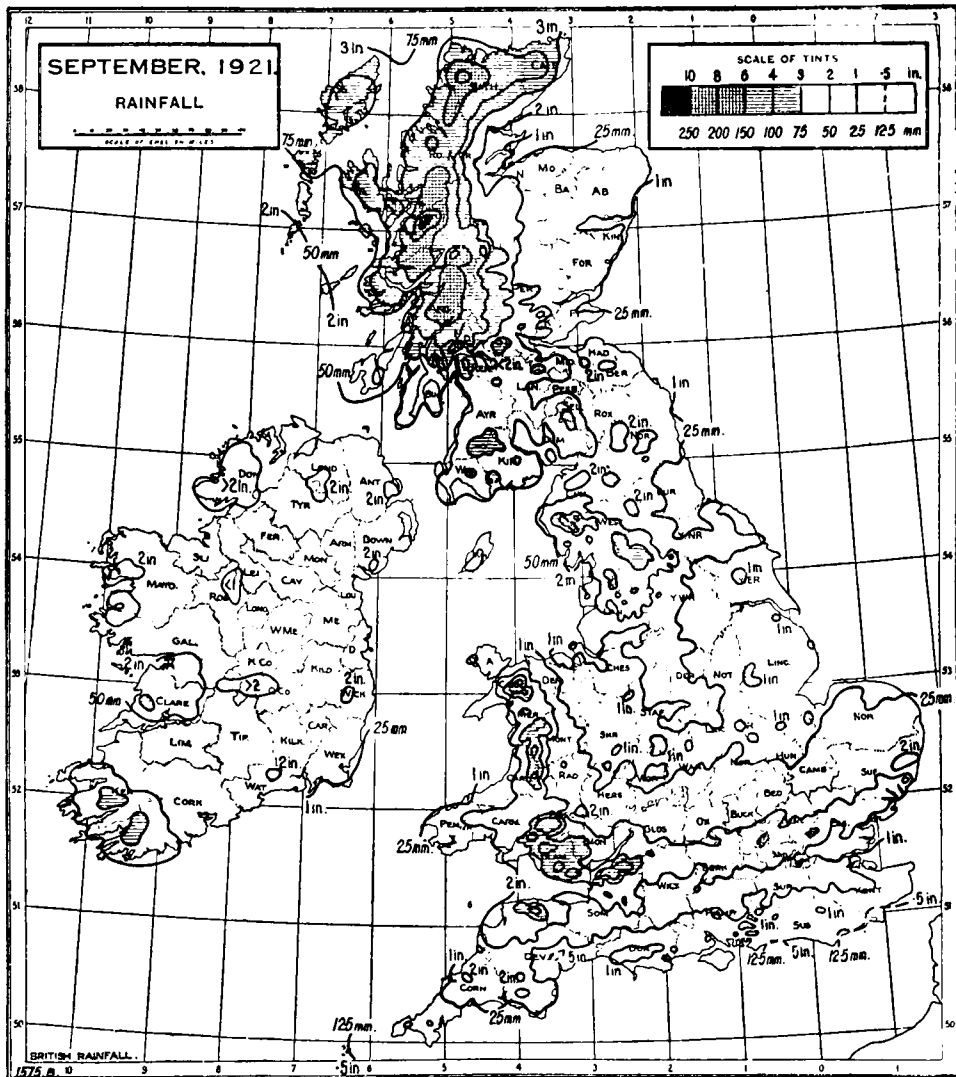
Broadly speaking, the centre of the British Isles had rather more than the average, and the north and south rather less. The excess was greatest in Northumberland, where one or two stations had twice the average; and the deficiency was most marked in Cambridgeshire, where less than half of the average fell.

Each of the countries showed a slight general excess, amounting to 7 per cent. in Ireland, 11 per cent. in Scotland and 16 per cent. in England and Wales, whilst for the British Isles the excess was 12 per cent.



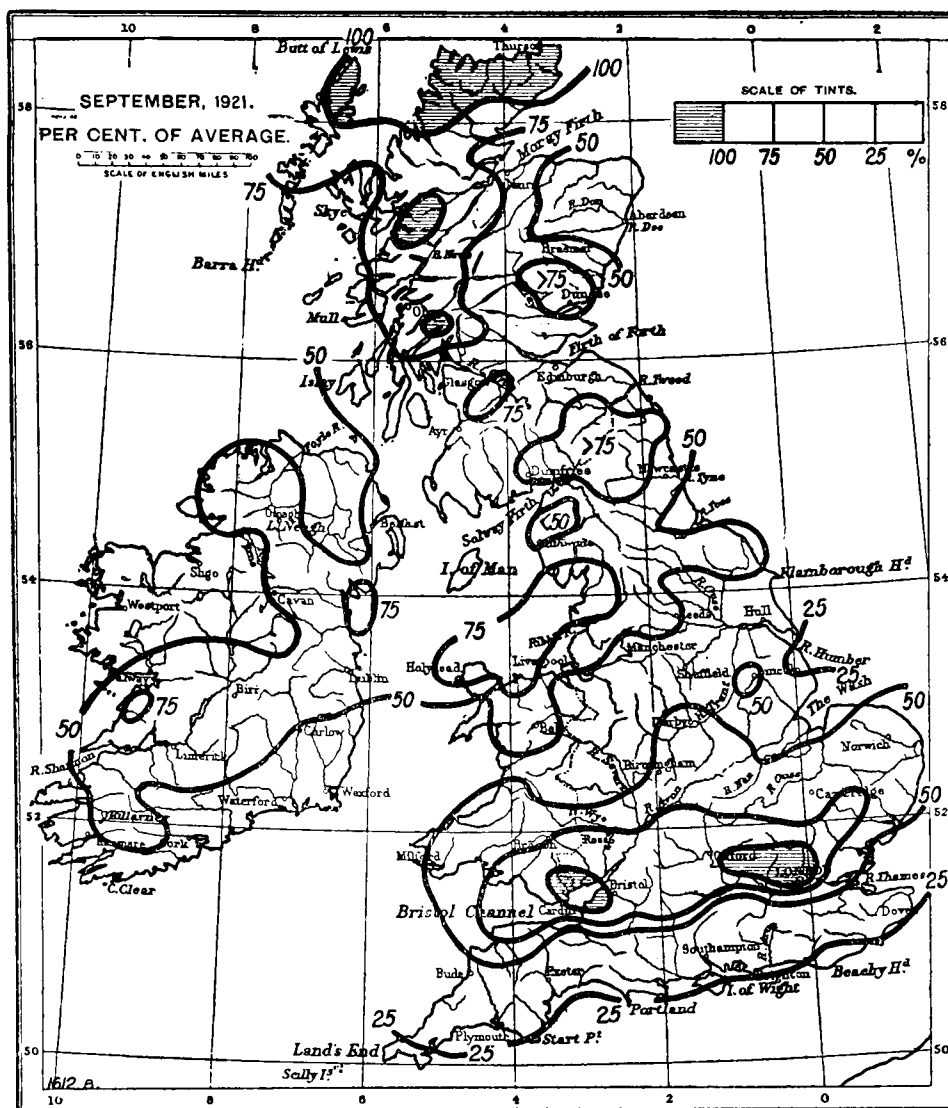
September.—Atmospheric pressure was high, especially in the south-east of England, which lay within the continental anti-cyclonic area. Depressions were again few, and nearly all passed well to the north of the British Isles. A well-marked exception occurred on the 11th-12th, when a secondary cyclone traversed the south of England, bringing the bulk of the rainfall of the month (credited to 10th and 11th) over a belt of country extending from the Bristol Channel to the coast of Essex.

But for the timely interruption just mentioned the abnormal tendency to dry weather was continued everywhere except in the north



of Scotland. A large part of the north Midlands of England and a strip along the south coast had less than 1 in. of rain, falling in places to less than ·50 in. More than 3 in. fell around Bristol and in Glamorganshire, but with this exception the only large area with as much as 3 in. was the north-western quarter of Scotland. Here, over considerable districts in Argyllshire, Inverness-shire, Ross-shire and Sutherlandshire more than 6 in. fell, rising locally to 8 and even 10 in.

The map of percentage values shows that the southern half of the British Isles generally had less than half the average except for the well-marked belt of country affected by the rains of the 10th and 11th. Here the fall exceeded the average round Cardiff and Bristol and to

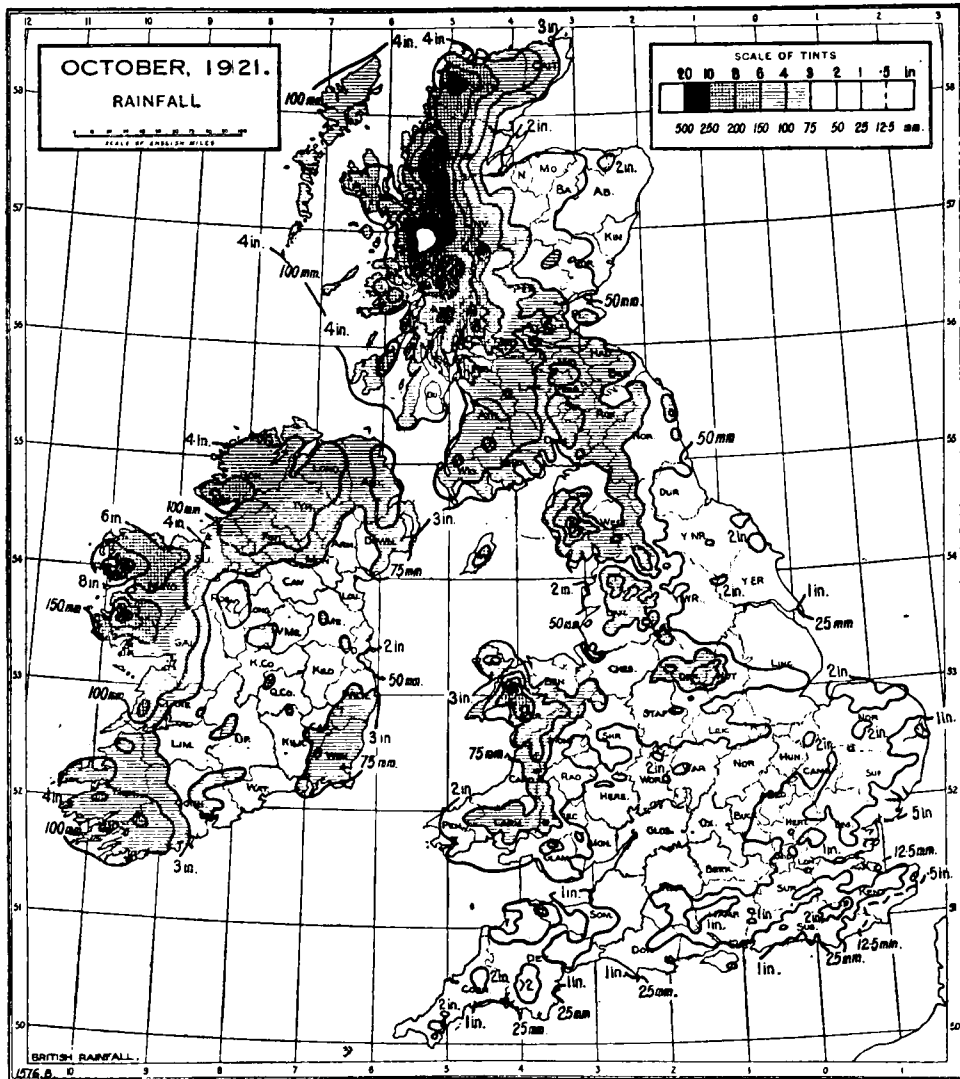


the west of London. The total exceeded the average also in the extreme north of Scotland.

The general deficiency was 46 per cent. in Ireland, 40 per cent. in England and Wales, 21 per cent. in Scotland, and 36 per cent. in the whole British Isles.

October.—Pressure was again high, more particularly in the south where the month was unusually dry for the season.

An area extending from Dorsetshire to the coast of Norfolk and also the south-east coast from Littlehampton to Margate, had less than 1 in. of rain, and in places on the coasts of Essex and Kent less than .50 in.



Towards the north and west the fall increased considerably, but in England and Wales falls of as much as 6 in. were extremely rare, occurring only in Snowdonia and the central Lake District. The rainfall in Ireland called for no special comment, but the west Highlands were again wet, most of the great wet tract between the Trossachs and western Sutherlandshire having more than 10 in., and as much as 20 in. falling in western Inverness-shire. The east of Scotland on the other hand had less than 2 in. between Dornoch Firth and the Firth of Tay.

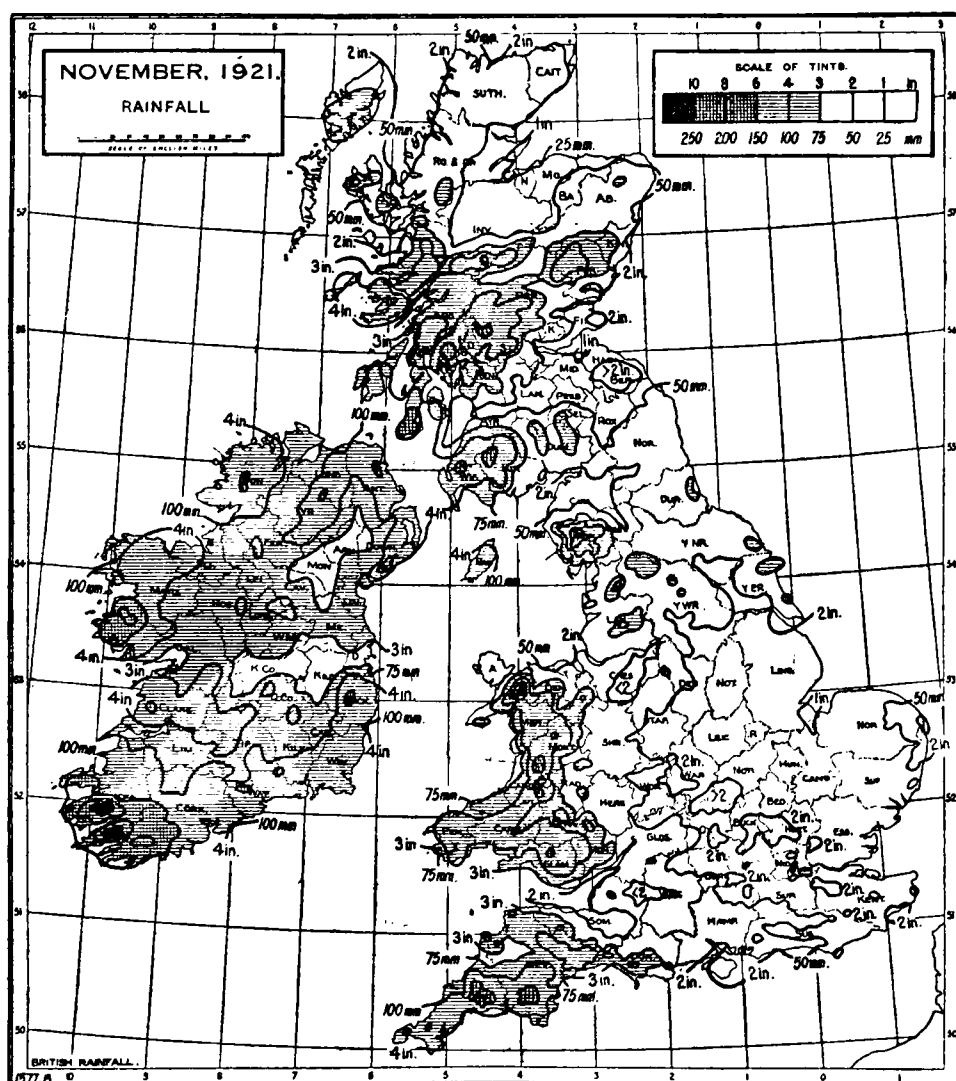
The rainfall exceeded the average over a belt stretching from Galway Bay across the North Channel to Cape Wrath and the Firth of Forth. There were also local patches with slight excess in the



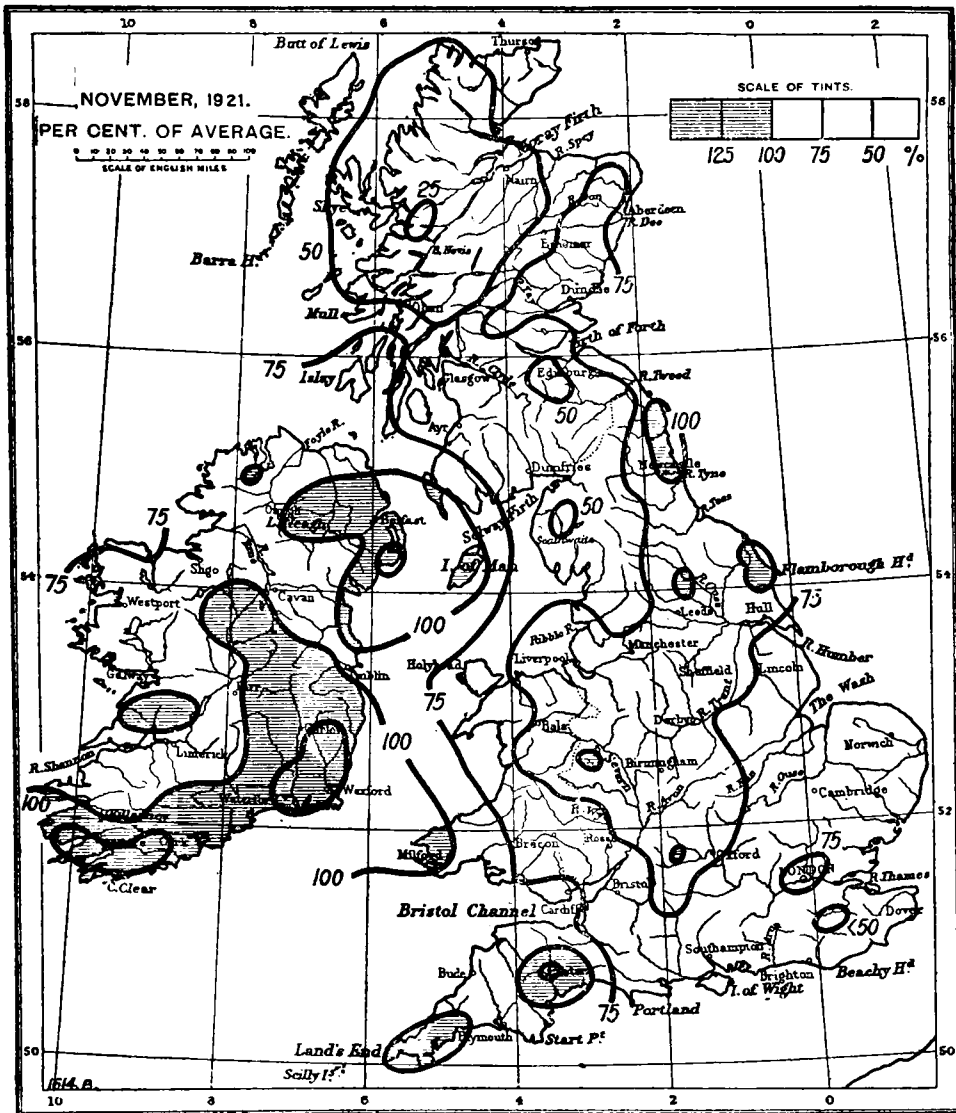
Pennines, but most of the east coast of Great Britain and the whole of the south of England and Wales had less than half the average, whilst less than a quarter fell between Devonshire and Kent.

In Ireland and Scotland the general deficiency was merely nominal, amounting to 1 per cent., but in England and Wales there was a deficiency of 47 per cent., bringing that for the whole British Isles to 23 per cent.

November.—Pressure was everywhere excessive, and abnormally so in the east. Although the month was by no means a wet one it was far less conspicuously dry in the drought area than were the preceding months, and, broadly speaking, it may be regarded as



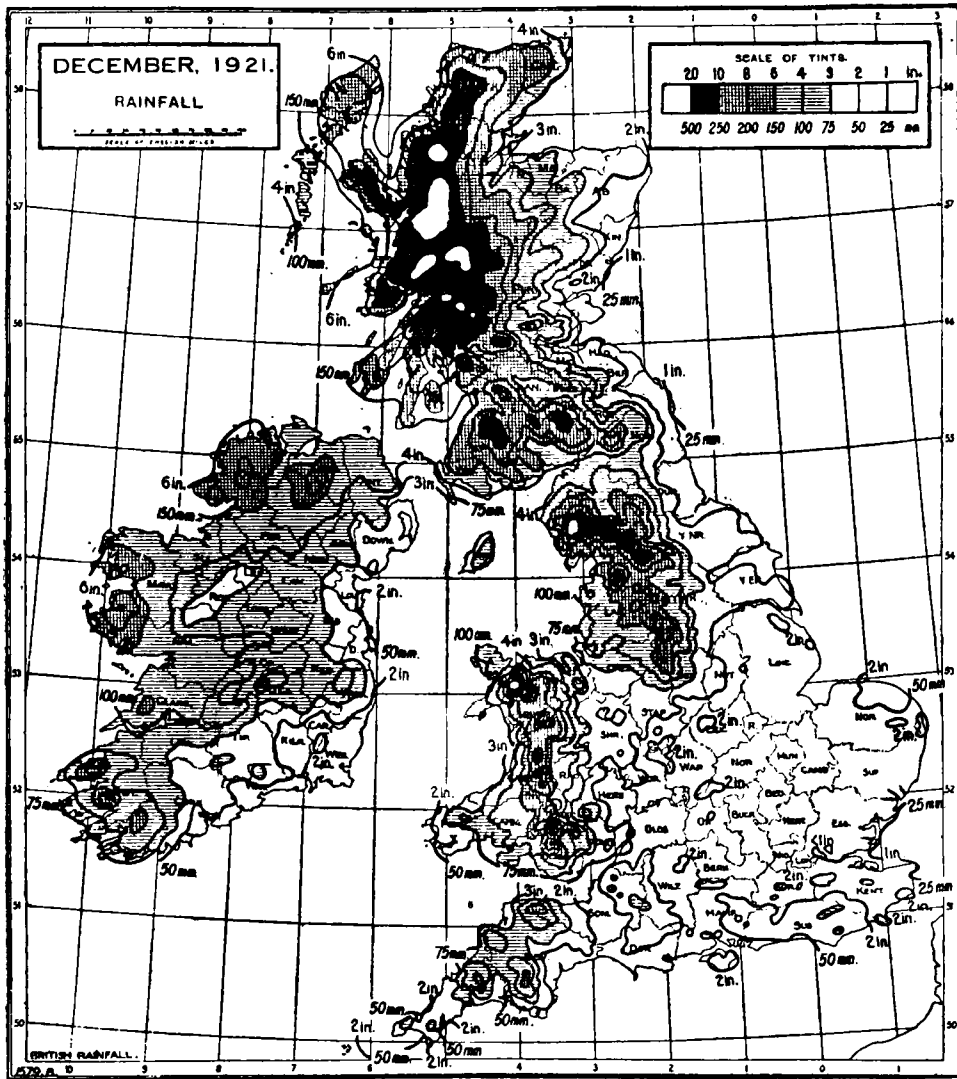
terminating the dry spell. Nevertheless in the south-eastern counties and east Midlands of England the total fall was well below 2 in. The deficiency was, however, most conspicuous in the north-west Highlands of Scotland, where the series of wet months gave way, paradoxically enough, to an unusually dry spell. Round the Moray Firth less than 1 in. fell, and save at one or two stations in the heart of the mountain area there is no evidence that as much as 3 in. fell north of about the latitude of Fort William. A large area with more than 4 in., rising in places to 6 in., extended from Ulster to Argyllshire and Kirkcudbrightshire, and 4 in. fell fairly widely in western Ireland, Cornwall and Wales, but no fall of 10 in. was recorded in Great Britain.



In the north-west of Scotland a large district had less than half the average, with less than a quarter of the average in the centre. The fall differed little from the average over the greater part of the remainder of the British Isles, the greatest excess being more than 25 per cent. in the east of Ireland, and the greatest deficiency, from 25 to 50 per cent., in parts of Wales and the south-east of England.

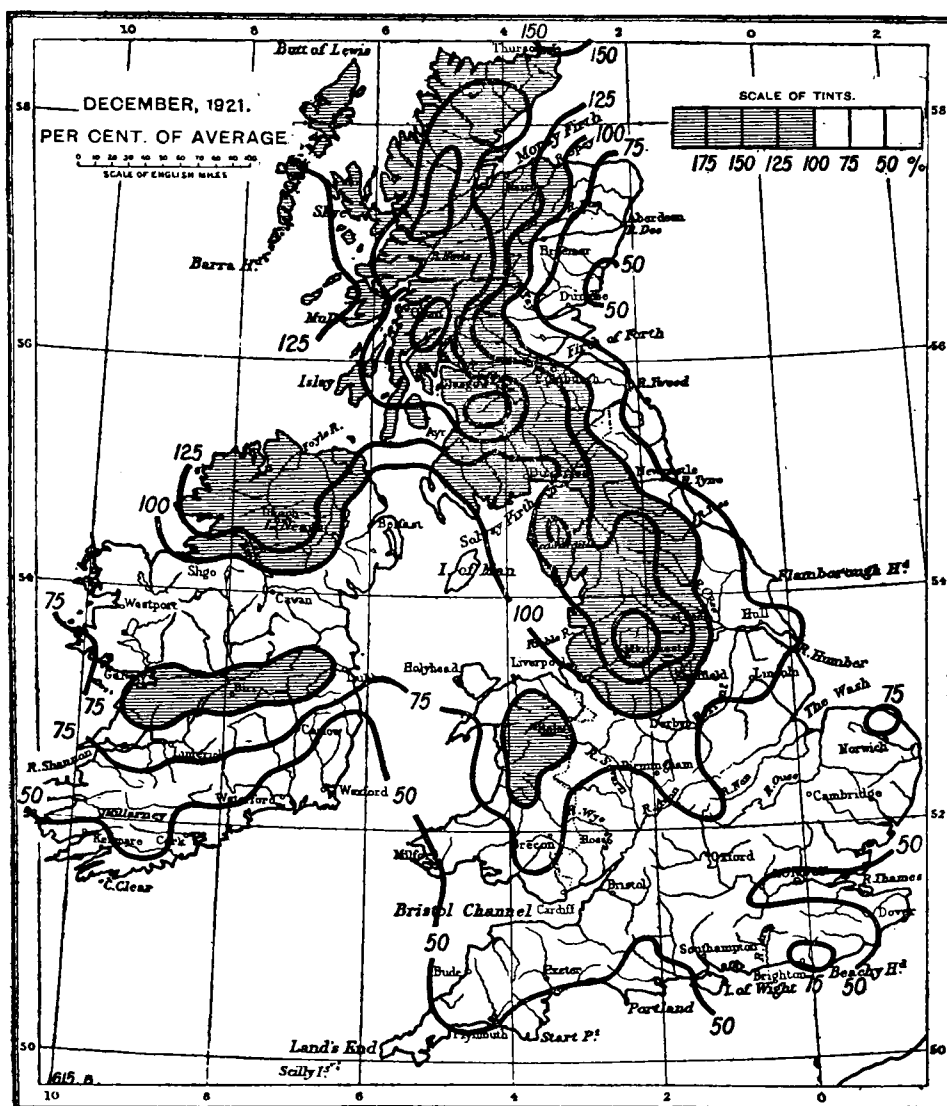
Ireland had a general excess of 4 per cent., but the general fall was deficient by 40 per cent. in Scotland, by 22 per cent. in England and Wales, and by 21 per cent. for the whole British Isles.

December.—Pressure still remained high, but the distribution was of a winter type with a more north-westerly tendency than usual.



Depressions were fairly numerous, but were conspicuously far to the north, and the rainfall in the south continued deficient.

Less than 2 in. fell along the south-east coast of Ireland, the east coast of Scotland south of Peterhead, and over the whole of the eastern half of England, except a strip along the south. Locally within this area the fall was again below 1 in. In other districts the distribution was of the ordinary winter type, upwards of 6 in. falling over more than half of Scotland, over the mountains of western Ireland and central Wales and most of the Pennine chain. In all the normally rainy areas patches with more than 10 in. occurred, in the west Highlands 20 in. was very widespread, and more than 40 in. fell at the head of Glenquoich.



The map of the rainfall of the month relative to the average shows a well-marked maximum in the west of Scotland, where a few stations approached twice their average fall. The area with an excess over the average embraced part of northern Ireland and the whole of the Pennine district. On the east coast of Scotland the percentage values fell to less than 50 at Montrose. With this exception the only area with less than half the average was a long narrow strip passing round the south coasts from Co. Kerry to Essex.

Scotland had a general excess of 30 per cent.; but Ireland had 13 per cent., and England and Wales 20 per cent., below the average. For the British Isles the deficiency amounted to 4 per cent.

TABLE II.—(con.) ENGLAND—(con.)

Div.	County.	Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
III.	Cambridgeshire ..	3 Wisbech (Bank House)	2.05	.54	1.14	1.34	1.18	.55	.21	1.61	1.03	1.60	1.10	1.27	13.62
IV.	Essex.....	2 Leigh (Herschell Road).....	1.76	.69	1.05	1.53	1.56	.24	.06	.67	1.02	.58	1.51	1.44	12.11
"	"	2 Ongar (Marden Ash)	1.80	.04	1.16	1.83	1.50	.15	.16	.96	2.60	.55	1.70	1.06	13.51
"	"	3 Bradwell-on-Sea (Bradwell Hall)	1.50	.51	.80	1.26	.98	.03	.24	.82	1.62	.61	1.80	1.04	11.21
"	"	4 Shalford (Littles).....	2.17	.30	.76	1.65	1.06	.23	.27	1.23	2.12	1.54	1.59	1.24	14.16
"	Suffolk	1 Chapel St. Mary School	1.93	.23	.96	1.28	1.51	.11	.39	2.03	2.24	.82	1.49	1.46	14.45
"	"	1 Hawkedon Rectory.....	1.97	.14	.87	1.76	1.11	.29	.40	1.76	1.45	1.30	1.55	1.46	14.06
"	"	2 Haughley (Haughley House) ..	1.69	.12	.86	1.21	.85	.21	.28	1.21	1.28	1.08	1.53	1.08	11.40
"	"	3 Orford (The Gables).....	2.32	.34	1.08	1.32	1.58	.38	.42	1.05	3.90	.86	1.82	1.41	16.48
"	"	3 Halesworth Rectory	1.88	.23	1.18	1.50	.96	.49	.31	.96	1.83	1.01	2.05	1.50	13.90
"	"	4 Yarmouth (Burgh Hall).....	1.42	.24	.98	1.17	.74	.65	.38	1.41	1.48	.92	2.08	1.95	13.42
"	Norfolk	1 Diss (The Cedars)	1.52	.13	.96	1.53	.89	.50	.25	1.58	1.11	1.70	1.58	1.25	13.00
"	"	1 Wymondham	2.23	.42	1.32	1.37	1.40	.25	.56	2.47	1.42	1.47	1.77	1.91	16.59
"	"	2 Aylsham (Rippon Hall)	2.11	.46	1.08	1.56	1.82	.38	.40	1.64	.95	1.87	2.09	2.29	16.65
"	"	3 Sandringham House Gardens..	2.39	.78	1.24	1.61	1.62	.46	.53	1.85	1.00	1.86	1.47	1.95	16.76
"	"	3 Blakeney	2.30	.57	1.10	1.29	1.02	.90	.12	2.08	.85	2.24	1.85	2.14	16.46
"	"	4 Thetford (Waterworks)	1.87	.39	1.01	1.88	1.00	.25	.92	1.68	1.24	1.71	1.46	1.50	14.91
"	"	4 Swaffham	2.35	.31	1.15	1.57	1.12	.51	1.75	1.42	1.14	1.65	1.41	1.35	15.73
V.	Wiltshire	1 Bradford (Manvers House)	3.39	.34	1.55	.72	2.83	.35	.53	1.31	2.18	1.23	1.99	2.19	18.61
"	"	2 Mere (Charnage)	3.10	.38	2.02	1.54	2.43	.43	.49	1.48	1.23	1.31	2.32	2.65	19.38
"	"	3 Salisbury Plain (Shrewton) ...	3.09	.28	1.24	1.05	1.54	.38	.47	1.21	1.85	1.06	2.71	1.71	16.59
"	"	5 Marlborough (Mildenhall)	3.35	.44	1.40	.76	2.21	.09	.31	1.72	2.14	1.28	2.63	1.73	18.06
"	Dorsetshire	3 Weymouth (Springfield)	3.45	.27	1.12	.81	2.20	.28	.22	1.28	.79	1.03	2.40	1.52	15.37
"	"	3 Beaminster (Hamilton Lodge)	4.16	.34	2.70	1.17	2.88	.46	.57	1.93	.90	1.02	3.34	1.82	21.29
"	"	4 Winterbourne Whitchurch Vic.	4.02	.26	1.88	.88	2.32	.80	.49	2.20	1.18	.93	3.59	1.63	20.18
"	"	4 Wimborne (Codford House)....	3.43	.41	1.40	.92	1.69	.50	.37	2.46	.95	1.14	2.46	1.62	17.35
"	"	3 South Brent (Great Aish)	9.26	.20	4.79	1.43	4.88	.18	1.92	5.00	1.87	2.11	5.83	4.77	42.24
"	South Devonshire	4 Two Bridges (Moor Lodge) ...	12.06	.43	7.94	2.09	5.03	.29	4.40	5.41	2.82	2.35	6.74	7.59	57.15
"	"	5 Teignmouth (Den Gardens)....	3.13	.21	1.72	.63	1.96	.18	.56	2.12	1.06	1.77	3.46	1.30	18.10
"	"	6 Crediton (Okefield)	2.32	.35	1.49	.67	1.46	.53	1.00	1.34	.73	.98	3.48	2.04	16.39
"	"	7 Ottery St. Mary (West Hill) ..	3.05	.28	2.04	.64	2.91	1.20	.60	1.46	.57	.98	5.23	1.52	20.48
"	North	1 Morthoe (Twitchen House) ...	4.99	.18	3.09	1.43	1.46	.24	1.11	2.77	2.12	2.07	3.41	3.09	25.96
"	"	2 Chumleigh (Leigh House)	3.94	.19	3.12	1.04	1.72	.28	.84	2.12	2.19	2.03	2.93	2.70	23.10

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TABLE II.—(con.). ENGLAND—(con.).

Div.	County.	Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
V.	North Devon ...	Dolton (Hilliers)	4.14	.21	2.78	.83	1.54	.10	1.50	2.39	1.86	1.95	2.64	3.54	23.48
"	Cornwall	Redruth (Trewirgie)	3.86	.78	3.96	1.05	2.64	.12	2.38	4.21	.70	1.55	5.86	2.64	29.75
"	"	Newquay (Tresillian House) ..	4.42	.41	3.43	.96	2.47	.12	2.26	3.20	1.01	1.47	4.73	2.50	26.98
"	"	Morwenstow Vicarage	4.54	.51	3.77	.98	1.72	.05	1.55	2.98	1.89	1.64	3.50	2.93	26.06
"	"	Penzance (Morrab Garden) ...	4.92	.38	3.80	.97	2.22	.18	1.37	4.63	.70	1.39	5.58	2.71	28.85
"	"	St. Austell (Trevarna)	4.84	.59	3.43	.98	2.65	.10	1.45	2.75	1.13	1.38	5.55	2.92	27.87
"	"	Liskeard (Trevillis)	4.40	.51	3.67	.98	2.38	.16	1.37	3.36	1.04	1.70	6.45	3.11	29.13
"	"	Altarnon Vicarage	5.98	.27	4.86	1.50	2.42	.04	1.85	4.39	1.94	2.06	5.18	5.22	35.71
"	"	Tresco Abbey	3.01	.47	2.19	.82	1.69	.16	.83	4.57	.48	1.45	4.51	1.88	22.06
"	"	Street (Hind Hayes)	3.13	.23	1.59	.86	1.66	.71	.30	1.41	1.79	.92	1.89	1.74	16.23
"	Somersetshire...	Burnham (Chalbury)	2.85	.24	1.84	.69	2.10	.28	.44	1.79	1.84	1.08	2.11	1.83	17.09
"	"	Taunton (The Park)	2.35	.16	1.49	.57	1.91	.63	.46	1.71	1.07	1.04	2.09	2.07	15.55
"	"	Winsford School	6.25	.28	4.45	1.63	2.64	.37	2.14	3.54	2.99	2.82	3.27	5.62	36.00
VI.	Gloucestershire..	Avening House.....	2.78	.33	1.82	1.03	2.59	.00	.25	2.46	1.82	1.34	2.69	1.74	18.85
"	"	Cheltenham (Old Bath Road) ..	2.61	.24	1.45	1.34	1.73	.67	.30	2.77	1.65	1.48	2.16	1.62	18.02
"	"	Mickleton (Bank House)	1.91	.21	1.05	.95	1.33	.39	.32	2.15	1.15	1.24	1.69	1.45	13.84
"	"	Clifton (Harley Place)	3.60	.34	2.30	.76	1.84	.24	.87	3.26	4.29	1.86	2.15	2.93	24.44
"	"	Lechdale (Claydon House)	2.61	.50	1.05	1.34	1.75	.50	.19	1.37	1.63	1.39	2.25	1.34	15.92
"	Herefordshire ..	Ross (Birchlea)	3.18	.16	1.56	.72	1.10	.42	.50	2.55	1.68	1.44	2.30	1.69	17.30
"	"	Weobley School	2.60	.20	1.98	.85	.80	.26	.71	2.84	.87	1.58	2.37	1.70	16.76
"	"	Ashford House	3.20	.41	1.89	1.81	1.06	.32	.64	3.64	1.02	2.28	2.48	2.25	21.00
"	Shropshire	Clun Forest (Cwm Frydd) ..	4.32	.36	3.67	1.13	2.00	.65	1.27	4.96	1.32	1.84	3.26	3.82	28.60
"	"	Much Wenlock (Willey Park) ..	2.22	.33	1.44	1.62	1.33	.56	.51	3.42	.55	1.81	2.13	2.28	18.20
"	Staffordshire ...	Market Drayton (Old Springs)	2.46	.36	1.17	1.53	1.31	.30	.70	3.94	.66	2.72	2.03	2.21	19.39
"	"	Lichfield (St. John Street)	2.01	.23	1.10	1.46	1.25	.37	.40	4.04	1.08	2.31	1.48	1.82	17.55
"	"	Stafford (Rising Brook)	2.44	.22	1.49	1.31	1.65	.59	.60	3.58	.82	2.19	1.71	2.14	18.74
"	"	Ashbourne (Mayfield House) ..	4.08	.29	2.05	1.58	1.74	.30	.94	4.96	1.19	2.95	1.85	2.83	24.76
"	Worcestershire..	Kempsey (The Lodge)	2.59	.22	.98	.95	1.28	.63	.40	3.32	.42	1.67	1.95	1.48	15.89
"	"	Bewdley School	2.45	.27	1.08	1.04	.84	.30	.59	3.02	.73	1.77	1.99	1.99	16.07
"	"	Dudley (Borough Cemetery) ..	2.06	.37	1.21	.56	.00	.06	.65	3.96	.93	1.79	1.51	2.20	15.30
"	"	Alvechurch (High Croft)	3.16	.19	1.23	1.36	1.83	.55	.75	4.02	1.16	1.71	1.86	1.94	19.76
"	Warwickshire ..	Coventry (Keresley Grange) ...	2.36	.18	1.34	2.01	1.80	.50	.35	3.40	.95	1.96	1.96	1.79	18.60
"	"	Farnborough	2.22	.33	1.55	1.57	2.46	1.05	.39	2.79	1.36	1.34	2.17	2.24	19.47

TABLE II.—(con.) ENGLAND—(con.).

Div.	County.	Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
VII.	Leicestershire ..	Loughboro' (Nan Pantan Res.)	2.64	.34	1.28	1.04	2.18	.78	.39	5.47	1.05	2.39	1.73	1.86	21.15
"	"	Belvoir Castle Gardens	1.95	.33	.97	.98	1.94	.73	.57	3.48	.88	1.55	1.24	1.44	16.06
"	Rutlandshire ...	Uppingham (Ridlington)	2.64	.32	.80	1.18	2.13	.68	.37	2.64	.99	2.54	1.67	2.28	18.24
"	Lincolnshire ...	Market Deeping (Wilsthorpe) ..	1.64	.45	.44	.76	.91	.77	.39	1.94	.68	1.10	1.13	1.11	11.32
"	"	Boston (Black Sluice, Skirbeck)	1.96	.44	.82	1.03	1.13	.55	.42	2.98	.68	2.07	1.30	1.36	14.74
"	"	Sleaford (Kesteven Co. Asylum)	1.85	.32	.67	.93	1.21	2.14	.30	2.94	.87	1.82	1.25	1.28	15.58
"	"	Willingham-by-Stow	1.86	.19	1.14	1.02	2.03	.28	.44	3.12	.63	1.13	1.57	1.84	15.25
"	"	Skegness (Estate Offices)	1.71	.36	.91	1.44	1.53	.37	.40	2.43	.81	1.60	1.41	1.72	14.69
"	"	Louth (Westgate)	2.16	.42	1.05	1.33	1.64	.42	.30	3.78	.47	1.28	1.69	1.67	16.21
"	"	Brigg	2.32	.30	1.09	1.24	1.91	.12	.65	2.64	.77	.98	1.69	2.04	15.75
"	"	Mansfield (West Bank)	2.17	.31	1.19	.98	1.70	.80	.60	3.98	.89	4.67	1.81	2.41	21.51
"	Nottingham	Littleover (The Knoll)	2.63	.30	1.33	1.19	1.63	.55	.55	4.49	1.10	2.59	1.59	2.03	19.98
"	Derbyshire	Matlock Bath (Lower Tower) ..	4.31	.24	1.99	1.56	1.63	.37	.90	3.61	1.12	3.79	1.97	3.37	24.86
"	"	Buxton (Devonshire Hospital)	7.53	.74	4.33	2.07	1.81	.52	1.44	5.07	1.15	3.07	2.58	6.67	36.98
VIII.	Cheshire	Northenden (Wythenshawe Hall)	4.15	.44	2.39	1.36	2.26	.28	1.01	4.19	1.09	1.93	1.98	4.13	25.21
"	"	Middlewich (Bostock Hall) ...	3.70	.43	1.46	1.31	.82	.44	.55	4.28	.78	2.60	1.91	2.87	21.15
"	"	Eccleston	3.48	.15	.94	1.17	1.15	.23	.55	3.51	.98	2.68	2.05	2.14	19.03
"	South Lancashire	Bolton (Bloomfield, Heaton) ..	6.54	.44	2.82	2.15	2.71	.52	2.24	6.02	1.45	2.66	3.73	5.56	36.84
"	Central	Burnley (Swinden)	8.63	.64	3.96	1.95	2.80	.32	2.35	6.10	2.16	3.21	2.42	7.06	41.60
"	"	Southport (Hesketh Park) ...	4.31	.38	2.79	1.42	1.45	.46	1.70	4.91	1.84	2.88	2.64	3.87	28.65
"	North	Lancaster (Greg Obsy.)	7.44	.27	4.31	1.69	3.43	.66	1.68	7.76	2.31	2.81	2.28	6.61	41.25
"	"	Broughton (Newsham House)	6.46	.29	3.71	1.85	2.23	.52	1.98	6.91	2.24	2.53	2.53	5.24	36.49
IX.	Yorkshire, W.R.	Settle (Gas Works)	8.77	.32	4.17	1.49	2.37	.50	1.79	5.87	2.43	2.17	2.77	7.43	40.08
"	"	Sheffield (Stumperlow Hall) 1	4.26	.29	2.66	1.40	1.53	.25	.70	5.20	1.00	2.50	2.08	4.95	26.82
"	"	Doncaster (Avenue Road)	2.01	.19	.58	1.49	1.57	.16	.55	4.34	.85	1.78	2.03	2.20	17.75
"	"	Meltham (Harewood Lodge) ..	7.79	.40	4.35	1.56	2.11	.23	1.54	5.52	1.22	2.59	2.37	8.31	37.99
"	"	Garforth (Manor Farm)	2.61	.17	.97	1.16	1.27	.11	.61	3.74	.72	1.61	2.35	2.45	17.77
"	"	Ilkley (Spence's Garden)	6.31	.30	2.18	1.54	2.10	.12	2.38	4.23	1.19	2.56	2.96	4.51	30.38
"	"	York (Mount Villas)	1.98	.19	.99	1.36	1.66	.31	.99	4.19	.75	2.12	2.21	2.54	19.29
"	"	Buckden	11.76	.16	5.96	1.95	2.95	.46	3.39	7.84	3.08	2.95	2.89	12.29	55.68
"	"	Knaresborough (Gram. School)	2.90	.11	2.11	1.58	1.61	.21	1.29	3.83	1.03	1.42	2.44	3.20	21.73
"	"	Birdsall Gardens	2.96	.20	1.40	1.53	1.77	.25	1.83	4.85	.89	1.89	2.24	2.07	21.88
"	"	Pattrington	2.18	.18	.92	.97	2.10	.25	.74	2.39	.61	1.07	2.50	2.09	16.00

TABLE II.—(con.). ENGLAND—(con.).

Div.	County.	Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
IX.	Yorkshire, E.R.	Holme-on-Spalding Moor	1.84	.15	1.09	1.22	1.70	.16	.77	3.55	.70	1.47	1.86	2.51	17.02
"	"	Beverley (East Riding Asylum)	2.57	.33	1.27	1.32	1.88	.32	.76	4.16	.49	1.49	2.19	2.36	19.14
"	"	Bridlington	2.64	.27	.87	1.07	2.37	.23	.94	3.39	.72	1.62	4.01	1.79	19.92
"	"	Masham Moor (Roundhill Res.)	7.47	.22	2.89	1.30	1.98	.96	3.28	6.04	1.81	1.95	2.59	6.12	36.61
"	"	Felixkirk (Mount St. John) . . .	2.47	.20	1.06	1.25	1.83	.38	1.40	4.10	1.32	1.37	2.06	2.14	19.58
"	"	Reeth (Arkengarthdale)	8.07	.29	4.01	1.44	1.62	.10	2.39	4.38	1.65	2.53	2.21	6.28	34.97
"	"	Bilsdale Priory	3.51	.33	1.97	1.61	1.87	.64	1.34	5.13	.85	1.80	2.47	2.36	23.88
"	"	Whitby (Mulgrave Castle)	3.67	.35	.87	1.22	1.15	.19	1.66	4.90	.82	2.05	2.88	1.09	20.85
"	"	Middlesbrough (Albert Park) . .	3.58	.18	.86	1.00	1.08	.36	1.66	5.46	.63	1.51	2.09	1.96	20.37
X.	Durham	Weardale W.W. (Waskerley) . . .	5.31	.12	1.77	1.40	1.91	.43	2.11	6.33	.99	2.16	2.82	3.16	28.51
"	"	Sunderland (W.Hendon Ho.) No. 6	3.60	.20	.84	1.23	1.86	1.27	1.79	3.64	.80	1.88	2.54	1.81	21.46
"	Northumberland	Corbridge (Howden Dene)	5.43	.08	1.02	.93	1.59	.53	1.53	5.76	1.55	2.29	2.15	2.44	25.30
"	"	Bellingham (High Green Manor)	6.68	.30	2.60	.75	1.53	.86	2.61	6.75	1.89	2.43	2.23	4.89	33.52
"	"	Morpeth (Bothalhaugh Lawn)	3.78	.24	.71	.85	1.65	.59	2.02	6.28	1.21	2.86	2.42	1.47	24.08
"	"	Fontburn R. (Tynemouth W.W.)	5.68	.27	1.34	.80	1.78	.69	1.90	6.78	2.30	2.64	2.74	2.39	29.31
"	"	Alnwick Castle	3.93	.18	1.10	1.12	1.60	1.03	2.57	4.89	1.40	4.07	2.45	1.59	25.93
"	"	Ilderton (Lilburn Tower Gdns.)	4.79	.17	1.66	.64	1.54	.53	2.65	5.07	1.44	2.69	2.05	1.62	24.85
"	Cumberland	Penrith (Briar Cottage)	5.86	.08	4.29	.82	2.53	.27	2.23	4.81	1.30	2.64	1.79	5.15	31.77
"	"	Mealsgate (Quarry Hill)	6.22	.28	5.37	.70	2.01	.45	2.36	5.71	1.86	3.53	1.84	4.91	35.24
"	"	Geltsdale	5.29	.20	5.14	1.00	1.75	.79	2.76	5.99	2.11	3.05	1.70	5.13	34.91
"	"	Carlisle (Scaleby Hall)	5.62	.21	3.16	1.04	1.90	.82	2.06	4.63	1.75	2.76	2.07	3.78	29.80
"	"	Whitehaven (Irish Street)	6.77	.27	5.70	2.40	3.27	.50	3.63	8.42	2.11	3.21	2.45	4.50	43.23
"	"	Silecroft (Old Chappels)	8.05	.39	5.80	2.07	3.55	.44	3.56	7.40	2.30	3.65	3.52	7.57	48.30
"	"	Kirkby Stephen (Redman Ho.)	8.94	.14	4.80	.78	2.90	.28	2.22	6.00	1.74	3.08	1.84	7.91	40.63
"	Westmorland . . .	Mickleden	32.21	1.36	26.40	3.89	9.43	.93	5.97	14.86	5.05	8.56	8.05	28.55	145.26
"	"	Kendal (Crosthwaite Vic.)	10.15	.16	7.00	1.50	3.87	.17	2.34	8.71	2.32	2.86	3.60	8.17	50.85
England. Mean of 156 Stations			3.82	.34	2.11	1.26	1.79	.40	.99	3.30	1.36	1.78	2.40	2.84	22.39

TABLE II.—(con.). MONMOUTH AND WALES.

Div.	County.	Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
XI.	Monmouth	Newport W.W. (Newchurch)	4.66	.21	3.37	.98	2.51	.18	1.07	4.99	2.83	1.76	3.44	3.33	29.33
"	"	Abergavenny (The Chain)	3.71	.13	2.79	.77	1.27	.47	.98	4.53	1.57	1.35	3.76	2.10	23.43
"	Glamorgan	Swansea (Victoria Park)	6.29	.13	4.16	1.13	1.85	.23	2.34	5.22	2.94	2.62	3.57	3.39	33.87
"	"	Bridgend (Highmead)	6.71	.24	3.56	1.51	2.35	.19	1.73	3.96	3.47	2.70	4.22	3.87	34.51
"	"	Treherbert (Tyn-y-waun)	15.63	.22	13.34	1.87	3.95	1.13	5.14	9.46	4.79	4.26	6.91	9.80	76.50
"	"	Cardiff (Roath Park)	5.24	.12	3.04	.83	2.33	.06	1.26	3.26	3.52	2.10	3.33	2.96	28.05
"	Carmarthen	Carmarthen (The Friary)	6.08	.22	4.66	1.74	2.34	.03	2.94	5.88	2.10	3.36	4.66	3.78	37.79
"	"	Llandoverly (Nantyalwygfaen)	7.33	.24	5.39	1.16	1.90	.21	3.60	7.13	2.20	2.93	3.01	5.39	40.49
"	Pembroke	St. David's	3.96	.44	3.20	.84	1.46	.00	2.41	5.26	1.06	1.42	3.78	1.60	25.43
"	"	Tenby	5.10	.16	3.83	1.04	1.91	.03	1.96	5.37	1.51	2.38	3.71	2.72	29.72
"	"	Haverfordwest (Portfield)	5.85	.41	4.81	.92	2.32	.01	2.28	7.31	1.87	2.06	5.02	2.79	35.65
"	"	Fishguard (Langton, Dwrbach)	7.01	.46	5.86	1.26	2.54	.03	3.11	7.58	1.72	2.45	4.33	3.57	39.92
"	Cardigan	Cardigan (County School)	3.82	.46	4.77	1.58	1.40	.00	2.59	6.24	.92	2.29	3.22	2.37	29.66
"	"	Lampeter (Falcondale)	5.74	.36	6.01	1.60	2.09	.27	2.43	7.44	1.86	2.99	3.86	4.46	39.11
"	"	Swansea W.W. (Cray Res.) No.1	12.06	.18	10.30	1.54	2.95	.48	4.20	8.50	3.11	3.37	5.09	7.29	59.07
"	Brecon	Glasbury (Gwernyfed)	3.42	.10	1.88	.85	.71	.15	.82	3.59	1.44	1.66	2.54	2.16	19.32
"	"	Birmingham W.W. (Cois-yr-hwch)	13.57	.70	11.11	2.82	4.33	1.13	5.17	10.37	3.79	3.77	6.61	11.75	75.12
"	"	Llandrindod Wells (Kimberley)	5.14	.26	3.80	1.29	1.43	.74	1.88	4.46	1.68	2.46	2.61	3.97	29.72
"	Radnor	Newtown (Penarth Weir)	4.15	.35	2.55	1.34	1.57	.63	1.40	4.86	1.21	2.01	2.31	2.99	25.37
"	Montgomery	Carno (Council School)	8.91	.21	5.01	2.20	1.93	.43	2.55	5.50	1.67	2.76	2.11	5.88	39.16
"	"	Llandysilio Rectory	3.30	.27	1.92	.92	1.26	.58	.71	3.64	.73	2.85	2.40	2.32	20.90
"	"	Lake Vyrnwy (Bk Cynon Isaf)	9.59	.24	5.70	2.10	2.88	.31	3.03	5.89	1.91	4.18	4.36	9.75	49.94
"	"	Mostyn Vicarage	4.47	.27	2.07	1.30	1.39	.12	1.55	4.29	1.29	2.65	2.22	3.34	24.96
"	Flint	Wrexham (Broughton Colliery)	4.11	.12	1.67	.98	1.59	.33	.83	3.77	.80	3.16	3.62	2.30	23.28
"	Denbigh	Gyffylliog (Fachlwyd Hall)	5.65	.58	2.71	1.32	1.88	.44	2.08	4.47	1.00	2.77	3.20	5.43	31.17
"	"	Pentre Foelas (Voelas Hall)	9.56	.46	6.50	1.72	2.70	.61	2.83	7.47	2.01	3.44	4.68	7.81	49.79
"	"	Dolgelly (Bryntirion)	8.59	.82	7.92	2.15	3.26	.54	2.59	9.45	2.45	5.89	5.04	7.25	55.95
"	Merioneth	Trawsfynydd Camp	13.70	.68	10.63	2.20	2.94	.50	3.71	9.85	2.08	6.01	4.69	8.47	65.46
"	"	Llandudno	4.63	.39	1.97	1.15	1.41	.21	1.51	3.94	1.89	2.49	2.39	3.06	25.04
"	Carnarvon	Bethesda (Penrhyn Quarries)	9.81	.95	8.97	2.79	3.42	.71	3.55	9.63	1.94	4.52	3.82	7.65	57.76

TABLE II.—(con.). MONMOUTH AND WALES—(con.).

Div.	County.	Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
XI.	Carnarvon	Abersoch.....	5.10	.60	4.53	1.50	2.22	.85	3.21	7.41	1.52	4.45	3.24	4.01	38.64
"	"	Snowdon (Teyrn)	26.81	1.67	24.47	5.44	9.52	1.70	12.41	21.60	5.13	8.55	7.65	22.55	147.50
"	Anglesey	Holyhead (Salt Island).....	5.32	.42	3.69	1.69	2.12	.18	3.78	5.00	2.14	2.84	2.10	3.60	32.88
"	"	Llanerchymedd(Llwydrth Esgb)	5.74	.51	4.27	1.88	2.48	.16	2.90	6.39	1.72	3.77	2.42	4.39	36.63
Wales. Mean of 34 Stations			7.38	.40	5.60	1.60	2.42	.40	2.78	6.57	2.11	3.18	3.82	5.24	41.50
England and Wales. Mean of 190 Stations			4.46	.35	2.73	1.32	1.91	.40	1.31	3.89	1.49	2.03	2.65	3.27	25.81

ISLANDS.

XI.	Isle of Man	Douglas (Borough Cemetery)...	5.39	.55	4.91	1.50	2.26	.23	4.37	6.17	1.99	3.08	4.91	4.43	39.79
"	"	Kirkmichael (Bishop's Court) .	4.35	.19	4.25	1.03	1.68	.44	3.77	4.38	1.33	2.56	4.31	2.79	31.26
"	Jersey	Millbrook (St. Helier W.W.) ..	2.27	.34	1.11	1.23	.75	1.56	1.04	.94	1.15	.64	2.94	2.69	16.66
"	Guernsey	St. Martin's (Les Blanchés) ..	3.00	.37	1.57	1.14	1.54	.34	.55	1.57	1.00	.81	2.47	2.50	16.86
"	Sark	Pointe Robert	2.62	.36	1.18	.94	1.06	.68	.82	1.56	.68	.65	2.10	2.04	14.69
"	Alderney	St. Anne's Rectory	2.67	.68	1.33	.60	.97	.47	.60	1.91	.92	.48	2.41	2.28	15.32

SCOTLAND.

XII.	Wigtownshire	Stoneykirk (Ardwell House) ...	5.40	.71	3.77	1.12	1.93	.28	4.20	4.43	1.82	4.28	4.24	3.59	35.77
"	"	Whithorn (Glasserton)	6.15	.52	4.63	1.10	1.67	.35	4.00	5.46	2.26	3.75	3.17	3.97	37.03
"	"	Kirkcowan (Craighlaw)	6.78	.75	5.08	1.89	2.93	1.02	5.92	5.30	2.58	4.84	5.17	6.08	48.34
"	Kirkcudbright	Dalry (Glendarroch)	10.49	.89	9.51	1.66	2.84	.29	5.26	7.76	2.71	4.56	4.45	8.30	58.72
"	"	Dalbeattie (Kirkennan)	8.35	.50	6.60	1.87	2.93	.37	4.46	7.81	2.37	2.62	2.37	5.52	45.77
"	Dumfriesshire	Dalton (Kirkwood)	7.62	.27	5.81	1.68	2.88	.85	6.10	7.01	2.36	3.31	2.88	6.24	47.01
"	"	Moffat (Craigielands)	9.71	.66	8.74	1.50	3.34	.52	5.90	8.11	1.68	3.40	2.68	8.85	55.09
"	"	Langholm (Ewes)	11.02	.59	7.82	1.35	3.02	.65	4.31	6.52	2.03	3.60	2.62	9.33	52.86
"	Roxburghshire	Jedburgh (Jedneuk)	4.66	.28	1.90	.69	1.51	.76	2.13	5.36	1.88	2.82	1.29	2.51	25.79
XIII.	Selkirkshire	Ettrick Manse	11.07	.71	9.87	1.41	3.04	.52	4.62	6.81	2.99	4.65	2.65	9.93	58.27
"	"	Galashiels(The Peel Clovenfords)	4.72	.45	4.50	.59	2.07	.48	3.63	5.04	1.70	3.97	2.11	3.61	32.87
"	Peeblesshire	Stobo Castle	7.62	.51	4.27	1.15	1.81	.55	3.32	6.74	1.71	4.14	1.52	5.31	38.65
"	Berwickshire	Earnsclough Burn (Blythe Rig)	4.92	.87	2.85	.73	1.75	.80	2.49	4.45	2.30	2.78	2.42	2.52	28.88
"	"	Marchmont House	5.97	.60	2.35	.68	2.02	.72	2.97	4.47	1.39	3.30	2.19	2.62	29.28
"	Haddingtonshire	North Berwick Reservoir	3.71	.30	1.78	.72	1.71	.57	2.19	4.17	1.39	3.43	1.96	2.02	23.95

TABLE II.—(con.). SCOTLAND—(con.).

Div.	County.	Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
XIII.	Midlothianshire .	5 Balerno (Cockburn Hill)	6.34	.89	3.43	.87	1.86	.43	2.12	5.07	2.39	4.09	1.32	5.61	34.42
"	"	5 Edinburgh (Royal Observatory)	3.98	.51	2.08	.61	1.64	.35	2.20	3.84	1.61	3.80	.99	3.13	24.74
XIV.	Lanarkshire . . .	4 Airdrie (Hillend Reservoir)	6.55	.65	4.94	1.43	2.17	.64	3.22	7.11	2.29	5.02	2.03	6.44	42.49
"	"	5 Leadhills	13.17	2.04	12.85	1.99	4.11	1.10	6.42	11.23	2.88	4.38	3.29	11.87	75.33
"	"	5 Strathaven (East Overton Ho.)	10.33	.86	6.84	1.35	1.73	.59	3.02	7.19	2.75	5.17	1.96	9.75	51.54
"	Ayrshire	3 Dalry (Blair Gardens)	7.08	1.60	5.50	2.48	3.42	.95	5.01	6.28	2.55	5.22	3.78	7.83	51.70
"	"	6 Maybole (Culzean Castle Gdns.)	7.88	.59	5.53	1.17	1.92	.58	4.51	4.76	1.66	4.35	2.37	6.85	42.17
"	"	8 Colmonell (Knockdolian)	6.70	.72	6.20	1.61	2.25	.83	4.74	4.37	1.91	4.55	3.89	6.44	44.21
"	"	13 New Cumnock (Ayr Sanator'm)	7.30	1.06	9.73	2.50	3.81	.83	3.80	7.91	2.23	3.89	2.76	8.45	54.27
"	Renfrewshire . .	2 Houston Manse	9.48	1.70	8.08	1.40	2.97	.54	4.98	6.42	2.04	6.06	3.57	8.36	55.60
XV.	Dumbartonshire	2 Cardross (Kilmaheew)	7.78	1.16	6.23	1.00	2.91	.50	4.59	4.95	1.80	4.53	2.98	6.92	45.35
"	Stirlingshire . .	1 Falkirk (Westbank Garden)	6.55	.53	5.37	1.18	2.05	.29	3.02	5.90	2.94	4.51	2.12	5.76	40.22
"	"	1 Kippen (Arngomery)	7.21	1.15	6.99	1.46	.56	.12	4.34	6.37	1.98	6.00	3.72	7.72	47.62
"	Buteshire	1 Rothesay (Ardencraig)	8.58	2.08	6.49	1.84	3.94	1.18	5.52	6.72	3.22	5.30	3.73	9.01	57.61
"	"	3 Arran (Dougargie Lodge)	6.93	1.24	5.12	1.41	3.48	.69	3.93	5.55	2.29	5.25	3.94	7.79	47.62
"	Argyllshire . . .	3 Morvern (Kingairloch)	18.96	5.39	16.63	5.33	6.03	2.28	7.56	7.87	7.20	12.18	5.12	21.24	115.79
"	"	5 Connel Ferry (Ach-na-cloich)	11.17	2.61	9.27	2.00	5.47	1.62	5.29	4.45	4.92	8.49	2.77	9.91	67.97
"	"	5 Glen Etive	24.48	7.64	21.17	2.24	6.15	1.49	4.91	4.92	6.21	12.71	2.14	14.57	108.63
"	"	6 Loch Awe (Ford)	11.75	3.60	10.32	3.10	4.65	1.82	5.60	6.66	4.61	7.98	4.37	13.57	78.03
"	"	6 Dalmally (Manse of Glenorchy)	16.38	5.79	12.35	2.40	6.42	2.32	6.76	6.78	6.46	9.02	3.40	18.96	97.04
"	"	9 Muasdale (Killean Manse)	5.87	1.36	3.99	1.28	2.44	.69	3.56	4.56	1.94	4.16	3.59	6.15	39.59
"	"	10 Skipness Castle	7.75	1.92	5.65	1.62	2.77	1.42	4.44	5.53	2.72	5.09	3.52	9.11	51.54
"	"	11 Ardishaig (Canal Office)	11.91	2.80	10.35	2.36	4.32	1.67	4.74	6.64	3.73	6.82	6.04	11.33	72.71
"	"	11 Ardinglas	13.89	3.53	12.16	2.69	5.47	1.15	5.36	6.66	4.76	7.27	3.90	11.87	78.71
"	"	12 Loch Eck (Benmore)	17.39	4.69	12.70	2.32	6.60	2.01	8.06	10.59	3.72	8.60	7.43	18.05	102.16
"	"	14 Islay (Ardbeg)	8.83	1.95	4.25	1.32	1.92	1.34	2.75	4.06	2.94	5.52	4.50	6.83	46.21
"	"	14 Jura (Ardfin)	10.11	2.78	6.90	2.60	3.27	1.31	4.31	4.82	2.90	6.26	5.28	8.33	58.87
"	"	14 Mull (Iona Manse)	7.66	2.34	6.43	2.55	2.58	1.43	3.70	4.03	2.49	4.48	4.17	7.22	49.08
"	"	14 Mull (Glencannel)	19.17	7.78	16.80	6.14	7.10	2.56	8.61	6.70	8.15	12.58	5.82	24.44	125.85
"	"	14 Mull (Quinish)	9.85	2.71	8.60	3.18	4.00	1.69	3.99	4.16	3.47	5.51	2.90	8.04	58.10
"	"	14 Tiree (Cornaimore)	6.09	3.10	5.56	1.88	2.57	.96	2.95	3.44	1.94	4.43	3.85	5.66	42.43
XVI.	Fifeshire	2 Kirkcaldy (Munro Street)	4.32	.34	2.96	.78	1.79	.25	2.57	3.93	1.23	3.59	1.35	3.27	26.38
"	"	3 Cupar (Rankellour)	3.62	.45	2.51	.68	1.26	.32	2.36	3.74	1.17	3.00	1.60	1.83	22.54

TABLE II.—(con.). SCOTLAND—(con.).

Div.	County.	Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
XVI.	Perthshire	Glengyle	17.80	2.90	16.20	2.40	7.55	1.00	6.90	8.10	4.05	9.40	4.70	17.60	98.60
"	"	Glendevon (Tormaukin)	8.15	.96	10.42	1.48	4.62	.29	4.16	7.43	2.01	5.64	3.31	7.60	56.07
"	"	Lochearnhead (Edenchip)	10.99	1.60	12.20	.98	4.66	.67	5.03	6.89	3.44	5.83	4.84	11.47	68.60
"	"	Crieff (Strathearn Hydro.)	5.21	.59	4.63	.97	2.56	.42	3.57	6.80	1.82	3.88	3.71	3.42	37.58
"	"	Aberfeldy (Dall Avon)	5.42	.44	5.64	.64	2.05	.52	3.02	4.45	1.60	2.60	2.93	4.78	34.09
"	"	Loch Rannoch (Dall)	10.05	1.50	7.14	.68	2.68	.50	2.46	4.06	2.15	3.17	2.33	8.65	45.37
"	"	Blair Atholl (Bruar Lodge) No.2	5.98	1.26	6.97	.93	3.46	.99	2.95	5.37	2.25	3.94	3.08	6.13	43.31
"	"	Coupar Angus (Public School)	3.11	.42	2.46	.92	1.82	.63	2.18	3.99	1.95	2.43	2.42	1.80	24.13
"	"	Kirkmichael (Ballintuin Ho.)	4.34	.81	4.42	1.10	2.94	.82	3.61	5.57	1.42	3.16	4.51	3.68	36.38
"	"	Arbroath (Muirheads Res.)	2.99	.61	2.41	1.25	2.46	1.21	1.00	3.51	1.46	1.71	2.58	.78	21.97
"	Forfarshire	Glen Prosen (Balnaboth Gdns.)	4.05	1.08	5.11	1.58	3.74	.61	3.45	4.55	1.58	2.87	4.88	3.81	37.31
XVII.	Kincardineshire	Fettercairn (Police Station)	2.06	.57	2.17	.97	2.01	.79	1.94	1.98	1.25	1.39	3.27	1.38	19.78
"	"	Crathes (Pinewood)	1.33	.52	2.28	1.75	1.34	.90	1.31	1.47	.69	1.25	3.06	1.05	16.95
"	Aberdeenshire	Glen Tanner (Aitnach)	4.22	.99	4.34	1.71	3.40	1.55	1.83	3.57	.94	1.27	3.59	2.06	29.47
"	"	Braemar (Derry Lodge)	5.42	.80	4.95	1.26	2.59	.98	1.75	3.85	1.62	2.15	2.05	5.83	33.25
"	"	Aberdeen (Cranford House)	1.39	1.13	2.28	1.73	1.18	1.12	1.69	1.96	1.09	1.62	2.03	1.64	18.86
"	"	Strathdon (Estate Office)	2.15	.71	1.21	1.54	2.17	1.64	2.04	2.37	1.05	1.54	2.70	2.75	21.87
"	"	Haddo House	1.53	.56	2.08	1.08	1.53	1.28	2.05	2.27	1.14	1.76	2.14	1.64	19.06
"	"	Peterhead (Forehill Works)	1.89	.71	1.92	1.28	1.83	1.08	1.65	1.67	1.34	1.83	2.65	1.94	19.79
"	"	Huntly (Cruchie)	1.68	.57	1.79	1.36	1.74	1.67	2.17	2.74	1.88	1.79	2.58	1.86	21.83
"	Banffshire	Banff (Duff House)	2.25	.63	1.79	.91	1.65	1.42	2.00	3.29	1.36	1.97	1.70	2.26	21.23
"	"	Gordon Castle	2.73	.45	2.04	.68	2.18	1.79	2.27	3.05	1.18	2.44	1.65	2.90	23.36
"	Morayshire	Grantown-on-Spey	3.13	.70	1.50	1.32	2.12	1.29	2.25	3.47	1.27	2.18	1.30	3.72	24.25
"	"	Knockando (Schoolhouse)	1.85	.37	1.33	1.15	2.82	1.62	2.26	2.73	1.36	2.08	2.09	2.61	22.27
"	"	Nairn (Achareidh)	3.03	.58	1.65	.51	2.95	.93	2.08	2.08	1.24	2.18	0.82	3.70	21.75
XVIII.	Inverness-shire	Cluny Castle	7.75	1.44	6.75	1.59	3.19	.97	2.67	4.16	2.65	4.11	1.82	7.63	44.73
"	"	Alvie Gardens	4.90	1.13	3.64	.94	1.84	1.09	2.88	2.66	1.88	2.69	1.30	5.45	30.40
"	"	Loch Ness (Foyers)	9.14	1.26	6.22	.78	3.56	.73	1.89	2.99	2.31	3.81	1.32	7.33	41.34
"	"	Loch Quoich (Glenquoich)	26.32	7.89	18.25	3.60	6.83	2.85	8.91	5.77	9.89	14.62	2.60	25.60	133.13
"	"	Invergarry Schoolhouse	14.02	2.59	11.61	1.39	3.89	.70	3.90	3.69	3.54	9.36	1.19	12.04	67.92
"	"	Arisaig House	9.39	4.31	7.89	3.06	5.14	2.87	4.97	4.14	6.01	8.67	2.13	12.64	71.22
"	"	Glenleven (Corrour Station) No.5	16.32	4.55	11.10	1.60	6.92	.60	4.78	6.37	5.05	8.56	3.95	16.15	85.95
"	"	Fort William (Atholl Bank)	16.85	3.79	14.94	2.27	6.06	1.25	5.71	5.12	5.49	10.78	2.85	15.40	90.51

TABLE II.—(con.). IRELAND—(con.)

Div.	County.	Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
XX.	Co. Kerry	Ballybunion (Wireless Station)	4.45	2.52	3.74	1.04	2.20	.64	3.17	4.83	1.56	4.18	4.30	3.58	36.21
"	"	Cahirveen Water Works	6.85	3.15	7.06	1.42	3.73	.28	5.00	7.21	1.92	5.19	8.60	5.27	55.68
"	"	Killarney (District Asylum)	5.28	3.32	5.84	.93	2.27	.06	3.79	5.11	1.88	3.79	4.35	3.89	40.51
"	"	Killorglin (Callinafercy)	4.85	3.90	5.28	2.14	2.07	.10	3.83	6.90	2.64	4.00	5.01	4.21	44.93
"	"	Darrynane Abbey	5.12	3.83	5.56	1.68	2.89	.13	3.96	7.28	1.99	4.69	6.22	2.68	46.03
"	"	Kenmare (Dromore Castle)	7.46	3.63	7.33	1.64	2.87	.12	5.28	7.00	2.44	3.73	6.64	5.72	53.86
"	"	Waterford	3.36	2.34	3.31	.57	2.27	.08	4.62	5.08	1.26	3.41	5.53	1.90	33.73
"	"	Portlaw (Curraghmore Gdns.)	2.93	3.18	3.50	.28	2.70	.13	5.25	3.73	2.38	1.02	5.31	2.21	32.62
"	"	Nenagh (Traverston)	5.55	1.16	3.20	1.00	2.92	.55	4.83	4.34	1.41	2.28	4.04	4.07	35.41
"	"	Nenagh (Castle Lough)	5.22	1.86	4.06	1.11	2.09	.76	3.78	3.91	1.72	2.07	4.04	4.40	35.02
"	"	Clogheen	3.78	2.50	3.77	.79	2.96	.29	3.94	4.70	1.34	3.37	3.89	2.67	34.00
"	"	Clonmel (Bruce Villa)	2.79	2.03	3.76	.56	2.60	1.07	4.85	4.38	1.47	2.39	4.73	2.22	32.85
"	"	Cashel (Ballinamona)	3.73	1.72	2.73	.68	1.67	.22	5.26	4.98	1.61	2.82	4.33	2.19	31.94
"	"	Roscrea (Timoney Park)	4.34	1.15	2.67	.86	1.36	1.03	4.91	3.67	1.27	2.06	3.27	3.28	29.87
"	"	Knocklong (Kilfrush)	3.61	1.45	2.77	1.08	1.60	.68	3.72	4.06	1.39	2.47	3.81	2.87	29.51
"	"	Foynes (National School)	4.66	2.82	3.32	.92	2.01	.69	4.27	4.97	1.73	2.93	3.56	3.55	35.43
"	"	Limerick (O'Connell Street)	3.66	3.94	3.03	.96	1.87	1.58	4.45	4.21	1.38	2.54	4.05	3.71	35.38
"	"	Inagh (Mount Callan)	8.81	2.73	6.59	1.77	4.11	.81	5.55	8.66	3.54	6.19	6.08	7.52	62.36
"	"	Ennistymon House	5.56	2.52	6.14	1.21	2.78	.64	3.72	5.53	2.91	5.39	4.96	5.43	46.79
"	"	Newmarket-on-Fergus	4.99	3.17	3.29	1.06	2.34	.54	5.01	4.73	2.04	2.70	4.21	3.88	37.96
XXI.	"	Foulkesmill (Longraigue)	3.45	1.76	3.58	.81	2.34	.07	3.40	5.69	1.04	3.05	5.77	1.82	32.78
"	"	Enniscorthy (Woodbrook)	4.54	2.39	4.10	1.12	2.92	.22	5.29	7.15	1.59	3.85	5.81	2.54	41.52
"	"	Gorey (Courtown House)	2.68	1.11	3.16	.56	1.83	.74	3.97	5.08	1.01	3.67	4.33	1.38	29.52
"	"	Kilkenny (Lavistown House)	3.22	1.91	2.14	.47	1.58	.25	3.39	4.15	1.29	2.70	3.57	1.28	25.95
"	"	Rathdrum (Avondale)	3.90	1.43	2.59	1.03	2.33	.79	3.14	4.74	1.49	3.87	6.41	2.79	34.51
"	"	Annacarter Schoolhouse	4.03	1.25	3.13	1.03	2.30	.78	4.47	3.99	1.74	2.83	5.45	3.92	34.92
"	"	Carlow (Browne's Hill)	4.95	1.99	3.16	.44	2.29	1.80	3.51	4.95	1.33	2.57	3.51	2.62	33.12
"	"	Hacketstown Rectory	3.66	1.74	2.85	.92	2.01	1.01	2.93	5.03	1.44	3.08	4.63	2.22	31.52
"	"	Abbey Leix (Blandford)	3.93	1.12	3.21	.75	2.25	3.69	4.51	4.78	1.65	2.35	3.91	3.33	36.38
"	Queen's County.	Mountmellick	4.27	.96	2.91	1.01	2.34	1.01	6.65	3.26	1.62	2.36	3.50	4.41	34.30
"	"	Birr Castle	3.70	.92	2.83	.79	2.01	.76	4.01	3.36	2.20	2.64	2.82	4.21	30.25
"	King's County.	Straffan House	3.57	1.19	3.29	.71	2.26	.21	4.12	3.70	1.57	3.17	3.26	3.35	30.40
"	Co. Kildare	Howth Castle	2.40	.74	1.83	.64	2.16	.16	4.01	3.04	1.29	1.99	2.73	2.07	23.06

TABLE II.—(con.). IRELAND—(con.).

Div.	County.	Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
XXI.	Co. Dublin	Balbriggan (Ardgillan).....	3.33	.76	2.34	.78	2.36	.11	4.05	3.61	1.54	2.54	3.73	2.37	27.52
"	"	Dunboyne (Stirling, Clonee) ..	4.01	1.33	3.03	.85	2.98	.19	4.58	3.82	1.63	3.64	3.12	3.08	32.26
"	"	Summerhill House	4.22	1.13	2.98	1.04	2.20	.40	4.50	3.58	1.72	2.43	2.86	3.34	30.40
"	"	Kells (Headfort)	3.92	1.02	3.19	.77	2.04	.23	3.42	3.63	1.73	2.88	2.95	3.21	28.99
"	"	Moate (Coolatore)	3.54	.68	2.80	1.02	2.49	.20	3.71	3.14	1.29	2.66	3.93	3.76	29.22
"	"	Mullingar (Belvedere)	3.83	.34	2.73	1.06	2.26	.20	3.78	3.64	1.08	2.31	3.71	3.68	28.62
"	"	Castlepollard (Pakenham Hall)	3.72	.88	3.97	.87	2.37	.22	3.62	3.73	1.43	2.90	4.30	3.58	31.59
"	"	Dundalk (Aughneskea Reservoir)	4.29	2.17	2.94	1.14	2.99	.31	3.98	4.92	1.50	3.21	4.08	3.53	35.06
"	"	Greenore	3.31	.70	2.77	.86	2.41	.11	3.14	4.29	1.77	3.03	3.20	2.99	28.58
"	"	Ballymahon (New Castle)	3.02	.56	2.69	1.06	1.72	.30	3.58	3.68	1.38	3.02	3.80	3.53	28.34
"	"	Castle Forbes Gardens	4.05	.67	2.65	1.12	2.15	.31	3.87	3.38	1.40	2.66	3.91	3.79	29.96
XXII.	"	Galway (Waterdale)	5.48	1.88	4.65	1.04	2.07	.50	3.99	5.04	1.99	4.70	2.72	5.14	39.20
"	"	Ballynahinch Castle	6.87	2.35	7.03	2.02	3.66	.83	4.00	6.09	1.63	7.36	7.23	7.56	56.63
"	"	Tuam (Gardenfield)	4.86	1.85	3.55	1.96	1.65	.44	4.30	4.07	1.62	5.05	3.83	2.86	36.04
"	"	Woodlawn	4.27	1.49	3.69	1.19	2.09	.39	4.00	3.82	1.91	2.97	3.67	4.56	34.05
"	"	Killimor (Ramore)	4.43	1.81	3.39	1.10	1.39	2.34	4.85	3.96	1.75	2.29	4.15	4.61	36.07
"	"	Strokestown (Castlenode)	3.19	.49	2.43	1.11	1.62	.16	3.83	2.49	.69	1.64	4.29	3.32	25.26
"	"	Castlebar House	5.28	2.08	5.83	2.29	2.23	.85	2.75	4.03	1.45	6.44	4.47	4.71	42.41
"	"	Swinford Rectory	5.15	1.81	5.06	1.58	2.08	.41	3.50	3.19	1.40	4.23	3.64	4.02	36.07
"	"	Crossmolina (Enniscoe)	7.53	2.57	6.62	2.48	2.58	.64	3.48	4.65	1.49	7.68	4.46	5.97	50.15
"	"	Blacksod Point	5.79	1.38	6.77	1.55	2.45	.52	1.70	4.05	1.67	9.92	3.94	5.91	45.65
"	"	Westport House	7.40	2.59	6.27	1.66	1.48	.68	2.51	3.79	1.83	4.83	4.63	5.36	43.03
"	"	Mallarany	9.18	2.17	8.94	2.70	3.85	.77	4.55	6.60	2.74	11.05	5.16	8.36	66.07
"	"	Aasleagh House	13.27	2.97	12.15	3.74	5.26	1.65	5.42	7.89	2.61	11.22	8.43	8.81	83.42
"	"	Cong (The Glebe)	7.24	1.98	5.57	2.20	2.00	.38	4.40	3.54	1.49	6.27	4.49	4.92	44.48
"	"	Ballinrobe (Cranmore)	6.28	2.06	5.33	1.51	1.99	.45	4.12	3.61	1.19	6.17	3.96	5.30	41.97
"	"	Collooney (Markree Obsy.)	4.96	1.94	4.12	1.77	3.12	.49	5.13	6.04	1.42	3.54	3.75	4.61	40.89
"	"	Sligo (Ard-na-veagh)	4.45	2.15	3.76	1.75	2.40	.49	3.08	4.95	1.31	3.61	3.48	5.18	36.61
"	"	Drumshanbo (Lough Allen Sluices)	3.79	.62	2.70	.96	1.90	.29	3.58	2.43	.97	2.97	3.29	2.88	26.38
XXIII.	"	Belturbet (Cloverhill)	3.85	.53	2.58	.87	1.85	.44	3.31	3.61	1.39	2.48	2.95	3.18	27.04
"	"	Enniskillen (Portora)	4.89	.73	3.50	1.03	1.90	.35	4.83	3.68	1.40	4.10	3.85	4.79	35.05
"	"	Belleek (Heronshaw)	5.70	1.30	4.31	1.64	1.97	.66	3.90	5.32	1.73	4.60	3.44	5.48	40.05

TABLE II.—(con.). IRELAND—(con.).

Div.	County.	Station.	Jan.	Feb.	March.	April.	May	June	July	Aug.	Sept.	Ot.	Nov.	Dec.	Total.
XXIII	Co. Monaghan ..	Monaghan (Workhouse)	3.54	.42	2.42	.83	1.42	.00	2.64	3.35	1.07	3.21	2.17	3.41	24.48
"	" Armagh	Lurgan (Belle Vue)	4.51	.77	2.23	1.07	1.81	.23	3.89	3.20	1.10	2.75	2.49	2.79	26.84
"	" "	Armagh Observatory	4.34	.98	2.60	.91	2.06	.29	3.66	3.53	1.23	2.79	2.81	3.29	28.49
"	" Down	Newry (Bridge Street House) ..	4.31	1.08	3.46	1.03	2.37	.22	3.80	3.44	1.51	2.72	3.06	3.32	30.32
"	" "	Seaford	5.05	.84	3.43	1.47	2.67	.44	5.38	4.00	1.69	3.36	5.95	2.99	37.27
"	" "	Donaghadee	4.36	.48	2.99	.93	1.90	.30	3.55	3.38	1.82	3.41	4.94	2.14	30.20
"	" "	Belfast (Queen's University)	5.88	.67	2.55	1.03	1.77	.16	3.75	4.29	1.81	4.63	3.87	3.03	33.44
"	" Antrim	Larne (Sallagh Springs)	7.26	.87	3.89	1.44	3.11	.28	5.58	4.41	1.81	4.33	6.03	6.47	45.48
"	" "	Glenarm Castle	7.93	.70	3.76	1.71	2.45	.28	3.26	4.01	1.69	4.38	5.81	4.27	40.25
"	" "	Antrim (Ardnaveigh)	4.41	.79	1.98	.89	2.15	.40	3.45	2.94	1.08	3.04	3.25	3.13	27.51
"	" "	Ballymena (Harryville)	5.45	1.44	3.70	1.47	3.52	.67	4.63	4.02	1.53	3.49	4.14	4.33	38.39
"	" Londonderry	Londonderry (Dunruadh)	4.16	1.23	4.33	1.58	1.98	.65	3.35	3.87	1.70	3.85	3.26	5.68	35.64
"	" "	Garvagh (Woodbank House) ..	4.56	1.64	4.37	1.61	3.09	.48	3.93	4.18	1.59	4.26	4.71	5.59	40.01
"	" "	Glenedra Lodge	7.33	1.99	6.13	2.58	3.60	.43	4.42	4.94	2.01	4.75	4.92	7.99	51.09
"	" "	Limavady (Drenagh)	3.87	.95	3.02	1.51	2.07	.30	3.16	3.57	1.27	4.37	2.52	5.11	31.72
"	" Tyrone	Tullyhogue (Rockdale House)	5.30	1.51	3.29	1.22	2.44	.28	4.10	4.23	1.57	3.70	4.40	4.67	36.71
"	" "	Omagh (Edenfel)	5.81	1.01	5.11	1.72	2.22	.58	4.28	3.58	1.59	4.35	3.90	6.00	40.15
"	" "	Sion Mills (Sion House)	4.64	1.18	4.92	1.54	2.02	.30	3.78	3.69	1.42	3.98	3.24	5.73	36.44
"	" Donegal	Malin Head	4.01	1.01	2.99	1.37	1.76	.60	2.02	2.92	1.83	3.07	3.07	4.35	29.00
"	" "	Letterkenny (District Asylum)	5.66	1.62	5.78	1.64	2.47	.42	3.11	4.86	1.86	4.42	4.86	6.84	43.54
"	" "	Milford (The Manse)	4.82	1.67	5.11	1.94	2.20	.57	2.59	4.79	1.73	4.19	4.32	6.03	39.96
"	" "	Dunfanaghy (St. Helens)	5.43	1.69	6.58	1.88	2.00	.83	2.67	4.22	1.91	4.01	4.45	6.98	42.65
"	" "	Narin (Kiltoorish)	6.10	2.89	6.69	1.55	2.58	.52	3.41	3.95	1.99	5.68	4.69	5.85	45.90
"	" "	Killybegs (Rockmount)	6.27	2.90	6.83	2.21	2.79	1.23	4.34	5.70	2.47	8.19	5.08	9.85	57.86
Ireland. Mean of 99 Stations			4.57	1.69	3.87	1.13	2.20	.50	3.78	4.19	1.60	3.66	4.17	3.87	35.28
British Isles. Mean of 395 Stations			5.36	1.07	4.02	1.39	2.31	.62	2.54	4.18	1.87	3.18	3.11	4.54	34.19

TABLE III.—*Monthly Rainfall in 1921; the Average, 1881–1915, being taken as 100.*

Station.	County.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
St. Pancras, Camden Square....	London	133	11	65	84	59	18	5	75	137	24	85	47
Tenterden, View Tower.....	Kent	94	32	73	91	99	0	14	56	29	11	63	63
Margate, Cliftonville	"	75	42	51	52	46	7	4	75	30	25	58	39
Edenbridge, Falconhurst.....	"	115	49	97	66	104	7	20	86	42	38	48	57
Compton, Compton House.....	Sussex	151	14	67	58	93	3	14	88	34	14	74	60
Brighton, Old Steyne.....	"	113	28	66	53	95	1	17	73	27	28	65	76
Ventnor, Royal National Hospital	Hampshire	139	17	59	74	69	10	14	141	23	41	71	69
Fordingbridge, Oaklands.....	"	138	16	66	67	73	14	29	62	42	21	66	51
Sherborne St. John Rectory	"	119	15	68	36	70	10	6	75	50	28	64	53
Royston, Therfield Rectory	"	133	16	57	88	54	43	11	35	65	32	70	51
High Wycombe.....	Hertfordshire	134	15	54	81	68	14	11	82	134	39	68	52
Oxford, Magdalen College.....	Buckinghamshire	134	35	56	59	63	16	9	67	99	42	91	55
Wellingborough, Swanspool	Oxfordshire	130	19	43	60	59	18	9	90	57	63	73	68
March	Northamptonshire.....	129	33	70	116	46	37	10	59	54	87	56	62
Chelmsford, High Street.....	Cambridgeshire	135	15	73	134	83	9	15	82	75	50	75	60
Hawkedon Rectory	Essex.....	113	9	46	114	60	14	16	68	75	48	68	60
Beccles, Geldeston	Suffolk	100	18	44	73	62	12	20	51	73	21	69	70
Worstead, Dilham	Norfolk	97	31	60	88	61	22	24	77	57	62	105	95
Swaffham.....	"	127	20	64	106	64	24	68	55	54	57	58	56
Bishops Cannings.....	"	160	19	72	38	103	12	20	56	85	38	78	53
Evershot, Melbury House.....	Wiltshire.....	128	7	81	51	132	25	26	68	34	23	62	37
Ashburton, Druid House.....	Dorsetshire	110	6	93	27	135	4	30	72	39	33	98	42
Cullompton	Devonshire	85	9	82	31	106	49	28	55	44	20	127	55
Barnstaple, N. Dev. Athenæum..	"	158	12	102	67	72	14	65	73	77	34	77	73
Penzance, Morrab Garden	Cornwall	130	11	119	40	100	8	50	146	24	30	122	48
St. Austell, Trevarna	"	113	15	100	38	110	4	43	76	35	26	113	48
Altarnon Vicarage	"	100	5	102	41	80	1	48	94	50	30	83	65
East Harptree, Sherborne Res...	Somerset	143	12	100	52	109	13	29	65	102	28	58	61
Cirencester, Dollarward House..	Gloucester	136	19	93	68	97	13	22	73	94	52	100	56
Kington, Gravel Hill.....	Hereford	84	7	82	35	49	12	29	92	48	46	74	35
Ledbury, Orchardleigh	"	138	10	73	61	62	37	18	116	69	48	84	59
Church Stretton, Wolstaston	Shropshire	130	17	111	62	79	26	47	145	41	53	103	88

TABLE III.—*Monthly Rainfall in 1921; the Average, 1881-1915, being taken as 100—(con.).*

Station.	County.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Market Drayton, Old Springs.....	Stafford.....	112	21	56	88	60	12	26	120	33	89	78	79
Farnborough	Warwick	103	16	73	80	110	44	15	102	64	42	79	76
Birmingham, Edgbaston.....	"	115	10	64	59	65	28	28	140	59	65	74	77
Belvoir Castle Gardens.....	Leicester	110	20	54	64	92	38	23	133	47	57	56	59
Boston, Black Sluice, Skirbeck ..	Lincoln	121	30	53	76	64	30	19	125	39	76	65	63
Lincoln, Skellingthorpe Hall.....	"	113	15	48	79	99	21	19	106	55	70	88	79
Mickleover, Clyde House	Derby	130	21	71	68	90	21	28	176	65	115	83	77
Chelford, Astle Hall.....	Cheshire	167	24	86	68	54	23	26	141	39	54	71	116
Bury, Gin Hall No. 1	S. Lancashire.....	187	16	117	82	107	14	50	143	49	68	83	154
Stonyhurst College.....	C. "	201	19	136	76	109	21	89	142	75	104	57	162
Southport, Hesketh Park.....	C. "	169	18	126	76	69	22	60	142	67	81	83	119
Cartmel, Holker Hall	N. Lancashire	225	9	134	59	107	10	65	179	77	68	64	128
Rotherham, Moorgate Grange....	W. R. Yorks.....	89	11	50	44	51	17	10	185	37	52	86	107
Bradford, Lister Park.....	"	203	6	83	64	69	2	54	152	55	57	80	147
York, Museum Gardens	"	88	9	49	80	76	14	37	145	44	62	79	81
Hull, Pearson Park.....	E. R. "	116	18	56	65	127	13	25	97	35	41	79	95
Leyburn, Bolton Hall.....	N. R. "	223	3	71	51	55	18	110	128	78	53	74	132
Felixkirk, Mount St. John.....	"	122	11	48	71	89	18	51	141	70	47	86	88
Scarborough	"	115	9	29	71	86	13	56	149	65	56	106	72
Middlesbrough, Albert Park	"	224	14	55	73	56	19	65	199	38	50	99	101
Barnard Castle, County School ..	Durham	214	3	59	35	58	17	65	135	39	59	80	138
Newcastle, Town Moor.....	Northumberland ..	216	13	51	82	77	41	62	227	57	68	104	65
Hallington, Fawcett, Newc. WW ..	"	243	6	60	45	56	34	43	236	98	67	76	107
Alnwick Castle	"	241	13	61	79	80	52	107	178	78	135	115	73
Carlisle, Spital Cemetery.....	Cumberland	211	7	161	46	59	27	79	139	85	80	59	130
Borrowdale, Seathwaite	"	226	14	233	36	88	19	83	156	40	64	42	167
Appleby, Castle Bank.....	Westmorland.....	163	3	161	41	109	14	71	145	64	64	59	112
Abergavenny, Larchfield.....	Monmouth	115	5	92	31	52	21	36	171	72	35	91	39
Ystalyfera, Wern House.....	Glamorgan	185	4	151	46	88	24	88	135	94	35	72	85
Cardiff, Ely Pumping Station....	"	135	2	100	33	78	2	32	75	113	43	81	53
Carmarthen, The Friary.....	Carmarthen	139	6	123	63	85	1	84	126	61	59	94	66
Haverfordwest, Grammar School ..	Pembroke	131	9	150	39	87	0	72	172	51	42	106	53

TABLE III.—*Monthly Rainfall in 1921; the Average, 1881–1915, being taken as 100—(con.).*

Station.	County.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Strata Florida, Hafod.....	Cardigan	152	27	126	84	86	24	61	155	64	49	62	102
Lake Vyrnwy, Bank Cynon Isaf..	Montgomery.....	160	5	124	67	91	10	88	116	53	72	76	138
Northop, Soughton Hall.....	Flint	146	23	52	67	71	15	40	91	36	69	81	95
Dolgelly, Bryntirion.....	Merioneth	151	18	161	59	98	16	61	168	57	97	81	106
Llandudno	Carnarvon	179	19	91	64	74	10	63	130	83	69	77	99
Llandwrog, Glynllivon Park.....	"	191	11	170	80	97	23	94	205	41	80	53	75
Holyhead, Salt Island.....	Anglesey	183	17	141	81	108	8	145	157	80	71	51	87
Douglas, Borough Cemetery.....	Isle of Man.....	161	17	166	61	90	10	143	162	61	68	104	90
Stoneykirk, Ardwell House.....	Wigtownshire	183	27	145	53	77	12	145	118	65	118	107	88
Dalry, Glendaroch	Kirkcudbrightshire	189	18	211	54	90	10	147	162	74	87	74	117
Auchencairn, Torr House.....	"	217	17	200	75	106	15	122	170	67	63	46	114
Durrisdeer, Drumlanrig Gardens.	Dumfriesshire	194	31	195	60	108	20	97	186	41	97	63	139
Hawick, Branxholme.....	Roxburghshire	195	13	142	34	91	25	97	168	77	98	55	128
Marchmont House	Berwickshire	265	29	89	34	82	31	97	135	58	86	73	93
North Berwick Reservoir	Haddingtonshire ..	216	19	95	51	86	34	85	132	67	116	87	94
Moorfoot Hills, Gladhouse Res.,..	Midlothianshire ..	221	43	111	54	76	30	93	154	74	115	44	125
Airdrie, Hillend Reservoir	Lanarkshire	198	24	173	72	87	126	98	180	75	140	54	164
Kilmarnock, North Craig Res. ..	Ayrshire	223	70	199	58	107	48	114	147	76	121	55	192
Girvan, Pinmore.....	"	173	23	192	60	86	32	130	121	72	100	74	137
Shaw's W.W., Loch Thom	Renfrewshire	205	53	236	65	111	27	124	130	66	119	61	164
Lochgilphead, Poltalloch	Argyllshire	220	52	233	64	135	52	115	121	76	117	80	173
Skipness Castle.....	"	164	48	147	53	96	53	132	120	65	114	66	163
Inveraray Castle Gardens.....	"	250	41	230	70	149	50	84	116	105	168	50	181
Islay, Eallabus	"	189	64	171	84	103	54	113	110	61	110	80	149
Mull, Quinish.....	"	176	57	194	96	131	57	99	85	72	98	47	113
Loch Leven Sluice.....	Kinross-shire	152	12	118	57	68	8	88	164	67	103	66	94
Balquhiddy, Stronvar	Perthshire	150	25	201	28	123	16	111	97	68	62	47	109
Crief, Strathearn Hydro.....	"	129	17	145	44	103	16	120	161	64	99	85	76
Blair Atholl.....	"	136	28	190	32	105	31	106	123	75	78	73	134
Dundee, Eastern Necropolis.....	Forfarshire.....	133	24	107	61	90	34	78	114	82	91	86	55
Montrose, Sunnyside Asylum.....	"	85	24	110	72	81	60	70	66	62	52	95	42
Braemar, Bank.....	Aberdeenshire	113	20	131	35	108	33	89	104	47	56	68	85

TABLE III.—*Monthly Rainfall in 1921; the Average 1881-1915, being taken as 100—(con.).*

Station.	County.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Logie Coldstone School.....	Aberdeenshire	67	21	62	63	117	63	66	73	41	36	78	67
Aberdeen, Cranford House.....	"	58	49	88	84	48	62	57	68	47	50	63	47
New Deer Schoolhouse.....	"	71	45	94	78	89	87	51	59	47	39	82	69
Gordon Castle.....	Morayshire	135	23	88	39	103	88	71	96	47	77	57	108
Grantown-on-Spey	"	129	33	57	67	91	57	73	108	51	73	43	137
Loch Quoich, Glenquoich	Inverness-shire	191	76	188	55	125	58	139	70	114	146	21	175
Inverness, High School	"	197	27	101	39	137	57	90	133	90	87	42	142
Arisaig House.....	"	151	87	168	85	149	88	100	71	99	147	32	174
Fort William, Atholl Bank	"	175	50	218	51	152	35	118	83	87	151	35	152
Alness, Ardross Castle.....	Ross-shire.....	161	27	116	63	125	37	97	75	53	75	41	145
Loch Torridon, Bendamph.....	"	181	47	218	75	108	78	91	70	77	129	30	147
Glencarron Lodge.....	"	175	93	157	52	104	59	84	72	91	132	30	178
Stornoway	"	158	57	163	83	118	76	106	83	117	92	55	139
Dunrobin Castle.....	Sutherlandshire ..	156	32	90	48	118	56	84	75	80	87	61	171
Tongue Manse.....	"	134	38	104	53	138	86	83	101	145	95	47	131
Melvich Schoolhouse	"	138	32	66	45	112	83	77	90	142	107	57	161
Loch More, Achfary.....	"	201	96	188	102	108	116	120	82	151	144	34	183
Wick.....	Caithness-shire.....	115	50	70	52	82	62	92	68	127	78	62	134
Pomona, Deerness	Orkney	159	71	116	72	113	106	109	98	131	102	74	181
Dunmanway, The Rectory.....	Co. Cork	102	64	125	28	89	2	138	114	67	85	130	55
Glanmire, Lota Lodge, No. 1.....	"	68	62	103	25	73	1	140	110	43	74	121	41
Mallow, Longueville	"	80	76	101	32	71	3	179	107	49	72	108	54
Killarney, District Asylum.....	" Kerry	89	64	124	28	74	2	114	116	53	71	78	53
Darrynane Abbey.....	"	102	83	136	49	97	4	104	167	56	93	122	46
Valencia, Glanleam	"	110	51	161	33	97	3	106	118	37	81	146	57
Waterford, Brook Lodge.....	" Waterford	91	72	120	22	98	3	143	133	45	87	146	41
Nenagh, Castle Lough.....	" Tipperary	132	60	131	44	85	31	120	99	61	61	100	95
Cahir Abbey	"	93	52	107	32	92	6	169	144	51	74	98	64
Foynes, Coolnanes	" Limerick	127	91	123	37	88	23	140	129	63	78	90	79
Ennistymon House	" Clare	132	74	181	44	99	21	99	107	76	123	107	104
Gorey, Courtown House.....	" Wexford	86	40	137	26	82	30	135	153	41	104	124	36
Shillelagh, Coolattin Gardens....	" Wicklow	91	49	126	21	77	19	113	124	40	88	128	45

TABLE III.—*Monthly Rainfall in 1921, the Average, 1881–1915, being taken as 100—(con.).*

Station.	County.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Abbey Leix, Blandsfort.....	Queen's County ..	120	42	123	29	93	142	173	121	61	67	117	90
Birr Castle.....	King's County	131	40	118	37	90	33	136	88	96	91	91	128
Straffan House.....	Co. Kildare	139	55	142	36	102	9	146	98	70	112	104	110
Balbriggan, Ardgillan, No. 1	" Dublin	145	39	116	39	113	5	149	106	75	94	130	82
Kells, Headfort.....	" Meath	124	38	116	31	76	9	108	87	65	86	87	84
Mullingar, Belvedere	" Westmeath ..	119	12	101	45	92	8	119	87	40	74	109	100
Greenore	" Louth	132	30	120	39	105	5	110	122	76	107	105	91
Tuam, Gardenfield.....	" Galway	119	52	103	76	57	16	125	91	49	127	84	56
Woodlawn	"	112	50	118	49	77	14	115	83	62	80	92	102
Strokestown, Castlenode.....	" Roscommon ..	102	18	88	50	67	7	137	66	25	54	126	89
Crossmolina, Enniscroe.....	" Mayo	144	58	147	79	79	21	96	103	38	148	76	91
Blacksod Point.....	"	114	34	165	53	87	19	54	88	43	199	76	97
Ballinrobe, Cranmore	"	127	50	137	53	65	15	123	82	32	137	80	89
Collooney Markree Observatory ..	" Sligo	126	55	119	67	111	16	148	139	42	86	90	97
Belturbet, Cloverhill	" Cavan	129	20	93	38	74	18	106	97	56	85	95	86
Armagh Observatory.....	" Armagh	172	44	111	43	87	12	127	98	50	103	99	105
Seaford	" Down	160	28	117	56	102	16	169	107	61	94	157	97
Belfast, Queen's University.....	" Antrim	205	27	99	46	77	6	125	116	70	141	116	82
Ballymena, Harryville.....	"	147	44	117	56	123	23	135	94	49	95	102	98
Londonderry, Creggan Reservoir.	" Londonderry ..	125	48	132	77	94	27	97	102	56	111	85	133
Limavady, Drenagh.....	"	121	33	103	67	90	12	101	93	43	127	68	136
Omagh, Edenfel	" Tyrone	164	34	163	65	86	21	126	84	52	119	103	142
Dunfanaghy, St. Helens.....	" Donegal	134	48	180	70	77	29	77	96	55	91	94	135
Killybegs, Rockmount	"	112	58	134	61	77	32	99	102	54	146	81	135
England	(mean of 59 stations)	142	16	62	64	80	19	36	112	58	52	78	79
Wales	" 12 "	156	12	123	59	85	13	72	133	67	60	77	83
England and Wales	" 72 "	144	15	73	63	81	18	44	116	60	53	78	80
Scotland	" 43 "	166	40	147	60	105	49	99	111	79	99	60	130
Ireland	" 37 "	123	49	125	45	87	18	124	107	54	99	104	87
British Isles	" 152 "	145	30	107	58	89	27	79	112	64	77	79	96

SEASONAL RAINFALL, 1920-1921.

From a climatic standpoint the two halves of the year are individually very important units of time. Each has its strongly marked characteristics, extending far beyond the mere difference of temperature, which render it desirable to study it independently of the other. From the point of view of water economy the winter half-year may be looked upon as representing the period of acquisition and the summer half-year the period of expenditure, for during the former practically all the precipitation goes to feed streams and underground storage whilst during the latter the bulk of the rainfall is re-evaporated and much of the naturally stored water is drawn upon for the upkeep of rivers and the requirements of animal and vegetable life.

The records for the winter of 1920-21, for the summer of 1921 and for the seasonal year from October to September are derived from the 152 stations utilized in Table III of the section on Monthly Rainfall. They are set out in the Tables on pp. 141-146 and when expressed as percentages of the average are shown graphically in the maps on pp. 137, 138 and 139.

During the winter half-year the total rainfall exceeded the average generally in the west and fell below it in the east. The wet area, however, excluded the north-west and much of the south-west of Ireland, and is shown as a broad belt extending from the west of Sutherlandshire and the Outer Hebrides southward, embracing the western half of Scotland and the eastern half of Ireland, with an extension to the west coast. The excess rose to more than 20 per cent. in a string of patches between Argyllshire and Co. Wexford, the maximum rising to more than 30 per cent. in western Argyllshire and in Co. Down. On the east of this wet belt there was a well-marked diminution in the percentage values. The least dry portions of the east of Great Britain were in Forfarshire and between Haddingtonshire and Co. Durham where the deficiency was less than 10 per cent., but in Morayshire and northern Banffshire and Aberdeenshire there was a deficiency of more than 30 per cent. In England more than 20 per cent. below the average fell everywhere east of a line from near Whitby to Salcombe and more than 30 per cent. east of a nearly parallel line from Scarborough to Brighton. Still further east more than 40 per cent. deficiency occurred in East Anglia; and on the coast of Essex and Kent there is reason to believe that the total rainfall did not exceed half the average amount.

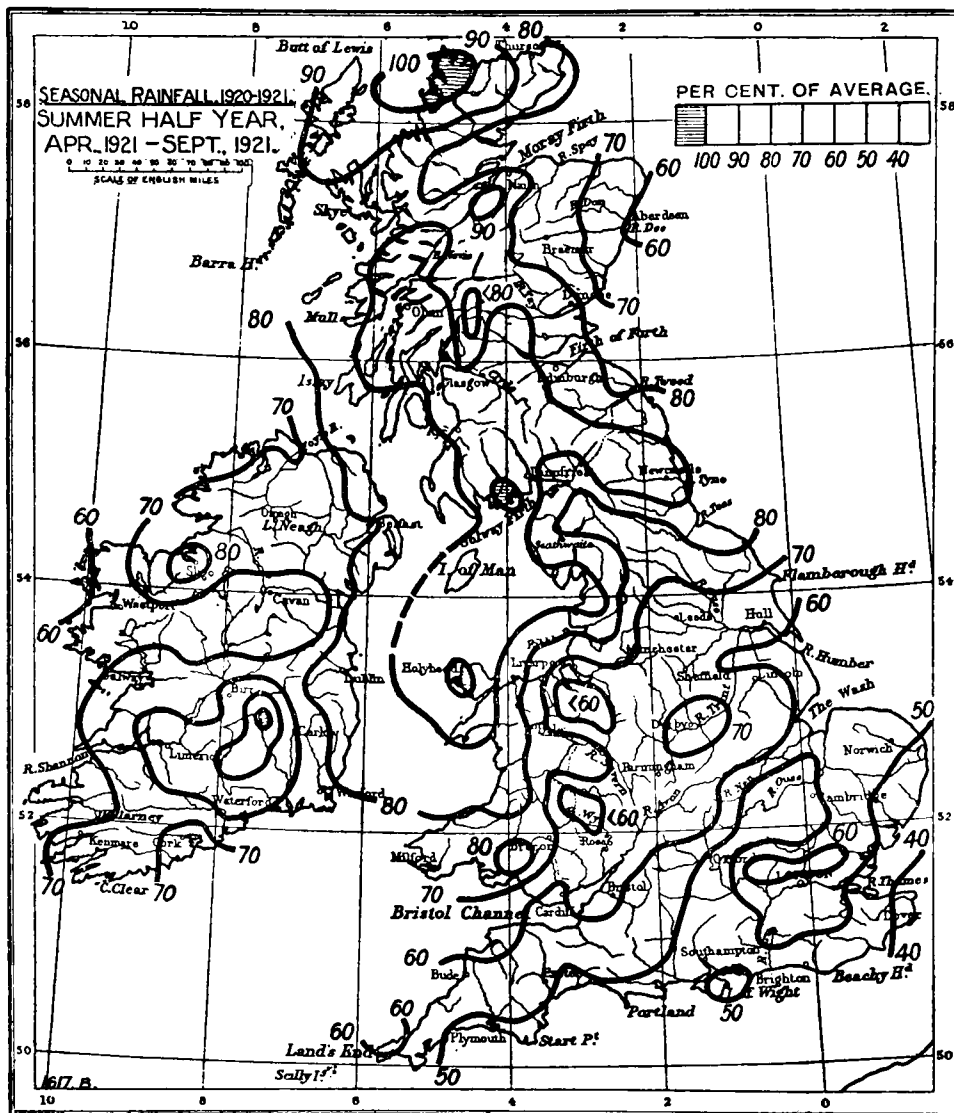
The general rainfall fell short of the average by 25 per cent. in England, 12 per cent. in Wales and 23 per cent. in England and Wales together. In Scotland there was a deficit of 2 per cent. and in Ireland an excess of 4 per cent. For the whole British Isles the rainfall of the six months was 10 per cent. below the average.

The distribution of the fall relative to the average during the ensuing six summer months was curiously similar to that of the winter, but the percentage values were nearly everywhere lower. The total fall just reached the average in the extreme north-west of Scotland, at one



station in Kirkcudbrightshire, one in Anglesey and one in Queen's Co the last mentioned being entirely due to a single heavy thunderstorm during June. The north-west, south-west and south of Scotland generally and part of the north-west of England and Wales had a deficiency of less than 10 per cent. and a larger central block of country embracing the whole of Scotland except the extreme east and including the greater part of Ireland and all the north-west of England and Wales, had a deficiency of less than 30 per cent. Beyond this block

the rainfall grew progressively less, the deficiency exceeding 40 per cent. in western Mayo, in eastern Aberdeenshire and over practically the whole of the south-east of England. In the last mentioned district, as in the preceding winter, the shortage of rainfall was of a very

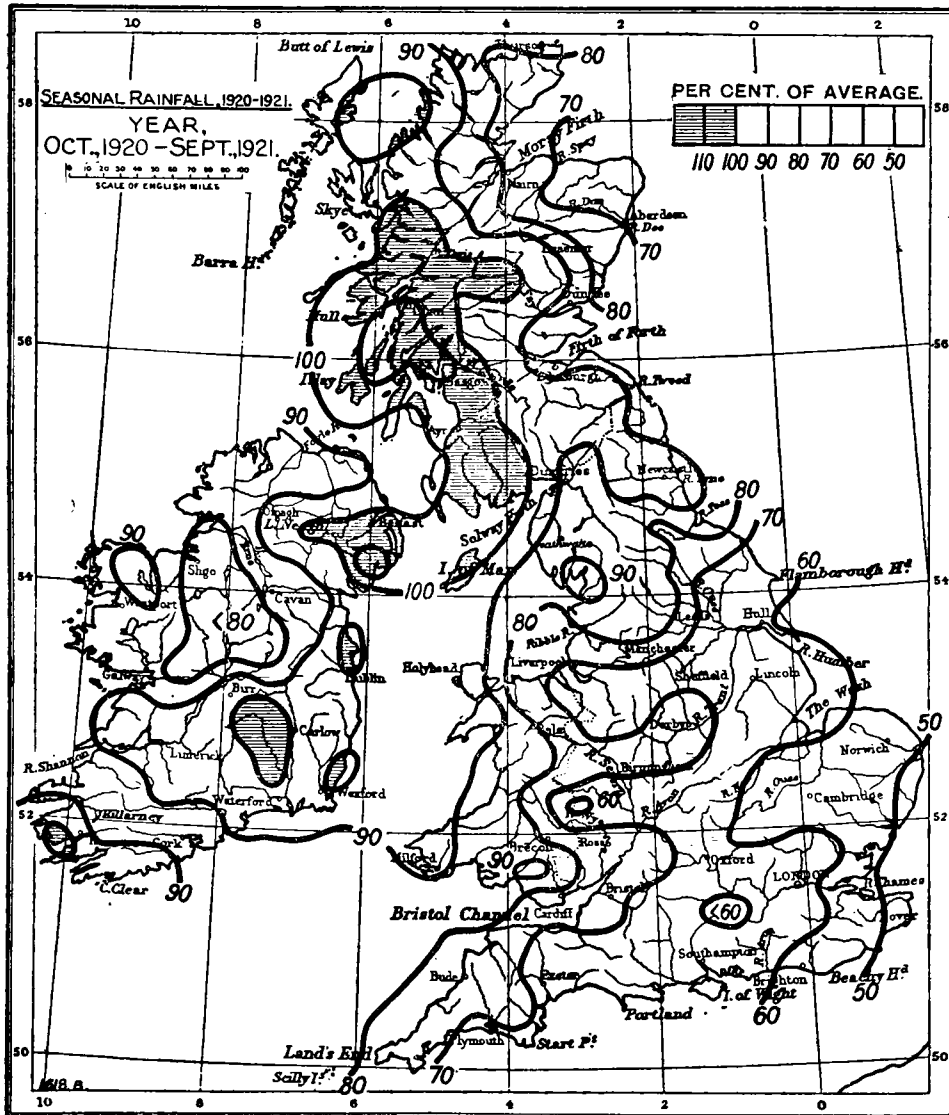


abnormal nature. A well-marked strip of country from South Devon to Norfolk, including also part of the east Midlands, had clearly less than half the average fall, whilst in eastern Kent there was not much more than one-third.

The general rainfall during the summer half-year was the least recorded since the records were first grouped in similar form in 1906-07. In England the deficiency mounted to 37 per cent., in Wales to 22 per cent., and for the two together to 34 per cent. Scotland was

less dry with a deficiency of 13 per cent., but Ireland was short by 24 per cent. and the British Isles as a whole by 26 per cent.

The broad similarity of the distribution during the two half-years which has already been mentioned, and which it may be remarked,



is a comparatively rare phenomenon, naturally resulted in the same type of distribution being reproduced in the map for the seasonal year. During the twelve months we find that an excess of no very pronounced nature was observed over a well-marked tract from Sutherlandshire to Co. Down with small disconnected patches further south in the east of Ireland. The excess within this belt rose above 10 per cent. in part of Argyllshire and in Co. Down. A very slight excess was also found on the coast of Kerry. From the wet centre

the fall diminished to a deficiency of above 20 per cent. in eastern Connaught and in the north-eastern counties of Scotland, whilst in England and Wales only the extreme north and west had less than 20 per cent. deficiency. The falling off towards the very dry area in the east of England was fairly regular and East Anglia with Kent and part of Sussex certainly had more than 40 per cent. below the average whilst a coastal strip probably had less than half the average.

During the seasonal year the general rainfall was deficient in all the countries, the shortage being 30 per cent in England, 16 per cent. in Wales and 28 per cent. in England and Wales together. Scotland and Ireland had deficiencies of respectively 7 and 9 per cent. and the British Isles as a whole of 17 per cent.

The following table compares the general percentage values for the countries with those for previous years.

SEASONAL RAINFALL AS PERCENTAGE OF THE AVERAGE.

PERIOD.	Winter, Oct. to Mar.			Summer, Seasonal Year, Apl. to Sept. Oct. to Sept.			Winter, Oct. to Mar.			Summer, Seasonal Year, Apl. to Sept. Oct. to Sept.		
	<i>England and Wales.</i>						<i>Scotland.</i>					
1906-1907	..	99	..	97	..	98	111	..	108	..	109	
1907-1908	..	113	..	100	..	107	113	..	104	..	108	
1908-1909	..	72	..	105	..	88	84	..	96	..	89	
1909-1910	..	113	..	100	..	107	108	..	105	..	107	
1910-1911	..	109	..	73	..	92	92	..	87	..	89	
1911-1912	..	140	..	125	..	133	117	..	98	..	108	
1912-1913	..	116	..	84	..	101	119	..	83	..	104	
1913-1914	..	105	..	81	..	94	108	..	83	..	97	
1914-1915	..	135	..	92	..	115	117	..	83	..	102	
1915-1916	..	130	..	91	..	112	111	..	108	..	110	
1916-1917	..	104	..	115	..	109	102	..	97	..	100	
1917-1918	..	88	..	123	..	104	112	..	108	..	111	
1918-1919	..	120	..	77	..	100	97	..	88	..	92	
1919-1920	..	108	..	129	..	117	118	..	101	..	111	
1920-1921	..	77	..	66	..	72	98	..	87	..	93	
<i>Ireland.</i>							<i>British Isles.</i>					
1906-1907	..	88	..	103	..	95	100	..	101	..	100	
1907-1908	..	112	..	108	..	110	113	..	103	..	108	
1908-1909	..	85	..	89	..	87	78	..	99	..	88	
1909-1910	..	114	..	109	..	112	112	..	103	..	108	
1910-1911	..	85	..	83	..	84	99	..	79	..	89	
1911-1912	..	137	..	100	..	119	133	..	112	..	123	
1912-1913	..	114	..	97	..	106	116	..	87	..	103	
1913-1914	..	118	..	83	..	102	108	..	82	..	96	
1914-1915	..	121	..	87	..	105	126	..	88	..	109	
1915-1916	..	113	..	101	..	108	121	..	98	..	110	
1916-1917	..	115	..	109	..	112	106	..	109	..	107	
1917-1918	..	109	..	105	..	107	99	..	115	..	107	
1918-1919	..	113	..	83	..	99	113	..	81	..	98	
1919-1920	..	108	..	110	..	108	111	..	117	..	113	
1920-1921	..	104	..	76	..	91	90	..	74	..	83	

Seasonal Rainfall, 1920-1921, in relation to the Average, 1881-1915.

Div.	Station.	Winter Six Months, October, 1920—March, 1921.				Summer Six Months, April—September, 1921.				Twelve Months, Oct., 1920— Sept., 1921. Per cent. of Average.
		Rainfall.	Average.	Difference from Average.	Per cent. of Aver.	Rainfall.	Average.	Difference from Average.	Per cent. of Aver.	
I.	St. Pancras, Camden Square.....	in. 8.43	in. 12.74	in. -4.31	66	in. 6.97	in. 11.73	in. -4.76	59	63
II.	Tenterden, View Tower.....	10.26	15.88	-5.62	65	5.21	11.62	-6.41	45	56
"	Margate, Cliftonville.....	5.96	12.24	-6.28	49	3.66	10.56	-6.90	35	42
"	Edenbridge, Falconhurst.....	12.38	17.59	-5.21	70	7.01	13.12	-6.11	53	63
"	Compton, Compton House.....	17.00	21.17	-4.17	80	7.35	15.42	-8.07	48	67
"	Brighton, Old Steyne.....	11.49	16.36	-4.87	70	4.95	11.33	-6.38	44	59
"	Ventnor, Royal National Hospital..	12.78	17.16	-4.38	74	6.24	11.70	-5.46	53	66
"	Fordingbridge, Oaklands.....	14.24	19.11	-4.87	75	6.11	12.54	-6.43	49	64
"	Sherborne St. John Rectory	11.41	16.42	-5.01	70	5.17	12.54	-7.37	41	57
III.	Royston, Therfield Rectory.....	7.11	12.47	-5.36	57	5.81	12.72	-6.91	46	51
"	High Wycombe	10.11	14.44	-4.33	70	7.38	11.46	-4.08	64	68
"	Oxford, Magdalen College.....	8.90	12.15	-3.25	73	5.77	11.66	-5.89	49	62
"	Wellingborough, Swanspool.....	8.12	12.27	-4.15	66	5.79	12.00	-6.21	48	57
"	March	7.70	11.23	-3.53	69	5.65	11.58	-5.83	49	59
IV.	Chelmsford, High Street.....	7.27	11.76	-4.49	62	6.51	10.73	-4.22	61	61
"	Hawkedon Rectory.....	7.10	12.55	-5.45	57	6.77	12.42	-5.65	54	56
"	Beccles, Geldeston.....	6.77	12.20	-5.43	56	5.37	11.46	-6.09	47	51
"	Worstead, Dilham.....	7.65	13.62	-5.97	56	6.71	12.67	-5.96	53	55
"	Swaffham	7.85	12.91	-5.06	61	7.51	12.65	-5.14	59	60
V.	Bishops Cannings	12.33	16.15	-3.82	76	7.17	14.17	-7.00	51	64
"	Evershot, Melbury House.....	17.26	23.64	-6.38	73	8.18	15.02	-6.84	54	66
"	Ashburton, Druid House.....	27.28	33.53	-6.25	81	9.38	18.19	-8.81	52	71
"	Collumpton	15.62	20.73	-5.11	75	7.43	14.54	-7.11	51	65
"	Barnstaple, N. Dev. Athenæum ...	18.65	21.51	-2.86	87	9.49	15.13	-5.64	63	77
"	Penzance, Morrab Garden	21.58	25.25	-3.67	85	10.07	15.68	-5.61	64	77
"	St. Austell, Trevarna.....	23.90	27.84	-3.94	86	9.16	18.00	-8.84	51	72
"	Altarnon Vicarage	30.10	36.98	-6.88	81	12.14	22.19	-10.05	55	71

Seasonal Rainfall, 1920-1921, in relation to the Average, 1881-1915—(con.).

Div.	Station.	Winter Six Months, October, 1920—March, 1921.				Summer Six Months, April—September, 1921.				Twelve Months, Oct., 1920 Sept., 1921. Per cent. of Average.
		Rainfall.		Difference from Average.		Rainfall.		Difference from Average.		
		in.	in.	in.	in.	in.	in.	in.	in.	
V.	East Harptree, Sherborne Reservoir	18.11	22.65	-4.54	80	10.58	17.34	-6.76	61	72
VI.	Cirencester, Dollarward House.....	13.47	15.77	-2.30	85	8.07	13.67	-5.60	59	73
"	Kington, Gravel Hill.....	13.20	19.32	-6.12	68	6.98	14.93	-7.95	47	59
"	Ledbury, Orchardleigh.....	10.69	13.80	-3.11	77	7.60	12.29	-4.69	62	70
"	Church Stretton, Wolstaston	13.82	17.01	-3.19	81	10.72	14.89	-4.17	72	77
"	Market Drayton, Old Springs.....	9.59	14.43	-4.84	66	8.44	14.32	-5.88	59	63
"	Farnborough	9.71	15.17	-5.46	64	9.62	14.00	-4.38	69	66
"	Birmingham, Edgbaston	9.90	13.47	-3.57	73	8.58	13.02	-4.44	66	70
VII.	Belvoir Castle Gardens.....	7.21	12.64	-5.43	57	8.58	12.47	-3.89	69	63
"	Boston, Black Sluice, Skirb ck	7.75	11.53	-3.78	67	6.79	11.28	-4.49	60	64
"	Lincoln, Skellingthorpe Hall.....	7.53	11.45	-3.92	66	7.39	11.67	-4.28	63	65
"	Mickleover, Clyde House.....	10.28	13.00	-2.72	79	10.10	13.05	-2.95	77	78
VIII.	Chelford, Astle Hall.....	10.54	15.04	-4.50	70	9.22	14.65	-5.43	63	67
"	Bury, Gin Hall, No. 1.....	19.51	23.90	-4.39	82	15.32	19.78	-4.46	77	80
"	Stonyhurst College	21.22	25.17	-3.95	84	19.30	21.38	-2.08	90	87
"	Southport, Hesketh Park.....	12.50	16.79	-4.29	74	11.81	15.20	-3.39	78	76
"	Cartmel, Holker Hall	22.34	24.41	-2.07	92	18.23	20.11	-1.88	91	91
IX.	Rotherham, Moorgate Grange.....	8.21	13.18	-4.97	62	7.47	12.24	-4.77	61	62
"	Bradford, Lister Park.....	17.01	17.40	-.39	98	9.51	13.98	-4.47	68	85
"	York, Museum Gardens	7.60	11.98	-4.38	63	8.37	12.33	-3.96	68	66
"	Hull, Pearson Park.....	8.23	12.86	-4.63	64	7.75	12.52	-4.77	62	63
"	Leyburn, Bolton Hall.....	18.29	19.00	-.71	96	10.59	13.63	-3.04	78	89
"	Felixkirk, Mount St. John.....	10.51	13.40	-2.89	78	9.94	13.14	-3.20	76	77
"	Scarborough.....	7.72	13.46	-5.74	57	9.64	12.31	-2.67	78	67
"	Middlesbrough, Albert Park.....	10.70	11.53	-.83	93	10.19	12.14	-1.95	84	88
X.	Barnard Castle, County School.....	14.62	15.97	-1.35	92	8.59	13.76	-5.17	62	78
"	Newcastle-on-Tyne, Town Moor.....	12.56	13.77	-1.21	91	13.27	13.45	-.18	99	95

Seasonal Rainfall, 1920-1921, in relation to the Average, 1881-1915—(con.).

Div.	Station.	Winter Six Months, October, 1920—March, 1921.				Summer Six Months, April—September, 1921.				Twelve Months, Oct., 1920— Sept., 1921. Per cent. of Average.
		Rainfall.	Average.	Difference from Average.	Per cent. of Aver.	Rainfall.	Average.	Difference from Average.	Per cent. of Aver.	
X.	Hallington, Fawcett	in. 14.80	in. 14.78	in. + .02	100	in. 12.90	in. 13.46	in. — .56	96	98
"	Alnwick Castle	13.65	16.49	— 2.84	83	12.61	14.30	— 1.69	88	85
"	Carlisle, Spital Cemetery	14.69	15.90	— 1.21	92	12.77	15.91	— 3.14	80	86
"	Borrowdale, Seathwaite	78.03	78.22	— .19	100	39.45	51.26	— 11.81	77	91
"	Appleby, Castle Bank	17.82	19.60	— 1.78	91	12.13	15.43	— 3.30	79	85
XI.	Abergavenny, Larchfield	20.06	22.08	— 2.02	91	10.38	15.45	— 5.07	67	81
"	Ystalyfera, Wern House	38.35	38.66	— .31	99	22.22	26.23	— 4.01	85	93
"	Cardiff, Ely Pumping Station	20.04	24.07	— 4.03	83	10.57	18.05	— 7.48	59	73
"	Carmarthen, The Friary	25.10	28.31	— 3.21	89	15.03	19.99	— 4.96	75	83
"	Haverfordwest, Grammar School	28.55	27.63	+ .92	103	14.48	18.74	— 4.26	77	93
"	Strata Florida, Hafod	26.01	32.54	— 6.53	80	20.08	23.82	— 3.74	84	82
"	Lake Vyrnwy, Bank Cynon Isaf	31.94	33.66	— 1.72	95	16.12	21.65	— 5.53	74	87
"	Northop, Soughton Hall	11.12	17.32	— 6.20	64	8.11	14.73	— 6.62	55	60
"	Dolgelly, Bryntirion	29.99	34.20	— 4.21	88	20.44	24.59	— 4.15	83	86
"	Llandudno	12.11	16.61	— 4.50	73	11.11	13.43	— 2.32	83	77
"	Llandwrog, Glynllivon Park	25.90	26.75	— .85	97	17.37	17.90	— .53	97	97
"	Holyhead, Salt Island	19.23	20.26	— 1.03	95	14.91	14.66	+ .25	102	97
"	Douglas, Borough Cemetery	22.98	23.69	— .71	97	16.52	17.50	— .98	94	96
XII.	Stoneykirk, Ardwell House	22.70	19.87	+ 2.83	114	13.78	16.48	— 2.70	84	100
"	Dalry, Glendarroch	36.37	33.48	+ 2.89	109	20.52	21.03	— .51	98	104
"	Auchencairn, Torr House	27.79	26.26	+ 1.53	106	20.90	20.79	+ .11	101	103
"	Durrisdeer, Drumlanrig Gardens	27.22	25.43	+ 1.79	107	17.15	18.14	— .99	95	102
"	Hawick, Branxholme	17.23	18.49	— 1.26	93	13.31	14.87	— 1.56	90	92
XIII.	Marchmont House	17.55	16.61	+ .94	106	12.25	15.57	— 3.32	79	93
"	North Berwick Reservoir	10.93	12.51	— 1.58	87	10.75	12.88	— 2.13	83	85
"	Moorfoot Hills, Gladhouse Res.	18.39	19.07	— .68	96	14.08	16.26	— 2.18	87	92
XIV.	Airdrie, Hillend Reservoir	20.02	20.15	— .13	99	16.86	17.17	— .31	98	99

Seasonal Rainfall, 1920-1921, in relation to the Average, 1881-1915—(con.).

Div.	Station.	Winter Six Months October, 1920—March, 1921.				Summer Six Months, April—September, 1921.				Twelve Months, Oct., 1920— Sept., 1921. Per cent. of Average.
		Rainfall.	Average.	Difference from Average.	Per cent. of Aver.	Rainfall.	Average	Difference from Average.	Per cent. of Aver.	
XIV.	Kilmarnock, North Craig Res.	in. 25.90	in. 22.80	in. +3.10	114	in. 18.10	in. 18.43	in. — .33	98	107
"	Girvan, Pinmore	31.19	29.07	+2.12	107	18.16	20.77	—2.61	87	99
"	Shaws W.W., Loch Thom	47.40	37.67	+9.73	126	25.14	27.69	—2.55	91	111
XV.	Lochgilphead, Poltalloch	39.81	29.93	+9.88	133	21.52	22.51	— .99	96	117
"	Skipness Castle	31.27	27.98	+3.29	112	18.50	20.79	—2.29	89	102
"	Inveraray Castle Gardens	54.80	46.75	+8.05	117	29.68	30.47	— .79	97	109
"	Islay, Eallabus	35.55	28.77	+6.78	124	17.69	20.09	—2.40	88	109
"	Mull, Quinish	38.96	33.67	+5.29	116	20.49	23.08	—2.59	89	105
XVI.	Loch Leven Sluice	17.12	19.94	—2.82	86	13.48	15.83	—2.35	85	86
"	Balquhidder, Stronvar	48.90	46.18	+2.72	106	21.08	28.06	—6.98	75	94
"	Crieff, Strathearn Hydro	23.48	23.50	— .02	100	16.14	17.36	—1.22	93	97
"	Blair Atholl	22.20	18.88	+3.32	118	11.91	14.21	—2.30	84	103
"	Dundee, Eastern Necropolis	13.23	13.65	— .42	97	11.24	13.79	—2.55	82	89
"	Montrose, Sunnyside Asylum	12.65	14.10	—1.45	90	8.89	12.93	—4.04	69	80
XVII.	Braemar, Bank	22.13	20.18	+1.95	110	11.05	15.20	—4.15	73	94
"	Logie Coldstone School	12.30	16.43	—4.13	75	10.62	14.79	—4.17	72	73
"	Aberdeen, Cranford House	13.53	17.23	—3.70	79	8.77	14.51	—5.74	60	70
"	New Deer Schoolhouse	11.57	17.64	—6.07	66	9.70	14.70	—5.00	66	66
"	Gordon Castle	9.76	14.99	—5.13	65	11.15	14.78	—3.63	75	70
"	Grantown-on-Spey	10.37	15.85	—5.48	65	11.72	15.30	—3.58	77	71
XVIII.	Loch Quoich, Glenquoich	78.88	70.61	+8.27	112	37.85	40.14	—2.29	94	105
"	Inverness, High School	11.31	14.27	—2.96	79	11.84	12.60	— .76	94	86
"	Arisaig House	36.82	35.76	+1.06	103	26.19	27.10	— .91	97	100
"	Fort William, Atholl Bank	54.83	49.45	+5.38	111	25.90	29.35	—3.45	88	102
"	Alness, Ardross Castle	20.53	22.36	—1.83	92	12.34	16.18	—3.84	76	85
"	Loch Torridon, Bendamph	57.32	52.29	+5.03	110	26.94	32.83	—5.89	82	99
"	Glencarron Lodge	53.08	53.26	— .18	100	26.60	34.49	—7.89	77	91

Seasonal Rainfall, 1920-1921, in relation to the Average, 1881-1915—(con.)

Div.	Station.	Winter Six Months, October, 1920—March, 1921.				Summer Six Months, April—September, 1921.				Twelve Months, Oct., 1920— Sept., 1921. Per cent. of Average.
		Rainfall.	Average.	Difference from Average.	Per cent. of Aver.	Rainfall.	Average.	Difference from Average.	Per cent. of Aver.	
XVIII.	Stornoway	in. 33.54	in. 30.99	in. +2.55	108	in. 18.44	in. 18.86	in. — .42	98	104
XIX.	Dunrobin Castle	13.12	17.35	—4.23	76	11.15	14.30	—3.15	78	77
"	Tongue Manse	17.23	24.53	—7.30	70	16.83	16.47	+ .36	102	83
"	Melvich Schoolhouse	13.43	21.11	—7.68	64	13.76	14.89	—1.13	92	76
"	Loch More, Achfary	48.82	45.91	+2.91	106	33.86	29.89	+3.97	113	109
"	Wick	11.88	16.18	—4.30	73	11.31	13.74	—2.43	82	78
"	Pomona, Deerness	20.66	21.18	— .52	97	15.10	14.24	+ .86	106	101
XX.	Dunmanway, The Rectory	38.11	37.25	+ .86	102	17.71	23.75	—6.04	75	92
"	Glanmire, Lota Lodge, No. 1	24.26	25.30	—1.04	96	11.81	17.30	—5.49	68	85
"	Mallow, Longueville	22.13	22.44	— .31	99	11.40	14.86	—3.46	77	90
"	Killarney, District Asylum	30.83	34.11	—3.28	90	14.04	20.60	—6.56	68	82
"	Darrynane Abbey	34.16	29.74	+4.42	115	17.93	21.28	—3.35	84	102
"	Valencia, Glanleam	41.10	33.72	+7.38	122	15.91	23.25	—7.34	68	100
"	Waterford, Brook Lodge	24.43	22.08	+2.35	111	13.88	17.39	—3.51	80	97
"	Nenagh, Castle Lough	23.95	22.19	+1.76	108	13.37	17.33	—3.96	77	94
"	Cahir Abbey	21.25	22.52	—1.27	94	14.82	16.68	—1.86	89	92
"	Foynes, Coolhanes	21.52	22.35	— .83	96	14.58	17.08	—2.50	85	92
"	Ennistymon House	27.14	25.25	+1.89	107	16.79	21.35	—4.56	79	94
XXI.	Gorey, Courtown House	23.37	19.09	+4.28	122	13.19	15.58	—2.39	85	105
"	Shillelagh, Coolattin Gardens	25.22	22.75	+2.47	111	13.65	19.15	—5.50	71	93
"	Abbey Leix, Blandsfort	20.29	19.12	+1.17	106	18.53	17.43	+1.10	106	106
"	Birr Castle	18.87	16.82	+2.05	112	13.13	15.74	—2.61	83	98
"	Straffan House	17.23	16.08	+1.15	107	12.57	15.28	—2.71	82	95
"	Balbriggan, Ardgillan, No. 1	17.80	14.73	+3.07	121	12.45	14.23	—1.78	87	104
"	Kells, Headfort	19.65	19.16	+ .49	103	11.82	17.84	—6.02	66	85
"	Mullingar, Belvedere	15.94	18.90	—2.96	84	12.02	17.44	—5.42	69	77
"	Greenore	18.40	16.28	+2.12	113	12.58	15.63	—3.05	80	97

Seasonal Rainfall, 1920-1921, in relation to the Average, 1881-1915—(con.).

Div.	Station.	Winter Six Months, October, 1920—March, 1921.				Summer Six Months, April—September, 1921.				Twelve Months, Oct., 1920— Sept., 1921. Per cent. of Average.
		Rainfall.	Average.	Difference from Average.	Per cent. of Aver.	Rainfall.	Average.	Difference from Average.	Per cent. of Aver.	
XXII.	Tuam, Gardenfield	in. 22.28	in. 24.69	in. -2.41	90	in. 14.04	in. 19.39	in. -5.35	72	82
"	Woodlawn	18.93	22.11	-3.18	86	13.40	19.13	-5.73	70	78
"	Strokestown, Castlenode	16.00	18.74	-2.74	85	9.90	16.26	-6.36	61	74
"	Crossmolina, Enniscoe	33.84	31.81	+2.03	106	15.32	21.46	-6.14	71	92
"	Blacksod Point	30.51	29.57	+ .94	103	11.94	20.12	-8.18	59	85
"	Ballinrobe, Cranmore	28.71	28.38	+ .33	101	12.87	20.30	-7.43	63	85
"	Collooney, Markree Observatory ..	22.50	29.74	-7.24	76	17.97	21.28	-3.31	84	79
XXIII.	Belturbet, Cloverhill	16.62	18.09	-1.47	92	11.47	16.54	-5.07	69	81
"	Armagh Observatory	19.03	15.78	+3.25	121	11.68	15.97	-4.29	73	97
"	Seaforde	27.08	20.59	+6.49	132	15.65	17.70	-2.05	88	112
"	Belfast, Queen's University	23.74	18.28	+5.46	130	12.81	16.33	-3.52	78	106
"	Ballymena, Harryville	25.01	22.28	+2.73	112	15.84	19.22	-3.38	82	98
"	Londonderry, Creggan Reservoir ..	21.89	22.15	- .26	99	15.33	19.62	-4.29	78	89
"	Limavady, Drenagh	18.13	19.94	-1.81	91	11.88	17.05	-5.17	70	81
"	Omagh, Edenfel.	25.69	21.36	+4.33	102	13.97	18.76	-4.79	74	99
"	Dunfanaghy, St. Helens	25.28	25.55	- .27	99	13.51	19.45	-5.94	69	86
"	Killybegs, Rockmount	29.86	34.90	-5.04	86	18.74	25.60	-6.86	73	80
{ General Values.	England	13.50	17.94	-4.44	75	9.30	14.73	-5.43	63	70
	Wales	25.80	29.36	-3.56	88	16.20	20.78	-4.58	78	84
	England & Wales	15.10	19.61	-4.51	77	10.30	15.62	-5.32	66	72
	Scotland	28.60	29.20	- .60	98	18.40	21.12	-2.72	87	93
	Ireland	25.30	24.28	+1.02	104	14.50	19.02	-4.52	76	91
	British Isles	21.10	23.42	-2.32	90	13.30	17.99	-4.69	74	83

THE TOTAL FALL OF RAIN IN 1921 AND ITS RELATION TO THE AVERAGE.

The method of presenting the information contained in this section is identical with that employed in dealing with monthly rainfall, but it is possible to introduce a greater degree of detail. The data are given in two forms. The map facing page 148 represents, on the scale of about 80 miles to one inch, the geographical distribution of the actual fall. It gives, in fact, in a graphical form the information which is set out in all the columns headed "Depth of Rain" throughout Part III of this volume, setting each figure in its correct position and thus enabling it to be appreciated in its relation to the others. This method of presentation has the additional advantage, when one is dealing with a period so long as a year, that in areas where no rainfall records exist the lines can be drawn in accordance with the experience of previous years, or, failing that, by taking advantage of the known details of the configuration, so that at least an approximate estimate of the total rainfall of the year in such districts can be obtained. Secondly, the map facing page 150 represents the rainfall of the year in its relation to the average of a long series of years, thus enabling the eye readily to see in which districts the fall was excessive, in which defective, and, within limits, the extent of the excess or defect. The bulk of the data upon which this map is based are given in the Table on pp. 156-160. The distribution of the actual fall is closely associated with the configuration of the land and is extremely complex. It is therefore necessary to utilize a very large number of records to represent the facts with any high degree of precision. The relation of the fall to the average depends upon other factors of a more general nature so that the lines on the percentage map are much less intricate and can be drawn with a reasonably high degree of accuracy from comparatively few data. As a matter of fact the number of records used in the larger map was approximately 3,500, whilst for the smaller only 390 were required.

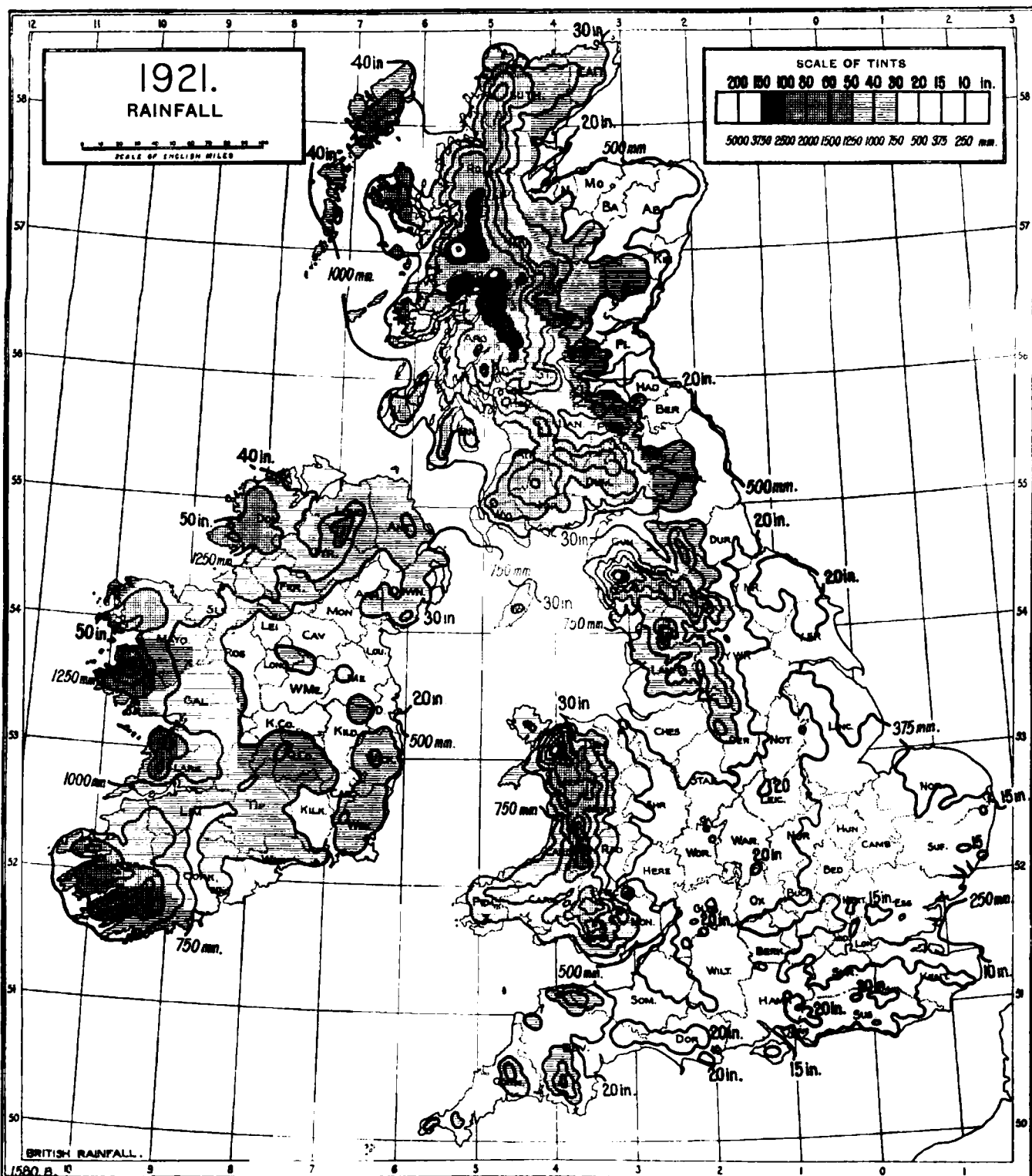
The distribution of annual rainfall over the British Isles has now been studied with more or less completeness for about sixty years, and in a more cursory manner for about a hundred years. Meteorologists may therefore possibly be pardoned for having supposed that during that long period the extent of the fluctuations to which a year's rainfall is subject had been fairly well exemplified. Judging by the experience which the past had provided, competent authorities have at various times drawn the conclusion that the smallest rainfall likely to occur in any individual part of the British Isles during any calendar year would not fall appreciably below 60 per cent. of the average amount.

It is true that smaller values have occasionally been observed at individual stations, but until 1921 no large area has been known to experience a more deficient annual rainfall. This statement must be interpreted as referring only to rainfall records of unimpeachable accuracy and to stations where a uniform series of observations has enabled a trustworthy average value for at least 35 years to be established. Such stations are fortunately very numerous and representative of nearly all parts of the country.

A glance at the map facing page 150 shows that this hitherto almost unsurpassed limit of 60 per cent. of the average, or 40 per cent. deficiency, was in 1921 exceeded over a very large area in the south-eastern counties of England and also in part of the east of Scotland. In the east of Kent there can be no doubt that the deficiency rose to 50 per cent., or in other words that the year's rainfall was less than half the average amount. In this way therefore 1921 opens a new chapter in rainfall experience in the British Isles and compels us to revise our preconceived ideas as to the possible range of annual fluctuations.

Dealing first with the map of actual rainfall, attention is naturally directed to the district of greatest deficiency in the south-east. Here we find a well-defined area extending from the north of Lincolnshire southward to the borders of Gloucestershire and Hampshire, and south-eastward to Lowestoft and Dover, in which the rainfall of the year was less than 15 in. (380 mm.). A very narrow strip of the south coast extending westward as far as Portsmouth also had rather less than 15 in. In the main dry area falls of less than 12 in. (300 mm.) occurred very widely in all parts of the Fen district and along the shores of the Thames estuary. The most remarkable totals were around the outer estuary where we have drawn with a fair degree of confidence a line showing a falling-off to less than 10 in. (250 mm.). It is true that this line lies mostly beyond the coast line, indicating merely that the figures near the coast were slightly more than 10 in., but the official record at Margate gives only 9·29 in. (236 mm.), and there is no reason to regard it as inaccurate, the station having been specially inspected and found to be in good condition.

Except in a few small patches either on elevated land or where local storms occurred, no part of the east of England south of the East Riding had as much as 20 in. (500 mm.) of rain during the year. The same may be said with regard to the whole of the Midlands and south of the country, and a coastal strip in the east of Scotland. The line of 20 in. passed from Dornoch Firth, through Berwick-on-Tweed and York, to Derby, thence eastward to Chester, southward along the Welsh border and across the Bristol Channel to the neighbourhood of Teignmouth. In Ireland, one or two stations near Dublin showed slightly less than 20 in., but for all practical purposes it may be stated that the whole of Ireland had more than 20 in.



In Ireland more than 30 in. (750 mm.) occurred fairly widely in the east, but in England and Wales even so moderate a total as this was recorded only in mountain areas and along the western sea-board. In the Devon-Cornwall peninsula, for example, as much as 30 in. occurred only on the uplands and less than 60 in. (1,500 mm.) on the highest parts of Dartmoor. In Wales the distribution was rather more normal, and there was a solid core of more than 40 in. (1,000 mm.) in the interior with more than 50 in. (1,250 mm.) nearly all along the main mountain ridge. Around Treherbert in the Upper Rhondda Valley, and on the summit of Plynlimon, the total slightly exceeded 80 in. (2,000 mm.), whilst in Snowdonia an appreciable area had more than 100 in. (2,500 mm.) with a maximum of 162·47 in. (4,127 mm.) on Crib Goch, one of the ridges near the summit of Snowdon, and 158·45 in. (4,025 mm.) at Llyn Llydaw Copper Mine. Over most of the Pennines more than 40 in. (1,000 mm.) fell, but south of the Bowland Forest very few stations had as much as 50 in. (1,250 mm.). Further north, however, the rainfall, including that over the English Lake District, was not in any way deficient, and a quite normal area in Cumberland and Westmorland had more than 100 in. (2,500 mm.), whilst on the Styne two gauges gave respectively 184·65 in. (4,690 mm.) and 184·75 in. (4,693 mm.), and at Mickleden in Langdale 145·26 in. (3,690 mm.) fell.

In the west of Ireland falls of less than 40 in. (1,000 mm.) occurred along the Shannon estuary and at Sligo, but more than 50 in. fell widely, and small areas on the mountains of Counties Cork, Kerry, Clare, Galway, Mayo, and Donegal had more than 60 in. (1,500 mm.). The highest falls recorded were 80·50 in. (2,045 mm.) at Gearahamean near the Gap of Dunloe; and 83·42 in. (2,119 mm.) at Aasleagh and 92·20 in. (2,342 mm.) at Delphi Lodge, in Mayo.

The conditions in the west of Scotland differed completely from those in other parts of the British Isles. Over the whole of this area the totals recorded were higher than usual. Except for coastal strips more than 50 in. (1,250 mm.) was observed practically everywhere. The main 60 in. (1,500 mm.) area extended without a break from western Sutherlandshire to the north of Ayrshire, being bounded by a line nearly parallel to the coast line in the west, and passing almost through the centre of the country in the east. There were also large areas with more than 60 in. rising locally to more than 80 in. (2,000 mm.) in parts of Kirkcudbrightshire, Ayrshire and Dumfriesshire. In the heart of the West Highlands the districts with more than 100 in. (2,500 mm.) were unusually extensive, covering a broad belt of country stretching from western Ross-shire to Loch Lomond. The most easterly region with 100 in. was indicated by two valuable new mountain stations on the slopes of Ben Alder: here 116·40 in. (2,957 mm.) was recorded at Loch a'Bhealaich, and 118·30 in. (3,005 mm.) at Lochan Sgoir, both at elevations between 2,250 and

2,300 ft. On the south side of Ben Nevis two gauges, the records of which had hitherto been untrustworthy but which were put on a satisfactory footing in 1920, showed the highest totals available for any part of that district, viz. 133·25 in. (3,385 mm.) at Loch Eilde Mòr, and 138·40 in. (3,515 mm.) at Loch Eilde Beg. There is no doubt that a far heavier fall occurred on the summit of the Ben, but since the shutting down of the Observatory no direct evidence is available. In the now famous rain centre at the head of Glenquoich the gauge at Kinlochquoich gave 148·36 in. (3,768 mm.), and that at Loan 201·78 in. (5,125 mm.), the latter being by far the highest value recorded for the year.

The fact that the districts driest and wettest in relation to the average, coincided in 1921 with those of least and greatest absolute fall respectively, means that the contrast between the extremes of total rainfall observed during the year was unusually great. Taking for example, Loan, in Inverness-shire, and Margate, it is interesting to observe that the former had no less than twenty-one times as much rain as the latter. The normal relation is about seven times, and in some years the ratio falls to about three to one.

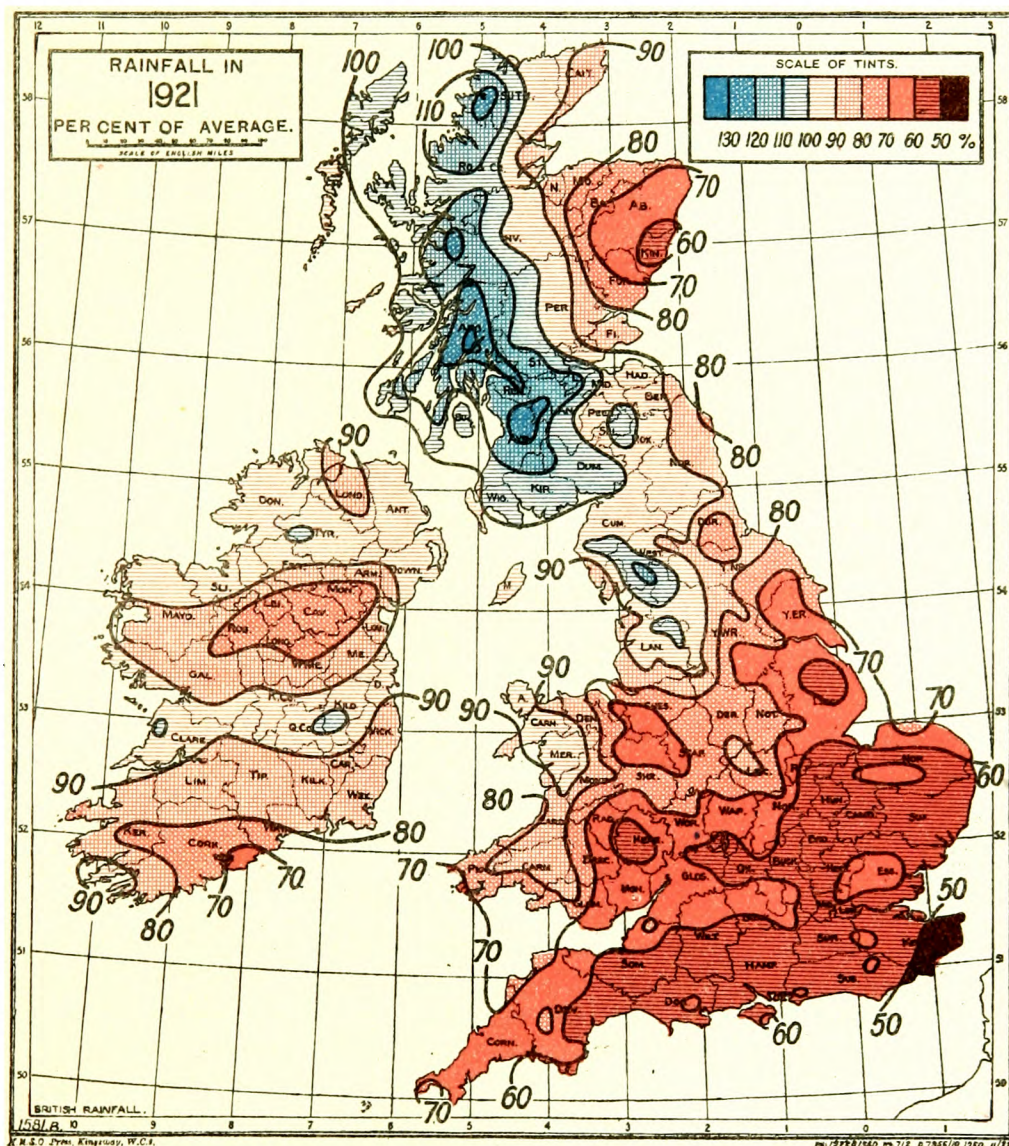
The coloured map representing the relation of the rainfall of the year to the average shows that the distribution of percentage values was comparatively simple. Over the whole of the west of Scotland, as has already been intimated, the year was wet, and over much of the West Highlands it may be described as very wet. This is shown by the large area with an excess of more than 10 per cent., having a well marked central strip most of which had an excess of more than 20 per cent. and a small part of more than 30 per cent. The region of greatest excess appears to have been round the head of Loch Fyne, where the gauge at Inveraray Castle indicated a surplus of 31 per cent.

A rainfall somewhat above the average occurred also in the north-western Pennines, where the maximum excess of 11 per cent. was reported from Sedbergh. One or two spots in Ireland just reached the average. The excess in Queen's Co. was undoubtedly caused solely by the thunderstorm of June 26th, an isolated event in the course of the great summer drought.

In all other parts of Ireland the rainfall of the year was well below the average, the deficiency rising to above 20 per cent. in two districts, one occupying the north-eastern Midlands, and extending from Co. Galway to Co. Down, the other being in the east of Co. Cork and the south of Co. Waterford. To the east of Cork Harbour there appears to have been a deficiency of rather more than 30 per cent.

In Great Britain the rainfall in relation to the average diminished in a very striking manner towards the east and especially the south-east. Scotland was sharply cut into regions of excess and defect by a line passing from near Cape Wrath to the Solway Firth. There was also some indication of a diminution towards the west, western

RELATION OF RAINFALL IN 1921 TO THE AVERAGE OF 1881-1915.



The area coloured Blue had rainfall above the average; that coloured Red had rainfall below the average. Each successive 10 per cent departure from the average is indicated by deepening the tint. The small area in Kent over which deficiency in 1921 exceeded 50 per cent is shown in Black.

Wigtownshire and part of the outer Hebrides having a slight deficiency. More than 20 per cent. below the average fell everywhere east of a line from the mouth of the Spey to Dundee, re-appearing in England on the coast of Northumberland, and again in the neighbourhood of Saltburn-on-Sea, whence it stretched south-westward to Liverpool, through eastern Wales to Swansea and then north-westward to Aberystwyth. In Scotland the deficiency increased to a well-marked maximum in the neighbourhood of Aberdeen, where a considerable area appears to have been short of its average rainfall by rather more than 40 per cent. In England the decrease continued on a much wider front, and most of the country south-east of a line drawn from Yarmouth to Plymouth had a deficiency exceeding 40 per cent. The same applies to two isolated areas respectively in Lincolnshire and Herefordshire. Attention may be drawn to the narrow tongue of slightly less deficiency extending from Bristol into Essex. It is clear that this tongue coincides closely with the area affected by the cyclonic rainfall of September 10th-11th, the extremely small fall of the remainder of the year making the effect of this one day's rain conspicuous enough to show itself on the map.

The number of records by which to determine the limits of the area over which the rainfall of 1921 was less than half the average is not so great as might have been wished, but the evidence is sufficient to make it tolerably certain that it occupied roughly the eastern half of Kent. The remarkable record at Margate, representing only 41 per cent. of the average, or a deficiency of 59 per cent. has already been mentioned.

The records quoted in the Table on pp. 156-160 are selected from the total number available, so as to be as far as possible equably distributed over the land surface of the British Isles. The mean percentage values for any large area, such as one of the constituent countries, must therefore be approximately equal to the general percentage values applicable to such an area as a whole.

In computing the values given in the following summary the general averages in inches are arrived at from large scale average maps* and the general rainfall values for 1921 are computed from them by applying the mean percentages derived from the table in this section. By making use of the large scale average maps in this way a considerable improvement is made in the accuracy of the determinations.

It will be observed that the dry area in Scotland almost exactly counterbalances the wet, so that for the country as a whole there was a nominal deficiency of 1 per cent. Apart from Scotland, the deficiency was least marked in Ireland, whilst in England it rose to the unprecedentedly high value of 31 per cent. ; Wales, with a deficit of 21 per cent.,

* See *British Rainfall*, 1920, pp. 255-256.

being also very dry. The value for the Channel Islands based upon two records is not given in the summary but works out at 53 per cent., a result of peculiar interest, as indicating that in all probability the deficiency of the rainfall continued to increase beyond the south of England.

COUNTRIES.	No. of Records utilized.	Average 35 years, 1881-1915.		1921.		Diff. from Average 1881-1915.		Diff. from Average computed cartographically.
						Amt.	Per cent.	
		in.	mm.	in.	mm.	in.		Per cent.
England	104	32·67	830	22·54	573	10·13	—31	—31
Wales	22	50·14	1,274	39·58	1,005	10·56	—21	—21
England and Wales ..	126	35·23	895	24·66	626	10·57	—30	—30
Scotland	63	50·32	1,278	49·80	1,265	·52	—1	—1
Ireland	48	43·30	1,100	38·08	967	5·22	—12	—13
British Isles	238	41·41	1,052	33·95	862	7·46	—18	—18

As in *British Rainfall*, 1920, a final column is added to the summary table for the year, giving the percentage values as computed by measuring the zones on the map of percentage variation. The agreement this year is extremely close, and provides a valuable check.

In the course of this process the areas of the zones must be determined, and these are of sufficient interest to quote. The following table should be examined in comparison with the similar table on

	PER CENT. OF AVERAGE.										Total Area.
	Less than 50	50-60	60-70	70-80	80-90	90-100	100-110	110-120	120-130	More than 130	
	Sq. mi.	Sq. mi.	Sq. mi.	Sq. mi.	Sq. mi.	Sq. mi.	Sq. mi.	Sq. mi.	Sq. mi.	Sq. mi.	Sq. mi.
England	710	17,650	14,720	7,010	4,220	4,790	1,140	70	—	—	50,310
Wales	—	40	1,760	2,330	2,430	1,440	—	—	—	—	8,000
Isle of Man	—	—	—	—	—	230	—	—	—	—	230
Scotland	—	410	2,040	2,000	2,630	5,790	8,620	6,200	1,820	70	29,580
Ireland	—	—	210	4,760	14,240	12,940	290	—	—	—	32,440
British Isles	710	18,100	18,730	16,100	23,520	25,190	10,050	6,270	1,820	70	120,560

page 143 of *British Rainfall*, 1920, with which it forms a striking contrast. The area of the British Isles over which the rainfall of 1921 exceeded the average was 18,210 square miles compared with 94,520 square miles in 1920, whilst the area with a deficient rainfall was 102,350 square miles compared with only 26,040 square miles in 1920. Of the 102,350 dry square miles, as much as 53,640 square miles had less than 80 per cent. of their average rainfall and 18,810 square miles less than 60 per cent. As against this, 1920 had only 700 square miles with less than 80 per cent. and none with less than 70 per cent. Taking

England alone the figures are even more striking, the areas respectively above and below the average being 1,210 square miles and 49,100 square miles in 1921, against 34,370 square miles and 15,940 square miles in 1920. With less than 80 per cent. there were respectively 40,090 and 60 square miles.

The rainfall of 1921 in England and Wales was undoubtedly the smallest annual fall observed during the period covered by trustworthy observations.

Comparison of the Total Rainfall 1910–1921 with average of 35 Years.

Year.	England.	Wales.	Eng. and Wales.	Scotland.	Ireland.	British Isles.
1910*	111	116	112	103	108	109
1911*	94	101	96	101	99	98
1912*	123	119	122	111	108	115
1913*	96	109	98	96	107	99
1914*	109	110	109	103	108	107
1915*	110	105	109	92	102	102
1916*	113	107	112	116	114	114
1917*	97	96	96	97	98	97
1918*	107	114	108	108	112	109
1919*	103	98	102	93	90	96
1920†	105	125	109	105	111	109
1921†	69	79	70	99	88	82

* Average 1875–1909.

† Average 1881–1915.

The above table goes back only to 1910, but on account of the unprecedented conditions in 1921 a special examination has been made of exceptionally dry years since 1854. Only four have been found to offer any definite resemblance to 1921.

For 1854 complete data are wanting for Scotland and Ireland, but the rainfall deficiency seems to have been confined mainly to England and Wales. Isolated areas in the north-west of England had just above the average, and along a coastal strip on the west coast more than 80 per cent. of the average occurred. The rainfall reached a minimum in the south-east, where it was less than 70 per cent. to the east of a line from Bournemouth to Lincoln, thus coinciding roughly with the limit of 60 per cent. of the average in 1921.

In 1864 areas with excess were confined to the north-east of England and the centre of Scotland. Practically the whole of Ireland and the north-west of Scotland had between 85 and 100 per cent. of the average. Smaller percentages occurred only in England, where, south of a line from Carmarthen to Spurn Head, less than 80 per cent. was general. Over large areas along the east coast and in Devon and Herefordshire the fall was less than 70 per cent. of the average.

In 1870 rainfall above the average occurred only in the North and East Ridings of Yorkshire. Falls of less than 80 per cent. were recorded

widely in the west and centre of Scotland, the south and centre of England, and near Waterford. In the central plain of Scotland and locally in the south and centre of England less than 70 per cent. of the average occurred.

In 1887 only a small area in the Outer Hebrides appears to have received its normal rainfall. Falls of more than 80 per cent. occurred mainly in the north-west of Scotland and Ireland, and in a narrow strip along the east coast of England and Scotland. In the centre of the British Isles a rainfall of less than 70 per cent. of the average was widespread, especially in a broad band across England from Southport to Hull. An equally large deficiency occurred in the south-east of Ireland, and only 59 per cent. of the average was recorded at Waterford.

The summary given below compares the rainfall of these years with that of 1921.

General Rainfall of the five driest years since 1854 as Percentage of Average, 1881–1915.

AREA	1854	1864	1870	1887	1921
	%	%	%	%	%
England and Wales	77	78	82	74	70
Scotland	—	94	80	80	99
Ireland	—	86	95	77	88
British Isles	--	85	84	77	82

The data appear to justify the conclusion that for England and Wales 1921 was the driest year at least since 1854, while for the British Isles as a whole only one year, 1887, was drier. In this connection it may be noted that the figures quoted above have been carefully re-worked, using the average for the 35 years, 1881–1915 throughout. They should certainly be substituted for the more or less tentative general percentages computed by Symons with insufficient data and published in *British Rainfall*, 1887.

Previous to 1854 the only available criterion is the diagram of the "Fluctuations of Annual Rainfall from 1726 to 1886" (for England and Wales), constructed by Symons and published as the frontispiece to *British Rainfall*, 1886. Referring to the rainfall of the year 1887 in England and Wales, Symons wrote :*

"There has been no year so low since 1788, and then we have to go back to the great dry period of the middle of the 18th Century before we find another case. As I have often

* *British Rainfall*, 1887, p. 166.

explained, I do not assume any responsibility for those old figures, but neither have I any evidence which contradicts them. Rainfall as small as or smaller than that of 1887 seems to have occurred only in:—

1740, 65 per cent. 1743, 60 per cent. 1750, 61 per cent.
 1741, 58 per cent. 1748, 65 per cent. 1788, 65 per cent.
 1742, 65 per cent. 1749, 59 per cent. 1887, 69 per cent."

This suggests that for England and Wales 1921 was possibly the driest year since 1788. It is quite clear that the figures for the earlier portion of the diagram are too low, a common defect in early records, when the gauges were often placed on roofs. The earlier figures must therefore be accepted with reserve.

Individual long records in the south-east of England show that nearly everywhere the total fall for 1921 was the smallest ever recorded. The following records of more than 75 years' duration illustrate this:—

Long-period Records in South-East England.

STATION	Period of Observation	1921		Previous driest	
		Total	Per cent. of Average	Total	Date
		in.		in.	
Cirencester	1844–1921	19·95	68	19·93	1854
Guernsey	1840–1921	17·65	48	25·05	1870
Chichester	1834–1921	19·29	55	21·81	1854
Spalding	1829–1921	12·66	54	15·13	1887
Oxford, Radcliffe Obsy.	1815–1921	14·94	60	16·66	1902
Greenwich	1815–1921	12·56	53	16·38	1864
* London generally	1774–1921	14·60	60	16·20	1796

* Records taken in various parts of London.

This indicates that in London 1921 was the driest year for at least 148 years, and as London was by no means the driest district relative to the average, it may be justifiably inferred that in 1921 a considerable part of the south-east of England had the smallest rainfall for at least a century and a half, and probably for a still longer period, though complete statistical proof is wanting.

It is necessary in accepting this statement to bear in mind that it refers only to the civil year from January 1st to December 31st. It is possible, though not extremely probable, that a re-grouping of the records so as to yield totals for periods of 365 days ending at other dates might reveal drier years in the past.

COMPARISON OF THE RAINFALL OF THE YEAR 1921 WITH THE AVERAGES OF THE PERIODS 1910-1919 & 1881-1915.

ENGLAND.

DIV.	COUNTY and river-division.	STATION.	Average 1910- 1919.	Average 1881- 1915.	Depth in 1921.	Difference from Average 1881-1915
			in.	in.	in.	Per Amount.cent.
I	London	2 St. Pancras (Camden Square) .	27.83	24.47	14.60	9.87 —40
II	Surrey	4 Caterham Asylum	34.96	31.15	18.76	12.39 —40
"	Kent	1 Tenterden (View Tower)	30.32	27.50	13.71	13.79 —50
"	"	1 Folkestone (Cherry Gardens) ..	32.44	29.13	15.95	13.18 —45
"	"	2 Margate (Cliftonville)	23.65	22.80	9.29	13.51 —59
"	"	4 Rochester (Knights Place)	27.91	26.03	15.18	10.85 —42
"	Sussex	1 Yapton (Bonhams)	30.55	27.69	15.53	12.16 —44
"	"	3 Brighton (Old Steyne)	31.61	27.69	15.00	12.69 —46
"	"	5 St. Leonards (Gensing Gardens)	30.21	28.37	14.19	14.18 —50
"	"	7 Crowborough (Uckfield Lodge)	41.55	36.00	24.82	11.18 —31
"	Hampshire	1 Totland Bay (Aston House) ..	31.13	28.49	15.87	12.62 —44
"	"	3 Fordingbridge (Oaklands)	35.93	31.65	16.97	14.68 —46
"	"	5 Portsmouth (Victoria Park) ..	30.31	27.75	14.23	13.52 —49
"	"	5 Ovington Rectory	39.54	33.18	19.06	14.12 —43
"	Berkshire	3 Wellington College	32.09	26.43	16.03	10.40 —39
"	"	4 Newbury (Greenham Common)	34.36	29.02	17.01	12.01 —41
III	Hertfordshire ..	2 Harpenden (Rothamsted)	28.96	26.73	14.93	11.80 —42
"	"	3 Royston (Therfield Rectory) ..	27.38	25.19	13.08	12.11 —48
"	Buckinghamshire	3 High Wycombe	31.72	25.90	15.95	9.95 —38
"	"	4 Newport Pagnell (The Croft) ..	26.25	23.69	14.02	9.67 —41
"	Oxfordshire	3 Oxford (Magdalen College)	25.83	23.81	13.96	9.85 —41
"	Northampton ..	4 Pitsford (Sedgebrook)	24.87	24.54	14.67	9.87 —40
"	"	4 Oundle (Milton Road)	22.37	22.32	11.06	11.26 —50
"	Cambridgeshire ..	2 Stretham Engine	23.05	21.20	10.88	10.32 —49
"	"	3 Wisbech (Bank House)	24.14	22.99	13.62	9.37 —41
IV	Essex	4 Chelmsford (High Street)	24.84	22.49	14.36	8.13 —36
"	"	5 Earls Colne (Chalkney House)	25.52	23.16	13.72	9.44 —41
"	Suffolk	1 Cockfield Rectory	26.00	24.77	14.43	10.34 —42
"	"	3 Rendlesham Hall	23.20	23.14	12.91	10.23 —44
"	Norfolk	1 Beccles (Geldeston)	26.47	23.66	12.01	11.65 —49
"	"	2 Worstead (Dilham)	28.64	26.29	17.28	9.01 —34
"	"	3 Blakeney	24.84	23.00	16.46	6.54 —28
"	"	4 Swaffham	26.49	25.56	15.73	9.83 —38
V	Wiltshire	1 Calne (High Street)	31.97	28.86	17.59	11.27 —39
"	"	3 Warminster (Rye Hill)	40.59	36.91	19.18	17.73 —48
"	Dorset	1 Evershot (Melbury House) ..	41.45	38.66	20.86	17.80 —46
"	"	3 Weymouth (Westham)	30.77	27.98	15.89	12.09 —43
"	"	3 Bere Regis (Bloxworth House)	40.40	33.71	21.04	12.67 —38
"	South Devon	2 Launceston (Polapit Tamar) ..	44.28	39.25	25.13	14.12 —36
"	"	4 Ashburton (Holne Vicarage)	67.24	59.80	41.29	18.51 —31
"	"	5 Torquay (Cary Green)	34.99	33.04	20.23	12.81 —39
"	"	6 Cullompton	40.36	35.27	19.94	15.33 —43
"	"	7 Sidmouth (Sidmount)	36.17	32.38	18.37	14.01 —43
"	North Devon	2 Arlington Court	57.00	53.77	39.77	14.00 —26
"	"	3 Torrington (Enfield)	42.04	39.25	25.87	13.38 —34
"	Cornwall	1 Newquay (Mount Wise)	36.66	33.22	22.15	11.07 —33
"	"	1 Bude .....	..	33.44	23.85	9.59 —29
"	"	2 Penzance (Morrab Garden) ..	43.84	40.93	28.85	12.08 —29
"	"	2 Falmouth (New Observatory)	46.72	42.90	28.90	14.00 —33
"	"	2 St. Austell (Trevana)	49.85	45.84	27.87	17.97 —39
"	"	3 Callington (Pencrebar)	48.30	43.80	29.68	14.12 —32
"	"	4 Tresco Abbey	36.46	32.63	22.06	10.57 —32
"	Somerset	2 Street (Millfield)	32.88	29.47	16.68	12.79 —43
"	"	3 Cothelstone House	39.81	34.93	19.56	15.37 —44
VI	Gloucestershire ..	2 Tewkesbury (Upper Lode)	26.93	25.22	16.69	8.53 —41
"	"	5 Clifton College	37.59	33.87	23.84	10.03 —30
"	"	7 Northleach (Sherborne House)	34.32	30.65	17.17	13.48 —44

ENGLAND—(con.).

DIV.	COUNTY and river-division.	STATION.	Average 1910- 1919.	Average 1881- 1915.	Depth in 1921.	Difference from Average 1881-1915. Per Amount.cent.
			in.	in.	in.	in.
VI.	Herefordshire .. 1	Hereford (Belmont)	33.85	26.34	15.55	10.79 —41
"	Shropshire	Church Stretton (Wolstaston)	28.33	31.90	24.93	6.97 —22
"	"	Shifnal (Hatton Grange)	29.81	26.15	18.41	7.74 —30
"	Staffordshire 2	Market Drayton (Old Springs) ..	33.81	28.75	19.39	9.36 —33
"	"	Tea (The Heath House)	28.84	31.83	22.93	8.90 —28
"	Worcestershire .. 2	Stourport (Lincombe Lock) ...	26.31	25.57	18.39	7.18 —28
"	Warwickshire 1	Stratford on Avon(ShotteryHall)	28.21	23.91	15.12	8.79 —35
"	"	Ryton-on-Dunsmore(RytonHo.)	28.45	25.98	17.60	8.38 —32
"	"	Birmingham (Edgbaston)	29.07	26.49	17.93	8.56 —32
VII	Leicestershire 4	Thornton Reservoir	26.62	26.20	21.22	4.98 —19
"	"	Belvoir Castle Gardens	25.34	25.11	16.06	9.05 —36
"	Lincolnshire 3	Boston (Black Sluice,Skirbeck) ..	23.88	22.81	14.74	8.07 —35
"	"	Lincoln (Skellingthorpe Hall) ..	24.74	23.12	15.50	7.62 —33
"	"	Skegness (Estate Office)	28.37	22.51	14.69	7.82 —35
"	"	Louth (Westgate)	25.38	28.00	16.21	11.79 —42
"	"	Brigg	25.01	25.38	15.75	9.63 —38
"	Nottinghamshire .. 5	Southwell (Elmfield)	24.17	24.89	17.81	7.08 —28
"	"	Worksop (Hodsok Priory) ..	29.06	23.63	16.65	6.98 —30
"	Derbyshire 5	Mickleover (Clyde House)	35.30	26.05	21.32	4.75 —18
VIII	Cheshire	Macclesfield (West Park)	30.07	34.11	27.14	6.97 —20
"	"	Middlewich (Bostock Hall) ...	31.61	29.28	21.15	8.13 —28
"	South Lancashire .. 2	Garston (Grassendale Park) ..	48.99	30.05	25.03	5.02 —17
"	"	Bolton (Smithills Halls)	47.42	46.06	42.80	3.26 —7
"	Central " .. 1	Burnley (Swinden)	48.13	44.32	41.60	2.72 —6
"	"	Stoneyhurst College	33.19	46.55	48.62	2.07 + 4
"	"	Southport (Hesketh Park)	50.11	31.99	28.61	3.38 —11
"	North " .. 2	Ulverston (Poaka Beck)	43.08	52.09	43.29	8.80 —17
"	"	Halton Park	59.78	40.54	40.04	.50 —1
IX	Yorks, West Riding1	Sedbergh (Akay)	41.74	54.58	60.44	5.86 +11
"	" " " 7	Sheffield W. W. (Redmires Res.)	25.07	40.26	31.38	8.88 —22
"	" " " 7	Wath-upon-Dearne (Chapel St.)	36.64	24.80	15.07	9.73 —39
"	" " " 8	Huddersfield (Cemetery)	57.04	33.91	28.66	5.25 —15
"	" " " 9	Malham Tarn	25.57	57.50	55.10	2.40 —4
"	" " " 10	York (Cherry Hill)	32.00	24.24	17.76	6.48 —27
"	" " " 11	Harrogate(Harlow Moor Obsy.)	23.87	29.61	23.59	6.02 —20
"	" East " 3	Patrington	27.08	23.30	16.00	7.30 —31
"	" " " 3	Lowthorpe (The Elms)	35.22	26.47	18.68	7.79 —29
"	" North " 1	Leyburn (Bolton Hall)	26.81	32.63	28.18	4.45 —14
"	" " " 2	Felixkirk (Mount St. John)	25.53	26.54	19.39	7.15 —27
"	" " " 5	Whitby	24.34	24.73	17.85	6.88 —28
"	" " " 6	Middlesbrough (Albert Park) ..	29.84	23.67	20.37	3.30 —14
X	Durham	Barnard Castle (County School)	28.52	29.73	23.34	6.39 —21
"	Northumberland .. 3	Newcastle (Town Moor)	28.57	27.22	25.20	2.02 —7
"	"	Hallington(FawcettNewc.W.W.)	31.46	28.24	26.58	1.66 —6
"	"	Alnwick Castle	30.35	30.79	25.93	4.86 —16
"	Cumberland 1	Carlisle (Spital Cemetery)	29.03	31.81	29.83	1.98 —6
"	"	Borrowdale (Scathwaite)	44.12	129.48	137.92	8.44 + 7
"	"	Whitehaven (Irish Street)	37.46	42.27	43.23	.96 + 2
"	Westmorland .. 1	Appleby (Castle Bank)		35.03	30.36	4.67 —13

MONMOUTH AND WALES.

XI	Monmouthshire .. 2	Tredegar Laboratory	63.12	59.83	39.65	20.18 —34
"	" .. 4	Monmouth (Pentwyn)	34.12	30.85	19.88	10.97 —36
"	Glamorganshire .. 1	Gorseinon (Penllergaer)	52.45	48.74	36.86	11.88 —24
"	" .. 3	Ystalyfera (Wern School)	71.02	64.89	56.50	8.39 —13
"	" .. 5	Cardiff (Ely Pumping Station)	46.01	42.12	27.08	15.04 —36
"	Carmarthenshire .. 2	Carmarthen (The Friary)	50.50	48.30	37.79	10.51 —22
"	" .. 2	Llanwrda (Dolaucothy)	60.61	57.55	48.78	8.77 —15
"	Pembrokeshire .. 3	St. David's	38.68	36.37	25.43	10.94 —30
"	" .. 4	Pembroke (Stackpole Court) ..	39.43	39.26	27.73	11.53 —29
"	" .. 4	Haverfordwest (Grammar Sch.)	48.56	46.37	36.51	9.86 —21

MONMOUTH AND WALES.—(con.).

DIV.	COUNTY and river-division.	STATION.	Average 1910- 1919.	Average 1881- 1915.	Depth in 1921.	Difference from Average 1881-1915. Per Amount.cent.
			in.	in.	in.	in.
XI	Cardiganshire .. 2	Aberystwyth (Gogerddan)	51.45	46.49	36.74	9.75 —21
"	Breconshire 8	Glasbury (Gwernyfed Park) ..	32.59	31.37	19.32	12.05 —38
"	Radnorshire 1	Birmingham WW (Tyrmynydd)	63.91	62.15	44.95	17.20 —28
"	Montgomeryshire. 4	Newton (Penarth Weir)	35.71	34.99	25.37	9.62 —28
"	" 5	Lake Vyrnwy (Bank Cynon Isaf)	58.01	55.31	49.94	5.37 —10
"	Denbighshire 1	Wrexham (Pack Saddle Res.) ..	34.03	32.00	23.47	8.53 —27
"	" 2	Denbigh (Garn)	35.68	32.70	27.69	5.01 —15
"	Merionethshire .. 1	Bala (Eryl Aran)	63.90	54.61	51.45	3.16 — 6
"	" 4	Dolgelly (Bryntirion)	64.74	58.79	55.95	2.84 — 5
"	Carnarvonshire .. 2	Llandudno	31.41	30.04	25.04	5.00 —17
"	" 3	Llandwrog (Glynllivon Park) ..	45.03	44.65	42.45	2.20 — 5
"	Anglesey	Llanerchymedd	39.35	38.10	36.63	1.47 — 4

ISLE OF MAN.

XI	Isle of Man.....	Douglas (Borough Cemetery) ..	41.98	41.19	39.79	1.40 — 3
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CHANNEL ISLANDS.

XI	Jersey	St. Aubins (Railway Station) ..	35.16	33.49	15.88	17.61 —53
"	Guernsey	St. Peter Port	39.85	36.47	17.66	18.81 —52

SCOTLAND.

XII	Wigtownshire ... 3	Stoneykirk (Ardwell House) ..	38.36	36.35	35.77	.58 — 2
"	Kirkcudbrightshire 3	Dalry (Glendarroch)	56.09	54.51	58.72	4.21 + 8
"	" 4	Auchencairn (Torr House)	48.64	47.05	48.67	1.62 + 3
"	Dumfriesshire.... 3	Dumfries (Crichton Roy. Inst.) ..	35.53	36.79	38.11	1.32 + 4
"	" 3	Durrisdeer (Drumlanrig Gdns.) ..	48.88	43.57	47.77	4.20 +10
"	" 4	Moffat (Craigielands)	52.53	52.35	55.09	2.74 + 5
"	" 5	Langholm (Ewes)	51.64	53.36	52.86	.50 — 1
"	Roxburghshire... 3	Hawick (Branxholme)	33.05	33.36	32.80	.56 — 2
XIII	Berwickshire 4	Marchmont House	32.05	32.18	29.28	2.90 — 9
"	Haddingtonshire . 4	Prestonkirk (Smeaton)	26.43	24.87	22.98	1.89 — 8
"	Midlothianshire . 4	Moorfoot Hills (Gladhouse Res.)	38.22	35.33	34.96	.37 — 1
"	" 5	Edinburgh (Univ. Engin. Lab.)	26.88	25.00	25.74	.74 + 3
XIV	Lanarkshire 1	Biggar (Cambus Wallace)	34.20	31.06	31.10	.04 + 0
"	" 4	Airdrie (Hillend Reservoir) ..	36.79	37.32	42.49	5.17 +14
"	Ayrshire	Kilmarnock (North Craig Res.) ..	41.54	41.23	51.00	9.77 +24
"	" 6	Maybole (Culzean Gardens) ..	..	36.39	42.17	5.78 +16
"	" 8	Girvan (Pinmore)	49.96	49.84	51.72	1.88 + 4
"	Renfrewshire 2	Glasgow (Queen's Park)	35.79	36.05	40.20	4.15 +12
"	" 3	Shaws W. W. (Loch Thom) ..	68.09	65.36	77.37	12.01 +18
XV	Argyllshire	Loch Sunart (Glenborrodale) ..	68.96	68.97	73.85	4.88 + 7
"	" 4	Corran Lighthouse	84.59	80.97	100.64	19.67 +24
"	" 8	Lochgilphead (Poltalloch)	60.31	52.23	64.78	11.55 +22
"	"10	Campbeltown (Devaar)	48.63	45.07	49.11	4.04 + 9
"	"10	Skipness Castle	46.48	48.77	51.54	2.77 + 6
"	"11	Inveraray Castle Gardens	82.13	77.22	101.55	24.33 +31
"	"14	Islay (Eallabus)	50.88	48.86	54.16	5.30 +11
"	"14	Mull (Quinish)	54.77	56.75	58.10	1.35 + 2
XVI	Kinross-shire 2	Loch Leven Sluice	34.51	35.77	31.79	3.98 —11
"	Perthshire	Loch Dhu	81.64	79.77	87.05	7.28 + 9
"	" 3	Loch Venachar	56.05	55.29	59.05	3.76 + 7
"	" 7	Crieff (Strathearn Hydro)	39.42	40.86	37.58	3.28 — 8
"	"14	Blair Atholl	35.51	33.09	31.96	1.13 — 3
"	"14	Glen Garry (Dalnaspidal) ....	..	61.96	63.77	1.81 + 3

SCOTLAND—(con.).

DIV.	COUNTY. and river-division.	STATION.	Average 1910- 1919.	Average 1881- 1915	Depth in 1921.	Difference from Average 1881-1915.	
						Per Amount.cent.	
			in.	in.	in.	in.	
XVI	Forfarshire	1 Kirriemuir (Lintrathen)	33.46	34.67	27.50	7.17	-21
"	"	2 Dundee (Eastern Necropolis) . .	27.35	27.44	22.47	4.97	-18
"	"	2 Montrose (Sunnyside Asylum)	26.90	27.03	18.45	8.58	-32
XVII	Aberdeenshire	1 Braemar (Bank)	37.48	35.38	26.81	8.57	-24
"	"	1 Logie Coldstone School	32.61	30.92	19.86	11.06	-36
"	"	1 Aberdeen (Cranford House) . .	31.39	31.74	18.86	12.88	-41
"	"	3 Ellon (Esslemont House)	30.47	29.78	19.47	10.31	-35
"	"	4 New Deer Schoolhouse	32.83	32.34	21.36	10.98	-34
"	Banffshire	2 Keith Station	37.97	33.79	26.00	7.79	-23
"	Morayshire	2 Gordon Castle	30.28	29.77	23.36	6.41	-22
"	"	3 Grantown-on-Spey	33.32	31.15	24.25	6.90	-22
"	Nairnshire	2 Nairn (Delnies)	27.76	24.94	20.99	3.95	-16
XVIII	Inverness-shire	3 Alvie Manse	32.36	30.28	27.14	3.14	-10
"	"	6 Fort Augustus (St. Benedicts)	44.31	44.20	42.98	1.22	-3
"	"	7 Loch Quoich (Glenquoich) . . .	113.68	110.75	133.13	22.38	+20
"	"	9 Inverness (High School)	27.77	26.87	26.26	.61	-2
"	"	13 Arisaig House	63.02	62.86	71.22	8.36	+13
"	"	17 Fort William (Atholl Bank) . .	74.53	78.80	90.51	11.71	+15
"	"	19 North Uist (Monach)	42.65	46.62	38.25	8.37	-18
"	Ross & Cromarty	4 Alness (Ardross Castle)	39.74	38.54	33.67	4.87	-13
"	"	8 Loch Torridon (Bendamph) . .	86.72	85.12	92.23	7.11	+8
"	"	9 Glencarron Lodge	83.22	87.75	95.36	7.61	+9
"	"	10 Stornoway	50.69	49.85	52.47	2.62	+5
XIX	Sutherlandshire	2 Dunrobin Castle	32.29	31.65	28.63	3.02	-10
"	"	4 Tongue Manse	41.81	41.00	39.54	1.46	-4
"	"	4 Melvich Schoolhouse	37.67	36.00	34.27	1.73	-5
"	"	5 Loch More (Achfary)	78.53	75.80	97.87	22.07	+29
"	Caithness-shire	2 Wick	29.63	29.92	25.29	4.63	-15
"	Orkney	Pomona (Deerness)	35.56	35.42	40.35	4.93	+14
"	Shetland	Lerwick . . . . .	..	38.01	41.92	3.91	+10

IRELAND.

XX	Co. Cork	6 Dunmanway (The Rectory) . .	62.16	61.00	51.57	7.71	-15
"	"	7 Cork (University College) . . .	39.46	39.97	28.87	11.10	-28
"	"	7 Middleton (Ballinacurra) . . .	37.99	40.36	25.92	14.44	-36
"	"	9 Mallow (Longueville)	40.27	37.30	29.32	7.98	-21
"	" Kerry	3 Cahirciveen (Valencia Obsy.) .	56.99	55.65	46.15	9.41	-17
"	"	3 Killarney (District Asylum) . .	56.77	54.71	40.51	14.20	-26
"	"	4 Darrynane Abbey	56.29	51.02	46.03	4.99	-10
"	"	4 Kenmare (Derreen)	76.78	70.51	67.44	3.07	-4
"	" Waterford	3 Waterford (Brook Lodge) . . .	39.87	39.47	33.73	5.74	-15
"	"	3 Portlaw (Mayfield)	42.64	43.10	35.47	7.63	-18
"	" Tipperary	1 Nenagh (Castle Lough)	41.33	39.52	35.02	4.50	-11
"	"	3 Cahir Abbey	39.85	39.20	32.81	6.39	-16
"	" Limerick	2 Foynes (Coolnanes)	41.22	39.43	36.11	3.32	-8
"	" Clare	2 Ennistymon House	48.71	46.60	46.79	.19	+0
XXI	" Wexford	2 Foulkesmill (Longraigue) . . .	40.59	39.32	32.78	6.54	-17
"	"	4 Gorey (Courtown House)	37.47	34.67	29.52	5.15	-15
"	" Kilkenny	2 Kilkenny Castle	34.20	33.15	27.11	6.04	-18
"	" Carlow	2 Bagnalstown (Fenagh House)	35.08	34.95	28.25	6.70	-19
"	Queen's County	2 Abbey Leix (Blandsfort)	37.94	36.55	36.38	.17	+0
"	King's	1 Birr Castle	33.70	32.56	30.22	2.34	-7
"	Co. Kildare	2 Straffan House	33.09	31.36	30.40	.96	-3
"	" Dublin	2 Dublin (Phoenix Park)	29.82	27.64	25.99	1.65	-6
"	"	3 Balbriggan (Ardgillan)	31.11	28.96	27.52	1.44	-5
"	" Meath	4 Kells (Headfort)	36.69	37.00	28.99	8.01	-22
"	" Westmeath	1 Athlone (Twyford)	39.85	37.00	31.97	5.03	-14
"	"	1 Mullingar (Belvedere)	39.21	36.34	28.62	7.72	-21
"	" Louth	3 Greenore	32.26	31.91	28.58	3.33	-10
XXII	" Galway	3 Tuam (Gardenfield)	45.35	44.08	36.04	8.04	-18
"	"	4 Woodlawn	39.65	41.24	34.05	7.19	-17

IRELAND—(con.).

DIV.	COUNTY and river-division.	STATION.	Average 1910— 1919.	Average 1881— 1915.	Depth in 1921.	Difference from Average 1881—1915. Per Amount.cent.
			in.	in.	in.	in.
XXII	Co. Roscommon . 4	Strokestown (Castlenode)	36·55	35·00	25·26	9·74 —28
"	" Mayo 2	Crossmolina (Enniscoe)	56·07	53·27	50·15	3·12 — 6
"	" " 3	Blacksod Point	49·08	49·69	45·65	4·04 — 8
"	" " 6	Ballinrobe (Cranmore)	49·88	48·68	41·97	6·71 —14
"	" Sligo 2	Collooney (Markree Obsy.) . .	48·59	43·53	40·89	2·64 — 6
XXIII	" Cavan 1	Belturbet (Cloverhill)	35·83	34·63	27·04	7·59 —22
"	" Armagh 5	Armagh Observatory	32·51	31·75	28·46	3·29 —11
"	" Down 2	Seaforde	39·76	38·29	37·27	1·02 — 3
"	" " 4	Donaghadee	30·92	31·32	30·20	1·12 — 4
"	" Antrim 1	Belfast (Queen's University) . .	37·62	34·61	33·44	1·17 — 3
"	" " 5	Ballymena (Harryville)	45·35	41·50	38·39	3·11 — 7
"	" Londonderry 3	Garvagh (Woodbank House) . .	46·53	45·09	40·01	5·08 —11
"	" " 3	Londonderry (Creggan Res.) . .	43·61	41·77	38·97	2·80 — 7
"	" " 5	Limavady (Drenagh)	37·20	36·99	31·72	5·27 —14
"	" Tyrone 3	Omagh (Edenfel)	42·62	40·12	40·25	·13 + 0
"	" Donegal 1	Malin Head	32·10	31·99	29·00	2·99 — 9
"	" " 2	Letterkenny (Mental Hospital) .	48·01	46·00	43·54	2·46 — 5
"	" " 3	Dunfanaghy (St. Helen's) . . . .	..	45·00	42·65	2·35 — 5
"	" " 5	Killybegs (Rockmount)	61·99	60·50	57·86	2·64 — 4

FOR OFFICIAL USE.

METEOROLOGICAL OFFICE, AIR MINISTRY.

BRITISH RAINFALL ORGANIZATION.

BRITISH RAINFALL, 1921.

PART III.

GENERAL TABLE
OF
TOTAL RAINFALL IN 1921
AT
5079 STATIONS
IN
GREAT BRITAIN AND IRELAND,
WITH THE NAMES OF
THE OBSERVERS
OR OTHER AUTHORITIES FOR THE OBSERVATIONS.

ISSUED BY THE AUTHORITY OF THE METEOROLOGICAL COMMITTEE.

EXPLANATORY NOTE.

The counties are divided up into numbered areas, corresponding with 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. Reprints of these articles are available.

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 ; occasionally it is in an adjoining county. The second name is added to fix the site of observation more closely, *e.g.*, " Haslemere (Clammer Hill) " means Clammer Hill, near Haslemere.

In the column headed " diameter," figures in old style type indicate the length of the sides of rectangular gauges.

The letter D signifies that daily observations have been received and are complete for the year ; d, that less complete daily records have been received ; w indicates that weekly readings have been received, and M that the gauge is read only once a month, usually on the 1st. (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.

The total rainfall is printed in ordinary roman 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. If the record was taken during part of the year in inches and part in millimetres, the figures in both columns are printed in old style type, and in the few instances in which the readings have been made in *both* units throughout both columns are printed in roman 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 a short distance during the year. A record is not as a rule printed if the gauge has been moved more than a mile, or if there is a greater difference than 50 ft. of altitude between the two positions.

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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ENGLAND AND WALES.

DIVISION I.—LONDON. (Area, 117 sq. mi.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1921	Days with ·01 in. or more.	Days with ·04 in. or more.	
		Diam.	Height Ground	above Sea Level.				
1.—THAMES.—Right Bank Tributaries. 67 sq. mi.								
					mm.	in.		
BERMONDSEY.								
D Southwark Park	London County Council ..	5	9 11	19	311	12·23	94	76
D Shad Thames Pumping Station	London County Council ..	6	28 5	43	292	11·50	110	66
LAMBETH.								
D Brockwell Park	London County Council ..	8	1 3	140	363	14·30	107	75
D Brixton Hill Reservoir	Met. Water Board.....	5	1 8	121	305	12·00	108	74
BATTERSEA.								
d Battersea Park	London County Council ..	5	9 8	13	280	11·02	..	68
D Battersea Water Works.....	Mr. F. J. Goldsworthy ...	5	3 6	6	309	12·17	93	69
D Nine Elms (Heathwall)	London County Council ..	8	39 4	54	283	11·15	117	65
WANDSWORTH.								
D Streatham (Conyers Road) ...	Met. Water Board.....	5	2 6	119	305	11·99	96	73
d Streatham Park (Pendle Road)	W. Snell, Esq.	8	1 0	125	317	12·49	100	70
D Streatham Hill Reservoir	Met. Water Board.....	5	3 2	205	294	11·56	105	72
D Putney Heath Reservoir	Met. Water Board.....	5	1 0	180	302	11·88	108	79
D Balham High Road..... (R)P. Dodd, Esq., C.E.		6	1 6	89	351	13·82	131	82
D Wandsworth C. (Loxley Rd.)...F. J. Brodie, Esq.		8	1 0	105	346	13·61	136	80
D Southfields (CoronationGds)(R)P. Dodd, Esq., C.E.		6	1 6	37	316	12·44	115	76
D Clapham Com. (Bromfelde Rd.)H. N. Prentice, Esq.....		5	1 2	70	298	11·74	104	77
CAMBERWELL.								
D Nunhead (Southwark W.W.)...Met. Water Board.....		5	1 0	173	310	12·20	103	76
DEPTFORD.								
D Telegraph Hill	London County Council ..	5	7 0	135	294	11·56	96	70
D Water Works	Met. Water Board.....	5	1 0	20	296	11·66	93	71
GREENWICH.								
D Deptford Pumping Station ..	London County Council ..	8	4 0	18	306	12·05	94	77
D Royal Observatory	Sir F. W. Dyson, F.R.S. ..	8	1 0	150	312	12·28	113	77
D Royal Observatory	Sir F. W. Dyson, F.R.S. ..	8	0 5	149	319	12·56	119	80
D Westcombe Park Road	Rev. T. R. Price	8	1 3	154	295	11·62	116	71
LEWISHAM.								
D Grove Park (The Avenue) ....A. Malden, Esq.		5	1 6	180	325	12·79	113	72
D Forest Hill Reservoir	Met. Water Board.....	5	3 3	340	352	13·87	105	87
D Clarendon Road	G. E. Dacey, Esq.	5	1 0	98	343	13·51	139	83
D Clarendon Road	G. E. Dacey, Esq.	8	1 0	98	342	13·48	141	..
WOOLWICH.								
D Eltham (High Street)	Met. Water Board.....	5	1 0	245	318	12·52	105	78
2.—THAMES—Left Bank Tributaries. 50 sq. mi.								
KENSINGTON.								
D Harley Gardens	Mrs. Hamlyn Price	5	1 5	29	327	12·87	110	79
D Victoria & Albert Museum....E. Hart, Esq.		8	0 6	27	337	13·25	115	79
D Holland House.....	Mr. P. B. Rintoul.....	5	4 0	69	349	13·74	105	74
D Cam House.....	Rt. Hon. Lord Phillimore	5	3 0	100	357	14·06	106	73
D Campden Hill.....	Met. Water Board.....	8	1 0	142	409	16·12	108	91
HAMMERSMITH.								
D The Creek	London County Council ..	8	15 5	35	309	12·16	105	69
FULHAM.								
D Acfold Road	Mrs. H. W. Carter	5	1 0	13	319	12·55	..	..
D Hammersmith Cemetery	Mr. R. J. Brown	5	1 0	16	335	13·21	119	76

DIVISION I.—LONDON—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.		
		Diam.	Height Ground	above Sea Level.	1921					
2.—THAMES—Left Bank Tributaries—(con.).		in.	ft.	in.	ft.	mm.	in.			
CHELSEA.										
d	Lots Road Pumping Station..	London County Council ..	8	32	0	48	296	11·64	102	75
d	Western Pumping Station....	London County Council ...	8	1	0	19	310	12·20	99	70
d	Physic Garden.....	W. Hales, Esq.	5	1	0	20	320	12·59	111	73
d	Oakley Street	A. Hampton Brown, Esq..	5	1	0	25	315	12·41	111	78
d	St. Luke's Gardens	T. W. E. Higgins, Esq., C.E.	5	1	0	25	339	13·33	104	75
WESTMINSTER.										
d	King's Scholar's Pond	London County Council ..	8	11	6	31	318	12·51	111	75
d	St. George's Square	T. H. McEwen, Esq.	8	0	6	..	323	12·73	94	72
d	Buckingham Palace.....	Mr. W. Osborne.....	5	8	0	35	319	12·57	116	69
d	Kensington Gardens.....	Mr. W. Beecher	8	2	0	80	352	13·87	111	79
d	Kensington Palace	Air Ministry	8	1	0	80	365	14·36	120	80
d	St. James's Park.....	Air Ministry	8	1	0	27	315	12·40	115	72
d	Hyde Park	Royal Humane Society ...	8	20	0	..	273	10·76	91	65
d	Spring Gardens.....	(3) London County Council ..	8	6	0	35	316	12·44	101	77
d	Strand	J. J. Steward, Esq.	5	40	0	80	299	11·79	104	70
ST. MARYLEBONE.										
d	Royal Botanic Gardens.....	Mr. J. L. North	8	1	0	130	370	14·55	115	77
d	Hamilton Terrace	E. Heron Allen, Esq., F.R.S.	5	0	6	..	376	14·81	..	..
HAMPSTEAD.										
d	Barrow Hill Reservoir	Met. Water Board.....	5	1	0	195	365	14·38	108	84
d	Kidderpore Reservoir	Met. Water Board	5	1	0	322	399	15·70	103	77
d	New End Square.....	Mr. W. Pikesley	5	1	0	..	414	16·30	122	88
d	Observatory	E. L. Hawke, Esq.	8	1	0	451	374	14·71	123	86
d	Golder's Hill	London County Council ..	5	9	8	350	367	14·45	..	80
ST. PANCRAS.										
d	Camden Square	Air Ministry	8	1	0	111	371	14·60	115	80
d	Camden Square	<i>Snowdon</i> Air Ministry	5	1	0	111	364	14·33	113	79
w	Camden Square	<i>weekly</i> Air Ministry	5	1	2	111	372	14·66	..	..
m	Camden Square	<i>float g.</i> Air Ministry	8	0	11	111	368	14·50	..	..
STOKE NEWINGTON.										
d	New River Filter Beds.....	Met. Water Board.....	5	1	3	101	381	14·98	106	81
d	New River Reservoirs	Met. Water Board.....	5	1	0	105	380	14·97	111	84
HACKNEY.										
	Clapton Pond	Norman Scorgie, Esq., C.E.	5	1	0	69	356	14·03	106	75
d	Clapton Pond	(R) Norman Scorgie, Esq., C.E.	8	2	3	70	357	14·05	106	75
HOLBORN.										
d	Stone Yard	E. F. Spurrell, Esq.	5	12	0	89	309	12·18	..	68
FINSBURY.										
d	New River Head.....	Met. Water Board	5	1	0	95	320	12·61	104	75
CITY OF LONDON.										
d	Guildhall	E. E. Finch, Esq., C.E. ...	8	2	6	50	282	11·12	100	67
d	Guildhall.....	(R) E. E. Finch, Esq., C.E. ...	8	51	0	99	302	11·88	100	68
BETHNAL GREEN.										
d	Victoria Park	London County Council ..	5	9	3	51	360	14·16	96	76
POPLAR.										
d	Isle of Dogs (Island Gardens)..	London County Council ..	5	4	2	22	277	10·91	96	77
d	Isle of Dogs (Stewart Street)..	London County Council ..	8	1	0	16	305	12·02	105	78
d	Old Ford Pumping Station....	Met. Water Board.....	8	0	9	19	343	13·51	102	79
d	Old Ford (Penstock House)...	London County Council ..	8	1	0	43	330	13·00	103	72
WOOLWICH.										
d	N. Woolwich Pumping Station	London County Council ..	8	0	9	12	295	11·62	98	69
d	Barking Outfall	London County Council ..	8	0	9	9	290	11·43	120	68

DIVISION II.—SOUTH-EASTERN COUNTIES.

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain. 1921	Days with ·01 in. or more	Days with ·04 in. or more.	
		Diam.	Height Ground	above Sea Level.					
SURREY. (Area, 725 sq. mi.).		in.	ft.	in.	ft.	mm.	in.		
1.—ARUN. 45 sq. mi.									
D Haslemere (Beech Side Cottage)	J. Jackson, Esq.	5	0	9	570	464	18·27	139	89
Haslemere (Clammer Hill)	Col. Farquhar Glennie	5	1	6	400	434	17·10	118	84
Chiddingfold (Stonehurst)	H. St. John H. Bashall, Esq.	5	0	10	220	371	14·61	..	71
Chiddingfold (The Knipp)	"Surrey Advertiser"	..	..	..	..	442	17·41	..	..
D Hambledon (Rossall)	L. R. Furneaux, Esq.	5	1	0	250	387	15·22	131	84
Holmbury St. Mary (Joldwynds)	F. C. Bayard, Esq.	5	1	0	530	454	17·87	107	89
2.—MEDWAY. 50 sq. mi.									
D Dormans Park (Chartham Park)	I. D. Margary, Esq.	5	1	0	270	441	17·36	118	88
D Dormans Park (Hill Crest)	Mrs. H. R. Mill	5	1	0	320	456	17·96	132	83
D Lingfield (Felcourt)	R. McAlpine, Esq.	5	1	3	225	429	16·87	118	84
D Oxted (Stone Hall)	W. P. Metcalfe, Esq.	5	1	2	320	403	15·88	121	84
Oxted (West Heath)	Norman W. Grieve, Esq.	8	1	2	500	422	16·62	115	..
Limpsfield (Ballards Shaw)	F. C. Bayard, Esq.	5	1	1	500	326	12·82	116	69
3.—THAMES—Darent. 22 sq. mi.									
D Farleigh (Croydon Ment. Hosp.)	Croydon Corporation	8	1	0	600	413	16·25	118	88
Chelsham (Fairchildes)	A. S. Daniell, Esq.	8	1	0	600	434	17·08	..	..
Chelsham (Fairchildes)	Mr. G. Mansfield	5	0	8	600	393	15·49	..	..
Addington (Hares Bnk Pmp Sta)	Croydon Corporation	8	1	0	331	375	14·76	155	87
D Addington Hills Reservoir	Croydon Corporation	8	1	0	473	368	14·48	130	91
D Norwood (Auckland Road)	Miss J. Cooper	5	1	5	230	294	11·58	104	68
d Penge Recreation Ground	H. W. Longdin, Esq.	5	13	6	122	284	11·17	..	64
4.—THAMES—Wandle. 71 sq. mi.									
D Kingswood (Margery Hall Res.)	W. Vaux Graham, Esq., C.E.	5	1	0	691	357	14·07	113	89
D Woldingham Reservoir	W. Vaux Graham, Esq., C.E.	5	1	6	851	414	16·30	..	..
D Woldingham (The Moorlands)	Mrs. G. A. Anderson	5	1	0	750	470	18·52	..	70
Caterham Reservoir	A. E. Cornwall-Walker, Esq.	5	1	2	717	414	16·30	138	86
D Chipstead (Eyhurst)	D. Morphew, Esq.	5	1	0	538	435	17·13	138	92
Chipstead (Walpole Avenue)	F. C. Bayard, Esq.	5	1	0	530	443	17·42	..	91
Caterham Mental Hospital	F. C. Bayard, Esq.	5	1	0	607	477	18·76	136	90
D Tadworth (Glade House)	W. J. Saunders, Esq.	5	1	6	545	408	16·07	127	85
D Chelsham & Woldingham	W. Vaux Graham, Esq., C.E.	5	1	0	479	445	17·50	111	86
D Warlingham (Council School)	R. W. Peacock, Esq.	5	1	0	600	406	15·98	120	89
Caterham Valley Depot	A. E. Cornwall-Walker, Esq.	5	1	6	431	471	18·56	151	97
D Banstead (Burgh Heath)	Capt. E. R. Taylor	5	1	0	571	421	16·57	132	88
D Banstead (Burgh Heath Res.)	W. Vaux Graham, Esq., C.E.	5	1	0	570	408	16·08	107	88
D Chipstead (The Lodge)	F. E. Goad, Esq.	5	0	9	525	407	16·03	129	86
D Chipstead (How Green Res.)	W. Vaux Graham, Esq., C.E.	5	1	0	528	402	15·83	119	84
Kenley Pumping Station	A. E. Cornwall-Walker, Esq.	5	1	6	275	372	14·64	130	91
Banstead Mental Hospital	W. Young, Esq.	5	4	6	420	381	14·99	..	..
D Purley (Oakwood Avenue)	E. W. Finch, Esq.	5	1	0	380	349	13·75	130	81
D Purley (Riddlesdown Rd.)	J. Edmund Clark, Esq.	5	1	0	360	358	14·11	135	84
Purley (Pumping Station)	A. E. Cornwall-Walker, Esq.	5	1	3	225	353	13·89	129	82
D Sanderstead (Beechwood Road)	E. Alexander, Esq.	5	1	0	370	350	13·79	139	81
D Croydon Aerodrome	Air Ministry	8	1	0	250	318	12·50	120	76
D South Croydon (Avondale Rd.)	Dr. A. D. Williams	5	1	2	225	347	13·68	122	85
D South Croydon (Newark Road)	A. H. Jukes, Esq.	5	1	1	177	340	13·40	135	81
D Wallington (Alcester Road)	F. C. Bayard, Esq.	5	4	1	144	331	13·01	136	80
D Wallington (Alcester Road)	F. C. Bayard, Esq.	8	1	0	141	309	12·17	131	78
D Carshalton (Sewage Works)	F. C. Bayard, Esq.	5	1	0	118	309	12·17	109	79
D Beddington (Sewage Farm)	Croydon Corporation	5	1	0	129	303	11·93	126	72
D Croydon (Edridge Road)	A. A. Gilpin, Esq.	5	1	0	185	335	13·21	119	77
D Croydon (Waddon New Road)	"Surrey Advertiser"	5	1	0	146	303	11·95	..	..
D Croydon (Northampton Road)	Mrs. Higgins	5	1	0	210	323	12·72	117	76
D Beddington Cor. (Millgreen Rd.)	G. Miller, Esq.	5	5	0	77	332	13·08	118	81
D Mitcham (Brook Cottage)	F. C. Bayard, Esq.	5	1	0	100	321	12·63	..	..
D Wimbledon (Kingston Road)	H. A. Marshall, Esq.	5	1	0	54	342	13·47	123	87
D Wimbledon (Trinity Road)	P. J. Bevan, Esq., C.E.	5	1	0	53	313	12·31	110	77
D Wimbledon (Sewage Works)	J. Bowen, Esq., C.E.	5	1	0	55	286	11·25	114	78

DIVISION II.—SOUTH-EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
SURREY—(con.).		in.	ft.	in.	ft.	mm.	in.		
5.—THAMES—Mole & c. 229 sq. mi.									
Horley (Smallfield)	..... F. C. Bayard, Esq.	5	1	0	215	319	12·56	117	82
Outwood (The Orchards)	..... F. C. Bayard, Esq.	5	1	0	280	372	14·66	125	86
d Dorking (Stone House, Rose Hill)	..... Lt.-Col. J. R. Greenhill ...	5	1	0	240	395	15·55	119	83
Dorking (Denbies)	..... Mr. J. Ansell	5	0	9	610	413	16·27	130	..
d Brockham (North Lodge)	..... H. R. Kempe, Esq., C.E....	8	0	9	160	373	14·70	115	79
d Reigate (Hartwood)	..... R. W. Clutton, Esq.	5	1	0	174	392	15·44	119	85
South Nutfield (Hale Edge)	..... R. C. Grant, Esq.	5	1	0	250	341	13·44	115	78
d Earlswood (Sewage Farm)	..... F. T. Clayton, Esq., C.E....	5	1	6	196	341	13·44	100	80
d Redhill (Station Road)	..... W. H. Fowler, Esq.	5	18	0	270	375	14·75	123	79
Redhill (Warwick Road)	..... A.E.Cornewall-Walker, Esq.	5	1	6	284	399	15·71	134	84
d Reigate (The Knowle)	..... G. Weston, Esq.	5	1	0	390	371	14·61	116	84
d Reigate (Undercroft)	..... Paul Crosfield, Esq.	5	0	4	242	359	14·13	117	78
d Reigate (Wray Lodge)	..... late A. Rosling, Esq.	5	1	0	316	392	15·45	119	88
d Reigate (Wray Park Road)	..... Mr. F. W. Hedges	5	1	0	281	388	15·27	117	78
d Reigate (Castle Grounds)	..... F. T. Clayton, Esq., C.E....	5	1	6	350	369	14·51	131	81
d Reigate (Gas Works)	..... F. S. Smith, Esq.	8	1	0	270	335	13·18	116	73
Reigate (Laglands)	..... J. Welch, Esq.	5	1	2	375	375	14·75	125	86
d Nutfield Priory	..... Mrs. Ferris	8	1	2	468	382	15·04	141	85
Nutfield Priory	..... F. C. Bayard, Esq.	8	1	2	331	411	16·16	148	82
Betchingley (South Park Fm.)	..... W. Lambert, Esq.	5	0	4	340	408	16·05	109	75
Betchworth (Snower Hill)	..... T. Du Buisson, Esq.	8	0	11	250	364	14·33	118	..
d Buckland (The White House)	..... J. Herbert Scrutton, Esq....	8	1	6	260	397	15·64	143	94
d Box Hill (Flint Cottage)	..... Mrs. Ralph Wood	5	0	9	203	432	17·02	112	86
Mickleham (Juniper Hall)	..... Miss B. V. MacAndrew ...	5	1	0	183	403	15·85	97	71
d Headley Rectory	..... Rev. T. E. R. Phillips ...	5	1	0	165	382	15·04	122	81
Headley (The Hurst)	..... Mrs. Lyall	5	1	3	420	381	14·99	103	..
d Walton (Walton Manor)	..... Mr. J. Millichamp	5	1	0	600	409	16·10	138	87
Ashted (The Hut)	..... F. C. Bayard, Esq.	5	0	5	200	327	12·87	112	75
d Cobham (Hatchford Park)	..... Sir H. B. Samuelson, Bart.	8	1	3	300	390	15·37	104	84
d Oxshott (Bevendean)	..... Mr. J. W. Harris	5	1	0	200	344	13·53	112	91
Banstead (The Hall)	..... F. C. Bayard, Esq.	8	1	0	480	446	17·55	120	92
Epsom (The Durdans)	..... J. Barclay, Esq.	8	0	11	224	375	14·78	..	..
d Epsom (Hylands Road)	..... F. Holroyd, Esq.	5	1	0	225	342	13·46	115	77
d Epsom (Sewage Farm)	..... E. R. Capon, Esq. C.E....	8	1	0	121	303	11·91	116	77
d Whiteley Village (Fox Oak)	..... H. E. Cooke, Esq.	8	3	4	195	287	11·29	..	..
d Cobham (Fairmile Hatch)	..... Mrs. Trollope	5	1	0	165	335	13·18	..	..
d Weybridge (Gower Road)	..... Miss J. A. Sanger	5	0	7	117	328	12·92	120	81
d Sutton (Camborne Road)	..... F. E. Wright, Esq.	5	1	0	250	325	12·79	113	85
d Claygate (Hertslets)	..... N. C. Armitage, Esq.	5	1	0	106	306	12·04	128	79
Esher (Sewage Works)	..... F. C. Bayard, Esq.	5	1	0	42	290	11·40	..	75
d Sutton (High Sch., Cheam Rd.)	..... Miss J. Harwood	5	1	0	197	315	12·38	112	83
d Sutton (Water Works)	..... W. Vaux Graham, Esq. C.E.	5	1	6	166	307	12·08	112	84
d Sutton (Sewage Works)	..... W. H. Grieves, Esq., C.E.	8	1	0	94	335	13·19	100	84
d Surbiton (Worthington Road)	..... W. Stephens, Esq.	5	1	0	82	372	14·64	121	88
d Surbiton (Seething Wells)	..... Met. Water Board	5	0	10	34	316	12·45	108	80
d Surbiton (Sew. Disposal Wks)	..... H. T. Mather, Esq.	8	0	5	41	289	11·38	..	..
Thames Ditton Vicarage	..... "Surrey Advertiser" .....	..	..	..	..	327	12·88	..	..
d West Molesey (Walton Works)	..... Met. Water Board	5	0	6	35	251	9·88?	95	70
d Norbiton (Wolverton Avenue)	..... Dr. W. H. Kesteven	3	1	0	50	360	14·16	129	84
d New Malden (Sewage Works)	..... R. H. Jeffes, Esq.	5	1	0	48	287	11·29	97	68
Kingston (Palace Road) .No. 1	..... Charles Price, Esq.	5	0	10	30	316	12·43	108	76
Kingston (Palace Road) .No. 2	..... Charles Price, Esq.	5	0	10	30	317	12·46	108	76
d Kingston (County Hall)	..... H. Wilson, Esq.	5	0	9	31	321	12·63	118	81
d Kingston Sewage Works	..... P. G. Lloyd, Esq.	5	1	0	25	330	13·00	113	78
d Merton Park (Mostyn Road)	..... J. F. Caley, Esq.	5	0	5	..	316	12·44	123	74
d Raynes Pk (Cottenham Pk P.S.)	..... J. Bowen Esq., C.E.	5	1	2	50	316	12·45	113	79
d Raynes Park (W. Barnes P.S.)	..... G. Jerram, Esq., C.E.	5	1	2	47	281	11·06	102	68
d Wimbledon (Merton Hall Rd.)	..... Rev. J. A. Barrow-Clough	5	1	0	70	289	11·36	123	71
Wimbledon (The Downs)	..... "Surrey Advertiser"	5	1	0	162	322	12·69	114	76
d Wimbledon (Eagle House)	..... Sir T.G. Jackson, Bart., R.A.	5	1	6	177	309	12·15	..	66
Richmond (The Terrace)	..... "Surrey Advertiser"	8	1	6	109	319	12·54	107	82
d Richmond (Kew Observatory)	..... Air Ministry	8	1	0	18	309	12·16	104	69
d Kew (Royal Botanic Gardens)	..... Dr. Arthur Hill, F.R.S. ..	8	0	9	..	317	12·46	107	79

DIVISION II.—SOUTH-EASTERN COUNTIES—(con.).

STATIONS	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
SURREY—(con.).		in.	ft.	in.	ft.	mm.	in.		
6.—THAMES—Wey. 236 sq. mi.									
D Haslemere (U.D.C. Depot)	A. G. Whitcher, Esq.	5	1	0	475	465	18·30	131	89
D Haslemere (Hangerfield)	J. P. Trew, Esq.	5	1	1	680	443	17·45	123	89
Haslemere (Frensham Hall) No.1H. Windibank, Esq.		5	1	0	550	445	17·54	131	94
D Haslemere (Frensham Hall) No.2H. Windibank, Esq.		5	1	6	625	478	18·83	131	90
D Haslemere (Hazelhurst)	Mrs. T. P. Newman	5	1	0	550	481	18·92	125	89
D Oakwood Hill (Honeywood Ho) The Lady Tredegar.		5	1	0	280	399	15·69	136	85
Witley (Sandhills)	L. W. Lodge, Esq.	8	1	0	450	406	16·00	128	86
D Witley (King Edward's School) J. Wood, Esq.		5	1	3	330	412	16·21	111	86
D Witley (Great Roke)	C. W. Dixon, Esq.	5	5	6	300	393	15·49	115	82
D Hascombe Place	C. T. Musgrave, Esq.	5	1	0	390	399	15·69	98	87
D Cranleigh (Stonewall)	late W. Welch, Esq.	5	1	0	182	406	15·97	107	89
Ewhurst (Copse Hill)	"Surrey Advertiser"					391	15·40		
D Ewhurst (Coneyhurst)	Mr. J. Russell	8	1	0	561	398	15·68	129	87
Ewhurst (Woolpit)	Mr. W. Harrison	5	1	6	600	405	15·95		
Godalming (Milford House)	Capt. F. D. Webb	5	1	0	304	358	14·10		74
Godalming (Westbrook)	"Surrey Advertiser"					349	13·73		
D Godalming (Charterhouse)	O. H. Latter, Esq.	5	1	0	130	334	13·14	112	80
Shackleford (Hall Place)	W. E. Horne, Esq., M.P.	8	1	6	200	347	13·66		81
Peaslake (Dewdney)	Sir F. G. Ogilvie, C.B.	5	1	0	532	404	15·91		
D Bramley (The Limes)	Rev. C. J. Etty	5	0	9	136	396	15·58	115	86
Bramley (C.E. School)	"Surrey Advertiser"					341	13·42		
d Wonersh (Little Tangle)	Mr. J. Smith	5	1	0	200	345	13·57		78
Compton (Sandy Knowe Gdns) Mrs. F. Houghton						345	13·58		
D Shere (Manor House)	R. A. Bray, Esq.	5	1	0	330	377	14·85	114	86
Shere (The Rectory)	F. C. Bayard, Esq.	5	1	0	255	410	16·15		
Albury (Dalton Hill Gardens)	"Surrey Advertiser"					365	14·36		
Abinger Hall	F. C. Bayard, Esq.	8	2	0	320	454	17·87	126	91
Abinger Hammer (West Hkhst) "Surrey Advertiser"						393	15·46		
D Farnham (Crooksbury Ridges) F. R. Walters, Esq., M.D.		5	1	4	440	380	14·97	156	85
D Farnham (Short Heath Lodge) Col. G. Chrystie		5	1	0	365	364	14·33	124	79
Gomshall (The Croft)	late C. Waithman, Esq.	5	1	0		405	15·95		
D Guildford (Piccard's Rough)	H. A. Powell, Esq., M.D.	5	6	0	330	328	12·90	117	80
Guildford (Briarfield)	Miss M. E. Swaine	5	2	6	300	329	12·96	112	81
Guildford (Roy. Gram. School) H. N. Weller, Esq.		5	1	2	200	309	12·16		
D Guildford (Newlands Corner)	Mr. H. Tann	5	1	6	550	385	15·14	135	85
D Guildford (Cross Lanes)	F. F. Smallpeice, Esq.	5	0	8	200	327	12·88	114	82
Horsley (Woodcote Lodge)	Mr. W. Grimwade	5	0	6	620	405	15·94		75
Merrow (Craigie)	late Miss Lomer	5	0	9	250	285	11·23	102	
Merrow (Craigie)	Paddock late Miss Lomer	5	0	9	250	323	12·73	102	
D Normandy (The Manor House) late Rt. Rev. Bishop Hose, D.D.		5	1	1	149	336	13·24	124	81
D E. Horsley (Rowbarns Grange)	D. W. Sissons, Esq.	5	1	7	290	364	14·33	102	83
Worplesdon (Perry Hill School)	"Surrey Advertiser"					317	12·48		
D Worplesdon Hill (Pinewood)	G. W. Hayes, Esq.	5	1	4	180	313	12·34	111	77
Worplesdon (Openwood)	"Surrey Advertiser"					307	12·08		
Send (Sendholme)	"Surrey Advertiser"					315	12·41		
Mayford (Stony Yarrows)	A. R. Ricardo, Esq.	5	1	5	140	303	11·91		
D Woking (Hook Heath)	W. S. Patterson, Esq.	5	1	0	160	319	12·56	97	74
D Woking (Northwood)	S. Price-Williams, Esq., C.E.	5	1	4	114	295	11·63	95	74
D Woking (The Green)	Mrs. Howlett	5	0	9	122	305	12·00	108	74
Woking (The Grange)	"Surrey Advertiser"	5	0	8	78	338	13·32	139	
D Pyrford (Wintergreen Wood)	Lady Davy	6	1	0	150	292	11·49	104	74
D Pyrford (Kelmars)	H. D. Richardson, Esq.	5	1	0	100	292	11·50	102	72
D Horsell (The Vicarage)	Rev. Norman Pares	5	1	9	140	309	12·16	112	84
D Horsell (Inglewood)	Vernon B. Longhurst, Esq.	5	1	0	115	302	11·89	124	74
D Wisley (R.H.S. Gardens)	W. D. Cartwright, Esq.	8	1	0	150	294	11·59	122	75
D Byfleet (West Hall Gardens)	Mr. G. Carpenter	5	1	0	61	315	12·41	108	78
D West Byfleet (Kilmeena)	F. Littleboy, Esq.	5	1	0	100	310	12·20	117	73
Weybridge (St. George's Hill)	Mrs. Buckley	5	1	6	235	285	11·23		
D Weybridge (St. George's Hill)	H. I. Bond, Esq.	5	0	8	115	277	10·92	115	75
D Weybridge (Heath Field)	Miss A. T. Gardiner	5	1	0	100	330	12·99	116	78
D Weybridge (West Oaks)	A. Whittet, Esq.	5	1	0	36	303	11·92	122	73
D Weybridge (Station Road)	H. K. G. Rogers, Esq.	5	1	0	85	315	12·41	128	78
Weybridge (Windsor Walk)	"Surrey Advertiser"					301	11·83		

DIVISION II.—SOUTH-EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1921	Days with ·01 in. or more.	Days with ·04 in. or more.			
		Diam.	Height Ground	above Sea Level.						
SURREY—(con.).		in.	ft.	in.	ft.	mm.	in.			
7.—THAMES—Bourne. 55 sq. mi.										
d Knapp Hill (Ulundi)	G. C. H. Simmonds, Esq.	5	1	0	181	305	12·00	..	..
Knapp Hill (Lynbrook)	Charles Wigan, Esq.	5	1	8	200	311	12·23	106	68	
d Knapp Hill (High Street)	W. H. Cullis, Esq.	5	1	0	198	303	11·94	99	68	
d Chobham (Sandpit Hall)	K. A. H. Power, Esq.	5	1	0	100	323	12·70	124	73	
d Chobham (The Manor House)	F. A. Walter, Esq.	5	1	0	150	343	13·50	119	84	
Bagshot (Pennyhill Park)	"Surrey Advertiser"	..	..	..	..	372	14·66	..	..
d Windlesham (Windlesham Ho.)	Miss G. Cochrane	5	0	9	180	375	14·75	109	73	
d Chertsey (Ottershaw)	Mrs. R. H. Otter	5	1	0	200	361	14·22	137	83	
d Chertsey (Botleys Park)	Mr. H. Whitmarsh	5	1	5	111	324	12·74	107	79	
d Virginia Water (S. Ann'sHeath)	Rev. J. Peck	8	1	1	120	325	12·78	116	70	
d Englefield Green (Queenswood)	S. J. Rigden, Esq.	8	1	0	200	375	14·76	132	81	
8.—THAMES—Loddon. 17 sq. mi.										
Frimley Green (Corry Hill)	Miss D. E. Bailey	5	1	0	285	330	13·00	103	72	
d Frimley Green Waterworks	S. G. Weller, Esq.	5	2	6	220	278	10·96	95	62	
d Frimley Green (Ridgemount)	C. C. Haviland, Esq.	5	0	9	350	359	14·12	146	77	
d Camberley (Way's End)	E. Ernest Green, Esq.	5	0	11	295	335	13·17	125	68	
KENT. (Area, 1532 sq. mi.										
1.—ROTHER & C. 217 sq. mi.										
d Lydd (The Paddock)	Dr. J. A. Proctor	5	4	6	..	321	12·62	104	69	
Lydd (Westbroke House)	A. Finn, Esq.	5	1	3	..	319	12·56	..	..
d Brookland (Thrift Farm)	C. Clark, Esq.	12	3	0	11	346	13·62	89	63	
Snaive (Poplar House)	T. K. Tickner, Esq.	8	2	3	10	307	12·07	93	68	
d Hawkhurst (Hensill)	F. Ross Thomson, Esq.	5	3	0	180	358	14·10	88	64	
Hawkhurst (Pixhall)	Jesse W. Norris, Esq.	5	1	3	355	484	19·04	95	83	
Tenterden (Summerhill)	Mrs. Wilkin	8	1	0	150	358	14·10	106	68	
Tenterden (Ashenden)	Major Herbert Neve	5	1	0	190	355	13·96	107	..	
d Tenterden (View Tower)	J. Ellis Mace, Esq.	8	1	5	190	355	13·97	130	72	
d Tenterden (View Tow.)	Snowdn. J. Ellis Mace, Esq.	8	1	5	190	348	13·71	121	71	
d Benenden (National Sanat'm)	Dr. Niven Robertson	5	1	0	180	370	14·58	120	75	
M Biddenden (Sandpit Wood)	J. Ellis Mace, Esq.	5	1	0	218	369	14·52	..	..
d Hythe	J. Singleton Green, Esq.	CE	5	1	0	0	339	13·33	119	70
d Hythe (Sandling Park)	Rt. Hon. L. Hardy, M.P.	8	1	0	220	383	15·09	115	80	
d Sandgate	C. Law Green, Esq., C.E.	5	4	0	176	339	13·33	117	84	
d Folkestone (Borough Sanat'm)	A. E. Nichols, Esq., C.E.	5	1	0	101	329	12·96	102	76	
d Folkestone (Cheriton Road)	B. J. Duncan Walker, Esq.	5	1	0	160	342	13·47	103	74	
Folkestone (Cherry Gardens)	H. T. Turner, Esq., C.E.	5	1	6	230	405	15·95	121	88	
Capel (Lower Standen)	H. T. Turner, Esq., C.E.	5	2	11	250	400	15·75	..	..
d Dover (Water Works)	W. B. Smith, Esq., C.E.	5	1	6	200	363	14·29	98	79	
d Dover (Buckland)	Guy Mannering, Esq.	8	1	6	50	413	16·27	116	80	
d Kearsney (Chilton Farm)	W. B. Smith, Esq., C.E.	5	1	6	127	455	17·93	103	80	
2.—STOUR & C. 386 sq. mi.										
d Lympne Aerodrome	Air Ministry	8	1	0	348	361	14·23	121	75	
d Lympne (Elham Valley W.W.)	Phillip Harris, Esq.	5	1	6	485	422	16·61	118	89	
d Dover (Martin Mill Pump. Stat.)	F. L. Ball, Esq.	5	11	0	298	343	13·51	141	74	
Ashford (Eastwell Park) (R.)	Mr. J. E. Weston	9	3	6	410	362	14·24	94	80	
d Charing Pumping Station	F. L. Ball, Esq.	5	1	0	593	407	16·03	110	74	
M Deal and Walmer W.W.	A. Mantle, Esq.	12	1	0	110	340	13·40	..	..
d Deal and Walmer W.W.	A. Mantle, Esq.	5	1	0	110	343	13·51	110	76	
d Deal (Wellington Road)	Deal Corporation	4	1	0	18	367	14·47	..	71	
d Great Mongeham Rectory	Rev. W. H. Rammell	5	1	8	100	348	13·70	103	75	
d Sandwich (Upton House, Word)	Capt. W. Elwin Napier	5	1	0	32	348	13·69	106	78	
d Chilham (Lower Ensden)	F. Ivo Neame, Esq.	5	3	0	305	405	15·95	123	95	
d Wingham (Margate W.W.)	Mr. W. R. Hosking	5	1	0	138	338	13·30	..	79	
d Canterbury (Oaten Hill House)	Miss H. M. Carr	5	1	3	50	316	12·43	..	71	
d Canterbury (Medical Hall)	A. Lander, Esq.	5	0	11	39	302	11·88	105	76	
d Canterbury (London Road)	P. J. Spillett, Esq.	5	0	6	66	335	13·20	119	87	
Canterbury (Irrigation Works)	C. Terry, Esq., C.E.	5	2	6	15	338	13·31	111	87	

DIVISION II.—SOUTH-EASTERN COUNTIES.—(con).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
KENT—(con.).		in.	ft.	in.	ft.	mm.	in.		
2.—STOUR & C.—(con.).									
d Wickhambreaux (The Willows)	A. Baird, Esq.	5	0	8	22	351	13·83	136	85
d Minster (Gas Works)	late W. Thomson, Esq., C.E.	5	1	0	60	297	11·69	..	..
d Ramsgate (Southwood W. W.)	late W. Thomson, Esq., C.E.	8	1	0	169	277	10·93	105	68
d Ramsgate (Archer House)	Miss L. M. Wainwright	5	1	0	75	273	10·73	95	69
d Reculver	Allington Collard, Esq.	5	5	2	27	279	10·97	104	66
d Broadstairs (Domus)	Capt. W. B. Marling	8	1	0	60	304	11·98	107	75
d Broadstairs (Collis Court Road)	A. Watkins, Esq.	5	1	0	..	299	11·78	101	73
d St. Peter's	late Rev. H. C. V. Snowden	5	0	9	140	297	11·71	112	80
d St. Peter's Court	A. J. Richardson, Esq.	5	1	0	135	285	11·20	111	74
d Birchington (Hollydene)	W. Tomlin, Esq., Junr.	6	6	0	75	280	11·01	88	65
d Birchington (Rose Bank)	Mr. G. Hoare	5	5	0	45	290	11·40	84	68
d Margate (Cliftonville)	J. W. Gunnis, Esq.	8	1	0	120	296	11·64	110	71
d Margate (Cliftonville)	C. J. Pemble, Esq.	5	1	0	51	236	9·29	95	60
3.—SWALE & C. 167 sq. mi.									
d Selling (Luton)	F. Ivo Neame, Esq.	5	4	9	263	398	15·67	113	84
d Bicknor Rectory	Rev. E. W. Edwards	5	1	6	517	404	15·89	113	82
d Dunkirk (Dunkirk House)	Col. E. F. Gosset	5	0	11	400	340	13·39	118	81
d Ospringe (Lorenden)	late Walter C. Stunt, Esq.	5	1	6	180	376	14·80	106	71
d Teynham (Norton Court)	Capt. A. W. Rickards	5	0	10	100	345	13·60	100	72
d Teynham (New Gardens)	Col. J. F. Honeyball	5	1	5	30	322	12·68	98	60
d Whitstable	G. Kirkby, Esq.	5	1	0	21	275	10·81	105	65
d Herne Bay (Water Works)	J. Roberts, Esq.	5	1	0	130	285	11·21	..	..
d Sheppey (Eastchurch, O. Rides)	H.C. Warren, Esq.	5	2	0	40	297	11·69	..	64
4.—MEDWAY. 506 sq. mi.									
d Woodchurch (Hengherst)	W. Mitchell, Esq.	5	1	0	152	325	12·80	109	73
d Speldhurst School	J. A. Ager, Esq.	5	1	3	365	486	19·14	98	81
d Scotney Castle	E. W. Hussey, Esq.	5	3	9	203	462	18·19	..	67
d Goudhurst (Maypole)	G. Parker Hinds, Esq.	8	1	8	412	506	19·91	104	77
d Goudhurst (Lidwells)	Rev. H. P. FitzGerald	5	1	0	270	480	18·88	134	82
d High Halden (Middle Quarter)	Mr. B. H. Budding	5	1	0	114	351	13·82	117	78
d Biddenden (Augsutus Villa)	E. Donne, Esq.	5	0	8	175	352	13·85	110	74
d TunbridgeWells (Hawkenbury)	D. W. Horner, Esq.	5	1	6	435	442	17·40	104	82
d TunbridgeWells (Calverley Park)	Dr. F. C. Linton	5	1	0	356	418	16·45	111	80
d Tun. Wells (TheW hite House)	Miss Monica Robins	5	1	6	360	442	17·40	109	85
d Horsmonden (Broad Ford Ho)	Mrs. L. E. Maude	5	1	0	96	468	18·44	113	77
d Speldhurst (Little Court)	P. L. Rooper, Esq.	8	1	3	350	441	17·35	127	86
d Pembury (The Spring)	Miss L. M. Fowler	5	1	6	416	452	17·78	146	85
d Pembury Waterworks	W. H. Maxwell, Esq., C.E.	8	1	8	197	400	15·75	110	80
d Paddock Wood (MatfieldGrange)	C. A. Perkin, Esq.	5	1	0	360	422	16·63	113	82
d Paddock Wood (Matfield)	D'Arcy W. Reeve, Esq.	5	1	0	321	437	17·22	122	82
d Edenbridge (Falconhurst)	Hon. Mrs. John Talbot	5	1	6	375	464	18·27	110	92
d Markbeech (Edells)	Miss M. F. Pearse	5	1	0	320	327	12·87	134	76
d Penshurst Place	Lord De L'isle and Dudley	5	1	6	120	458	18·04	134	82
d Chiddingstone Hoath (Truggers)	Alsager Vian, Esq.	5	0	8	388	487	19·19	120	83
d Penshurst (Parkholt)	Mr. J. M. Sturgess	5	0	9	265	402	15·84	110	77
d Tonbridge (Mabledon Park)	J. F. W. Deacon, Esq.	5	1	0	190	437	17·19	118	80
d Tonbridge (Brooklands)	G. J. Kimmins, Esq.	5	0	10	120	401	15·77	98	73
d Tonbridge (Lyons)	Dr. E. S. Cardell	..	0	8	75	371	14·61	107	72
d Hildenborough (Hollanden Ho.)	C. H. Scott, Esq.	8	1	0	99	429	16·89	126	84
d Ulcombe Place	A. O. Walker, Esq.	5	1	0	350	392	15·45	112	72
d Linton Park	Mr. C. Pratt	5	0	8	..	388	15·26	109	80
d Langley (Rumwood Court)	Mr. W. J. Gould	5	1	9	354	407	16·02	120	76
d Otham (Synyards)	Ambrose Boyson, Esq.	5	1	0	315	416	16·39	138	83
d Wateringbury (The Limes)	Alan Lambert, Esq.	5	1	0	130	401	15·78	129	78
d Wateringbury (Manor Farm)	W. Pye English, Esq.	5	3	0	152	382	15·03	118	71
d Wateringbury	J. Garratt, Esq.	5	1	6	120	365	14·36	..	73
d Sevenoaks (River Hill)	Lt.-Col. J. M. Rogers, D.S.O.	8	2	6	500	433	17·06	118	81
d Sevenoaks (Soar Farm, Plaxtol)	H. Stonham, Esq.	5	3	0	300	452	17·80	100	82
d Maidstone (W. W., Barming)	W. J. Ware, Esq., C.E.	5	1	6	250	351	13·84	112	74

DIVISION II.—SOUTH-EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
KENT—(con.).		in.	ft.	in.	ft.	mm.	in.		
4.—MEDWAY—(con.).									
D Maidstone (Branchley Gardens)	T. F. Bunting, Esq., C.E. . .	5	0	9	50	351	13·80	112	77
D Maidstone (Mill Street)	T. F. Bunting, Esq., C.E. . .	8	6	0	38	354	13·92	107	72
D East Malling (Broadwater)	C. B. Mercer, Esq.	5	1	6	166	398	15·67	124	85
M Maidstone (Allington Lock)	Mr. W. Smith	5	1	0	45	355	13·97	88	70
D Detling (The Croft)	R. Cooke, Esq.	5	1	2	330	393	15·49	149	85
D Detling (The Croft)	R. Cooke, Esq.	5	1	0	330	395	15·53	149	85
M Detling (Pollhill Fields)	R. Cooke, Esq.	5	1	0	553	380	14·95	..	..
D Chatham (Woolmans Wood)	W. Coles Finch, Esq.	5	3	0	470	347	13·66	99	73
D Halling Pumping Station	F. L. Ball, Esq.	5	1	0	75	361	14·20	..	69
D Chatham (Luton W.W.)	W. Coles Finch, Esq.	5	3	0	88	312	12·29	89	70
D Rochester (Knights Place)	Miss F. H. Pye	5	3	0	320	386	15·18	113	79
D Strood Water Works	W. Banks, Esq., C.E.	5	3	0	112	330	12·99	99	69
D Frindsbury (The Shrubbery)	Warwick Stunt, Esq.	5	3	0	150	299	11·79	89	65
D Frindsbury (Stonehouse Farm)	E. W. Wood, Esq.	5	5	0	20	341	13·42	99	76
5.—THAMES—Darent. 256 sq. mi.									
D Westerham (Quebec Square)	Met. Water Board	5	1	0	380	446	17·55	115	88
D Westerham Hill Pumping Stat.	Met. Water Board	5	1	0	539	462	18·20	120	91
M Sevenoaks (Tonbridge Rd Res.)	A. Grainger, Esq.	5	1	6	556	430	16·93	..	..
D Sevenoaks (The Old House)	W. Tattersall, Esq.	8	1	0	510	446	17·56	125	80
D Sevenoaks (Speldhurst Close)	Rev. D. D. Mackinnon	5	1	0	470	410	16·15	124	81
D Tatsfield (Betsom Hill)	Met. Water Board	5	0	7	820	467	18·39	116	87
D Seal (St. Lawrence Reservoir)	A. Grainger, Esq.	8	1	0	665	425	16·72	..	..
D Seal (Wilderness Gardens)	Mr. J. Shelton	5	1	0	300	420	16·52	114	76
D Seal (Kemsing Pumping Stat.)	A. Grainger, Esq.	5	1	0	292	436	17·16	..	..
D Sevenoaks (Chevening Gardens)	Mr. J. C. Sutton	5	1	0	360	449	17·69	118	78
D Knockholt (Kent Waterworks)	Met. Water Board	5	1	0	785	447	17·59	117	89
D Otford (Beechy Lees)	Mr. R. Edwards	5	0	10	480	457	17·98	127	87
D Biggin Hill	Air Ministry	8	1	0	601	442	17·40	135	84
D Downe (Petleys)	G. N. Murton, Esq.	5	1	0	512	416	16·37	..	77
D Chelsfield (Woodlands)	W. A. Waring, Esq.	5	4	0	400	384	15·13	114	73
D Keston (Forest Lodge)	W. H. Dodgson, Esq.	5	0	3	450	402	15·84	..	..
D West Wickham (Wickham Court)	F. C. Bayard, Esq.	5	1	2	300	359	14·15	109	84
D Eynsford Hill	Arthur Mee, Esq.	8	1	0	358	349	13·76	102	72
D West Wickham (Ingleside)	G. B. Kershaw, Esq., C.E.	5	1	0	248	260	10·24?	97	58
D Hayes (Hayes Place)	F. C. Bayard, Esq.	8	1	0	350	376	14·81	113	84
D Orpington (Kent Waterworks)	Met. Water Board	5	1	0	220	395	15·53	114	80
D Orpington (Lynwood)	W. Jones, Esq.	5	1	4	272	327	12·87	..	..
D Cobham (Sole Street House)	J. Scrutton, Esq.	5	1	8	311	367	14·45	120	82
D Cobham (Scaler's Hill)	A. W. Booth, Esq.	5	1	9	250	386	15·20	100	80
D Bromley Common (Elmfield)	Rev. J. P. Faunthorpe	5	0	9	240	336	13·23	129	78
D Bickley (Sunnydene)	Sir J. Wrench Towse	5	1	0	227	327	12·89	99	77
D Bickley (St. Luke's Vicarage)	Rev. C. C. Gosselin	5	2	0	..	319	12·56	110	70
D Bickley (Farrants)	L. E. Chalmers, Esq.	8	1	0	300	326	12·84	100	69
D Bromley (High Street)	H. W. Thomas, Esq.	5	1	0	200	301	11·85	..	..
D Bromley (Gilbert Road)	Edward Kinder, Esq.	5	1	4	200	326	12·83	..	..
D Bromley (Hammilton Road)	Rev. F. N. Style	5	1	0	231	301	11·86	..	..
D Beckenham (Croydon Road)	J. A. Angell, Esq., C.E.	8	1	0	110	354	13·95	127	80
D Chislehurst (Hawkwood)	F. C. Bayard, Esq.	5	1	0	300	312	12·27	98	69
D Swanley (Horticultural Coll.)	Norman Humphrey, Esq.	5	0	10	155	343	13·49	..	..
D Southfleet (Hazells)	"Kent Messenger" . . . . .	..	..	..	..	334	13·15	..	..
D Southfleet (Kent Waterworks)	Met. Water Board	5	1	0	82	317	12·46	108	72
D Wilmington (Kent Waterworks)	Met. Water Board	5	1	0	25	311	12·25	..	71
D Dartford (West Hill House)	J. Taylor, Esq.	5	1	3	100	350	13·78	98	71
D Gravesend (Park House)	W. G. Rea, Esq.	5	38	4	78	292	11·49	103	65
D Stone (City of Lond. Mntl. Hspl.)	Dr. R. H. Steen . . . . .	..	..	..	..	316	12·43	94	65
D Higham Waterworks	C. H. Clark, Esq.	8	1	0	141	381	15·02	143	73
D Bexley Heath (Rookwood)	G. Berry Hamlin, Esq.	5	1	0	161	358	14·08	128	78
M Bexley Heath (Rookwood)	G. Berry Hamlin, Esq.	5	1	0	161	333	13·09	..	..
D Erith (Crossness)	London County Council	14	0	6	16	290	11·41	104	71
D Belvedere	(R) Callender's Cable Co., Ltd.	6	1	0	14	297	11·71	99	68

DIVISION II.—SOUTH-EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1921	Days with ·01 in. or more.	Days with ·04 in. or more.	
		Diam.	Height Ground	above Sea Level.				
SUSSEX. (Area, 1458 sq. mi.)		in.	ft.	in.	ft.	mm.	in.	
1.—LAVANT & C. 175 sq. mi.								
d Selsey (Large Acres) . . . <i>Field</i> . . . E. Heron Allen, Esq., F.R.S.	5	1	0	25	415	16·33	137	86
d Selsey (Large Acres) . . . <i>Lawn</i> . . . E. Heron Allen, Esq., F.R.S.	5	1	0	25	412	16·22	137	86
d Bognor (Waterloo Square) A. G. Thompson, Esq., C.E.	8	1	0	21	387	15·25	121	78
d Bognor (Albert Road) H. L. F. Guernonprez, Esq.	8	1	0	17	384	15·12	120	83
d Colworth (Manor Farm) Harold W. Drewitt, Esq.	5	4	6	18	395	15·54	107	77
Bognor (Lidsey Lodge) H. Neale, Esq.	8	1	2	25	409	16·09	96	82
d Merston (Abelands) Miss V. Kennard	5	0	6	24	421	16·58	124	83
d Bosham (Cobnor) Major S. W. B. Beale	5	0	6	12	405	15·95	138	77
Yapton (Bonhams) W. Harrison, Esq.	5	1	0	24	395	15·53	115	81
Yapton (Drove Farm) W. Harrison, Esq.	5	1	0	14	396	15·58	115	81
d Chichester (Westgate) G. Ashley Tyacke, Esq.	8	0	6	40	456	17·95	121	86
d Chichester (West Street) Walter Dick, Esq.	5	1	0	40	443	17·45	119	82
d Chichester (Summersdale) Late Rev. H. J. Peckham	5	1	0	100	486	19·13	142	89
Chichester (Oakwood House) Mrs. Baring Du Pre	5	0	5	101	496	19·54	104	92
d Chichester (West Broyle Gdns.) T. Weller-Poley, Esq.	5	1	4	107	469	18·48	113	86
d Emsworth (West Bourne) Rev. L. B. Birkett	5	1	0	30	408	16·07	130	88
d Funtington J. A. Greenwood, Esq.	5	1	0	95	459	18·09	129	89
West Stoke Rectory Rev. Preb. W. F. Shaw	5	1	0	176	446	17·56	87	78
d Chichester (Goodwood Gardens) Mr. F. Brock	5	1	3	133	527	20·76	143	94
d Emsworth (Watagate House) W. M. Christy, Esq.	5	1	0	236	489	19·24	131	89
West Dean Park Mr. W. H. Smith	10	1	6	190	545	21·45	103	91
d Chilgrove House E. L. Woods, Esq.	5	1	0	266	490	19·29	..	82
d Compton (Compton House) Kenneth M. Langdale, Esq.	5	1	0	263	518	20·38	151	95
d Elsted (Telegraph House) The Earl Russell	5	1	0	625	557	21·91	113	98
2.—ARUN. 285 sq. mi.								
d Littlehampton (Met. Station) C. Thomas Gardner, Esq.	5	1	0	27	323	12·71	107	68
d Patching (Dulaney House) Mr. J. J. Hunt	5	0	9	125	423	16·67	116	89
d Patching Farm Michael Drewitt, Esq.	5	1	0	180	427	16·83	98	78
d West Chiltington (Gaywood) E. Burney-Young, Esq.	5	0	8	134	444	17·48	..	69
Cocking Rectory Mrs. Randall	5	1	0	195	564	22·22	129	92
Harting (Down Place) R. G. Blackwell, Esq.	5	1	0	400	638	25·12	126	104
d Fittleworth Rectory Rev. A. C. Lucey	5	1	4	135	482	18·97	104	83
d Bepton (Fairfield) Major W. A. Chauncy	5	0	8	158	447	17·62	104	83
d Selham (Selham House) C. C. Lacaita, Esq.	5	1	0	115	398	15·68	..	75
Midhurst (Meadowlea) Gilbert Eames, Esq.	5	1	0	..	461	18·15	110	85
d Stedham (Rotherhill) Dr. W. A. Wills	8	0	6	190	525	20·65	117	99
Midhurst (Hollist) Nigel V. Combe, Esq., MBE.	5	0	10	107	494	19·45	..	..
d Rogate (Durford Abbey Farm) Late J. Harmsworth, Esq.	5	4	0	156	468	18·43	118	91
d Petworth Park Gardens Mr. E. W. Pull	5	1	0	182	439	17·27	113	81
Tillington (River House) Hon. Lady Cunliffe, C.B.E.	5	1	0	230	362	14·24	..	..
Lodsworth Lt.-Col. E. O. Hollist, R.A.	8	2	0	220	368	14·48	..	..
d Midhurst (K. Edward VII. San.) B. Ash, Esq.	5	1	0	481	431	16·95	122	81
Wisborough Green (Lowfold) B. de F. Osmaston, Esq.	5	1	0	150	390	15·36	..	75
d Linchmere (Borden Wood) Edmund Lamb, Esq.	8	1	0	260	524	20·64	98	86
Fernhurst (Ashurst) J. G. Ohlenschlager, Esq.	5	1	0	280	472	18·59	112	83
d Fernhurst (Blackdown House) Lady Philipson Stow	5	1	0	550	465	18·30	114	85
Petworth (Roundwyck) Brig. Gen. C. Lewis, CMG, DSO	5	0	6	105	431	16·98	95	85
d Lower Beeding (The Warren) Leicester M. Reed, Esq.	5	0	10	430	459	18·09	105	85
d Horsham (Christ's Hospital) Major Gabriel Green, M.C.	8	1	3	160	407	16·01	115	75
d Horsham (Wimblehurst) Miss E. M. Allcard	5	1	0	195	427	16·81	127	76
Rusper (The Nunnery) Sir Cecil J. B. Hurst, K.C.B.	5	1	6	260	418	16·46	105	..
3.—ADUR & C. 237 sq. mi.								
d Rottingdean School Mr. T. A. Sandalls	5	1	0	120	360	14·19	101	80
d Worthing (Victoria Park) Dr. R. H. Wilshaw	8	1	0	35	337	13·26	108	65
East Preston (Bay Trees) Rev. J. B. Orme	5	0	9	25	381	15·00	132	80
d Brighton (Old Steyne) F. W. Braybon, Esq.	5	1	0	32	380	14·96	117	75
d Hove (Marine Park) Dr. A. Griffith	8	1	0	41	340	13·39	123	69
d Brighton (Dyke Road) R. A. Penney, Esq.	5	3	10	240	396	15·59	137	85
d Brighton W.W. (Goldstone Bot.) J. Johnston, Esq., C.E.	8	0	7	140	366	14·42	115	77
d Brighton W.W. (Lewes Road) J. Johnston, Esq., C.E.	8	4	9	140	447	17·61	132	91

DIVISION II.—SOUTH-EASTERN COUNTIES—(con.).

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		Diam.	Height Ground	above Sea Level.		1921			
SUSSEX—(con.).		in.	ft.	in.	ft.	mm.	in.		
3.—ADUR & C.—(con.).									
Brighton W.W. (Shoreham)	J. Johnston, Esq., C.E.	8	1	9	12	377	14·85	112	75
Brighton W.W. (Mile Oak*)	J. Johnston, Esq., C.E.	8	1	3	167	399	15·69	122	74
Brighton W.W. (Race Hill Res.)	J. Johnston, Esq., C.E.	8	1	0	466	461	18·14	133	93
Preston Park (Cromer Lodge)	P. J. Trouncer, Esq.	8	1	3	96	424	16·71
Falmer (Brighton W. W.)	J. Johnston, Esq., C.E.	8	1	3	209	467	18·37	158	88
Patcham (Brighton W. W.)	J. Johnston, Esq., C.E.	5	1	6	207	446	17·56	132	94
Bramber (Burletts)	Hatton G. Sugden, Esq.	5	3	6	75	518	20·40	121	89
Washington Vicarage	Rev. A. H. S. Patrick	5	1	0	251	435	17·14	118	80
Ditchling (Sillwood House)	Miss Tupper	5	1	0	220	480	18·91
Burgess Hill (Leylands Road)	Frank Dean, Esq.	5	1	0	152	455	17·92
Wykehurst Park Gardens	Mr. T. Tyson	5	1	6	360	427	16·80	..	77
Cuckfield (Henmead Hall)	Mrs. Maxwell Campbell	5	3	5	365	453	17·82	..	89
Billingshurst (Duncan's Farm)	Miss Edith Beck	5	1	0	130	405	15·96	102	84
4.—OUSE. 224 sq. mi.									
Seaford College	A. F. V. Prater, Esq.	5	1	6	39	305	11·99	88	68
Seaford (Bowden House School)	J. F. Thomas, Esq.	5	1	0	190	361	14·23	107	80
Newhaven (Poverty Bottom WW)	J. T. Bickford, Esq.	8	1	1	51	395	15·55	109	82
Lewes (Little Dene)	Mr. F. Down	8	0	11	58	483	19·02	96	82
Lewes W. W. (Kingston)	A. Wells, Esq.	8	1	3	13	509	20·05	156	92
Framfield (High Cross)	Maj. R. L. Thornton, C.B.E.	5	0	9	195	435	17·12
Wivelsfield Green	T. D. Evans, Esq.	5	1	0	..	423	16·64	..	64
Uckfield (Pilt Down)	W. M. Alderton, Esq.	5	1	0	100	389	15·30	..	80
Haywards Heath (Gower Road)	Mr. J. F. Shirley	5	3	4	242	382	15·03	119	79
Buxted (Strawberry Hall)	C. Rintoul, Esq.	5	1	0	180	444	17·48	104	..
Sheffield Park Gardens	Mr. G. Figgis	5	1	10	..	447	17·60	97	83
Mayfield (Five Ashes)	Miss Emily Aston	5	1	5	300	474	18·67	134	83
Lindfield (The Bungalow)	Mrs. M. Weedon	5	0	11	177	434	17·07	119	78
Lindfield (Council School)	H. Woolcock, Esq.	5	1	0	113	440	17·34	116	79
Oldlands Hall	(R) F. Eckstein, Esq.	8	3	0	400	630	24·82	130	97
Ardingly (Lywood House)	G. Forrester Scott, Esq.	5	0	9	240	459	18·09	140	80
Ardingley (Brook House)	H. R. G. Clarke, Esq.	8	0	9	240	463	18·24	108	87
Ardingley (Wakehurst Place)	G. W. E. Loder, Esq.	8	1	3	437	511	20·12	133	88
Horsted Keynes (Birchgrove)	Miss G. C. Price-Davies	5	1	0	400	495	19·48	129	80
Balcombe (The Gables)	Mr. G. J. Warren	8	1	3	358	495	19·48	133	94
Balcombe (Stockcroft)	R. Newton, Esq.	5	1	1	341	512	20·17	130	93
Balcombe (Waterworks)	F. Martin, Esq., C.E.	8	1	0	471	512	20·14	..	90
Balcombe (Highley Manor)	Mr. B. T. Brooks	8	1	6	420	586	23·08	130	85
5.—CUCKMERE & C. 189 sq. mi.									
Eastbourne (Wilmington Sq.)	Dr. W. G. Willoughby	5	1	0	36	401	15·80	122	85
Eastbourne (Motcombe Gdns)	(R) Major L. Roseveare, C.E.	11	1	7	59	399	15·71	122	86
Eastbourne (Bakewell Road)	Chas. Harding, Esq.	8	1	0	85	411	16·18	125	86
Eastbourne (Arundel Road)	Miss Woodd	8	1	6	87	405	15·94	141	89
Eastbourne (Arundel Road)	J. C. Wright, Esq.	5	1	0	70	408	16·07
West Dean	A. Wilkins, Esq.	8	1	6	112	366	14·42	128	92
Jevington (Church Farm)	A. Wilkins, Esq.	8	1	6	274	376	14·80	..	70
Litlington (Plough & Harrow Inn)	A. Wilkins, Esq.	8	1	6	19	420	16·53	106	86
Willingdon Sewage Farm	J. H. Knight, Esq.	5	1	0	24	404	15·89	103	89
Pevensey Pumping Station	J. H. Knight, Esq.	5	1	0	12	358	14·08	104	85
Pevensey Bay (Beach House)	J. H. Anderson, Esq., C.E.	5	1	5	21	336	13·24	..	67
Pevensey Bay Pumping Station	J. H. Knight, Esq.	5	1	0	7	338	13·31	104	81
Hastings (Filsham Reservoir)	P. H. Palmer, Esq., C.E.	5	1	3	35	320	12·60	98	78
St. Leonards (West Marina Gdns)	W. Ruskin Butterfield, Esq.	8	1	0	22	337	13·27	127	87
St. Leonards (Gensing Gardens)	W. Ruskin Butterfield, Esq.	8	1	0	179	360	14·19	142	82
Hailsham Vicarage	Rev. F. Clyde Harvey	5	1	0	105	426	16·76	106	87
Hailsham (Magham Down)	E. M. Bear, Esq.	5	1	0	90	387	15·23	106	79
Hastings (Newgate)	(R) P. H. Palmer, Esq., C.E.	8	5	6	240	332	13·06	93	76
Hastings (Halton Reservoir)	P. H. Palmer, Esq., C.E.	5	1	3	301	362	14·26	106	81
Hastings (Fairlight Reservoir)	P. H. Palmer, Esq., C.E.	5	1	3	523	347	13·68	97	78
Hastings (Cemetery)	Walter Field, Esq.	5	0	8	478	358	14·09	129	80

* Formerly called Upper Portslade.

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SUSSEX—(con.).		in.	ft.	in.	ft.	mm.	in.		
5.—CUCKMERE & C.—(con.).									
D Ninfield (Hazard's Grn Pmp. St.)	C. P. King, Esq.	8	0	10	74	351	13·83	136	78
D Battle (Forewood W.W.)	P. H. Palmer, Esq., C.E.	5	1	3	46	357	14·06	108	73
D Horeham Road (Coxlow)	Miss P. C. Harrison	5	1	0	260	370	14·55	118	78
D Horeham Rd. (Hollycroft Cott.)	J. Hamlin, Esq.	5	1	0	300	425	16·74	106	82
D Heathfield (The White Cottage)	J. F. Leigh Clare, Esq.	5	1	0	500	408	16·08	114	88
D Heathfield (South Ridge)	P. Lennox Wright, Esq.	8	2	6	550	443	17·42	113	90
6.—ROTHER. 194 sq. mi.									
D Westfield Vicarage	Rev. E. J. Morgan	5	5	6	101	379	14·92	135	84
D Icklesham Vicarage	Rev. Philip Houghton	5	0	6	110	302	11·90	97	67
D Winchelsea (Mariteau House)	C. W. Campion, Esq.	5	1	0	120	386	15·19	122	80
D Brede Pumping Station	P. H. Palmer, Esq., C.E.	5	1	3	37	373	14·69	92	79
D Udimore (The Wick)	Major R. P. Mair	8	1	0	92	307	12·08	101	70
D Rye	"Sussex Express"					365	14·36		
D Brightling (The Cottage)	T. W. C. Terry, Esq.	5	1	0	130	479	18·86	111	88
D Beckley (Little Harmers)	B. E. de N. Ramus, Esq.	5	1	0	150	386	15·21	111	75
D Heathfield (Tottingworth Park)	Mr. J. Masson	5	1	0	500	463	18·21	116	91
D Northiam (Great Dixer)	Nathaniel Lloyd, Esq., OBE	8	1	0	210	345	13·59	105	75
D Wadhurst (The Olives)	Miss Edith P. Luck	5	1	0	380	472	18·59	128	81
D Hurst Green (Boarzell)	Sir F. W. Fison, Bart.	8	1	0	271	401	15·77	117	71
7.—MEDWAY. 117 sq. mi.									
D Crowborough (Jarvis Brook)	Crowborough Water Co.	5	1	0	325	587	23·13	119	88
D Crowborough (Uckfield Lodge)	Mrs. A. M. Driberg	8	1	0	785	630	24·82	134	95
D Crowborough (Te Whare)	Miss Hames	5	1	0	796	649	25·53	164	102
D Crowborough (Smallfield)	J. Godfrey, Esq.	5	2	0	600	581	22·87	156	87
D Wadhurst (Lower Couslev Wd)	F. Wilkin, Esq.	5	1	0	416	487	19·16	120	79
D Forest Row (Wych Cross Place)	D. W. Freshfield, Esq., D.C.L.	5	1	0	600	520	20·49		
D Forest Row (Hindleap Lodge)	Mr. A. Adam	5	1	0	620	582	22·91	111	92
D Forest Row (Charlwood Farm)	A. Hoare, Esq.	5	2	0	350	530	20·86	106	
D Coleman's Hatch (Holly Hill)	J. MacAndrew, Esq.	5	1	6	352	519	20·44	104	83
D Frant (Hazlehurst)	C. H. Ledward, Esq.	5	1	6	450	512	20·16	120	78
D Frant (Henley House)	Rev. E. Malden	5	1	6	440	518	20·40	134	84
D Frant (Eridge Castle)	Mr. A. Wilson	5	2	0	400	520	20·47	115	97
D Frant (Highfield)	C. M. R. Cleeve, Esq.	5	2	3	413	486	19·15	103	82
D Tunbridge Wells (Frant Road)	Alban G. Robins, Esq.	5	1	0	430	493	19·42	122	87
D Crawley Down (The Grange)	T. H. W. Buckley, Esq.	5	0	9	430	466	18·35	122	83
D East Grinstead (Highfields)	G. Mason, Esq.	5	1	0	400	428	16·84	117	82
D E. Grinstead (Brockhurst Obsy)	F. J. Hanbury, Esq.	8	1	0	435	497	19·56	146	87
8.—THAMES—Mole. 27 sq. mi.									
D Turners Hill (Hill House)	Miss R. M. Ravenshaw	8	1	6	477	524	20·63	107	96
D Worth (Worth Lodge)	C. W. Nix, Esq.	5	3	0	340	503	19·80	138	87
9.—THAMES—Wey. 10 sq. mi.									
D Liphook (Ripsley)	W. D. Bosanquet, Esq.	5	1	0	401	472	18·57	129	91
HAMPSHIRE. (Area, 1622 sq. mi.)									
1.—ISLE OF WIGHT. 150 sq. mi.									
D Chale (Blackgang)	James Gibb, Esq.	5	6	0	300	357	14·05		79
D Ventnor (Flint Cottage)	J. S. Ineson, Esq.	5	1	0	99	395	15·54	120	84
D Ventnor (Royal National Hos.)	Miss M. Gibson	5	1	0	60	446	17·55	152	85
D Shanklin (Pomona Road)	E. C. Cooper, Esq., C.E.	8	1	0	184	493	19·42		81
D Sandown (Free Library)	C. E. Gilchrist, Esq.	8	1	0	30	476	18·75	147	93
D Brighstone Rectory	Rev. E. W. Silver	5	1	0	120	441	17·36		77
D Brighstone (Pitt Place)	A. A. H. Wykeham, Esq.	8	1	0	200	522	20·55		78
D Totland Vicarage	Mrs. Hall	5	0	11	150	421	16·59	142	86
D Totland Bay (Aston House)	J. Dover, Esq.	8	1	0	140	403	15·87	119	78

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HAMPSHIRE—(con.).		in.	ft.	in.	ft.	mm.	in.		
1.—ISLE OF WIGHT.—(con.).									
d Bembridge (The Grange)	Major F. A. Edwards	5	0	9	100	409	16·09	118	87
d Newport (The Mall)	F. Morey, Esq.	5	1	0	48	515	20·28	126	93
d Ryde (New Lodge, S. John's Pk)	Mrs. Dobie	5	1	1	147	481	18·93	162	82
Ryde (Perivale)	Major E. C. Murray	5	1	3	193	433	17·04	116	83
d Ryde (Buckland Grange)	Lt. Col. Sir Hugh Daly	5	1	0	90	445	17·53	143	88
d Ryde (Pier Street)	G. Nicholson, Esq.	12	10	8	35	423	16·65	116	82
d Ryde (Esplanade Gardens)	B. F. Holness, Esq., C.E.	8	1	6	13	452	17·79	115	86
d Wootton (Fernhill)	Major C. G. Brodie, M.C.	8	0	6	118	418	16·46	110	79
d East Cowes (Spring Hill)	G. Shedden, Esq.	5	1	0	121	427	16·79	120	78
d Cowes W. W. (Broadfields)	J. W. Webster, Esq., C.E.	5	1	0	161	445	17·53	108	83
d Cowes (Upper Moor Green)	J. G. K. Day, Esq.	5	4	0	160	447	17·60	113	80
2.—STOUR. 32 sq. mi.									
Bournemouth (Pleasure Gdns)	C. Dales, Esq.	5	1	0	41	445	17·53	128	..
d Bournemouth (West Cliff)	Rev. G. A. Rideout	5	1	0	145	459	18·08	135	97
d Bournemouth (Rodney House) 1S. Hyla Greves, Esq.		5	1	0	145	411	16·18	121	89
d Bournemouth (Rodney House) 3S. Hyla Greves, Esq.		5	1	0	145	430	16·92	128	94
M Bournemouth (Rodney House) 2S. Hyla Greves, Esq.		5	1	0	145	423	16·65	..	..
d Bournemouth (Vale View)	C. Dales, Esq.	5	1	0	145	448	17·64	129	91
d Bournemouth (Derby Road)	Mrs. G. Bennett	10	2	0	102	411	16·20	130	94
Bournemouth (Milton Road)	S. Barker, Esq.	5	1	0	200	417	16·41	118	..
d Christchurch (Heron Court)	The Earl of Malmesbury	5	1	2	25	462	18·18	122	96
Ringwood (St. Leonards)	S. O. Ferry, Esq.	5	0	8	60	434	17·09	117	85
3.—EAST AVON & C. 114 sq. mi.									
d Ringwood (Bisterne)	Major J. D. Mills	8	1	2	45	424	16·71	..	86
Ringwood (West Mount)	R. F. Williams, Esq.	5	1	0	100	445	17·51	135	89
Ringwood (Grey Friars)	R. W. Christy, Esq.	5	1	0	79	389	15·30	..	..
d Fordingbridge (Cuckoo Hill)	Heywood Sumner, Esq.	5	1	0	150	459	18·08	144	96
d Fritham (Fritham House)	H. H. S. Northcote, Esq.	5	1	0	399	489	19·25	131	98
Fordingbridge (Dockens)	E. W. Poore, Esq.	8	1	0	140	417	16·41	114	86
d Fordingbridge (Oaklands)	S. B. Rake, Esq.	8	1	0	135	431	16·97	163	95
4.—TEST & SOLENT. 551 sq. mi.									
d Milford-on-Sea (Salt Grass)	A. C. G. Heygate, Esq.	5	1	0	6	421	16·57	115	93
Milford-on-Sea (Milford House)	E. L. Agar, Esq.	5	0	8	23	385	15·15	128	89
d Lymington (The Salterns)	P. A. Ouvry, Esq.	5	1	0	4	427	16·81	134	95
d Lymington (Woodmancote)	Major G. M. Harding	5	1	10	70	408	16·07	128	90
Lymington (Wisteria)	F. Collins, Esq.	5	1	0	70	440	17·33	..	..
d New Milton (White Cottage)	Rev. W. M. Furneaux, D.D.	5	0	8	105	419	16·50	115	85
d New Milton (Wootton Hill)	J. A. Harman, Esq.	5	2	0	197	460	18·10	113	91
d Calshot	Air Ministry	8	0	10	9	340	13·41	115	72
Burley (Manor House)	Col. F. Willan	5	1	4	210	388	15·28	..	82
d Fawley (Cadland)	Mr. Lewis Smith	8	4	6	52	403	15·85	103	81
d Hythe (Heathfield, Dibden)	Mr. Jesse Reeves	5	1	3	131	470	18·49	144	92
Lyndhurst (Deerhurst)	R. Paget, Esq.	5	1	0	250	419	16·50	125	91
Lyndhurst (Allum Green)	Miss S. R. Fenwick	5	0	8	..	423	16·67	117	..
d Hythe (Dibden House)	Lt. Col. H. W. Kettlewell	5	0	6	85	442	17·40	117	88
d Totton (Shorne Hill)	Capt. J. H. W. Rennie	5	1	0	130	433	17·03	136	93
d Southampton (East Park)	Col. Sir C. F. Close, K.B.E.	8	1	0	66	406	15·97	133	88
Southampton (Shirley)	J. A. Crowther, Esq., C.E.	5	8	0	70	378	14·87	108	..
M Southampton Common Res.	E. C. Rodda, Esq., C.E.	5	1	0	193	417	16·42	..	..
d Cadnam (Copythorne House)	N. M. Lawrence, Esq.	5	2	0	130	439	17·27	142	93
Romsey (Harefield)	Lt. Col. W. Y. Langford	5	1	0	140	428	16·85	..	..
d Melchet Court	Mr. F. Clipstone	5	2	6	200	427	16·79	..	87
d Romsey (Timsbury)	(R) D. Kitchingman, Esq., C.E.	8	1	8	96	393	15·46	130	85
d Braishfield Manor	Alfred C. King, Esq.	5	1	0	206	412	16·23	132	83
d Horsebridge (Bossington House)	Mrs. Mansell-Jones	8	0	9	98	409	16·09	122	86
d Sparsholt (Thatched Cottage)	Capt. E. M. Tidy . . . . .	..	..	..	..	378	14·89	102	76
d Ashley (Old Manor House)	Lt.-Col. A. S. Byng	5	1	3	235	389	15·31	106	81
d Ashley (Upper Somborne)	Mr. C. Alleway	8	1	0	250	414	16·30	133	89
d Broughton	W. Steele Tomkins, Esq.	5	4	0	130	389	15·33	111	89

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HAMPSHIRE—(con.).		in.	ft.	in.	ft.	mm.	in.		
4.—TEST & SOLENT—(con.).									
Stockbridge (Houghton Lodge)	Mr. G. Morris	5	1	0	190	396	15·60	105	83
D Crawley (Chilbolton Down)	R. Hargreaves, Esq.	8	1	2	350	391	15·38	117	86
D Micheldever (Stoke Charity)	Rev. C. B. Lloyd	5	1	0	221	407	16·04	119	84
Andover (Anna Valley)	H. H. Goddard, Esq.	5	1	8	200	301	11·87	..	..
D Andover Sewage Works	C. Jerome, Esq.	8	0	6	..	363	14·28	111	85
D Fyfield Rectory	Rev. E. K. R. Reynolds	5	1	4	255	386	15·21	130	99
D St. Marybourne (Bournside)	Prof. C. V. Boys, F.R.S.	5	1	0	300	370	14·58	125	85
d Worthing (Manydown Park)	(R) S. E. Bates, Esq. . . . .	..	1	8	415	369	14·51	..	81
Oakley (Malshanger)	Major Godfrey Walter	5	1	0	400	418	16·46	..	..
Hurstbourne Tarrant (Rookery)	R. E. C. Burder, Esq.	5	1	0	331	480	18·89	159	100
D Litchfield (Dunley Manor)	Sir Alfred Herbert	5	3	10	420	438	17·25	120	95
D Vernham Dean (Rowe House)	Adm. E. H. Gamble, C.B.	5	0	7	620	486	19·12	118	93
D Ashmansworth Manor House	B. C. Thomassett, Esq.	5	0	10	800	518	20·40	122	98
5.—ITCHEN & SPITHEAD. 422 sq. mi.									
D Alverstoke (Monckton House)	Major J. Blake	5	1	3	15	397	15·61	123	78
D Alverstoke (Gleneve)	J. G. Thomas, Esq.	5	1	3	20	394	15·50	115	83
d Portsmouth (Eastney)	A. W. Ward, Esq., C.E.	8	0	6	16	354	13·92	..	76
D Portsmouth (Victoria Park)	Dr. A. Mearns Fraser	5	1	0	15	361	14·23	119	77
Hayling Island (Richmond Ho.)	E. S. McEuen, Esq.	5	1	2	16	409	16·11	109	84
D Lee-on-Solent (Edinburgh Ho Sch)	Trevor J. Tatham, Esq.	5	1	0	15	374	14·72	112	80
D Porchester (Noel Cottage)	Miss R. M. Frost	5	1	9	..	323	12·73	97	72
D Titchfield	Capt. E. H. Buxton	5	0	9	10	359	14·12	103	72
D Fareham (Fareham House)	W. S. Stevenson, Esq., M.D.	5	1	6	30	381	14·98	102	82
D Fareham (Roche Court)	Mrs. H. F. Rawstorne	5	1	0	104	431	16·99	131	87
D Havant (Farlington)	H. Ashley, Esq., C.E.	5	1	0	77	367	14·45	115	76
M Havant (Farlington)	H. Ashley, Esq., C.E.	5	1	0	77	369	14·53	..	..
D Havant	H. Ashley, Esq., C.E.	5	1	0	25	377	14·83	121	79
M Havant	H. Ashley, Esq., C.E.	5	1	0	25	381	14·99	..	..
Rowlands Castle (Oaklands)	Col F. Stubington	7	1	0	160	477	18·78	127	90
D Netley (Lake House)	Miss Pennington	8	1	0	54	409	16·09	140	82
D Cowplain (Forest View)	H. C. Pearson, Esq.	5	5	0	222	472	18·58	143	98
d Wickham (The Lower House)	Mj.-Gen. Sir C. H. Powell, KCB	5	1	0	100	425	16·73	..	77
Wickham (Park Place)	Lt.-Col. H. R. Farquhar	5	1	0	150	415	16·32	115	..
Southampton (Chapel)	J. A. Crowther, Esq., C.E.	5	5	0	10	378	14·87	113	..
Southampton (Portwood)	J. A. Crowther, Esq., C.E.	5	2	0	10	405	15·96	109	..
D Botley (Fairthorne Manor)	Mr. D. F. Lailey	8	1	0	70	429	16·90	132	93
Botley (Brook House)	Beckett Powell, Esq.	5	3	2	45	435	17·12	..	..
D Botley (Botley Hill)	Lady Jenkyns	5	1	6	36	416	16·37	124	90
Botley (Uplands Farm)	Mr. Wilmot H. Yates	5	1	0	60	418	16·47	122	..
D Curdridge (Beechcroft)	Miss L. M. S. Pasley	5	1	0	96	420	16·52	120	90
D Curdridge (Kitnocks House)	Major C. F. Randolph	5	0	6	185	388	15·27	123	86
D Soberton (Mislingford)	E. T. Hildred, Esq., C.E.	5	1	0	136	442	17·41	115	85
M Soberton (Mislingford)	E. T. Hildred, Esq., C.E.	5	1	0	136	435	17·13	..	..
M Chalton (Woodcroft)	C. J. P. Cave, Esq.	5	1	0	230	545	21·47	..	..
D West End (Oaklands)	Capt. P. C. Pearson, R.N.	5	1	0	45	406	16·00	124	85
D Bishops Waltham (Palace Ho.)	A. F. Hardy, Esq.	5	1	3	116	427	16·83	123	82
Bishops Waltham (Swanmore H.)	W. H. Myers, Esq.	8	1	0	390	550	21·66	105	83
D Droxford (Uplands)	Miss Bridge	5	1	0	279	507	19·98	139	95
D Droxford (Fairfield House)	H. Hamilton Bridge, Esq.	5	1	0	254	493	19·43	129	93
D Droxford (Fir Hill)	Cap. Mackenzie-Grieve, R.N.	5	3	6	212	455	17·91	114	93
Eastleigh (Fair Oak School)	G. E. Edwards, Esq.	5	1	0	120	416	16·38	..	..
D Petersfield (Ditcham Park)	C. J. P. Cave, Esq.	8	1	0	555	555	21·87	148	101
M Petersfield (Downley)	C. J. P. Cave, Esq.	5	1	2	374	586	23·07	..	..
D Fair Oak (Fisher's Pond)	G. M. Mathews, Esq.	5	1	0	91	406	15·98	108	78
D Otterbourne House	E. Christian, Esq.	5	1	0	111	437	17·22	132	86
D Otterbourne (W. W., Shawford)	E. C. Rodda, Esq., C.E.	5	1	0	113	427	16·83	116	82
D Westbury House Gardens	Col. H. LeRoy Lewis, CB, DSO	5	2	10	296	569	22·39	123	98
D Twyford (Pumping Station)	(R) D. Kitchingman, Esq., C.E.	8	1	9	139	439	17·29	126	86
D Twyford (Mallards Close)	G. R. Marsh, Esq.	5	1	0	153	429	16·88	117	85
Hursley Park	(R) Sir G. A. Cooper, Bart.	10	1	6	250	396	15·59	124	82
D West Meon (Westwood)	Major G. E. Galbraith	5	1	7	470	544	21·43	131	90
Kilmeston Manor	Mrs. Heathcote	5	4	6	323	469	18·46	..	..

DIVISION II.—SOUTH-EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
HAMPSHIRE—(con.).		in.	ft.	in.	ft.	mm.	in.		
5.—ITCHEN & SPITHEAD—(con.).									
Petersfield (Broadhanger).....	Mrs. R. M. Caulfeild	5	1	0	730	627	24·69	154	96
D Winchester (East Hill).....	Mrs. Wilde	5	1	0	250	400	15·74	119	75
M Winchester (East Hill).....	Mrs. Wilde	5	1	0	215	383	15·10	..	..
D Ropley (The Vicarage).....	Rev. H. W. C. Geldart ...	5	0	10	350	439	17·28	117	88
D Ovington Rectory	Rev. H. F. LaM. Stowell...	5	1	0	221	484	19·06	116	84
Ovington (Barley Down)	J. Stevens, Esq.	12	3	6	300	465	18·30	121	..
D Itchen Abbas (Chilland).....	W. J. Arnold, Esq.	5	1	3	200	385	15·16	121	78
6.—ARUN. 32 sq. mi.									
M Petersfield (Sunwood).....	C. J. P. Cave, Esq.	5	0	10	479	530	20·87	..	..
M Petersfield (The Miscombe) ...	C. J. P. Cave, Esq.	5	1	1	262	574	22·60	..	..
d Petersfield (Buriton House)....	L. G. Bonham Carter, Esq. 5	2	0	300	518	20·39	..	..	81
M Petersfield (Nursted)	C. J. P. Cave, Esq.	5	1	0	270	538	21·17	..	..
D Petersfield (Weston)	Capt. P. W. Seward	5	1	0	330	573	22·55	107	95
D Petersfield (Durford Edge)	M. J. Miller, Esq. ....	..	..	..	..	467	18·39	128	84
D Petersfield (Stoner Hill)	C. J. P. Cave, Esq.	5	0	9	760	619	24·36	121	95
D Liss (Overcombe)	Miss Jebb	5	1	3	500	471	18·53	138	85
Liss (Heathmount)	(R) R. A. Bosanquet, Esq. ...	..	3	6	500	507	19·97	..	..
D Liss (Highfield)	J. S. Gamble, Esq., CIE, FRS	5	0	9	325	522	20·55	154	94
D Liss (The Lodge)	Ernest Latter, Esq.	5	1	3	240	509	20·03	136	89
D Liss (Berry Grove House)	Col. A. de B. V. Paget....	5	1	1	235	497	19·58	116	84
D Liss (Kippences)	Rev. W. A. H. Thorold....	5	0	9	250	517	20·36	109	83
Greatham (Manor House)	F. Coryton, Esq.	5	0	7	250	493	19·43	..	..
D Greatham (Le Court)	Sir Heath Harrison, Bart... 5	0	9	350	508	20·01	125	89	..
7.—THAMES—Wey. 92 sq. mi.									
d Colmer Rectory.....	Rev. A. C. Hervey	5	1	1	560	498	19·62	..	74
East Tisted (Rotherfield Park) ..	Mr. J. F. Busby	5	1	0	550	563	22·18	133	..
D Newton Valence Vicarage	Rev. A. C. Maclachlan ...	5	1	0	586	498	19·62	137	86
D Newton Valence Place	Rear Adl. E. Jervoise, C.B.E.	8	1	5	615	506	19·92	147	94
D Selborne (The Wakes)	Mrs. Bibby	5	1	0	400	528	20·79	134	98
D Grayshott	Mrs. Lyndon	5	1	0	661	462	18·20	136	86
Liphook (Bordon Camp)	The Division Officer, R.E. .	8	1	0	265	378	14·89	..	73
D Bentworth Rectory	Lt. Col. W. J. Long, C.M.G. .	5	1	0	587	466	18·36	131	87
Alton (Shalden Manor).....	J. Gathorne Wood, Esq. ...	8	3	0	594	460	18·12	143	95
D Alice Holt Forest	Office of Woods	8	1	0	264	437	17·19	120	81
8.—THAMES—Loddon. 164 sq. mi.									
D Upton Grey (Hoddington Ho.) ..	F. Anderson, Esq.	8	1	0	378	455	17·93	124	92
D Aldershot (Sewage Works)	Dr. G. W. Routley	5	1	0	231	381	15·00	139	83
D Greywell	S. G. Weller, Esq.	5	2	6	266	347	13·68	102	74
D Basingstoke (Queen Mary's Sch.)	The Headmaster	5	1	2	89	360	14·19	101	75
D Basingstoke (Pumping Station) ..	J. H. Drew, Esq., C.E. ...	5	0	9	320	361	14·20	115	83
D Sherborne St. John Rectory ..	Rev. D. W. Chute	5	1	3	267	365	14·35	126	77
D South Farnborough.....	Air Ministry	8	1	0	234	324	12·75	117	72
D Winchfield (Elvetham Park) ..	Mr. G. B. Mitchison	8	1	0	217	403	15·88	134	86
D Bramley (Street Farm House) ..	F. Walkinshaw, Esq.	8	1	0	227	366	14·40	122	78
D Stratfieldsaye Rectory	Rev. F. Page-Roberts	5	1	0	164	399	15·71	148	81
D Heckfield (Park Corner)	Miss Martineau	5	1	2	257	391	15·39	127	83
9.—THAMES—Kennet. 65 sq. mi.									
Wolverton (Ewhurst Park).....	Mr. J. Bartlett.....	5	1	6	400	413	16·27	124	79
Highclere (Boxhall Cottage).....	D. R. Sharpe, Esq.	5	1	0	450	473	18·64	..	..
BERKSHIRE. (Area, 722 sq. mi.)									
1.—TEST. 2 sq. mi.									
2.—THAMES—Bourne. 15 sq. mi.									
3.—THAMES—Loddon & c. 162 sq. mi.									
D Wellington College	E. O. Tancock, Esq.	5	1	0	283	407	16·03	127	81
D Wokingham.....	C. W. Marks, Esq.	5	1	0	174	351	13·83	116	74
D Wokingham (Pinewood).....	Dr. F. Clark	8	1	0	215	344	13·56	103	74

DIVISION II.—SOUTH-EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain. 1921	Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height above Ground		Sea Level.			
		in.	ft.	in.	ft.	mm.	in.	
BERKSHIRE—(con.).								
3.—THAMES—Loddon & c.—(con.).								
Bracknell (Ranelagh School) ... J. H. Bury, Esq.		5	1	3	280	366	14·41	..
d Bracknell (Hillside) Mrs. Littlewood		5	1	0	207	379	14·92	..
d Winkfield (Ryemead) Mrs. Aubrey Elliott		5	0	10	220	361	14·20	126
d Windsor (Royal Gardens) Mr. A. MacKellar		5	1	0	88	349	13·72	133
d Windsor (Osborne Road) Miss M. G. Cookson		8	1	0	88	332	13·07	106
d Maidenhead (Hall Place) Sir G. A. C. East, Bart. ...		8	1	2	275	346	13·63	123
Remenham Hill (Wedmore) Lt.-Col. C. D. Burnell, D.S.O.		5	1	0	300	411	16·19	130
d Hambleden Lock Mr. S. J. Bourner		5	2	0	120	375	14·77	117
d Bisham Vicarage Rev. W. Farrer		5	1	0	100	327	12·87	111
d Marlow (Temple House) Mrs. Owen Williams		5	1	0	106	399	15·70	140
4.—THAMES—Kennet & c. 224 sq. mi.								
d Hampstead Marshall (Redhill) . Mrs. Lewis		5	1	0	400	426	16·76	..
Mortimer (Wokefield Park) ... A. Palmer, Esq.		5	4	0	220	369	14·54	114
d Brimpton (Stonehouse) F. Hadden, Esq.		5	0	7	350	410	16·14	111
d Newbury (Greenham Common) H. L. Bowman, Esq., D.Sc.		5	1	0	328	432	17·01	121
Newbury (Grammar School) ... H. Liggins, Esq.		5	0	9	279	422	16·62	128
d Newbury (Andover Road) J. H. Spackman, Esq.		5	1	0	329	452	17·79	142
d Ufton Nervet Rectory Rev. A. E. Brisco Owen ..		8	1	0	312	409	16·10	145
d Shinfield (University Col. Farm) Prof. W. G. Duffield		5	1	0	201	371	14·59	111
d Bucklebury Place Dr. Carl Langer		5	1	0	409	390	15·37	..
d Beenham House Capt. W. Waring		8	2	3	315	415	16·33	110
d Reading W. W. (Bath Road) ... L. C. Walker, Esq., C.E. ...		5	1	8	218	373	14·69	113
d Earley (Elm Road) Comr. W. George Lingham		5	1	1	265	399	15·73	121
d Reading (Forbury Gardens) ... J. Bowen, Esq., C.E.		5	1	5	145	400	15·74	132
d Reading (University College) .. Prof. W. G. Duffield		5	1	0	153	404	15·89	133
Reading (Victoria Square) W. Haynes, Esq.		5	1	0	145	397	15·61	124
d Reading (Caversham Lock) ... R. A. Swarbrick, Esq.		5	17	3	143	321	12·62	..
d Lambourn (Clarionville) F. Gullett, Esq.		5	1	0	500	395	15·53	123
5.—THAMES—Ock & c. 319 sq. mi.								
d Reading (Englefield) J. H. Benyon, Esq.		5	1	1	175	422	16·61	119
d Frilsham House Mr. W. E. Austen		5	1	0	370	416	16·39	124
Hampstead Norris John Brown, Esq.		5	1	6	300	420	16·54	126
Farnborough Rectory Rev. J. B. H. Whitehurst ..		5	1	0	713	447	17·60	130
d Upton Miss Fry		5	1	0	240	389	15·30	140
d Uffington Vicarage Rev. E. M. Hadow		5	1	0	287	421	16·56	155
Steventon (Milton Hill) R. H. Betteridge, Esq. ...		5	1	6	300	375	14·76	..
d Wallingford (St. Lnd's Rctry) . Rev. A. Simmons		5	1	3	140	363	14·31	125
d Wallingford (Woodlea) G. F. Slade, Esq., M.B.E. ...		5	0	6	200	394	15·52	120
Wallingford Castle Miss Hedges		5	1	6	175	383	15·07	126
d Wallingford (Shillingford Hill) . Late Lt.-Col. G. Hart Dyke		5	1	4	218	379	14·93	138
d Little Wittenham J. Latham, Esq.		5	2	0	189	342	13·48	124
d Abbots Wittenham Rectory ... Rev. W. F. B. Ward		5	1	0	190	345	13·59	137
d Long Wittenham (Manor Ho.) . Adm. W. R. Clutterbuck..		12	1	0	170	379	14·90	..
d Long Wittenham (Willington) . H. J. Hewett, Esq.		5	1	0	167	379	14·90	124
d Faringdon (Bleak House) Miss Turner		5	1	0	367	361	14·23	139
d Abingdon (Twickenham House) G. Saxby, Esq.		5	10	0	210	347	13·65	..
d Abingdon (Sewage Works) Raphael V. Hall, Esq., C.E. ...		5	0	6	169	333	13·10	105
d Abingdon (Fitzharris) Mrs. Blakeney		8	0	10	185	354	13·92	114
Abingdon (Donnington) R. W. Langford, Esq.		5	6	0	196	387	15·25	134
d Abingdon (Northcourt House) . M. T. Tatham, Esq.		5	1	0	190	341	13·44	137

DIVISION III.—SOUTH MIDLAND COUNTIES.

MIDDLESEX. (Area, 232 sq. mi.)

1.—THAMES—Colne & Brent. 185 sq. mi.

d Weybridge (Shepperton Lock) . R. A. Swarbrick, Esq.	5	1	0	41	310	12·19	102	75
d Shepperton (Charlton Court) ... Met. Water Board	8	1	0	42	316	12·43	114	81
d Hampton Met. Water Board	8	1	0	50	303	11·95	112	81
d Hampton (The Manor House) .. J. Hughes, Esq.	5	2	3	43	300	11·83	103	77

DIVISION III.—SOUTH MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with -01 in. or more.	Days with -04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
MIDDLESEX—(con.).		in.	ft.	in.	ft.	mm.	in.		
1.—THAMES—Colne & Brent—(con.).									
d Staines (St. Ann's Cottage)	J. Gundry, Esq.	5	1	0	52	335	13·17	112	73
d Staines Reservoir	Met. Water Board.	5	1	0	50	330	13·00	123	81
d Twickenham (Sewage Works)	F. W. Pearce, Esq., C.E.	5	1	7	37	302	11·90	110	78
d Hounslow(S.Stephen'sVicarage)	Rev. R. Dixon Box	5	1	0	67	318	12·53	113	78
d Sipson (Hollycroft)	Mr. W. J. Mitchell	5	1	0	94	324	12·75	..	80
d Chiswick (Ellesmere Road)	A. E. Bronger, Esq.	5	1	1	20	321	12·65	..	..
d Kew Bridge (Waterworks)	Met. Water Board.	8	1	0	36	350	13·79	118	81
d Hanwell (Oaklands Road)	R. G. Davies, Esq.	5	1	0	81	331	13·03	115	72
d Ealing (Webster Gardens)	late H. M. Baker, Esq.	5	1	6	97	351	13·84	113	75
d Ealing (Longfield Avenue)	W. R. Hicks, Esq., C.E.	5	0	9	114	320	12·61	111	..
d Ealing (St. Stephen's Road)	H. W. Peal, Esq.	5	0	10	156	374	14·73	122	82
d Ealing (Hanger Hill Reservoir)	Met. Water Board.	5	1	0	206	374	14·74	96	80
d Perivale(NorthernSewageFarm)	W. R. Hicks, Esq., C.E.	5	0	5	56	405	15·94	132	94
d Uxbridge (Frays Lodge)	J. C. Hibbert, Esq.	8	1	3	125	371	14·59	129	86
d Willesden Reservoir	Met. Water Board.	5	2	6	199	363	14·31	..	68
d Willesden Green (Strode Road)	Miss Lamport	5	1	0	150	411	16·16	132	86
d Willesden (Richmond Avenue)	W. Godden, Esq.	5	6	0	176	393	15·48	116	88
d Willesden (Stonebridge Fm.) (R)	F. Wilkinson, Esq., C.E.	10	5	9	100	394	15·50	122	84
d Sudbury (Station Approach)	L. H. Powers, Esq.	8	1	0	153	382	15·05	131	82
d Highgate (North Hill)	L. J. Tatham, Esq.	5	1	0	400	365	14·36	116	79
d Highgate (North Hill Depot)	E. J. Lovegrove, Esq., C.E.	5	5	4	309	376	14·80	107	77
d Harrow (Oakhurst)	Hugh Gardner, Esq.	5	1	5	320	335	13·20	101	78
d Harrow(Bessborough Rd.Depot)	J. P. Bennetts, Esq., C.E.	5	1	0	215	402	15·82	118	87
d Hendon (Sewage Works)	(R) A. O. Knight, Esq.	6	1	6	153	353	13·89	100	74
d Hendon (Central School)	J. W. Butler, Esq.	5	1	4	200	449	17·67	120	92
d Wealdstone House	Miss H. O. E. Cobb	5	1	0	236	338	13·29	..	69
d Hatch End (Royston Park)	W. J. Hill, Esq.	5	2	2	286	402	15·84	140	79
d Harefield (Harefield House)	Walter J. B. Byles, Esq.	5	0	8	290	404	15·92	104	91
d Northwood (Watford Road)	E. Preedy, Esq.	5	1	1	400	383	15·08	106	..
d Northwood (Haslemere)	Miss McBean	5	1	0	240	378	14·89	97	81
d Harrow Weald (Hill House)	A. Crossman, Esq.	5	3	6	284	390	15·35	130	82
d North Finchley (Rowley)	Miss M. Shoults	5	0	8	295	448	17·63	124	90
d Mill Hill (The Vineries)	Master Willoughby Salter	5	0	10	350	405	15·93	130	86
d Mill Hill (Cleveland)	Mrs. Stewart King	5	1	0	400	403	15·85	129	89
d Bushey Heath (Highfield)	W.B.Worthington, Esq., C.E.	5	1	0	503	380	14·97	117	83
d Barnet (Dyrham Park)	Mr. H. Juniper	5	1	0	310	392	15·45	..	..
d Potters Bar (Mount Grace)	J. Forbes, Esq.	5	1	3	375	382	15·03	114	86
2.—THAMES—Lea. 47 sq. mi.									
d Crouch End (Barrington Road)	E. J. Lovegrove, Esq., C.E.	8	3	10	122	397	15·65	123	82
d Harringay(WightmanRdDepot)	E. J. Lovegrove, Esq., C.E.	8	23	3	113	328	12·90	114	75
d Harringay (Wightman Road)	L. R. Bennett, Esq.	5	1	0	140	340	13·39	109	75
d Tottenham (Drayton Road)	Medical Officer of Health.	5	1	3	51	349	13·72	97	76
d Hornsey (High Street)	Met. Water Board.	5	1	0	109	375	14·77	115	83
d Muswell Hill (Grand Avenue)	G. Michael Williams, Esq.	5	1	0	317	383	15·10	126	85
d Muswell Hill (Tollington School)	K. H. Shelton, Esq.	5	0	6	333	429	16·89	128	81
d Muswell Hill (Page's Lane)	Miss Abethell	5	0	8	310	395	15·57	133	88
d Muswell Hill (Sewage Farm)	E. J. Lovegrove, Esq., C.E.	8	4	5	214	395	15·57	121	88
d Wood Green (Maryland Road)	Mr. F. C. Hornsey	5	1	0	110	361	14·22	113	80
d Wood Green (Town Hall)	(R) C. H. Croxford, Esq.	8	5	6	126	329	12·94	109	65
d Finchley (Victoria Park)	P. T. Harrison, Esq., C.E.	5	1	0	272	446	17·55	119	96
d Palmers Green(Broomfield Pk.)	R. Phillips, Esq.	8	1	0	138	338	13·29	97	77
d Edmonton (Latymer School)	S. G. Dyer, Esq.	5	1	0	70	334	13·14	..	..
d Ponders End (Bylock Hall)	H. E. Freir, Esq.	5	1	0	50	351	13·82	117	80
d Ponders End Pumping Station	Met. Water Board.	8	1	0	45	351	13·83	103	83
d Enfield (Southbury Road)	Met. Water Board.	5	1	0	223	374	14·74	117	83
d Enfield (Public Offices)	Dr. W. P. Warren	8	43	0	148	393	15·45	136	85
d Enfield (Rowantree Road)	J. McEwan, Esq.	5	1	0	218	415	16·36	132	85
d Enfield (Roselands, Turkey St.)	E. S. Rashleigh, Esq.	5	0	7	80	379	14·90	116	84
d Enfield (North Lodge)	Lady Gundry	5	1	0	332	419	16·48	..	..
d Waltham Cross (Sewage Works)	J. E. Sharpe, Esq.	5	0	6	61	348	13·70	99	77

DIVISION III.—SOUTH MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height above Ground		Sea Level.	1921			
HERTFORDSHIRE. (Area, 635 sq. mi.)		in.	ft.	in.	ft.	mm.	in		
1.—THAMES—Thame. 10 sq. mi.									
d Tring (Grove Lodge).....	Miss Boyson	5	1	0	450	383	15·07	121	91
Tring (Pendley Manor).....	Mrs. J. G. Williams	5	2	0	420	331	13·03	129	93
2.—THAMES—Colne. 199 sq. mi.									
d Northwood (Woodhouse Eaves)	Miss S. F. Fox, M.D.	5	1	0	400	392	15·45	142	84
Bushey Heath (California La.)	Miss K. Cooper .....	..	..	..	..	367	14·43	..	..
d Rickmansworth (Croxley Green)	S. Ingleby Oddie, Esq.	5	1	0	262	404	15·89	102	86
d Totteridge (West Lodge)	W. H. Newman, Esq.	5	1	0	390	409	16·12	129	86
d Watford (Oxhey Grange)	J. Doyle Penrose, Esq.	5	1	0	295	366	14·42	..	72
d Watford (Bushey Hall Road) ..	J. Durst, Esq.	5	1	2	230	404	15·91	124	90
d Bushey (Colne Valley W. W.) ..	C. P. Sinclair, Esq.	5	1	2	200	363	14·29	118	77
d Elstree (Aldenharn House)	Mr. Edwin Beckett.....	10	4	9	305	317	12·46	113	85
d Watford (London Orphan Sch.)	Rev. J. J. Jackson	5	1	0	230	452	17·79	..	72
Watford (Cassibury Pk. Av.)	E. A. Robins, Esq.	5	1	0	..	364	14·33	107	..
d Watford (Park Road)	E. J. Slinn, Esq.	5	1	6	263	384	15·11	117	83
d Shenley (Kitwells).....	T. H. Riches, Esq.	5	1	0	420	402	15·84	108	89
m Shenley (Kitwells).....	T. H. Riches, Esq.	5	1	0	420	395	15·55	..	..
Sarratt (Goldingtons).....	P. Clutterbuck, Esq.	5	4	0	384	445	17·50	94	84
d Radlett (Watford Road)	A. E. Payne, Esq.	5	1	0	350	394	15·50	..	..
Chipperfield (Little Callipers) ..	A. W. Rivington, Esq.	5	1	0	407	378	14·89	..	..
d King's Langley (Langley Rise)	T. Goldring, Esq.	5	1	0	300	392	15·45	108	86
King's Langley (Barnes Lodge)	J. C. Shorrocks, Esq.	5	1	0	475	431	16·98	116	96
d Hemel Hempstead (Apsley Mills)	Messrs. J. Dickinson & Co. 24	1	4	268	..	392	15·43	150	87
d St. Albans (Co. Mental Hosp.) ..	G. Goodchild, Esq.	5	1	0	295	322	12·68?	..	76
d St. Albans (County Museum) ..	G. E. Bullen, Esq.	5	1	0	389	379	14·92	104	82
d St. Albans (Jennings Road)	M. L. Nicholas, Esq.	5	1	6	380	383	15·08	135	81
d Gorhambury	Mr. J. Ison	5	1	0	423	404	15·92	117	84
d Berkhamsted (Anglefield)	E. T. Browne, Esq.	5	1	0	450	411	16·16	133	86
d Berkhamsted Golf Club.....	T. S. Wheeler, Esq.	8	1	0	550	403	15·87	129	86
d Tring (Cowroast Lock)	W. Yates, Esq.	5	3	6	394	380	14·95	108	90
d Childwickbury Gardens	Mr. E. J. May	8	1	2	416	429	16·90	107	81
d Gt. Gaddesden (Golden Pars' nage)	Elliott Kitchener, Esq.	8	1	0	536	415	16·33	130	90
d Harpenden (Rothamsted)	Lawes Agricultural Trust ..	8	0	9	424	379	14·92	128	79
3.—THAMES—Lea. 340 sq. mi.									
d New Barnet (Gas Works)	F. J. Bancroft, Esq., C.E.	8	1	0	217	429	16·89	109	79
d Barnet (Summerhill).....	F. A. Milne, Esq.	5	1	0	400	406	15·99	126	92
d Barnet (Bedford Avenue)	Miss Haines	5	1	4	350	428	16·84	132	89
d Hadley (Hadley Bourne)	Mrs. Weber	5	1	0	428	420	16·52	122	92
d Cheshunt (Manor House)	J. E. Sharpe, Esq.	5	1	0	83	383	15·10	126	73
d Northaw (Vernon's House)	Mrs. James Paterson	5	1	0	400	370	14·57	110	90
d Cheshunt Yard	Met. Water Board	5	1	0	100	358	14·09	111	79
d Cheshunt Park.....	Mr. W. Standerwick.....	5	0	9	209	319	12·55	118	69
d Cheshunt (Darnicle Hill P. Stn.)	J. E. Sharpe, Esq.	5	1	0	250	381	15·01	123	92
d Broxbourne (Stafford House) ..	A. F. Newbery, Esq.	5	1	0	118	381	14·99	133	87
d Broxbourne (St. Cross).....	Capt. H. S. F. Jebb	5	1	5	123	352	13·85	120	83
d Hoddesden (Feilde's Weir)	Met. Water Board.....	8	3	8	95	356	14·03	122	83
d Hoddesden (Westfield House) ..	Miss J. A. J. Barclay	5	1	0	200	330	12·99	105	76
d Haileybury College	Late P. H. Latham, Esq.	8	1	0	270	377	14·85	115	87
d Gilston Park	Mr. J. A. Cook	8	1	0	175	353	13·88	131	89
Hatfield (Surveyor's Office)	Lt. Col. A. Ernest Prescott ..	5	1	0	270	363	14·29	..	..
d Hertford (Bayfordbury)	H. W. Clinton Baker, Esq.	8	1	2	250	347	13·64	124	82
d Stanstead Abbots (Warrax).....	E. H. Barlow, Esq.	5	1	2	110	373	14·70	121	86
d Hertford (Sewage Works)	Met. Water Board.....	8	1	0	117	361	14·20	122	78
d Ware (Red House)	Met. Water Board	5	1	0	115	331	13·03	116	77
d Ware (Chadwell Spring)	Met. Water Board.....	5	1	0	140	356	14·02	112	81
d Welwyn (Codicote Lodge)	Mr. J. G. Miller	5	1	0	340	352	13·85	..	73
d Much Hadham	T. Woodham Mott, Esq.	5	1	0	212	332	13·08	115	87
d Bishop Stortford (Twyford Ho.)	Laurie Frere, Esq.	5	0	8	181	328	12·92	125	79
Watton (Frogmore Hall)	Lt. Col. J. B. Gilliatt, D.S.O. 5	0	9	350	..	341	13·44	..	..
d Standon	F. H. Wace, Esq.	5	1	0	375	356	14·02	122	84
d Bennington House	Miss E. A. Parker	5	1	0	407	379	14·91	136	83

DIVISION III.—SOUTH MIDLAND COUNTIES—(con.).

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		Diam.	Height Ground	above Sea Level.		1921			
HERTFORDSHIRE—(con.).		in.	ft.	in.	ft.	mm.	in.		
3.—THAMES—Lee.—(con.).									
d Little Hadham (Hadham Hall)	W. Minet, Esq.	5	0	10	338	341	13·44	113	86
d Hitchin (Preston)	R. de V. Pryor, Esq.	8	2	6	484	338	13·31	118	84
d Buntingford (Coles)	Mrs. Greg.	5	1	0	375	338	13·31	119	82
d Weston Park	Col. W. M. Pryor, D.S.O. .	5	0	10	470	342	13·47	127	88
d Furneaux Pelham(The Brewery)	G. Warren Bindloss, Esq. .	5	1	0	300	364	14·34	124	85
d Royston (Therfield Rectory)	Rev. H. R. Humphreys ..	5	1	0	513	332	13·08	113	83
4.—OUSE. 86 sq. mi.									
d Offley (School House)	C. W. Mears, Esq.	5	1	0	526	350	13·79	114	80
d Offley Vicarage	Rev. E. P. Gatty	5	1	6	525	341	13·44	130	74
d Graveley Rectory	Rev. R. E. C. Walker.	5	0	10	325	372	14·64	130	87
d Hitchin (Newlands)	F. Ransom, Esq.	5	1	0	271	335	13·20	134	82
d Hitchin (Chiltern Road)	A. Latchmore, Esq.	5	1	0	297	291	11·45	119	75
d Hitchin (High Down)	Miss E. Pollard	5	1	1	421	343	13·51	180	78
d Hitchin (Roxley House, William)	Mrs. H. Bendixson	5	1	6	375	321	12·62	127	83
d Letchworth (Sewage Farm)	A.W.E.Bullmore, Esq., C.E.	5	1	0	214	289	11·38	108	70
d Letchworth (Gernon Road)	A. W. Brunt, Esq.	5	1	0	280	304	11·97	123	79
d Letchworth (Broadway)	W. C. Steen, Esq., M.D. .	5	1	0	310	287	11·29	..	..
d Holwell Rectory	Rev. J. F. Llewelyn.	5	0	7	200	278	10·94	..	65
d Baldock	Dr. Bertram Suggit	5	1	0	210	288	11·33	125	75
d Barley (Dalnyveed)	W. W. Cook, Esq.	5	1	0	300	345	13·58	123	91
d Ashwell	Dr. J. Woodforde.	5	1	0	175	289	11·38	103	72
d Royston (Earlshill House)	J. Phillips, Esq.	8	1	3	225	338	13·30	133	90
BUCKINGHAMSHIRE. Area, 743 sq. mi.									
1.—THAMES—Cherwell. 30 sq. mi.									
2.—THAMES—Thame. 158 sq. mi.									
Weston Turville (Yaxley Lodge)	Miss Morris.	5	1	3	352	369	14·53	..	..
Weston Turville	G. Eland, Esq.	5	1	0	320	295	11·63?	..	..
Tring (Bulbourne)	W. Yates, Esq.	5	2	3	401	422	16·61	135	97
Mentmore Gardens	Mr. J. MacGregor	5	1	3	400	387	15·22	..	..
3.—THAMES—Wye & c. 129 sq. mi.									
d Eton (Tangier Island)	E. A. Stickland, Esq.	5	0	6	68	370	14·55	126	74
m Slough (Upton)	R. Bentley, Esq.	8	2	0	80	314	12·35	..	..
d Slough (Upton)	R. Bentley, Esq.	5	2	0	78	342	13·46	139	85
d Taplow (Hitcham Grange)	Hon. C. S. Irby	5	1	0	175	308	12·12	96	77
d Stoke Poges (Stoke Court)	Mr. F. W. Beevers	8	1	3	196	351	13·82	..	77
d Henley-on-Thames (Greenlands)	Lord Hambleden	5	1	0	116	388	15·27	106	80
d Hedsor	Lord Boston.	8	1	0	170	404	15·89	95	79
d Bourne End (The Bourne)	A. Morse, Esq.	5	1	0	240	376	14·79	..	77
d Marlow (Thames Bank)	S. H. Wright, Esq.	8	2	0	105	395	15·55	127	85
d High Wycombe (Flackwell Hth.)	E. Dickson Park, Esq.	5	1	10	365	368	14·48	109	83
d High Wycombe	H. S. Wheeler, Esq.	5	0	11	253	405	15·95	133	90
d High Wycombe (R. Gram. Sch.)	G. W. Arnison, Esq.	8	1	0	545	449	17·67	124	86
d Penn (Rayners)	Mr. E. Peett	5	1	10	547	419	16·49	127	87
d Penn (Ashwell Manor)	Capt. A. G. Soames.	5	1	7	550	422	16·63	..	..
d Hampden House	Earl of Buckinghamshire..	5	1	0	695	405	15·93	133	91
4.—THAMES—Colne. 133 sq. mi.									
Slough (Ditton Park)	F. Creagh-Osborne, Esq. .	..	..	..	..	347	13·64	..	..
d Slough (Langley)	R. H. Major, Esq.	8	0	10	85	341	13·43	113	82
d Chalfont St. Giles (Roughw'd Pk)	Thurston Agelasto, Esq. .	5	1	0	450	430	16·92	113	81
d Amersham (St. Mary's Sch.) No. 1	W. Garton, Esq.	5	1	8	340	404	15·92	113	81
d Amersham (St. Mary's Sch.) No. 2	W. Garton, Esq.	5	1	0	340	411	16·16	115	81
d Amersham (The Plantation)	G. Weller, Esq.	8	1	0	464	405	15·98	121	83
d Chesham Bois Rectory	Rev. T. H. Fitzpatrick ..	5	0	11	530	408	16·05	124	83

DIVISION III.—SOUTH MIDLAND COUNTIES—(con.).

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BUCKINGHAMSHIRE—(con.).		in.	ft.	in.	ft.	mm.	in.		
5.—OUSE. 293 sq. mi.									
D Oving House	H. Yates Thompson, Esq..	5	1	0	515	418	16·45	146	97
M Oving House	H. Yates Thompson, Esq..	5	1	6	515	413	16·27	..	..
Swanbourne House School.....	L. L. C. Evans, Esq.	5	1	0	411	351	13·82	115	99
D Mursley Hall	A. W. Beecham, Esq.	8	1	0	490	390	15·36	151	88
D Mursley Observatory	A. W. Beecham, Esq.	5	0	10	490	382	15·03	134	88
D Addington (C. of E. School) ...	J. H. Webster, Esq.	5	0	7	320	376	14·82	130	86
Leighton Buz. (Stockgrove Pk.)	Mr. J. Clues	5	1	2	500	373	14·70	..	89
D Great Horwood	W. Weston, Esq.	5	0	9	..	392	15·44	137	91
Stony Stratford (Calverton L.)	Mrs. Hawkins	5	1	8	260	372	14·65	104	84
D Wolverton (St. George's Vic.)..	Rev. Canon W. L. Harnett	5	1	0	270	373	14·70	142	86
D Wolverton (The School House)	H. J. Hipsley, Esq.	5	1	0	264	365	14·38	141	81
d Wolverton (Council School)....	H. J. Hipsley, Esq.	5	5	0	263	348	13·71	..	..
D Newport Pagnell (The Croft) ..	F. Littleboy, Esq.	5	1	9	191	356	14·02	139	82
OXFORDSHIRE. Area, 756 sq. mi.									
1.—SEVERN—Upper Avon. 10 sq. mi.									
D Sibford Ferris(Woolman Cottage)	Joshua Lamb, Esq.	5	1	0	570	422	16·60	116	91
2.—THAMES—Windrush & c. 261 sq. mi.									
D Kencot Rectory.....	Rev. H. E. Cooper	5	1	0	290	398	15·68	143	96
D Witney (Cokethorpe)	Major H. G. Feilden	5	4	6	280	388	15·28	123	95
D Witney (Church Green)	E. S. Fry, Esq.	5	1	0	270	405	15·96	142	98
Eynsham (Cassington Vicarage)	Rev. Cecil G. Paget	5	1	0	213	422	16·60	131	94
d Charlbury (Cornbury Park) ...	Mr. B. Campbell	5	1	0	435	451	17·74	..	78
D Wootton Rectory	Rev. F. R. Marriott	5	1	0	370	427	16·81	133	102
D Lyneham	R. de M. Pratt, Esq.	5	1	7	351	436	17·16	137	99
D Glympton Park	Mr. J. Butler	5	2	6	..	409	16·11	112	95
D Chadlington (Langston House)	Lt.-Col. F. W. Schofield, CMG.	5	1	0	430	406	16·00	136	100
D Sarsden Gardens	Mr. J. E. Vine	5	0	10	538	412	16·22	129	99
D Chipping Norton (Bungalow) ..	T. H. Burbidge, Esq.	5	1	0	700	420	16·53	134	99
D Chipping Norton (Heythrop) ..	Lt.-Col. H. E. Du C. Norris	10	3	6	660	396	15·58	126	99
3.—THAMES—Cherwell. 250 sq. mi.									
d Nuneham Park Gardens	Mr. C. E. Munday	8	3	0	280	350	13·78	..	82
D Oxford (Hincksey Pumping Sta.)	J. E. Wilkes, Esq., C.E. ...	8	1	0	187	355	13·99	142	80
D Oxford (Osney Lock)	Thames Conservancy	5	2	11	191	370	14·56	129	81
D Oxford (Magdalen College)	J. J. Manley, Esq.	5	1	0	186	355	13·96	140	83
D Oxford (Magdalen College)	J. J. Manley, Esq.	5	33	6	194	329	12·96	141	78
Oxford (Radcliffe Observatory)	Dr. A. A. Rambaut, F.R.S.	8	1	8	210	379	14·94	139	80
D Oxford (Radcliffe Observty.) (R)	Dr. A. A. Rambaut, F.R.S.	11	2	4	210	379	14·94	129	77
D Oxford (Northmoor Road).....	Miss E. M. Tawney	5	1	0	217	383	15·09	141	78
D Headington (Warneford Asy.)..	Dr. A. W. Neill	5	1	0	300	360	14·19	121	90
D Headington (Charlton Lea) ...	Mr. L. Dawes	5	1	0	300	394	15·50	125	88
D Elsfield Manor House	Miss M. J. Parsons	5	1	0	355	392	15·44	137	82
d Islip	Col. G. E. Eliot	5	3	0	200	397	15·63	..	72
Charlton-on-Otmoor School....	E. Cartwright, Esq.	6	1	3	220	412	16·23	..	..
d Blethington School	H. C. Witcombe, Esq.	5	1	6	329	531	20·90	..	..
D Middleton Park	The Earl of Jersey	5	2	6	326	411	16·19	135	98
D Steeple Aston (The Grange) ...	Arthur E. Bradshaw, Esq.	8	1	0	400	411	16·20	143	96
D Steeple Aston (Hill House) ...	B. S. Ogle, Esq.	5	0	5	406	405	15·94	144	92
West Adderbury (St. Amand's)	Miss M. M. Bradford	8	1	0	320	446	17·56	117	101
D Adderbury (Cross Hill).....	G. H. Norris, Esq.	5	1	1	338	405	15·95	134	98
D Adderbury (The Rookery)	C. C. Bradford, Esq.	8	1	0	323	427	16·80	135	100
D Bodicote House	J. F. Starkey, Esq.	8	1	0	388	404	15·91	132	91
D Bodicote	A. Ridge, Esq.	5	1	0	391	438	17·26	140	102
D Bodicote Vicarage	Rev. H. N. Fowler	5	1	0	390	410	16·13	134	93
Broughton Rectory.....	Rev. B. W. Bradford	5	0	6	370	416	16·38	136	96
Wroxton	Hon. Mrs. Fitz Gerald	12	2	6	700	421	16·57
D Shenington School Gardens ...	Rev. A. Blythman	5	1	3	540	586	23·07	140	109

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OXFORDSHIRE—(con.).		in.	ft.	in.	ft.	mm.	in.		
4.—THAMES—Thame & c. 210 sq. mi.									
Caversham (Eastfield)	C. M. Powell, Esq.	5	1	0	180	379	14·91	125	79
d Caversham (Kidmore End Sch.)	T. F. Higgins, Esq.	5	1	0	330	472	18·58	124	89
d Harpsden (Cray)	B. E. Dunbar Kilburn, Esq.	5	1	0	230	391	15·40	129	81
d Henley-on-Thames (Hart St.)	A. Edward Hobbs, Esq.	5	1	6	110	364	14·32	116	82
d Henley-on-Thames (Hart St.)	A. Edward Hobbs, Esq.	5	7	6	116	360	14·18	116	82
d Henley-on-Thames (Greys Lane)	G. Potter, Esq.	5	0	9	123	359	14·13	109	85
d Henley-on-Thames (Greys Gr.)	Mrs. Wolferstan	5	2	0	350	424	16·71	120	97
d Nettlebed (Joyce Grove) . No. 1	Mr. F. Morley	5	1	0	590	410	16·14	..	83
d Nettlebed (Joyce Grove) . No. 2	Mr. F. Morley	5	1	0	590	415	16·35	119	87
d Benson Observatory	Air Ministry	8	1	0	186	341	13·42	132	80
d Dorchester (Bishops Court)	T. Latham, Esq.	5	2	0	168	362	14·24	136	104
d Culham School House	F. Mitchell, Esq.	5	0	10	180	349	13·73	128	85
d Clifton Hampden (Manor House)	Lord Aldenham	5	1	0	190	359	14·12	126	89
d Watlington (Pyrtton Manor)	Major H. Ducat Hamersley	5	1	0	325	379	14·90	123	86
d Lewknor (Manor House)	Miss Spencer	5	1	3	360	399	15·70	132	84
d Wheatfield	A. J. Spencer, Esq.	5	0	8	275	358	14·09	106	82
d Toot Baldon (Potlands)	D. Clinkard, Esq.	5	1	0	288	359	14·12	131	89
d Thame (Tythrop House)	A. W. Smith, Esq.	8	1	2	266	369	14·51	109	79
Stanton St. John (Woodperry)	Mrs. Thomson	6	1	0	336	386	15·21	122	97
5.—OUSE. 25 sq. mi.									
NORTHAMPTONSHIRE. Area, 1003 sq. mi.									
1.—SEVERN—Upper Avon. 60 sq. mi.									
d Winwick Warren	Col. R. H. Ainsworth	8	1	5	648	433	17·05	151	101
d Naseby Reservoir	T. W. Millner, Esq.	5	1	6	519	386	15·18	137	86
2.—THAMES—Cherwell. 77 sq. mi.									
d King's Sutton (Manor House)	Major C. A. Markham	5	1	0	338	405	15·96	100	90
d King's Sutton School	A. H. Tilbury, Esq.	5	1	0	380	404	15·89	..	..
d Grimsbury (Banbury W.W.)	W. E. Wood, Esq.	5	1	3	320	353	13·90	137	86
3.—OUSE. 148 sq. mi.									
d Brackley House	Major J. Allen	5	1	0	425	465	18·32	157	116
d Towcester (Easton Neston)	J. P. Maitland, Esq.	8	1	0	325	403	15·88	115	91
d Hartwell Vicarage	Rev. C. Ryder-Macnally	5	1	10	405	436	17·18	150	105
d Hargrave Hall	C. K. Murchison, Esq.	5	1	0	273	329	12·95	..	..
4.—NENE. 622 sq. mi.									
d Salcey Forest	Office of Woods	8	1	3	370	373	14·68	109	86
d Blisworth (Crieff House)	A. Westley, Esq.	5	1	0	330	389	15·33	144	86
d Blisworth	Dr. D. Jeaffreson	5	1	0	275	374	14·71	123	82
d Blisworth	T. W. Millner, Esq.	5	1	6	300	365	14·35	134	86
d Castle Ashby	Major C. A. Markham	5	1	4	230	379	14·90	137	85
d Little Houghton House	Christopher Smyth, Esq.	5	2	0	270	359	14·15	122	87
d Northampton (Dallington Av.)	Major C. A. Markham	5	1	0	265	382	15·05	166	87
d Northampton (General Hosp.)	Major C. A. Markham	5	1	1	259	339	13·35	121	83
d Northampton (Mental Hosp.)	Major C. A. Markham	8	1	2	398	351	13·84	136	98
d Northampton (Stimpson Avnue)	F. Tomlinson, Esq., C.E.	8	18	0	329	337	13·27	..	82
d Northampton (Cheyne Walk)	Major C. A. Markham	5	8	6	240	336	13·24	144	86
d Hazelborough Woods	Office of Woods	8	1	0	241	407	16·01	156	92
d Daventry (Tunnel End)	T. W. Millner, Esq.	5	1	6	394	398	15·67	147	88
d Althorp Park	Mr. C. F. Crump	5	1	3	414	389	15·33	108	89
d Sywell Hall	T. A. Dickson, Esq.	5	1	0	371	367	14·46	115	85
d Pitsford (Sedgebrook)	Major C. A. Markham	5	1	0	311	373	14·67	123	82
d Pitsford (Sedgebrook)	Major C. A. Markham	5	1	0	311	368	14·48	..	..
d Wellingborough (Swanspool)	R. S. Henshaw, Esq., C.E.	5	1	0	169	356	14·00	130	82
d Wellingborough (Sewage Works)	R. S. Henshaw, Esq., C.E.	5	1	0	139	334	13·15	130	86
d Wellingborough (Castle St.)	J. E. Ekins, Esq.	5	4	6	160	351	13·83	142	84
d Wellingboro' (Bushfield W.W.)	R. S. Henshaw, Esq., C.E.	8	0	11	286	349	13·76	134	82
d Watford Court	Major C. A. Markham	9	1	2	380	429	16·88	151	94

DIVISION III.—SOUTH MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.	1921			
NORTHAMPTONSHIRE—(con.).		in.	ft. in.	ft.	mm.	in.		
4.—NENE—(con.).								
d Ashby St. Ledgers	Major P. E. T. Hibbert.	5	0 10	500	424	16·68	146	100
d Ravensthorpe Reservoir	F. Tomlinson, Esq., C.E.	8	1 0	370	409	16·09	140	96
d Scaldwell	Capt. R. Soames.	5	1 0	406	347	13·68	..	..
d Lamport Hall Gardens	Mr. H. Tyrrell	8	1 0	440	404	15·89	119	92
d Lamport Hall	Mr. James Sutherland.	8	0 8	400	432	17·00	123	95
d Raunds (Day School)	L. G. H. Lee, Esq.	8	1 0	214	326	12·83	126	78
d Kettering W.W. (Cransley) ...	T. R. Smith, Esq., C.E.	8	0 6	275	361	14·21	115	74
d Kettering (Sewage Works) ...	T. R. Smith, Esq., C.E.	8	0 11	199	351	13·80	129	85
d Kettering W.W. (Thorpe Malsor)	T. R. Smith, Esq., C.E.	5	0 11	352	397	15·62	135	82
d Kettering W.W. (Clover Hill) ..	T. R. Smith, Esq., C.E.	5	0 7	344	356	14·03	113	82
d Kettering (Warkton)	Mr. R. H. Brett.	5	1 3	275	336	13·22	98	83
d Rothwell (Loddington)	Mr. J. Oliff.	5	1 6	400	396	15·59	105	..
d Thrapston (Drayton House) ...	Mr. G. Medcraft.	5	1 6	220	381	15·02	115	85
d Desborough	Mr. F. U. Grudgings.	5	4 0	400	385	15·17	..	..
d Rushton Manor	R. A. Willows, Esq.	5	1 0	400	371	14·62	..	83
d Rothwell (Shotwell Mill)	W. T. Lynam, Esq.	5	1 6	340	379	14·90	113	88
d Barnwell (Lilford Hall)	Mr. F. W. Gallop.	5	1 0	..	345	13·59	117	78
d Oundle (Milton Road)	J. M. Siddons, Esq.	5	3 6	131	281	11·06	..	62
d Oundle School	Late F. W. Sanderson, Esq.	8	1 0	147	316	12·44	130	70
d Peterborough (Westbourne Ho.)	E. H. Colman, Esq.	8	1 0	38	287	11·32	110	62
d Peterborough (Ashfield)	J. A. Percival, Esq.	5	0 7	30	281	11·07	109	66
d Peterborough (Abbeyfields) ...	Major J. Shipley Ellis.	5	0 9	49	329	12·94	119	68
d Peterborough (Milton House) ..	Major C. A. Markham.	5	3 0	96	435	17·13	102	81
d Wittering Rectory	Rev. S. B. Warde.	5	1 0	180	363	14·30	131	76
d Wittering (Whitewater)	E. Betts, Esq.	8	3 0	241	379	14·92	..	74
d Wittering (Bone Mill)	E. Betts, Esq. ....	..	..	..	371	14·61	103	77
d Eye (Northolm)	S. M. Egar, Esq.	5	1 0	17	352	13·87	128	70
d Eye (Newborough)	R. Williams, Esq.	5	1 0	8	336	13·23	113	72
5.—WELLAND. 96 sq. mi.								
d Marston Trussell Rectory .. (r)	Rev. J. Knight Law.	10	2 9	314	371	14·59	143	87
d Market Harboro' (Dingley Hall)	Mr. J. Hanson.	5	1 6	400	391	15·40	123	89
d Carlton Park Gardens	Mr. R. W. Thatcher.	5	1 1	400	410	16·15	..	84
d Ashley	Major N. H. Matthews.	5	1 3	240	440	17·34	141	105
d Rockingham Castle Gardens ..	Mr. A. E. Higgott.	5	4 0	410	406	15·98	117	90
d Gretton (Gretton House)	Mr. J. Rogers.	9	1 0	354	421	16·59	124	87
d Gretton School	W. Leeson, Esq.	5	1 0	365	404	15·92	142	90
d Colleyweston (Cuckoo Lodge) ..	E. Betts, Esq.	8	3 0	241	338	13·31	..	74
d Market Deeping (Etton)	W. H. A. Court, Esq., C.E.	8	1 0	25	333	13·11	107	72
HUNTINGDONSHIRE. (Area, 366 sq. mi.)								
1.—OUSE. 327 sq. mi.								
d Gamlingay (Wdbury Hall Gdns)	Major Foster.	10	1 0	..	282	11·12	104	65
d St. Neots (Waresley Park)	Miss Duncombe.	5	0 11	190	312	12·28	111	84
d Hemingford Grey (Millview) ...	G. F. Wilson, Esq.	5	1 6	20	279	11·00	105	73
d Huntingdon (Hinchingsbrke.) (r)	Mr. W. Prowting.	8	6 0	74	309	12·17	123	81
d St. Ives (Slepe House)	Dr. W. R. Grove.	5	1 0	25	273	10·73	97	65
d Catworth	J. H. Annet, Esq.	5	0 9	210	340	13·38	131	82
d Whittlesea Mere	Maj. R. G. Clark.	8	1 6	10	271	10·67	85	70
2.—NENE. 39 sq. mi.								
BEDFORDSHIRE. (Area, 467 sq. mi.)								
1.—THAMES—Colne. 20 sq. mi.								
d Dunstable (Kensworth Vicarage)	Mrs. Little.	5	1 3	585	397	15·62	..	79
d Luton (Stockwood)	Mrs. E. R. Crawley.	5	3 0	539	313	12·34	104	75
2.—THAMES—Lea. 32 sq. mi.								
d Luton (Pumping Station)	J. W. Tomlinson, Esq., C.E.	5	1 0	343	338	13·30	124	77
d Luton	E. A. Mander, Esq.	5	1 0	390	320	12·61	105	73
d Luton (Tennyson Road)	Harold F. Smith, Esq.	5	1 1	530	327	12·86	124	75
d Luton (The Downs) ..	G. W. Pryer, Esq.	5	1 0	479	352	13·85	121	90

DIVISION III.—SOUTH-MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
BEDFORDSHIRE—(con.).		in.	ft.	in.	ft.	mm.	in.		
3.—OUSE. 408 sq. mi.									
d Milton Bryant (Manor House)	C. J. Kilby, Esq.	5	1	0	510	345	13·59	..	77
d Shillington	Dr. Kilham Roberts	5	1	0	182	315	12·38	116	77
d Shefford (Stondon Manor)	R. Long, Esq.	5	1	0	241	288	11·35	..	72
d Woburn (Crawley Mill Farm)	J. Crabtree, Esq.	8	1	0	292	361	14·19	155	89
d Woburn (Fruit Farm, Ridgmont)	E. J. Hobbs, Esq.	5	1	0	270	380	14·96	139	87
d Stotfold (Three Co. Mental Hos.)	Dr. L. O. Fuller	5	1	0	220	272	10·70	118	72
d Lidlington (White Lodge)	H. J. Wright, Esq.	5	0	8	200	322	12·66	122	80
Shefford (Clifton Bury)	A. Inskip, Esq.	5	2	1	150	301	11·83	..	..
d Shefford Council School	G. F. Alldritt, Esq.	5	1	0	134	307	12·10	127	75
Shefford (Stanford)	H. Inskip, Esq.	5	2	0	60	279	10·98	..	..
Sandy (The Lodge)	Mr. R. Pettifer	5	1	0	200	255	10·02	..	..
d Sandy (Beeston Grange)	Lt.-Col. Maunsell Bowers	5	1	0	80	301	11·87	114	77
d Bedford (The Park)	(R) N. Greenshields, Esq.	8	5	8	123	293	11·54	118	63
d Bedford (Castle Road)	Miss M. E. Newbery	5	7	0	108	325	12·80	121	67
Goldington (Castle Mills)	W. H. Rogers, Esq.	5	1	4	90	304	11·97	..	..
d Great Barford House	J. Arnold Whitchurch, Esq.	5	1	0	120	339	13·36	117	76
Sharnbrook (Castle Close)	L. Stileman-Gibbard, Esq.	5	0	8	210	341	13·41	124	82
d Sharnbrook (Colworth Gardens)	Mr. J. Hoad	5	2	0	250	338	13·31	106	78
4.—NENE. 7 sq. mi.									
CAMBRIDGESHIRE. (Area, 859 sq. mi.)									
1.—STOUR. 17 sq. mi.									
2.—OUSE. 740 sq. mi.									
d Ashwell (Odsey)	Sir H. G. Fordham	5	1	0	256	280	11·01	126	75
Abington Pigotts	Rev. M. de Courcy-Ireland	8	0	10	70	291	11·47	..	..
Melbourne Vicarage	Rev. M. de Courcy-Ireland	5	1	0	78	321	12·63	..	97
Meldreth (Chiswick Farm)	A. Howard, Esq.	5	1	1	70	327	12·89	112	80
d Fowlmere (Fruit Farm)	H. F. Smith, Esq.	5	1	0	61	284	11·19	117	69
d Bartlow House Gardens	Mr. F. M. Folkard	5	0	9	18	325	12·81	..	76
d Foxton (The Bury)	J. Gifford, Esq.	5	1	0	60	320	12·59	131	86
d Whittlesford (Scots)	Robert Maynard, Esq.	5	0	6	68	303	11·93	..	65
Harston Vicarage	Mrs. E. C. Baldwin	5	0	8	47	296	11·66	..	..
Wimpole Hall	Mr. W. J. Snell	5	1	0	141	290	11·42	96	67
d Gamlingay (Old Woodbury)	Hon. C. Hill Trevor	5	0	10	200	288	11·35	121	76
d Balsham Rectory	Rev. H. J. E. Burrell	5	1	6	399	340	13·40	122	85
d Grantchester Mill	J. Nutter, Esq.	5	5	0	31	301	11·84	..	77
d Fulbourne (Fleam Dyke)	W. W. Gray, Esq., C.E.	5	1	0	99	296	11·67	133	73
d Fulbourne Pumping Station	W. W. Gray, Esq., C.E.	5	1	0	37	305	12·02	140	81
d Fulbourne (Cambs. Ment. Hos.)	Dr. M. A. Archdale	5	0	6	72	304	11·97	124	78
d Cambridge W.W. (Cherryhinton)	W. W. Gray, Esq., C.E.	5	1	0	35	315	12·41	151	80
d Cambridge (Hills Road, South)	Smith Nutter, Esq.	8	0	10	45	330	12·98	141	92
d Cambridge (Herschel House)	C. N. H. Lock, Esq.	5	1	0	36	290	11·42	..	64
d Cambridge (Sidney Street)	Messrs. W. E. Pain & Sons	8	53	0	83	297	11·70	132	72
d Cambridge (Corporation Store Yd)	Julian Julian, Esq., C.E.	5	1	0	52	295	11·60	125	76
d Cambridge (Tenison Avenue)	W. B. Parsons, Esq.	8	1	2	40	318	12·52	123	78
d Cambridge (Pinehurst)	Late C. F. Foster, Esq.	5	0	10	36	327	12·89	138	83
d Cambridge (Botanic Gardens)	F. G. Preston, Esq.	5	1	0	41	308	12·13	120	75
d Cambridge (Corporation Ppg.St.)	Julian Julian, Esq., C.E.	5	1	0	28	285	11·24	139	76
d Boxworth	E. H. Thornhill, Esq.	5	1	0	76	323	12·73	122	77
d Swaffham Prior Vicarage	Rev. L. Fisher	5	1	4	44	327	12·86	139	77
Burwell	R. Stephenson, Esq.	5	2	0	58	318	12·53	109	74
Conington (Conington Hall)	Philip T. Gardner, Esq.	8	0	5	50	356	14·02	115	82
d Cottenham (Bernard House)	Miss Bull	5	1	6	30	311	12·24	124	74
Fordham	W. V. Bloom, Esq.	5	1	0	30	285	11·23	94	73
d Stretham Engine	Mr. J. Housley	9	4	9	13	276	10·88	..	60
Stretham (Orchard House)	C. Wright, Esq.	8	5	0	42	293	11·53	107	..
d Chatteris (Holwood Farm)	Mr. J. W. Watson	5	1	0	12	275	10·81	..	66
Littleport (Highfield House)	H. G. Martin, Esq.	8	2	7	67	294	11·58	99	76

DIVISION III.—SOUTH MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain. 1921	Days with ·01 in. or more.	Days with ·04 in. or more.	
		Diam.	Height Ground	above Sea Level.					
CAMBRIDGESHIRE—(con.).		in.	ft.	in.	ft.	mm.	in.		
2.—OUSE—(con.).									
d Chatteris (Aylesby House).....	A. H. Ruston, Esq.....	8	1	0	31	323	12·72	..	65
d Chatteris (The Priory)	H. F. Fryer, Esq.	5	1	0	32	288	11·35	93	70
d March	Major R. G. Clark	9	2	0	10	354	13·95	99	81
d Upwell (Marmont Priory Lock) ..	Major R. G. Clark	8	1	1	..	301	11·84	110	82
d Wisbech (Queen's Road)	H. Dann, Esq.	5	7	6	10	359	14·13	117	81
3.—NENE. 102 sq. mi.									
d Stanground Sluice	Major R. G. Clark	8	1	6	15	311	12·24	120	74
d Parson Drove (Clows Cross) ...	W. Kingston, Esq.	8	3	0	13	298	11·74	111	80
d Wisbech (Bank House)	Hon. Anna J. Peckover ..	8	0	8	6	346	13·62	138	80

DIVISION IV.—EASTERN COUNTIES.

ESSEX. (Area, 1532 sq. mi.)

1.—THAMES—Lea. 132 sq. mi.									
d West Ham (Abbey Mills)	London County Council ..	8	0	10	15	332	13·07	102	79
d Leyton (Town Hall)	E. H. Essex, Esq., C.E. ..	5	1	0	22	340	13·37	101	74
d Leytonstone (High Road)	Miss G. Lister	5	1	8	100	384	15·13	105	76
d Lea Bridge (Waterworks)	Met. Water Board.	8	0	6	23	335	13·17	104	76
d Walthamstow (Ferry Lane).....	Met. Water Board.	5	0	10	30	323	12·71	114	77
d Woodford (Haggar Lane)	Met. Water Board.	8	0	8	176	333	13·11	104	75
d Buckhurst Hill Reservoir	Met. Water Board.	8	1	7	275	360	14·16	106	74
d Buckhurst Hill (Ardmore)	Miss E. F. Howard	8	1	0	270	389	15·30	107	80
d Chingford (Crescent Road)	Miss M. L. Mathieson	5	2	9	200	357	14·06	112	78
d Chingford Mill	Met. Water Board.	8	0	6	40	338	13·29	107	76
d Loughton (High Beech Res.) ..	Met. Water Board.	8	1	0	376	422	16·60	107	82
d Waltham Abbey (Ramney Marsh) ..	Met. Water Board.	8	1	0	60	367	14·43	124	81
d Waltham Abbey (Pumping Stn.) ..	Met. Water Board.	8	1	3	66	345	13·58	113	79
d Waltham Abbey (Gunpr. Fact.) ..	The Superintendent	5	2	0	64	326	12·84	113	69
d Hatfield Broad Oak (Barrington) ..	A. H. Gosling, Esq.	5	0	10	300	339	13·36	118	78
d Bishop Stortford (Hassobury) ..	R. C. Gosling, Esq.	5	0	10	290	379	14·92	134	92
d Stansted (Ravens)	Col. R. Egerton	5	1	0	290	409	16·10	130	95
d Elsenham (Gaunts End)	H. Cotterell, Esq.	5	1	0	363	374	14·73	131	89
2.—THAMES—Roding & c. 316 sq. mi.									
d Tilbury (Park View Observatory) ..	S. A. Hill-Willis, Esq.	5	1	0	6	277	10·92	..	62
d Grays (Stanley Road)	A. C. James, Esq., C.E. ..	5	3	3	21	359	14·12	116	69
d Grays Sewage Works	L. D. Holgate, Esq.	8	6	0	9	301	11·86	107	69
d East Ham (Central Park)	F. J. Kendall, Esq.	12	1	0	15	331	13·03	109	81
d East Ham Well	Met. Water Board.	8	1	0	17	298	11·74	102	72
d Ilford Sewage Works	E. E. J. Sandford, Esq. ..	5	1	1	31	267	10·50	..	66
d Leigh-on-Sea (Herschell Road) ..	Mrs. Elliot	5	0	10	100	308	12·11	112	76
d Leigh (Brick House)	Miss Bentall	5	..	..	..	271	10·66	..	..
d Vange Pumping Station	Southend Water Works Co. ..	5	1	0	43	305	11·99	120	77
d Pitsea Pumping Station	Southend Water Works Co. ..	5	1	0	28	291	11·45	99	66
d Hornchurch	W. J. Grant, Esq.	8	1	8	46	293	11·52	108	67
d Wanstead (Red Bridge)	Met. Water Board.	5	2	0	27	314	12·37	102	68
d Manor Park (Albany Road)	A. J. Wilmshurst, Esq.	5	2	11	40	331	13·04	111	77
d Harold Wood (Longmoor)	Sir J. G. Broodbank	5	4	0	120	323	12·70	140	76
d Havering Grange	G. P. Hope, Esq.	5	1	0	255	379	14·91	178	76
d Havering-atte-Bower (Fernside) ..	Benjamin Smith, Esq.	5	1	0	341	396	15·60	162	86
d Epping (The Hemnalls)	Miss A. Nicholl	8	0	8	345	490	19·29	111	92
d Ongar (Marden Ash)	W. E. Calver, Esq.	5	1	6	190	343	13·51	..	76
d Ongar (Folyats)	J. M. Newall, Esq.	5	0	10	210	344	13·55	..	..
d North Weald (Canes)	H. W. Hart, Esq.	5	2	0	250	376	14·79	120	80
3.—CROUCH. 186 sq. mi.									
d Shoeburyness	Air Ministry	8	1	0	11	283	11·13	97	64
d Shoeburyness	Air Ministry	5	1	0	13	273	10·73	..	..
d Southend (Corporation Obsy.) ..	E. J. Elford, Esq.	8	1	0	90	271	10·65	104	62
d Southend (Broadway)	H. J. G. Ralph, Esq.	5	1	0	78	287	11·29	116	60

DIVISION IV.—EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
ESSEX—(con.).		in.	ft.	in.	ft.	mm.	in.		
3.—CROUCH—(con.).									
d Southend (Water Works).....	Southend Water Works Co.	8	1	0	112	283	11·13	98	66
d Leigh Reservoirs	Southend Water Works Co.	5	1	0	117	277	10·91	97	65
d Great Wakering	Air Ministry	5	1	0	9	267	10·51	104	65
d Eastwood Pumping Station ..	Southend Water Works Co.	8	1	0	50	287	11·31	119	68
d Thundersley Reservoir	Southend Water Works Co.	5	1	0	277	296	11·67	88	75
d Nevendon Pumping Station ...	Southend Water Works Co.	5	1	0	43	287	11·29	100	67
d Billericay (Service Tank)	Southend Water Works Co.	5	1	0	310	331	13·03	109	76
d Billericay (Ramsden Hall)	T. W. Bacon, Esq.	5	0	9	260	378	14·88	116	81
d Wickford (Runwell Hall)	Lt.-Col. H. Kemble.....	5	1	0	75	328	12·92	98	77
d Southminster (Dudswell)	Mrs. H. G. Owen	5	0	10	60	253	9·94	..	59
d Southminster (The New Moor) ..	E. J. Attenborough, Esq. .	..	..	..	..	277	10·89	..	..
d Bradwell-on-Sea (Bradwell H.) ..	J. C. Chillingworth, Esq. .	5	1	1	27	285	11·21	106	60
4.—BLACKWATER. 425 sq. mi.									
Shenfield (Cliveden).....	Mr. F. Copeman.....	5	1	0	320	383	15·08	91	79
Shenfield (The Lodge).....	Harcourt P. Landon, Esq..	5	0	7	305	373	14·67	..	..
d South Hanningfield (Peardowns) ..	W. Hill, Esq.	8	1	10	133	367	14·45	118	72
d Ingatestone (Fryerning)	A. E. Christy, Esq.	5	1	0	290	376	14·80	138	67
d Danbury Rectory	Rev. J. Bridges Plumptre	5	1	0	365	332	13·06	115	71
d Writtle (Melbourne)	J. A. Rosling, Esq.	5	0	9	140	353	13·89	120	66
d Chelmsford (County Laboratories)	R. M. Wilson, Esq.	5	1	0	134	361	14·21	109	73
d Chelmsford (High Street).....	Miss F. J. Chancellor	8	1	6	98	365	14·36	133	..
d Little Waltham Hall.....	Miss M. Harrison	8	1	0	150	353	13·90	96	76
d Pleshey Vicarage	Rev. C. H. B. Woodd.....	8	1	3	..	350	13·77	112	70
d Great Leighs (Lyons Hall).....	J. H. Tritton, Esq.	5	3	0	130	347	13·65	..	68
d Witham (Faulkbourne Hall)	Miss C. L. Parker	5	0	8	100	346	13·61	116	70
d Hartford End (Leez Priory)	M. E. Hughes-Hughes, Esq.	5	1	0	170	368	14·49	120	73
d Kelvedon (Lawn House)	F. Randolph-Symmons, Esq.	5	1	0	96	355	13·98	106	71
d Kelvedon (White Barn)	W. & H. J. Sheldrake, Esqs.	5	1	5	135	328	12·90	105	68
d Felsted School	J. H. Owen, Esq.	5	1	2	248	366	14·41	102	72
d Little Dunmow Council School	Miss M. A. L. Scott.....	5	1	0	258	322	12·66	102	73
d Great Dunmow	Messrs. Hasler & Co., Ltd.	5	1	0	215	323	12·71	124	72
d Little Dunmow (Throws)	Miss Webb	5	1	4	283	309	12·15	..	..
d Pattiswick Hall	Harris Smith, Esq.	5	0	10	210	336	13·24	..	68
d Great Saling (Woolpits)	Mrs. Joseph Smith	5	0	9	284	325	12·79	97	72
d Shalford (Littles)	W. F. Hart, Esq.	5	1	8	260	360	14·16	99	71
d Gt. Bardfield (South Lodge) ..	A. W. Brunwin, Esq.	5	1	0	250	383	15·10	118	81
5.—COLNE & C. 283 sq. mi.									
d Clacton-on-Sea.....	Mr. A. W. Shadick	8	1	0	55	285	11·21	109	63
d Great Clacton (Clay Hall)	Philip Smith, Esq.	5	2	0	45	282	11·10	103	..
d Tiptree	Messrs. Wilkin & Sons, Ltd.	5	0	6	170	340	13·37	91	73
d Walton-on-the-Naze	The Town Clerk	5	1	0	69	279	10·98	..	..
d Colchester (Berechurch)	R. P. Blyth, Esq.	5	0	10	120	326	12·82	..	68
d Colchester (King's Ford)	Hon. Lady Digby	5	0	10	103	344	13·53	141	78
d Colchester (Boro' Surveyor's Off.) ..	H. Collins, Esq., C.E.	8	17	0	82	294	11·57	95	67
d Lexden (Hill House)	S. F. Hurnard, Esq.	5	1	0	90	326	12·82	100	62
d Lexden (Hill House)	S. F. Hurnard, Esq.	5	1	0	90	320	12·59	..	..
d Lexden (Home Farm)	Mr. W. Bird	5	1	0	125	358	14·08	..	..
d Lexden Rectory	Rev. T. S. Raffles	5	1	4	116	354	13·94	105	71
d Great Bromley (Broughton) ..	W. A. Roberts, Esq.	5	1	0	115	335	13·21	..	68
d Earls Colne (Chalkney House)	H. F. Hills, Esq.	5	1	0	180	349	13·72	91	83
d Halstead (Atwoods)	R. E. Vaisey, Esq.	5	1	0	200	370	14·55	113	73
d Halstead (The Brewery)	Lt. E. T. Adams, R.N.V.R.	5	1	0	140	357	14·04	108	62
d Wormingfold (The Grove).....	Miss St.O.M. Eustace Smith	5	1	9	156	341	13·43	..	..
d Gt. Maplestead (Monk's Lodge) ..	T. F. Miller, Esq.	5	0	9	230	362	14·26	..	..
d Great Yeldham (The Oak House) ..	G. A. Goodchild, Esq.	5	2	0	200	356	14·00	115	82
d Ridgewell (Ridgewell Hill)	F. J. Gurney, Esq.	5	1	0	269	368	14·48	129	74
6.—STOUR. 110 sq. mi.									
d Manningtree (Dale Hall)	Nigel C. Cooke, Esq.....	5	1	0	110	325	12·81	104	63
d Sudbury (Bulmer Lodge)	Miss Burke	5	1	3	202	370	14·55	111	84
d Sudbury (Belchamp Hall)	Major T. G. C. Reynolds...	5	1	0	150	349	13·72	115	68

DIVISION IV.—EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.	1921			
ESSEX—(con.).		in.	ft. in.	ft.	mm.	in.		
7.—OUSE. 80 sq. mi.								
Arkesden (Wood Hall)	Charles Beadle, Esq.	5	0 9	400	393	15·46	96	87
Saffron Walden (Market Place)	"Herts. & Essex Observer"	5	1 5	201	347	13·66	..	..
Saffron Walden (Littlebury)	"Herts. & Essex Observer"	..	..	..	352	13·85	..	..
Great Chesterford Mills	Ernest H. King, Esq.	5	1 0	130	374	14·73	..	..
SUFFOLK. (Area, 1489 sq. mi.)								
1.—STOUR. 271 sq. mi.								
d East Bergholt (Ackworth Ho.)	A. Harwood, Esq.	8	1 6	145	323	12·70	124	76
Capel St. Mary School	B. B. Taylor, Esq.	5	1 6	156	367	14·45	106	..
d Great Cornard (The Firs)	A. B. Legard, Esq.	5	1 0	64	346	13·63	106	79
Great Cornard (The Limes)	E. Oliver, Esq.	5	0 9	65	332	13·07	104	71
d Sudbury (Friars Street)	E. Ransom, Esq.	5	1 7	93	361	14·23	150	85
d Hitcham Rectory	Rev. R. R. Cobbold	5	1 5	255	366	14·42	137	81
d Hitcham (Loose Hall)	T. A. Harwood, Esq.	5	1 0	275	377	14·86	127	75
d Hawkedon Rectory	Rev. B. P. Oakes	5	3 4	303	357	14·06	119	82
d Cockfield Rectory	Rev. Canon Edwin Hill	5	1 0	305	367	14·43	117	82
2.—ORWELL. 166 sq. mi.								
d Ipswich (Rookwood, Copdock)	F. L. Bland, Esq.	8	1 0	164	349	13·74	109	68
d Ipswich (Tuddenham Road)	F. Woolnough, Esq.	6	1 0	110	365	14·37	100	76
d Ipswich (Museum)	F. McCullum, Esq.	8	0 10	72	332	13·08	105	72
d Ipswich (Dale Hall)	Percy Turner, Esq.	8	1 0	135	331	13·04	115	74
Elmsett (Laurel Cottage)	A. E. Ladbrook, Esq.	5	3 0	210	317	12·49	..	63
d Ringshall Rectory	Rev. G. C. Blaxland	5	2 9	280	351	13·82	109	71
d Haughley (Haughley House)	Major S. H. Creagh	5	1 0	188	290	11·40	109	73
3.—DEBEN & C. 466 sq. mi.								
d Felixstowe	Air Ministry	8	1 2	15	286	11·26	107	62
d Felixstowe (Wireless Tel. Stat.)	Coastguard Officer	8	1 6	15	311	12·26	112	71
d Woodbridge Abbey	Col. R. J. Carthew	8	1 2	46	322	12·67	113	76
d Orford (The Gables)	A. E. Rope, Esq.	5	0 9	30	419	16·48	125	82
d Melton (St. Audrey's Hospital)	A. F. Philpott, Esq.	8	1 2	74	340	13·37	106	67
Melton (Bromeswell Rectory)	Rev. F. Shadwell	5	1 0	30	328	12·92	123	72
d Rendlesham Hall	Lord Rendlesham	5	1 0	88	328	12·91	107	72
Charsfield (Red House)	Hugh P. Youngman, Esq.	5	1 9	150	414	16·30	..	..
Helmingham (Bocking Hall)	W. B. Damant, Esq.	5	1 6	180	376	14·79	111	78
d Snape	G. H. Garrett, Esq.	5	1 6	50	349	13·75	99	80
Campea Ashe (High House)	Viscount Ullswater, P.C.	8	2 6	60	331	13·03	108	..
Leiston (The Red House)	J. R. Grimsey, Esq.	8	2 0	65	369	14·51	113	79
d Leiston (Lower Abbey)	M. K. Rope, Esq.	5	0 7	30	364	14·34	..	68
d Halesworth Rectory	Rev. H. C. Newbery	5	1 0	50	353	13·90	129	78
d Wangford (Reydon Grove)	C. P. Runnacles, Esq.	5	1 5	20	354	13·95	96	70
d Wangford (Ford House)	Hon. Agnes Eden	5	0 10	25	373	14·67	114	76
Lowestoft (Kirkley)	H. S. Gribble, Esq.	5	1 6	15	363	14·30	113	75
d Lowestoft (Mill Road)	Mr. Mark Bean	8	1 1	18	387	15·23	144	80
4.—YARE & C. 208 sq. mi.								
Horham Rectory	Rev. J. E. Soden	5	1 4	172	398	15·67	127	93
d Rumburgh Vicarage	Rev. W. Linton Wilson	5	1 0	148	347	13·67	124	78
d Bungay (Flixton Hall)	Sir Shafto Adair, Bart.	5	1 0	79	347	13·64	112	91
d Beccles (Ballygate)	R. L. T. Clarkson, Esq.	8	1 0	55	388	15·29	126	73
d Lowestoft (Belle Vue Park)	C. W. Edwards, Esq.	5	1 0	84	358	14·11	117	68
d Herringfleet (The Gables)	G. H. Wyllys, Esq.	5	0 8	55	374	14·71	144	89
d Lound Rectory	Mrs. Howes	5	1 0	63	331	13·03	130	70
d Lound Pumping Station	Lowestoft Water & Gas. Co.	8	1 0	34	360	14·16	119	78
Fritton Warren	Major-Gen. R. Upcher, D.S.O.	5	0 6	42	393	15·46	127	84
d Fritton Hall	Capt. E. H. Buxton	8	1 0	30	381	15·02	132	92
d Yarmouth (Burgh Hall)	H. P. Frederick, Esq.	5	0 10	45	341	13·42	126	78

DIVISION IV.—EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with ·01 in or more.	Days with ·04 in or more.	
		Diam.	Height Ground	above Sea Level.	1921				
SUFFOLK—(con.).		in.	ft.	in.	ft.	mm.	in.		
5.—OUSE. 378 sq. mi.									
Bradfield St. George School....	R. W. Thompson, Esq.....	5	0	10	300	285	11·21	..	..
Drinkstone	J. E. Townsend, Esq.	5	3	0	220	339	13·33	106	..
Newmarket(Sewage Outfall)...	W. H. Grey, Esq., C.E.....	..	..	..	..	332	13·07	..	..
D Bury St. Edmunds (Risbygate)...	F. E. Rogers, Esq.....	5	0	10	150	326	12·82	113	80
D BurySt.Edmunds(NorthgateSt.)	Rev. J. S. Pratt.....	5	1	0	100	304	11·98	121	71
D BurySt.Edmunds(Hengrave Hl)	Sir John Wood, Bart., M.P.	5	1	5	85	310	12·20	110	75
D Mildenhall	H. R. W. Forster, Esq.	5	1	3	50	295	11·62	116	74
M Barningham (The Beeches) ...	Miss A. K. Lingwood	8	0	9	136	330	12·98	..	..
D Elveden Hall	The Earl of Iveagh, K.P....	5	1	0	130	324	12·77	137	80
NORFOLK. (Area, 2044 sq. mi.)									
1.—YARE. 658 sq. mi.									
D Brockdish Rectory	Rev. Wilson W. White....	8	1	3	115	330	12·98	130	78
D Diss (The Cedars)	Dr. H. M. Speirs	5	1	8	108	330	13·00	102	71
D Pulham St. Mary (Hill House)...	W. G. Rutter, Esq.....	5	1	0	120	414	16·31	154	105
D Pulham	Air Ministry.....	8	0	9	122	375	14·76	116	71
D Denton Rectory	Rev. Canon T. H. Bindley.	5	0	10	50	315	12·38	117	75
D LongStratton(Gt.MoultonRec.)	Rev. T. D. Chute	5	1	0	150	406	16·00	114	84
D Stratton St. Mary Rectory.....	Hubert Satchell, Esq.....	5	1	0	170	351	13·84	139	83
D Beccles (Geldeston)	Miss E. Dowson	5	1	0	37	301	11·85	115	74
D Ditchingham	W. G. Rutter, Esq.	5	1	0	25	322	12·66	119	74
D Aldeby Vicarage	Rev. H. Muir	5	0	10	9	335	13·18	124	73
D Beccles (Raveningham Hall)...	N. H. Bacon, Esq.	8	1	3	60	306	12·06	..	64
D Spooner Row (Wattlefield Hall)...	E. F. Routh Clarke, Esq. .	5	1	5	165	386	15·21	122	89
D Wymondham (Morley School)...	T. E. Ormond, Esq.....	8	3	0	100	390	15·34	137	91
D Wymondham	J. B. Pomeroy, Esq.	8	1	3	118	421	16·59	142	91
D Hingham Rectory	Rev. Canon A. C. W. Upcher	5	0	11	195	375	14·77	127	89
D Keswick Old Hall	E. Knight, Esq.....	5	1	0	90	402	15·81	137	88
D Thuxton Rectory	A. W. Preston, Esq.	5	0	7	140	375	14·77	143	85
D Gorleston Coastguard Station...	Air Ministry.....	8	1	0	16	379	14·91	128	76
D Yarmouth (Northgate Street)...	A. W. Preston, Esq.	5	1	0	7	401	15·78	149	86
D Norwich(ChristChurchRdEaton)	A. W. Preston, Esq.	5	1	0	98	399	15·71	142	93
D Norwich (Carrow House)	Miss Colman.....	5	1	3	35	396	15·60	123	86
D Brundall (Blofeld Road)	A. W. Preston, Esq.....	5	1	0	55	434	17·07	135	90
D Norwich (Ipswich Road)	J. H. Willis, Esq.	5	1	0	110	385	15·15	135	92
D Norwich (Heigham Cemetery)...	A. W. Preston, Esq.....	5	3	2	37	394	15·50	131	94
D ThorpeSt.Andrew(Thorpehurst)	Capt. J. H. Mander, O.B.E.	5	1	6	45	422	16·61	136	94
D Norwich (Marlingford Hall)...	Major E. H. Evans-Lombe	5	1	6	75	374	14·73	..	..
D Drayton Rectory.....	A. W. Preston, Esq.	5	1	0	..	393	15·47	133	84
D Drayton Hall	J. H. Walter, Esq.....	5	0	8	..	397	15·65	..	..
D Swanton Morley Rectory	Rev. G. D. Barry	5	1	0	105	393	15·46	..	91
D Bylaugh Park Gardens	Mr. G. Beeton	5	1	0	130	388	15·27	120	86
D Swanington (Heath House) ...	P. Norgate, Esq.	5	1	3	101	396	15·60	148	88
D East Bilney Hall	A. W. Preston, Esq.	5	4	0	140	401	15·80	130	90
D Reepham (Old Brewery House)...	A. W. Preston, Esq.	5	1	5	150	483	19·00	177	114
D Cawston Rectory.....	A. W. Preston, Esq.	5	1	0	120	448	17·65	120	94
2.—YARE—Bure & c. 368 sq. mi.									
D Acle	A. W. Preston, Esq.	5	0	6	51	452	17·78	155	82
D Sprowston (Oak Lodge)	A. W. Preston, Esq.	5	1	0	100	376	14·81	133	84
D Sprowston Hall	Sir Eustace Gurney	5	1	0	90	389	15·30	131	86
D Yarmouth(OrmesbySt.Michael)	Gt. Yarmouth W. W. Co. .	8	1	0	22	448	17·65	217	95
D Coltishall	F. A. Bainbridge, Esq.	5	0	9	12	423	16·65	134	93
D Wroxham (Hoveton Hall)	G. F. Buxton, Esq., C.B. .	5	3	6	25	399	15·69	139	90
D Wroxham House	D. Chisholm, Esq.....	5	1	6	..	401	15·78	..	..
D Aylsham (Rippon Hall)	Major H. S. Marsham	5	0	8	90	423	16·65	..	90
D Worstead (Frankfort Manor) ...	J. R. W. Pigott, Esq.	5	5	4	50	442	17·41	126	106
D Worstead (Dilham)	A. W. Preston, Esq.	5	0	8	..	439	17·28	163	96
D Worstead (TheRookery,Dilham)	H. Morse Taylor, Esq. .	5	25	0	50	421	16·59	118	112
D Worstead (Lyngate Cottage) ..	R. T. Cross, Esq.	8	1	0	55	416	16·37	116	94

DIVISION IV.—EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.	
		Diam.	Height Ground	above Sea Level.	1921				
NORFOLK—(con.).		in	ft.	in.	ft.	mm.	in.		
2.—YARE—Bure &c.—(con.).									
d Aylsham (Woodgate House) ...	Lt.-Col. J. W. Purdy	5	1	0	100	438	17·25	122	88
d Hindolveston (Church Farm) ...	R. G. Lee, Esq.	5	1	0	..	407	16·04	122	92
d North Walsham (Empson House) ...	W. S. Horn, Esq.	5	1	0	102	416	16·37	134	91
d North Walsham (Gunton Park) ...	A. W. Preston, Esq.	8	1	6	..	456	17·96	116	89
d Mundesley (Raxawa House) ...	C. S. Morris, Esq.	5	3	0	..	375	14·75	..	..
d Baconsthorpe Rectory	Rev. H. Milnes Walker	5	1	6	280	405	15·94	134	84
d Cromer (Northrepps Hall)	A. W. Preston, Esq.	5	1	2	225	480	18·88	145	87
3.—STIFFKEYS & C. 288 sq. mi.									
d Little Massingham	Rev. P. H. L. Brereton	5	1	2	278	411	16·19	166	86
d Sandringham House Gardens	Mr. T. H. Cook	5	0	9	121	426	16·76	212	101
d Walsingham	Rev. Canon J. Blake-Humfrey	5	0	4	54	455	17·92	132	96
d Holt (Gresham's School)	J. M. Hailey, Esq.	5	0	10	215	424	16·71	..	..
d Cromer (The Warren)	F. H. Barclay, Esq.	8	1	8	101	456	17·94	118	86
d Langham Episcopi	A. W. Preston, Esq.	5	0	6	139	440	17·32	157	96
d Blakeney	Mr. R. Lee	5	1	3	29	418	16·46	134	87
d Wells (Holkham Hall)	Earl of Leicester, G.C.V.O.	8	3	6	39	445	17·52	108	87
d Hunstanton	Capt. C. E. Gray	5	1	0	30	347	13·67	123	79
4.—OUSE & C. 700 sq. mi.									
d E Harling (Garboldishm Mnr)	Mjr E. Wriothsley Denny, D.S.O.	8	1	0	70	341	13·43	115	89
d Thetford (Shadwell Court Gdns)	J. Musker, Esq.	..	..	..	..	351	13·81	..	..
d Thetford (Ford Street Gdns.)	Mr. A. Pipe	5	1	0	44	356	14·03	115	79
d Thetford (Kilverstone Hall)	Baron Fisher of Kilverstone	8	1	0	50	321	12·64	141	84
d Thetford (Waterworks)	E. S. Greenwood, Esq.	8	1	0	165	379	14·91	134	85
d Attleborough (Quidenham Hall)	Mr. J. Dewhurst	5	1	0	100	330	12·98	..	83
d Hargham Hall	Sir H. R. Beevor, Bart., M.D.	8	0	6	120	369	14·54	114	88
d Watton (Merton Hall Gardens)	Mr. G. Barrell	5	1	0	156	472	18·59	129	95
d Watton	A. A. Gompertz, Esq.	5	1	0	166	515	20·28	142	95
d Downham (Dial House)	late T. H. Wenn, Esq.	5	1	6	..	371	14·59	110	78
d Outwell (Wellbreck Sluice)	Major R. G. Clark	9	2	6	16	267	10·50	..	64
d Emneth	F. M. Bland, Esq.	5	1	0	6	329	12·96	119	77
d Swaffham	W. H. Plowright, Esq.	5	5	0	250	399	15·73	122	84
d Swaffham (The Paddocks)	H. Lee Warner, Esq.	5	0	8	245	449	17·66	131	90
d Swaffham (Homewood)	Messrs. Vynne & Everett	5	2	7	210	496	19·53	113	98
d Sporle	T. S. Matthews, Esq.	5	4	0	230	443	17·46	148	93
d Great Dunham (The Rectory)	Rev. E. C. S. Upcher	5	0	7	230	429	16·91	134	90
d Kings Lynn (West Bilney Hall)	G. Hall Rennie, Esq.	5	1	1	50	356	14·01	..	..
d Wiggshall (St. Germans Sluice)	Major R. G. Clark	8	1	6	..	361	14·22	109	81
d East Winch (Holland House)	J. C. Cottam, Esq.	5	1	3	55	351	13·81	108	81
d King's Lynn (Manure Works)	J. Brown, Esq.	5	3	10	10	346	13·62	114	76
d King's Lynn (High Street)	S. S. Burlingham, Esq.	5	43	0	63	313	12·33	124	71
d Tittleshall	Capt. H. J. Buxton	5	2	6	259	454	17·87	129	98
5.—NENE. 30 sq. mi.									

DIVISION V.—SOUTH-WESTERN COUNTIES.

WILTSHIRE. (Area, 1375 sq. mi.)

1.—LOWER AVON. 386 sq. mi.								
		in.	ft.	in. ft.	mm.	in.		
d Edington Vicarage	Rev. E. C. Alexander	5	0	8 334	402	15·84	136	88
d Erlestoke Vicarage	Rev. H. S. Travers	5	0	6 320	377	14·84	108	90
d Market Lavington (Old House)	Miss A. Pleydell Bouverie	5	0	9 290	392	15·44	129	116
d Trowbridge W.W. (Biss Bottom)	W. W. Gray, Esq., C.E.	5	1	0 311	434	17·09	111	103
d Trowbridge (Rood Ashton)	Mr. W. Strugnell	8	1	6 250	495	19·48	145	101
d Bradford (Woodleigh)	A. Scrutton, Esq.	5	2	4 223	528	20·80	152	112
d Bradford (Winsley Manor)	E. W. Knatchbull, Esq.	5	0	6 400	462	18·19	148	109
d Bradford (Manvers House)	Dr. C. E. S. Flemming	5	1	6 130	473	18·61	143	108

DIVISION V.—SOUTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1921	Days with ·01 in. or more.	Days with ·04 in. or more.		
		Diam.	Height Ground	above Sea Level.					
WILTSHIRE—(con.).		in	ft.	in.	ft.	mm.	in.		
1.—LOWER AVON—(con.).									
d Seend (Cleeve House)	(R) W. Heward Bell, Esq.	5	1	0	160	379	14·93	138	88
d Seend (Manor Cottage)	Rev. E. Seymour Awdry	5	1	0	305	369	14·53	152	96
d Seend (Ferrum Towers)	H. W. Langley Haigh, Esq.	8	1	3	250	422	16·63	142	103
d Holt (The Retreat)	A. V. H. Beaven, Esq.	5	2	6	145	472	18·59	129	107
d Devizes (Wilts. Co. Asylum)	Dr S. J. Cole	8	2	3	385	390	15·34	122	88
d Devizes (Highclere)	H. W. Green, Esq.	5	1	6	480	411	16·20	131	96
d Devizes (Southbroom Vicarage)	Rev. H. C. B. Lethbridge	5	0	11	425	409	16·09	137	96
d Calne (High Street)	E. W. Brown, Esq.	4	1	0	242	447	17·59	131	100
d Calne (Compton Bassett Gdns.)	J. Howard Jones, Esq.	5	2	0	500	460	18·10	140	..
d Chippenham (Rowden Hill)	Miss A. M. Collen	5	1	4	223	506	19·93	136	123
d Chippenham (Kington Langley)	Charles Garnett, Esq.	8	1	0	270	450	17·72	..	..
d Wroughton (Basset Down Ho.)	Mrs. Story Maskelyne	5	1	0	500	461	18·17	133	95
w Luckington Court	Major A. Johnson-Ferguson	5	0	8	370	535	21·07	..	..
d Pinkney Park Gardens	Mr. G. H. Shoebridge	5	0	6	350	582	22·91	159	122
d Malmesbury (Cowbridge Ho.)	C. E. de Bertodano, Esq.	5	1	0	236	495	19·47	141	103
d Malmesbury (Easton Grey)	Mr. W. Balcombe	5	3	6	350	538	21·19	..	102
2.—STOUR. 33 sq. mi.									
d Mere (Charnage)	A. R. White, Esq., O.B.E.	5	1	0	426	492	19·38	156	104
d Stourhead	Sir H. H. A. Hoare, Bart.	5	1	0	583	578	22·77	..	97
d Kilmington Rectory	Rev. H. G. Fox-Strangways	5	1	6	710	610	24·03	197	112
3.—EAST AVON. 554 sq. mi.									
d Longford Castle	The Earl of Radnor	5	1	2	141	445	17·51	163	92
d Tisbury (The Academy)	J. Bristol, Esq.	5	0	9	380	537	21·16	129	88
d Fonthill House Gardens	Hugh Morrison, Esq., M.P.	5	1	0	400	534	21·03	144	106
d Salisbury (Sewage Works)	W. J. Goodwin, Esq. C.E.	5	2	2	153	398	15·66	118	85
d Salisbury (Fowlers Hill)	Mrs. T. Awdry	5	1	0	225	411	16·20	117	90
d Salisbury (Brown Street)	Mrs. T. H. Baker	5	1	0	155	442	17·39	183	97
d Salisbury (Atherton House)	Wilfrid Fletcher, Esq.	5	0	11	250	403	15·88	159	87
d Stratford-sub-Castle (Manor Ho.)	Miss F. Carpenter	5	0	9	165	366	14·42	129	78
d Woodford (Nunthorpe)	Mrs. Chetwynd-Stapylton	5	0	10	200	409	16·10	121	87
d Porton	Air Ministry	5	1	0	340	369	14·53	108	85
d Wylve Rectory	Rev. E. Montagu Parken	5	1	8	246	408	16·05	138	89
d Codford (Stockton House Gdns.)	Mr. N. Williams	5	1	0	260	456	17·95	130	91
d Maiden Bradley	The Duke of Somerset	5	1	6	626	531	20·92	130	103
d Sutton Veny (Greenhill)	Basil R. Hoare, Esq.	5	1	0	390	452	17·80	109	90
d Sutton Veny (The Cottage)	P. Benton, Esq.	5	1	0	370	434	17·07	133	91
d Warminster (Rye Hill)	A. E. Jefferys, Esq.	8	2	0	466	487	19·18	135	110
d Heytesbury	Dr. Hammond T. Hinton	5	1	7	300	438	17·23	134	95
d Salisbury Plain (Chitterne Ho.)	Admiral Charles Napier	11	1	0	339	422	16·60	..	97
d Salisbury Plain (Shrewton)	F. J. Wardale, Esq.	5	0	9	322	421	16·59	142	92
d Chirton Old Manor Farm	Mr. T. Selfe	5	3	0	374	401	15·80	130	97
d Bishops Cannings	Mrs. H. H. Mogg	5	1	0	446	461	18·15	140	105
4.—TEST. 77 sq. mi.									
d Landford (Northlands)	Cedric R. Boulton, Esq.	5	1	10	167	423	16·67	120	83
d Ludgershall (Conholt Park)	(R) E. A. Wigan, Esq.	8	1	0	800	463	18·21	..	84
5.—THAMES—Kennet. 169 sq. mi.									
d Marlborough College	A. Robson, Esq.	5	1	6	430	467	18·38	158	95
d Marlborough (Mildenhall)	Rev. Gordon Soames	5	1	0	456	459	18·06	117	93
d Aldbourne (Upham House)	Mrs. Currie	5	1	6	875	482	18·96	113	90
6.—THAMES—Cole & c. 156 sq. mi.									
d Wroughton (Burderop Park)	A. Ashford, Esq.	5	0	9	570	445	17·50	126	97
d Wanborough	A. M. Toyer, Esq.	5	1	0	475	443	17·46	137	94
d New Swindon	H. J. Southwell, Esq.	8	0	11	378	447	17·58	120	96
d Highworth (Hannington Hall)	Mrs. A. D. Hussey-Freke	5	1	0	375	416	16·39	119	88

DIVISION V.—SOUTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1921	Days. with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.			
DORSETSHIRE. (Area, 988 sq. mi.)		in.	ft. in.	ft.	mm.	in.	
1.—PARRETT. 61 sq. mi.							
D Evershot (Melbury House)	Mr. R. Rintoul	5	1 6	500	530	20·86	118 95
D Chedington Court	Sir Henry Peto, Bart.	9	1 0	605	507	19·97	126 90
D Leigh Vicarage	Rev. T. L. Jenkins	5	0 10	..	512	20·14	143 105
D Sherborne Castle	Mr. T. Turton	5	1 0	195	472	18·58	158 107
D Sherborne (Castleton)	Reading T. Grantham, Esq.	5	1 6	200	441	17·38	.. 113
Nether Compton Rectory	Rev. Canon E. W. Goodden	5	0 8	160	434	17·07	125 100
2.—AXE. 25 sq. mi.							
D Broadwindsor (Blackdown Ho.)	C. E. M. Pinney, Esq.	5	0 9	515	567	22·33	131 105
Forde Abbey	Freeman Roper, Esq.	5	0 11	226	525	20·65	123 103
3.—FROME & C. 502 sq. mi.							
D Portland Bill (New Lighthouse)	Air Ministry	8	1 0	19	343	13·47	119 86
D Portland (H. M. Naval Depôt)	W. Young, Esq., C.E.	8	1 6	25	411	16·19	137 99
D Weymouth (Westham)	G. Nicolson, Esq.	5	1 0	20	403	15·89	141 93
D Weymouth (Springfield)	Major J. H. C. Devenish	5	1 3	90	390	15·37	135 88
D Chickereil (Montevideo)	Mrs. N. M. Richardson, O.B.E.	5	1 0	100	387	15·25	154 96
Tyneham House	Mrs. W. H. Bond	8	1 6	255	518	20·39	130 86
D Corfe Castle (Kingston Vicarage)	Rev. R. A. Bond	5	1 3	452	508	19·99	139 96
D Corfe Castle (Bucknowle Ho.)	C. Waterston, Esq.	5	1 6	170	483	19·01	128 87
D Creech Grange	J. W. G. Bond, Esq.	5	1 0	241	539	21·23	108 95
D Abbotsbury (New Barn)	J. C. P. White, Esq.	5	1 6	111	414	16·29	136 98
D Upwey (Friar Waddon)	T. H. Tyson, Esq., C.E.	5	1 0	215	489	19·27	131 96
D Upwey (Higher Well)	T. H. Tyson, Esq., C.E.	8	1 0	290	501	19·71	131 104
D Wareham (East Holme)	G. D. Bond, Esq.	5	1 0	23	521	20·52	128 91
D Wareham (South Street)	S. W. Bennett, Esq.	5	2 6	18	454	17·89	115 89
D Wareham (Binnegar Hall)	Mr. J. W. Hayward	5	1 0	65	517	20·35	142 90
D Wareham (Trigon)	Mrs. L. Sturdy	8	1 4	60	472	18·60	120 91
D Dorchester (Kingscote)	E. A. Fooks, Esq.	5	1 0	226	567	22·32	132 101
D Dorchester Water Works	H. D. Strange, Esq.	8	1 0	315	515	20·29	145 90
D Dorchester (Wollaston House)	Capt. J. E. Acland	5	1 0	200	546	21·48	141 91
D Holton Heath	Air Ministry	8	1 0	64	415	16·34	124 85
D Parkstone (Firgrove)	E. N. M. Wadman, Esq.	5	1 0	180	417	16·40	138 91
D Parkstone (Bournemouth Road)	W. H. Symes, Esq.	5	1 3	160	460	18·10	137 91
D Branksome (Bourne Valley)	P. G. G. Moon, Esq.	8	1 3	84	449	17·68	114 91
D Branksome (Alderney Res.)	P. G. G. Moon, Esq.	8	1 3	213	415	16·35	159 98
D Broadstone House	Mrs. Schuster	5	0 6	140	441	17·38	.. 80
Lyme Regis (Horn Bridge)	E. T. Stoward, Esq.	5	1 0	100	500	19·69	143 104
D Lyme Regis (Boat Close)	Henry Ellis, Esq.	5	1 6	495	491	19·35	141 107
D Lyme Regis (Rotherfield)	Rev. E. J. Sing	5	0 8	145	507	19·95	165 110
Lyme Regis (Evington)	J. E. Hewitt, Esq.	5	0 9	300	503	19·80	138 105
D Lyme Regis (Highcliff)	Miss G. Lister	5	1 3	330	439	17·27	139 96
Charmouth (Hammond's Mead)	A. Barrow, Esq.	5	1 3	50	455	17·90	.. ..
D Bridport (Coneygar)	H. Gordon, Esq., C.E.	5	1 0	110	491	19·33	136 ..
D Bradford Peverell	Mrs. Middleton	6	1 2	381	592	23·30	127 98
D Moreton (Oaker's Wood)	Miss Fetherstonhaugh	5	1 0	160	473	18·61	117 95
D Tolpuddle	Rev. Harold R. Long	5	0 6	100	513	20·19	141 93
D Puddletown Vicarage	Rev. A. R. Helps	5	2 8	195	548	21·57	.. 94
Bere Regis (Manor House)	Mr. W. Bedford	8	1 0	115	504	19·85	126 95
D Bere Regis (Barrow Hill)	Mr. A. E. Lucas	5	1 0	120	512	20·17	126 95
D Bere Regis (Bloxworth House)	F. G. A. Lane, Esq.	5	1 6	118	534	21·04	135 101
D Wynford House	Col. Lord Wynford, D.S.O.	5	1 0	410	670	26·39	152 114
D Cattistock Lodge	H. H. Palaiet, Esq.	5	1 0	350	605	23·80	165 106
D Beaminster (Hamilton Lodge)	F. Trotman, Esq.	5	1 0	210	541	21·29	145 96
4.—STOUR. 383 sq. mi.							
D Kinson (Eglington)	W. C. Keevil, Esq.	5	0 6	45	453	17·83	141 98
D Wimborne (Corfe Mullen W. W.)	G. V. Sparrow, Esq., C.E.	5	1 0	81	453	17·84	125 89
D Wimborne (Corfe Mullen, For. H.)	E. Philip Belben, Esq.	8	2 0	300	408	16·07	142 89
D Winterbourne Whitchurch Vic.	Rev. H. H. Tilney Bassett	8	0 6	241	513	20·18	121 103
D Sturminster Marshall (Bailie Ho.)	Rev. J. Cross	5	1 0	85	459	18·08	129 95
D Wimborne (Codford House)	G. H. Batterbury, Esq., M.D.	5	0 9	69	441	17·35	163 89
D Blandford (Bryanston Gardens)	Mr. J. Jaques	5	1 0	155	527	20·74	131 112

DIVISION V.—SOUTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.	
		Diam.	Height Ground	above Sea Level	1921				
DORSETSHIRE—(con.).		in.	ft.	in.	ft.	mm.	in.		
4.—STOUR—(con.).									
D Turnworth	Lt.-Col. W. Parry Okeden.	5	1	0	473	577	22·73	161	101
d Horton Vicarage	Rev. R. de Bary	5	1	0	133	359	14·13	..	..
D Holwell (Westrow House)	W. Warry, Esq.	5	1	0	252	440	17·31	125	97
D Wimborne St. Giles (St. Giles Ho.)	The Earl of Shaftesbury, K.P.	5	1	6	165	410	16·14	132	95
D Gussage St. Michael Manor	Miss Ellen Good	5	1	4	201	431	16·98	131	100
D Iwerne Courtney Rectory	Rev. R. H. Gundry	5	1	2	200	451	17·75	115	93
D Iwerne Minster House Gardens.	J. H. Ismay, Esq.	5	1	0	244	455	17·90	144	96
D Fontmell Magna (Glebe Cottage)	Dr. J. Appleyard	8	1	8	300	401	15·78	118	93
D Handley (W. Woodyates Man.)	F. B. Eastwood, Esq.	5	1	0	368	443	17·44	..	..
D Shaftesbury (Abbey House)	A. Macdonell, Esq.	5	1	0	722	459	18·07	136	95
D Bourton	B. Pope Bartlett, Esq.	5	1	4	353	525	20·68	158	114
5 —EAST AVON. 12 sq. mi.									
SOUTH DEVONSHIRE. (Area, 1707 sq. mi.)									
1.—PARRETT. 7 sq. mi.									
D Culmstock (Nicholashayne) ...	Rev. H. F. Ramsay	5	1	0	477	459	18·07	163	106
2.—TAMAR & C. 395 sq. mi.									
D Plymouth (Boveysand Lodge)	Rev. J. F. Case	5	1	6	75	523	20·59	143	112
D Plymouth (Cattewater)	Air Ministry	8	1	0	59	558	21·97	154	106
D Plymouth (The Hoe)	H. Victor Prigg, Esq., C.E.	8	1	0	117	526	20·70	157	121
D Plymouth (Drake's Reservoir)	F. Howarth, Esq., C.E. ...	5	1	0	149	600	23·61	157	117
D Plymouth (Hartley Reservoir)	F. Howarth, Esq., C.E. ...	5	1	0	321	645	25·38	163	118
D Plymouth (Freedom Fields)	H. Victor Prigg, Esq., C.E.	8	1	0	208	631	24·85	161	130
D Devonport (Rowdens Res.)	F. Howarth, Esq., C.E. ...	5	1	0	201	530	20·85	159	119
D Bickley (Roborough Reservoir)	F. Howarth, Esq., C.E. ...	5	1	0	548	772	30·40	181	138
D Lee Moor Clay Works	R. Martin, Esq.	8	1	0	900	1403	55·23	179	156
D Bere Alston (Rumleigh)	Sir A. W. Croft, K.C.I.E. ...	5	1	6	125	682	26·86	191	135
D Sheepstor Vicarage	Rev. H. H. Breton	8	1	0	749	1225	48·23	191	169
M Sheepstor	F. Howarth, Esq., C.E. ...	5	1	0	1024	1023	40·26	..	..
D Sheepstor (Red Stone)	F. Howarth, Esq., C.E. ...	5	1	0	763	980	38·57	186	142
D Sheepstor (Burrator)	F. Howarth, Esq., C.E. ...	5	1	0	755	1080	42·53	186	160
D Sheepstor (Head Weir)	F. Howarth, Esq., C.E. ...	5	1	0	720	1017	40·06	186	151
D Dousland Reservoir	F. Howarth, Esq., C.E. ...	5	1	0	721	848	33·37	184	145
D Dartmoor (Deancombe Farm)	F. Howarth, Esq., C.E. ...	5	1	0	830	1081	42·57	184	155
D Dartmoor (Lowery)	F. Howarth, Esq., C.E. ...	5	1	0	899	1030	40·56	187	149
D Dartmoor (Leather Tor Farm)	F. Howarth, Esq., C.E. ...	5	1	0	910	1047	41·22	188	152
M Dartmoor (Siwards Cross)	F. Howarth, Esq., C.E. ...	5	1	0	1200	993	39·09	..	..
M Dartmoor (Cramber Tor)	F. Howarth, Esq., C.E. ...	5	1	0	1435	978	38·50	..	..
D Whitchurch (Langstone)	Col. H. F. Coleridge, C.B.E.	5	1	0	700	853	33·60	174	142
D Whitchurch (Ashbrook)	Rev. H. B. Grylls	5	1	0	400	773	30·45	175	140
D Tavistock	W. J. Monk, Esq.	5	1	0	457	809	31·85	183	145
D Tavistock (The Library)	J. Spurway, Esq.	8	1	0	282	710	27·94	178	137
M Dartmoor (Leeden Tor)	F. Howarth, Esq., C.E. ...	5	1	0	1270	873	34·38	..	..
M Dartmoor (N. Hessary Tor) No. 1F.	Howarth, Esq., C.E. ...	5	1	0	1625	1091	42·95	..	..
M Dartmoor (N. Hessary Tor) No. 2F.	Howarth, Esq., C.E. ...	5	1	0	1502	1056	41·53	..	..
D Lifton (Kelly House)	Rev. Maitland Kelly	8	2	6	462	733	28·86	170	141
D Coryton Manor (Lewdown)	Mr. W. H. Blatchford	5	1	2	450	779	30·69	156	139
D Launceston (Polapit Tamar)	R. C. Coope, Esq.	5	1	0	315	638	25·13	179	127
3.—ERM & C. 217 sq. mi.									
D Salcombe	Rev. E. P. Thorpe	5	1	0	38	567	22·31	170	104
D South Huish	Late W. Balkwill, Esq.	5	5	6	68	589	23·19	..	..
D Kingsbridge (Bank House)	W. H. Skinner, Esq.	5	5	0	60	578	22·77	142	107
D Kingsbridge (Bank House)	W. H. Skinner, Esq.	5	40	0	100	489	19·27	117	87
D East Allington (Fallapit Gdns.)	Lord Ashcombe	5	1	0	327	756	29·75	138	128
D Ermington (Strode)	Capt. H. Gore Hawker ...	5	1	0	75	724	28·50	156	132
D Ivybridge (Filham House)	H. Alger, Esq.	5	1	0	162	750	29·52	175	128
D Wrangaton (Blackadon Aslm.)	H. Victor Prigg, Esq., C.E.	5	1	0	608	1026	40·39	183	148
d South Brent (Glazebrook)	Vere Cholmondeley, Esq. ...	5	1	0	500	1114	43·87	..	135
d South Brent (Great Aish)	Miss Kingwell	5	1	0	500	1073	42·24	174	139
d South Brent (Badworthy)	T. W. Latham, Esq.	5	1	6	550	1188	46·77	..	..

DIVISION V.—SOUTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1921	Days with ·01 in. or more.	Days with ·04 in. or more.		
		Diam.	Height Ground	above Sea Level.					
SOUTH DEVONSHIRE—(con.).		in.	ft.	in.	ft.	mm.	in.		
4.—DART. 197 sq. mi.									
Churston Ferrers (Greenway) .. Mrs. C. Williams	5	0	10	..	662	26·06	140	110	
D Ashprington (Myrtle Cottage) .. G. H. Beecheno, Esq.	5	1	0	200	610	24·01	137	105	
Waddeton Court	Sir A. L. Goodson, Bart. ...	5	1	0	175	622	24·50	157	105
D Paignton Vicarage	Rev. H. M. Drake	5	1	0	42	564	22·21	136	106
D Paignton (Queen's Park)	C. Bellinger, Esq.	8	1	0	11	472	18·57	131	101
D Paignton (Torquay Road)	H. Le B. Gunner, Esq. ...	5	1	0	10	524	20·64	151	99
D Paignton (Claylands)	G. M. Rosling, Esq.	8	1	2	130	530	20·85	144	98
D Totnes (Berry Pomeroy)	C. Barran, Esq.	5	1	6	185	671	26·41	147	109
D Totnes (Staverton)	J. A. Devenish, Esq.	5	0	11	50	636	25·05	140	106
D Totnes (Broadhempston)	Charles Mole, Esq.	5	1	0	135	560	22·04	154	105
D Ipplepen Vicarage	Rev. R. D. Cooke	5	1	0	266	595	23·43	150	112
D Holne (Church Park Cottage) ..	L. W. Frost, Esq.	5	1	6	620	1049	41·29	169	127
D Ashburton (Dolbear)	Mrs. W. W. Battiscombe ..	5	1	0	300	656	25·84	131	99
D Ashburton (Druid House)	J. S. Amery, Esq.	5	1	0	584	766	30·17	158	120
D Princetown (Huccaby House) ..	Major H. H. Joll, D.S.O. .	5	1	0	900	783	30·84	143	126
D Two Bridges (Moor Lodge)	T. C. Bridges, Esq.	5	0	9	1190	1452	57·15	186	164
w Dartmoor (Cowsic Valley)	F. Howarth, Esq., C.E. ...	8	1	6	1352	1221	48·05	..	..
m Dartmoor (Black Dunghill) No.5	F. Howarth, Esq., C.E. ...	8	1	0	1590	832	32·75	..	..
m Dartmoor (Beardown Tor) No.3	F. Howarth, Esq., C.E. ...	8	1	0	1550	757	29·80	..	..
m Dartmoor (White Tor) .. No. 1	F. Howarth, Esq., C.E. ...	8	1	0	1640	744	29·30	..	..
m Dartmoor (Devil's Tor) No. 2	F. Howarth, Esq., C.E. ...	8	1	0	1785	844	33·23	..	..
m Dartmoor (Cowsic Head) .. No. 4	F. Howarth, Esq., C.E. ...	8	1	0	1580	1036	40·80	..	..
5.—TEIGN. 209 sq. mi.									
D Torquay (Cary Green)	G. E. Body, Esq.	5	1	0	12	528	20·77	142	93
D Torquay (Abbey Road)	Henry Brown, Esq.	5	1	0	125	561	22·08	141	104
Torquay (Merton Lodge)	Miss Brown	5	1	0	250	471	18·54	147	97
D Newton Abbot (The Chestnuts) ..	E. D. Wylie, Esq.	5	0	6	100	573	22·55	165	117
D Teignmouth (Den Gardens)	G. Rossiter, Esq.	8	1	6	20	460	18·10	133	89
Teignmouth (Hazledown Res.) ..	G. Rossiter, Esq.	8	2	0	425	501	19·74	130	104
Teignmouth (Shaldon Res.)	G. Rossiter, Esq.	5	1	0	213	529	20·84	128	100
Teignmouth (Landscore Resrvr)	G. Rossiter, Esq.	8	1	0	133	478	18·81	128	97
D Teignmouth (The Shrubbery) ..	E. A. Norton, Esq.	8	1	0	275	490	19·29	141	99
D Teignmouth (The Hill)	E. W. Jenks, Esq.	5	1	2	335	464	18·28	127	80
d Ilsington School House	W. J. J. H. Burnett, Esq. .	5	1	0	650	654	25·76	..	..
D Dawlish (Sefton)	T. H. Mead-Briggs, Esq. ...	5	0	9	53	451	17·75	142	96
D Chudleigh Knighton Vicarage ..	Rev. A. H. Skipper	5	1	0	110	432	17·00	148	104
D Bovey Tracey (Hedgebarton) ..	S. C. Chapman, Esq., C.E. .	5	1	0	1137	882	34·73	171	135
D Lustleigh (Rockmead)	Rev. W. A. Jones	5	1	0	300	608	23·92	154	112
D Manaton School	D. W. Horner, Esq.	5	5	6	910	647	25·46	184	122
D Moretonhampstead (Bullaton) ..	S. C. Chapman, Esq., C.E. .	8	1	0	928	550	21·65	165	103
D Moretonhampstead (Mardon) ..	S. C. Chapman, Esq., C.E. .	8	1	0	835	537	21·13	166	104
North Bovey (Manor House) ..	Mr. J. G. Laurence	5	1	0	700	680	26·78	156	..
D Christow (Kennick)	S. C. Chapman, Esq., C.E. .	8	1	0	836	548	21·57	170	103
D Christow (Smithacott)	S. C. Chapman, Esq., C.E. .	5	1	0	861	576	22·67	166	101
D Moretonhampstead (Stinhall) ..	S. C. Chapman, Esq., C.E. .	5	1	0	844	700	27·56	159	122
m Moretonhampstead (Blickngstne)	S. C. Chapman, Esq., C.E. .	8	1	0	1158	522	20·55	..	..
D Christow (Laployd)	S. C. Chapman, Esq., C.E. .	5	1	6	1041	621	24·47	167	108
D Moretonhampstead Rectory ..	Rev. S. D. Dewey	5	1	5	601	562	22·12	158	106
d Chagford (Thornworthy)	H. B. Varwell, Esq.	5	1	0	1150	998	39·29	..	128
6.—EXE. 445 sq. mi.									
Exmouth (Douglas Avenue) ..	Mrs. S. G. Gillum	5	0	10	80	383	15·09	134	85
D Exmouth (Nidderdale)	Mrs. Herbert Stewart	5	1	0	51	391	15·40	145	88
D Exmouth (Manor Grounds)	S. Hutton, Esq., C.E.	5	1	0	30	371	14·59	133	91
Exmouth (Filters, Salterton Rd.)	S. Hutton, Esq., C.E.	5	8	6	195	451	17·77	140	98
Exmouth (Filters, Capel Lane) ..	S. Hutton, Esq., C.E.	5	8	0	240	430	16·93	134	99
D Kenton	E. J. Pitt, Esq.	5	1	0	85	437	17·20	130	94
D Exeter (Hatfield, Longdown) ..	C. Holman, Esq.	5	0	10	450	408	16·07	141	96

DIVISION V.—SOUTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
SOUTH DEVONSHIRE—(con.).		in.	ft.	in.	ft.	mm.	in.		
6.—EXE—(con.).									
d Aylesbeare (Rosamondford)	A. T. Loram, Esq.	5	0	4	220	452	17·78	131	95
d Exeter (Devon & Exeter Inst.)	J. E. Coombes, Esq.	5	13	7	155	405	15·96	136	98
d Exeter (Elmfield House)	W. B. Heberden, Esq., C.B.	5	1	0	100	391	15·39	131	96
d Exeter (The Close)	Rev. Canon D. McLaren	5	1	0	140	402	15·83	135	96
d Exeter (Hele's School)	W. Littler, Esq.	8	7	0	160	397	15·64	137	100
d Broad Clyst (Brockhill)	Mrs. Bayne	5	1	0	80	391	15·39	148	97
Whimble (Ousley)	A. A. Sanders, Esq.	5	1	0	230	452	17·79	..	..
d Crediton (Hookway)	A. F. Parbury, Esq.	5	1	0	151	425	16·73	142	107
d Crediton	R. Stanley Clarke, Esq.	8	1	2	150	427	16·81	156	115
d Silverton (Killerton)	Mr. J. Wilson	5	1	0	161	417	16·40	..	91
d Crediton (Okefield)	Seymour F. Pope, Esq., OBE	5	0	9	325	416	16·39	160	110
d Coplestone (Coplestone House)	Miss Pope	5	0	11	315	474	18·66	170	116
d Bradninch (Dunmore House)	Miss H. R. Hepburn	5	1	0	300	483	19·00	146	114
d Cullompton	Murray T. Foster, Esq.	5	1	0	202	506	19·94	164	115
d Tiverton (St. Aubyn's Park)	F. C. Fox-Strangways, Esq.	5	1	0	394	596	23·48	166	117
d Tiverton (St. Peter Street)	Miss Gill	5	6	0	270	546	21·51	172	111
d Tiverton (Fore Street)	G. Rossiter, Esq.	5	1	3	235	603	23·76	165	115
d Tiverton (Hartnolls)	Maj.-Gen. F. A. Bowles, C.B.	5	1	4	226	565	22·26	167	115
d Tiverton (Alstree, Halburton)	Miss M. G. Izat	5	1	0	240	574	22·60	144	115
d Hemyock (Windlehurst)	Sir Arthur Tedder, C.B.	5	1	0	750	563	22·15	179	121
Bampton (Oakford Rectory)	Rev. F. G. Buller	5	1	0	640	638	25·13	..	128
7.—AXE & C. 237 sq. mi.									
d Budleigh Salterton (Lindenwd)	Lt.-Col. J. H. Hamersley	5	1	0	120	431	16·95	123	97
Budleigh Salterton (Squabmr)	S. Hutton, Esq., C.E.	5	1	0	267	461	18·13	..	..
d East Budleigh (Bicton Gards)	Mr. E. H. High	5	1	0	90	455	17·91	137	103
East Budleigh (Bicton Com.)	S. Hutton, Esq., C.E.	5	1	0	300	484	19·07	..	..
d Sidmouth (Sidmount)	Miss C. M. Radford	5	1	0	149	467	18·37	144	105
d Sidmouth (Sidmount)	Miss C. M. Radford	5	1	0	186	469	18·48	144	103
Sidmouth (Winslade Cottage)	Miss G. Collins	5	1	0	145	438	17·23	..	..
d Sidmouth (Salcombe Regis)	J. W. B. Unwin, Esq.	5	0	7	340	499	19·65	..	..
d Seaton (The Copse)	H. J. Roberts, Esq.	5	1	0	220	494	19·44	159	98
d Lyme Regis (Pinhay)	Mr. G. Austin	5	1	11	465	474	18·65	148	95
d Lyme Regis (Ware)	A. J. Woodroffe, Esq., O.B.E.	5	0	10	318	481	18·92	162	104
d Ottery St. Mary (West Hill)	B. Stansbury, Esq.	5	1	6	340	520	20·48	149	106
d Ottery St. Mary (Broad Street)	H. D. Badcock, Esq.	5	4	0	170	586	23·07	150	115
d Kilminster (Haddon Corner)	A. Hitchcock, Esq.	5	1	0	400	547	21·54	152	107
M Kilminster (Haddon Corner)	A. Hitchcock, Esq.	5	1	0	400	540	21·25	..	..
M Kilminster (Summerleaze)	A. Hitchcock, Esq.	5	1	0	82	501	19·73	..	..
Axminster (Lea Combe House)	Major A. C. F. Luttrell	5	2	0	170	577	22·72	129	109
d Hawkchurch (Tempest's Ho.)	Col. G. L. Eliot	5	1	6	700	567	22·31	135	107
d Axminster (Coaxdon Hall)	Dr. Cecil Woodhouse	5	1	0	165	528	20·79	141	95
d Membury (Yarty House)	Major W. H. Wilkin	5	1	0	245	476	18·73	142	96
d Membury (Green Down)	James Lee, Esq.	5	1	0	500	530	20·85	139	98
Stockland (The Library)	Mr. A. W. Reed . . . . .	..	..	..	..	548	21·59	..	..
NORTH DEVONSHIRE. (Area, 898 sq. mi.)									
1.—NORTH COAST STREAMS. 77 sq. mi.									
d Woolacombe (Hotel Grounds)	Miss Chichester	5	1	0	60	561	22·11	165	120
d Morthoe (Twitchen House)	Col. R. Longstaff, D.S.O.	8	1	0	430	659	25·96	169	126
d Ilfracombe (Reservoir)	O. M. Prouse, Esq., C.E.	5	1	0	395	841	33·12	172	147
d Ilfracombe (Bickleighscombe)	Mrs. Slade King	5	1	0	300	780	30·71	174	140
d Ilfracombe (Langleigh)	H. B. Holland, Esq.	5	0	11	127	755	29·72	168	139
d Ilfracombe (Meteorological Stn.)	O. M. Prouse, Esq., C.E.	5	1	0	25	643	25·30	155	122
d Martinhoe Rectory	Rev. R. W. Oldham	5	2	3	808	785	30·91	159	130
Lynton (Lee Abbey)	Mr. J. Delbridge	5	0	6	320	618	24·34	..	..
d Lynmouth (Gwynallt)	A. L. Ford, Esq.	8	0	8	284	738	29·06	168	125

DIVISION V.—SOUTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.	
		Diam.	Height Ground	above Sea Level.	1921				
NORTH DEVONSHIRE—(con.).		in.	ft.	in.	ft.	mm.	in.		
2.—TAW. 442 sq. mi.									
d Chulmleigh (Leigh House).....	Mr. W. Gillies.....	5	1	0	350	587	23·10	169	128
d Witheridge	H. J. Mansfield, Esq.....	5	1	2	600	684	26·94	155	135
d Filleigh (Castle Hill Gardens)...	The Countess Fortescue...	12	4	0	317	780	30·72	187	144
d Molland.....	S. J. Case, Esq.....	5	1	9	674	878	34·56	182	147
d East Anstey (Rhyll Manor).....	Mrs. Hancock.....	5	1	0	850	710	27·95	146	..
Tawstock Court	(R) Basil E. Peto, Esq.....	8	1	9	150	741	29·16	..	..
West Buckland (County School)...	Rev. E. C. Harries	5	1	2	650	782	30·79	..	155
d Barnstaple (N. Dev. Athenæum)...	Miss E. Young	8	1	0	25	646	25·45	190	130
d Barnstaple (Fort Hill).....	Rev. F. Sterry.....	5	2	3	200	653	25·69	196	128
Goodleigh (Willesleigh House)...	Lt.-Col. Montague H. Hall.	5	1	0	375	663	26·12	163	..
Braunton (Great Field).....	Miss Perkins.....	..	..	..	95	585	23·02	164	123
d Arlington Court.....	Miss Chichester	5	1	0	613	1010	39·77	175	151
d Challacombe.....	O. M. Prouse, Esq., C.E....	5	1	0	815	1154	45·44	175	154
3.—TORRIDGE. 342 sq. mi.									
d Okehampton (Uplands)	E. P. Burd, Esq.....	5	1	0	700	851	33·50	184	154
d Okehampton	J. E. Rushworth, Esq.....	5	1	0	510	755	29·74	154	142
d Dolton (Hilliers)	A. Smythies, Esq.....	5	1	3	380	596	23·48	149	128
d Torrington (Enfield)	G. M. Doe, Esq.....	5	1	0	337	657	25·87	159	125
d Parkham (Melbury Moor).....	F. Harding, Esq.....	5	1	0	633	917	36·09	176	145
d Parkham (Melbury Reservoir)...	F. Harding, Esq.....	5	1	0	517	978	38·49	176	153
d Buckland Brewer.....	Miss B. G. Rogers.....	5	0	11	469	758	29·85	172	141
d Littleham (Orleigh Court).....	W. H. Rogers, Esq.....	5	1	0	260	749	29·48	179	140
d Landcross (South Close).....	C. R. J. Hibbert, Esq.	5	1	0	100	555	21·84	164	119
d Bideford (Webbery)	Mrs. C. E. Boyd.....	5	1	10	355	599	23·57	162	119
d Bideford (Slade Park).....	J. C. T. Heriz-Smith Esq..	5	1	6	198	600	23·63	161	115
Bideford (Horwood House).....	Rev. J. Dene.....	5	1	0	288	541	21·29	174	117
d Northam (Fairlea)	Col. F. W. Bennet.....	5	2	6	190	576	22·69	172	115
d Westward Ho! (Bellevue)	A. H. Boyd, Esq.....	8	1	0	200	569	22·39	175	114
Westward Ho! (Royal Golf Clb)...	Major A. Newton-King ...	5	1	6	10	481	18·93	133	..
Instow.....	Col. F. W. Evatt	5	1	0	105	576	22·66	..	131
4.—WEST COAST STREAMS. 32 sq. mi.									
d Hartland Abbey	Mr. G. Sleep	5	1	6	222	656	25·82	150	131
d Clovelly Court	Mr. H. Tuke.....	5	1	0	360	787	31·00	172	143
5.—EXE. 5 sq. mi.									
CORNWALL. (Area, 1357 sq. mi.)									
1.—CAMEL & N.W. COAST STREAMS. 458 sq. mi.									
Crowan (Camborne W.W.).....	Cornwall Rainfall Assocn. .	..	..	..	511	734	28·88	..	..
Phillack Rectory	Rev. Canon A. P. Hockin .	5	1	0	70	550	21·67	157	..
Camborne (Roskear)	F. Osborne, Esq.....	6	2	0	349	786	30·94	159	131
d Redruth (Trewirgie)	A. P. Jenkin, Esq.....	5	1	0	399	756	29·75	192	136
Redruth (Green Lane Nurseries)...	F. Sanders, Esq.....	5	0	6	..	606	23·86	..	..
St. Agnes (Church Town).....	Dr. W. C. Whitworth	5	5	0	318	541	21·31	175	124
St. Agnes (Trevaunance).....	J. Hitchins, Esq.....	5	0	7	100	620	24·40	..	..
d Newquay (Tresillian House)	Lt.-Col. E. Gully-Bennet .	5	2	0	290	685	26·98	186	139
Newquay (Reservoir)	Dr. C. C. Vigurs	5	1	0	214	548	21·57	..	..
d Newquay (Mount Wise) No. 1.....	Dr. C. C. Vigurs.....	5	1	0	190	563	22·15	168	123
Newquay (Mount Wise) No. 2.....	Dr. C. C. Vigurs.....	5	1	0	190	554	21·80	168	122
d Bodmin (Polgwin)	H. D. Foster, Esq.....	5	1	0	400	742	29·22	165	138
d Bodmin (Castle Hill House)...	W. G. Wales, Esq., C.E.	5	1	0	484	766	30·15	197	146
Helland (Tredethy)	Mrs. Hext	5	1	6	..	695	27·38	117	137
d Wadebridge (Bryn).....	Rev. G. Thorne Phillips ..	5	1	6	60	627	24·69	181	141
d Wadebridge (Trewornan).....	Brig.-Gen. L. J. Hext, CMG.	5	1	0	30	615	24·21	174	135
St. Kew (Skisdon).....	Mrs. Braddon.....	5	1	0	100	651	25·64	175	138
St. Minver (Treberthick)	A. T. Roseveare, Esq.	9	1	0	140	539	21·22	..	..
St. Teath (Treburgett Mine).....	Oswald Strete, Esq.....	5	4	0	400	717	28·22	153	..
Camelford (Stannon Clay Wks.)...	Cornwall Rainfall Assocn..	8	1	5	800	949	37·36	189	..
d Bude	Karl Durston, Esq.....	5	1	0	50	606	23·85	160	128
d Bude (Bramble Hill).....	J. E. Barclay Bevan, Esq..	5	0	8	100	671	26·41	182	137
d Morwenstow Vicarage	Rev. H. Lynne-Jones	5	0	10	331	662	26·06	200	135
d Morwenstow (Torracombe Man.)...	W. W. Martyn, Esq.	5	1	0	450	653	25·69	156	128

DIVISION V.—SOUTH-WESTERN COUNTIES—(con.).

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		Diam.	Height Ground	above Sea Level.				
CORNWALL—(con.).		in.	ft.	in.	ft.	mm.	in.	
2.—FOWEY & S.E. COAST STREAMS. 620 sq. mi.								
M The Lizard	A. P. Jenkin, Esq.	5	1	0	244	576	22·68	..
D Cadgwith (Coastguard Houses)	Miss H. F. Shepherd	5	1	0	180	601	23·67	180 125
Mullion	H. H. Penrose, Esq.	5	0	10	178	518	20·41	159 104
D Porthcurno	J. G. Marsden, Esq.	5	1	0	150	629	24·77	205 137
St. Keverne (Lanarth)	P. D. Williams, Esq.	5	1	10	290	760	29·92	205 138
D St. Keverne (Rosuick Cottage)	G. W. Jevons, Esq.	5	1	0	250	741	29·17	196 143
Bosahan	Cornwall Rainfall Assocn.	..	..	..	240	495	19·47	131 ..
Helston (Tenderah)	J. Walker Tyacke, Esq.	5	1	2	220	679	26·75	200 ..
Constantine (Pons-a-Verran)	Cornwall Rainfall Assocn.	..	..	..	60	619	24·36	.. ..
D Mawnan (Carwinion)	R. N. Rogers, Esq.	5	0	6	160	713	28·08	181 138
Penzance (Trewidden)	Mr. J. H. Murley	5	0	5	..	754	29·68	.. ..
Penzance (Lower Larrigan)	E. T. Gregory, Esq.	5	0	9	70	719	28·30	.. ..
D Penzance (Morrab Garden)	C. H. Benn, Esq.	5	1	0	55	733	28·85	191 137
Penzance (Hea Moor)	F. Tupper, Esq.	5	1	0	280	850	33·48	.. ..
Penzance (Tregwainton House)	T. Robins Bolitho, Esq.	10	1	0	400	832	32·75	185 ..
Marazion	T. Field Michell, Esq.	5	2	0	30	657	25·88	136 113
D Falmouth (The Crossways)	Comm. A. Rogers, R.N.R.	5	0	9	78	700	27·55	182 128
D Falmouth (New Observatory)	Air Ministry	5	1	0	168	734	28·90	186 129
D Penryn (Ashfield)	J. G. Stephens, Esq.	5	1	0	95	658	25·90	169 119
D Gwennap (Trevince)	C. H. Beauchamp, Esq.	8	1	0	240	752	29·60	180 136
Truro (Killiow)	Miss Daubuz	5	1	0	250	694	27·31	185 139
D Truro (Tregolls)	Miss C. L. Rashleigh	5	1	0	65	654	25·74	190 128
D Truro W.W. (Lower Tregurrow)	W. J. Lean, Esq.	5	1	0	71	690	27·15	169 133
D Truro (Polwhele)	A. C. Polwhele, Esq.	5	4	0	280	700	27·57	198 135
D Fowey	C. I. Wellington, Esq.	5	1	0	52	482	18·99	155 128
D St. Austell (Trevarna)	W. M. Coode, Esq.	5	1	0	300	708	27·87	186 139
D Looe (Morval)	Capt. A. H. Tremayne, R.N.	5	1	0	150	782	30·77	165 135
D Looe (Bray)	Mrs. G. Sneyd	5	1	0	450	693	27·28	176 130
D Lostwithiel (Lanwithan)	Miss Foster	5	1	0	80	699	27·51	176 128
Menheniot (Coldrenick)	Rev. F. E. Trelawny	5	1	0	301	795	31·30	.. ..
D Liskeard (St. Pinnock Rectory)	Rev. S. H. Farwell Roe	5	0	5	400	994	39·14	206 168
D Liskeard (Trevillis)	Col. L. C. Foster	5	1	0	320	740	29·13	182 144
Liskeard (County School)	R. A. G. Travers, Esq.	5	1	0	407	819	32·25	176 139
St. Clear (Tregarrie)	Lt.-Col. J. D. A. Roberts.	5	1	0	800	784	30·85	.. ..
D Bolventor Vicarage	Rev. J. W. Timson	5	2	6	845	1173	46·17	186 174
3.—TAMAR & C. 279 sq. mi.								
D Devonport (Empacombe)	J. Sandercock, Esq.	5	1	0	20	565	22·25	165 119
Devonport (Cremyll)	S. B. Wilcox, Esq.	5	10	0	25	532	20·95	162 ..
Torpoint (Trethill House)	Lt.-Col. J. D. A. Roberts.	5	2	0	200	502	19·75	.. ..
Saltash (Pentillie Castle)	Cornwall Rainfall Assocn.	5	2	4	150	728	28·65	166 ..
St. Mellion Rectory	Rev. F. T. Wintle	5	1	0	401	665	26·18	165 116
Callington (Pencrebar)	Miss Horndon	5	1	9	450	754	29·68	182 129
D Albaston	N. R. Rosekilly, Esq.	5	4	0	600	637	25·06	154 121
D Launceston (Landue)	Miss S. E. Tregoning.	5	0	11	225	638	25·12	180 127
D Launceston (Hexworthy)	R. B. Rogers, Esq.	5	1	0	270	653	25·73	171 124
D Altarnon Vicarage	Rev. A. H. Thorold	5	1	0	620	907	35·71	198 156
D Launceston (Old Tree House)	Mrs. Saunders	8	1	6	600	648	25·51	185 133
Egloskerry (Tregear)	E. G. B. Lethbridge, Esq.	5	1	6	613	704	27·70	.. ..
North Tamerton (Davies)	Miss M. A. Bray	5	4	0	390	623	24·54	178 138
4.—INSULAR—Isles of Scilly. 6 sq. mi.								
D St. Mary's	Air Ministry	8	1	0	131	546	21·51	186 115
D Tresco Abbey	Maj. A. A. Dorrien Smith.	8	3	0	40	560	22·06	196 113
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	584	23·00	130 107
Shepton Mallet (Pondsmead)	R. A. Hobhouse, Esq.	8	1	0	710	735	28·94	168 129
D Frome W.W. (Egford)	L. Slaughter, Esq.	8	2	0	270	575	22·62	177 112
D Frome (Orchardcroft)	H. G. Chislett, Esq.	5	1	0	265	471	18·56	134 101
D Frome (Selwood School)	Miss A. K. Coombs	5	1	7	230	503	19·79	154 105

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		Diam.	Height Ground	above Sea Level.	1921			
SOMERSETSHIRE—(con.).		in	ft. in.	ft.	mm.	in.		
1.—LOWER AVON—(con.).								
d Mells (Selwood)	Miss E. G. Horner	5	1	0 344	513	20·19	148	106
d Binegar (Gurneyslade)	Rev. G. B. Hicks	5	1	0 588	701	27·58	162	129
d Stratton-on-Fosse(DownsideAb)	Rev. G. B. Hicks	8	1	0 600	626	24·65	156	119
d Beckington	E. M. Nelson, Esq.	8	1	3 270	465	18·29	129	107
d Chewton Mendip (The Priory)	The Earl Waldegrave	5	1	0 550	704	27·73	169	125
d Midsomer Norton (Island Ho.)	Dr. G. S. Pollard	5	1	6 300	561	22·07	145	116
d Midsomer Norton (Dymboro)	Dr. A. Bulleid	5	1	0 357	532	20·95	140	110
d E. Harptree (Sherborne Res.)	J. A. McPherson, Esq., C.E.	5	1	0 338	645	25·39	150	124
d Harptree Hill	J. A. McPherson, Esq., C.E.	8	1	0 784	670	26·39	..	..
d Temple Cloud	Dr. Theodore Martin	5	1	0 340	496	19·54	147	106
d Clutton (Council School)	W. J. Pullen, Esq.	5	1	6 426	590	23·23	148	108
d Pensford (Sutton Court)	Lord Strachie	8	1	0 280	519	20·43	147	112
d Monkton Combe (Crossways)	M. J. Lipscomb, Esq.	5	1	0 180	518	20·41	..	103
d Pensford (Hunstrete House)	H. Leyborne Popham, Esq.	5	0	9 400	532	20·95	157	119
d Chew Magna	J. A. McPherson, Esq., C.E.	5	1	4 180	587	23·09	138	115
d Pensford (Publow School Ho.)	A. Hayes, Esq.	5	1	0 230	536	21·10	149	108
d Bath (Henrietta Park)	Bath Corporation	5	1	0 67	439	17·29	143	99
d Bath (Combe Lodge)	Major T. H. Clark	5	1	0 520	519	20·42	127	112
d Bath (Combe Down)	Dr. T. F. Vaisey	5	0	8 600	483	19·02	116	99
d Bath (Statutory Hospital)	Bath Corporation	5	1	0 520	496	19·54	125	104
d Bath (Lansdown Place)	Sir Percy K. Stothert, K.B.E.	5	1	2 410	487	19·18	158	106
d Bath (Lansdown Croft)	Sidney Robinson, Esq., M.P.	..	0	0 550	475	18·68	..	..
d Bath (Charlcombe)	J. Dent Young, Esq., C.E.	8	2	0 325	501	19·72	149	114
d Saltford House	S. V. Rolleston, Esq.	8	0	9 100	497	19·58	146	113
d Batheaston Reservoir	J. Dent Young, Esq., C.E.	6	2	0 248	510	20·07	158	117
d Barrow Gurney Reservoir	J. A. McPherson, Esq., C.E.	5	1	6 300	644	25·35	164	117
d Long Ashton (Research Station)	W. H. Neild, Esq.	12	0	8 162	640	25·20	150	113
d Failand House	Miss Agnes Fry	5	1	0 385	670	26·37	161	116
d Portishead (West Hill)	Rev. Arthur Lewis	5	0	10 248	551	21·69	141	98
2.—YEO, AXE & BRUE. 405 sq. mi.								
d Castle Cary (Alford House)	Admiral P. F. Tillard	5	1	0 98	424	16·68	140	108
d Somerton (Butleigh Court)	R. Neville Grenville, Esq.	8	1	2 95	429	16·89	137	103
d Bruton (Pitcombe Vicarage)	Rev. F. P. Syngé	5	2	4 295	450	17·71	153	101
d Bruton (Redlynch Park)	W. F. Pepper, Esq.	5	0	7 390	476	18·73	144	102
d Ditchat Rectory	Rev. H. H. Tripp	5	1	0 200	460	18·12	136	104
d Street (Overleigh House)	J. B. Clark, Esq.	5	0	8 100	398	15·67	137	99
d Street (Hind Hayes)	Joseph Clark, Esq.	5	1	5 78	412	16·23	140	99
d Street (Millfield)	W. S. Clark, Esq.	8	1	0 100	424	16·68	136	99
d Glastonbury (Wyrall)	J. Morland, Esq.	5	0	8 120	395	15·53	118	95
d Glastonbury (St. Michael's)	Ven. Archdeacon W. Farrer	5	1	0 220	424	16·69	132	102
d Edington	Major A. C. F. Luttrell	5	2	6 90	403	15·86	127	96
d Shepton Mallet (Pilton)	Miss Allen	5	1	3 354	540	21·25	174	118
d Shepton Mallet (Charlton)	C. E. Burnell, Esq.	5	1	0 481	579	22·80	156	109
d Shepton Mallet (Field House)	F. H. Berryman, Esq.	5	1	0 500	582	22·92	147	113
d Shepton Mallet (Sewage Farm)	Mr. C. Marshman	5	0	8 310	583	22·95	142	119
d Wells (Somerset & Bath Asym.)	J. E. P. Shera, Esq., M.D.	5	1	2 300	548	21·57	152	112
d Wells (Wookey Hole Paper Mills)	W. S. Hodgkinson & Co., Ltd.	5	1	6 200	539	21·23	..	..
d Burnham (Chalbury)	H. A. Smith Spark, Esq.	5	1	0 20	434	17·09	136	98
d Burnham	W. H. Chowins, Esq., C.E.	8	0	9 24	467	18·37	120	99
d Burnham (Berrow Road)	Rev. C. E. B. Fripp	5	1	0 10	427	16·83	127	99
d Burnham (Brent Knoll)	Miss FitzGerald	5	2	0 26	455	17·93	136	100
d Compton Bishop (Webbington F.)	H. A. Tiarks, Esq.	8	1	6 40	499	19·65	130	95
d Compton Martin	J. A. McPherson, Esq., C.E.	8	1	0 276	619	24·37	..	..
d Ubley (Rookery Farm)	J. A. McPherson, Esq., C.E.	8	1	0 525	683	26·88	..	..
d Blagdon (Nordrach-on-Mendip)	W. R. Thurnam, Esq., M.D.	5	0	5 862	715	28·17	155	133
d Winscombe (Barton)	A. E. Stephens, Esq.	8	1	6 124	527	20·75	131	102
d Winscombe (Kamiah)	Late Dr. Caroline Sturge	5	1	0 216	525	20·67	151	102
d Winscombe (The Down)	J. Grubb, Esq.	5	1	0 295	595	23·42	157	113
d Banwell (Eversleigh)	Dr. Kenneth Anderson	5	1	6 50	553	21·79	151	116
d Blagdon Hill	J. A. McPherson, Esq., C.E.	8	1	0 550	605	23·83	..	..
d Blagdon (Pumping Station)	J. A. McPherson, Esq., C.E.	8	0	8 112	544	21·43	149	106

DIVISION V.—SOUTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
SOMERSETSHIRE—(con.).		in.	ft.	in.	ft.	mm.	in.		
2.—YEO, AXE & BRUE—(con.).									
Blagdon (Coombe Lodge)	J. A. McPherson, Esq., C.E.	8	1	0	388	619	24·35	..	..
Ubley (Pixey Hole)	J. A. McPherson, Esq., C.E.	8	1	0	300	523	20·60	..	..
Nempnett (West Town)	J. A. McPherson, Esq., C.E.	8	1	0	263	564	22·21	..	..
Burrington (Burrington Links)	J. A. McPherson, Esq., C.E.	8	1	0	335	612	24·08	..	..
d Burrington (Langford)	Miss M. B. Smith	5	1	8	40	595	23·42	150	113
d Weston-spr-Mare (Clarence Pk.)	W. H. Allen, Esq.	5	1	2	29	507	19·96	138	109
Butcombe (Cholwell)	J. A. McPherson, Esq., C.E.	8	1	0	370	601	23·68	..	..
d Worle (Springfield House)	J. Stuckey, Esq.	5	4	0	25	527	20·74	144	103
d Worle Vicarage	Rev. M. I. Holme	5	1	6	150	570	22·44	168	107
d Wrington (The Cottage)	H. C. Bristowe, Esq., M.D.	5	5	6	100	559	22·01	140	106
d Wrington (The Rectory)	Rev. G. M. Ashdown	5	5	0	69	591	23·26	151	116
d Wrington (West Hay)	Miss M. C. Meade-King	5	1	8	98	615	24·22	160	114
Yatton (Chelvey)	J. A. McPherson, Esq., C.E.	8	0	8	60	607	23·89	121	101
Flax Bourton (West Town)	Theodore Robinson, Esq.	5	4	0	80	720	28·36	175	123
d Flax Bourton (The Grange)	C. Onslow Master, Esq.	5	1	0	120	606	23·86	121	104
d Clevedon (Gas Works)	J. Harger Pye, Esq.	5	1	2	22	594	23·38	134	103
d Clevedon W. W. (Tickenhm Rd)	J. Harger Pye, Esq.	5	1	6	70	559	22·01	136	101
d Clevedon (Bowling Green)	Major A.B. Trestrail M.B.E.	5	0	11	126	604	23·77	..	..
d Clevedon (Mt. Heber Cottage)	G. M. S. Farmer, Esq.	5	1	0	144	584	23·00	146	102
Wraxall (Boys' School)	Ebenezer Brown, Esq.	5	1	0	80	602	23·69	135	123
3.—PARRETT. 568 sq. mi.									
d Crewkerne (The Reservoir)	E. H. Munford, Esq.	8	1	0	426	465	18·32	145	100
d Crewkerne (Bincombe House)	Miss Sparks	5	1	3	250	485	19·09	151	106
d Crewkerne (Merefield House)	J. J. Tompsett, Esq.	8	1	1	231	485	19·11	143	99
d Crewkerne (Mark's Barn)	Miss V. Blake	8	0	9	260	436	17·18	166	96
Chard (Chaffcombe House)	Mrs. Hartley	5	0	11	400	413	16·24	150	93
d Combe St. Nicholas	Rev. G. de Y. Aldridge	5	2	0	580	545	21·45	193	112
Coker Court Gardens	Mr. T. H. Gilham	8	1	6	250	437	17·20	114	94
d West Coker	G. F. Deedes, Esq.	5	1	6	265	412	16·23	131	91
d Ilminster (Laurel Bank)	W. Beckwith, Esq.	5	1	0	180	424	16·68	144	95
d Ilminster (Whitelackington Ho.)	S. Creed, Esq.	5	3	0	200	426	16·76	135	91
d Ilminster (Dillington Park) (R)	Mr. W. Goldthorpe	8	3	0	161	434	17·07	132	98
Yeovil (Gas Works)	G. Fenwick, Esq.	5	22	0	122	410	16·13	..	91
d Yeovil (Pen Mill Sewage Wrks)	Dr. C. W. Gee	5	1	0	102	436	17·17	170	97
d Stoke-under-Ham	Miss Gillett	8	1	0	80	449	17·67	117	101
d Angersleigh (Blagdon Res.)	H. T. Coles, Esq.	8	1	6	590	471	18·54	..	..
d Angersleigh (Leigh Hill Res.)	H. T. Coles, Esq.	8	1	6	525	468	18·44	..	..
d Angersleigh (Leigh Court)	A. Eastwood, Esq.	8	1	0	360	480	18·91	153	104
d Wellington (Old Way House)	T. Fox, Esq.	5	1	1	300	473	18·61	186	103
d Tintinhull (Manor House)	Rev. Dr. S. J. M. Price	5	0	10	145	401	15·78	..	103
d Taunton (The Park)	Dr. John Allen	5	1	0	50	395	15·55	167	102
Milverton (Spring Grove)	Major R. C. Coldwell	5	1	0	449	548	21·56	..	..
d Wiveliscombe (Culverhead)	T. R. Marsh, Esq., C.M.G.	5	1	0	450	591	23·25	156	118
d Langport (The Grange)	Rev. H. A. Boys	5	1	0	50	371	14·60	153	94
d Langport (Huish Episcopi)	Miss A. M. Kelway	8	1	1	30	384	15·11	..	101
d N. Cheriton (Maperton House)	Mr. W. Smith	5	1	3	390	488	19·20	134	97
d North Cadbury Rectory	Rev. H. A. Boys	5	1	4	256	412	16·22	129	104
Somerton	R. W. Pretor-Pinney, Esq.	5	1	2	121	402	15·83	116	..
Cotthelstone House	C. E. J. Esdaile, Esq.	5	1	0	430	497	19·56	154	..
d Aisholt (Timbercombe)	Mrs. White	5	1	2	700	455	17·90	..	..
d Bagborough Rectory	C. Hubert Lance, Esq.	5	0	7	470	478	18·81	161	115
d Enmore (Smocombe)	Col. H. Andrews Speed	5	1	2	340	508	19·99	162	119
d Bridgwater (Blake Gardens)	F. Parr, Esq., C.E.	5	3	1	27	393	15·47	134	97
d Bridgwater (Ashford)	F. Parr, Esq., C.E.	5	1	1	102	436	17·17	139	101
d Cannington (Brymore)	H. H. P. Bouverie, Esq.	5	2	0	65	381	14·99	139	90
d Fiddington (Keenthorpe)	Mrs. Cuffe	6	1	0	220	443	17·44	117	93
4.—NORTH COAST STREAMS. 158 sq. mi.									
Williton (Aller Farm)	R. G. Hosegood, Esq.	5	2	6	175	474	18·65	128	107
d Bicknoller (Ford)	John Tracey, Esq.	5	1	3	150	474	18·66	159	105
m Quantock H. (Hodderscombe)	Lord St. Audries	5	1	0	900	523	20·61	..	..

DIVISION V.—SOUTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
SOMERSETSHIRE—(con.).		in.	ft.	in.	ft.	mm.	in.		
4.—NORTH COAST STREAMS—(con.).									
	Bicknoller (Weacombe House) .. Lord St. Audries	5	1	0	320	459	18·05	..	..
M	Quantock H. (Erridge Combe) .. Lord St. Audries	5	1	0	800	530	20·85	..	..
d	Bicknoller (Willett)	5	1	0	450	521	20·50	..	110
d	Williton (The White House) .. S. L. Rogers, Esq.	5	1	3	98	456	17·97	145	107
d	Holford (Dytche School)	5	1	0	260	379	14·90	145	102
d	Quantockshead (St. Audries) .. Mr. F. S. Hayne	5	1	0	264	439	17·30	141	103
d	Carhampton Vicarage	5	1	3	65	493	19·42	179	108
d	Dunster (The Schools)	5	1	0	80	511	20·11	146	106
	Minehead (The Poplars)	5	1	6	100	484	19·07	148	97
d	Minehead (Northfield Road) .. W. Y. Tamlyn, Esq.	5	1	0	95	503	19·80	135	110
	Porlock (Lynch Md, Allerford) .. J. Dyke Acland, Esq.	5	1	0	100	533	20·97	155	118
5.—EXE. 122 sq. mi.									
d	Dulverton (Exbridge Fishery) .. T. F. Tracy, Esq.	5	1	0	410	627	24·67	164	129
d	Brushford Rectory	5	1	0	450	708	27·87	177	139
d	Brushford Nurseries	5	1	2	430	681	26·83	176	143
d	Hawkrigge (Liscombe)	5	3	6	980	990	38·99	200	153
d	Winsford School	5	1	0	685	914	36·00	167	146
d	Cutcombe (Wheddon Cross) .. H. H. P. Bouverie, Esq.	5	1	2	945	808	31·82	174	141
	Exford (North Ley)	5	5	0	1000	1111	43·72	..	..
6.—AXE. 42 sq. mi.									
	Tatworth Vicarage	5	1	3	345	577	22·70	132	106
d	Cricket St. Thomas (Cricket Ho.) .. Mr. G. F. Richardson	5	1	0	444	525	20·65	135	104
d	Chard (High Street Council Sch.) .. F. Barnard, Esq.	5	1	2	425	528	20·77	148	105
d	Buckland St. Mary	5	0	9	750	516	20·31	161	110
7.—STOUR. 35 sq. mi.									
d	Temple Combe Rectory	5	0	6	215	509	20·04	144	108
d	Temple Combe (Cheriton Ho.) .. Rev. H. A. Boys	5	..	..	..	483	19·01	141	109
d	Wincanton (Roundhill Grange) .. Maj.-Gen. C. H. P. Ducat ..	5	1	11	375	472	18·60	145	104

DIVISION VI.—WEST MIDLAND COUNTIES.

GLOUCESTERSHIRE. (Area, 1243 sq. mi.).

1.—WYE. 50 sq. mi.

d Chepstow (Castleford)	Mrs. W. R. Lysaght	5	0	8	146	597	23·50	148	115	
d Chepstow (Pen Moel)	W. R. Price, Esq.	5	1	0	240	642	25·28	152	125	
Forest of Dean (Mailscot Ldge) .. Office of Woods		8	1	0	630	530	20·85	..	..
Forest of Dean (Ruardean H. Lo) .. Office of Woods		8	1	0	932	457	17·99	..	..
d Lydbrook (Viaduct House) G. S. Damsell, Esq.		5	1	0	95	500	19·70	151	102	

2.—SEVERN—Right Bank Tributaries. 176 sq. mi.

Forest of Dean (Whitemead Pk) .. Office of Woods		8	1	0	200	482	18·96	..	..
Forest of Dean (Worcester Lo.) .. Office of Woods		8	0	11	712	535	21·06	..	..
Forest of Dean (Edgehills Lo.) .. Office of Woods		8	1	0	914	436	17·15	..	..
d Cinderford (Belle Vue Road) .. Dr. J. N. Beadles		5	1	1	780	537	21·15	148	105	
d Westbury-on-Severn (Chaxhill) .. Miss Grant		5	3	0	122	452	17·78	100	90	
d Newent (Clifford Manor)	F. F. Grafton, Esq.	5	1	5	312	469	18·46	114	99	
d Oxenhill (Dymock Woods)	Office of Woods	8	1	0	232	399	15·72	112	89	
d Bromsberrow Heath Pump .. Stat. W. Osborne Thorp, Esq., C.E.		5	1	0	181	370	14·58	119	86	
Tewkesbury (Forthampton Ct.) .. Mr. B. Webster		5	1	0	48	495	19·48	154	102	
d Tewkesbury (Upper Lode)	E. J. Bradley, Esq.	5	1	0	41	424	16·69	131	91	

3.—SEVERN—Left Bank Tributaries. 372 sq. mi.

d Wickwar	F. G. Ansell, Esq.	5	1	0	260	498	19·62	113	98	
d Thornbury (Thornbury House) .. H. V. Gillett, Esq.		5	2	1	110	517	20·37	..	94	
Tortworth Court	Mr. J. Banting	8	1	0	264	481	18·93	142	102	
Tortworth School	E. A. Smith, Esq.	5	2	0	264	480	18·89	142	101	

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with .01 in. or more.	Days with .04 in. or more.	
		Diam.	Height above Ground	Sea Level.	1921				
GLOUCESTERSHIRE—(con.).		in.	ft.	in.	ft.	mm.	in.		
3.—SEVERN—Left Bank Tributaries.—(con.).									
Avering House	The Lady Eleanor Byng	8	1	3	350	479	18.85	101	86
Berkeley Castle Gardens	Mr. T. B. Ashbee	5	1	6	60	468	18.43	111	97
Nailsworth (Three Corners)	F. R. Rushton, Esq.	5	0	9	325	541	21.28	169	109
Berkeley (Sharpness Docks)	F. G. Marling, Esq.	5	2	0	50	520	20.47	141	103
Minchinhampton (Rowan Cott)	E. Metcalfe Day, Esq.	5	1	0	630	405	15.96?	140	92
Minchinhampton (Camp Field)	Piers F. Legh, Esq.	5	1	6	625	491	19.33	140	98
Stroud (Stanley Park)	Sir P. S. Marling, Bt., V.C., C.B.	8	1	0	365	498	19.62	129	106
Stroud (Field Place)	A. W. Stanton, Esq.	5	1	0	226	374	14.72
Stonehouse (Wycliffe College)	W. A. Sibly, Esq.	5	1	0	120	438	17.24	130	98
Bisley (Jaynes Court)	Hugh T. Coles, Esq.	5	0	11	777	498	19.59	165	106
Stroud (Berrimans)	E. Armitage, Esq.	5	1	0	750	504	19.86
Stonehouse (Parklands) No. 1 (R)	W. Grey Robinson, Esq.	8	2	6	103	431	16.99	146	93
Stonehouse (Parklands) No. 2	W. Grey Robinson, Esq.	5	2	6	103	431	16.96	140	98
Whitminster (The Junction)	F. A. Jones, Esq., C.E.	5	1	0	33	492	19.36	163	103
Haresfield Court	R. I. Tidswell, Esq.	5	1	0	100	497	19.55	156	..
Harescombe Grange	Stamford Hutton, Esq.	5	1	0	557	462	18.18	145	102
Quedgeley House	Lt.-Col. T. F. Curtis-Hayward	5	1	0	65	494	19.44	140	108
Witcombe Reservoir	E. W. A. Carter, Esq.	8	3	0	297	464	18.26	115	97
Gloucester (The Park)	G. Embrey, Esq.	8	1	3	56	465	18.31	164	103
Gloucester (Denmark Road)	Harley Butt, Esq.	5	1	5	79	425	16.72	142	97
Gloucester (Barnwood Vicarage)	Rev. F. H. Fowler	5	1	0	80	479	18.84	152	101
Gloucester (Llanthony Lock)	E. J. Bradley, Esq.	5	1	2	39	429	16.91	139	93
Gloucester (Maisemore Lock)	E. J. Bradley, Esq.	5	1	1	39	404	15.90	130	96
Badgeworth Court	A. J. Stephens, Esq.	5	1	0	180	434	17.09
Churchdown (Barrow Hill)	Mrs. J. H. Jones	5	1	0	225	460	18.11	142	99
Dowdeswell Reservoir	J. S. Pickering, Esq., C.E.	5	1	3	357	440	17.32	..	84
Cheltenham (Thirlestane Hill) (R)	J. Player, Esq.	8	2	0	240	381	14.99	134	82
Charlton Kings (The Grange)	Miss E. M. Heberden	5	0	9	300	466	18.33	142	103
Cheltenham (Hewletts Res.)	J. S. Pickering, Esq., C.E.	8	1	6	419	447	17.60	149	96
Cheltenham (Sandford Mead)	J. S. Pickering, Esq., C.E.	5	2	6	210	413	16.26	130	94
Cheltenham (Kemerton Lodge)	Rev. Percy Burd	5	1	0	211	445	17.53	145	..
Cheltenham (Old Bath Road)	F. A. Jones, Esq., C.E.	5	1	0	290	458	18.02	133	97
Cheltenham (High Street)	A. C. Saxby, Esq.	5	1	0	214	395	15.57	118	86
Cheltenham (Oxford Lawn)	Miss Grace Jones	5	1	4	230	394	15.50	147	85
Cheltenham (Swindon)	J. C. M. Stanton, Esq.	8	1	2	136	432	17.00	139	95
Tewkesbury Pumping Station	J. S. Pickering, Esq., C.E.	5	0	9	47	475	16.36	133	92
Alderton Rectory	Rev. A. D. Pennington	..	2	2	185	303	11.94?	129	84
Beckford Hall	Capt. H. Ashton Case	..	1	0	130	433	17.04
4.—SEVERN—Upper Avon. 99 sq. mi.									
Broadway (Buckland Manor)	J. Whiteley, Esq.	5	1	0	..	387	15.22	..	84
Chipping Campden (Hidcote)	Major W. Wright	5	1	0	520	368	14.49	141	79
Mickleton (Bank House)	M. J. Salter, Esq.	5	1	0	250	351	13.84	138	82
5.—LOWER AVON & G. 198 sq. mi.									
Bath (Monkswood Reservoir)	J. Dent Young, Esq. C.E.	5	2	0	365	504	19.83	147	107
Bristol Docks (Underfall Yard)	T. A. Peace, Esq.	8	19						

DIVISION VI.—WEST MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1921	Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam. in.	Height ft.	above Sea Level. in.			
GLOUCESTERSHIRE—(con.).		in.	ft.	in.	mm.	in.	
7.—THAMES—Windrush & c. 333 sq. mi.							
d Fairford (Dunfield, Kempsford)	A. T. Iles, Esq.	5	1	0 260	393	15·47	150 94
d Fairford Vicarage	Rev. Canon R. C. S. Jones ..	5	0	9 280	408	16·06	123 93
d Fairford (Draycott)	Late C. W. Edmonds, Esq.	5	2	0 200	443	17·46	128 95
d Lechlade (St. John's Lock)	R. A. Swarbrick, Esq.	5	3	2 239	358	14·09	135 87
d Lechdale (Claydon House)	T. T. S. Metcalfe, Esq.	5	1	0 250	404	15·92	139 88
d Lechlade (Southrop)	Thomas Arkell, Esq. ....	..	1	0 ..	394	15·51	.. ..
d Cirencester (Cripps Mead)	Mrs. Wilfred Cripps	5	0	8 365	459	18·07	149 109
d Cirencester (Dollarward House)	C. P. Hooker, Esq.	5	1	6 366	507	19·95	153 111
d Cirencester (Dollarward House)	C. P. Hooker, Esq.	8	1	6 366	500	19·67	153 111
d Cirencester (Argyll House)	Prof. E. Blundell	5	2	2 350	418	16·45	112 93
d Cirencester (Bartonbury)	E. C. Rankin, Esq.	5	0	9 429	422	16·62	141 ..
d Aldsworth	T. Rich, Esq.	5	1	0 430	457	17·99	.. 94
d Colesborne Park	H. J. Elwes, Esq., F.R.S.	5	0	9 565	528	20·80	141 90
d Great Barrington	H. J. Barrett, Esq.	5	1	6 430	433	17·05	133 100
d Northleach (Sherborne House)	Mr. A. Mitchell	5	1	0 420	436	17·17	112 96
d Northleach (Leygore Manor)	Arthur E. Moss, Esq.	5	1	0 650	447	17·62	174 100
d Bourton-on-Water (Eastfield)	E. W. Kendall, Esq.	5	1	6 434	443	17·43	131 94
d Bourton-on-Water (Chardwar)	G. F. Moore, Esq.	5	0	10 430	449	17·67	142 94
d Bourton-on-Water Rectory	Rev. Canon W. E. White ..	5	0	10 433	441	17·38	123 86
d Stow-on-the-Wold (Icomb Place)	Capt. G. H. Simpson Hayward	8	1	6 500	449	17·69	134 97
d Stow-on-the-Wold (Duncombe)	W. T. Arkell, Esq.	5	1	0 650	417	16·43	131 100
HEREFORDSHIRE. (Area, 840 sq. mi.)							
1.—WYE. 685 sq. mi.							
d Goodrich Court Gardens	T. Spencer, Esq.	5	1	5 200	473	18·61	145 92
d Ross (Hill Court)	G. R. Trafford, Esq.	5	1	1 161	435	17·13	125 88
d Ross (County Observatory)	F. J. Parsons, Esq.	5	1	0 228	412	16·23	128 88
d Ross (Birchlea)	Miss M. L. Southall	5	1	0 210	439	17·30	141 93
d Ross (Ashe Leigh)	Major W. Stanley R. Cox ..	5	1	0 250	407	16·02	110 86
d Kentchurch Rectory	Rev. R. P. Dansey	5	1	0 220	513	20·21	129 100
d Kentchurch Rectory	Rev. R. P. Dansey	5	1	0 212	464	18·26	.. ..
d Perrystone Court	Brig.-Gen. G. S. Clive, D.S.O.	5	1	3 450	378	14·87	112 ..
d Brockhampton Court	Col. A. W. Foster	8	4	0 500	458	18·04	.. ..
d Fownhope (Lower House)	Miss F. Cresswell	8	2	6 200	451	17·75	143 100
d Fownhope (Morney Cross)	A. P. Maudslay, Esq., D.Sc.	5	1	0 180	417	16·43	.. 85
d Woolhope (The Hyde)	J. A. Thompson, Esq.	5	1	0 440	395	15·53	132 89
d Vowchurch (Whitehouse)	A. S. Wood, Esq.	8	1	0 450	585	23·04	142 ..
d Hereford (Longworth Hall)	R. H. Barneby, Esq.	5	1	0 200	411	16·20	.. 92
d Hereford (Belmont Abbey)	Rev. John Owen, O.S.B.	8	1	0 292	395	15·55	112 96
d Hereford (Barton House)	Rev. A. G. Jones	8	1	0 179	409	16·11	138 ..
d Hereford (Breinton Court)	H. A. Wadworth, Esq.	5	3	0 238	358	14·11	124 84
d Hereford (Broomy Hill)	W. Cooke, Esq.	8	1	0 201	384	15·11	119 87
d Hereford (Holmer Hall)	Rev. Preb. M. Hopton	8	1	3 244	404	15·90	153 94
d Credenhill (Stretton Sugwas)	Capt. S. H. Armitage	5	1	0 226	384	15·12	132 90
d Credenhill	F. E. Whiting, Esq.	5	1	5 275	423	16·64	130 92
d Burghill Court	Miss E. D. Woodhouse	5	1	0 293	349	13·73	142 83
d Ocle Pychard (Ocle Court)	G. Creswell, Esq.	8	1	2 298	462	18·20	164 95
d Brilley Vicarage	Rev. W. Head	5	1	0 590	543	21·39	184 110
d Sarnesfield Court	Rev. W. Marshall	5	0	10 378	418	16·44	128 91
d Almeley (The Bungalow)	B. G. Ronalds, Esq.	5	1	0 396	467	18·39	140 96
d Almeley (Council School)	P. Morgan, Esq.	5	1	1 387	479	18·84	.. ..
d Weobley School	A. J. Dean, Esq.	5	1	0 320	426	16·76	133 93
d Pencombe Rectory	Rev. J. Seymour 'St. John	5	1	6 520	486	19·12	134 106
d Pembridge (Diiwyn)	Dr. T. Lambert Hall	5	0	8 290	428	16·84	142 97
d Pembridge (Burton Court)	Lt.-Col. P. L. Clowes, C.B.	5	1	6 400	475	18·71	201 ..
d Bromyard (Dumbleton Cottage)	T. V. Philpott, Esq.	5	1	0 393	481	18·94	136 91
d Bromyard (Rowden Abbey)	H. J. Bailey, Esq.	5	1	0 450	510	20·08	148 99
d Bromyard (Buckenhill)	Mrs. Phipps	8	1	6 410	481	18·92	120 91
d Kington (The Ovals)	Major S. Robinson	5	0	8 700	475	18·69	137 103
d Kington (Montfort House)	G. H. Evans, Esq.	5	0	6 600	626	24·66	186 123
d Kington (Sunset)	H. Langston, Esq.	5	1	0 495	486	19·13	.. ..
d Kington (Gravel Hill)	Col. G. F. Pearson	5	0	8 535	443	17·45	167 112

DIVISION VI.—WEST MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.	1921			
HEREFORDSHIRE—(con.).		in.	ft. in.	ft.	mm.	in.		
1.—WYE—(con.).								
◻ Pembridge (Byletts)	Gen. Sir E. Wood K.C.B...	5	1 5	350	462	18·20	137	101
◻ Kimbolton (Grantsfield)	J. M. Hutchinson, Esq. . .	5	1 0	424	483	19·02	148	98
◻ Eytton	Rev. B. G. Way	5	1 1	200	420	16·52	135	91
Eytton Hall	R. H. Evans, Esq.	5	0 9	300	447	17·59	146	98
2.—SEVERN—Right Bank Tributaries. 155 sq. mi.								
◻ Much Marcle (The Mount)	Miss A. M. Charles	5	0 9	240	413	16·26	124	88
◻ Ledbury (Orchardleigh)	Dr. Miles A. Wood	5	3 6	180	434	17·10	119	96
◻ Ledbury (Underdown)	S. H. Bickham, Esq.	5	1 0	307	395	15·55	134	88
◻ Ledbury (Underdown)	S. H. Bickham, Esq.	5	1 0	306	385	15·16	..	..
◻ Ledbury (Putley Court)	J. Riley, Esq.	5	1 0	290	460	18·12	133	103
◻ Ledbury (Wellington Heath Vic)	Rev. F. S. Stooke-Vaughan	5	1 0	505	401	15·79	138	95
◻ Cradley (Mill Bank)	Lt.-Col. E. H. Thurlow ...	5	1 0	325	484	19·04	116	..
◻ Brimfield (The Hall)	A. A. Gatty, Esq.	5	0 7	240	443	17·45	..	..
◻ Leintwardine	Mrs. E. Charnock	5	1 6	450	564	22·21	183	115
SHROPSHIRE. (Area, 1343 sq. mi.)								
1.—MERSEY—Weaver. 27 sq. mi.								
2.—DEE. 30 sq. mi.								
◻ Whitchurch (Fenns Bank)	M. W. Sowden, Esq., C.E... 8	1 0	271	483	19·03	132	105	
◻ Overton (Lodylt Hall)	W. H. Horsfall, Esq.	5	1 0	266	514	20·22	140	..
3.—SEVERN—Right Bank Tributaries. 722 sq. mi.								
◻ Ashford House	W. Downes Hall, Esq.	5	0 5	315	533	21·00	137	108
◻ Ludlow (Ashford Hall)	Viscountess Hereford ....	..	..	..	465	18·31	127	100
◻ Whitton (Whitton Paddocks) ..	Mrs. Batley	5	0 4	420	441	17·37	..	..
◻ Ludlow (Spring Field)	A. A. Barnes, Esq., C.E. ...	5	1 0	302	477	18·79	144	106
◻ Ludlow (Spring Field)	A. A. Barnes, Esq., C.E. ...	5	1 0	301	460	18·12	..	..
◻ Bromfield (Oakley Par.	Mr. J. R. Francis	5	1 0	300	477	18·80	131	105
◻ Bromfield (Warwick House) ...	F. Brayshaw, Esq.	5	1 0	320	524	20·64	166	109
◻ Bitterley Rectory	Rev. Preb. J. R. Burton ...	5	1 6	509	476	18·74	147	95
◻ Llanfair Waterdine (The Green)	Miss M. A. Davies	5	1 9	950	543	21·37	..	..
◻ Clun (Trinity Hospital)	Rev. W. M. D. La Touche	5	1 0	685	578	22·77	155	..
◻ Craven Arms (Newington Ho.) (R)	R. E. Serjeantson, Esq. ...	8	1 6	406	415	16·35	144	89
◻ Wistanstow Rectory	Rev. W. M. D. La Touche ...	8	1 2	482	494	19·44	153	104
◻ Burwarton Hall	Rt. Hon. Viscount Boyne	5	0 9	894	606	23·85	130	107
◻ Clun Forest (Cwm Ffrydd)	Sydney Wilson, Esq.	5	1 0	1155	726	28·60	..	..
◻ Lydbury North (Totterton H.)	Major W. H. B. Whitaker ...	5	1 3	700	510	20·07	173	129
◻ Bishops Castle (Castle Street)	E. Griffiths, Esq.	5	2 0	720	535	21·08	153	118
◻ Bishops Castle (Claremont) ...	Richard Parry, Esq.	5	1 0	681	521	20·50	141	109
◻ Bishops Castle Vicarage	Rev. G. W. Stewart	5	1 6	596	585	23·03	167	117
◻ Bishops Castle (Roveries H.) (R)	A. H. Sykes, Esq.	8	4 6	600	423	16·66?	..	..
◻ Church Stretton (Sewage Works)	E. J. Marsh, Esq.	5	1 0	582	614	24·16	142	124
◻ Church Stretton (Watling St.)	Mr. W. Bowden	5	1 0	..	650	25·59	155	124
◻ Church Stretton (West Leigh)	H. Constantine, Esq.	5	0 8	700	607	23·89	151	110
◻ Bridgnorth (Cantreyn)	W. Bayliss, Esq.	5	3 0	290	414	16·29	130	92
◻ Bridgnorth (Cantreyn)	W. Bayliss, Esq.	5	0 3	288	456	17·95	130	101
◻ Church Preen (Preen Cottage)	Mr. J. Hopkins	5	1 0	760	525	20·66	129	107
◻ Church Stretton (Wolstaston)	Rev. Alan Clover	5	1 0	795	633	24·93	158	116
◻ Much Wenlock (Wiley Park) ...	Col. Lord Forester	5	3 0	492	462	18·20	139	104
◻ Dorrington (Netley Hall)	Miss Hope-Edwardes	5	1 6	351	582	22·92	..	100
◻ Shrewsbury (Beckbury House)	G. H. Horsfall, Esq.	5	0 9	230	429	16·87	129	..
◻ Shrewsbury (Radbrook Hall) ...	D. D. Macpherson, Esq. ...	5	0 8	235	445	17·50	147	103
4.—SEVERN—Left Bank Tributaries. 564 sq. mi.								
◻ Bridgnorth (Coton Hall)	Lt.-Col. E. M. Wakeman ..	5	1 6	460	455	17·93	139	98
◻ Worfield (School House)	Frank Turner, Esq.	5	1 0	140	430	16·92	140	99
◻ Shifnal (Hatton Grange)	Mr. G. Risebrow	5	4 4	262	468	18·41	163	108
◻ Shifnal (National Schools)	T. F. Chard, Esq.	5	1 5	283	486	19·15	127	102
◻ Wellington W.W. (Wrekin Res.)	G. Riley, Esq., C.E.	8	1 6	478	465	18·32?	..	..

DIVISION VI.—WEST MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
SHROPSHIRE—(con.).		in.	ft.	in.	ft.	mm.	in.		
4.—SEVERN—Left Bank Tributaries—(con.).									
w Shrewsbury (St. Michael's Sch.)	W. H. Barclay, Esq.	5	30	9	229	431	16·95	..	..
Shrewsbury (Coton Hill)	Dr. M. Gepp	5	0	8	190	408	16·08	136	93
d Shrewsbury (Roden)	J. W. Nowell, Esq.	8	1	2	207	474	18·66	144	97
d Shrewsbury (Fitz Rectory)	Rev. W. Brewster	5	1	2	238	493	19·43	149	109
d Newport (Aston Hall)	Col. R. Leeke	5	0	11	280	540	21·26	165	114
d Newport (Edgmond)	W. Bevan, Esq.	5	1	0	225	484	19·05	125	89
d Newport (Agricultural College)	P. Hedworth Foulkes, Esq.	5	1	0	220	459	18·06	135	95
d Newport (Chetwynd Park)	Mrs. Burton Borough	5	1	0	240	546	21·50	172	106
d Newport (Chetwynd Pk. Gdns.)	Mr. N. Sherwood	5	1	0	250	548	21·58	182	108
d Grinshill (Sansaw Hall Gardens)	Capt. F. B. Bibby	5	0	10	300	515	20·29	161	106
d Cheswardine (Knighton Res.)	H. C. Jones, Esq.	8	1	0	351	523	20·57	144	106
d Oswestry (The Mount Res.)	G. W. Lacey, Esq., C.E.	5	1	0	698	561	22·10	170	105
d Oswestry (Council School)	E. Compton, Esq.	5	1	0	450	594	23·40	150	107
d Ellesmere	H. C. Jones, Esq.	8	1	0	368	551	21·71	133	104
d Norton-in-Hales School	Chas. Chadwick, Esq.	5	2	0	350	564	22·21	148	122
STAFFORDSHIRE. (Area, 1171 sq. mi.)									
1.—MERSEY—Weaver. 50 sq. mi.									
d Biddulph Grange	Robert Heath, Esq.	5	0	7	525	711	27·98	188	140
2.—SEVERN—Left Bank Tributaries. 160 sq. mi.									
d Kingswinford (Ashwood P.S.)	F. J. Dixon, Esq., C.E.	5	1	0	207	421	16·59	118	97
d Dudley (Shavers End)	F. J. Dixon, Esq., C.E.	5	1	0	745	449	17·68	151	94
d Wolverhampton (Town Hall)	G. Green, Esq., C.E.	5	15	6	482	443	17·46	129	101
d Wolverhampton (West Park)	Dr. R. H. H. Jolly	5	1	6	432	467	18·38	132	98
d Patshull Park	Earl of Dartmouth, K.C.B.	8	1	3	273	437	17·21	..	95
d Shifnal (Weston Park)	Earl of Bradford	5	1	6	400	500	19·69	163	115
d Norbury Junction	H. C. Jones, Esq.	8	1	0	332	535	21·05	172	111
d Market Drayton (Old Springs)	F. E. Harding, Esq.	5	1	3	422	493	19·39	160	96
Maer Hall Gardens	Mrs. F. J. Harrison, O.B.E.	8	1	6	390	573	22·56	..	103
Muckleston (Willoughbridge Lo)	M. D. Hill, Esq.	5	0	10	450	506	19·93	137	..
3.—TRENT—Right Bank Tributaries. 518 sq. mi.									
d West Bromwich	(R) A.D. Greathorex, Esq., C.E.	8	1	7	543	463	18·24	145	91
d Wednesbury (Ocker Hill)	A. W. Willet, Esq., C.E.	5	1	0	476	450	17·70	134	91
d Walsall (Bescot Sewage Farm)	J. Taylor, Esq.	8	0	11	376	467	18·39	149	98
d Walsall (Wednesbury Sew. Wks)	G. Wicks, Esq.	5	2	8	381	441	17·35	139	94
d Bilston (The Lunt Outfall)	Edgar Willan, Esq., C.E.	8	1	0	423	485	19·11	143	102
d Aldridge (Bourne Vale)	F. J. Dixon, Esq., C.E.	5	1	0	419	456	17·95	133	91
d Bloxwich (Sneyd Reservoir)	A. W. Willet, Esq., C.E.	5	1	0	507	471	18·53	136	101
d Brewood (Slade Heath P.S.)	F. J. Dixon, Esq., C.E.	5	1	0	340	447	17·62	139	97
d Hammerwich (Cannock Chase Rs)	A. W. Willet, Esq., C.E.	5	1	0	475	479	18·85	162	101
d Brewood (Belvide Reservoir)	H. C. Jones, Esq.	5	1	0	367	446	17·56	145	104
d Lichfield (St. John Street)	Dr. F. M. Rowland, C.B.E.	5	1	0	269	446	17·55	146	95
d Hednesford (Scout House)	F. J. Dixon, Esq., C.E.	5	1	0	750	418	16·47	135	86
d Rugeley (Longdon)	F. J. Dixon, Esq., C.E.	5	1	0	413	465	18·30	118	99
d Lichfield (Hanch Reservoir)	F. J. Dixon, Esq., C.E.	5	1	0	259	431	16·95	136	94
d Rugeley (Brindley Bank)	F. J. Dixon, Esq., C.E.	5	1	0	254	453	17·85	127	97
d Milford Waterworks	W. Plant, Esq., C.E.	5	1	0	246	449	17·68	136	104
d Shugborough	The Earl of Lichfield	5	1	0	260	503	19·79	118	105
d Stafford (Rising Brook)	W. Fred. Wright, Esq.	5	1	0	273	476	18·74	148	99
d Stafford (Corporation Depôt)	W. Plant, Esq., C.E.	5	1	6	249	503	19·82	145	106
■ Stafford (West Bank, Doxey)	Leslie Wilson, Esq.	5	0	6	280	463	18·22	..	..
Little Ingestre	Major H. Cecil Gardner	8	1	6	272	481	18·93	123	..
d Eccleshall (Johnson Hall)	Major W. Moat	5	1	1	400	515	20·26	154	98
Stone (Meece House)	E. J. W. Wood, Esq.	5	1	6	331	520	20·49	126	..
Stone (Meaford Hall)	Lt. Col. W. S. W. Parker Jervis	5	0	9	325	596	23·48	170	..
d Standon (Hatton W.W.)	R. C. Frain, Esq., C.E.	5	1	8	355	548	21·58	145	106

DIVISION VI.—WEST MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES	Rain Gauge.			Depth of Rain. 1921	Days with ·01 in. or more.	Days with ·04 in. or more.		
		Diam.	Height Ground	above Sea Level.					
STAFFORDSHIRE—(con.).		in.	ft.	in.	ft.	mm.	in.		
4.—TRENT—Left Bank Tributaries. 193 sq. mi.									
D Burton (Hoar Cross)	F. W. Lycett, Esq.	8	1	0	400	503	19·79	129	108
D Burton Reservoir	F. J. Dixon, Esq., C.E.	5	1	0	309	505	19·88	115	99
D Burton (Borough Hospital) ..	Dr. J. M. Cowie	8	1	6	220	590	23·24	161	103
D Burton (Shobnall)	Messrs. Bass & Co. Ltd.	5	5	6	156	470	18·51	143	96
D Stone (Alleyne's Grammar Sch.)	H. Malcolm Fraser, Esq.	5	1	6	415	548	21·59	190	119
D Stone (Idlerocks)	Mrs. Wedgwood	5	1	0	740	556	21·89	154	111
D Longton (The Meir)	R. C. Frain, Esq., C.E.	5	1	0	618	561	22·10	195	104
5.—TRENT—Dove. 250 sq. mi.									
D Tean (The Heath House)	Lt.-Col. B. H. Philips, C.M.G.	5	1	0	647	583	22·85	144	114
D Oakamoor (Lightoaks)	M. A. Bolton, Esq.	5	1	6	650	617	24·29	156	116
D Oakamoor (Lightoaks)	(R) M. A. Bolton, Esq.	8	4	9	600	597	23·50	186	114
D Ashbourne (Mayfield House) ..	Graham C. Lawson, Esq.	8	1	0	374	629	24·76	160	106
D Mayfield (Doveside)	Mr. T. Bridge	8	1	0	421	590	23·24	158	101
D Leek (Wall Grange)	R. C. Frain, Esq., C.E.	5	1	0	458	672	26·46	167	123
D Leek (Hillesdon)	A. Y. Worthington, Esq.	5	1	0	750	685	26·95	174	128
D Leek (Haregate)	Mr. G. Sweetmore	5	0	9	680	727	28·63	186	123
WORCESTERSHIRE. (Area, 751 sq. mi.)									
1.—SEVERN—Right Bank Tributaries. 231 sq. mi.									
D Redmarley (Haselden)	Miss F. L. Newbury	5	0	5	280	409	16·09	112	90
D Upton-on-Severn (Willow Bank)	J. Selwyn Cowley, Esq.	5	1	2	46	453	17·82	125	93
D Upton-on-Severn (The Eades) ..	Lt.-Col. E. W. Tennant	5	0	9	100	449	17·66	136	88
D Malvern (British Camp Res.) ..	W. Osborne Thorp, Esq., C.E.	5	1	0	677	424	16·69	122	93
D Malvern (Church Street)	W. Osborne Thorp, Esq., C.E.	5	1	0	350	483	19·02	129	101
D West Malvern	W. Osborne Thorp, Esq., C.E.	5	1	0	832	474	18·66	127	98
D Malvern (Hayes Bank)	Capt. G. M. Archdale	5	1	0	190	424	16·70	..	..
D Malvern (Belle Vue House)	A. Mander, Esq.	5	4	0	520	478	18·81	138	97
D Malvern (Free Library)	E. W. Harris, Esq.	5	1	0	377	471	18·53	138	94
D Malvern (Clarence Road)	S. Bottomley, Esq.	5	1	0	300	454	17·88	151	99
D Malvern (Hornyard Road)	Rev. T. Wolseley Lewis	5	1	0	498	466	18·34	119	92
D Knightwick Sanatorium	H. Gordon-Smith, Esq.	5	1	0	300	435	17·12	120	86
D Worcester (Diglis Lock)	E. J. Bradley, Esq.	5	1	0	49	389	15·33	134	79
D Worcester (St. John's School) ..	E. R. Bowen, Esq.	5	1	0	82	405	15·96	117	90
D Martley Rectory	Rev. J. F. Hastings	5	1	0	220	463	18·22	136	97
D Ombersley (Holt Lock)	E. J. Bradley, Esq.	5	1	1	55	428	16·86	133	94
D Shelsley Grange	A. G. Burney, Esq.	5	1	0	350	429	16·88	128	98
D Rochford Rectory	Rev. Allan Ellison	5	1	0	315	477	18·76	129	89
D Tenbury (St. Michael's)	Miss Hewitt	5	1	0	329	471	18·56	133	95
D Tenbury (St. Michael's Obsy.) ..	Frederick Lowe, Esq.	5	1	0	314	462	18·20	141	95
D Stockton-on-Teme (Eardiston) ..	Miss M. Wallace	5	0	8	200	429	16·89	120	93
D Bewdley (Winterdyne)	Miss K. M. Sturt	5	3	5	175	372	14·63	113	89
M Bewdley (Winterdyne)	Miss K. M. Sturt	5	1	0	110	423	16·65	..	..
2.—SEVERN—Left Bank Tributaries. 194 sq. mi.									
D Earl's Croom (Levant Lodge) ..	F. W. Burnett, Esq.	5	2	0	110	463	18·25	137	95
D Kempsey (Draycott Lodge)	Major H. Berkeley Hill	5	1	0	70	435	17·12	121	..
D Kempsey (The Lodge)	Mrs. Isaac	5	1	0	80	404	15·89	121	89
D Worcester (Water Works)	T. Caink, Esq., C.E.	5	1	0	52	411	16·18	123	91
D Worcester (Barbourne)	B. Brotherton, Esq.	5	1	0	92	418	16·47	127	99
D Worcester (Bever Lock)	E. J. Bradley, Esq.	5	1	1	52	438	17·25	128	98
D Droitwich (Friar Street Depot) ..	H. Hulse, Esq., C.E.	12	4	0	98	445	17·50	151	101
D Bromsgrove (Tardebigge Res.) ..	F. A. Jones, Esq., C.E.	5	4	6	455	487	19·16	133	98
D Barnt Green (Upwood)	Miss M. Gibbins	5	0	11	650	432	17·02	142	93
D Stourport (Lincombe Lock)	E. J. Bradley, Esq.	5	1	0	62	467	18·39	129	124
D Bewdley (C.E. School)	J. Bates, Esq.	8	1	0	80	408	16·07	133	92
D Kidderminster (Brinton Park) ..	J. T. Cowderoy, Esq.	5	1	0	160	403	15·87	134	87
D Kidderminster (Park Hall)	G. E. Wilson, Esq.	5	1	0	200	446	17·57	105	92
D Halesowen (Romsley)	F. J. Dixon, Esq., C.E.	5	1	0	614	471	18·54	125	98

DIVISION VI.—WEST MIDLAND COUNTIES—(con.).

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		Diam.	Height Ground	above Sea Level.	1921			
WORCESTERSHIRE—(con.).		in.	ft. in.	ft.	mm.	in.		
2.—SEVERN—Left Bank Tributaries—(con.).								
d Pedmore (The Dene)	T. Grazebrook, Esq.	5	0 6	340	470	18·52	140	105
d Stourbridge	W. Fiddian, Esq.	8	1 0	215	480	18·88	137	101
d Halesowen (Hasbury Cottage)	Rev. A. S. Rashleigh	5	1 1	532	410	16·13	143	93
d Netherton (Lodge Farm Res.)	A. W. Willett, Esq., C.E.	5	1 0	445	411	16·16	148	94
d Dudley (Borough Cemetery)	F. H. Gibbons, Esq., C.E.	5	1 3	591	389	15·30	..	73
d Dudley (Trindle House)	S. Staffs. Drainage Comm.	8	1 0	575	567	22·33	..	..
3.—SEVERN—Upper Avon. 260 sq. mi.								
d Blockley (Upton Wold)	E. W. Arkell, Esq.	5	1 0	800	456	17·97	148	105
d Bredon (The Croft)	Jasper Lambert, Esq.	5	1 1	120	435	17·13	130	..
d Shipston (Tidmington House)	Miss Staunton	5	1 0	160	408	16·05	..	..
d Evesham (Bengeworth)	Messrs. Ross Bros., Ltd.	5	1 0	128	375	14·76	125	90
d Evesham (Lansdowne)	R. Burlingham, Esq.	8	4 6	108	428	16·85	109	88
d Evesham (Rossyvera House)	R. Burlingham, Esq.	5	1 0	163	385	15·15	..	85
d Evesham (Sewage Works)	L. Abbott, Esq.	8	3 0	86	397	15·64	142	96
d Evesham (Great Hampton)	H. C. Boutflower, Esq.	5	1 0	130	374	14·71	120	83
d Shipston (Armscote)	W. L. Stanton, Esq.	5	1 1	241	409	16·12	145	95
d Shipston (Cookhill Co. School)	T. Barber, Esq.	5	1 0	400	421	16·58	138	..
d Redditch (Hewell Gardens)	Mr. J. J. Graham	5	1 0	469	523	20·61	158	108
d Alvechurch (Bordesley Hall)	A. H. Wiggin, Esq.	12	4 0	490	476	18·73	131	104
d Alvechurch (High Croft)	D. B. Grubb, Esq.	5	1 0	580	502	19·76	133	102
d Alvechurch (Fairfield)	D. McMichael, Esq.	5	1 0	400	509	20·06	132	104
d Bromsgrove (Lower Bittal Res.)	F. A. Jones, Esq., C.E.	5	3 0	457	472	18·58	155	101
4.—THAMES—Windrush & c. 10 sq. mi.								
5.—TRENT—Right Bank Tributaries. 56 sq. mi.								
d Halesowen (Frankley)	F. W. Macaulay, Esq., C.E.	5	0 10	570	509	20·03	142	119
WARWICKSHIRE. (Area, 902 sq. mi.)								
1.—SEVERN—Upper Avon. 603 sq. mi.								
d Long Compton (Weston Park)	H. A. Warriner, Esq.	8	3 0	510	347	13·65	113	82
d Shipston-on-Stour (Cherington)	L. G. Slade, Esq.	8	1 2	300	409	16·09	136	94
d Bidford (Moor Hall)	E. H. Cubberley, Esq.	5	1 0	125	432	17·00	129	90
d Stratford-on-Avon (Milcote)	F. W. Jones, Esq., C.E.	5	1 6	122	381	14·99	..	77
d Stratford-on-Avon (Avonfield)	G. W. Everard, Esq.	5	6 0	120	377	14·86	120	85
d Stratford-on-Avon (Shottery H.)	R. C. Carter, Esq.	5	0 8	140	384	15·12	121	77
d Alcester (Ragley Hall)	Mr. C. Harding	5	1 0	270	455	17·93	..	95
w Ashorne	Mr. G. T. Osborn	5	1 0	160	473	18·64	..	..
d Stratford-on-Avon (Snitterfield)	F. W. Jones, Esq., C.E.	5	1 6	274	413	16·26	110	90
d Southam (Stockton House)	G. B. Blyth, Esq.	6	1 4	394	378	14·88	145	82
d Studley College	Miss E. H. Ekins	5	0 9	235	465	18·30	124	94
d Warwick Castle Gardens	Mr. H. F. Smale	5	1 0	197	456	17·96	147	105
d Warwick (The Lawn Gardens)	Mr. D. Cooper	5	1 0	180	452	17·79	149	107
d Leamington (Pump Room Gdns.)	H. Gibbins Ward, Esq.	8	0 9	165	389	15·30	123	90
d Willoughby Vicarage	Rev. H. Trethewy	5	1 0	300	424	16·68	145	105
d Henley-in-Arden (Hillfield)	W. E. Milner, Esq.	5	1 0	450	479	18·84	152	102
d Tanworth-in-Arden	F. Davies, Esq.	5	3 0	512	475	18·68	..	..
d Lapworth Rectory	London Bell, Esq.	5	0 10	436	447	17·62	132	93
d Lapworth Croft	T. Birkett Barker, Esq.	5	1 6	410	485	19·11	110	90
d Rugby (Bilton Grange)	J. S. Buckby, Esq.	5	1 0	400	374	14·71	112	87
d Rugby (Caldecott)	H. A. Sparling, Esq.	5	1 0	390	363	14·30	107	79
d Stretton-on-Dunsmore Manor Ho.	Mrs. Lister-Kaye	5	0 8	295	390	15·37	..	93
d Ryton-on-Dunsmore (Ryton Ho)	Charles Browett, Esq.	5	1 2	260	447	17·60	135	95
d Coventry (Radcliffe Road)	J. B. Morris, Esq.	5	1 0	339	443	17·46	145	93
d Coventry (City Hospital)	E. H. Snell, Esq., M.D.	8	1 0	269	441	17·36	133	91
d Coventry (Keresley Grange)	Miss H. Rotherham	5	0 10	413	472	18·60	164	100
d Nuneaton (Astley Vicarage)	Rev. I. F. H. Carr-Gregg	5	1 0	440	469	18·46	112	88

DIVISION VI.—WEST MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1921		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.				
WARWICKSHIRE—(con.).		<i>in.</i>	<i>ft.</i>	<i>in.</i>	<i>ft.</i>	<i>mm.</i>	<i>in.</i>	
2.—THAMES—Windrush & c. 2 sq. mi.								
3.—THAMES—Cherwell. 15 sq. mi.								
d Farnborough	Miss C. A. Prater	5	1	0	515	495	19·47	142 97
4.—TRENT—Right Bank Tributaries. 282 sq. mi.								
d Northfield (West Heath House). J. B. Shewell, Esq.....		5	0	6	590	485	19·09	112 100
d Solihull (Marsh Cottage) Capt. E. P. Currall.....		5	1	0	420	450	17·70	140 89
d Selly Oak (Bourneville) Messrs. Cadbury Bros., Ltd.		5	1	0	432	443	17·44	143 92
d Selly Oak (Lodge Hill Cemtry.) Mr. W. Garden		5	1	2	540	462	18·18	119 92
d Selly Oak (South Hill) W. Littleboy, Esq.....		5	0	9	460	436	17·15	130 92
d Moseley (Prospect Road) Rev. F. Oscar Lane		5	1	0	550	433	17·04	129 90
d Moseley (Highfield Road) J. Newland Brown, Esq....		8	1	9	550	481	18·94	144 95
d Moseley (Russell Road)..... Ralph Priestman, Esq.....		5	1	0	429	438	17·23	138 91
d Birmingham (Sparkhill) D. H. Owen, Esq.		5	1	0	426	490	19·29	142 95
d Birmingham (Edgbaston) A. J. Kelley, Esq.....		8	1	6	525	456	17·93	132 95
m Birmingham (The Crescent) ... J. J. Gilbert, Esq.....		5	7	0	480	523	20·59	.. ..
d Birmingham (Gravelly Hill) W. L. Mold, Esq.		5	3	0	470	481	18·95	134 94
d Birmingham (Erdington) F. W. Macaulay, Esq., C.E.		5	1	2	472	456	17·94	134 91
d Minworth Greaves..... Birmingham Drainage Bd.		8	0	6	259	421	16·57	119 96
d Whitacre (Birmingham W.W.) ... F. W. Macaulay, Esq., C.E.		5	1	0	269	433	17·06	138 84
d Sutton Coldfield (The Park) Mr. H. Harland		5	1	0	370	479	18·87	127 96

DIVISION VII.—NORTH MIDLAND COUNTIES.

LEICESTERSHIRE. (Area, 824 sq. mi.)

1.—SEVERN—Upper Avon. 41 sq. mi.									
d Welford (The Reservoir)	T. W. Millner, Esq.	5	1	6	430	413	16·26	144	89
d Lutterworth Water Works	W. Keay, Esq., C.E.	8	1	11	414	435	17·11	..	..
d Bitteswell School Gardens	Maurice Smith, Esq.	5	1	6	401	468	18·42	139	96
2.—WELLAND. 96 sq. mi.									
d Market Harborough (Rose Hill)	G. O. Nicholson, Esq.	5	1	0	350	388	15·28	115	85
d East Langton Grange	J. W. Logan, Esq., M.P. ..	5	1	0	300	355	13·96	..	75
d Kibworth Beauchamp	E. V. Phillips, Esq.	9	2	6	390	498	19·59	110	94
d Hallaton Hall	Mr. T. Beers	8	1	3	366	429	16·90	..	..
m Horninghold House <i>Snowdon g.</i>	Mr. B. Inchley	5	1	6	380	427	16·83	..	..
m Horninghold House <i>Float g.</i>	Mr. B. Inchley	6	2	0	380	411	16·20	..	..
d Knossington Rectory	Rev. G. G. Wilkinson	5	0	11	575	456	17·94	132	98
3.—WITHAM. 7 sq. mi.									
4.—TRENT—Right Bank Tributaries. 680 sq. mi.									
d Wistow Hall Gardens	Col. Lord Cottesloe	5	1	0	309	441	17·35	111	92
d Countesthorpe (Wigston Sew Fm.)	W. G. J. Clark, Esq., C.E.	8	0	9	257	427	16·79	159	92
d Leicester (Stoughton Drive)	Theodore B. Ellis, Esq.	5	0	6	315	434	17·10	131	88
d Leicester (Town Hall Square)	E. G. Mawbey, Esq., C.E.	5	0	6	211	440	17·34	135	85
d Leicester (Town Hall Sq.) (R)	E. G. Mawbey, Esq., C.E.	7	1	8	212	439	17·27	134	85
d Leicester (Westcotes Drive)	C. Modlen, Esq.	5	0	11	200	423	16·67	127	83
d Market Bosworth (Osbaston Hall)	Sir Thomas Cope, Bart. ...	8	1	0	393	490	19·30	158	101
d Humberstone Asylum	S. C. Leak, Esq.	8	1	0	266	483	19·03	136	92
d Leicester (Gillroes Cemetery)	E. G. Mawbey, Esq., C.E.	5	1	0	285	484	19·07	134	94
d Thornton Reservoir	G. T. Edwards, Esq., C.E.	8	1	2	371	539	21·22	129	106
d Cropstone (Bradgate Res.)	G. T. Edwards, Esq., C.E.	8	1	0	246	564	22·20	143	105
d Barkby Hall	Victor R. Pochin, Esq.	5	0	6	227	520	20·48	126	96
d Swithland (The Brand)	G. T. Edwards, Esq., C.E.	8	1	0	172	505	19·89	130	92
d Ashby-de-la-Zouch (Cole Orton)	Mr. C. Watson	5	2	0	540	517	20·35	..	87
d Barrow-upon-Soar (The Mount)	Mrs. C. Stuart Thomson ..	5	1	6	..	438	17·26	112	89
d Asfordby Rectory	Rev. W. R. Finch	5	0	11	212	393	15·49	126	92
d Melton Mowbray (White Lodge)	R. Barker, Esq.	8	1	0	236	417	16·40	149	98
d Melton Mowbray	Hon. Gerald Walsh	5	1	0	345	403	15·86	137	90

DIVISION VII.—NORTH MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.	
		Diam.	Height Ground	above Sea Level.	1921				
LEICESTERSHIRE—(con.).		ft.	in.	ft.	in.	mm.	in.		
4.—TRENT—Right Bank Tributaries—(con.).									
d Charnwood For. (Blackbrk. Res)	A. H. Walker, Esq., C.E....	5	1	0	379	506	19·92	156	110
d Loughborough (NanPantan Res)	A. H. Walker, Esq., C.E....	8	1	0	269	537	21·15	147	91
Loughborough (The Widenings)	Adrian Young, Esq.	5	0	7	197	451	17·75	141	91
d Loughborough (Sewage Farm)	A. H. Walker, Esq., C.E....	8	1	0	134	473	18·61	..	84
d Burton-on-theWolds (Burtn H.)	Late Lord Ernest St. Maur	5	1	0	270	470	18·51	120	96
d Prestwold Hall	Mr. W. Coe	8	1	0	209	483	19·02	135	101
d Croxton Kerrial School	C. J. Prowse, Esq.	5	1	0	480	412	16·22	126	88
d Belvoir Castle Gardens	The Duke of Rutland, K.G.	8	1	0	259	408	16·06	134	97
RUTLAND. (Area, 152 sq. mi.)									
1.—WELLAND. 125 sq. mi.									
d Uppingham (Ridlington)	N. W. Wortley, Esq.	5	4	7	527	463	18·24	143	95
2.—WITHAM. 5 sq. mi.									
3.—TRENT—Right Bank Tributaries. 22 sq. mi.									
LINCOLNSHIRE. (Area, 2646 sq. mi.)									
1.—NENE. 100 sq. mi.									
d Tydd (North Level Sluice)	Mr. S. Fovargue	5	3	0	10	309	12·17	114	72
d Long Sutton (Lutton Lodge)	Mrs. T. A. Dring	5	2	2	20	291	11·45	..	..
2.—WELLAND. 341 sq. mi.									
d Crowland (Bank House)	J. Goodacre, Esq.	5	6	0	10	351	13·83	..	64
d Market Deeping (Wilsthorpe)	W. H. A. Court, Esq.	8	3	10	55	287	11·32	114	74
Holywell Hall	Lt.-Col. A. A. H. Reynardson	5	0	9	137	338	13·29	116	83
d Bourne (Guthram)	F. S. Robins, Esq., C.E. ..	8	1	6	19	280	11·02	120	69
d Bourne (Edenham School)	O. Davies, Esq.	5	1	0	110	345	13·57	106	73
d Spalding (Pode Hole)	H. Bain, Esq.	8	1	3	12	322	12·66	158	83
d Holbeach (Leadenhall)	T. J. Ward, Esq.	5	4	0	13	307	12·07	111	79
3.—WITHAM & C. 1085 sq. mi.									
d Stainby Rectory	Rev. W. L. de B. Thorold	4	0	9	496	379	14·93	100	87
Stroxton Rectory	Rev. S. C. Wood	5	0	10	350	366	14·40	..	..
d Denton Manor	Sir C. G. E. Welby, Bt., C.B.	5	3	0	310	404	15·90	156	89
d Grantham (Saltersford)	H. Preston, Esq.	5	0	6	188	372	14·65	138	83
d Grantham (Guildhall)	G. A. Ballard, Esq., O.B.E.	5	17	0	206	372	14·64	115	77
d Boston (Black Sluice, Skirbeck)	F. S. Robins, Esq., C.E. ..	8	1	3	11	374	14·74	135	89
d Boston (Sleaford Road)	J. Shaw, Esq.	5	1	2	9	377	14·86	139	88
d Boston (Grand Sluice)	J. H. Johnson, Esq., C.E.	8	8	0	18	383	15·08	145	84
Boston (Bargate End)	A. O. Scrivener, Esq.	8	1	4	9	369	14·52	120	..
d Sleaford (Kesteven County Asy.)	Dr. J. A. Ewan	5	0	9	100	396	15·58	138	80
d Fulbeck Hall	Col. King Fane	5	1	0	180	443	17·43	180	82
d Cranwell	Air Ministry	8	1	0	236	434	17·09	151	93
d New Leake (Lade Bank Engine)	J. H. Johnson, Esq., C.E.	8	1	0	10	337	13·27	..	..
d Carrington Grange	Mr. T. J. Ward	5	6	0	15	402	15·84	117	94
d Wellingore	Miss A. S. Morley	5	1	0	..	403	15·87	137	84
Navenby Rectory	Mr. J. Thompson	5	1	0	218	431	16·96	132	..
d Carlton-le-Moorland	J. Brocklebank, Esq.	5	1	2	49	440	17·32	123	86
d East Kirkby (E. Kirkby House)	Capt. R. S. Fieldsend	5	1	0	90	379	14·91	142	84
d Revesby Reservoir	J. Shaw, Esq.	5	2	0	124	394	15·50	122	80
d Woodhall Spa (Galm House)	J. Collins, Esq.	5	1	6	72	400	15·74	155	84
d Bardney Railway Station	A. Burridge, Esq., C.E....	8	7	6	25	363	14·31	123	72
d Horncastle	H. R. Maynard, Esq.	5	2	0	120	383	15·10	142	82
Lincoln (Boultham Pump Stn.)	C. Horobin, Esq., C.E.	5	1	0	19	406	16·00	..	91
Lincoln (Skellingthorpe Hall)	A. H. Bergne-Coupland, Esq.	5	1	0	40	394	15·50	118	96
Lincoln (Station)	Great Central Rly. Co.* ..	9	3	6	20	368	14·49	131	..
d Lincoln (Sessions House)	Arthur Smith, Esq.	5	1	0	54	373	14·70	135	85
d Lincoln (D'Isney Place)	Late A. H. Leslie Melville, Esq.	4	1	0	215	391	15·38	136	92
d Lincoln (Cottesford Place)	F. A. Peacock, Esq.	6	0	9	224	413	16·27	141	88
d Hackthorn Hall	E. W. Cracroft, Esq.	5	4	6	105	357	14·06	146	86
Willingham-by-Stow	R. C. Bacon, Esq.	8	2	0	65	387	15·25	148	99
Springthorpe Rectory	Rev. B. Davies	5	1	0	75	359	14·14	115	90

* Kept for the Canal Department of the Great Central Railway Company. Returns supplied by F. T. Chappell, Esq.

DIVISION VII.—NORTH MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.	
		Diam.	Height Ground	above Sea Level.	1921				
LINCOLNSHIRE—(con.).		in.	ft.	in.	ft.	mm.	in.		
4.—GREAT EAU & C. 443 sq. mi.									
D Skegness (Estate Offices)	Mrs. R. H. Jenkins	8	1	0	13	373	14·69	127	84
D East Keal Rectory	Rev. R. H. Simpson	5	0	7	180	380	14·97	137	77
D Spilsby (Ashby Road)	J. Jarvis Rainey	5	1	0	160	365	14·38	122	87
D Hagworthingham (Glebe House)	Mr. R. Wright	5	1	8	240	409	16·12	138	97
Alford (Finsbury Street)	Mr. E. Hodgson	5	1	0	30	327	12·89	..	86
D Mablethorpe (Trusthorpe Hall)	I. N. Woodiwiss, Esq.	8	1	3	10	432	17·02	138	104
D Louth (Westgate)	Rev. W. E. Yates	5	0	9	120	412	16·21	174	96
Louth (High Holm Road)	J. Larder, Esq.	4	0	10	120	397	15·63	..	..
S. Elkington (Elkington Hall)	Countess of Wilton	5	1	9	234	408	16·08	123	97
D Kirmond	C. Fieldsend, Esq.	5	1	2	309	438	17·24	163	93
Wold Newton Manor	W. Maurice Wright, Esq.	5	1	0	230	432	17·00	..	..
D Grainsby Hall	Mr. J. Butters	5	1	0	75	427	16·80	161	109
5.—HUMBER—Right Bank Tributaries. 428 sq. mi.									
D North Willingham House	Mr. J. H. Staniforth	5	3	4	..	444	17·49	181	107
Market Rasen	Great Central Rly. Co.	9	3	6	100	327	12·88	..	..
Brigg Station	Great Central Rly. Co.	9	3	6	16	317	12·50	118	..
D Brigg (Grammar School)	H. E. Bryant, Esq.	5	1	0	32	360	14·16	102	77
D Brigg	A. Atkinson, Esq., C.E.	8	1	2	11	400	15·75	144	102
D Riby (Riby Grove)	Rev. Watson Stratton	5	1	11	117	482	18·99	126	107
D Grimsby (Abbey Road)	W. J. Wood, Esq., C.E.	5	3	6	23	415	16·33	124	96
Grimsby	Great Central Rly. Co.	9	15	0	42	383	15·06	136	..
Barnetby	Great Central Rly. Co.	9	3	6	52	386	15·21	123	..
D Brocklesby Park	Mr. F. C. Stainsby	5	2	0	108	503	19·81	134	110
D Burton-on-Stather (Normanby)	A. G. Wilkes, Esq.	5	1	0	185	413	16·26	125	95
D Horkstow	E. J. Turton, Esq.	5	0	10	75	385	15·14	124	98
Ferriby Sluice	A. Atkinson, Esq. C.E.	5	1	0	18	383	15·08	143	..
New Holland	Great Central Rly. Co.	9	3	6	18	389	15·32	100	..
6.—TRENT—Right Bank Tributaries. 172 sq. mi.									
Woolthorpe	T. Wallis Gordon, Esq., C.E.	1	3	182		374	14·73	128	..
D Swinderby (Ling Moor)	Capt. Cecil H. Wray	5	1	0	50	512	20·15	127	112
d Gate Burton Hall	Late J. D. Sandars, Esq.	5	2	0	97	369	14·54	..	91
Gainsborough	Great Central Rly. Co.	9	..	76		334	13·14	113	..
7.—Trent—Left Bank Tributaries. 77 sq. mi.									
D Wroot (S. Level Pump Station)	Mr. F. S. Trafford	10	4	0	13	357	14·04	105	79
d Crowle (N. Level Pump. Station)	Mr. H. G. Trafford	5	2	6	13	375	14·78	..	86
Keadby	Great Central Rly. Co.	9	3	6	17	357	14·07	130	..
NOTTINGHAMSHIRE. (Area, 843 sq. mi.)									
1.—WITHAM. 10 sq. mi.									
2.—TRENT—Right Bank Tributaries. 218 sq. mi.									
Loughborough (Costock School)	S. C. Beecroft, Esq.	5	1	0	167	453	17·84	..	..
D Kingston (Midland Agric. Coll.)	J. H. Beale, Esq.	5	1	0	125	389	15·31	132	79
D Plumtree (Normanton-on-Wolds)	T. A. Hill, Esq.	8	2	0	170	441	17·38	150	98
D Nottingham (Wilford Hill Res.)	F. W. Davies, Esq.	8	0	10	296	461	18·15	151	99
3.—TRENT—Derwent. 2 sq. mi.									
4.—TRENT—Erewash. 42 sq. mi.									
D Nottingham (Strelley)	T. L. K. Edge, Esq.	8	1	0	386	544	21·42	169	111
D Nottingham (Strelley Hall)	T. L. K. Edge, Esq.	5	1	0	377	507	19·97	145	100
M Nottingham (Strelley Hall)	T. L. K. Edge, Esq.	5	1	0	377	523	20·58	..	..
D Bulwell (Watnall Reservoir)	F. W. Davies, Esq.	8	0	11	472	519	20·44	154	107
D Eastwood Waterworks	F. W. Davies, Esq.	8	1	2	244	503	19·80	139	97
D Eastwood Hall	Messrs. Barber Walker & Co.	5	1	0	218	679	26·74	147	107
D Eastwood (Moorgreen Res.)	Great Northern Rly Co.	5	6	0	301	560	22·05	155	115
D Annesley (Selston W.W.)	S. Maylan, Esq.	5	1	0	475	471	18·55	131	94

DIVISION VII.—NORTH MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1921	Days with ·01 in. or more.	Days with ·04 in. or more.		
		Diam.	Height Ground	above Sea Level.					
NOTTINGHAMSHIRE—(con.).		in.	ft.	in.	ft.	mm.	in.		
5.—TRENT—Left Bank Tributaries. 569 sq. mi.									
D Beeston (Chilwell Road)	W. D. Norbury, Esq.	5	1	0	110	439	17·29	141	97
D Lenton (Lenton Fields)	R. F. T. Granger, Esq.	8	1	0	132	439	17·29	156	101
D Nottingham (Trent Lane) . . (R.)	T. Wallis Gordon, Esq., C.E.	8	1	0	85	461	18·17	156	100
D Nottingham (The Castle)	T. Wallis Gordon, Esq., C.E.	8	1	0	192	461	18·14	156	100
Nottingham (The Castle)	T. Wallis Gordon, Esq., C.E.	8	76	0	268	432	17·02	139	91
D Nottingham (Burford Road)	A. B. Tinn, Esq.	5	1	0	170	482	18·99	140	99
D Nottingham (Stoke Bardolph)	T. Wallis Gordon, Esq., C.E.	8	1	0	66	455	17·92	124	..
D Nottingham (Mapperley Hill)	Dr. G. L. Brunton	8	1	0	400	474	18·65	130	96
Bagthorpe (Isolation Hospital)	P. Boobyer, Esq., M.D.	8	2	0	189	503	19·79	162	..
D Nottingham (Basford W.W.)	F. W. Davies, Esq.	8	1	0	169	461	18·17	135	98
D Burton Joyce Water Works	F. W. Davies, Esq.	8	0	9	65	501	19·74	143	110
Bulcote (Corporation Farm)	T. Wallis Gordon, Esq., C.E.	10	1	0	65	512	20·14	146	..
Lowdham (Chilwell Nurseries)	Mr. J. D. Pearson	5	1	7	90	427	16·79	..	..
D Bulwell (Bestwood W. W.)	F. W. Davies, Esq.	8	1	2	317	427	16·80	129	93
D Daybrook (Red Hill Reservoir)	F. W. Davies, Esq.	8	0	11	407	481	18·95	168	105
D Daybrook (Ramsdale Hill Res.)	F. W. Davies, Esq.	8	0	11	495	516	20·33	167	109
Bulwell Hall Park	T. Wallis Gordon, Esq., C.E.	8	1	0	252	483	19·03	142	..
d Hucknall (Forge Mills)	Messrs. J. & T. Walker, Ltd.	5	4	3	200	435	17·13	..	87
D Papplewick (Water Works)	F. W. Davies, Esq.	8	0	10	317	500	19·68	143	104
D Southwell (The Residence)	Vn. Acn. W. J. Conybeare	5	1	0	106	466	18·36	131	99
D Southwell (Elmfield)	Dr. H. Handford	5	1	0	133	452	17·81	144	97
M Southwell (Elmfield)	Dr. H. Handford	5	1	0	133	441	17·38	..	..
D Sutton-in-Ashfield (Rushley P.S.)	Messrs. G. & F. W. Hodson	5	1	0	462	507	19·98	135	97
D Sutton-in-Ashfield (Sew. Wks.)	F. J. Grierson, Esq.	5	1	0	453	557	21·93	144	110
D Mansfield (Rainworth W.W.)	J. Gibson, Esq., C.E.	5	1	0	360	484	19·06	135	100
D Mansfield (High Oakham)	P. J. Shacklock, Esq.	5	1	0	425	555	21·87	153	109
D Mansfield (West Bank)	W. Pickard, Esq.	8	1	0	405	546	21·51	151	99
d Mansfield (Debdale Hall)	Francis N. Ellis, Esq.	5	1	0	400	583	22·96	177	99
D Clipstone Water Works	J. Gibson, Esq., C.E.	5	1	0	225	436	17·15	124	89
D Ollerton (Boughton W.W.)	F. W. Davies, Esq.	8	0	7	141	422	16·60	137	90
D Ollerton (Thoresby Gardens)	Mr. A. Simmons	8	0	9	125	559	22·00	119	91
Elkescley Pumping Station	C. Horobin, Esq., C.E.	5	1	0	120	443	17·45	132	86
Workshop (Hardwick)	A. E. Elliott, Esq.	5	1	6	149	441	17·35	103	..
D Workshop (Carlton Road)	J. Edeson, Esq.	5	1	1	130	418	16·47	135	88
Workshop	Great Central Rly. Co.	9	3	6	127	433	17·04	124	..
D Workshop (Osberton Gardens)	Mr. E. Hill	5	3	6	70	473	18·61	133	95
Retford	Great Central Rly. Co.	9	3	6	52	380	14·96	123	..
D Retford (Grammar School)	W. P. McFerran, Esq.	8	1	2	53	415	16·34	139	98
D Retford (Morton Hall)	W. H. Mason, Esq.	5	1	0	140	461	18·13	122	83
D Retford (Sewage Disposal Works)	R. E. Wilson, Esq.	5	1	0	74	461	18·14	157	114
D Workshop (Wigthorpe Hill)	R. C. Ramsden, Esq.	5	1	0	100	444	17·47	124	82
D Workshop (Hodsock Priory)	Lt.-Col. H. Mellish, C.B.	8	1	0	56	420	16·53	138	86
M Workshop (Hodsock Priory)	Lt.-Col. H. Mellish, C.B.	5	1	0	56	415	16·33	..	..
D Workshop (Hodsock Priory) (R.)	Lt.-Col. H. Mellish, C.B.	11	1	6	56	425	16·73	133	84
D Scrooby	Mr. J. Mallender	5	1	0	44	389	15·33	137	85
D Bawtry Hall (The Gardens)	Mr. F. E. Hogbin	5	1	0	31	385	15·17	110	88
Stockwith	Great Central Rly. Co.	9	3	6	21	382	15·03	130	..
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	778	30·62	185	..
Chapel-en-le-Frith	Great Central Rly. Co.	9	3	6	965	713	28·05	160	..
D Whaley Bridge (Mosley Hall)	S. Arrowsmith, Esq.	5	1	0	760	884	34·82	189	135
D Glossop W. W. (Swineshaw)	Mr. J. Garner	12	3	0	733	874	34·40	181	139
Woodhead Station	Great Central Rly. Co.	9	3	6	878	1107	43·59	177	..
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	505	19·90	157	105
Stanton-by-Bridge W.W.	W. A. Harrison, Esq., C.E.	8	1	2	144	449	17·66	112	91

DIVISION VII.—NORTH MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.	1921				
DERBYSHIRE—(con.).		in.	ft.	in.	ft.	mm.	in.		
4.—TRENT—Dove. 156 sq. mi.									
d Snelston Hall	Mr. A. Bennett	5	1	0	490	614	24·16	141	120
d Ashbourne Water Works	E. Wright Esq.,	5	1	0	582	599	23·57	135	107
d Ashbourne (The Mansion)	R. E. Sadler, Esq.,	5	1	0	396	631	24·85	158	112
5.—TRENT—Left Bank Tributaries. 84 sq. mi.									
Findern (The Longlands)	Mrs. B. W. Spilsbury	5	0	9	186	470	18·51	138	98
d Etwall (Blakeley Lodge)	Mr. R. Giles	5	1	0	190	468	18·43	..	94
d Etwall (Sewage Farm)	Mr. B. Hydes	5	13	0	201	423	16·64	..	87
d Mickleover (County Asylum)	M. L. Rowan, Esq., M.D.	5	3	0	300	498	19·62	118	92
d Mickleover (Clyde House)	Mr. J. Campbell	5	2	0	280	541	21·32	151	101
Littleover (The Knoll)	W. Blews Robotham, Esq.	5	1	0	300	507	19·98	151	110
Littleover (Old Hall)	E. McInnes, Esq.	5	2	6	346	508	19·99	159	100
6.—TRENT—Derwent. 428 sq. mi.									
d Spondon (Derby Sewage Wks.)	C. A. Clews, Esq., C.E.	5	1	3	135	497	19·58	152	101
d Derby (Wild Street)	Messrs. J. Davis & Son	5	1	0	174	551	21·68	166	105
d Derby (Midland Railway)	J. Sayers, Esq.	5	1	5	156	467	18·40	133	92
d Derby (Royal Infirmary)	W. Banks, Esq.	5	1	0	195	531	20·90	..	99
d Derby (The Arboretum)	C. A. Clews, Esq., C.E.	8	1	0	196	482	18·97	139	92
Kirk Langley (Langley Hall)	G. W. Peach, Esq.	5	1	5	396	551	21·71	153	102
d Duffield (The Kirkstyles)	Messrs. J. Davis & Son	5	1	0	235	561	22·09	154	97
d Belper (Fernslope)	F. J. Jackson, Esq.	5	1	6	356	576	22·68	152	112
d Belper (Quarry Bank)	J. Hunter, Esq., C.E.	5	0	10	281	575	22·62	151	115
d Butterley Park	G. F. Wright, Esq.	5	1	2	413	544	21·42	..	..
Ambergate Reservoir	No. 61 S. B. Winser, Esq., C.E.	5	1	0	700	590	23·23	120	104
d Wirksworth (Manor House)	T. Atkinson, Esq.	5	1	0	501	680	26·78	159	124
d Whatstandwell (Meerbrk Sough)	Messrs. G. & F. W. Hodson.	5	1	0	246	697	27·44	172	124
Matlock Bath (Lower Tower)	Miss E. Chadwick	5	1	1	500	631	24·86	..	..
d Darley Hall	A. Clay, Esq.	5	1	0	400	598	23·53	166	110
d Clay Cross (Press Reservoirs)	Gilbert Frith, Esq., C.E.	8	1	0	810	672	26·45	126	108
Buxton (Hurdlow Top)	E. H. d'E. Darby, Esq.	8	2	3	1267	862	33·93	..	..
d Chatsworth Gardens	Mr. G. F. Marples	5	1	0	436	503	19·81	127	101
d Buxton (Portobello Bar)	F. Langley, Esq., C.E.	8	1	0	1600	1219	48·00	225	151
d Buxton (Stanley Moor)	F. Langley, Esq., C.E.	8	1	0	1340	1154	45·44	216	150
d Buxton (Burbage Edge)	F. Langley, Esq., C.E.	8	1	0	1400	1160	45·66	222	150
d Buxton (Devonshire Hospital)	Messrs. W. Pilkington & Son	5	1	0	988	939	36·98	180	142
d Holmesfield (Barbrook Res.)	Gilbert Frith Esq., C.E.	8	1	0	1080	558	21·98	145	111
w Froggatt Edge (Stoke Flat Filters)	J. Gratton Bown, Esq.	5	1	0	960	665	26·17	..	..
d Bamford (Engineer's Office)	No. 60 S. B. Winser, Esq., C.E.	8	2	0	510	754	29·68	224	129
Bamford Filters	No. 70 S. B. Winser, Esq., C.E.	8	1	0	656	728	28·65	196	129
d Hope (Killhill Bridge)	No. 56 S. B. Winser, Esq., C.E.	5	1	0	500	799	31·46	163	130
Bamford (Yorkshire Br. Weir)	No. 59 S. B. Winser, Esq., C.E.	5	1	0	540	760	29·91	..	..
Derwent Vicarage	No. 67 S. B. Winser, Esq., C.E.	8	1	0	675	959	37·76	189	143
Derwent (Lockerbrook Plant.)	No. 68 S. B. Winser, Esq., C.E.	5	1	0	755	1054	41·50	..	..
Derwent Dam	No. 26 S. B. Winser, Esq., C.E.	8	1	0	790	957	37·68	198	134
Woodland Dale (Woodlnds, S)	No. 48 S. B. Winser, Esq., C.E.	5	1	0	1044	748	29·45	..	..
Woodland Dale (Woodlnds, N)	No. 47 S. B. Winser, Esq., C.E.	5	1	0	1063	948	37·33	..	..
Hayfield (Ashop Head)	No. 43 S. B. Winser, Esq., C.E.	5	1	0	1650	1021	40·20	..	..
Derwent Dale (Shire Owlers)	No. 69 S. B. Winser, Esq., C.E.	5	1	0	825	920	36·21	..	..
Derwent Dale (Birchinlee)	No. 23 S. B. Winser, Esq., C.E.	8	1	0	870	1137	44·75	199	137
Westend Bridge	No. 66 S. B. Winser, Esq., C.E.	5	1	0	878	1088	42·83	..	..
Lady Clough Moor	No. 41 S. B. Winser, Esq., C.E.	5	1	0	1720	1047	41·20	..	..
Coldharbour Moor (Summit)	No. 39 S. B. Winser, Esq., C.E.	5	1	0	1670	1095	43·10	..	..
Derwent Dale (Howden Dam)	No. 17 S. B. Winser, Esq., C.E.	8	1	0	829	1048	41·26	199	137
Derwent Dale (Ridge Farm)	No. 13 S. B. Winser, Esq., C.E.	8	1	0	1175	866	34·11	..	..
Alport Moor (Glethering Cl.)	No. 40 S. B. Winser, Esq., C.E.	5	1	0	1640	1049	41·30	..	..
Westend Moor (Blacklow Cote)	No. 15 S. B. Winser, Esq., C.E.	5	1	0	970	1132	44·56	..	..
Westend Moor	No. 10 S. B. Winser, Esq., C.E.	5	1	0	1560	1026	40·40	..	..
Alport Moor	No. 38 S. B. Winser, Esq., C.E.	5	1	0	1790	1082	42·60	..	..
Broadhead Clough	No. 63 S. B. Winser, Esq., C.E.	5	1	0	1005	1103	43·41	..	..
Derwent Dale (Slippery Stones)	No. 62 S. B. Winser, Esq., C.E.	5	1	0	908	985	38·77	..	..
Ridgewalk Moor	No. 9 S. B. Winser, Esq., C.E.	5	1	0	1650	1053	41·44	..	..

DIVISION VII.—NORTH MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1921		Days with ·01 in. or more.	Days with ·04 in. or more.	
		Diam.	Height Ground	above Sea Level.					
DERBYSHIRE—(con.).		in.	ft.	in.	ft.	mm.	in.		
7.—TRENT—Erewash. 50 sq. mi.									
d Trowell (Ilkeston Sew. Wks.)	(R) H. J. Kilford, Esq., C.E.	6	1	11	134	421	16·56	129	84
d Codnor (Cross Hill)	A. F. Pine, Esq.	5	1	0	372	551	21·69	147	117
d Codnor Park	Midland Railway Co.	5	1	0	243	561	22·07	182	105
8.—OUSE—Don. 148 sq. mi.									
d Grassmoor Colliery	Mr. J. Norman	5	19	10	370	404	15·91	..	..
Chesterfield (Central Station)	Great Central Rly. Co.	9	3	6	250	491	19·31	122	..
d Chesterfield (Sewage Works)	Mr. W. Tomlinson	5	2	0	222	459	18·06	127	86
d Chesterfield (Linacre Res.)	Chesterfield Water Board	8	1	0	460	584	23·00	148	115
d Chesterfield (Linacre Res.)	Chesterfield Water Board	5	1	0	490	561	22·09	148	115
d Chesterfield (Tapton Grove)	Mr. W. R. Bloxham	5	4	3	400	473	18·61	133	94
d Totley Hall	W. A. Milner, Esq.	5	1	0	700	699	27·52	163	127
d Eckington (Mosbrough C.E. Sch.)	W. H. Holmes, Esq.	5	1	0	330	504	19·83	132	92
Killamarsh (Norwood)	Great Central Rly. Co.	9	3	6	226	456	17·94	139	..

DIVISION VIII.—NORTH-WESTERN COUNTIES.

CHESHIRE. (Area, 1027 sq. mi.)

1.—MERSEY, UPPER. 269 sq. mi.							
d Macclesfield (West Park) Mr. S. H. Moss		5	1 0	501	689 27·14	168	133
Macclesfield Great Central Rly. Co.		9	3 6	539	559 22·00	171	..
d Macclesfield (Swanscoe Park) T. C. Horsfall, Esq.		5	1 0	676	735 28·94	194	128
Rainow (The Clough) Miss Anna Neave		5	1 0	815	667 26·26	..	..
d Bollington Cross (Turner Heath) Mrs. Murton		5	1 8	500	646 25·44	140	114
d Wilmslow (Parkside) J. H. Neave, Esq.		8	1 0	255	639 25·16	183	124
d Wilmslow (Dean Row) J. H. Cooke, Esq.		5	1 0	292	692 27·24	174	130
d Kettleshulme (Glebe House) A. Y. Barker, Esq.		5	1 6	850	791 31·16	173	135
d Whaley Bridge Great Central Rly. Co.		9	3 6	602	831 32·72	182	..
d Poynton (Waterloo) C. F. Butterworth, Esq.		5	1 0	397	727 28·63	172	129
d Disley (Lyme Park) T. Molyneux, Esq., C.E.		5	1 0	674	683 26·89	170	144
d Bramhall (Bramhall Lane) S. O'Dwyer, Esq.		5	1 0	256	722 28·42	131	114
d Runcorn (Weston Point) Col. J. A. Saner, C.E.		8	1 4	17	566 22·28	163	117
d Thelwall (The Clough) E. W. Reynolds, Esq.		5	1 0	95	637 25·08	172	123
Altrincham (Hale) F. C. Lamb, Esq., Jnr.		5	0 8	122	600 23·61	..	..
Altrincham (Norman's Place) Miss G. A. Griffiths		5	8 0	150	722 28·41	..	..
Altrincham (Barrington House) C. E. Newton, Esq., C.E.		8	2 6	103	670 26·39	..	..
Cheadle (Adswold) R. W. Wright, Esq.		5	0 6	186	659 25·93	..	..
d Northenden (Wythenshawe Hall) T. E. Tatton, Esq.		5	1 0	114	640 25·21	169	121
m Northenden (Wythenshawe Hall) T. E. Tatton, Esq.		8	1 6	114	631 24·83	..	..
Marple Top Lock Great Central Rly. Co.		9	3 6	523	687 27·04	153	..
d Carrington Vicarage Rev. J. S. Addison		5	2 0	55	622 24·49	161	118
Godley Reservoir L. Holme Lewis, Esq., C.E.		12	2 0	500	732 28·82	..	..
Newton Great Central Rly. Co.		9	3 6	396	692 27·26	161	..
Mottram Station Great Central Rly. Co.		9	3 6	452	759 29·87	157	..
d Broadbottom (Harewood Lodge) Col. W. Sidebottom		5	1 0	440	758 29·84	155	133
d Dukinfield (Higher Reservoir) G. H. Raddin, Esq., C.E.		8	1 6	495	648 25·50	176	132
d Dukinfield (Lower Reservoir) G. H. Raddin, Esq., C.E.		5	1 0	435	722 28·44	176	137
Arnfield Reservoir L. Holme Lewis, Esq., C.E.		12	2 0	550	836 32·92	..	..
Rhodes Wood Reservoir L. Holme Lewis, Esq., C.E.		12	2 0	520	892 35·12	..	..
Torrside Reservoir L. Holme Lewis, Esq., C.E.		12	2 0	680	1027 40·45	..	..
d Stalybridge (Market Ground Yd.) G. H. Raddin, Esq., C.E.		5	1 0	373	792 31·19	167	130
d Stalybridge (Brushes Filter Ho.) G. H. Raddin, Esq., C.E.		8	1 6	616	853 33·58	174	142
d Stalybridge (Brushes Filter Ho.) G. H. Raddin, Esq., C.E.		6	3 0	615	823 32·38	174	141
d Swineshaw Moor (Lees Hill) G. H. Raddin, Esq., C.E.		5	1 0	1108	850 33·45	..	..
Woodhead Reservoir L. Holme Lewis, Esq., C.E.		12	2 0	660	1130 44·48	..	..

DIVISION VIII.—NORTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
		in.	ft.	in.	ft.	mm.	in.		
CHESHIRE—(con.).									
2.—MERSEY—Weaver. 489 sq. mi.									
D Nantwich (Dorfold Hall)	Col. J. A. Saner, C.E.	8	1	0	190	540	21·27	175	119
D Nantwich (Reaseheath Hall)	Col. J. A. Saner, C.E.	8	1	0	130	510	20·08	179	119
D Crewe (Queen's Park)	W. H. Williams, Esq.	12	4	0	186	535	21·08	139	100
D Crewe (Isolation Hospital)	L. St. G. Wilkinson, Esq., C.E.	5	1	0	172	498	19·61	150	112
D Sandbach (Malkins Bank)	Messrs. Brunner, Mond & Co.	5	3	8	138	490	19·30	156	102
D Congleton (Sewage Works)	J. H. Walters, Esq., C.E.	5	1	0	248	625	24·60	164	126
D Congleton (Buglawton Vicarage)	Col. J. A. Saner, C.E.	8	5	0	347	602	23·71	196	122
Bosley Reservoir	Great Central Rly. Co.	9	3	6	590	609	23·96	149	..
Bosley Minns	Great Central Rly. Co.	9	3	6	1210	476	18·75?	170	..
D Tarporley (Tirley Garth Gdns.)	Mr. J. B. Allan	5	3	6	450	541	21·31	170	117
D Middlewich	Messrs. Brunner, Mond & Co.	5	3	10	138	486	19·14	141	103
Middlewich (Bostock Hall)	Capt. W. H. France-Hayhurst	5	2	0	157	537	21·15	..	108
D Delamere Forest (Kingswood)	Office of Woods . . . . .	..	..	..	355	558	21·99	138	111
D Chelford (Astle Hall)	Sir G. Dixon, Bart.	5	1	0	250	569	22·40	150	120
M Chelford (Astle Hall)	Sir G. Dixon, Bart.	8	1	0	250	533	20·97	..	..
D Northwich	Great Central Rly. Co.	9	3	6	76	457	18·00	139	..
D Northwich (Hunts Lock)	Col. J. A. Saner, C.E.	8	1	0	47	548	21·57	187	115
D Northwich (Winnington)	Messrs. Brunner, Mond & Co.	5	1	0	64	530	20·87	167	111
D Northwich (Lostock Gralam)	Messrs. Brunner, Mond & Co.	5	3	6	75	547	21·55	168	110
3.—MERSEY, LOWER & C. 142 sq. mi.									
D Ince Hall	Mrs. Park-Yates	5	1	0	95	621	24·44	175	125
D Hooton Water Works	A. J. Robinson, Esq.	5	1	0	97	597	23·52	170	122
D Eastham (Mill Hey)	Roger P. Sing, Esq.	5	1	7	125	690	27·17	170	133
D Eastham House	Sir J. Herbert Vernon, Bart.	5	1	0	100	675	26·57	178	142
D Wirral W. W. (Prenton)	A. J. Robinson, Esq.	5	1	0	91	552	21·72	146	107
D Rock Ferry (Elmhurst)	Miss Shepherd	8	6	0	100	665	26·19	154	117
D Birkenhead (Bidston Observ'y.)	W. E. Plummer, Esq.	8	1	0	189	571	22·47	165	117
D Hoylake (District Council Office)	R. W. Fraser, Esq.	5	1	0	29	633	24·92	149	120
D New Brighton (Marine Park)	Dr. T. W. N. Barlow	5	1	0	35	652	25·67	176	125
4.—DEE. 127 sq. mi.									
D Malpas (Chorlton Hall)	E. Radclyffe Crump, Esq.	5	1	0	210	471	18·53	157	110
D Eaton Hall Gardens	Mr. N. F. Barnes	5	3	6	72	456	17·94	146	105
D Eccleston	E. Wells, Esq.	5	1	1	94	483	19·03	150	109
D Rowton (Holly Bank)	R. J. Salmon, Esq.	5	1	5	123	525	20·65	144	102
D Chester (Abbot's Park)	J. H. Howell, Esq.	5	1	1	63	490	19·28	162	109
D Chester (Boughton)	Rev. Canon T. Urmsion	5	1	0	58	470	18·52	145	101
D Chester (Sewage Works)	F. W. Davis, Esq.	5	1	0	34	429	16·87	144	105
D Chester (Water Works)	C. Wilfrid Bennett, Esq.	5	0	10	85	486	19·14	167	97
D Chester (Water Works)	C. Wilfrid Bennett, Esq.	8	6	0	89	497	19·55	169	103
D Chester (Northgate Station)	Great Central Rly. Co.	9	3	6	84	441	17·35	..	..
D Capenhurst Hall	R. T. Richardson, Esq.	5	5	10	130	611	24·17	172	128
D Neston (Vine House)	H. F. Russell, Esq.	5	1	0	111	508	19·99	163	111
D Heswall (Gayton Cottage)	J. A. Dockray, Esq., C.E.	5	1	0	29	534	21·03	159	110
D West Kirby (Hilbre House)	Egerton Macdonald, Esq.	5	0	9	25	593	23·36	..	..
D West Kirby (Princes Av.)	Miss G. S. Kirkby	5	1	0	80	588	23·16	157	114
D West Kirby (The Abbey Manor)	Cedric R. Boulton, Esq.	5	0	10	200	564	22·19	134	109
D West Kirby (St Andrew's Vic.)	Rev. E. F. Robson	5	9	0	50	552	21·75	141	105
SOUTH LANCASHIRE. (Area, 687 sq. mi.)									
1.—ALT & C. 103 sq. mi.									
D Great Crosby (Carnegie Library)	J. Appleby, Esq.	5	1	0	53	649	25·54	161	122
D Blundellsands (Myra)	H. Montgomery, Esq.	5	1	0	35	663	26·11	179	124
D Ormskirk (Bickerstaffe P. Stn.)	G. H. Abbott, Esq.	5	1	2	128	709	27·90	195	..
D Ormskirk (Springfield P. Stn.)	G. H. Abbott, Esq.	5	0	11	70	694	27·33	192	..
D Downholland (Barton Moss)	J. Baxendell, Esq.	5	1	0	15	678	26·70	..	..
2.—MERSEY, LOWER. 240 sq. mi.									
D Garston	J. A. Brodie, Esq., C.E.	10	1	10	84	757	29·81	182	141
D Garston (Grassendale Park)	Miss E. C. Abraham	5	1	0	35	636	25·03	159	123

DIVISION VIII.—NORTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.	1921				
SOUTH LANCASHIRE—(con.).		in.	ft.	in.	ft.	mm.	in.		
2.—MERSEY, LOWER—(con.).									
D Aigburth (Holmfild)	Miss Maxwell	5	1	0	100	655	25·78	186	132
D Aigburth (Beech Lawn)	T. H. Edwards, Esq.	8	1	0	150	619	24·35	175	125
D Woolton (Roseleigh Gardens)	Mr. J. Stoney	8	1	0	184	721	28·38	177	144
D Warrington (Howley Yard)	A. M. Ker, Esq.	10	0	9	26	475	18·70	143	108
Warrington (Central Station)	Great Central Rly. Co.	9	3	6	59	593	23·33	150	..
Liverpool (Monument Place)	J. A. Brodie, Esq., C.E.	5	1	3	126	648	25·51	166	121
D Liverpool (Monument Place) (a)	J. A. Brodie, Esq., C.E.	10	4	6	129	627	24·67	166	121
Liverpool (Smithdown Road)	J. A. Brodie, Esq., C.E.	10	0	9	135	681	26·79	186	129
Liverpool (Rathbone Road)	J. A. Brodie, Esq., C.E.	10	1	0	199	757	29·82	167	133
Liverpool (Lark Lane)	J. A. Brodie, Esq., C.E.	10	10	8	101	716	28·20	186	134
Liverpool (Newsham Park)	J. A. Brodie, Esq., C.E.	10	1	0	140	759	29·90	179	140
Liverpool (Huskinson Station)	Great Central Rly. Co.	9	3	6	42	638	25·13	177	..
Liverpool (Breeze Lane)	J. A. Brodie, Esq., C.E.	5	0	9	135	749	29·47	186	134
D St. Helen's (Eccleston Hill)	A. W. Bradley, Esq.	8	3	0	268	666	26·21	175	119
D St. Helen's (Victoria Park)	R. Macdonald, Esq.	8	1	5	160	707	27·83	163	121
D Earlestown (Newton Cemetery)	T. E. Clough, Esq.	5	1	0	75	653	25·73	..	108
D Leigh (Leesrigg)	Maj. T. Hunter, V.D., C.E.	5	1	0	71	633	24·93	169	124
3.—MERSEY—Irwell. 299 sq. mi.									
D Manchester (Whalley Range)	F. Edwards, Esq.	5	1	0	90	684	26·93	168	134
D Urmston (Sew. Wks., Davyhulme)	G. F. Walter, Esq.	8	2	2	72	694	27·32	..	..
D Manchester (Godlee Observ'y)	W. C. Jenkins, Esq.	8	1	6	140	653	25·71	175	121
Manchester (Piccadilly)	Great Central Rly. Co.	9	40	0	194	653	25·70	176	..
Manchester (Fairfield)	Great Central Rly. Co.	9	6	0	312	751	29·56	181	..
D Manchester (Oldham Road)	Dr. J. Niven	5	1	0	191	726	28·59	172	137
D Manchester (Whitworth Park)	Manchester University	8	1	5	126	652	25·70	168	128
D Ashton-und.-Lyne (Knott's Res.)	G. H. Raddin, Esq., C.E.	8	1	0	605	865	34·05	174	142
D Prestwich Sewage Works	M. A. Piercy, Esq., C.E.	8	1	0	136	628	24·72	155	119
Prestwich Reservoir	L. Holme Lewis, Esq., C.E.	12	2	0	357	758	29·86	..	..
D Prestwich (Heaton Park)	Manchester Corporation	8	1	0	312	848	33·38	171	140
D Oldham Gas Works	Ernest Parry, Esq., C.E.	5	3	8	621	893	35·17	187	141
Oldham (Honeywell Lane)	Great Central Rly. Co.	8	3	6	553	891	35·08	184	..
Oldham (Brushes Clough) old g.	C. J. Batley, Esq., C.E.	5	4	0	930	1075	42·32	190	151
Oldham (Brushes Clough) new g.	C. J. Batley, Esq., C.E.	5	5	0	955	1067	42·00	189	150
D Bolton (Queen's Park)	T. Midgley, Esq.	5	1	0	342	991	39·02	196	148
D Bolton (Heaton Reservoir)	J. K. Swales, Esq., C.E.	5	1	0	500	1033	40·65	208	152
D Bolton (Bloomfield, Heaton)	Mrs. F. Taylor, J.P.	5	1	0	530	936	36·84	202	150
D Bolton (Smithills Hall)	Col. R. H. Ainsworth	8	1	2	510	1087	42·80	..	142
Bolton (Smithills Moor)	Col. R. H. Ainsworth	8	1	2	1375	1179	46·42	..	..
D Bury (Parsons Lane)	R. B. Rigby, Esq.	8	9	8	316	987	38·85	187	147
D New Hey (Sewage Works)	Mr. J. B. Ogden	5	1	0	514	1041	40·98	170	132
Milnrow (Butterworth Hall)	C. J. Batley, Esq., C.E.	5	1	0	512	1063	41·86	187	149
Milnrow (Piethorne, Kitcliffe)	C. J. Batley, Esq., C.E.	5	4	6	769	996	39·23	184	142
D Milnrow (Piethorne, Coldgreave)	C. J. Batley, Esq., C.E.	5	4	6	894	979	38·54	184	146
Milnrow (Piethorne, Norman Hill)	C. J. Batley, Esq., C.E.	5	4	6	1076	951	37·45	184	144
Milnrow (Piethorne, Rooden Res.)	C. J. Batley, Esq., C.E.	5	4	6	1131	889	34·98	184	142
D Rochdale (Roch Mills Sew. Wks.)	H. Yarwood, Esq., C.E.	8	1	1	363	1061	41·79	200	154
D Rochdale (Broadfield Pk. Obsy.)	Dr. A. G. Anderson	8	0	6	472	1079	42·46	193	149
D Rochdale (Fieldhead Yard)	H. Yarwood, Esq., C.E.	8	12	0	484	1039	40·91	172	137
D Rochdale (Ashworth Moor Res.)	J. S. Diggle, Esq., C.E.	5	1	2	956	1019	40·13	178	144
D Bury (Gin Hall)	No. 1 J. Woodhead Smith, Esq. C.E.	8	1	0	475	1043	41·06	182	150
D Bury (Gin Hall)	No. 2 J. Woodhead Smith, Esq. C.E.	8	1	0	475	1087	42·79	182	151
D Bolton (Belmont Reservoir)	J. K. Swales, Esq., C.E.	5	1	0	800	1253	49·35	207	155
D Rochdale (Hamer Pasture Res.)	H. A. Braddock, Esq.	5	1	0	760	1196	47·08	185	147
D Rochdale (Naden Filters)	J. S. Diggle, Esq., C.E.	5	1	8	761	1112	43·77	170	144
M Norden (Higher Red Lumb)	J. S. Diggle, Esq., C.E.	5	1	2	1125	1072	42·21	..	..
W Norden (Far Knowl Farm)	J. S. Diggle, Esq., C.E.	5	0	10	..	1218	47·97	..	..
W Rochdale (Naden Dean) old g.	J. S. Diggle, Esq., C.E.	5	1	4	948	943	37·12	..	..
W Rochdale (Naden Dean) new g.	J. S. Diggle, Esq., C.E.	5	1	4	948	1040	40·93	..	..
M Ramsbottom (Killgate Brook)	J. S. Diggle, Esq., C.E.	5	1	0	977	1111	43·70	..	..
M Ramsbottom (Cheesden Barn)	J. S. Diggle, Esq., C.E.	5	1	0	997	1089	42·89	..	..

DIVISION VIII.—NORTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain. 1921	Days with ·01 in. or more.	Days with ·04 in. or more.	
		Diam.	Height Ground	above Sea Level					
SOUTH LANCASHIRE—(con.).		in.	ft.	in.	ft.	mm.	in.		
3.—MERSEY—Irwell—(con.).									
d Edenfield (Scout Moor Res.) No. 1	J. Woodhead Smith, Esq., C.E.	8	1	0	1275	859	33·83	191	136
d Edenfield (Scout Moor Res.) No. 2	J. Woodhead Smith, Esq., C.E.	8	1	0	1275	928	36·54	191	139
d Waterfoot (Cragg Holes Reservoir)	W. H. Newton, Esq., C.E.	5	1	0	1425	1164	45·82	199	150
d Waterfoot (Cowpe Reservoir)	W. H. Newton, Esq., C.E.	5	1	0	1026	1199	47·19	200	156
d Rochdale (Spring Mill Whitworth)	H. A. Braddock, Esq.	5	1	7	720	1304	51·34	177	159
d Rochdale (Cowm, Whitworth)	H. A. Braddock, Esq.	5	1	7	762	1269	49·96	172	153
d Entwistle Reservoir	J. K. Swales, Esq., C.E.	5	1	0	700	1168	45·97	191	162
Littleborough (Hollingworth L.)	Rochdale Canal Co.*	8	1	0	600	831	32·72	..	..
Littleborough (Windy Bank)	Rochdale Canal Co.	8	2	0	605	906	35·66	..	..
Littleborough (Blackstone Edge)	Rochdale Canal Co.	8	2	0	1225	818	32·20	..	..
Littleborough (Canal Summit)	Rochdale Canal Co.	8	2	0	700	839	33·05	..	..
Littleborough (Chelburn)	Rochdale Canal Co.	8	2	0	800	1011	39·80	..	..
Littleborough (Byron Edge Drain)	Rochdale Canal Co.	8	1	5	1250	942	37·07	..	..
Littleborough (Lenches)	Rochdale Canal Co.	8	2	0	806	937	36·91	..	..
Walsden (Calf Lee)	Rochdale Canal Co.	10	1	6	960	928	36·55	..	..
Walsden (Warland Drain)	Rochdale Canal Co.	8	1	5	1250	884	34·81	..	..
Walsden (Whiteholme Drain)	Rochdale Canal Co.	8	1	5	1250	1027	40·43	..	..
Walsden (Rishworth Drain)	Rochdale Canal Co.	8	1	5	1300	848	33·37	..	..
d Haslingden (Holden Wood) No. 1	J. Woodhead Smith, Esq., C.E.	8	1	0	670	1307	51·45	191	166
d Haslingden (Holden Wood) No. 2	J. Woodhead Smith, Esq., C.E.	8	1	0	670	1361	53·60	191	167
d Haslingden (Calf Hey) No. 1	J. Woodhead Smith, Esq., C.E.	8	1	0	800	1268	49·91	191	163
d Haslingden (Calf Hey) No. 2	J. Woodhead Smith, Esq., C.E.	8	1	0	800	1163	45·78	191	163
Rawtenstall Cemetery	J. Johnson, Esq.	8	1	0	572	1138	44·82	142	141
d Rawtenstall (Cloughbottom) No. 1	J. Woodhead Smith, Esq., C.E.	8	1	0	1025	1179	46·43	186	165
d Rawtenstall (Cloughbottom) No. 2	J. Woodhead Smith, Esq., C.E.	8	1	0	1025	1111	43·72	186	161
d Rawtenstall (Hapton Res.) No. 1	J. Woodhead Smith, Esq., C.E.	8	1	0	930	1168	45·97	200	170
d Rawtenstall (Hapton Res.) No. 2	J. Woodhead Smith, Esq., C.E.	8	1	0	930	1245	49·02	200	170
4.—MERSEY, UPPER. 45 sq. mi.									
d Didsbury (Linden Road)	L. G. King, Esq.	8	1	6	110	664	26·15	166	131
d Stockport (Heaton Mersey)	W. B. Leigh, Esq.	5	1	0	218	629	24·77	173	123
d Chorlton-cum-Hardy Sew. Works	G. F. Walter, Esq.	8	4	0	78	657	25·85	183	129
d Chorlton-cum-Hardy	J. H. Casartelli, Esq.	5	2	0	75	641	25·25	154	123
d Fallowfield (Platt Field Park)	Manchester Corporation	8	3	3	124	629	24·77	174	130
Denton Reservoir	L. Holme Lewis, Esq., C.E.	12	2	0	324	630	24·81	..	..
Gorton Reservoir	L. Holme Lewis, Esq., C.E.	12	2	0	263	652	25·66	..	..
d Ashton-u-Lyne (Henrietta St Yd)	G. H. Raddin, Esq., C.E.	7	1	0	394	802	31·57	181	139
d Ashton-u-Lyne (Waterhouses)	Great Central Ry. Co.	9	3	6	345	677	26·64	173	..
d Lower Swineshaw Reservoir	G. H. Raddin, Esq., C.E.	8	1	6	886	923	36·34	185	151
d Swineshaw Moor	G. H. Raddin, Esq., C.E.	5	1	0	1340	1013	39·90	..	..
d Mossley (Manor House Yard)	G. H. Raddin, Esq., C.E.	5	1	0	636	951	37·44	177	140
CENTRAL LANCASHIRE. (Area, 536 sq. mi.)									
1.—RIBBLE & C. 326 sq. mi.									
Rivington (Higher Hill)	Col. J. R. Davidson, C.E.	8	1	4	733	905	35·63	..	..
d Haslingden (Mitchells Ho. Res.)	A. J. Harrison, Esq.	5	1	6	990	1097	43·21	..	153
d Darwen (Sunnyhurst Hey Res.)	E. Marsden, Esq., C.E.	8	1	8	915	1141	44·92	198	156
d Darwen (Earnsdale Reservoir)	E. Marsden, Esq., C.E.	8	1	8	705	1143	44·99	198	156
d Darwen (Bold Venture Park)	Dr. F. G. Haworth	8	1	1	722	1205	47·44	195	151
Darwen (Hoddlesden) No. 1	A. T. Gooseman, Esq., C.E.	8	1	6	680	978	38·50	187	146
Darwen (Hoddlesden) No. 2	A. T. Gooseman, Esq., C.E.	8	1	0	675	974	38·34	187	148
Darwen (Daisy Green) No. 1	A. T. Gooseman, Esq., C.E.	8	1	6	969	1213	47·74	187	156
Darwen (Daisy Green) No. 2	A. T. Gooseman, Esq., C.E.	8	1	0	969	1141	44·91	187	155
Darwen (Pickup Bank) No. 1	A. T. Gooseman, Esq., C.E.	8	1	6	720	929	36·59	187	146
Darwen (Pickup Bank) No. 2	A. T. Gooseman, Esq., C.E.	8	1	0	720	933	36·73	187	146
d Brindle (Whiteholme)	Victor H. Gatty, Esq.	5	1	8	315	907	35·70	161	137
Blackburn (Guide Reservoir)	A. T. Gooseman, Esq., C.E.	8	1	6	610	994	39·15	178	147
Blackburn (Witton)	A. T. Gooseman, Esq., C.E.	8	1	6	315	1033	40·67	176	152
Blackburn Fever Hospital	A. T. Gooseman, Esq., C.E.	6	1	6	570	972	38·26	198	151
Blackburn (Pumping Station)	A. T. Gooseman, Esq., C.E.	8	1	6	600	1007	39·66	187	149

* Returns supplied by W. A. M'Grath, Esq., M.B.E.

DIVISION VIII.—NORTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain. 1921	Days with ·01 in. or more.	Days with ·04 in. or more.	
		Diam.	Height Ground	above Sea Level.					
CENTRAL LANCASHIRE—(con.).		in.	ft.	in.	ft.	mm.	in.		
1.—RIBBLE & C.—(con.).									
Accrington (Milnshaw Park) .. Mr. J. W. Terry		5	1	6	464	919	36·18	165	136
D Hutton (Lancs.C.C.Hortic.Stat.) J. Gillett, Esq.....		5	1	0	82	818	32·22	175	136
Higher Walton (Bannister Hall) A. A. Gatty, Esq.		5	0	7	75	898	35·34	..	..
D Preston (Corporation Offices) .. J. H. Smethurst, Esq., C.E. 8		18	7	148		912	35·91	196	140
Samlesbury Sewage Works A. T. Gooseman, Esq., C.E. 8		1	6	240		936	36·84	183	147
Rishton Reservoir	Leeds & Liverpool Canal Co.	10	2	0	467	880	34·64	..	..
Causeway Side (Burnley W.W.) S. Rawlinson, Esq.		8	2	0	1116	1060	41·73	..	..
Sheddin (Burnley W. W.) S. Rawlinson, Esq.		8	2	0	960	933	36·75	..	..
CantCloughS.Side(BurnleyWW) S. Rawlinson, Esq.		8	2	0	900	960	37·78	207	144
CantCloughN.Side(BurnleyWW) S. Rawlinson, Esq.		8	2	0	900	871	34·29	208	144
RamsCloughHead(BurnleyWW) S. Rawlinson, Esq.		8	2	0	1260	996	39·23	..	..
D Huncoat (Burnley Road Res.) A. J. Harrison, Esq.		9	1	6	620	1167	45·95	183	133
D Wilpshire (Brooklyn Road) ... H. W. Apperley, Esq.		5	1	0	408	1002	39·45	193	132
Great Harwood (Parsonage Res.) A. T. Gooseman, Esq., C.E. 8		1	0	631		1042	41·01	184	175
D Great Harwood (Dean Clough) A. J. Harrison, Esq.		12	1	6	540	1478	58·20	207	173
D Burnley (Queen's Park) Dr. T. Holt		8	1	0	459	949	37·34	201	138
Burnley (Yorkshire Street) S. Rawlinson, Esq.		8	30	0	420	799	31·46	195	126
Burnley (Swinden) Upper g. ... S. Rawlinson, Esq.		8	12	0	820	1037	40·84	215	149
Burnley (Swinden) Lower g. ... S. Rawlinson, Esq.		8	2	0	745	1057	41·60	217	160
Burnley (Extwistle Moor Top) S. Rawlinson, Esq.		8	2	0	1310	1096	43·14	..	..
D Burnley (Gawthorpe Hall) Lord Shuttleworth		8	0	9	316	960	37·78	171	151
D Burnley (Huntroyde) N. G. Howsin, Esq.		5	1	0	423	1052	41·43	190	152
Alston Reservoir	J. H. Smethurst, Esq., C.E. 8	1	2	320		975	38·37	..	..
D Nelson (Coldwell Res.) No. 1 Smith Whitehead, Esq., C.E. 5		1	0	950		908	35·74	189	146
D Nelson (Coldwell Res.) No. 2 Smith Whitehead, Esq., C.E. 5		1	0	960		1088	42·83	200	154
D Nelson (Victoria Park) Smith Whitehead, Esq., C.E. 5		1	0	375		1103	43·42	191	152
D Stonyhurst College	Rev. A. L. Cortie, S.J.	8	1	10	377	1235	48·62	197	159
Stonyhurst College	Rev. A. L. Cortie, S.J.	11	1	10	377	1242	48·91	197	162
M Stonyhurst College... Check g. Rev. A. L. Cortie, S.J.		11	1	0	376	1225	48·23	..	..
M Knowle Green (Preston W. W.) J. H. Smethurst, Esq., C.E. 8		1	2	400		1064	41·89	..	..
M Loud Scales (Preston W. W.) J. H. Smethurst, Esq., C.E. 8		1	2	400		1166	45·91	..	..
M Spade Mill (Preston W. W.) ... J. H. Smethurst, Esq., C.E. 8		1	2	400		1041	41·00	..	..
M Jeffrey Hill (Preston W. W.) ... J. H. Smethurst, Esq., C.E. 8		1	2	900		1141	44·93	..	..
D Sabden (Churn Clough Res.) ... R. Ratcliffe, Esq., C.E.		5	1	0	790	1146	45·12	210	161
W Sabden (Stainscomb) R. Ratcliffe, Esq., C.E.		5	1	0	1025	1081	42·54	..	..
W Sabden (Craggs Dole) R. Ratcliffe, Esq., C.E.		8	1	0	1050	1172	46·14	..	..
W Newchurch (Cock Dole) R. Ratcliffe, Esq., C.E.		5	1	0	1090	1197	47·14	..	..
D Barley (Ogden Reservoir) ... Smith Whitehead, Esq., C.E. 8		2	0	950		1244	48·97	196	154
D Colne (The Rectory) Rev. Dr. S. P. Duval		5	1	4	538	1130	44·48	195	147
D Colne (Cemetery Grounds) ... (R) T. H. Hartley, Esq.		8	2	11	619	880	34·66	164	132
Barrowford Reservoir	Leeds & Liverpool Canal Co.	8	1	0	473	1028	40·47	..	..
Foulridge (Upper Reservoir) ... Leeds & Liverpool Canal Co.		8	1	0	582	1010	39·75	..	..
Clitheroe (Downham Hall) ... R. C. Assheton, Esq.		10	1	6	464	1064	41·89	..	..
2.—RIBBLE—Douglas. 156 sq. mi.									
D Wigan WW (Billinge Higher End) R. B. Donald, Esq., C.E.		12	3	6	374	784	30·88	159	137
D Orrell (Upholland Gram. Sch.) C. H. Cox, Esq.		5	1	0	320	800	31·51	194	141
D Wigan W. W. (Worthington) ... R. B. Donald, Esq., C.E.		8	1	6	225	847	33·34	182	141
D Horwich (Lower Rivington) ... Col. J. R. Davidson, C.E. 8		1	0	440		862	33·93	191	140
Horwich (Lower Knoll) Col. J. R. Davidson, C.E. 8		1	4	742		924	36·39	..	..
Rivington (Brown Hill) Col. J. R. Davidson, C.E. 8		1	4	843		974	38·33	..	..
D Rivington (Stoneshouse) No. 1 Col. J. R. Davidson, C.E. 8		1	4	623		891	35·09	192	142
Rivington (Stoneshouse) No. 2 Col. J. R. Davidson, C.E. 8		1	4	623		883	34·77	..	..
Rivington (Hurst Hill) Col. J. R. Davidson, C.E. 8		1	10	1029		1049	41·28	..	..
Rivington (Great Hill) Col. J. R. Davidson, C.E. 8		1	8	1240		1135	44·68	..	..
Rivington (Coppice Stile) Col. J. R. Davidson, C.E. 8		1	8	879		927	36·49	..	..
Rivington (Gamekeeper's) Col. J. R. Davidson, C.E. 8		0	8	850		1134	44·65	..	..
D Leyland (Worden Hall) H. Nowell ffrington, Esq. 5		1	0	125		826	32·51	199	133
M Leyland (Worden Hall) H. Nowell ffrington, Esq. 5		1	0	125		807	31·76	..	..
D Bamber Bridge (Cuerden Hall) R. A. Tatton, Esq.		5	1	0	230	901	35·46	144	134

DIVISION VIII.—NORTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Day with ·01 in. or more.	Days with ·04 in. or more.	
		Diam.	Height Ground	above Sea Level.	1921				
CENTRAL LANCASHIRE—(con.).					in.	ft. in.	ft.	mm.	in.
3.—COAST STREAMS. 52 sq. mi.									
▷ Birkdale (Westcliffe Road)	Percy W. Hoyle, Esq.	5	0	6	35	687	27·06	179	124
▷ Birkdale	J. Baxendell, Esq.	5	1	0	27	735	28·94	..	..
▷ Southport (Hesketh Park)	J. Baxendell, Esq.	5	1	0	38	726	28·61	183	126
▷ Southport (Hesketh Park)	J. Baxendell, Esq.	8	1	0	38	728	28·65	182	129
▷ Southport (Hesketh Park)	(R) J. Baxendell, Esq.	11	1	6	39	725	28·56	183	127
▷ Southport (Hesketh Park)	J. Baxendell, Esq.	5	16	0	66	676	26·63	174	120
▷ Southport (Lord Street Station)	Great Central Rly. Co.	9	3	6	21	651	25·65	152	..
4.—OUSE—Aire. 2 sq. mi.									
▷ Worthdale (Watershed Res.)	M. R. Barnett, Esq., C.E.	5	1	0	1115	1053	41·44	186	148
▷ Foulridge (Canal Office)	Leeds & Liverpool Canal Co.	8	1	0	497	1335	52·55?	..	..
▷ Foulridge (Cragg Nook Hill)	Leeds & Liverpool Canal Co.	8	1	0	690	1022	40·24	..	..
NORTH LANCASHIRE. (Area, 609 sq. mi.)									
1.—DUDDON & C. 77 sq. mi.									
▷ Barrow-in-Furness (Gas Works)	F. Chadderton, Esq.	11	3	0	17	747	29·43	158	120
▷ Barrow-in-Furness (Sewage Wks)	W. C. Persey, Esq., C.E.	5	1	0	21	860	33·87	175	134
▷ Little Urswick (North View)	J. Dobson, Esq.	5	1	6	130	1047	41·20	191	143
▷ Ulpha	F. Chadderton, Esq.	11	1	6	251	1624	63·94	226	164
▷ Duddon Valley (Seathwaite Vic)	Rev. F. K. Berry	5	1	0	348	1847	72·73	224	185
▷ Duddon Val. (Seathwaite Tarn)	F. Chadderton, Esq.	11	1	6	1221	2314	91·11	..	..
2.—LEVEN & C. 135 sq. mi.									
▷ Cartmel (Carke)	R. Heathcote, Esq.	5	1	0	76	990	38·97	176	142
▷ Cartmel (Holker Hall)	Lord Richard Cavendish	5	0	9	85	1115	43·89	213	166
▷ Ulverston (Poaka Beck)	F. Chadderton, Esq.	11	1	6	512	1100	43·29	183	164
▷ Grange-ovr-Sands (Newton R.)	(R) T. Huddleston, Esq.	10	1	0	586	1150	45·28	223	161
▷ Rusland Hall	Mrs. Archibald	5	14	0	45	1063	41·85	190	157
▷ Greenodd (Pennybridge School)	W. White, Esq.	5	1	0	118	1166	45·90	194	162
▷ Coniston (Water Park)	Late A. P. Brydson, Esq.	8	1	6	160	1397	55·02	191	..
▷ Coniston Park	Miss C. Marshall	5	1	2	305	1913	75·33	..	..
▷ Hawkshead (Tower Bank)	Sawrey Miss Alcock-Beck	5	2	0	342	1591	62·62	196	168
▷ Hawkshead School	J. Lowe Handley, Esq.	5	0	7	214	1833	72·17	..	..
▷ Hawkshead (Esthwaite Lodge)	W. L. Turner, Esq.	5	0	6	224	1882	74·10	210	179
▷ Hawkshead (Black Fell)	Miss C. Marshall	5	1	6	1055	1745	68·71	..	..
▷ Ambleside (Skelwith Fold)	Miss C. Marshall	5	1	0	333	2040	80·32	200	174
▷ Ambleside (Skelwith Fold)	Miss C. Marshall	5	1	0	333	2047	80·59	..	..
3.—KENT & C. 45 sq. mi.									
▷ Heysham Harbour	Midland Railway Co.	5	1	6	27	877	34·53	180	143
▷ Morecambe	T. B. Lamb, Esq.	8	1	0	24	847	33·35	185	140
▷ Yealand Conyers (Beechfield)	Mrs. Roper	5	1	0	250	1008	39·68	199	152
▷ Yealand Conyers (Morecambe Lo.)	J. Rawlinson Ford, Esq.	5	1	0	278	1133	44·59	210	159
▷ Silverdale (Bleasdale House)	R. S. Raisbeck, Esq.	12	1	0	160	866	34·11	162	..
▷ Grange-over-Sands (Eden Mount)	Miss K. F. Brothers	5	1	6	280	1047	41·23	204	144
▷ Grange-over-Sands (Nutwood)	Miss S. M. Arkwright	5	1	0	140	1038	40·87	181	151
▷ Grange-over-Sands (Holmcroft)	Robert Rhodes, Esq.	5	2	4	300	1208	47·56	194	150
▷ Lindale (Ellerhow)	H. P. Gnospelius, Esq.	5	1	2	360	1211	47·68	198	161
▷ Cartmel Fell (The Schoolhouse)	R. J. Craggill, Esq.	5	5	0	220	1347	53·04	199	168
4.—LUNE. 135 sq. mi.									
▷ Hampson-in-Ellel	W. G. Welch, Esq.	5	1	0	145	900	35·45	189	146
▷ Lancaster (Bairrig Gardens)	H. L. Storey, Esq.	5	1	3	200	981	38·61	193	148
▷ Quernmore (Brow Top)	F. Hill, Esq., C.E.	8	1	0	552	1038	40·85	176	157
▷ Bowland Forest (Higher Salter)	J. T. Sanderson, Esq.	5	1	0	1014	1173	46·17	..	..
▷ Bowland Forest (Whiteray)	J. T. Sanderson, Esq.	5	1	0	1139	1415	55·70	..	..
▷ Bowland Forest (Lower Salter)	J. T. Sanderson, Esq.	5	1	0	575	1443	56·82	..	..
▷ Lancaster (Strathspey)	A. B. S. Welch, Esq.	5	1	0	87	988	38·89	203	152
▷ Lancaster (Blea Tarn Res.)	F. Hill, Esq., C.E.	8	1	0	330	919	36·20	195	147
▷ Lancaster (Greg Observatory)	Neville Holden, Esq.	8	1	0	312	1048	41·25	195	150
▷ Lancaster (Lune Aqueduct)	J. H. Thurston, Esq., C.E.	8	3	0	74	931	36·66	180	151

DIVISION VIII.—NORTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.	
		Diam.	Height Ground	above Sea Level.	1921				
NORTH LANCASHIRE—(con.).		in.	ft.	in.	ft.	mm.	in.		
4.—LUNE—(con.).									
Caton (Escowbeck).....	Neville Holden, Esq.	5	1	0	158	1073	42·26	..	..
d Caton (School House)	W. Shaw, Esq.....	5	1	0	170	1059	41·70	..	146
Halton Park.....	Mr. E. Ashton.....	5	1	1	200	1017	40·04	157	142
d Wennington (Tatham Rectory)	Rev. A. S. Roberts	5	1	3	150	1056	41·58	..	141
d Leck Vicarage	Rev. J. Turner	5	1	1	400	1027	40·44	205	152
5.—WYRE & C. 213 sq. mi.									
d St. Anne's-on-Sea	W. E. Procter, Esq.	5	1	0	25	626	24·65	146	128
d St. Anne's-on-Sea (Lawrence Ho.)	C. G. D. Hoare, Esq.	5	1	0	25	713	28·07	174	135
d Weeton Reservoir	No. 1 J. Cook, Esq., C.E.	5	1	0	133	807	31·78	166	144
d Weeton Reservoir	No. 2 J. Cook, Esq., C.E.	5	1	0	150	693	27·27	160	123
d Weeton Reservoir	No. 3 J. Cook, Esq., C.E.	5	1	0	108	784	30·87	162	134
d Blackpool (Met. Observatory)...	E. W. Rees Jones, Esq., M.D	5	1	0	67	758	29·86	194	134
d Barton (Newsham House).....	W. B. S. Smith, Esq.	5	1	0	101	927	36·49	184	142
d Kirkham (Elswick Lodge).....	L. G. King, Esq.	5	1	4	52	799	31·47	197	143
d Poulton-le-Fylde (Singleton Pk.)	Mrs. Miller	8	1	6	50	1072	42·21	181	151
d St. Michael's-on-Wyre (Rose Cot.)	J. Moss, Esq.	5	1	0	27	808	31·82	190	140
d St. Michael's-on-Wyre Vicarage	Ven. Archdeacon Hornby .	5	1	0	26	804	31·64	181	129
d Fleetwood.....	(R) E. Frobisher, Esq.	8	1	8	29	712	28·02	169	127
d Garstang (Holme Ho., Bleasdale)	A. Wilson, Esq.	5	1	0	650	1265	49·81	..	..
m Garstang (Fairsnape Fell)	A. Wilson, Esq.	5	1	0	1630	1777	69·98	..	..
d Garstang (Barnacre Reservoir)	J. Cook, Esq., C.E.	5	1	0	616	1088	42·83	207	160
d Garstang (Grizedale Reservoir)	J. Cook, Esq., C.E.	5	1	0	517	1033	40·65	202	159
d Garstang (Calder Intake)	J. Cook, Esq., C.E.	5	1	0	632	1059	41·68	..	..
d Garstang (Grizedale Intake) ...	J. Cook, Esq., C.E.	5	1	0	644	987	38·86	..	..
d Forton (Low Abbey)	Stephen Simpson, Esq.	5	1	6	80	915	36·03	199	151
Wyresdale (Abbeystead Res.)	F. Hill, Esq., C.E.	8	1	0	366	1149	45·22	193	168
d Wyresdale (Abbeystead Gdns)	Mr. M. Campbell	8	1	3	440	1130	44·50	193	160
d Quernmore (Old Gauge Basin)	F. Hill, Esq., C.E.	8	1	0	963	1203	47·38	..	..
m Wyresdale (Wardstone)	F. Hill, Esq., C.E.	8	1	0	1440	1571	61·83	..	..
6.—INSULAR. 4 sq. mi.									

6.—INSULAR. 4 sq. mi.

DIVISION IX.—YORKSHIRE.

WEST RIDING. (Area, 2791 sq. mi.)

1.—LUNE. 178 sq. mi.								
Austwick (Leigh House).....	R. Stockdale, Esq.	5	1	0	500	1019	40·10	..
d Bentham (Felstead).....	A. W. Wilson, Esq.	5	1	0	310	925	36·41	179
d High Bentham (Inglefield).....	Mr. Bryan Holmes	5	1	0	412	989	38·94	190
Ingleton (Ellerbeck).....	(R) Mrs. H. E. Hollins.....	8	12	0	475	1081	42·54	..
d Ingleton (Kingsdale Head).....	Mr. R. Ireton	5	1	0	994	1834	72·21	181
d Sedbergh (Brigg Flats).....	The Misses Wilson.....	5	1	0	305	1392	54·79	193
d Sedbergh (Akay).....	C. E. Taylor, Esq.....	5	1	0	400	1535	60·44	189
d Sedbergh (Bynac).....	Mrs. B. Wilson	5	1	0	480	1412	55·60	194
d Sedbergh (Havera Bank).....	Albert Wilson, Esq.....	5	1	0	485	1411	55·53	199
Sedbergh (Ashbeck Head).....	Albert Wilson, Esq.....	5	1	0	1365	1754	69·04	..
2.—RIBBLE. 225 sq. mi.								
d Colne (Laneshaw Reservoir)...	J. F. Bedford, Esq., C.E....	5	1	0	842	866	34·10	169
d Barnoldswick (Rainhall Road)	Asa Burniston, Esq.	5	1	2	549	923	36·35	166
Barnoldswick (Greenberfield L.)	Leeds & L'pool Canal Co...	8	1	0	488	964	37·97	..
Slaidburn (Knowlmer Manor)	W. Peel, Esq.....	5	1	0	417	1197	47·11	..
Slaidburn (Thorneyholme).....	R. A. Tatton, Esq.	5	2	0	380	1463	57·58	..
d Slaidburn (Hareden Brook).....	J. H. Smethurst, Esq., C.E.	8	1	2	540	1698	66·84	..
d Slaidburn (Langden Brook).....	J. H. Smethurst, Esq., C.E.	8	1	2	556	1697	66·83	..
d Slaidburn (Dunsop House).....	A. T. Gooseman, Esq., C.E.	8	1	6	450	1544	60·79	194
d Slaidburn (Middle Knoll).....	A. T. Gooseman, Esq., C.E.	8	2	6	1298	1330	52·37	..
Slaidburn (Brennand).....	A. T. Gooseman, Esq., C.E.	8	1	0	820	1624	63·92	195
Slaidburn (Whitendale).....	A. T. Gooseman, Esq., C.E.	8	1	0	830	1694	66·71	197
d Slaidburn (Cabin Hill).....	A. T. Gooseman, Esq., C.E.	8	3	1	1559	1474	58·04	..
d Slaidburn (Baxton Fell).....	A. T. Gooseman, Esq., C.E.	8	2	6	1540	1567	61·71	..

DIVISION IX.—YORKSHIRE—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1921	Days with ·01 in. or more.	Days with ·04 in. or more.		
		Diam.	Height Ground	above Sea Level.					
WEST RIDING—(con.).		in.	ft.	in.	ft.	mm.	in.		
2.—RIBBLE—(con.).									
d Settle (Gas Works)	J. W. Shepherd, Esq.	8	1	0	450	1018	40·08	177	147
d Settle (Giggleswick School)....	A. Russell, Esq.	8	1	0	500	967	38·10	192	145
d Horton-in-Ribblesdale	Nathaniel Hunt, Esq.....	5	1	0	800	1238	48·75	..	..
3.—MERSEY—Irwell. 2 sq. mi.									
4.—MERSEY, UPPER. 35 sq. mi.									
Greenfield (Upperwood Moor)...	G. H. Raddin, Esq., C.E....	5	1	0	1518	1140	44·88	..	..
d Greenfield (Chew Mount)	G. H. Raddin, Esq., C.E....	5	1	0	1578	1155	45·49	189	157
Greenfield (Chew Reservoir)	G. H. Raddin, Esq., C.E....	5	1	0	1648	1181	46·50	..	..
d Greenfield (Yeoman Hey)	G. H. Raddin, Esq., C.E....	5	1	0	759	1157	45·57	186	160
Greenfield (Ashway Moss)	G. H. Raddin, Esq., C.E....	5	1	0	1581	851	33·50	..	..
Greenfield (Birchen Clough)	G. H. Raddin, Esq., C.E....	5	1	0	1018	1246	49·07	..	..
m Saddleworth Station	E.H. d'E. Darby, Esq., C.E.	5	4	0	630	906	35·66	..	..
Oldham (Strinesdale)	C. J. Batley, Esq., C.E. ..	5	4	0	815	820	32·27	179	144
d Standedge (Cas Shaw Broadh'd)	C. J. Batley, Esq., C.E. ..	8	4	6	875	1008	39·69	201	157
Standedge (CasShaw Cudworth)	C. J. Batley, Esq., C.E. ..	5	4	6	1410	690	27·18	202	138
m Standedge (Redbrook Res.)	E. H. d'E. Darby, Esq., C.E.	8	1	0	1150	1119	44·07	..	..
Denshaw (Ox Hey)	C. J. Batley, Esq., C.E. ..	8	4	6	1030	1012	39·85	198	150
d Denshaw (New Year's Bridge)...	C. J. Batley, Esq., C.E. ..	8	4	0	1012	912	35·89	198	151
Denshaw (Ready Con Dean) ..	C. J. Batley, Esq., C.E. ..	8	4	0	1414	1010	39·75	198	154
5.—TRENT—Derwent. 7 sq. mi.									
Derwent Dale (Abbey Brook) 65 S. B. Winser, Esq., C.E. ..	5	1	0	825	923	36·34	..	..
Derwent Dale (Howden Cl'gh) 64 S. B. Winser, Esq., C.E. ..	5	1	0	1030	897	35·31	..	..
Derwent Dale (Howden Ho.) 19 S. B. Winser, Esq., C.E. ..	8	1	0	775	834	32·85	..	..
Derwent Dale (Sandy Lee) No. 7 S. B. Winser, Esq., C.E. ..	5	1	0	1340	968	38·12	..	..
6.—TRENT—Left Bank Tributaries. 143 sq. mi.									
d Woodsetts Grange (Old Vic.) ..	H. P. Marsh, Esq.....	5	1	0	245	487	19·17	163	109
d Doncaster (Carr House Hosp.)...	Dr. D. L. Andersen	5	1	1	42	376	14·80	133	80
7.—OUSE—Don. 564 sq. mi.									
d Sheffield (Stumperlow Hall) .1	J. Dixon, Esq.	5	1	0	730	681	26·82	164	121
d Sheffield (Stumperlow Hall) .2	J. Dixon, Esq.	5	1	0	770	690	27·17	167	123
d Sheffield W.W. (Redmires Res.)	L. S. M. Marsh, Esq., C.E....	10	5	0	1110	797	31·38	179	130
Sheffield W.W. (Redmires Res.)	L. S. M. Marsh, Esq., C.E....	8	4	0	1110	783	30·81	..	..
d Sheffield W.W. (Rivelin)	(r) L. S. M. Marsh, Esq., C.E....	10	4	0	564	658	25·91	177	113
Sheffield W.W. (Rivelin)	L. S. M. Marsh, Esq., C.E....	8	4	0	564	655	25·78	..	..
d Sheffield W.W. (Crookes)	(r) L. S. M. Marsh, Esq., C.E....	10	2	0	629	570	22·43	150	108
Sheffield W.W. (Crookes)	L. S. M. Marsh, Esq., C.E....	8	2	0	629	570	22·43	..	..
d Sheffield (Weston Park)	E. Howarth, Esq.	8	1	0	430	578	22·77	164	108
d Darnall (High Hazels Museum) ..	E. Howarth, Esq.	8	1	0	285	443	17·46	142	87
Sheffield (Victoria Station)	Great Central Rly Co.	9	3	6	188	464	18·28	138	..
Loxley Valley (Broadcar)	L. S. M. Marsh, Esq., C.E....	5	1	0	1004	931	36·67	..	..
Loxley V. (Oaks Fm. Damflask) ..	L. S. M. Marsh, Esq., C.E....	5	1	0	650	710	27·96	..	..
Loxley V. (Loftshaw, Strines) ..	L. S. M. Marsh, Esq., C.E....	5	1	0	1011	885	34·86	..	..
d Loxley V. (Dale Dike Res.)	(r) L. S. M. Marsh, Esq., C.E....	10	3	0	715	809	31·83	177	131
Loxley V. (Dale Dike Res.)	L. S. M. Marsh, Esq., C.E....	8	3	0	715	805	31·70	..	..
Loxley V. (Thornseat)	L. S. M. Marsh, Esq., C.E....	5	1	0	1326	920	36·22	..	..
Loxley V. (Rocher Flat)	L. S. M. Marsh, Esq., C.E....	5	1	0	1106	742	29·23	..	..
Loxley V. (Mortimer House) ..	L. S. M. Marsh, Esq., C.E....	5	1	0	1036	897	35·30	..	..
d Rotherham (Ulley Reservoir) ..	Vincent Turner, Esq., C.E.	5	1	0	184	392	15·42	..	79
Sheffield (Tinsley Locks)	Great Central Rly. Co.	9	..	..	117	355	13·99	131	..
d Wincobank (Sewage Works) (r) ..	J. Haworth, Esq.	8	2	0	99	413	16·25	118	76
d Rotherham (Sitwell Vale)	Mr. G. Howard	5	1	0	300	445	17·52	135	89
d Rotherham (Moorgate Grange) ..	F. M. Watson, Esq.	5	1	0	262	418	16·46	136	85
d Rotherham (Aldwarke Sew.Wk.) ..	James H. Kershaw, Esq.	5	1	4	71	423	16·64	..	91
d Rotherham (Thrybergh)	F. O. Kirby, Esq., C.E.	8	1	0	184	421	16·56	115	84
d Chapeltown (Potter Hill)	Mr. C. W. Frost	8	5	0	583	487	19·18	127	86

DIVISION IX.—YORKSHIRE—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
WEST RIDING—(con.).		in.	ft.	in.	ft.	mm.	in.		
7.—OUSE—Don—(con.).									
d Conisborough (Firsby Res.)	F. O. Kirby, Esq., C.E.	8	1	4	189	435	17·12	114	79
d Wentworth Woodhouse	Mr. A. Third	5	0	10	360	475	18·71	..	85
d Mexborough	G. Fenwick Carter, Esq. C.E.	5	1	6	77	412	16·22	154	87
Wortley	Great Central Rly. Co.	9	3	6	548	537	21·16	160	..
Wortley (Service Reservoir)	J. R. Fox, Esq., C.E.	5	1	0	700	598	23·56	157	114
Elsecar	Great Central Rly. Co.	9	3	6	181	391	15·38	140	..
d Little Don Val. (Underbank Rs.)	L. S. M. Marsh, Esq., C.E.	8	1	6	604	674	26·52	185	114
Little Don Val. (Brockholes)	L. S. M. Marsh, Esq., C.E.	5	1	6	934	708	27·87	..	..
Little Don Val. (Sheep House)	L. S. M. Marsh, Esq., C.E.	5	1	6	974	675	26·56	..	..
d Little Don Val. (Bridge Lane)	L. S. M. Marsh, Esq., C.E.	8	4	9	761	783	30·84	180	130
Langsett Moor (Midhope)	J. R. Fox, Esq., C.E.	5	1	0	830	880	34·65	160	121
d Langsett Moor (Up. Midhope)	L. S. M. Marsh, Esq., C.E.	8	1	6	925	803	31·63	184	129
Langsett Moor (Mickleden)	L. S. M. Marsh, Esq., C.E.	5	1	6	1217	1025	40·36	..	..
Langsett Moor (Catcleugh)	L. S. M. Marsh, Esq., C.E.	8	1	6	1516	1031	40·60	..	..
Langsett Moor (Fiddlers Green)	L. S. M. Marsh, Esq., C.E.	8	1	6	1493	1100	43·30	..	..
Langsett Moor (Border Hill)	L. S. M. Marsh, Esq., C.E.	5	1	6	1148	988	38·88	..	..
d Langsett Moor (Swinden Lodge)	L. S. M. Marsh, Esq., C.E.	8	1	6	1037	874	34·42	162	134
d Langsett Moor (Flouch Road)	L. S. M. Marsh, Esq., C.E.	8	4	3	960	857	33·72	185	132
Wath-upon-Dearne (Chapel St.)	Dr. T. Crowley	8	2	2	188	383	15·07	..	..
d Bolton-upon-Dearne	T. Washington, Esq.	5	1	0	130	397	15·62	122	84
Worsborough	Great Central Rly. Co.	9	3	6	225	440	17·32	146	..
d Doncaster (Littlemoor Terrace)	Edgar Smith, Esq.,	5	1	8	50	431	16·98	125	84
Doncaster	Great Central Rly. Co.	9	3	6	32	349	13·73	103	..
d Doncaster (Pumping Station)	F. O. Kirby, Esq., C.E.	5	1	6	30	387	15·22	127	81
d Doncaster (Avenue Road)	M. H. Stiles, Esq.	5	4	0	62	451	17·75	139	81
Dunford Bridge (Windleden)	H. Dearden, Esq., C.E.	12	2	2	1100	1172	46·16	..	..
Dunford Bridge (Dearden Res.)	H. Dearden, Esq., C.E.	12	1	6	1244	1159	45·61	..	..
Dunford Bridge Station	Great Central Rly. Co.	9	3	6	954	939	36·98	161	..
Dunford Bridge Reservoir	H. Dearden, Esq., C.E.	12	2	0	1111	1207	47·54	183	146
Penistone	Great Central Rly. Co.	9	3	6	717	451	17·74	131	..
Penistone (Hazlehead)	Great Central Rly. Co.	9	3	9	868	958	37·73	154	..
Penistone (Ingbirchworth Res.)	J. R. Fox, Esq., C.E.	8	1	0	853	550	21·64	161	97
d Barnsley (Jordan Hill)	J. R. Fox, Esq., C.E.	8	1	0	460	468	18·41	132	81
Barnsley	Great Central Rly. Co.	9	3	6	317	403	15·85	117	..
d Cawthorne (Cannon Hall)	Capt. J. H. Pardoe	5	0	11	418	531	20·92	124	98
d Brodsworth Hall Gardens	Mr. F. W. Larnier	5	1	0	175	429	16·91	..	76
d Barnsley (Burntwood Hall)	J. Dymond, Esq.	5	1	0	378	495	19·48	160	91
d Kirk Bramwith	H. A. Brundell, Esq., C.E.	5	1	0	17	468	18·42	119	82
d Badsworth (Rogerthorpe Man.)	Lt.-Col. W. J. F. Ramsden	8	1	2	150	457	18·00	153	89
d Ackworth School	E. Priestman, Esq.	8	1	0	100	463	18·21	144	83
d Ackworth (Hillthorpe)	Mrs. F. Hatchard	5	1	3	175	418	16·46	118	82
d Womersley Park	The late Countess of Rosse	8	0	8	50	428	16·86	114	86
d Goole	F. Hinchliffe, Esq.	5	2	0	18	482	18·96	131	96
8.—OUSE—Aire—Calder. 361 sq. mi.									
d Holmbridge (Yateholme Res.)	J. C. Barrowclough, Esq., C.E.	5	1	0	1009	1206	47·48	194	148
d Holmbridge (Yateholme Farm)	J. C. Barrowclough, Esq., C.E.	5	1	0	861	1338	52·68	195	161
Holmbridge (Holme Styes Res.)	Messrs. Mallinson & Son, CE	5	2	0	830	891	35·10	..	..
Holmbridge (Boshaw Whams R.)	Messrs. Mallinson & Son, CE	5	1	0	930	942	37·10	..	..
Holmbridge (Bilberry Res.)	Messrs. Mallinson & Son, CE	5	1	0	970	1092	43·00	..	..
Meltham (Harden Moss)	J. W. Armitage, Esq., C.E.	8	1	2	1212	1121	44·15	..	..
Meltham (Harden Moss) new g.	J. W. Armitage, Esq., C.E.	8	1	0	1212	1133	44·59	..	..
Wessenden Head	J. W. Armitage, Esq., C.E.	8	1	0	1270	956	37·64	..	..
Wessenden Head new g.	J. W. Armitage, Esq., C.E.	8	1	0	1200	1053	41·44	..	..
Wessenden (Hollin Bank Moss)	J. W. Armitage, Esq., C.E.	8	1	0	1280	865	34·07	..	..
Wessenden (Old Reservoir)	J. W. Armitage, Esq., C.E.	8	1	0	940	1088	42·83	..	..
Wessenden (Butterley Moss)	J. W. Armitage, Esq., C.E.	8	1	0	1110	1189	46·82	..	..
Wessenden (Bobus)	J. W. Armitage, Esq., C.E.	8	1	0	1200	1012	39·85	..	..
Meltham (Brow Grains)	J. W. Armitage, Esq., C.E.	8	1	0	900	1065	41·91	..	..
Meltham (Royd Edge)	C. L. Brook, Esq.	8	1	0	585	1064	41·89	..	..
d Meltham (Harewood Lodge)	C. L. Brook, Esq.	8	1	0	514	965	37·99	189	140

DIVISION IX.—YORKSHIRE—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
WEST RIDING—(con.).		in.	ft.	in.	ft.	mm.	in.		
8.—OUSE—Aire—Calder—(con.).									
Meltham Grange	J. W. Armitage, Esq., C.E.	8	1	0	850	948	37·32	..	..
Marsden	E. H. d'E. Darby Esq., C.E.	8	2	4	692	1135	44·69	..	..
Marsden (Deer Hill)	J. W. Armitage, Esq., C.E.	8	1	0	1149	977	38·46	..	..
Marsden (Deer Hill)	<i>new g.</i> J. W. Armitage, Esq., C.E.	8	1	0	1149	1045	41·14	..	..
d Slaithwaite (Blackmoorfoot) ..	J. W. Armitage, Esq., C.E.	8	1	0	800	951	37·45	219	152
d Slaithwaite (Inglewood)	J. Woodhead, Esq.	5	1	0	546	1025	40·37	204	145
d Huddersfield (Carr End, Dalton)	Mr. T. Hey	8	1	0	350	669	26·33	168	113
Huddersfield (Bankfield, Golcar)	Miss Sykes	5	1	0	400	914	36·00	..	143
d Huddersfield (Cemetery)	Late Mr. J. Firth	8	1	0	410	728	28·66	169	127
d Huddersfield (Oakes) ... (No. 1)	S. Morris Bower, Esq.	5	1	0	772	715	28·13	161	128
Huddersfield (Oakes) ... (No. 2)	S. Morris Bower, Esq.	4	1	0	772	725	28·54	..	..
d Kirkheaton (Kirk Vale)	Miss A. Robson	8	1	0	220	631	24·86	145	113
d Rishworth Mr (G. Walden Edge)	C. Clemesha Smith, Esq., C.E.	5	0	10	1135	1171	46·09	192	155
w Rishworth (Stott Hall)	C. Clemesha Smith, Esq., C.E.	5	1	0	935	986	38·82	..	..
d Rishworth (Ringstone Res.) ...	C. Clemesha Smith, Esq., C.E.	5	1	0	990	1004	39·51	184	150
w Rishworth Moor (Greystones) ...	C. Clemesha Smith, Esq., C.E.	5	1	0	1175	1237	48·72	..	..
w Soyland Moor (Summit)	C. Clemesha Smith, Esq., C.E.	5	1	0	1290	1005	39·57	..	..
d Soyland Moor (Baitings Gate) ...	C. Clemesha Smith, Esq., C.E.	5	1	0	935	1233	48·55	188	148
w Soyland Moor (Manshead) ...	C. Clemesha Smith, Esq., C.E.	5	1	0	1240	1161	45·69	..	..
d Horbury (Addingford Hos.) ...	J. H. Horsfall, Esq.	8	2	0	200	455	17·93	114	93
Horbury (Highfields)	J. H. Green, Esq.	5	1	0	226	483	19·01	..	..
d Mirfield (Cote Wall)	F. P. Mitchell, Esq.	8	1	0	200	686	27·02	141	113
d Wakefield	W. J. Read, Esq.	8	1	0	174	429	16·90	106	87
d Wakefield (Clarence Park) ...	C. Clemesha Smith, Esq., C.E.	5	1	0	124	446	17·57	129	86
d Wakefield (Fieldhead Res.) ...	C. Clemesha Smith, Esq., C.E.	5	1	0	250	395	15·55	120	83
d Sowerby Br. (Haugh End) No. 4	J. Selwyn Rawson, Esq. ...	5	0	8	450	927	36·48	183	139
d Walsden (Ramsden Reservoir) ...	H. A. Braddock, Esq., C.E.	8	1	0	993	1197	47·14	172	148
d Walsden (Ramsden Hill)	H. A. Braddock, Esq., C.E.	5	1	0	1326	1519	59·80	..	..
d Todmorden (Fielden Hospital) ...	Mr. F. Rogers	5	1	0	650	959	37·75	177	155
d Todmorden (Sourhall Hospital)	Mr. F. Rogers	5	1	0	1020	1239	48·76	195	158
d Halifax (Hall Ings, S. Owram)	Late Rev. G. E. Aspinall ..	5	0	7	750	590	23·24	179	119
d Halifax (Public Library)	E. Green, Esq.	8	1	0	625	769	30·28	155	118
d Batley (Staincliffe Reservoir) ...	J. C. Barrowclough, Esq., C.E.	5	1	0	492	440	17·34	120	89
d Ardsley Reservoir	No. 1 C. Clemesha Smith, Esq., C.E.	5	1	2	395	456	17·94	142	95
d Ardsley Reservoir	No. 2 C. Clemesha Smith, Esq., C.E.	5	1	2	326	466	18·33	142	96
d Ardsley (Jaw Hill Filters) ...	C. Clemesha Smith, Esq., C.E.	5	1	0	315	446	17·57	128	91
d Castleford School	S. Gee, Esq.	5	1	2	100	449	17·67	..	82
m Halifax W.W. (Albert)	R. J. Hartley, Esq., C.E. ...	5	1	0	795	833	32·80	..	..
m Halifax W.W. (Gibbet)	R. J. Hartley, Esq., C.E. ...	5	3	9	568	793	31·22	..	..
m Halifax W.W. (Ramsden Wood)	R. J. Hartley, Esq., C.E. ...	8	1	2	816	783	30·81	..	..
d Hebden Bridge (Falling Royd)	A. R. Crossley, Esq.	4	1	0	479	1077	42·39	184	149
d Hebden Bridge (Burnside)	J. Hoyle, Esq.	5	1	0	825	991	39·00	187	147
m Halifax W.W. (Castle Carr Lo.)	R. J. Hartley, Esq., C.E. ...	5	0	6	1060	903	35·53	..	..
m Halifax W.W. (Midgley Moor)	R. J. Hartley, Esq., C.E. ...	8	0	9	1350	935	36·82	..	..
m Halifax W.W. (Warley Moor)	R. J. Hartley, Esq., C.E. ...	8	1	2	1325	887	34·94	..	..
m Halifax W.W. (Ogden)	R. J. Hartley, Esq., C.E. ...	5	0	10	990	968	38·10	..	..
m Halifax W.W. (Ovenden Moor)	R. J. Hartley, Esq., C.E. ...	8	1	9	1375	951	37·45	..	..
m Halifax W.W. (Widdop)	R. J. Hartley, Esq., C.E. ...	5	1	3	1050	1059	41·70	..	..
m Hal. W.W. (Walshaw Dean Lo.)	R. J. Hartley, Esq., C.E. ...	5	1	0	1040	1057	41·62	..	..
m Halifax W.W. (Walshaw Dean)	R. J. Hartley, Esq., C.E. ...	8	1	0	1380	1008	39·70	..	..
9.—OUSE—Aire. 504 sq. mi.									
d Pontefract (Tanshelf Drive) ...	T. K. Heseltine, Esq.	5	1	0	180	473	18·64	122	94
d Pudsey (Fulneck)	Miss E. C. Lawford	5	1	0	490	663	26·10	..	..
d Garforth (Manor Farm)	Dr. A. G. Ruston	8	1	2	194	452	17·77	150	95
Bradford (Grange Rd., Horton)	Mr. A. E. Chilton	5	3	0	450	698	27·47	169	122
Bradford (Queensbury)	G. R. Foster, Esq.	8	2	2	1050	775	30·52	..	..
Bradford (Brayshaw Reservoir)	L. Mitchell, Esq., C.E.	5	1	0	982	737	29·02	158	124
Bradford (Lister Park)	H. Lander, Esq.	8	1	0	439	678	26·72	165	118
Bradford (Thornton Moor Filters)	L. Mitchell, Esq., C.E. ...	5	1	0	1218	983	38·69	206	140

DIVISION IX.—YORKSHIRE—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain. 1921	Days with ·01 in. or more.	Days with ·04 in. or more.	
		Diam.	Height above Ground Sea		Level.				
WEST RIDING—(con.).		in.	ft.	in.	ft.	mm.	in.		
9.—OUSE—Aire—(con.).									
Bradford (Stubden Res.) No. 8A.	L. Mitchell, Esq., C.E.	8	1	0	1075	1178	46·37	211 159	
Bradford (Stubden Res.) No. 8B.	L. Mitchell, Esq., C.E.	8	1	0	1075	1101	43·33	211 157	
Bradford (Stubden Res.) No. 8	L. Mitchell, Esq., C.E.	5	1	0	1071	1072	42·22	211 161	
M Bradford (Nan Scar, Oxenhope)	L. Mitchell, Esq., C.E.	5	1	0	1101	1167	45·93	.. ..
M Bradford (Stairs Top, Oxenhope)	L. Mitchell, Esq., C.E.	5	1	0	1401	1058	41·64	.. ..
Bradford (Leeming Reservoir)	L. Mitchell, Esq., C.E.	5	1	0	850	649	25·57	185 119	
Bradford (Doe Park Reservoir)	L. Mitchell, Esq., C.E.	8	1	0	810	968	38·12	203 140	
Bradford (Doe Park Reservoir)	L. Mitchell, Esq., C.E.	5	1	0	811	922	36·29	203 135	
M Bradford (Leeshaw Res.)	L. Mitchell, Esq., C.E.	5	1	0	875	1099	43·28	.. ..
Bradford (Chellow Dean Res.)	L. Mitchell, Esq., C.E.	5	1	0	645	754	29·67	164 119	
Bradford (Chellow Heights Res.)	L. Mitchell, Esq., C.E.	5	1	0	848	743	29·24	185 115	
Bradford (Hewenden Res.)	6A L. Mitchell, Esq., C.E.	5	1	0	700	914	35·97	201 140	
Bradford (Hewenden Res.)	6L. Mitchell, Esq., C.E.	5	1	0	701	898	35·37	201 141	
Bradford (Heaton Reservoir) 5A	L. Mitchell, Esq., C.E.	8	1	0	530	662	26·07	155 117	
Bradford (Heaton Reservoir) 5L	L. Mitchell, Esq., C.E.	5	1	0	531	650	25·60	155 116	
Leeds (Wortley Reservoir)	C. G. Henzell, Esq., C.E.	8	0	9	307	562	22·13	155 112	
Leeds (Knoctrop)	C. G. Henzell, Esq., C.E.	8	0	9	72	461	18·17	124 90	
Leeds (Holbeck W.W. Depôt)	C. G. Henzell, Esq., C.E.	8	0	9	93	517	20·37	159 101	
Leeds (Great George Street)	C. G. Henzell, Esq., C.E.	5	0	9	180	498	19·59	152 104	
D Leeds (Museum)	H. Crowther, Esq.	8	46	0	177	498	19·59	143 101	
D Leeds (Kingfisher)	Greevz Fisher, Esq.	5	14	4	170	541	21·28	.. ..
Leeds (Woodhouse Moor)	C. G. Henzell, Esq., C.E.	8	0	9	307	517	20·35	131 104	
D Seacroft (Leeds City Hospital)	A. E. Pearson, Esq.	8	1	0	236	598	23·56	186 111	
Leeds (Weetwood Res.) No. 1	C. G. Henzell, Esq., C.E.	8	0	9	328	515	20·29	157 113	
Leeds (Weetwood Res.) No. 2	C. G. Henzell, Esq., C.E.	8	0	9	328	537	21·15	157 112	
Leeds (Weetwood Garth)	Mrs. B. K. Gott	5	0	6	300	577	22·73	135 112	
Leeds (Gledhow Grove)	F. J. Kitson, Esq.	5	2	6	285	528	20·79	135 ..	
D Leeds (Chapel Allerton Terrace)	Greevz Fisher, Esq.	5	3	6	404	503	19·81	152 107	
Leeds (Allerton Hill)	T. Harding Churton, Esq.	5	0	7	418	491	19·35	.. ..
Shipley (Cragg End)	Leeds & Liv'pool Canal Co.	8	1	0	304	649	25·53	.. ..
D Shipley (Glenholme)	M. E. Burton, Esq.	5	0	9	370	687	27·06	162 120	
D Haworth (Harbour Lodge)	M. R. Barnett, Esq., C.E.	8	1	0	1187	1227	48·31	202 156	
D Haworth (Lower Laithe Res.)	M. R. Barnett, Esq., C.E.	5	0	10	772	1058	41·67	203 144	
D Haworth (Lwr Laithe Res.) (R)	M. R. Barnett, Esq., C.E.	6	1	6	772	1061	41·77	202 140	
D Oakworth (Oldfield Filters)	M. R. Barnett, Esq., C.E.	5	1	0	1008	1072	42·22	187 148	
D Bingley (Sewage Works)	J. Slater, Esq.	5	1	1	227	689	27·11	162 115	
Bingley (Gilstead Filters)	L. Mitchell, Esq., C.E.	5	1	0	572	646	25·42	150 115	
D Adel (Lawns Wood Cemetery)	Mr. S. R. Dyson	5	1	0	475	671	26·41	191 128	
D Keighley (The Knowle)	P. Clough, Esq.	5	1	0	385	830	32·69	174 135	
Keighley (Victoria Park)	Mr. R. Butterfield	5	1	0	304	772	30·41	171 128	
Bingley (Sunnydale Reservoir)	L. Mitchell, Esq., C.E.	5	1	0	825	577	22·72	.. ..
D Salterforth (Barnoldswick W.W.)	J. W. Thompson, Esq.	8	1	4	832	1247	49·09	177 140	
D Kelbrook (Higher Burnt Hill Fm.)	J. E. Aldersley, Esq.	5	1	0	1050	1099	43·25	178 149	
D Earby (Sewage Works)	J. E. Aldersley, Esq.	5	1	0	425	986	38·82	190 137	
D Silsden (Bolton Road)	Mr. A. Elder	5	1	0	432	662	26·05	152 120	
Silsden (Gill Grange)	L. Mitchell, Esq., C.E.	5	1	0	883	663	26·09	.. ..
Silsden Reservoir	L. Mitchell, Esq., C.E.	5	1	0	560	674	26·55	151 123	
Silsden (Cringles Res. Site)	L. Mitchell, Esq., C.E.	5	1	0	760	690	27·15	151 124	
D Elslack (Moorside Farm)	J. W. Thompson, Esq.	5	0	7	835	1037	40·83	184 147	
Carleton (Beech Hill)	W. Cyril Empson, Esq.	8	5	3	425	844	33·24	.. ..
D Skipton (Sewage Works)	F. Morrison, Esq.	8	1	0	318	742	29·23	170 130	
D Skipton (Town Hall)	A. E. W. Aldridge, Esq.	6	1	6	367	758	29·83	169 133	
Skipton (Hawthorne Cottage)	Leeds & Liv'pool Canal Co.	8	1	0	380	698	27·47	.. ..
Gargrave (Banks Hill Bank Nwtn)	Leeds & Liv'pool Canal Co.	8	1	0	545	999	39·31	.. ..
Gargrave (Ray Bridge Hill)	Leeds & Liv'pool Canal Co.	8	0	10	459	780	30·71	.. ..
D Rylstone Rectory	Rev. C. H. Lowe	5	0	7	708	972	38·27	188 147	
Winterburn (Long Hill)	Leeds & Liv'pool Canal Co.	8	0	9	705	962	37·88	.. ..
Winterburn (Brown Hill)	Leeds & Liv'pool Canal Co.	8	1	0	961	1116	43·95	.. ..
D Malham Tarn	Mr. John Winskill	8	1	0	1292	1399	55·10	225 176	
D Malham Tarn	Mr. John Winskill	5	1	0	1292	1423	56·02	225 176	
10.—OUSE—Wharfe. 408 sq. mi.									
D Aberford (Lotherton Hall)	(R) Mrs. Trench Gascoigne	8	1	0	200	419	16·51	.. ..
D Saxton Vicarage	Rev. C. D. Ash	5	2	0	95	477	18·76	152 108	

DIVISION IX.—YORKSHIRE—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with -01 in. or more.	Days with -04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
WEST RIDING—(con.).		in.	ft.	in.	ft.	mm.	in.		
10.—OUSE—Wharfe—(con.).									
Bolton Percy (Bolton Lodge) (R)	Col. T. H. Morris, C.B.E.	8	1	0	30	601	23.66	..	..
Appleton Roebuck School	W. Clayton, Esq.	5	0	10	23	515	20.26	130	111
Adel (Eccup, South)	C. G. Henzell, Esq., C.E.	8	0	9	390	590	23.22	164	117
Adel (Eccup, East)	C. G. Henzell, Esq., C.E.	8	0	9	375	569	22.40	165	118
Harewood (Arthington)	C. G. Henzell, Esq., C.E.	8	0	9	139	717	28.22	135	118
Harewood House	Countess of Harewood	5	0	10	300	632	24.88	156	122
Otley (Sewage Works)	C. F. Hodgson, Esq., C.E.	5	1	0	172	559	21.99	..	..
Ilkley (Silverwell Cottage)	J. M. Gameson, Esq., C.E.	5	1	0	900	845	33.27	176	139
Ilkley (Beechwood Grove)	P. G. Marshall, Esq.	5	11	0	400	747	29.39	158	127
Ilkley (Spence's Garden)	J. M. Gameson, Esq., C.E.	5	1	0	314	772	30.38	180	128
Leathley (Lindley Wood, S.)	C. G. Henzell, Esq., C.E.	8	0	9	312	623	24.53	181	123
Leathley (Lindley Wood, N.)	C. G. Henzell, Esq., C.E.	8	0	9	320	621	24.46	181	122
Ilkley (March Gill Reservoir)	C. F. Hodgson, Esq., C.E.	5	1	0	655	738	29.07	176	138
York (Mount Villas)	Miss Rowntree	5	1	0	70	490	19.29	179	99
York (Cherry Hill)	Messrs. H. Richardson & Co.	5	1	6	50	451	17.76	136	98
York (Museum Gardens)	W. Watson, Esq.	8	1	8	57	407	16.01	160	99
York (The Retreat)	Dr. H. J. Mackenzie	5	1	0	73	438	17.23	157	96
York (Acomb Landing)	W. H. Humphreys, Esq.	5	1	0	40	430	16.94	140	105
Skipton (Counter Hill)	L. Mitchell, Esq., C.E.	5	1	0	951	679	26.72	..	..
Skipton (Chelker Reservoir)	L. Mitchell, Esq., C.E.	5	1	0	730	788	31.04	..	..
Fewston (Timble Ings)	C. G. Henzell, Esq., C.E.	8	0	9	912	795	31.29	201	137
Fewston (Timble)	C. G. Henzell, Esq., C.E.	8	0	9	720	696	27.40	175	131
Fewston (Swinsty, East)	C. G. Henzell, Esq., C.E.	8	0	9	460	674	26.53	180	117
Fewston (Swinsty, West)	C. G. Henzell, Esq., C.E.	8	0	9	425	690	27.18	180	119
Fewston, South	C. G. Henzell, Esq., C.E.	8	0	9	525	746	29.38	195	131
Fewston, North	C. G. Henzell, Esq., C.E.	8	0	9	525	697	27.45	195	129
Fewston (Blubberhouses)	C. G. Henzell, Esq., C.E.	8	0	9	575	794	31.25	172	130
Bolton Abbey Estate Office	A. Downs, Esq.	5	1	2	368	800	31.48	173	130
Barden Reservoir	L. Mitchell, Esq., C.E.	8	1	0	746	1002	39.46	202	154
Barden Reservoir	L. Mitchell, Esq., C.E.	5	1	0	746	1037	40.83	201	152
Upper Barden Reservoir	L. Mitchell, Esq., C.E.	5	1	0	1250	926	36.47	199	144
Thruscross (Lane Head)	C. G. Henzell, Esq., C.E.	8	0	9	950	791	31.13	190	142
Burnsall (Thorpe Fell)	L. Mitchell, Esq., C.E.	5	1	0	1661	960	37.80	..	..
Burnsall (Sandbed Beck)	L. Mitchell, Esq., C.E.	5	1	0	676	1003	39.50	..	..
Burnsall Rectory	Rev. W. J. Stavert	8	4	8	503	978	38.52	183	142
Grimwith Reservoir	L. Mitchell, Esq., C.E.	8	1	0	890	1014	39.91	174	145
Grimwith Reservoir	L. Mitchell, Esq., C.E.	5	1	0	893	984	38.74	174	144
Grimwith (Trunla Hill)	L. Mitchell, Esq., C.E.	5	1	0	1201	911	35.86	..	..
Buckden	G. E. Clayton, Esq.	5	3	0	800	1414	55.68	176	156
Oughtershaw Hall	Miss Woodd	5	1	6	1175	1779	70.04	183	178
11.—OUSE—Nidd. 254 sq. mi.									
Spofforth (Sewage Works)	C. E. Rivers, Esq., C.E.	5	1	0	184	578	22.74	175	..
Wetherby (Ribston Hall)	Mr. W. Simpson	5	1	2	130	593	23.35	..	95
Harrogate W.W. (Ling Cottage)	A. S. West, Esq., C.E.	5	1	0	740	633	24.90	..	..
Harrogate W.W. (Broad Dubb)	A. S. West, Esq., C.E.	5	1	0	725	672	26.45	..	..
Harrogate W.W. (Cobblers Cott.)	A. S. West, Esq., C.E.	5	1	0	730	624	24.56	..	..
Harrogate W.W. (Ten Acres Res.)	A. S. West, Esq., C.E.	8	1	6	620	662	26.05	163	..
Harrogate W.W. (Scargill Res.)	A. S. West, Esq., C.E.	8	1	0	646	652	25.67	163	115
Harrogate W.W. (Beaver Dyke R.)	A. S. West, Esq., C.E.	8	0	11	575	664	26.14	174	117
Harrogate W.W. (John o' Gaunts)	A. S. West, Esq., C.E.	5	1	0	600	668	26.29	..	..
Harrogate W.W. (Long Stoop)	A. S. West, Esq., C.E.	5	1	0	700	664	26.14	..	..
Harrogate W.W. (Knab's Moor)	A. S. West, Esq., C.E.	5	1	0	700	609	23.98	..	..
Harrogate (Harlow Moor Obsy.)	C. E. Rivers, Esq., C.E.	5	1	0	480	599	23.59	174	112
Harrogate (Harlow Hill Res.)	A. S. West, Esq., C.E.	8	1	0	589	566	22.27	143	107
Harrogate (Irongate Bridge Res.)	A. S. West, Esq., C.E.	8	1	6	455	597	23.49	145	112
Harrogate (The Stray)	Mr. G. W. Gledhill	5	1	0	380	614	24.16	149	114
Harrogate (Park Parade)	Mr. G. W. Gledhill	5	1	0	400	593	23.36	149	112
Knaresborough (The Abbey)	Rev. Canon J. T. Hartley	5	1	0	140	552	21.72	150	109
Knaresborough (Water Tower)	A. S. West, Esq., C.E.	8	1	0	240	494	19.46	145	94
Knaresborough (Grammar Sch.)	C. W. H. Greaves, Esq.	5	1	0	230	552	21.73	157	97
Harrogate (Bilton Sewage Works)	C. E. Rivers, Esq., C.E.	5	1	0	208	584	23.00	157	..
Birstwith Hall	F. A. Aykroyd, Esq.	8	0	10	370	752	29.59	179	124

DIVISION IX.—YORKSHIRE—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain. 1921	Days with ·01 in. or more.	Days with ·04 in. or more.	
		Diam.	Height Ground	above Sea Level.					
WEST RIDING—(con.).		in.	ft.	in.	ft.	mm.	in.		
11.—OUSE—Nidd—(con.).									
D Birstwith (Swarcliffe)	Capt. C. S. Greenwood	5	1	0	510	739	29·08	159	129
D Greenhow Hill (Kell House)	Harold Bruff, Esq., C.E.	5	1	0	1302	1103	43·41	214	161
D Pateley Bridge (Bewerley Hall)	T. E. Yorke, Esq.	5	1	0	420	868	34·19	143	124
Ramsgill (Holme Ho. Gouthwaite)	L. Mitchell, Esq., C.E.	5	1	0	464	926	36·45	180	136
Ramsgill (Raygill House)	L. Mitchell, Esq., C.E.	5	1	0	925	1113	43·83	150	131
Nidderdale (High Riggs)	L. Mitchell, Esq., C.E.	5	1	0	1010	1119	44·06	..	131
M Nidderdale (East Gill Head)	L. Mitchell, Esq., C.E.	5	1	0	1710	1603	63·11	..	..
M Nidderdale (Rain Stang)	L. Mitchell, Esq., C.E.	5	1	0	1470	1379	54·31	..	..
Nidderdale (New Houses)	L. Mitchell, Esq., C.E.	5	1	0	755	1082	42·61	142	127
Nidderdale (West Houses)	L. Mitchell, Esq., C.E.	5	1	0	1150	1300	51·19	183	167
12.—OUSE—Ure. 110 sq. mi.									
Dallow Moor (Harper Hill)	C. G. Henzell, Esq., C.E.	5	0	9	858	792	31·18	174	134
D Ripon (Studley Royal Gardens)	Marquis of Ripon	5	1	6	271	638	25·11	158	121
D Ripon (The Red House)	F. D. Wise, Esq., C.E.	5	1	0	120	570	22·45	153	117
Kirkby Malzeard (Drovers' Inn)	C. G. Henzell, Esq., C.E.	8	0	9	576	801	31·55	195	134
Kirkby Malzeard (Hawsett)	C. G. Henzell, Esq., C.E.	8	0	9	820	868	34·17	178	145
Kirkby Malzeard (Hambleton H.)	C. G. Henzell, Esq., C.E.	8	0	9	1106	847	33·34	..	..
Kirkby Malzeard (Bagwith Brae)	C. G. Henzell, Esq., C.E.	5	0	9	703	666	26·21	168	129
Kirkby M. (Stone & Ears Wham)	C. G. Henzell, Esq., C.E.	8	0	9	1118	935	36·79	..	..
EAST RIDING. (Area, 1176 sq. mi.)									
1.—OUSE—Left Bank Tributaries. 82 sq. mi.									
D York (Heslington)	Hn. L. de Yarburgh-Bateson	8	0	10	35	467	18·40	143	105
D York (Dunnington Hall)	Miss Hildyard	8	1	2	110	456	17·97	172	106
2.—OUSE—Derwent. 248 sq. mi.									
D Warter	Mrs. J. Coxon	5	1	10	230	504	19·86	150	103
D Burythorpe Rectory	Rev. William Robinson	5	1	0	240	483	19·02	143	98
D Birdsall Gardens	Mr. J. Anderson	5	1	0	303	556	21·88	164	113
D Rillington (Scampston Hall)	W. H. St. Quintin, Esq.	5	1	6	100	521	20·53	148	119
D Ganton (Dawnay Lodge)	H. D. Birdsall, Esq.	5	1	0	185	505	19·87	150	104
D Ganton (Ganton Hall)	Harold Wrigley, Esq.	5	2	0	250	515	20·29	170	109
D Hunmanby (Holly Bank)	Miss Ackland	5	1	2	225	446	17·57	..	..
d Hunmanby (Pentrieve)	Dr. R. A. Campbell	..	..	..	..	488	19·22	..	..
3.—HUMBER—Left Bank Tributaries. 675 sq. mi.									
D Patrington (Spurn Head)	Air Ministry	8	1	0	19	335	13·17	131	92
D Patrington	Miss H. Kirman	5	2	6	46	406	16·00	124	89
D Hull (Pearson Park)	H. B. Witty, Esq.	5	0	10	12	416	16·39	150	96
D Hull (Springhead)	C. B. Newton, Esq., C.E.	5	1	0	16	405	15·93	156	94
D Roos (Northend)	Miss F. Brown	..	..	..	56	422	16·63	144	100
D Newport (Co. School)	A. Y. Jordan, Esq.	5	0	8	9	418	16·46	146	101
D Cottingham (Water Works)	C. B. Newton, Esq., C.E.	5	1	1	26	415	16·35	134	91
D North Cave (The Croft)	Major W. H. Carver	8	1	6	35	469	18·45	..	..
D Holme-on-Spalding-Moor	C. J. Pybus, Esq.	8	1	0	32	432	17·02	137	104
D Beverley (E. Riding Mental Hosp.)	Dr. E. S. Simpson, M.C.	5	1	0	175	486	19·14	158	106
D Beverley (New Walk)	W. Evans, Esq., C.E.	5	3	0	38	468	18·43	164	97
D Beverley (Hull Bridge)	W. Evans, Esq., C.E.	5	2	6	11	436	17·15	140	86
D Market Weighton (Dalton Holme)	Mr. J. P. Jobling	8	6	0	120	482	18·97	162	103
D Watton Abbey	J. A. Coulson, Esq.	5	2	0	40	409	16·09	125	85
D Brandesburton (Hempholm Lk.)	W. Evans, Esq., C.E.	5	2	6	11	437	17·20	148	96
D Lowthorpe (The Elms)	F. K. Hawes, Esq.	5	1	0	63	475	18·68	150	90
4.—EAST COAST STREAMS. 171 sq. mi.									
D Hornsea (Promenade)	F. Lord, Esq.	8	1	0	40	444	17·08	135	100
D Bridlington	S. R. Crofts, Esq.	5	1	0	60	506	19·92	168	105
D Bridlington (Grammar School)	G. T. Reeve, Esq.	8	1	0	57	481	18·95	141	94
D Wold Newton Hall	Major Ralph E. Stuart	5	1	6	175	465	18·29	..	..
D Ganton (Willerby Wold)	Major W. F. Wormald	5	0	6	565	487	19·17	159	103
D Filey Vicarage	Rev. Canon A. N. Cooper	5	1	0	95	465	18·29	174	108

DIVISION IX.—YORKSHIRE—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.	
		Diam.	Height Ground	above Sea Level.	1921				
NORTH RIDING. (Area, 2155 sq. mi.)		in.	ft. in.	ft.	mm.	in.			
1.—OUSE—Ure. 273 sq. mi.									
Masham Moor (W.Somerside) . . . C. G. Henzell, Esq., C.E. . .		5	0 9	928	984	38·74	175	149	
Masham Moor (HighSourMire) . . . C. G. Henzell, Esq., C.E. . .		5	0 9	884	663	26·10	..	..
Masham Moor (Leighton Res.) . . . C. G. Henzell, Esq., C.E. . .		5	0 9	634	786	30·95	177	126	
Masham Moor (Towler Hill) . . . C. G. Henzell, Esq., C.E. . .		8	0 9	820	833	32·78	181	129	
Masham Moor (Breary Bank) . . . C. G. Henzell, Esq., C.E. . .		5	0 9	600	821	32·33	178	131	
Masham Moor (Healey) . . . C. G. Henzell, Esq., C.E. . .		5	0 9	542	755	29·73	169	142	
Masham Moor (Healey Pasture) . . . C. G. Henzell, Esq., C.E. . .		5	0 9	1237	798	31·41	178	127	
Masham Moor (Low Houses) . . . C. G. Henzell, Esq., C.E. . .		5	0 9	693	896	35·27	198	152	
d Masham Moor (Roundhill Res.) . . A. S. West, Esq., C.E. . .		8	1 0	743	930	36·61	195	141	
d Clifton Castle Gardens Lady Cowell		5	1 0	360	592	23·30	148	106	
Middleham (Cotesue) A. Rowntree, Esq.		5	1 0	600	640	25·19	..	..
d Middleham (Castle Hill) Col. P. H. Hammond, C.B. . .		5	1 0	470	649	25·56	152	111	
d Middleham (The Deanery) Rev. H. G. Topham		5	1 0	450	663	26·12	145	115	
d West Witton (Ivy House) J. B. Espiner, Esq.		5	1 0	606	739	28·85	172	119	
d Leyburn (Bolton Hall) Mr. F. Scrivener		8	1 0	420	716	28·18	171	114	
d Askrigg (Worton) Rev. W. M. Atkinson		5	1 0	700	752	29·60	163	128	
Hawes (The Stone House) H. Arden Crallan, Esq. . . .		5	1 6	845	1284	50·54	169	153	
2.—OUSE—Swale. 569 sq. mi.									
Sessay Rev. F. Payne Gallwey		5	1 0	113	419	16·49	..	..
d Dalton Parsonage Rev. G. H. Chilman		5	1 0	79	452	17·80	133	94	
d Carlton Husthwaite W. R. Bagley, Esq.		5	1 0	190	455	17·92	168	99	
d Coxwold (The Old Hall) H. Geipel, Esq.		5	1 6	260	482	18·99	..	102	
d Baldersby (Baldersby Park) . . . Mr. J. E. Hathaway		10	1 6	100	475	18·70	174	103	
Burniston (Camp Hill) Capt. F. H. Reynard		8	3 6	152	475	18·68	..	..
d Thirsk (Spital Hill) C. H. Gill, Esq.		5	1 0	117	480	18·89	162	108	
Thirsk (Sowerby) William Brown, Esq.		5	1 0	110	455	17·92	..	..
d Carlton Miniott School L. P. Knowles, Esq.		5	1 0	100	533	20·98	176	112	
d Thirsk (Brynkellhow) A. B. Hall, Esq.		8	1 0	115	461	18·15	149	104	
d Thirsk (The Hall) Late R. Bell, Esq.		5	1 10	121	447	17·62	141	95	
d Thirsk (Stoneybrough) T. J. Foggitt, Esq.		5	1 2	122	471	18·53	142	100	
d Sutton (Brook House) Mrs. Hansell		5	1 0	246	466	18·33	136	103	
M Felixkirk (Thirlby) A. J. Walker, Esq.		5	1 0	339	508	19·99	..	..
d Felixkirk (Mount St. John) . . . A. J. Walker, Esq.		5	1 0	523	484	19·06	172	104	
d Felixkirk (Mount St. John) . . . A. J. Walker, Esq.		5	1 10	542	493	19·39	166	105	
d Felixkirk (Mount St. John) . . . A. J. Walker, Esq.		5	1 0	541	497	19·58	169	106	
Felixkirk (Mount St. John) . . . A. J. Walker, Esq.		5	1 10	542	473	18·62	..	..
M Felixkirk (Mount St. John) . . . A. J. Walker, Esq.		5	1 0	541	484	19·04	..	..
d Boltby (Ravensthorpe Manor) . . F. E. Walker, Esq.		5	1 7	661	491	19·34	157	106	
M Boltby, East A. J. Walker, Esq.		5	1 0	460	515	20·29	..	..
M Boltby (Cliff Head) No. 2 A. J. Walker, Esq. . . .		5	1 4	772	521	20·50	..	..
M Boltby (High Paradise) A. J. Walker, Esq.		5	1 3	1144	629	24·78	..	..
d Kirkby Knowle Rectory Rev. C. H. Murray		5	1 0	436	469	18·45	138	97	
Bedale (Thorp Perrow) Mr. W. Pattison		8	1 6	140	520	20·47	154	110	
d Maunby Hall Major A. Hill-Walker, V.C. . .		5	1 0	90	513	20·20	122	113	
d Bedale (Park House) Miss M. Greenwood		5	1 1	180	520	20·49	135	106	
d Thornton-le-Moor (Pasture Ho.) G. H. Croft, Esq.		5	1 0	225	463	18·25	154	99	
d Borrowby (Leake Vicarage) . . . Rev. G. W. Kendall		5	1 0	215	485	19·10	143	112	
Kepwick Vicarage Rev. T. E. Parkinson		5	1 0	530	441	17·36	..	96	
Scruton Hall Rev. A. T. Coore		5	1 3	110	470	18·51	150	96	
M Swaledale (Gunnarside Lodge) . W. M. Christy, Esq.		5	1 0	950	1095	43·12	..	..
d Northallerton (Brompton) . . . J. P. Yeoman, Esq.		5	3 0	165	499	19·63	172	109	
d Reeth T. R. Blumer, Esq.		5	1 0	700	741	29·16	144	122	
d Osmotherley T. Yeoman, Esq.		8	0 8	660	557	21·91	146	110	
d East Harlsey (Harlsey Hall) . . J. Constantine, Esq.		5	1 0	370	495	19·47	125	104	
Richmond (Marske Hall) R. A. Tatton, Esq.		5	1 0	525	659	25·93	154	115	
d Richmond (National Schools) . . R. Hornby, Esq.		5	1 0	430	553	21·79	127	86	
d Rounton Grange Mr. J. Hanagan		8	1 0	249	484	19·04	177	110	
d West Rounton Rectory Rev. G. Bird		5	0 11	200	431	16·95	126	91	
d Reeth (Arkengarthdale) Samuel Gott, Esq.		5	1 0	940	888	34·97	143	120	
d Richmond (Gilling West) . . . Miss Roper		5	1 3	303	665	26·17	..	104	
Middleton Tyas J. F. B. Baker, Esq.		5	0 10	380	520	20·47	..	..

DIVISION IX.—YORKSHIRE—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with .01 in. or more.	Days with .04 in. or more.
		Diam.	Height Ground	above Sea Level.	1921				
NORTH RIDING—(con.).		in.	ft.	in.	ft.	mm.	in.		
3.—OUSE—Left Bank Tributaries. 153 sq. mi.									
Haxby (Moorlands)	E. G. Tew, Esq.	5	1	6	58	445	17.53	115	55
Sutton-on-Forest (Sutton Hall)	Mrs. Grey	5	1	0	125	423	16.67	..	..
d Crayke Rectory	Rev. T. Catton	5	..	..	200	400	15.74	140	92
4.—OUSE—Derwent. 509 sq. mi.									
Huttons Ambo (Minster Hill)	J. W. Procter, Esq.	5	1	3	75	446	17.56	..	..
d Welburn	John D. Atkin, Esq.	5	1	0	300	495	19.50	145	105
d Malton (Broughton Rise)	C. C. Laverack, Esq.	5	1	0	164	513	20.18	139	114
d Hovingham Hall	Sir W. H. A. Worsley, Bt. ..	5	0	9	119	544	21.41	143	99
d Ampleforth College	Rev. H. deNormanville, OSB	8	1	0	350	489	19.26	162	100
d Helmsley (Duncombe Pk. Gdns.)	Mr. D. Williams	5	3	0	176	587	23.13	137	113
d Pickering (Hungate Hall)	Dr. J. L. Kirk	5	1	0	90	517	20.35	188	111
d Seamer (Irtton Pump. Station)	H. Richardson, Esq., C.E. ..	8	1	0	94	594	23.38	163	109
d Scarborough (Osgodby)	H. Richardson, Esq., C.E. ..	8	1	0	166	508	20.00	..	110
d East Ayton (Derwent House)	A. H. Robinson, Esq.	5	1	0	110	545	21.47	150	107
d Scawton Rectory	Rev. C. H. Rowntree	5	1	0	606	590	23.23	170	122
d Cold Kirby (The School)	John Sanders, Esq.	5	1	0	763	599	23.58	175	120
d Old Byland (Board Inn)	Herbert Nicholson, Esq.	5	1	0	722	614	24.17	149	116
d Kirkby Moorside (Ravenswyke)	Harrison Holt, Esq.	5	1	0	220	514	20.22	..	97
d Kirkby Moorside (Hutton-le-Hole)	F. M. Curtis, Esq.	5	1	0	350	498	19.60	..	..
d Hawnby Rectory	Rev. W. Hughes	5	1	0	497	625	24.61	137	126
d Rosedale Abbey Vicarage	Miss M. Wainman	5	1	0	550	649	25.54	152	115
d Bilsdale Priory	Rev. J. Powell Parry	5	1	0	638	607	23.88	168	119
5.—ESK & C. 278 sq. mi.									
d Scarborough	D. Quaife, Esq.	5	1	0	118	476	18.74	142	97
d Scarborough (Scalby)	Mrs. J. W. Rowntree	5	0	11	131	631	24.84	137	124
d Scarborough (Scalby St. Philips)	Rev. W. E. Stewart	5	1	0	130	484	19.05	151	100
d Goathland (Thwaitefield)	L. G. Rowland, Esq.	5	0	6	485	531	20.89	..	..
d Glaisdale (The Gables Gardens)	Mr. H. Hope	5	0	9	400	617	24.30	148	113
d Danby (The School House)	J. W. Lynas, Esq.	5	1	0	500	650	25.59	144	119
d Danby Lodge	Mr. C. Hardy	5	3	0	500	640	25.18	139	116
d Whitby (Park Hall, Aislaby)	Rev. J. H. Richardson	5	1	0	500	546	21.48	168	108
d Whitby	D. S. Ramsdale, Esq.	8	1	0	125	453	17.85	151	91
d Whitby (Mulgrave Castle)	Mr. J. Corbett	5	1	0	410	530	20.85	174	98
d Guisborough (Lockwood Res.)	W. M. I'Anson, Esq., C.E. ..	8	1	0	632	659	25.94	141	113
d Guisborough (Lockwood Res.)	W. M. I'Anson, Esq., C.E. ..	8	1	0	632	642	25.26	..	..
d Saltburn (Skelton Castle)	Lt.-Col. W. H. A. Wharton ..	5	0	9	272	602	23.71	160	125
6.—TEES. 373 sq. mi.									
d Ingleby Manor	Lord De L'Isle & Dudley ..	5	0	11	460	571	22.47	141	108
d Ingleby Greenhow Vicarage	Rev. M. A. Horsfall	5	1	6	420	638	25.13	165	121
d Croft (Dalton-on-Tees)	Mr. W. Wrather	8	2	0	170	485	19.09	136	97
d Hutton Magna Vicarage	Rev. A. W. M. Close	5	0	6	450	593	23.35	137	115
d Kildale Hall	Major R. B. Turton	5	1	2	600	683	26.88	197	131
d Marton-in-Cleveland (Southcroft)	R. Theodore Wilson, Esq.	5	0	9	100	501	19.74	135	102
d Middlesbrough (Albert Park)	J. R. F. Readman, Esq.	8	1	0	30	517	20.37	142	97
d Baldersdale (Blackton Res.)	Hugh Wilson, Esq.	5	1	0	937	912	35.90	..	..
d Baldersdale (Balderhead)	Hugh Wilson, Esq.	5	1	0	1360	1148	45.20	..	..
d Baldersdale (Hury Reservoir)	Hugh Wilson, Esq.	5	1	0	866	859	33.84	174	141
d Lunedale (Lunehead)	Hugh Wilson, Esq.	5	1	0	1450	1466	57.70	..	..
d Lunedale (Selset)	Hugh Wilson, Esq.	5	1	0	924	1039	40.90	..	..
d Lunedale (Grassholme Res.)	Hugh Wilson, Esq.	5	1	0	936	957	37.69	170	145
d Mickleton (Lime Kiln Pasture)	Mr. J. Harvey	8	1	0	1175	780	30.70	..	..

DIVISION X.—NORTHERN COUNTIES.

DURHAM. (Area, 1011 sq. mi.)

1.—TEES & C. 396 sq. mi.

d Darlington (North Villa)	Dr. C. A. Lower	5	1	3	100	457	17.98	156	97
d Darlington (Public Park)	"North Star"	5	1	0	150	511	20.13	148	..
d Darlington (Hummersknott)	Mr. John Short	5	1	0	200	495	19.50	..	99
d Piercebridge (Carlbury Hall)	J. H. Pease, Esq.	5	1	0	222	479	18.87	..	..

DIVISION X.—NORTHERN COUNTIES—(con.).

STATIONS.	AUTHORITIES	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.	1921				
DURHAM—(con.).		in.	ft.	in.	ft.	mm.	in.		
1.—TEES & C.—(con.).									
d Barnard Castle (County School)	C. W. Watson, Esq.	5	1	6	540	593	23·34	146	111
d Winston-on-Tees	E. Hardy, Esq.	5	1	0	380	490	19·28	..	..
d Stockton (Ropner Park)	W. A. Jenkins, Esq.	5	1	9	61	476	18·73	130	92
d Hurworth Burn (Crookfoot Res.)	A. W. Branson, Esq., C.E.	10	1	6	293	497	19·58	155	97
d West Hartlepool (Lynn Street)	H. Lamb, Esq.	5	63	0	84	418	16·45	139	87
d West Hartlepool (WaterWorks)	A. W. Branson, Esq., C.E.	10	1	0	35	483	19·01	150	80
d Hurworth Burn Reservoir	A. W. Branson, Esq., C.E.	10	1	0	357	513	20·20	159	97
d Hartlepool (Hart Reservoir)	A. W. Branson, Esq., C.E.	10	1	0	172	429	16·88	140	83
d Shotton Pumping Station	A.B.E. Blackburn, Esq. C.E.	8	1	0	422	577	22·73	165	109
d Seaham (Dalton Pumping Sta.)	A.B.E. Blackburn, Esq. C.E.	8	1	0	345	568	22·37	155	106
2.—WEAR. 464 sq. mi.									
d Bishop Auckland (N. Bondgate)	J. Kilburn, Esq.	5	1	0	316	544	21·42	157	107
d Stanhope (Parson Byers Quarry)	Messrs. Bell, Bros., Ltd.	5	6	8	846	581	22·86	..	102
d Durham Observatory	F. Sargent, Esq.	8	0	10	336	490	19·30	156	101
d Ushaw (St. Cuthbert's College)	Rev. J. R. Adamson	5	0	9	594	537	21·14	171	104
d Pitlington (Elemore Hall)	Miss Baker Baker	8	0	6	323	701	27·58	..	..
d Weardale W.W. (Tunstall Res.)	H. Robinson, Esq., C.E.	8	1	2	724	635	25·02	135	119
d Weardale W.W. (Waskerley 6)	H. Robinson, Esq., C.E.	8	4	2	1229	632	24·88	..	..
d Weardale W.W. (Waskerley 3)	H. Robinson, Esq., C.E.	8	4	6	1433	695	27·38	..	..
d Weardale W.W. (Waskerley 4)	H. Robinson, Esq., C.E.	8	4	7	1321	627	24·69	..	..
d Weardale W.W. (Waskerley 5)	H. Robinson, Esq., C.E.	8	4	2	1244	652	25·66	..	..
d Weardale W.W. (Waskerley)	H. Robinson, Esq., C.E.	8	0	11	1179	724	28·51	177	133
d Weardale W.W. (Waskerley 2)	H. Robinson, Esq., C.E.	8	4	5	1367	650	25·60	..	..
d Weardale W.W. (Waskerley 1)	H. Robinson, Esq., C.E.	8	4	4	1317	671	26·43	..	..
d Fence Houses (Chilton Moor)	V. W. Corbett, Esq.	5	1	4	186	509	20·04	..	..
d Chester-le-Street (Biddick Hall 1)	Mr. J. Fletcher	5	1	0	150	626	24·63	170	113
d Chester-le-Street (Biddick Hall 2)	Mr. J. Fletcher	5	1	0	150	631	24·83	170	112
d Ryhope Pumping Station	A.B.E. Blackburn, Esq. C.E.	8	1	1	228	541	21·31	150	96
d Sunderland (W. Hendon H.) No. 5.	Late Mrs. Mounsey	5	1	0	130	545	21·46	166	103
d Sunderland (Mowbray Park)	H. Renney, Esq., M.D.	5	3	0	105	623	24·53?	154	104
d Sunderland (Claxheugh Grove)	Ford Paper Works, Ltd.	5	2	6	90	595	23·44	183	109
d Sunderland (Cedars End)	W. F. Vint, Esq.	5	1	0	115	537	21·13	147	97
d Sunderland (Southwick Cemet'y)	Mr. J. R. Hodgson	8	1	0	171	680	26·78	133	..
3.—TYNE, LOWER. 151 sq. mi.									
d Weardale W.W. (Smiddy Shaw)	H. Robinson, Esq., C.E.	8	1	3	1128	722	28·43	195	135
d Consett Park Farm	J. D. Brown, Esq.	5	4	3	641	605	23·83	137	101
d Chopwellwood (Armstrong Coll.)	R. W. Hunter, Esq.	8	1	0	446	591	23·26	161	101
d Sunderland (Cleaton Pump Stn.)	A.B.E. Blackburn, Esq. C.E.	8	1	0	216	522	20·55	152	94
d Ryton-on-Tyne (Balgonie Ho.)	J. W. Smith, Esq., M.D.	5	1	3	258	621	24·47	139	108
d South Shields (Bent's Park)	Dr. W. Campbell Lyons	5	1	0	36	518	20·41	163	95
NORTHUMBERLAND. (Area, 2015 sq. mi.)									
1.—EDEN. 20 sq. mi.									
2.—SOUTH TYNE. 232 sq. mi.									
d Allenheads	J. W. Metcalfe, Esq.	8	1	0	1353	991	39·02	..	..
d Bardon Mill (Allans Green)	J. B. Lowes, Esq.	5	0	5	1000	687	27·06	193	136
3.—TYNE, LOWER. 227 sq. mi.									
d Corbridge (Howden Dene)	T. D. Straker-Smith, Esq.	5	0	8	200	643	25·30	163	120
d Hexham (Beaufront Castle)	The Lady Rayleigh	8	1	0	400	672	26·44	..	..
d Newcastle (Lit. and Phil. Soc.)	H. Richardson, Esq.	8	55	0	160	585	23·04	..	..
d Newcastle (Leazes Park)	W. J. Steele, Esq.	5	1	0	255	576	22·67	..	93
d Newcastle (Town Moor)	D. C. Baldie, Esq.	5	2	0	201	640	25·20	153	113
d Newcastle (Wellburn, Jesmond)	J. H. Holmes, Esq., C.E.	5	1	6	163	593	23·33	160	106
d Tynemouth (Tyne Pier Works)	R. F. Hindmarsh, Esq. C.E.	5	1	8	65	609	23·97	166	99
d Tynemouth (Coastguard Stat.)	Meteorological Office	8	1	0	118	529	20·83	158	98
d Whittle Dean (Newcastle W.W.)	A. Hardcastle, Esq., C.E.	5	0	6	380	610	24·03	184	123
d Whittle Dean Filters (N'stle W.W.)	A. Hardcastle, Esq., C.E.	5	1	1	353	611	24·07	174	118

DIVISION X.—NORTHERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1921	Days with ·01 in. or more.	Days with ·04 in. or more.		
		Diam.	Height Ground	above Sea Level.					
NORTHUMBERLAND—(con.).		in.	ft.	in.	ft.	mm.	in.		
4.—NORTH TYNE. 433 sq. mi.									
N. Tyne (G. Crag) (N'castle W.W.)	A. Hardcastle, Esq., C.E...	5	1	6	896	681	26·80	..	..
Hallington Vill. (N'castle W.W.)	A. Hardcastle, Esq., C.E...	5	1	0	467	722	28·43	..	..
Hallington Res. (N'castle W.W.)	A. Hardcastle, Esq., C.E...	5	1	0	470	700	27·56	178	119
Hallington (Fawcett) (Newc. W.W.)	A. Hardcastle, Esq., C.E...	5	1	2	537	675	26·58	..	..
Hallington (Cheviot) (Newc. W.W.)	A. Hardcastle, Esq., C.E...	5	1	2	576	669	26·36	..	..
Campbill (Newcastle W.W.)	A. Hardcastle, Esq., C.E...	5	1	1	650	735	28·92	..	..
Colt Crag (Newcastle W.W.)	A. Hardcastle, Esq., C.E...	5	1	0	654	675	26·59	181	131
d Falstone Rectory	Rev. A. J. Dexter	5	1	0	485	1133	44·59	204	144
d Bellingham (High Green Man.)	Capt. Sir C. Morrison-Bell, Bt.	5	1	0	849	851	33·52	226	127
Redewater (Catcleugh)	A. Hardcastle, Esq., C.E...	5	1	0	819	981	38·63	201	146
5.—COQUET & C. 840 sq. mi.									
Whittington (Newcastle W.W.)	A. Hardcastle, Esq., C.E...	8	0	9	528	668	26·30	..	..
Burnside (Newcastle W.W.)	A. Hardcastle, Esq., C.E...	5	0	9	419	647	25·48	..	..
Ryal Cottage (Newcastle W.W.)	A. Hardcastle, Esq., C.E...	10	0	9	463	644	25·34	..	..
d Morpeth (Bothalhaugh Garden)	Hon. Rev. W. C. Ellis	5	1	10	35	621	24·46	187	103
M Morpeth (Bothalhaugh Garden)	Hon. Rev. W. C. Ellis	5	0	10	35	617	24·28	..	..
d Morpeth (Bothalhaugh Lawn)	Hon. Rev. W. C. Ellis	5	0	10	137	612	24·08	187	103
M Morpeth (Bothalhaugh Lawn)	Hon. Rev. W. C. Ellis	5	0	10	130	621	24·43	..	..
Morpeth (Ashington)	J. Gray, Esq.	5	1	0	110	599	23·60	164	98
d Morpeth (Cockle Park)	M. R. Pitman, Esq.	8	1	0	325	646	25·44	162	110
d Font Res. (Tynemouth W. W.)	J. W. McKerrrow, Esq.	10	1	0	614	745	29·31	187	132
Rothbury (Brinkburn Priory)	Mrs. Hugh Fenwick	8	1	0	257	579	22·80	..	123
Felton R.C. School	J. Brown, Esq.	5	1	0	210	523	20·61	125	102
d Rothbury (Crag-side)	Miss L. Hudson	8	1	3	405	704	27·73	151	122
Alnmouth (Nether Grange)	(R) Miss E. Pease	8	15	0	25	442	17·39?	144	88
d Alnwick Castle	Duke of Northumberland, K.G.	8	1	0	181	658	25·93	160	116
d Howick Hall Gardens	Mr. John Wright	8	0	10	121	604	23·79	149	108
Bamburgh	T. W. Little, Esq.	5	1	0	75	491	19·31	..	..
d Beal (Lowlynn)	H. L. Pattinson, Esq.	5	1	10	200	567	22·34	..	..
6.—TWEED. 262 sq. mi.									
d Glanton (Glanton Pyke Gdns.)	Mr. J. Henderson	8	4	2	521	689	27·13	169	135
d Ilderton (Lilburn Tower)	A. B. Collingwood, Esq.	10	6	0	300	573	22·55	151	101
d Ilderton (Lilburn Tower Grdns.)	Mr. W. Lovett	5	1	0	240	631	24·85	151	114
Wooler (St. Ninians)	Dr. R. Walker	8	0	10	176	711	28·01	..	..
Wooler (Victoria House)	Miss E. M. Dodds	5	1	0	176	571	22·48	..	96
d Doddington Vicarage	Rev. J. G. Shotton	8	1	4	140	584	23·00	141	104
Mindrum (Thornington House)	Leonard Briggs, Esq.	5	..	..	..	628	24·72	..	..
Ford Castle Gardens	Mr. J. Jackson	5	3	0	220	612	24·09	126	95
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	1191	46·90	168	..
Watermillock (Mell Fell House)	Mrs. Spring-Rice	5	1	6	960	1138	44·81	..	174
d Penrith (Briar Cottage)	H. Lester, Esq.	5	1	0	575	807	31·77	169	131
d Penrith (Sandath)	Major G. Varty-Smith	5	1	0	570	790	31·11	177	132
d Penrith (Benson House)	A. B. Sinclair, Esq.	5	1	0	480	825	32·48	173	130
d Penrith (Newton Rigg)	John Procter, Esq.	8	1	0	559	876	34·49	194	138
Penrith (Greystoke Castle)	J. Smith Hill, Esq.	5	1	3	650	1133	44·60	..	..
d Penrith (Ennism)	Mrs. Hamlet Riley	5	1	0	660	990	38·99	172	141
d Uldale (Chapel House Res.)	J. Strong, Esq.	8	1	0	620	1141	44·90	192	168
d Penrith (Nunwick Hall)	Mrs. Heywood Thompson	5	1	0	298	699	27·50	160	125
d Mealsgate (Quarry Hill)	J. Ferguson, Esq.	..	0	9	487	895	35·24	183	139
d Renwick (Ravenwood)	W. Salkeld, Esq.	5	4	0	750	931	36·67	195	164
d Wigton (Brookfield)	F. C. Ransom, Esq.	5	5	0	124	842	33·15	163	127
d Wigton (Dacre House)	J. H. Walker, Esq.	5	4	6	134	863	33·96	180	136
d Wreay Vicarage	Rev. Canon A. R. Hall	5	2	0	310	736	28·96	181	130
d Geltsdale	H. C. Marks, Esq., C.E.	5	1	2	778	887	34·91	222	150
d Carlisle (Spital Cemetery)	J. T. Charlton, Esq.	8	1	6	114	758	29·83	205	138
Carlisle (Denton Holme)	W. Eggleston, Esq.	5	2	0	57	621	24·43	..	..

DIVISION X.—NORTHERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1921	Days with ·01 in. or more.	Days with ·04 in. or more.		
		Diam.	Height Ground	above Sea Level.					
CUMBERLAND—(con.).		in.	ft.	in.	ft.	mm.	in.		
1.—EDEN & SOLWAY—(con.).									
d Carlisle (Scaleby Hall)	Sir R. A. Allison	5	1	0	112	756	29·80	179	138
Longtown (Arthuret Rectory) ..	Rev. J. C. Graham .....	..	..	..	..	869	34·20	183	..
d Penton (Warwickland School) ..	W. Roden, Esq.	5	0	6	360	877	34·51	193	147
2.—DERWENT. 257 sq. mi.									
M Sprinkling Tarn	Air Ministry	5	1	6	1985	3345	131·70	..	..
M Styehad Tarn	Air Ministry	5	1	0	1472	3072	120·95	..	..
M The Sty B	Air Ministry	4	0	6	1077	4541	178·80	..	..
M The Sty B <i>Seathwaite g.</i> ..	Air Ministry	5	1	6	1070	4690	184·65	..	..
M The Sty C	Air Ministry	4	1	0	1077	4693	184·75	..	..
M The Sty D	Air Ministry	4	1	0	1077	3821	150·45	..	..
M Borrowdale (Seathwaite)	Air Ministry	4	0	6	422	3503	137·92	..	..
Borrowdale (Seathwaite)	Air Ministry	5	1	0	423	2943	115·86	..	..
Borrowdale (Seathwaite) <i>Field</i> ..	Miss C. Marshall	5	1	0	423	3254	128·10	..	..
M Ullscarf	L. Holme Lewis, Esq., C.E. ..	7	1	8	2100	2931	115·40	..	..
M Helvellyn (Birkside)	L. Holme Lewis, Esq., C.E. ..	7	1	3	1900	1293	50·90	..	..
M Wythburn	L. Holme Lewis, Esq., C.E. ..	7	1	4	610	2377	93·60	..	..
Armboth Fells (The Pewitts) ..	L. Holme Lewis, Esq., C.E. ..	7	1	6	1650	2327	91·60	..	..
Helvellyn (Whiteside)	L. Holme Lewis, Esq., C.E. ..	7	1	6	2100	1727	68·00	..	..
d Buttermere (Hassness)	S. O. Hanlon, Esq.	5	1	0	350	2572	101·27	233	198
Thirlmere (Dale Head Hall) ..	L. Holme Lewis, Esq., C.E. ..	7	1	5	620	1969	77·50	..	..
d Keswick (Derwent Island)	John Marshall, Esq.	5	0	7	280	1477	58·17	212	159
d Keswick (Derwent Island)	John Marshall, Esq.	5	0	6	290	1463	57·58	212	160
d Keswick (The Bank)	Mr. W. E. Campbell	5	1	3	265	1455	57·29	206	163
d Keswick (High Hill)	H. Swinburn, Esq.	5	1	0	254	1363	53·66	211	160
d Keswick (Crosthwaite School) ..	H. Swinburn, Esq.	5	1	0	254	1371	53·97	212	163
d Keswick (Mirehouse)	Miss Spedding	5	1	6	280	1232	48·50	187	159
Lorton (Whinfell Hall)	Sennett Weeks, Esq.	5	0	1	255	1309	51·53	200	161
Lorton Vicarage	A. W. Lewis, Esq.	5	1	3	272	1252	49·28	153	140
d Workington (Stainburn Res.) ..	H. Bowman Williams, Esq. ..	5	1	0	180	881	34·70	179	136
d Cockermouth (Derwent Lodge) ..	Wilfred Irwin, Esq.	5	4	6	200	936	36·86	187	143
d Threlkeld (Blencathra Sanat.) ..	Dr. W. Goodchild	5	1	0	885	1612	63·46	181	170
Camerton Vicarage	Rev. E. C. Bennett	5	1	0	200	846	33·32	..	..
d Bassenthwaite Vicarage	Rev. M. H. Banister	5	1	0	350	1098	43·24	206	154
Bassenthwaite (Higham)	G. F. Fisher, Esq.	5	0	9	500	1080	42·53	204	153
3.—WEST COAST STREAMS. 235 sq. mi.									
Ravenglass (The Grove)	Sweton Fraser, Esq.	5	2	8	77	926	36·46	172	142
d Eskdale Green (Gatehouse)	Mr. J. W. Rainbow	5	1	0	215	1345	52·96	223	173
Beckfoot	Miss C. Marshall	5	1	0	180	1372	54·01	..	..
d Seascale (Whinthwaite)	Dr. R. Hellon	5	1	0	52	927	36·48	..	121
d Calder Bdge (Ponsonby Old Par.) ..	G. L. McKelvie, Esq.	5	1	6	300	1057	41·63	179	148
Braystones	H. H. Watson, Esq.	10	3	6	36	947	37·30	..	..
d Egremont (The Grange)	J. Sherwen, Esq.	8	1	0	350	1235	48·61	203	152
d St. Bees (Bickerley House) ..	(R) Lt. Col. G. Dixon	8	1	6	60	888	34·97	183	137
d Whitehaven (Scragill Reservoir) ..	E. E. Stiven, Esq., C.E.	8	1	0	188	1121	44·14	190	167
d Whitehaven (Irish Street)	Dr. Eldon Pratt	5	1	1	21	1098	43·23	179	142
Distington (Gilgarran)	Mr. A. Kydd	5	4	0	470	1056	41·59	191	151
d Workington (Winscales House) ..	Late J. A. Trench, Esq.	5	1	6	440	884	34·82	191	141
4.—DUDDON & C. 50 sq. mi.									
d Silecroft (Old Chappels)	G. H. Holt, Esq.	5	1	0	200	1227	48·30	189	159
5.—SOUTH TYNE. 87 sq. mi.									
WESTMORLAND. (Area, 783 sq. mi.).									
1.—EDEN. 373 sq. mi.									
d Kirkby Stephen (Redman Ho.) ..	Mrs. T. Mason	5	1	0	574	1032	40·63	155	128
Mosedale (Mosedale Cottage) ..	L. Holme Lewis, Esq., C.E. ..	5	1	0	1442	2387	93·97	..	..
Wet Sleddale (Mirethwaite)	L. Holme Lewis, Esq., C.E. ..	5	1	0	989	1608	63·31	..	..
Blea Water	L. Holme Lewis, Esq., C.E. ..	5	1	0	1477	2317	91·24	..	..
Mardale (Grove Brae)	L. Holme Lewis, Esq., C.E. ..	5	1	0	800	2183	85·94	..	..
Swindale Head	L. Holme Lewis, Esq., C.E. ..	5	1	0	1029	1625	63·98	..	..
Grizedale (Ruthwaite Lodge) ..	Miss C. Marshall	8	1	6	1750	2456	96·69	..	..

DIVISION X.—NORTHERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1921	Days with ·01 in. or more.	Days with ·04 in. or more.		
		Diam.	Height Ground	above Sea Level.					
WESTMORLAND—(con.).		in.	ft.	in.	ft.	mm.	in.		
1.—EDEN—(con.).									
Shap (Force Beck).....	L. Holme Lewis, Esq., C.E.	5	1	0	1062	990	38·98	..	..
Shap (Thornship Gill).....	L. Holme Lewis, Esq., C.E.	5	1	0	865	1165	45·88	..	..
Shap (Tailbert Head).....	L. Holme Lewis, Esq., C.E.	5	1	0	1103	1312	51·67	..	..
Shap (Kirk Bank).....	L. Holme Lewis, Esq., C.E.	5	1	0	911	1002	39·45	..	..
D Stainmore (Rampson).....	Capt. T. W. Bracken.....	5	1	9	981	806	31·74	204	146
Hawes Water (Naddle House).....	L. Holme Lewis, Esq., C.E.	5	1	0	830	1403	55·22	..	..
Hawes Water (Measand).....	L. Holme Lewis, Esq., C.E.	5	1	0	831	1797	70·76	..	..
Measand Beck (Keasgill).....	L. Holme Lewis, Esq., C.E.	5	1	0	1877	1298	51·12	..	..
Patterdale Hall.....	Miss C. Marshall.....	5	1	3	490	2160	85·03	202	..
Cawdale Beck (Howe Grain)....	L. Holme Lewis, Esq., C.E.	5	1	0	1638	1057	41·63	..	..
Heltondale (Kidmoor).....	L. Holme Lewis, Esq., C.E.	5	1	0	988	1106	43·53	..	..
Patterdale (Greenside Mine)....	Matthew Place, Esq.....	7	1	6	1000	2023	79·66	189	176
D Appleby (Castle Bank).....	C. R. Rivington, Esq.	5	4	0	440	771	30·36	187	135
Ullswater (Sharrow Bay).....	Mr. G. Robinson.....	5	0	7	600	1029	40·51	..	..
D Penrith (Morland).....	F. R. Markham, Esq.....	5	1	0	456	779	30·65	186	121
Penrith (Brougham Gardens)...	Mr. J. H. Lane.....	5	0	5	470	718	28·28	158	130
2.—LEVEN. 60 sq. mi.									
D Bowness (Dawstone).....	A. M. Sing, Esq.....	5	1	2	550	1247	49·08	216	168
D Bowness (Fellside).....	T. D. Lingard, Esq.....	5	0	6	310	1591	62·62	189	167
Bowness (Fallbarrow).....	Miss C. Marshall.....	8	1	0	155	1598	62·91	..	..
D Windermere (Hammar Bank)....	Mrs. H. Coutts.....	5	1	0	200	1546	60·85	211	157
D Windermere (Holebird).....	W. G. Groves, Esq.....	5	1	0	483	1721	67·76	219	174
Windermere (Brockhole).....	W. Gaddum, Esq.....	5	1	6	175	1606	63·24	197	161
D Ambleside (Wansfell).....	Miss Wrigley.....	8	1	0	150	1733	68·23	186	166
Ambleside (Skelwith Bridge)....	Miss C. Marshall.....	5	1	9	190	2574	101·35	187	..
M Little Langdale (Fell Foot)....	Miss C. Marshall.....	5	2	2	380	2884	113·53	..	..
D Ambleside (White Craggs)....	C. H. Hough, Esq.....	5	1	7	200	1812	71·34	196	166
D Ambleside (Market Square)....	G. A. Johnston, Esq., M.D.	5	1	0	180	1891	74·45	206	170
Ambleside (Lesketh How).....	Miss Benson.....	5	2	6	175	2019	79·47	210	179
D Rydal (The Stepping Stones) ..	Gordon Wordsworth, Esq..	5	1	0	190	2071	81·54	210	176
M Rydal (The Stepping Stones)....	Gordon Wordsworth, Esq..	5	1	3	190	2005	78·94	..	..
D Rydal.....	Miss M. Yates.....	5	1	0	390	2100	82·66	217	184
D Rydal (High Close).....	F.E.T. Jones Balme, Esq....	8	0	9	553	2090	82·27	202	172
D Rydal (The Hall).....	R. E. Porter, Esq.....	5	0	6	354	2131	83·90	218	182
D Dungeon Ghyll.....	Miss C. Marshall.....	5	1	0	310	3003	118·24	206	175
M Dungeon Ghyll.....	Miss C. Marshall.....	5	1	0	311	3001	118·15	..	..
M Mickleden.....	Miss C. Marshall.....	5	1	6	490	3690	145·26	..	..
D Grasmere (The Wray).....	Miss G. M. Simpson.....	5	1	0	221	2445	96·28	222	179
3.—KENT. 188 sq. mi.									
D Burton (Under Fell).....	J. B. Hoyle, Esq.....	5	0	9	225	1089	42·88	197	160
D Heversham (Plumtree Hall)....	Miss M. C. Watson.....	5	0	8	115	1155	45·46	205	150
D Heversham (Leasgill).....	Major T. A. Argles.....	5	0	8	130	1047	41·23	196	147
Old Hutton (Middleshaw).....	J. H. Thurstan, Esq., C.E.	8	3	5	369	1075	42·31	153	142
Killington Reservoir.....	J. H. Thurstan, Esq., C.E.	8	2	8	674	1090	42·91	..	137
D Kendal (Crosthwaite Vicarage)....	Rev. T. Heelis.....	5	1	0	165	1292	50·85	176	151
D Kendal (Vicarage Terrace)....	G. F. Braithwaite, Esq. ..	8	3	3	150	1155	45·47	191	148
D Kendal (Holmcroft).....	R. Rhodes, Esq.....	5	1	3	150	1234	48·59	189	155
Kendal (Greenside).....	Miss C. E. Wilson.....	5	1	0	380	1303	51·30	198	158
D Kendal (Hylands).....	H. W. Baron, Esq.....	5	1	6	375	1384	54·49	169	152
D Kendal (Oak Bank).....	Allan Jesper, Esq.....	5	1	0	220	1226	48·28	178	160
Kendal (Ellergreen).....	C. J. Cropper, Esq.....	5	1	6	270	1430	56·31	208	..
M Long Sleddale (Low House)....	A. Wilson, Esq.....	5	1	0	550	1832	72·14	..	..
Long Sleddale (High House)....	F. L. O'Dwyer, Esq.....	5	1	0	520	1790	70·49	..	..
D Kentmere (Mags Howe).....	Miss G. M. Barker.....	5	1	0	750	1884	74·19	200	174
4.—LUNE. 122 sq. mi.									
Kirkby Lonsdale.....	J. R. Picard, Esq.....	7	0	8	215	1224	48·18	..	..
D Kirkby Lonsdale (Casterton Sch)	The Head Mistress.....	8	1	6	320	1189	46·79	177	142
D Barbon Manor.....	Lord Shuttleworth.....	5	1	3	650	1168	46·00	..	153
D Barbon.....	W. Wilkinson, Esq.....	5	1	0	310	1214	47·80	174	154
D Orton.....	Michael Scott, Esq.....	5	1	0	770	1515	59·63	200	155
5.—TEES. 40 sq. mi.									

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

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.	1921			
MONMOUTH. (Area, 534 sq. mi.).		in.	ft.	in.	ft.	mm.	in.	
1.—RHYMNEY. 39 sq. mi.								
d Rumney (Witla Court)	.....Mr. J. F. Matthyssens	5	1	0	177	660	26·00	130 118
2.—EBBW. 88 sq. mi.								
d Rogerstone (Brynhedydd)	.....Blethyn T. Rees, Esq., C.E	5	0	8	333	582	22·90	.. 114
d Rogerstone (Rhiwderin)	.....L.Forestier-Walker, Esq, MP	5	1	3	259	646	25·45	145 117
d Abertillery (The Park)	.....S. E. Thomas, Esq.....	5	1	0	700	978	38·50	175 132
d Abertillery (Cwmtillery).....	W. Y. Hobkirk, Esq.	5	1	0	970	1115	43·91	157 136
d Tredegar Laboratory	.....W. Morgan, Esq.	5	2	0	950	1007	39·65	167 137
d Tredegar (Redesdale)	.....D. W. Davies, Esq.....	5	1	6	963	698	27·49	165 132
d Ebbw Vale (Iron Works)	.....J. H. Williams, Esq., V.C.	8	1	0	902	1006	39·59	165 132
d Nant-y-bwch(ShonSheffrey's W)	D. W. Davies, Esq.....	5	1	5	1204	985	38·80	176 143
3.—USK & C. 290 sq. mi.								
Goldcliff (Porton)	.....Blethyn T. Rees, Esq., C.E..	5	1	3	27	507	19·96	131 104
d Newport (Alexandra Dock)	.....T. W. R. Pearson, Esq. . .	5	8	0	39	552	21·72	141 105
d Portskewett (Sudbrook)	.....H.V.Woodward, Esq., C.E..	8	0	10	22	512	20·15	.. 87
d Newport W.W. (Friar St. Yard)	Newport Corporation	5	6	0	32	671	26·41	144 116
d NewportWW(Ynis-y-froR) new	Newport Corporation	5	1	0	136	729	28·71	164 125
d Newportww(Pant-y-reosR) new	Newport Corporation	5	1	0	435	685	26·95	176 121
d Newport W.W. (Llanvaches)	Newport Corporation	5	0	10	456	653	25·72	173 121
d Newport W.W. (Nantpridd)	Newport Corporation	5	1	0	500	693	27·28	168 119
d Chepstow (Itton Court)	.....Col. E. C. Curre.....	5	1	0	390	609	23·99	148 113
d Caerleon (Cwm-y-Wiwer)	.....Blethyn T. Rees, Esq., C.E	5	1	0	112	620	24·42	147 111
d Llanfrechfa Grange	.....Late Gen. W. F Cleeve, C.B.	5	4	0	326	667	26·27	.. ..
d Newport W.W. (Newchurch)	Newport Corporation	5	1	0	550	745	29·33	167 119
d Usk (Castle Parade House)	.....J.MaitlandWatkins, Esq. . .	5	1	0	75	608	23·93	131 109
d Abersychan (Snatchwood Pk.)	Godfrey E. Jones, Esq.....	8	1	0	529	955	37·57	171 130
d Abersychan (Glansychan)	.....G. W. James, Esq.	5	1	0	699	990	38·98	203 136
d Little Mill (Monmouth Reform.)	Major F. E. Craven Jones.	5	1	0	300	659	25·93	154 110
d Goytre (Goytre Hall)	.....Mrs. Lionel Whitehead....	9	1	2	300	772	30·40	166 123
d Blaenavon (Estate Office)	.....E. J. John, Esq.	8	4	0	1150	916	36·08	.. ..
d Abergavenny	.....F. Mansfield, Esq.....	5	1	0	194	604	23·79	.. 90
d Abergavenny (Mansel Place)...	C. Webb, Esq.....	8	7	2	207	640	25·21	128 91
d Abergavenny (Larchfield)	.....Dr. N. R. Phillips	5	1	0	240	607	23·89	139 103
d Abergavenny (The Chain)	.....W. Baker-Gabb, Esq.	5	1	0	310	595	23·43	142 97
d Grwyne Fawr (Coed Dias)	.....W. Baker-Gabb, Esq.	5	1	0	900	714	28·12	179 127
4.—WYE. 117 sq. mi.								
Chepstow (The Cedars).....	J. E. G. Lawrence, Esq....	5	2	0	150	598	23·55	138 115
d Tintern	.....Office of Woods.....	8	1	0	100	..	..	.. ..
d Monmouth (The Elms)	.....Mrs. Hall	5	1	1	91	391	15·41	.. ..
d Monmouth (Pentwyn).....	Rev. Canon J. T. Harding.	9	1	0	191	505	19·88	136 99
d Llanvihangel Crucorney Depôt.	J. F. Jupp, Esq., C.E.	5	1	0	501	577	22·70	135 109
GLAMORGAN. (Area, 808 sq. mi.)								
1.—LOUGHOR. 55 sq. mi.								
d Gorseinon (Penllergaer)	.....Sir J. T. D. Llewelyn, Bt...	5	3	6	240	936	36·86	167 139
d Felindre (Blaenant Dhu).....	G. R. Collinson, Esq., C.E..	5	1	3	348	1096	43·16	189 145
d Felindre (Lower Lliw Res.)	.....G. R. Collinson, Esq., C.E..	8	1	3	427	959	37·75	176 137
d Felindre (Upper Lliw Res.)	.....G. R. Collinson, Esq., C.E..	8	1	3	600	1310	51·58	204 149
2.—GOWER PENINSULA. 62 sq. mi.								
d Penmaen (Cefn Mor).....	Lieut. A. Bostock	5	1	5	300	827	32·57	155 136
d Sketty (Rhydyrhelyg)	.....E. H. Perkins, Esq.	5	1	0	124	932	36·71	185 140
d Sketty (Killay House)	.....M. Williams, Esq.....	5	0	6	265	889	34·99	175 138
3.—TAWE. 47 sq. mi.								
d Swansea (Victoria Park)	.....Mr. D. Bliss	8	1	0	26	861	33·87	195 140
d Morriston (Pentreporth House).	M. W. Williams, Esq.	5	1	0	236	1026	40·39	168 150
d Clydach (Wernfadog)	.....Mrs. Player	8	4	2	..	864	34·00	158 117
d Pontardawe (Plas Cilybebyll)	J. H. B. Lloyd, Esq.	5	3	6	500	1285	50·60	.. ..
d Ystalyfera (Wern House)	.....J. Williams, Esq.	5	1	6	240	1435	56·50	187 156

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.	
		Diam.	Height Ground	above Sea Level.	1921				
GLAMORGAN—(con.).		in.	ft.	in.	ft.	mm.	in.		
4.—NEATH. 82 sq. mi.									
Briton Ferry (Brynsiriol)	H. A. Clarke, Esq., C.E. . .	5	1	0	33	889	35·01	156	134
Briton Ferry (Cefn Court)	H. A. Clarke, Esq., C.E. . .	5	1	0	503	945	37·19	157	141
Neath (Cimla Reservoir)	G. C. Jones, Esq.	5	1	0	364	957	37·68	173	146
Neath (Gnoll Reservoir)	G. C. Jones, Esq.	5	1	0	204	1107	43·59	168	150
Neath (Maesmelyn)	Major E. Ll. Green	5	1	6	115	860	33·86	166	143
Neath (Glynfeln)	T. Gibbins, Esq.	5	1	4	180	1083	42·63	..	142
5.—OGMORE & C. 350 sq. mi.									
Cowbridge (Fonmon Castle)	Mrs. Oliver Jones	8	1	2	130	610	24·02	129	114
Barry W.W. (Biglis)	T. E. Franklin, Esq., C.E. . .	5	1	0	20	581	22·87	144	108
Barry W.W. (Merthyr Dyfan R.)	T. E. Franklin, Esq., C.E. . .	5	1	0	300	673	26·49	..	..
Barry W.W. (Pencoedtre Res.)	T. E. Franklin, Esq., C.E. . .	5	1	0	200	586	23·08	..	..
Barry W.W. (Dinas Powis Res.)	T. E. Franklin, Esq., C.E. . .	5	1	0	165	651	25·65	..	..
Lower Penarth	E. I. Evans, Esq., C.E. . .	5	1	0	67	569	22·42	138	103
Penarth	E. I. Evans, Esq., C.E. . .	5	5	0	160	662	26·08	152	120
Cardiff (Cogan Pumping Statn.)	C. H. Priestley, Esq., C.E. . .	5	1	0	121	574	22·60	144	112
Cardiff (Ely Pumping Station)	C. H. Priestley, Esq., C.E. . .	5	1	0	53	688	27·08	194	123
Cardiff (St. Fagans)	Capt. H. A. Pettigrew	5	0	11	100	842	33·16	161	136
Cowbridge (Ash Hall)	E. Tudor Owen, Esq.	8	3	6	315	929	36·59	152	136
Merthyr Mawr	Lt.-Col. J. D. Nicholl	8	0	10	70	817	32·18	152	140
Bridgend (Highmead)	H. J. Randall, Esq.	5	1	0	80	877	34·51	176	142
Llantrisant (Talygar)	W. D. Clark, Esq.	5	4	3	250	1044	41·09	157	133
Port Talbot (Twyn-yr-hydd)	G. Lipscomb, Esq.	5	1	3	180	718	28·27	166	131
Ogmore Vale (Ogmore School)	T. Jacob Jones, Esq.	5	0	6	600	1569	61·76	147	136
Pontycymer (Garw Sec. Sch.)	J. J. Morgan, Esq.	5	1	0	600	1357	53·43	157	142
Glyncorwg Colliery	Mr. C. Stephens	5	4	6	725	1785	70·26	179	155
6.—TAFF. 157 sq. mi.									
Cardiff (Trade Street Depôt)	C. H. Priestley, Esq., C.E. . .	5	1	0	45	634	24·95	149	110
Llandaff (West Hill)	J. E. Gladstone, Esq.	5	1	0	110	694	27·33	161	120
Rhubina Reservoir	C. H. Priestley, Esq., C.E. . .	5	1	0	336	868	34·16	157	130
Pontypridd (Maesderwen)	T. Bowen, Esq.	5	6	0	425	1044	41·10	164	138
Pontypridd (Lan Wood Res.)	T. W. Coates, Esq., C.E. . .	5	1	6	300	1132	44·55	170	136
Ystradyfodwg (Tyntyla Hos.)	J. D. Jenkins, Esq., M.D. . .	5	1	0	590	966	38·03	147	121
Treharris Service Reservoir	T. F. Harvey, Esq., C.E. . .	5	1	0	865	1070	42·12	163	134
Mountain Ash (Maesydderwen)	Lt.-Col. M. Morgan	5	1	0	483	1054	41·48	167	124
Mountain Ash (Darranlas Res.)	W. G. Thomas, Esq., C.E. . .	5	0	11	540	1127	44·35	182	136
Treherbert (Tyn-y-waun)	O. Thomas, Esq.	5	1	0	801	1943	76·50	189	155
Treherbert (Tyn-y-waun)	O. Thomas, Esq.	5	1	0	801	1922	75·67	..	..
Cwmaman Collieries	R. R. Davies, Esq.	5	2	2	930	1263	49·73	181	146
Rhondda (Pont Lluest WenR.)	3 T. W. Coates, Esq., C.E. . .	5	1	6	1200	1805	71·06	170	157
Rhondda (Pont Lluest WenR.)	2 T. W. Coates, Esq., C.E. . .	5	1	6	1225	1111	43·72?	170	148
Rhondda (Pont Lluest WenR.)	1 T. W. Coates, Esq., C.E. . .	5	1	6	1250	2019	79·50	170	160
Rhondda W.W. (LlynFawr Res.)	Mr. J. B. Hughes	8	1	0	1220	1855	73·01	180	153
Merthyr Tydfil (Penybryn Filt.)	T. F. Harvey, Esq., C.E. . .	5	1	0	936	1026	40·41	195	150
Merthyr Tydfil (Penybryn Filt.)	T. F. Harvey, Esq., C.E. . .	5	1	0	936	1018	40·08	..	..
Dowlais (Gwernllwyn)	R. C. Harrison, Esq.	5	1	6	1071	837	32·94	171	133
7.—RHYMNEY. 55 sq. mi.									
Cardiff (Roath Park)	Mr. A. A. Pettigrew	5	1	0	49	713	28·05	170	135
Cardiff (Penylan)	A. E. Brain, Esq.	5	1	0	203	659	25·94	147	125
Cardiff (Heath Filters)	C. H. Priestley, Esq., C.E. . .	5	1	0	132	681	26·83	138	121
Llanishen Reservoir	C. H. Priestley, Esq., C.E. . .	5	1	0	155	635	25·01	153	120
Lisvane Reservoir	C. H. Priestley, Esq., C.E. . .	5	1	0	150	571	22·50	152	115
Caerphilly (Deneholme)	J. Prosser-Jones, Esq., C.E. . .	5	1	0	400	926	36·47	..	..
Rhymer Bridge Reservoir	J. Prosser-Jones, Esq., C.E. . .	8	1	0	1130	1111	43·73	..	148
CARMARTHEN. (Area, 918 sq. mi.)									
1.—TEIFI. 87 sq. mi.									
2.—TOWY & C. 715 sq. mi.									
Carmarthen (The Friary)	Dr. L. M. Bowen-Jones	5	1	5	62	960	37·79	205	143
Llandilo (Golden Grove Gdns.)	Mr. W. Robinson	6	1	6	125	1086	42·77	154	149
Llandilo (Dynevor Castle)	Lord Dynevov	8	1	0	202	1005	39·56	199	151

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.	1921				
CARMARTHEN—(con.).		in.	ft.	in.	ft.	mm.	in.		
2.—TOWY & C.—(con.).									
D Llyn-y-fan Fach (Waen Sychlwch)	R. C. Jones, Esq.	5	1	0	1647	1667	65·65	178	159
D Llyn-y-fan Fach (Llethr-y-Llyn)	R. C. Jones, Esq.	5	1	0	1665	1400	55·11	177	152
D Llyn-y-fan Fach (Afon Sychlwch)	R. C. Jones, Esq.	5	1	0	1371	1845	72·62	178	160
D Llyn-y-fan Fach (Nant Côch)	R. C. Jones, Esq.	5	1	0	1172	1483	58·39	178	156
D Llandilo (Cwmifor School)	T. I. Griffiths, Esq.	5	1	6	210	973	38·30	178	143
D Llanddeusant (Pontcrynfe)	J. Thomas, Esq.	5	1	0	323	1163	45·77	177	138
D Llandovery (Nantyalwygfaen)	D. T. M. Jones, Esq.	5	1	0	249	1028	40·49	189	142
D Llanwrda (Dolaucothy)	Lady Hills-Johnes.....	5	2	6	498	1239	48·78	230	175
3.—LOUGHOR & C. 104 sq. mi.									
D Llanelly (Old Market Yard)	G. Watkeys, Esq., C.E.	5	12	0	35	890	35·05	170	136
D Llanelly (Filter Beds)	G. Watkeys, Esq., C.E.	5	1	0	237	854	33·61	169	145
D Llanelly (Cwmlledi W.W.)	G. Watkeys, Esq., C.E.	5	2	3	240	980	38·58	203	150
D Llanelly (Upper Lliedi Res.)	G. Watkeys, Esq., C.E.	5	3	0	290	1155	45·48	197	157
D Llanelly (Cynheidre)	G. Watkeys, Esq., C.E.	5	1	6	505	1139	44·83	175	154
D Ammanford (Wernoleu)	E. Hewlett, Esq.	5	0	6	240	1058	41·65	170	147
4.—TAW. 7 sq. mi.									
5.—USK. 5 sq. mi.									
6.—WYE.									
PEMBROKE. (Area, 617 sq. mi.).									
1.—TEIFI. 37 sq. mi.									
2.—NEVERN & C. 91 sq. mi.									
3.—WEST COAST STREAMS. 82 sq. mi.									
D St. Davids School	G. O. Bulbrook, Esq.	5	1	0	124	646	25·43	143	119
4.—GLEDDAU & C. 407 sq. mi.									
Pembroke (Stackpole Court)	Mr. C. McInroy	6	1	6	60	704	27·73	177	131
D Tenby	Miss D. Truscott	8	0	10	64	755	29·72	178	125
D St. Ann's Head	Air Ministry	8	0	10	150	611	24·05	169	116
D Pembroke Dock (Admiralty R.)	W. T. Coldicott, Esq.	8	1	0	101	678	26·69	152	120
D Saundersfoot (Hean Castle)	Lord Merthyr	5	1	0	206	679	26·75	146	122
D Haverfordwest (Picton Castle)	Sir C. E. G. Philipps, Bt.	5	0	10	138	888	34·97	182	..
D Haverfordwest (Portfield)	J. W. Phillips, Esq.	5	1	0	250	905	35·65	171	125
D Haverfordwest (Grammar Sch.)	J. W. Phillips, Esq.	5	1	0	95	927	36·51	165	129
D Penffordd Council School	T. H. Davies, Esq.	5	1	1	310	888	34·97	..	..
D Mynachlogddu Council School	W. Phillips, Esq.	5	1	3	620	1175	46·25	182	144
D Fishguard (Langton, Dwrbach)	J. C. Yorke, Esq.	5	1	0	320	1014	39·92	183	132
CARDIGAN. (Area, 688 sq. mi.).									
1.—DOVEY. 20 sq. mi.									
2.—YSTWYTH & C. 347 sq. mi.									
D Strata Florida (Hafod)	T. J. Waddingham, Esq. .	5	1	0	580	1231	48·47	216	175
D Devil's Bridge	T. Richards, Esq.	5	1	0	825	1357	53·44	217	169
D Capel Bangor (Penllwyn)	W. E. Whitehouse, Esq.	5	1	0	145	865	34·06	179	141
D Ponterwyd	W. E. Whitehouse, Esq.	5	1	0	767	1442	56·76	..	..
D Aberystwyth (Castle Grounds)	Dr. A. Thomas	8	2	6	59	675	26·58	182	122
D Aberystwyth (North Parade)	Dr. A. Thomas	8	2	6	18	762	30·01	183	136
D Aberystwyth (Gogerddan)	Mr. F. J. Reeves	5	1	1	83	933	36·74	..	113
D Ynys-las (Sandling)	Wyndham Deedes, Esq.	5	1	6	15	735	28·95	158	114
3.—TEIFI. 260 sq. mi.									
D Cardigan (County School)	Dr. D. Rees	5	1	6	72	753	29·66	165	128
D Lampeter (Falcondale)	Mr. W. Taylor	5	1	0	498	993	39·11	186	150
4.—TOWY. 46 sq. mi.									
D Abergwesyn (Nantneuadd)	Mr. W. Roberts	5	1	0	1290	1331	52·40	..	147
M Tregaron (Maes-y-bettws)	Air Ministry	5	1	0	910	1365	53·75	..	..
M Strata Florida (Towy-fechan)	Air Ministry	5	1	0	1330	1562	61·50	..	..

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.	1921				
CARDIGAN—(con.).		in.	ft.	in.	ft.	mm.	in.		
5.—WYE. 15 sq. mi.									
M Birmingham W.W.(Llyn Gynon)	F. W. Macaulay, Esq., C.E.	5	1	0	1500	1517	59·73	..	..
M Birmng'm WW(Bwlchyrhendre)	F. W. Macaulay, Esq., C.E.	5	1	0	1585	1530	60·24	..	..
M Birmingham W.W. (Claerddu)	F. W. Macaulay, Esq., C.E.	5	1	0	1500	1722	67·80	..	..
M Birmingham W.W. (Gwngu)	F. W. Macaulay, Esq., C.E.	5	1	0	1650	1532	60·33	..	..
d Birmingham W.W.(Abergwngu)	F. W. Macaulay, Esq., C.E.	5	1	0	1200	1455	57·30	..	175
M Plynlimon	Air Ministry	5	1	0	1740	2085	82·10	..	..
BRECON. (Area, 733 sq. mi.)									
1.—TOWY. 17 sq. mi.									
2.—TAWE. 41 sq. mi.									
D Ystradgynlais(Ynyscedwyn Ho)	Capt. H. A. B. Griffith	5	0	8	232	1273	50·10	169	155
D Swansea WW(Nantyrwydd)	No1 G. R. Collinson, Esq., C.E.	5	1	0	916	1677	66·03	183	161
D Swansea W.W.(Nantyrwydd)	No2 G. R. Collinson, Esq., C.E.	5	0	10	909	1747	68·77	183	162
3.—NEATH. 48 sq. mi.									
Glyn Neath (P. Neath Vaughan)	Messrs. Curtis & Harvey, Ltd.	5	1	5	297	1298	51·09	186	142
Ystradfellte Reservoir	D. M. Davies, Esq.	5	1	0	1147	1841	72·47	203	164
4.—TAFF. 48 sq. mi.									
D Aberdare (Nanthir Reservoir)	O. Williams, Esq., C.E.	5	1	0	860	1095	43·09	196	149
d Penderyn Reservoir	F.W.laT. Bateman, Esq., C.E.	5	1	0	717	1094	43·08	..	..
M Penderyn Reservoir	F.W.laT. Bateman, Esq., C.E.	5	1	0	1003	1122	44·18	..	..
D Taff Fechan (Pontsticill) No. 12	T. F. Harvey, Esq., C.E.	5	1	0	1031	1011	39·79	181	146
M Taff Fechan (Pontsticill) No. 12A	T. F. Harvey, Esq., C.E.	5	1	0	1031	1039	40·89	..	..
M Taff Fechan (Pontsticill West) 14	T. F. Harvey, Esq., C.E.	5	1	0	1254	1073	42·23	..	..
D Cardiff W.W. (Llwynon Res.)	C. H. Priestley, Esq., C.E.	5	1	0	854	1090	42·91	174	146
Cardiff W.W. (Troedryhiw)	C. H. Priestley, Esq., C.E.	5	1	0	860	1239	48·76	..	..
D Cardiff W.W. (Pont-ar-daf)	C. H. Priestley, Esq., C.E.	5	1	0	850	1199	47·20	176	149
Cardiff W.W. (Garw-nant)	C. H. Priestley, Esq., C.E.	5	1	0	1100	1300	51·19	..	..
Cardiff W.W. (Nant-Gwineu)	C. H. Priestley, Esq., C.E.	5	1	0	1275	1193	46·95	..	..
Cardiff W.W. (Nant-y-gou-garn)	C. H. Priestley, Esq., C.E.	5	1	0	..	1236	48·67	..	..
D Taff Fechan (Pentwyn Res.)	T. F. Harvey, Esq., C.E.	5	1	0	1120	1338	52·66	200	159
M Taff Fechan (Pentwyn Res.)	T. F. Harvey, Esq., C.E.	5	1	0	1120	1334	52·52	..	..
Cardiff W.W. (Nant Goch)	C. H. Priestley, Esq., C.E.	5	1	0	..	1072	42·21	..	..
Cardiff W.W. (Nant Ddu)	C. H. Priestley, Esq., C.E.	5	1	0	1560	1605	63·17	..	..
Cardiff W.W. (Storey Arms) No. 4	C. H. Priestley, Esq., C.E.	5	1	0	1430	1352	53·22	..	..
Cardiff W.W. (Tyle Brith) No. 1	C. H. Priestley, Esq., C.E.	5	1	0	2350	1488	58·58	..	..
D Cardiff W.W. (Cantref R.) No. 2	C. H. Priestley, Esq., C.E.	5	1	0	1120	1429	56·26	185	151
D Torpantau Station	Newport Corporation	5	1	0	1316	1174	46·22	169	153
D Cardiff W.W. (Beacons Res.) No. 6	C. H. Priestley, Esq., C.E.	5	1	0	1340	1788	70·39	195	160
Cardiff W.W. (Nant Penig) No. 3	C. H. Priestley, Esq., C.E.	5	1	0	2000	2281	89·81	..	..
D Taff Fechan (Neuadd Rs.) No. 1	T. F. Harvey, Esq., C.E.	5	1	0	1462	1610	63·38	205	166
M Taff Fechan (Neuadd Rs.) No. 1	T. F. Harvey, Esq., C.E.	5	1	0	1462	1502	59·13	..	..
D Taff Fechan (Neuadd Rs.) No. 4	T. F. Harvey, Esq., C.E.	5	1	0	1487	1832	72·13	205	173
D Taff Fechan (Neuadd Rs.) No. 4A	T. F. Harvey, Esq., C.E.	5	1	0	1487	1826	71·89	205	173
M Taff Fechan (Neuadd Rs.) No. 2	T. F. Harvey, Esq., C.E.	5	1	0	1993	1472	57·94	..	..
M Taff Fechan (Neuadd Rs.) No. 5	T. F. Harvey, Esq., C.E.	5	1	0	1515	1678	66·06	..	..
M Taff Fechan (Neuadd Rs.) No. 10	T. F. Harvey, Esq., C.E.	5	1	0	1700	1472	57·96	..	..
D Taff Fechan (Neuadd Rs.) No. 11	T. F. Harvey, Esq., C.E.	5	1	0	1524	1354	53·29	205	160
M Taff Fechan (Neuadd Rs.) No. 7	T. F. Harvey, Esq., C.E.	5	1	0	2017	1705	67·12	..	..
M Taff Fechan (Neuadd Rs.) No. 8	T. F. Harvey, Esq., C.E.	5	1	0	1723	1877	73·88	..	..
M Taff Fechan (Neuadd Rs.) No. 3	T. F. Harvey, Esq., C.E.	5	1	0	1843	1437	56·56	..	..
M Taff Fechan (Neuadd Rs.) No. 3A	T. F. Harvey, Esq., C.E.	5	1	0	1843	1297	51·06	..	..
M Taff Fechan (Neuadd Rs.) No. 9	T. F. Harvey, Esq., C.E.	5	1	0	1997	1119	44·04	..	..
M Taff Fechan (Neuadd Rs.) No. 6	T. F. Harvey, Esq., C.E.	5	1	0	2099	2148	84·56	..	..
5.—RHYMNEY. 2 sq. mi.									
6.—EBBW. 7 sq. mi.									
D Ebbw Vale W.W. (Llangunider) 1	P. I. Davies, Esq., C.E.	5	1	0	1413	1095	43·13	178	143
Ebbw V.W.W. (Llangunider) W3	P. I. Davies, Esq., C.E.	5	1	0	1468	1357	53·41	178	154
Ebbw V.W.W. (Llang'nd'r) NW2	P. I. Davies, Esq., C.E.	5	1	0	1471	1285	50·60	178	153

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
BRECON—(con.).		in.	ft.	in.	ft.	mm.	in.		
6.—EBBW—(con.).									
Ebbw Vale W.W. (Carno, S.)	P. I. Davies, Esq., C.E....	5	1	0	1236	1182	46·55	154	145
Ebbw Vale W.W. (Carno, E.)	P. I. Davies, Esq., C.E....	5	1	0	1391	1103	43·44	152	144
Ebbw Vale W.W. (Carno, W.)	P. I. Davies, Esq., C.E....	5	1	0	1412	1194	47·00	153	146
Ebbw Vale W.W. (Carno, N.)	P. I. Davies, Esq., C.E....	5	1	0	1533	1136	44·72	153	146
7.—USK. 299 sq. mi.									
Torpantau (Darenfawr).....	Newport Corporation.....	5	1	0	1172	1439	56·67	..	..
Torpantau (Ynysposte).....	Newport Corporation.....	5	1	0	741	1371	53·99	..	..
Torpantau (Blaen-caer-fanell).....	Newport Corporation.....	5	1	0	1584	1622	63·85	..	..
d Talybont (Pentir-rhiw).....	Newport Corporation.....	5	1	0	587	1122	44·16	177	145
Talybont (Pwll Ifor).....	Newport Corporation.....	5	1	0	1224	1378	54·24	..	..
d Crickhowell (Glanusk Park).....	Col. Lord Glanusk, C.B....	5	1	0	290	741	29·17	..	114
d Crickhowell (Gwernvale).....	E. Pirie Gordon, Esq.....	5	1	0	393	716	28·19	172	113
m Swansea W.W. (Cray Rs.) No. 2.	G. R. Collinson, Esq., C.E..	5	1	0	1020	1857	73·09	..	..
d Swansea W.W. (Cray Rs.) No. 1.	G. R. Collinson, Esq., C.E..	5	1	0	1044	1500	59·07	192	163
m Cray Station.....	Mr. J. Jones.....	5	1	0	930	1613	63·50	..	..
m Talybont (Cwy Parc).....	Col. H. R. Jones-Williams .	5	1	6	480	884	34·80	..	..
Llanfrynach (Ty-mawr).....	Miss M. D. de Winton.....	5	1	0	450	785	30·92	168	119
m Crickhowell (Cwmdu Rectory) .	Rev. W. A. Davies.....	5	1	0	430	594	23·40	..	..
m Crickhowell (Tal-y-maes).....	Air Ministry.....	5	1	0	1250	833	32·80	..	..
d Treacastle (Blaenau-hydfder) .	Air Ministry.....	5	1	0	1070	1345	52·94	..	129
d Brecon (Ffrwdgrech).....	Capt. J. D. D. Evans.....	8	1	1	570	777	30·57	155	119
d Black Mountains (Blaen-y-cwm)	J. F. Jupp, Esq., C.E....	5	1	0	1423	965	37·99	188	152
d Black Mountains (Blaen-y-cwm)	J. F. Jupp, Esq., C.E....	5	1	0	1289	922	36·29	175	145
Black Mountains (Waun Fach)	J. F. Jupp, Esq., C.E....	5	1	0	2650	950	37·39	..	..
Black Mts. (Cwm Grigus Uchaf)	J. F. Jupp, Esq., C.E....	5	1	0	1980	950	37·41	..	..
d Black M. (Dam Site Grwyne Fawr)	J. F. Jupp, Esq., C.E....	5	1	0	1620	1027	40·44	184	155
d Black Mountains (AberClyd)....	J. F. Jupp, Esq., C.E....	5	1	0	1880	913	35·93	181	150
Black Mts. (Pen-y-Manllwyn)....	J. F. Jupp, Esq., C.E....	5	1	0	2512	867	34·14	..	..
Black Mts. (Taren-yr-Esgob)....	J. F. Jupp, Esq., C.E....	5	1	0	2039	781	30·75	..	..
Black Mts. (Twyn Tal-y-Cefn)....	J. F. Jupp, Esq., C.E....	5	1	0	2130	783	30·81	..	..
Black Mts. (Blaen Grwyne Fawr) .	J. F. Jupp, Esq., C.E....	5	1	0	2150	831	32·72	..	..
8.—WYE. 271 sq. mi.									
d Cathedine Rectory.....	Air Ministry.....	5	1	6	650	525	20·65	139	104
d Talgarth (Dan-y-garth).....	F. Morgan, Esq.....	5	4	0	404	459	18·07	..	93
d Talgarth (Pontiwal Sanatorium)	Dr. H. E. Watson.....	5	1	0	500	662	26·08	165	120
d Glasbury (Gwernyfed Park)....	Mr. J. J. Crosfield.....	5	1	0	375	491	19·32	161	99
d Llanwrtyd Wells (Brynnonen) .	Rhys D. Jones, Esq.....	5	1	0	702	1051	41·39	196	152
d Builth Wells (Tyn-y-berllan)....	Dr. W. Black Jones.....	5	1	0	425	655	25·80	173	122
m Abergwesyn (Trallwn).....	Air Ministry.....	5	1	0	1000	1697	66·80	..	..
m Newbridge (Pengraig).....	Air Ministry.....	5	1	0	960	1176	46·30	..	..
d Newbridge (Llysdinam).....	Col. C. Venables Llewelyn..	5	1	3	646	810	31·89	191	134
m Birm'gh'm W.W. (Cors-yr-hwch)	F. W. Macaulay, Esq., C.E..	5	1	0	1775	1908	75·12	..	..
m Birm'gh'm W.W. (Esgair Ceiliog)	F. W. Macaulay, Esq., C.E..	5	1	0	1525	1537	60·50	..	..
m Birm'gh'm W.W. (Llyn-Carw) .	F. W. Macaulay, Esq., C.E..	5	1	0	1775	1657	65·23	..	..
m Birm'gh'm W.W. (Nant-y-car) .	F. W. Macaulay, Esq., C.E..	5	1	0	1545	1673	65·86	..	..
m Birm'gh'm W.W. (Esgair G'rth'n)	F. W. Macaulay, Esq., C.E..	5	1	0	1600	1509	59·42	..	..
d Birm'gh'm W.W. (Elan Village) .	F. W. Macaulay, Esq., C.E..	5	1	0	700	1060	41·73	189	159
RADNOR. (Area, 474 sq. mi.)									
1.—WYE. 424 sq. mi.									
d Glasbury-on-Wye (Hampton Sc.)	Rev. D. C. Lloyd.....	5	1	0	274	489	19·24	136	96
d Builth (Cefndyrys).....	Capt. E. A. Thomas.....	5	2	0	740	754	29·70	..	117
Builth Rd. (St. John's Vicarage)	Rev. J. L. Bryans.....	5	0	11	550	799	31·44	190	141
New Radnor.....	John Langston, Esq.....	5	1	4	720	690	27·17	181	..
d Llandrindod Wells (Kimberley)	W. B. de Winton, Esq. C.I.E.	5	1	0	699	755	29·72	192	140
d Presteign (St. Davids).....	Dr. N. Y. Lower.....	5	1	0	500	571	22·49	174	109
d Presteign (Norton Manor Gdns.)	Mr. J. Septon.....	8	1	6	600	560	22·06	..	96
d Birmingham WW (Tyrmynydd)	F. W. Macaulay, Esq., C.E..	5	1	0	832	1142	44·95	188	159
d Birmingham W W (Nantgwillt)	F. W. Macaulay, Esq., C.E..	5	1	0	845	1206	47·49	188	160
m Birmingham W. W. (Dwfnant) .	F. W. Macaulay, Esq., C.E..	5	1	0	1050	1301	51·24	..	..

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.	1921				
RADNOR—(con.).		in	ft.	in.	ft.	mm.	in.		
1.—WYE—(con.).									
M Birm'gham WW (EsgairGader)	1F. W. Macaulay, Esq., C.E.	5	1	0	1500	1273	50·12	..	..
M Birm'gham WW (EsgairGader)	2F. W. Macaulay, Esq., C.E.	5	1	0	1500	1429	56·28	..	..
d Birmingham W.W. (Claerwen)	F. W. Macaulay, Esq., C.E.	5	1	0	1250	1533	60·35	..	196
Rhayader (East Street)	John Jones, Esq.	5	1	0	700	909	35·79	..	..
D Rhayader (Penralley)	E. D. Prothero, Esq.	5	1	0	758	828	32·59	197	138
M Bir'gham WW (Cerrigllwydion)	F. W. Macaulay, Esq., C.E.	5	1	0	1700	1778	70·01	..	..
M Birm'gham WW (Pen-y-gareg)	1F. W. Macaulay, Esq., C.E.	5	1	0	1500	1060	41·74	..	..
M Birm'gham WW (Pen-y-gareg)	2F. W. Macaulay, Esq., C.E.	5	1	0	..	1145	45·07	..	..
M Birmingham W.W. (Calettwr)	F. W. Macaulay, Esq., C.E.	5	1	0	1500	1656	65·18	..	..
M Birmingham W.W. (Figin) No. 1	F. W. Macaulay, Esq., C.E.	5	1	0	1700	1826	71·88	..	..
M Birmingham W.W. (Figin) No. 2	F. W. Macaulay, Esq., C.E.	5	1	0	1700	1858	73·16	..	..
M Birmingham WW (Aberhenllan)	F. W. Macaulay, Esq., C.E.	5	1	0	1250	1321	51·99	..	..
M Llanbister (Llananno)	Air Ministry	5	1	0	900	869	34·20	..	..
2.—SEVERN—Right Bank Tributaries. 50 sq. mi.									
Knighton (Upper Woodhouse)	S. Wilson, Esq.	5	1	0	850	576	22·66	..	..
MONTGOMERY. (Area, 797 sq. mi.)									
1.—DOVEY. 120 sq. mi.									
d Machynlleth (The Plas)	Mr. A. Gribble	5	1	0	41	1399	55·06	197	172
2.—YSTWYTH. 7 sq. mi.									
3.—WYE. 37 sq. mi.									
d Llangurig (Dernol)	Air Ministry	5	1	0	870	1127	44·37	183	160
4.—SEVERN—Right Bank Tributaries. 154 sq. mi.									
d Llandinam (Plas Dinam)	Mr. D. Bowen	5	3	0	503	765	30·10	167	147
M Dolfor (Gilfach)	S. Wilson, Esq.	5	1	0	1050	696	27·39	..	..
Bishops Castle (Bishops Moat)	S. Wilson, Esq.	5	1	0	1130	602	23·69	..	..
d Newtown (Penarth Weir)	H. C. Jones, Esq., C.E.	8	1	0	321	644	25·37	159	120
d Welshpool (Edderton Hall)	Miss A. M. Howell Evans	5	1	0	500	532	20·95	162	107
5.—SEVERN—Left Bank Tributaries. 479 sq. mi.									
Carno (Council School)	S. Wilson, Esq.	5	1	0	600	995	39·16	..	..
Berriew (Brithdir Hall)	F. E. Marston, Esq.	5	2	0	350	566	22·27	144	98
d Welshpool (County School)	John Ward, Esq.	5	1	0	263	623	24·53	138	105
Welshpool (Fron Llwyd)	Major G. B. D. Harrison	5	1	3	500	633	24·91	163	121
M Garthbibio (Bwlch Tomlyd)	Air Ministry	5	1	0	1370	1417	55·80	..	..
d Llandysilio Rectory	Rev. H. G. Dickinson	5	1	0	225	531	20·90	130	102
d Lake Vyrnwy	E. J. Bradley, Esq.	5	0	7	770	1401	55·14	156	146
Lake Vyrnwy (Bryn Gwyn)	J. R. Davidson, Esq., C.E.	8	1	0	1311	1326	52·22	..	..
d Lake Vyrnwy (Bank Cynon Isaf)	J. R. Davidson, Esq., C.E.	8	1	0	750	1269	49·94	173	149
Lake Vyrnwy (Ty Uchaf)	J. R. Davidson, Esq., C.E.	8	1	0	860	1313	51·68	..	..
Lake Vyrnwy (Heol-y-ffridd) 1.	J. R. Davidson, Esq., C.E.	8	1	0	913	1705	67·11	..	..
Lake Vyrnwy (Heol-y-ffridd) 2.	J. R. Davidson, Esq., C.E.	8	1	0	830	1649	64·92	..	..
Lake Vyrnwy (Tyn-y-ffridd)	J. R. Davidson, Esq., C.E.	8	1	0	1010	1220	48·02	..	..
Lake Vyrnwy (Lluestwen)	J. R. Davidson, Esq., C.E.	8	1	0	1667	1637	64·44	..	..
Lake Vyrnwy (Llwynrhiw)	J. R. Davidson, Esq., C.E.	8	1	0	1428	1975	77·76	..	..
Lake Vyrnwy (Craig-y-Gribbin)	J. R. Davidson, Esq., C.E.	8	1	0	1422	1482	58·35	..	..
Lake Vyrnwy (Eunant Bridge)	J. R. Davidson, Esq., C.E.	8	1	0	830	1939	76·32	..	..
Lake Vyrnwy (Carreg Goch)	J. R. Davidson, Esq., C.E.	8	1	0	1750	1692	66·61	..	..
Lake Vyrnwy (Fawnog)	J. R. Davidson, Esq., C.E.	8	1	0	1315	1269	49·98	..	..
FLINT. (Area, 256 sq. mi.)									
1.—DEE. 198 sq. mi.									
d Hanmer (Gredington)	Lord Kenyon, K.C.V.O.	5	0	10	300	582	22·91	163	114
d Overton (Fairleigh)	B. J. E. Wright, Esq.	5	1	8	220	521	20·52	162	106
Buckley	W. Simmons, Esq.	5	1	0	553	543	21·37	..	..
Cilcain	W. Simmons, Esq.	5	1	0	790	515	20·29	156	119

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
FLINT—(con.).		in.	ft.	in.	ft.	mm.	in.		
1.—DEE—(con.).									
Hawarden	Great Central Rly Co.	9	3	6	35	448	17·63	152	..
D Hawarden (County School)	A. Lyon, Esq.	5	9	6	260	500	19·69	150	103
Northop (Soughton Hall)	Lord Justice Bankes	5	1	0	418	556	21·89	149	115
D Hawarden Bridge	T. T. Sill, Esq.	8	1	3	22	495	19·47	160	115
D Mostyn Vicarage	Rev. W. Vaughan-Jones ..	5	1	0	100	634	24·96	176	109
2.—CLWYD. 51 sq. mi.									
D Bodfari (Nantlys)	D. F. Pennant, Esq.	5	1	4	178	538	21·17	136	97
D Bodfari (Cae Gwyn)	Mrs. Morgan	5	0	6	542	566	22·28	175	122
D St. Asaph (St. Beuno's College) ..	Rev. R. S. Corish, S.J. ...	8	1	0	480	594	23·37	182	124
Dyserth Castle	J. B. Price, Esq.	5	0	6	350	503	19·82	..	..
D Rhyl (Sewage Works)	A. A. Goodall, Esq.	8	1	0	31	528	20·77	164	111
3.—SEVERN—Left Bank Tributaries. 7 sq. mi.									
DENBIGH. (Area, 668 sq. mi.)									
1.—DEE. 270 sq. mi.									
D Chirk Castle Gardens	Mr. J. A. Jones	5	1	2	630	623	24·52	138	113
D Ruabon (Whitehurst)	Mr. James Vert	5	1	1	327	505	19·87	140	101
D Ruabon (Trevor Hall)	E. Lloyd Edwards, Esq. ...	12	3	1	500	549	21·62	..	99
Wrexham (Ty Mawr Reservoir) ..	F. Storr, Esq., C.E.	5	0	9	805	694	27·31	150	118
Wrexham (Pack Saddle Res.) ..	F. Storr, Esq., C.E.	5	0	9	370	596	23·47	169	104
Wrexham (Cae Llwyd Res.) ..	F. Storr, Esq., C.E.	8	0	9	918	748	29·46	149	121
Wrexham (Cae Llwyd Res.) ..	F. Storr, Esq., C.E.	5	0	9	918	689	27·12	150	115
D Wrexham (Broughton Colliery) ..	J. Hall, Esq.	5	1	6	500	591	23·28	171	113
D Brymbo (Pentre Broughtn Sch.) ..	D. E. Rees, Esq.	5	1	0	680	572	22·52	148	122
D R. Alwen (Hafod-llan-isaf) No.1 ..	R. F. Baker, Esq., C.E.	5	1	0	1200	709	27·92?	186	133
D R. Alwen (Hafod-llan-isaf) No.2 ..	R. F. Baker, Esq., C.E.	5	1	2	1200	941	37·03	185	148
D R. Alwen (Hafod-llan-isaf) No.3 ..	R. F. Baker, Esq., C.E.	5	1	0	1200	858	33·79	183	134
D Pentre Voelas (Nant Heilyn) ..	R. F. Baker, Esq., C.E.	5	1	0	1225	1346	53·00	178	157
D R. Brenig (Hafod-yr-Onen) ..	R. F. Baker, Esq., C.E.	5	1	0	1175	983	38·72	188	158
D Nantglyn (Pant-y-maen)	R. F. Baker, Esq., C.E.	8	1	0	1320	1205	47·44	..	..
D Llyn Bran	R. F. Baker, Esq., C.E.	8	1	0	1428	1308	51·50	..	..
2.—CLWYD & C. 267 sq. mi.									
Pentre Celyn Council School ..	John W. Jones, Esq.	5	1	2	330	593	23·33	146	114
D Gyffyllog (Fachlwyd Hall) ..	Elliott S. Currey, Esq.	5	1	0	640	792	31·17	198	137
Gyffyllog (Brynhyfryd)	E. Stanton Roberts, Esq. ...	5	1	0	560	806	31·72	175	131
D Ruthin (Tymawr)	Maj.-Gen. C. L. Cary	5	1	0	400	603	23·76	171	120
D Llangynhafal (Plâs Drâw)	Col. C. J. Bromhead, C.B. ..	5	1	0	419	643	25·33	188	125
D Gwytherin Council School	D. Jones, Esq.	5	1	1	730	1104	43·48	171	149
D Denbigh (Asylum)	W. Barker, Esq.	5	1	0	316	644	25·34	163	122
D Denbigh (Garn)	W. D. W. Griffith, Esq. ...	5	1	0	447	703	27·69	194	133
M Llanefydd (Rhyl W.W., S.)	L. G. Hall, Esq., C.E.	5	1	0	600	714	28·12	..	..
M Llanefydd (Rhyl W.W., E.)	L. G. Hall, Esq., C.E.	5	1	0	570	562	22·11	..	..
D Llanefydd (Plas Uchaf Res.) ..	L. G. Hall, Esq., C.E.	5	1	0	485	598	23·53	171	117
D Llanefydd (Glascoed Res.)	L. G. Hall, Esq., C.E.	5	1	0	360	604	23·78	173	121
D Llanrhaiadr (Plas Llangwyfan) ..	J. R. Lloyd, Esq.	5	1	0	470	540	21·25	147	107
D Trefnant (County School)	F. Rees, Esq.	5	1	3	..	643	25·32	..	..
St. Asaph (Wygfair)	(R) Col. H. R. L. Howard, D.S.O.	8	2	6	250	579	22·79	..	..
D Abergelle (Sea Road)	Sydney Wilson, Esq.	5	1	0	30	580	22·84	151	107
D Colwyn Bay (Council Offices) ..	W. J. Dunning, Esq., C.E. ..	8	1	0	83	616	24·25	..	121
3.—CONWAY. 84 sq. mi.									
D Pentre Foelas (Voelas Hall) ..	Mr. T. Dickie	5	1	3	640	1265	49·79	171	..
4.—SEVERN—Left Bank Tributaries. 47 sq. mi.									
Llanrhaiadr-yn-Mochnant	David F. Jones, Esq.	5	1	0	400	859	33·83	159	130
D Llansilin (Penygwely Res.)	G. W. Lacey, Esq., C.E. ...	5	1	0	1094	689	27·11	161	121

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
MERIONETH. (Area, 661 sq. mi.)		in.	ft.	in.	ft.	mm.	in.		
1.—DEE. 218 sq. mi.									
Bala (Eryl Aran).....	Mrs. Burton	8	1	0	600	1307	51·45	171	156
Llanderfel (Palé Gardens)	Mr. E. J. Edwards	8	1	0	606	1117	43·99	178	154
Corwen (Rûg Gardens)	Col. Vaughan Wynn.....	8	1	2	600	779	30·65	..	118
2.—CLWYD. 7 sq. mi.									
3.—GLASLYN. 92 sq. mi.									
d Tan-y-bwlch (The Gardens)....	Mr. J. Roberts.....	5	1	0	50	1515	59·63	210	174
Tan-y-bwlch (Dol-y-Moch)	Mrs. Howland Jackson ...	5	0	6	55	1472	57·96	200	167
d Festiniog (Hafod Fawr).....	Office of Woods.....	8	1	0	900	1762	69·37	211	182
d Blaenau Festiniog (Oakley Q.)..	R. H. Jones, Esq.....	5	10	0	1100	2413	95·01	186	175
d Blaenau Festiniog (Llechwedd Q.)	Messrs. J. W. Greaves & Sons	5	1	0	700	2667	104·98	223	188
4.—MAWDDACH & C. 262 sq. mi.									
d Towyn (Ynys-y-Maengwyn) ...	Roger Corbett, Esq.	5	1	0	14	966	38·04	176	149
d Towyn (Peniarth)	Mrs. Wynne	8	1	0	25	1120	44·10	188	168
Dolgelly (Dr. Williams' School) ..	Miss F. A. Anstey	5	4	0	43	1280	50·41	..	155
d Dolgelly (Dol'rhyd)	Col. P. H. Enthoven, D.L.	5	0	9	100	1299	51·15	201	167
d Dolgelly (Bryntirion)	E. P. Beale, Esq.	5	0	10	50	1421	55·95	190	171
d Trawsfynydd Camp.....	E. Jones, Esq.....	5	1	0	800	1663	65·46	187	171
5.—DOVEY. 82 sq. mi.									
d Aberdovey	R. Williams, Esq.....	..	1	0	60	841	33·10	184	137
d Aberdovey (Plas Penhelig)	J. M. Howell, Esq., D.L. ...	5	1	0	120	881	34·69	177	148
Pennal (Talgarth Hall)	Mrs. B. K. Gott.....	5	0	5	125	1389	54·68	162	149
6.—SEVERN—Left Bank Tributaries.									
CARNARVON. (Area, 572 sq. mi.)									
1.—BARDSEY ISLAND.									
2.—CONWAY & C. 146 sq. mi.									
m Lake Cowlyd (Llethyr Gwyn) cC. F. Farrington, Esq., C.E.		5	1	0	1700	1903	74·94	..	..
m Lake Colwyd (Gors-y-Llithrig) dC. F. Farrington, Esq., C.E.		5	1	0	1900	1784	70·24	..	..
m Lake Cowlyd (Ffrith Fawr) ...	BC. F. Farrington, Esq., C.E.	5	1	0	..	1851	72·87	..	..
m L. Cowlyd (Ffrith Carreg Wen) aC. F. Farrington, Esq., C.E.		5	1	0	1168	2054	80·87	..	..
Trefriw Wells.....	C. P. Adamson, Esq.	5	1	0	25	982	38·66	..	121
d Lake Eigiau (Dam Site)	H. J. Jack, Esq.....	5	1	5	1245	1769	69·63	203	180
w Llanbedr-y-Cennin (Plasdulyn) ..	W. T. Ward, Esq., C.E....	8	1	0	509	1237	48·68	..	..
w Llanbedr-y-Cennin (Llyndulyn) ..	W. T. Ward, Esq., C.E....	8	1	6	1632	1405	55·30	..	..
Deganwy (Y Berlfa)	(R) Willoughby Gardner, Esq.	5	1	0	35	599	23·58	..	..
d Llandudno (Glanwydden School) ..	Thomas Roberts, Esq.....	5	1	0	28	610	24·01	..	..
d Llandudno	W. Little, Esq.....	5	1	0	22	636	25·04	168	119
3.—MENAI STRAITS, 221 sq. mi.									
d Madryn Castle (Farm School) ..	J. Hines, Esq.....	5	1	0	285	886	34·87	184	134
d Pen-y-groes (Nebo School)	Elias Thomas, Esq.....	5	1	0	700	1600	62·98	209	172
d Llanllyfni (Bryn Aerau School) ..	Llewelyn Parry, Esq.....	5	1	0	150	1117	43·99	..	..
m Nantlle (Dorothea Quarries) ..	W. J. Griffith, Esq.....	8	60	0	400	1452	57·16	..	..
Llandwrog (Glynllivon Park) ..	Hon. F. G. Wynn	5	1	0	100	1078	42·45	..	..
Llandwrog (Glynllivon Nursery) ..	Hon. F. G. Wynn	5	1	0	200	1086	42·76	..	..
Llandwrog (Glynllivon Garden) ..	Hon. F. G. Wynn	5	1	0	100	1115	43·89	..	..
Llandwrog (Glynllivon Fort) ..	Hon. F. G. Wynn	5	1	0	200	1029	40·53	..	..
d Bettws Garmon	Rev. T. C. V. Bastow	5	0	7	414	1484	58·44	207	170
d Bettws Garmon	Rev. T. C. V. Bastow	8	0	11	414	1495	58·87	207	171
Carnarvon (Belan Fort)	Hon. F. G. Wynn	5	1	0	15	782	30·80	..	..
Lake Ogwen C.E. School	R. Hughes, Esq.....	5	1	0	1006	2369	93·27	..	..
d Llanbeblig (Penrhos).....	Col. M. F. Preece.....	8	..	..	..	952	37·47	196	154
d Llanberis (Brynrefail School) ..	Gwilym Jones, Esq.....	5	0	8	360	1217	47·90	186	162
d Llanberis (Llandinorwig School) ..	John Roberts, Esq.....	5	1	0	850	1263	49·72	181	168

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS.—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
CARNARVON—(con.).		in.	ft.	in.	ft.	mm.	in.		
3.—MENAI STRAITS—(con.).									
D Llanrug (Meillionydd).....	J. Rees Foster, Esq.....	5	1	0	420	1116	43·93	179	154
D Bethesda (St. Ann's Vicarage) ..	Rev. W. Morgan	5	1	6	500	1393	54·84	206	167
D Bethesda (Penrhyn Quarries) ..	W. D. Hobson, Esq.	8	1	0	528	1467	57·76	208	178
D Bangor (Penrhyn Castle Gdns.) ..	Mr. J. Kneller.....	5	1	0	150	920	36·23	194	147
D Llanfairfechan	Mr. W. Timmins	5	1	0	103	766	30·15	165	127
D Penmaenmawr (Mountain Res.) ..	R. J. Hughes, Esq.	5	1	6	1200	1026	40·38	..	..
D Penmaenmawr (Council Offices) ..	R. J. Hughes, Esq.....	5	1	6	100	807	31·78	171	128
4.—ERCH & C. 155 sq. mi.									
D Abersoch	Sir W. H. Winterbotham..	8	1	0	100	981	38·64	159	149
D Bryncroes (Schoolhouse)	E. R. Williams, Esq.	5	0	11	320	926	36·45	..	122
D Pwllheli (Bodfean Hall)	Hon. F. G. Wynn	5	1	0	200	992	39·05	..	..
D Pwllheli (Bodfean Hall Gdns.) ..	Hon. F. G. Wynn	5	1	0	200	959	37·75	..	..
d Fourcrosses (Council School) ..	Morris Williams, Esq.	5	1	3	200	1220	48·04	..	..
5.—GLASLYN. 50 sq. mi.									
D Portmadoc (Wern)	R. M. Greaves, Esq.....	5	1	0	90	1297	51·06	202	162
D Beddgelert (Council School) ..	David Jones, Esq.....	5	1	0	133	2340	92·14	168	..
D Snowdon (Wenallt)	No. 6 H. J. Jack, Esq.	5	1	2	1050	3589	141·29	..	..
D Snowdon (Cwm Dyli)	No. 11 H. J. Jack, Esq.....	5	1	0	310	3186	125·44	172	162
D Snowdon (Cwm Dyli, Old Rd.) ..	14 H. J. Jack, Esq.....	5	0	10	325	3119	122·78	..	..
M Snowdon (Lliwedd)	No. 2 H. J. Jack, Esq.....	5	1	3	1485	3803	149·74	..	..
M Snowdon (Glaslyn)	No. 3 H. J. Jack, Esq.....	5	0	8	2050	3730	146·86	..	..
M Snowdon (Teyrn)	No. 1 H. J. Jack, Esq.....	5	1	0	1080	3747	147·50	..	..
D Snowdon (Llydaw Intake) ..	10 H. J. Jack, Esq.....	5	1	0	1480	3649	143·67	..	..
D Snowdon (L. Llydaw Copper M.) ..	9 H. J. Jack, Esq.....	5	1	5	1480	4025	158·45	..	..
M Snowdon (Crib Goch) ..	No. 8 H. J. Jack, Esq.....	5	1	3	2340	4127	162·47	..	..
ANGLESEY. (Area, 275 sq. mi.)									
Llandwyn Island	Hon. F. G. Wynn.....	5	1	0	30	566	22·30	..	..
D Llangadwaladr (Bodorgan) ..	Mr. W. Pilgrim	5	1	0	100	904	35·59	182	147
D Llanfaelog	H. S. Lowe, Esq.	5	0	6	50	863	33·97?	..	..
D Llangefni (Penrhos)	Miss M. Nicholls-Jones ..	8	0	9	132	1033	40·67	153	145
D Beaumaris (Fryars)	Mrs. Burton	10	2	0	20	964	37·96	..	..
D Llangwilog (Trescawen) ..	Mrs. Pritchard-Rayner...	5	1	0	239	1023	40·28	174	150
D Bodedern (Presaddfed) ..	Lt.-Col. W. A. Fox-Pitt ..	5	1	0	155	1020	40·17	201	170
D Holyhead (Salt Island) ..	Air Ministry	5	1	0	15	835	32·88	191	125
D Llanerchymedd (Llwydiarth Esch)	Miss Prichard	5	1	6	175	930	36·63	185	144
D Penrhosligwy School	T. Rowlands, Esq.	5	1	0	140	1006	39·59	186	146
D Lligwy	Lord Boston	5	1	0	170	874	34·41	192	132
D Amlwch (Dyffryn Adda) ..	Major T. Fanning Evans ..	5	1	2	178	922	36·30	202	..
ISLE OF MAN. (Area, 227 sq. mi.)									
Castletown (Langness)	Board of Northern Lights	8	1	0	75	619	24·37	..	..
Santon Vicarage	Rev. R. Jones	5	0	10	245	887	34·91	182	..
D Douglas (Borough Cemetery) ..	H. A. Bridge, Esq.	8	1	0	284	1011	39·79	192	147
D Douglas (Clype Res., Onchan) ..	Mr. W. Crebbin	8	1	0	440	969	38·14	193	137
D Maughold Head	Board of Northern Lights	..	..	..	..	539	21·22	..	..
D Kirkmichael (Bishop's Court) ..	Mr. W. Brew	5	0	10	80	794	31·26	146	131
D Ramsey (Town Hall)	G. W. Kewin, Esq.	8	15	0	18	956	37·64	166	131
D Ramsey (North Promenade) ..	G. W. Kewin, Esq.	5	2	0	5	1023	40·29	180	136
D Point of Ayre.....	Board of Northern Lights	3	4	6	116	797	31·36	..	..
CHANNEL ISLANDS. (Area, 76 sq. mi.)									
JERSEY. 45 sq. mi.									
D Pontac (St. Edmunds)	Dr. E. G. Barnes, O.B.E....	5	1	6	30	427	16·83	149	92
D Samarès (Constantia Lodge) ..	Vivian J. Bailhache, Esq...	5	2	6	50	396	15·60	122	85
D St. Brelade (La Sergenté)	J. E. Le Boutillier, Esq. ...	5	1	6	188	375	14·78	121	86
D St. Aubins (Railway Station) ..	Air Ministry	8	1	9	25	403	15·88	126	95

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS.—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.	1921			
CHANNEL ISLANDS—(con.).		in.	ft. in.	ft.	mm.	in.		
JERSEY—(con.).								
d St. Aubins (Belle Vue)	C. J. Sumner, Esq.	5	1 4	220	425	16·74	135	92
d Grouville (Gouray Lodge)	Dr. G. E. T. Crallan	5	1 3	101	443	17·45	101	90
d Millbrook (St. Helier W.W.)	A. J. Jenkins, Esq., C.E.	5	0 11	53	423	16·66	121	90
St. Ouen's Manor	R. Malet de Carteret, Esq.	5	2 6	270	420	16·54	124	95
GUERNSEY. 25 sq. mi.								
St. Peter in the Wood (Les Héches)	Late A. Collenette, Esq.	5	3 0	300	401	15·78	..	..
d St. Peter in the Wood (Hawthorns)	L. J. Nicolle, Esq.	5	1 0	100	354	13·94	125	84
d St. Martins (Les Blanches)	B. T. Rowswell, Esq.	5	1 0	310	428	16·86	152	97
d St. Martin's Rectory	Rev. R. Coulthard	5	1 0	310	413	16·28	155	90
d St. Martins (Hautnez)	A. A. Allain, Esq., C.E.	5	0 8	336	441	17·37	166	99
d Villiaze	A. A. Allain, Esq., C.E.	5	0 6	302	467	18·40	165	104
St. Andrew (Les Vauxbelets)	Late A. Collenette, Esq.	5	1 0	200	402	15·82	..	..
d St. Peter Port	Late A. Collenette, Esq.	5	1 0	..	449	17·66	171	93
d St. Peter Port (Queens Road)	A. A. Allain, Esq., C.E.	5	0 6	220	479	18·87	161	105
d St. Peter Port (Market Street)	B. T. Rowswell, Esq.	5	52 8	100	450	17·73	144	97
Rohais (Colborne Villa)	Late A. Collenette, Esq.	5	1 0	120	413	16·28	..	..
d Menheniot Vineries	Major H. Roper	5	1 0	100	441	17·36	113	96
St. Sampsons (Lowlands)	Late A. Collenette, Esq.	5	on roof	..	339	13·34	..	..
Fort Doyle (Platte Fougère) (R)	Late A. Collenette, Esq.	..	on roof	..	366	14·41	..	..
SARK. 2 sq. mi.								
d Pointe Robert	B. T. Rowswell, Esq.	5	1 0	215	373	14·69	147	92
HERM. 1 sq. mi.								
ALDERNEY. 3 sq. mi.								
d St. Anne's Rectory	B. T. Rowswell, Esq.	5	1 0	205	389	15·32	124	94

SCOTLAND.

DIVISION XII.—SOUTHERN COUNTIES.

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
WIGTOWN. (Area, 488 sq. mi.)		in.	ft.	in.	ft.	mm.	in.		
1.—LOCH RYAN. 46 sq. mi.									
Loch Ryan Lighthouse	Board of Northern Lights ..	..	..	..	46	850	33·46	..	..
2.—WESTERN GALLOWAY. 44 sq. mi.									
Mull of Galloway	Board of Northern Lights ..	..	..	..	327	628	24·73	..	..
Logan House	K. McDouall, Esq.	8	1	0	80	905	35·65	227	156
Killantringan Lighthouse	Board of Northern Lights ..	..	..	..	162	849	33·44	..	..
Corsewall	Board of Northern Lights ..	..	3	4	112	910	35·81	169	..
3.—LUCE BAY. 186 sq. mi.									
Port William (Monreith)	Major R. F. Brebner	5	0	5	145	927	36·50	199	136
d Stoneykirk (Ardwell House) ...	Sir M. McT. Stewart, Bt... ..	8	3	0	65	909	35·77	208	152
Glenluce (Crews)	Peter Taylor, Esq.	5	1	9	218	949	37·38	..	..
4.—CREE & WIGTOWN BAY. 212 sq. mi.									
d Whithorn (Glasserton)	Adm. Johnston Stewart, C.B. .	5	1	0	225	941	37·03	191	137
d Kirkcowan (Craighlaw)	Major W. M. F. Hamilton. .	8	1	0	220	1228	48·34	177	159
KIRKCUDBRIGHT. (Area, 902 sq. mi.)									
1.—DOON. 16 sq. mi.									
2.—CREE & WIGTOWN BAY. 222 sq. mi.									
d Borgue (Knockbrenx)	J. Douglas Brown, Esq.	5	1	0	10	985	38·79	193	152
d Creetown (Cassencary)	late J. A. Henryson-Caird, Esq. .	5	0	8	50	1143	44·99	204	159
d Palnure (Bargaly)	Mrs. Colvin Stewart	8	3	5	60	1363	53·67	222	183
3.—DEE. 377 sq. mi.									
Little Ross Lighthouse	Board of Northern Lights ..	..	3	3	175	661	26·04?	..	..
New Galloway (Glenlee Park) ..	Mr. C. Jamieson	5	0	6	224	1785	70·27	..	182
d Dalry (Glendaroch)	Miss M. Barbour	5	0	11	192	1491	58·72	222	179
Dalry (Garroch)	Arthur Young, Esq.	8	1	3	250	1745	68·68	184	158
d Carsphairn (Shiel)	Mr. S. Wilson	5	1	0	850	2145	84·45	239	211
d Carsphairn (Knockgray)	Miss Clark Kennedy	8	0	11	641	1525	60·04	210	180
4.—URR & C. 196 sq. mi.									
Auchencairn (Torr House)	W. Ovens, Esq.	5	0	8	50	1236	48·67	..	..
d Dalbeattie (Kirkennan)	Wellwood Maxwell, Esq.	5	0	9	30	1163	45·77	195	157
d Dalbeattie (Richorn Wood) ...	Mrs. McNae	5	1	0	54	1087	42·80	192	152
d Dalbeattie (Southwick House) ..	Sir M. McT. Stewart, Bart. .	5	1	0	75	1181	46·50	198	160
d Kirkpatrick Durham (Glenlair) ..	A. L. Hannay, Esq.	5	0	9	250	1240	48·82	171	160
d Corsoch (Monybuie)	Mrs. Stirton	5	1	0	580	944	37·16?	..	..
5.—NITH & C. 91 sq. mi.									
d Dumfries (Cargen)	Col. R. F. Dudgeon	5	0	10	80	1249	49·17	207	162
Lochrutton (Dumfries W.W.) ..	J. Smellie, Esq.	5	1	0	273	1253	49·32	225	..
d Dumfries (Lincluden House) ..	Miss P. A. Young, M.B.E. .	5	1	0	60	1110	43·71	194	163
d Dumfries (Jardington)	J. Rutherford, Esq.	5	4	0	50	1104	43·46	212	161
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) ..	Earl of Mansfield	5	1	0	74	918	36·15	173	143
d Dumfries (Crichton Roy. Inst.) ..	Mr. E. Joss.	5	1	0	140	968	38·11	193	145
Moniaive (Glencrosh)	Miss Macmillan	5	1	2	350	1388	54·65	205	172
d Moniaive (Maxwelton House) ..	Sir Claude V. E. Laurie, Bt. .	5	1	6	400	1153	45·39	160	154
d Durrisdeer (Drumlanrig Gdns.) ..	Mr. R. Stuart	5	0	9	191	1213	47·77	..	158

DIVISION XII.—SOUTHERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain. 1921	Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.				
DUMFRIES—(con.).		in.	ft.	in.	ft.	mm.	in.	
4.—ANNAN. 367 sq. mi.								
	Dalton (Whitecroft) W. Maitland-Heriot, Esq.	5	0	6	240	1110	43·69	227 180
D	Dalton (Kirkwood) Arthur J. Steel, Esq.	5	0	8	245	1194	47·01	215 164
	Ecclefechan (Burnfoot) Major H. C. Irving.	5	0	11	160	1044	41·10	.. ..
d	Lockerbie (Castle Milk) Mr. J. T. Jeffrey	5	1	6	199	942	37·08	.. 132
D	Lochmaben (Esthwaite) W. J. Halliday, Esq., M.B.E.	5	1	0	166	1097	43·19	203 165
	Amisfield (Glenae) H. Sharpe Gordon, Esq. OBE.	5	0	11	300	1046	41·19	195 162
	Moffat (Craigielands) Mr. Luke Fraser	5	1	6	300	1399	55·09	.. ..
5.—ESK. 275 sq. mi.								
M	Canonbie (Byreburnfoot) Mr. David Crabbe	3	0	9	160	1111	43·75	.. ..
	Canonbie (Irvine House) J. H. Milne Home, Esq.	5	0	9	200	1201	47·30	191 160
D	Langholm (Broomholm) W. C. Everley Taylor, Esq.	5	1	0	266	1306	51·41	197 164
D	Langholm (Drove Road) Mrs. Jackson	5	0	9	270	1408	55·42	189 161
D	Langholm (Craig) J. Little, Esq.	5	1	0	450	1341	52·80	188 160
	Langholm (Ewes) Mrs. Lyall	5	1	0	445	1343	52·86	.. ..
D	Eskdalemuir Observatory Air Ministry	8	1	0	794	1513	59·61	225 181
ROXBURGH. (Area, 666 sq. mi.)								
1.—NORTH TYNE. 6 sq. mi.								
2.—TWEED, LOWER—Right Bank Tributaries. 57 sq. mi.								
D	Kelso (Lempitlaw) J. Stirling, Esq.	5	1	0	635	669	26·36	150 117
	Kelso (Springwood Seed Ground) Messrs. Laing & Mather	5	1	0	200	617	24·30	152 110
3.—TWEED—Teviot & c. 431 sq. mi.								
D	Hawick (Wolfelee) R. M. Hudson, Esq.	5	0	10	537	866	34·10	183 131
D	Hawick (Braxholme) J. G. Winning, Esq.	5	0	6	457	833	32·80	189 138
D	Denholm (Spital Tower) T. G. Leadbetter, Esq.	5	0	9	410	771	30·35	174 127
D	Jedburgh (Jedneuk) T. Yool, Esq.	5	1	0	271	655	25·79	183 116
	Ancrum (Monteviot) Bertram Talbot, Esq.	5	2	6	200	708	27·89	172 ..
	St. Boswells (Monksford) Lt.-Col. A. Mitchell	5	0	11	320	617	24·28	.. ..
D	St. Boswells (The Fens) J. J. Fairbairn, Esq.	5	1	6	260	580	22·83	142 102
	Kelso (Springwood Park) Mr. W. Chaplin	5	1	0	130	564	22·19	157 110
4.—TWEED—Ettrick & c. 10 sq. mi.								
D	Melrose (Asylum) .. gauge A T. C. Mitchell, Esq.	5	0	6	480	758	29·86	186 117
D	Melrose (Asylum) .. gauge B T. C. Mitchell, Esq.	5	1	0	480	722	28·42	186 116
	Old Melrose Gardens Mr. S. Brooker	5	1	2	400	678	26·71	.. 104
5.—TWEED—Gala. 6 sq. mi.								
6.—TWEED—Leader & c. 25 sq. mi.								
D	Melrose (Drygrange) A. T. Roberts, Esq.	5	1	0	360	618	24·34	151 109
7.—TWEED, LOWER—Left Bank Tributaries. 25 sq. mi.								
D	Kelso (Broomlands) J. C. Scott, Esq.	5	1	0	193	596	23·46	163 104
M	Smailholm (Sandyknowe) Mr. J. E. Templeton	..	..	..	..	509	20·06?	.. ..
8.—ESK. 106 sq. mi.								

DIVISION XIII.—SOUTH-EASTERN COUNTIES.

SELKIRK. (Area, 268 sq. mi.)

1.—TWEED—Teviot & c. 34 sq. mi.								
D Selkirk (Whitmuir Hall)	late C. W. Dunlop, Esq.	5	1	0	800	780	30·73	155 129
2.—TWEED—Ettrick & c. 192 sq. mi.								
D Ettrick Manse	Rev. A. Horn	1	1	0	796	1480	58·27	219 176
M Edinburgh W.W. (Meggat Hd.)	1 Messrs. Leslie & Reid, C.E.	5	1	3	1496	1312	51·66	.. ..
D Selkirk (Lindean Reservoir) ..	S. Pittillo, Esq.	5	1	0	900	806	31·73	.. ..
3.—TWEED, UPPER—Right Bank Tributaries. 17 sq. mi.								

DIVISION XIII.—SOUTH-EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.	
		Diam.	Height Ground	above Sea Level.	1921				
SELKIRK—(con.).		in.	ft.	in.	ft.	mm.	in.		
4.—TWEED, UPPER—Left Bank Tributaries. 19 sq. mi.									
D Caddonfoot (Fairnilee)	Alex. F. Roberts, Esq.	5	1	0	450	745	29·35	147	114
Galashiels (The Peel Clovenfords)	W. R. Ovens, Esq.	6	1	6	500	835	32·87	..	..
5.—TWEED—Gala. 6 sq. mi.									
D Galashiels (Abbotsford Road)	Dr. J. W. Somerville	5	0	8	416	899	35·38	180	129
Galashiels (Stantling Craigs)	Mr. J. Murray	12	1	3	800	776	30·55	..	..
PEEBLES. (Area, 348 sq. mi.)									
1.—TWEED, UPPER—Right Bank Tributaries. 127 sq. mi.									
M Edin. W.W. (Ravenscraig)	3 Messrs. Leslie & Reid, C.E.	5	1	3	2258	2055	80·89	..	..
M Edin. WW (Gameshope Loch)	4 Messrs. Leslie & Reid, C.E.	5	1	3	1860	1766	69·52	..	..
M Edin. WW (Loch Craig Head)	2 Messrs. Leslie & Reid, C.E.	5	1	0	2627	1895	74·60	..	..
D Edin. WW (Gameshope Farm)	5a Messrs. Leslie & Reid, C.E.	5	1	3	1538	1693	66·66	236	198
M Edin. WW (Gameshope Farm)	5 Messrs. Leslie & Reid, C.E.	8	1	3	1538	1580	62·20	..	..
D Edin. WW (Talla Linns Foot)	6a Messrs. Leslie & Reid, C.E.	5	1	3	966	1468	57·78	226	180
M Edin. WW (Talla Linns Foot)	6 Messrs. Leslie & Reid, C.E.	8	1	3	966	1440	56·70	..	..
D Edin. WW (Quarter Hill) No. 7a	Messrs. Leslie & Reid, C.E.	5	1	3	1196	1231	48·48	226	178
M Edin. WW (Quarter Hill) No. 7	Messrs. Leslie & Reid, C.E.	8	1	3	1196	1173	46·18	..	..
D Edin. WW (Victoria Lodge)	8 Messrs. Leslie & Reid, C.E.	5	1	3	904	1205	47·46	218	170
M Edin. WW (Victoria Lodge)	8a Messrs. Leslie & Reid, C.E.	8	1	3	904	1162	45·76	..	..
2.—TWEED, UPPER—Left Bank Tributaries. 192 sq. mi.									
Stobo Castle	Major J. Ainslie,	5	1	0	594	982	38·65	206	158
D Innerleithen (Glen)	Mr. A. Black	5	0	10	754	977	38·47	215	151
D Dolphinton (Castlecraig)	James Mann, Esq.	5	0	10	820	940	37·01	203	162
D West Linton (Woodlea Cottage)	Messrs. Leslie & Reid, C.E.	5	1	0	801	951	37·45	218	163
D West Linton	W. Mackie, Esq.	5	3	6	769	1052	41·43	222	175
3.—ESK. 23 sq. mi.									
D Eddlestone (Portmore Res.)	Messrs. Leslie & Reid, C.E.	11	1	0	1000	938	36·93	226	154
M Eddlestone (Portmore Res.)	Messrs. Leslie & Reid, C.E.	11	1	0	1007	922	36·31	..	..
M Penicuik (N. Esk Reservoir)	Mr. W. Tod	11	0	6	1150	1034	40·70	..	..
4.—CLYDE—Right Bank Tributaries. 6 sq. mi.									
BERWICK. (Area, 457 sq. mi.)									
1.—TWEED—Gala. 6 sq. mi.									
2.—TWEED—Leader. 92 sq. mi.									
D Earlston (Cowdenknowes)	Mr. T. J. Fleming	5	1	2	300	668	26·29	156	109
Lauder (Burncastle)	J. G. S. Turnbull, Esq.	5	1	0	900	628	24·72	..	..
M Earnsclough Burn (Blythe Rig)	J. G. S. Turnbull, Esq.	5	1	0	1200	734	28·88	..	..
3.—TWEED, LOWER—Left Bank Tributaries. 115 sq. mi.									
D Coldstream (Lochton)	J. Aitchison, Esq.	5	1	0	151	603	23·74	..	..
D Coldstream (The Hirsell)	Mr. D. Black	5	1	4	130	610	24·00	157	114
D Swinton House	Snowdon Rev. A. E. Swinton	5	1	2	200	634	24·95	173	111
D Swinton House	Rev. A. E. Swinton	5	0	10	200	635	24·99	177	115
4.—TWEED—Whiteadder. 164 sq. mi.									
D Marchmont House	Mr. P. Ross	5	1	0	498	744	29·28	166	121
D Duns Castle	Mr. P. Smith	5	1	0	500	633	24·93	171	114
D Duns (Manderston)	Mr. F. J. Marshall	5	1	6	356	677	26·64	..	118
West Foulden	J. Hewat Craw, Esq.	5	1	0	250	542	21·34	..	..
5.—EAST COAST STREAMS. 80 sq. mi.									
St. Abb's Head	Board of Northern Lights	8	4	3	224	573	22·54	..	..
HADDINGTON. (Area, 267 sq. mi.)									
1.—TWEED—Leader. 1 sq. mi.									
2.—TWEED—Whiteadder. 35 sq. mi.									

DIVISION XIII.—SOUTH-EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with -01 in. or more.	Days with -04 in. or more.
		Diam.	Height Ground	above Sea Level.	1921			
HADDINGTON—(con.).		in.	ft. in.	ft.	mm	in.		
3.—EAST COAST STREAMS. 69 sq. mi.								
Garvald (Donolly Reservoir) . . .	J. C. Miller, Esq., C.E. . . .	5	1 0	550	783	30·82	..	..
Garvald (Thorster Reservoir) . . .	J. C. Miller, Esq., C.E. . . .	5	1 0	700	485	19·10	..	..
Prestonkirk (Ninewar)	W. S. Curr, Esq.	5	1 0	125	525	20·69	..	91
Barnsness Lighthouse	Board of Northern Lights . . .	..	..	120	447	17·60	..	..
4.—TYNE & C. 114 sq. mi.								
LammermuirH.(StobshielRes.)A.J. Ross, Esq., C.E.		5	2 0	998	643	25·30	..	..
LammermuirH.(StobshielRes.)B.J. Ross, Esq., C.E.		5	2 0	950	782	30·78	..	..
Prestonkirk (Knowes)	Mr. J. Rattray	5	1 0	78	613	24·12	145	107
Prestonkirk (Smeaton)	Sir A. Buchan-Hepburn . . .	7	7 10	100	584	22·98	137	119
5.—FIRTH OF FORTH. 48 sq. mi.								
Gullane (The Warren)	Miss E. M. Meek	8	1 0	115	625	24·61	139	109
North Berwick Reservoir	J. C. Miller, Esq., C.E. . . .	5	1 6	150	608	23·95	157	124
6.—INSULAR.								
MIDLOTHIAN. (Area, 369 sq. mi.)								
1.—TWEED—Gala. 68 sq. mi.								
Stow (Cragdale)	J. Pringle, Esq.	5	0 6	642	819	32·24	..	..
2.—TYNE. 28 sq. mi.								
3.—FIRTH OF FORTH. 3 sq. mi.								
Oxenford Castle Gardens	Mr. A. C. Scott	5	1 2	452	712	28·02	153	118
4.—ESK. 116 sq. mi.								
Moorfoot Hills (Bowbate)	Messrs. Leslie & Reid, C.E. . .	11	0 6	1260	1241	48·87	..	..
Moorfoot Hills (Gladhouse Res.) . .	Messrs. Leslie & Reid, C.E. . .	5	0 8	915	888	34·96	218	150
Moorfoot Hills (Gladhouse Res.) . .	Messrs. Leslie & Reid, C.E. . .	8	1 0	915	857	33·74	..	..
Moorfoot Hills (Rosebery)	Messrs. Leslie & Reid, C.E. . .	4	0 9	750	856	33·70	209	135
Moorfoot Hills (Rosebery)	Messrs. Leslie & Reid, C.E. . .	11	0 9	750	801	31·55	..	..
Moorfoot Hills (Edgelaw)	Messrs. Leslie & Reid, C.E. . .	4	0 10	654	815	32·07	209	135
Moorfoot Hills (Edgelaw)	Messrs. Leslie & Reid, C.E. . .	11	0 10	654	767	30·20	..	..
Penicuik (Brunstane Cottage)	Messrs. Leslie & Reid, C.E. . .	5	1 0	800	1042	41·03	209	148
Gorebridge (Deanbank)	A. Wilson Spalding, Esq. . . .	5	1 0	500	722	28·42	235	130
Pentland Hills (Harehill)	Messrs. Leslie & Reid, C.E. . .	11	1 7	1297	946	37·24	..	..
Pentland Hills (Martyrs Cross)	Messrs. Leslie & Reid, C.E. . .	5	1 0	750	959	37·76	234	151
Pentland Hills (Loganlea)	Messrs. Leslie & Reid, C.E. . .	5	1 0	811	759	29·89	180	121
Pentland Hills (Loganlea)	Messrs. Leslie & Reid, C.E. . .	8	1 4	813	834	32·85	..	..
Pentland Hills (Glencorse Fil.)	Messrs. Leslie & Reid, C.E. . .	5	1 0	638	896	35·26	189	144
Pentland Hills (Glencorse Fil.)	Messrs. Leslie & Reid, C.E. . .	11	1 0	638	923	36·35	..	..
Pentland Hills (Glen Cottage)	Messrs. Leslie & Reid, C.E. . .	5	1 2	739	935	36·81	191	147
Pentland Hills (Glen Cottage)	Messrs. Leslie & Reid, C.E. . .	8	1 2	738	910	35·82	..	..
Milton Bridge (Bush)	J. S. Abernethy, Esq.	5	1 0	600	882	34·74	198	147
Newbattle (Public School)	W. Fowler, Esq.	5	4 3	300	603	23·76	..	93
5.—ALMOND & C. 153 sq. mi.								
Pentland Hills (Crosswood)	Messrs. Leslie & Reid, C.E. . .	5	1 0	950	1048	41·25	193	170
Pentland Hills (Crosswood)	Messrs. Leslie & Reid, C.E. . .	8	1 0	950	1039	40·90	..	..
Pentland Hills (Harperrig)	Messrs. Leslie & Reid, C.E. . .	5	1 0	900	1001	39·42	225	168
Pentland Hills (Harperrig)	Messrs. Leslie & Reid, C.E. . .	8	1 0	900	962	37·86	..	..
Pentland Hills (Morton)	Messrs. Leslie & Reid, C.E. . .	5	1 0	749	982	38·66	239	158
West Calder (Addiewell)	Scottish Oils, Ltd.	12	24 3	620	1076	42·37	182	154
Balerno (Cockburn Hill)	R. Cross, Esq.	5	1 0	767	874	34·42	159	141
Mid-Calder (Calder Hall)	T. A. F. Hog, Esq.	5	1 2	400	694	27·34	183	128
Pentland Hills (Harlaw Res.)	Messrs. Leslie & Reid, C.E. . .	5	1 0	800	751	29·55	190	139
Pentland Hills (Harlaw Res.)	Messrs. Leslie & Reid, C.E. . .	11	0 9	800	757	29·81	..	..
Pentland Hills (Bonally Res.)	Messrs. Leslie & Reid, C.E. . .	11	0 6	1112	597	23·50	..	..
Pentland Hills (ClubbiedeanRs.) . . .	Messrs. Leslie & Reid, C.E. . .	4	0 6	773	734	28·89	161	130
Pentland Hills (ClubbiedeanRs.) . . .	Messrs. Leslie & Reid, C.E. . .	11	0 9	773	609	23·96	..	..
Pentland Hills (Swanston)	Messrs. Leslie & Reid, C.E. . .	5	0 6	550	763	30·04	176	130
Pentland Hills (Swanston)	Messrs. Leslie & Reid, C.E. . .	11	0 6	550	784	30·86	..	..

DIVISION XIII.—SOUTH EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.	Days with ·01 in. or more.	Days with ·04 in. or more.		
		Diam.	Height above Ground	Sea Level.					
		in.	ft.	in.	ft.	1921			
MIDLOTHIAN—(con.).		in.	ft.	in.	ft.	mm.	in.		
5.—ALMOND & C.—(con.)									
D Pentland Hills (Fairmilehead)	Messrs. Leslie & Reid, C.E.	5	1	0	590	717	28·24	141	124
D Pentland Hills (Firhill Tank)	Messrs. Leslie & Reid, C.E.	5	0	6	555	676	26·61	181	116
D Liberton (Alnwick Hill)	Messrs. Leslie & Reid, C.E.	5	1	0	407	662	26·08	164	111
M Liberton (Alnwick Hill)	Messrs. Leslie & Reid, C.E.	8	1	0	407	659	25·95	..	..
D Liberton (College Garden)	A. McCallum, Esq.	5	1	0	190	643	25·30	150	101
D Liberton (The Inch)	(R) Gen. R. Gordon Gilmour, C.B.	8	2	9	60	526	20·72	151	97
D Edinburgh (Royal Observatory)	Prof. R. A. Sampson, F.R.S.	8	1	0	442	629	24·74	169	110
D Edinburgh (Napier Road)	C. Harrison, Esq.	5	1	2	300	639	25·15	161	103
D Edinburgh (The Academy)	M. McC. Fairgrieve, Esq.	5	1	0	68	609	23·99	165	112
D Edinburgh (Univ. Engin. Lab.)	Prof. T. Hudson Beare	5	1	0	227	653	25·74	169	105
M Edinburgh (Univ. Engin. Lab.)	Prof. T. Hudson Beare	5	1	0	227	653	25·73	..	..
D Edinburgh (Geo. Watson's Coll.)	J. G. Kerr, Esq.	5	1	1	215	595	23·42	148	96
D Edinburgh (St. Roque)	H. B. Waugh, Esq.	5	0	10	270	676	26·61	175	113
D Edinburgh (City Observatory)	Sir W. Peck	8	1	0	348	568	22·35	150	97
M Edinburgh (Charlotte Square)	Messrs. Leslie & Reid, C.E.	11	1	6	190	638	25·12	..	..
M Edinburgh (Charlotte Square)	Messrs. Leslie & Reid, C.E.	12	63	0	300	499	19·63	..	..
D Leith (Navigation School)	J. Bolam, Esq.	5	0	5	76	607	23·89	185	96
D Davidson's Mains (Broomfield)	J. I. Balfour-Melville, Esq.	5	0	10	42	640	25·21	164	119
6.—CLYDE—Right Bank Tributaries. 1 sq. mi.									
LINLITHGOW. (Area, 120 sq. mi.)									
1.—ALMOND & C. 60 sq. mi.									
M Uphall	No. 7. Messrs. Leslie & Reid, C.E.	8	1	4	790	884	34·81	..	..
M Uphall	No. 8. Messrs. Leslie & Reid, C.E.	8	1	4	577	859	33·81	..	..
M Uphall	No. 6. Messrs. Leslie & Reid, C.E.	8	1	4	680	852	33·56	..	..
M Uphall	No. 3. Messrs. Leslie & Reid, C.E.	8	1	2	711	867	34·13	..	..
D Uphall (Beecraigs)	Messrs. Leslie & Reid, C.E.	..	..	..	531	961	37·83	..	..
D Uphall (Bangour Asylum)	Col. J. Keay	5	1	0	587	827	32·56	191	142
D Uphall	Scottish Oils, Ltd.	8	0	10	380	839	33·05	..	..
D Dalmeny House	Mr. D. T. Johnston	5	1	0	55	660	26·00	207	122
D Bathgate (Filters)	No. 1. A. L. Reid, Esq.	5	0	9	640	921	36·24	189	148
M Bathgate (Petershill Res.)	No. 2. A. L. Reid, Esq.	5	0	9	640	829	32·62	..	..
M Bathgate (Bellencreeff R.)	No. 3. A. L. Reid, Esq.	5	0	9	640	872	34·34	..	..
2.—FORTH—Right Bank Tributaries. 59 sq. mi.									
M Torphichen (Lochcote)	John Louden, Esq.	5	0	4	550	877	34·54	..	..
M Carribber Reservoir	John Louden, Esq.	5	0	4	400	1088	42·84	..	..
D Linlithgow (Grange)	H. M. Cadell, Esq.	5	0	9	430	802	31·56	191	124
D Linlithgow (Preston House)	Mr. C. Blair	5	1	0	380	872	34·32	181	145
D Linlithgow Academy	J. Beveridge, Esq.	5	1	0	170	940	37·01	196	148
M Linlithgow Academy	J. Beveridge, Esq.	5	1	0	170	945	37·20	..	..
Bo'ness (Neidpath Cottage)	Mr. J. Grant	5	3	0	200	720	28·36	..	..
3.—CLYDE—Right Bank Tributaries. 1 sq. mi.									

DIVISION XIV.—SOUTH-WESTERN COUNTIES.

LANARK. (Area, 881 sq. mi.)

1.—TWEED, UPPER—Left Bank Tributaries. 20 sq. mi.

D Biggar	J. Eunson, Esq.	8	1	0	691	871	34·31	208	153
d Biggar (Cambus Wallace)	T. W. M. Watson, Esq.	6	0	6	748	790	31·10	..	120

2.—ALMOND. 14 sq. mi.**3.—FORTH—Right Bank Tributaries. 9 sq. mi.**

M Airdrie (Forrestburn Reservoir)	J. Frew, Esq.	4	0	8	722	1095	43·10
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DIVISION XIV.—SOUTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.	1921				
LANARK—(con.).		in.	ft.	in.	ft.	mm.	in.		
4.—CLYDE—Right Bank Tributaries. 378 sq. mi.									
M Coulter Reservoir	No. 2. W. Ross, Esq., C.E.	11	1	0	..	1257	49·48	..	..
M Coulter Reservoir	No. 1. W. Ross, Esq., C.E.	11	1	0	..	1283	50·51	..	..
Lamington (Cowgill Reservoir)	J. Chisholm, Esq., C.E.	5	1	0	970	1085	42·70	..	..
M Biggar (Shieldhill)	Miss Dunlop	5	1	2	850	931	36·65	..	..
D Biggar (Shieldhill)	Miss Dunlop	5	on roof	850	770	30·33	208	142	
D Cleghorn Gardens	Mrs. Elliott Lockhart	5	0	6	720	992	39·07	179	170
Carluke (Coldstream Reservoir)	W. Ross, Esq., C.E.	11	1	0	800	1008	39·70	..	..
Wishaw (Orchardlea)	T. Swinnerton, Esq.	6	1	6	450	974	38·33	..	132
Glasgow (Tollcross Park)	J. Whitton, Esq.	5	0	6	85	1069	42·09	..	..
Glasgow Green	J. Whitton, Esq.	5	0	6	35	1044	41·12	..	..
Glasgow (Alexandra Park)	J. Whitton, Esq.	5	0	6	141	1033	40·66	..	..
Glasgow (Botanic Gardens)	J. Whitton, Esq.	5	0	6	110	984	38·74	..	..
Glasgow (Kelvingrove Park)	J. Whitton, Esq.	5	0	6	48	1025	40·36	..	..
Glasgow (Victoria Park)	J. Whitton, Esq.	5	0	6	30	1044	41·10	..	..
Glasgow (Ruchill Park)	J. Whitton, Esq.	5	0	6	222	1043	41·06	..	..
Glasgow (Springburn Park)	J. Whitton, Esq.	5	0	6	352	1098	43·22	..	..
D Airdrie (Broomknoll Street)	J. Chisholm, Esq., C.E.	5	1	0	402	1058	41·67	202	167
D Airdrie (Hillend Reservoir)	Mr. W. A. Ritchie	5	3	6	620	1079	42·49	210	176
Clarkston (Roughrigg Res.)	J. Chisholm, Esq., C.E.	5	1	0	661	1108	43·63	..	..
D Gartcosh (Gartloch Hospital)	Mr. James McEwen	5	1	1	291	1151	45·33	235	186
5.—CLYDE—Left Bank Tributaries. 448 sq. mi.									
D Leadhills	J. McFarlane Esq.	5	1	1	1310	1913	75·33	244	195
Strathaven (Glengavel Res.)	J. McMillan, Esq., C.E.	5	1	0	880	1459	57·43	209	182
D Strathaven (Dungavel)	A. K. Foulis, Esq.	5	1	0	789	1747	68·77	227	187
Strathaven (Dunside Res.)	J. McMillan, Esq., C.E.	5	0	10	1010	1483	58·37	212	197
Strathaven (Kype Reservoir)	W. H. Purdie, Esq., C.E.	11	3	0	941	1306	51·40	182	..
Lesmahagow (Auchtyfardle)	Major T. E. Lander	5	1	0	578	1067	41·99	..	..
D Strathaven (East Overton Ho.)	H. Lee Dykes, Esq.	5	1	0	700	1309	51·54	203	175
D Stonehouse Sanatorium	James Watson, Esq.	5	1	0	526	1181	46·50	205	167
Stonehouse (Glassford Filters)	J. McMillan, Esq., C.E.	5	0	9	775	1165	45·88	219	185
d Hamilton W. W. (Townhill)	W. H. Purdie, Esq., C.E.	7	1	0	436	1114	43·85	..	160
D Hamilton (St. James's Manse)	Rev. J. A. Lees	5	1	0	200	1084	42·67	193	162
D Busby (Thornton Hall)	A. H. Bishop, Esq.	5	1	0	441	1147	45·15	216	166
D Carmunnock (Carnbooth)	R. Robertson, Esq., C.E.	5	1	0	365	1253	49·34	231	173
Cambusland (Greenlees Filters)	J. McMillan, Esq., C.E.	5	1	0	322	1150	45·27	216	170
Glasgow (Bellahouston Park)	J. Whitton, Esq.	5	0	6	160	1061	41·79	..	..
Glasgow (Elder Park)	J. Whitton, Esq.	5	0	6	40	1127	44·39	..	..
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)	A. Shanks, Esq.	8	1	6	110	1704	67·07	233	186
2.—FIRTH OF CLYDE. 60 sq. mi.									
D Skelmorlie (West Park)	J. Wilkinson, Esq.	5	1	6	150	1440	56·68	220	186
Shaws W.W. (Kelly Dam)	J. Macalister, Esq., C.E.	6	1	0	640	1649	64·90	..	..
Shaws W.W. (Knockencorsan)	J. Macalister, Esq., C.E.	6	1	0	1040	1849	72·80	..	..
3.—IRVINE & C. 283 sq. mi.									
Troon (Collenan Res.)	Adam Simpson, Esq., C.E.	11	0	10	203	820	32·30	..	..
D Irvine (Gailes)	H. W. Aitken, Esq.	5	1	0	12	1151	45·32	196	167
D Kilmarnock (Agricultural Coll.)	Prof. R. A. Berry	8	1	2	80	1163	45·81	197	166
Kilmarnock (North Craig Res.)	R. Blackwood, Esq.	12	1	0	319	1295	51·00	..	..
D Kilwinning (Eglinton Castle)	Mr. W. Priest	5	1	0	50	1211	47·66	170	161

DIVISION XIV.—SOUTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain. 1921	Days with ·01 in or more.	Days with ·04 in or more.
		Diam.	Height Ground	above Sea Level.				
AYR.—(con.).		in.	ft.	in.	ft.	mm.	in.	
3.—IRVINE & C.—(con.).								
D Stevenston (Greenhead Filters)	Gilbert Christie, Esq., C.E.	5	1	0	186	1177	46·36	226 175
D Dalry (Blair Gardens)	Mr. J. Fairley	5	1	0	155	1313	51·70	206 187
D Dalry (Munnich Reservoir)	Gilbert Christie, Esq., C.E.	5	1	0	325	1364	53·69	210 179
D Dalry (Caaf Reservoir)	Gilbert Christie, Esq., C.E.	5	1	3	515	1442	56·78	210 182
D Dalry W. W. (Filters)	Mr. W. Wightman	5	1	0	320	1399	55·06	221 184
M Dalry W. W. (Thirdpart)	Mr. W. Wightman	5	1	0	560	1531	60·28	.. ..
D Dalry (Camphill Reservoir)	James Lee, Esq., C.E.	12	1	6	611	1727	68·00	.. ..
Beith (Filter Station)	W. C. Dale, Esq.	5	6	0	124	1377	54·20	189 161
4.—AYR. 222 sq. mi.								
D Ayr Cemetery	J. Young, Esq., C.E.	5	1	0	40	1083	42·64	176 158
D Muirkirk (Kannshill)	Dugald Baird, Esq.	5	2	0	750	1299	51·15	228 184
5.—DOON. 119 sq. mi.								
Loch Finlas	J. Young, Esq., C.E.	5	1	0	849	1523	59·97	.. ..
M Maybole (Knockdon Farm)	Mr. W. Muir	5	1	6	352	1202	47·32	.. ..
D Patna (Kerse Filters)	W. Gray, Esq., C.E.	11	1	0	743	1495	58·87	236 196
D Ayr (Doonholm)	J. Kennedy, Esq.	5	1	0	90	1301	51·21	212 171
6.—CULZEAN BAY & C. 32 sq. mi.								
D Turnberry (Hotel)	J. H. Thomas, Esq.	5	1	0	97	905	35·62	168 158
D Maybole (Culzean Castle Gdns)	Mr. A. T. Harrison	8	2	10	150	1071	42·17	176 152
7.—GIRVAN. 105 sq. mi.								
Girvan (Glendoune Gardens)	Mr. J. Simons	5	1	0	100	1163	45·78	171 ..
D Girvan (Sunnyside, Golf Course)	D. Macdonald, Esq.	5	1	0	27	1062	41·82	203 163
Loch Bradan	Adam Simpson, Esq., C.E.	11	1	0	991	1717	67·60	.. ..
8.—STINCHAR & C. 155 sq. mi.								
D Colmonell (Knockdolian)	Mr. A. Ogg	5	1	0	170	1123	44·21	209 167
D Girvan (Pinmore)	Miss Hamilton	5	0	5	207	1314	51·72	242 181
9.—LOCH RYAN. 12 sq. mi.								
10.—LUCE BAY. 15 sq. mi.								
Ballantrae (Lagafater Lodge)	Cedric R. Boulton, Esq.	5	0	11	792	1718	67·65	.. 190
11.—GREE. 40 sq. mi.								
12.—DEE. 9 sq. mi.								
13.—NITH. 62 sq. mi.								
D New Cumnock (Ayr Sanator'm)	Dr. E. E. Prest	5	1	0	850	1379	54·27	236 185
D New Cumnock (Power Station)	James Jack, Esq.	5	1	0	764	1757	69·18	205 170
14.—INSULAR. 1 sq. mi.								
Ailsa Craig	Board of Northern Lights	3	5	0	..	815	32·07	.. ..
RENFREW (Area, 241 sq. mi.)								
1.—CLYDE—Right Bank Tributaries. 3 sq. mi.								
2.—CLYDE—Left Bank Tributaries. 194 sq. mi.								
Gorbals Dist. W. W. (Nether Cairn)	J. R. Sutherland, Esq., C.E.	12	0	5	700	1563	61·55	.. ..
Gorbals Dist. W. W. (Middleton)	J. R. Sutherland, Esq., C.E.	12	0	5	550	1453	57·20	.. ..
Gorbals Dist. W. W. (Ryat Lynn)	J. R. Sutherland, Esq., C.E.	8	0	5	310	1431	56·35	.. ..
Gorbals Dist. W. W. (Waulk Glen)	J. R. Sutherland, Esq., C.E.	12	0	5	280	1401	55·15	.. ..
Paisley W. W. (Muirhead)	James Lee, Esq., C.E.	12	1	0	482	1614	63·55	.. ..
Paisley W. W. (Springside)	James Lee, Esq., C.E.	12	1	0	532	2005	78·95	.. ..
Paisley W. W. (Back Thornley Muir)	James Lee, Esq., C.E.	12	1	0	646	1531	60·29	.. ..
Paisley W. W. (Stanely)	James Lee, Esq., C.E.	12	1	0	190	1252	49·30	.. ..
D Howwood (Midtown House)	Andrew McNab, Esq.	5	1	6	231	1767	69·56	221 185
Pollokshaws (Rouken Glen)	J. Whitton, Esq.	5	0	6	156	1357	53·42	.. ..
D Pollokshaws (Pollok House)	Sir J. Stirling Maxwell, Bt.	5	1	0	50	1087	42·81	207 159
D Glasgow (Queen's Park)	J. Whitton, Esq.	8	0	9	145	1021	40·20	201 161
Glasgow (Maxwell Park)	J. Whitton, Esq.	5	0	6	69	1013	39·89	.. ..
D Kilbarchan (Milliken Park)	M. Douglas Anderson, Esq.	5	1	6	75	1443	56·80	210 190

DIVISION XIV.—SOUTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
RENFREW—(con.).		in.	ft.	in.	ft.	mm.	in.		
2.—CLYDE—Left Bank Tributaries.—(con.)									
D Kilbarchan (Glentyan) ... (R.) R. H. Hunter, Esq.		8	3	9	285	1596	62·85	226	188
D Paisley (The Coats Observatory) . Observatory Committee ..		8	1	0	107	1236	48·67	217	161
D Houston Manse Rev. George Muir.....		5	1	0	103	1412	55·60	213	170
Shaws W.W. (Duchall Moor) ... J. Macalister, Esq., C.E. ...		6	1	0	1150	2019	79·50	..	..
Shaws W.W. (Creuch Hill) J. Macalister, Esq., C.E. ...		6	1	0	1350	2238	88·10	..	..
Shaws W.W. (Green Water) ... J. Macalister, Esq., C.E. ...		6	1	0	788	1941	76·40	..	..
D Renfrew Aerodrome Air Ministry		8	1	0	37	1044	41·09	194	151
Kilmalcolm "Greenock Telegraph"		5	1	0	300	2120	83·47	..	..
Kilmalcolm Village "Greenock Telegraph"						1512	59·51	..	..
D Shaws W.W. (Gryfe Reservoir) J. Macalister, Esq., C.E. ...		5	1	0	640	1944	76·54	236	201
D Shaws W.W. (Mansfield) J. Macalister, Esq., C.E. ...		5	1	0	573	1916	75·43	237	206
Shaws W.W. (Darndaff Moor) . J. Macalister, Esq., C.E. ...		5	1	0	850	1889	74·37	..	..
Bishopton (Ingliston) D. Cross, Esq.		5	1	0	195	1241	48·87	..	..
3.—FIRTH OF CLYDE. 34 sq. mi.									
Shaws W.W. (Largs Road) J. Macalister, Esq., C.E. ...		5	1	0	910	1826	71·90	..	..
Inverkip (Daff Burn Reservoir) Alex. Duthie, Esq.		5	0	10	506	1746	68·73	..	..
w Douglihill Filters (Pt. Glas. W.W.) James Murray, Esq.		8	1	6	540	1530	60·25	..	..
w Parkhill Filters (Pt. Glas. W.W.) . James Murray, Esq.		8	1	6	275	1422	55·97	..	..
D Shaws W.W. (Compens. Res.)... J. Macalister, Esq., C.E. ...		5	1	0	600	1875	73·80	248	202
D Shaws W.W. (Loch Thom) J. Macalister, Esq., C.E. ...		5	1	0	643	1965	77·37	248	206
Shaws W.W. (Shielhill) J. Macalister, Esq., C.E. ...		6	1	0	962	2106	82·90	..	..
Shaws W.W. (Spango Burn) .. J. Macalister, Esq., C.E. ...		6	1	0	757	1859	73·20	..	..
D Shaws W.W. (Hole Glen) J. Macalister, Esq., C.E. ...		5	1	0	603	1882	74·09	265	213
D Shaws W.W. (New Yett's Dam) J. Macalister, Esq., C.E. ...		5	1	0	800	1830	72·03	264	215
M Langbank (East Bank Gardens) T. Cross, Esq.		5	2	6	250	1393	54·84	..	..
D Greenock (Prospect Hill) J. Macalister, Esq., C.E. ...		5	1	0	200	1772	69·75	237	201
D Gourrock (Coves Reservoir) Alex. Duthie, Esq.		5	1	0	221	1537	60·51	180	169
4.—IRVINE. 10 sq. mi.									

DIVISION XV.—WEST MIDLAND COUNTIES.

DUMBARTON. (Area, 270 sq. mi.).

1.—FORTH—Right Bank Tributaries. 10 sq. mi.**2.—FIRTH OF CLYDE & COWAL. 52 sq. mi.**

D Cardross (Kilmahew) Capt. Claud A. Allan	5	1	0	130	1152	45·35	220	175
D Helensburgh (Ferniegair) J. N. Stirling, Esq., C.E.	8	1	0	22	1573	61·93	239	198
D Helensburgh (Valve House) ... J. N. Stirling, Esq., C.E. ...	5	1	0	293	1636	64·42	238	201
Garlochhead (Aikenshaw) Mr. W. S. Turnbull	6	1	0	32	1704	67·10	..	..
D Arrochar (Glen Loin) Mrs. Little	5	1	0	17	2122	83·55	290	225

3.—CLYDE—Leven. 149 sq. mi.

D Dumbarton (Leven Shipyard) . Messrs. W. Denny & Bros.	5	1	0	11	1212	47·70	221	172
M Kilpatrick H. (Burncrooks Res.) 3T. L. Rae, Esq., C.E.	5	1	0	959	1595	62·78	..	..
M Kilpatrick H. (Burncrooks Res.) 2T. L. Rae, Esq., C.E.	5	1	0	920	1599	62·96	..	..
M Kilpatrick H. (Burncrooks Res.) 1T. L. Rae, Esq., C.E.	5	1	0	835	1567	61·71	..	..
D Renton (Carman Filters) Mr. Chas. Brown	8	4	0	292	1198	47·18	219	165
D Glen Finlas Reservoir No. 7 George Beaton, Esq.	12	0	9	820	2567	101·06	236	215
M Glen Finlas Reservoir No. 1 George Beaton, Esq.	5	0	9	820	2314	91·09	..	..
M Glen Finlas Reservoir No. 2 George Beaton, Esq.	5	0	9	1200	2163	85·14	..	..
M Glen Finlas Reservoir No. 3 George Beaton, Esq.	5	0	9	1600	2355	92·70	..	..
M Glen Finlas Reservoir No. 4 George Beaton, Esq.	5	0	9	2000	2409	94·83	..	..
M Glen Finlas Reservoir No. 5 George Beaton, Esq.	5	0	9	1600	2124	83·61	..	..
M Glen Finlas Reservoir No. 6 George Beaton, Esq.	5	0	9	1200	2027	79·81	..	..

4.—CLYDE—Right Bank Tributaries. 59 sq. mi.

D Drumchapel (Wasdale) F. C. Thomson, Esq.	5	1	0	49	1141	44·90	242	163
D Milngavie (Dougalston) Major R. M. Ker	5	1	0	150	1218	47·97	206	175
D Duntocher (Cochno Filters) ... T. L. Rae, Esq., C.E.	5	1	0	400	1256	49·44	202	173
Kilpatrick Hills (Greenside Res.) T. L. Rae, Esq., C.E.	5	1	0	876	1442	56·76	..	..
Kilpatrick Hills (Loch Cochno) T. L. Rae, Esq., C.E.	5	1	0	909	1516	59·69	..	..
Kilpatrick Hills (Jaw Reservoir) T. L. Rae, Esq., C.E.	5	1	0	912	1451	57·13	..	..

DIVISION XV.—WEST MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.	
		Diam.	Height Ground	above Sea Level.	1921				
STIRLING. (Area, 463 sq. mi.)		in.	ft.	in.	ft.	mm.	in.		
1.—FORTH—Right Bank Tributaries. 263 sq. mi.									
d Linlithgow (Muiravonside Ho) .. Mr. C. Leeder	5	4	8	175	1024	40·32	..	119	
d Polmont (Vellore)	W. Brown, Esq.	8	0	8	320	935	36·81	213 150	
d Falkirk (Inglewood, Laurieston) .. W. Ballantine, Esq.	5	1	3	133	938	36·94	157 133		
d Falkirk (Westbank) ... Garden. A. Nimmo, Esq.	5	1	6	75	1022	40·22	197 159		
m Falkirk (Westbank) Lawn. A. Nimmo, Esq.	5	1	6	105	975	38·38	..	..
d Falkirk (Burgh Chambers) W. Gibson, Esq.	5	1	0	107	897	35·32	..	133	
Falkirk (Kerse) C. Brown, Esq.	8	1	0	18	859	33·80	..	..
d Grangemouth	D. A. Donald, Esq., C.E.	5	1	0	15	917	36·11	166 124	
Little Denny Reservoir	C. Massie, Esq.	8	1	0	326	1397	55·02
Little Denny Filters	C. Massie, Esq.	8	1	0	268	1326	52·20
Kilsyth (Faughlin Res.)	C. Massie, Esq.	8	1	0	707	1681	66·19
Denny (Buckieburn Reservoir) ..	C. Massie, Esq.	1601	63·01
Denny (Buckieburn Filters)	C. Massie, Esq.	1500	59·04
Earlsburn Reservoir	C. Massie, Esq.	8	1	0	1202	1680	66·13
d Stirling (North Third Res.)	D. A. Donald, Esq., C.E.	8	1	0	560	1292	50·85	198 178	
d Stirling (Touch Res.) No. 3 A. H. Goudie, Esq.	8	1	9	759	1425	56·10	221 181		
d Stirling (Touch Res.) No. 2 A. H. Goudie, Esq.	8	1	4	707	1398	55·03	221 174		
d Stirling (Touch Res.) No. 1A. H. Goudie, Esq.	8	1	0	455	1403	55·25	220 177		
Stirling (Touch House)	Sir D. A. S. Steuart, Bart.	5	1	0	35	1319	51·93
d Stirling (Sauchie House)	J. Fyfe, Esq., C.S.I.	5	1	0	151	986	38·83	182 128	
Stirling (Victoria Place)	Dr. R. Kidston, F.R.S.	5	2	10	100	1005	39·56
Gargunnoch House	Mr. D. McNeill.	5	1	6	85	1172	46·13
d Kippen (Arrangomery)	Mr. P. McCowan.	5	3	6	150	1209	47·62	..	140
w Duchray Valley (Ben Lomond) ..	J. R. Sutherland, Esq., C.E.	8	0	6	1800	2449	96·40
d Duchray Valley (Glen Dhu) ...	J. R. Sutherland, Esq., C.E.	8	1	0	500	2306	90·80	..	205
d Duchray Valley (Comer)	J. R. Sutherland, Esq., C.E.	8	1	0	600	2513	98·95	..	206
w Duchray Valley (Achaidh Burn) ..	J. R. Sutherland, Esq., C.E.	8	1	0	1200	2875	113·20
w Duchray Val. (Hd. of Main Stream) ..	J. R. Sutherland, Esq., C.E.	8	1	0	950	2700	106·30
2.—FORTH—Teith. 5 sq. mi.									
d Stronachlachlar (Invergyle) ...	J. R. Sutherland, Esq., C.E.	8	1	0	376	2374	93·45	..	227
3.—FORTH—Left Bank Tributaries. 15 sq. mi.									
Bridge of Allan (The Lea)	Laurence Pullar, Esq.	5	1	0	80	1007	39·66	231 155	
4.—CLYDE—Leven. 128 sq. mi.									
Strathblane (Blane field)	J. R. Sutherland, Esq., C.E.	8	1	0	250	1469	57·85
d Killearn (Achnagowan)	Miss A. L. Guthrie-Smith.	5	0	10	332	1618	63·70	186 176	
w Loch Arklet (Corriebichon)	J. R. Sutherland, Esq., C.E.	8	0	6	870	2521	99·25
w Loch Arklet (Corriearklet)	J. R. Sutherland, Esq., C.E.	8	0	6	950	2545	100·20
5.—CLYDE—Right Bank Tributaries. 52 sq. mi.									
Strathblane (Mugdock Res.) ..	J. R. Sutherland, Esq., C.E.	8	0	6	320	1373	54·05
m Strathblane (Craigbarnet)	Capt. Miller Stirling, R.N.	5	0	6	300	1493	58·80
d Kilsyth (Innsbridge)	J. I. Little, Esq.	5	11	0	202	1383	54·45	182 168	
Kilsyth (Corrie Reservoir)	J. I. Little, Esq.	10	2	0	1010	1700	66·92
BUTE. (Area, 218 sq. mi.)									
1.—ISLE OF BUTE. 50 sq. mi.									
d Rothesay (Arden Craig)	J. J. Davidson, Esq.	5	1	0	201	1463	57·61	253 212	
d Rothesay (Arden Craig)	J. J. Davidson, Esq.	5	1	0	200	1449	57·05	253 212	
Port Bannatyne (Ettrickdale) ..	Lt.-Col. M. R. Gray Buchanan	5	1	0	190	1309	51·53	254 195	
2.—CUMBRAES. 4 sq. mi.									
d Millport (Marine Biog. Stat.) ..	R. Elmhirst, Esq.	5	1	0	16	1127	44·38	245 179	
d Millport (Cliff House)	J. R. Thomson, Esq.	5	1	0	..	1128	44·40	235 179	
3.—ARRAN. 164 sq. mi.									
Pladda	Board of Northern Lights. ....	..	..	..	130	1237	48·72	210 ..
Holy Island (Pillar Rock)	Board of Northern Lights.	3	0	3	46	1039	40·90	161 ..	
d Dougarie Lodge	David Reside, Esq.	5	1	0	10	1209	47·62	226 175	

DIVISION XV.—WEST MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain. 1921		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.					
		in.	ft.	in.	ft.	mm.	in.		
ARGYLL. (Area, 3181 sq. mi.)									
1.—TAY—Tummel. 36 sq. mi.									
2.—SOUND OF ARISAIG, SOUND OF MULL & C. 317 sq. mi.									
d Morvern (Ardtornish)	G. Craig Sellar, Esq.	5	1	0	48	2088	82·21	267	237
Morvern (Drimnin)	Mrs. Gordon	5	1	0	225	1465	57·66	280	..
d Loch Sunart (Glenborrodale) ..	T. J. A. Armstrong, Esq.	5	0	2	60	1876	73·85	..	184
Ardnamurchan	Board of Northern Lights ..	8	4	3	180	1059	41·69	166	..
3.—LOCH LINNHE—Right Bank Tributaries. 139 sq. mi.									
d Morvern (Kingairloch)	G. Herbert Strutt, Esq. ..	5	1	0	40	2941	115·79	246	228
d Ardgor House	Capt. Maclean of Ardgor ..	5	0	10	60	3101	122·10	268	236
4.—LOCH LINNHE—Left Bank Tributaries. 165 sq. mi.									
Duror (The Rectory)	Rev. E. J. Benwell	5	1	0	120	2075	81·70	242	220
d Duror (Achara)	Mr. W. D. Stewart	5	1	2	45	1939	76·33	244	222
Glenleven (Blackwater House) ..	4 British Aluminium Co. Ltd.	8	1	0	1069	2846	112·05	..	..
d Glenleven (Blackwater Dam, S.) ..	2 British Aluminium Co. Ltd.	8	1	0	1072	2800	110·25	278	231
Glenleven (Blackwater Dam, S.) ..	British Aluminium Co. Ltd.	6	1	6	1072	2666	104·95	279	232
d Glenleven (Kinlochleven) No. 1 ..	British Aluminium Co. Ltd.	8	1	0	140	2439	96·04	251	224
Corran Lighthouse	Board of Northern Lights ..	3	1	6	38	2556	100·64	233	..
5.—LOCH ETIVE. 197 sq. mi.									
d Connel Ferry (Ach-na-cloich) ..	W. D. Fordyce, Esq.	5	1	0	20	1726	67·97	222	216
d Glen Etive	W. D. Fordyce Esq.	5	1	0	200	2759	108·63	..	221
6.—LOCH ETIVE—Loch Awe. 319 sq. mi.									
d Loch Awe (Ford)	A. Cumming, Esq.	8	1	0	149	1982	78·03	274	234
d Loch Awe (Dalavich)	A. Cumming, Esq.	8	1	0	260	2488	97·95	273	231
d Dalmally (Manse of Glenorchy) ..	Rev. Farquhar MacRae ..	5	1	0	150	2465	97·04	256	234
7.—FIRTH OF LORNE. 112 sq. mi.									
d Kilmelfort (Arduaine)	J. A. Campbell, Esq.	5	0	10	23	1644	64·72	233	222
w Oban (Gleann-a-Bhearraidh Res.) ..	D. Galloway Esq.	8	1	6	370	1593	62·73	..	..
d Oban	D. Galloway, Esq.	8	1	0	21	1428	56·23	256	222
8.—SOUND OF JURA. 163 sq. mi.									
Lochgilthead (Poltalloch)	Mr. D.S. Melville	5	1	2	135	1645	64·78	262	213
9.—KINTYRE, WEST. 146 sq. mi.									
Mull of Kintyre	Board of Northern Lights ..	..	..	..	279	900	35·42	199	..
d Muasdale (Killeen Manse)	Rev. D. J. Macdonald	5	1	0	10	1006	39·59	249	180
Largie Castle	Mrs. Moreton Macdonald ..	5	1	1	160	1155	45·47	243	198
d Carse	J. Birkmyre, Esq.	6	1	6	20	1054	41·48	271	219
10.—KINTYRE, EAST. 177 sq. mi.									
d Campbeltown (South Park)	J. A. Gardiner, Esq.	8	0	10	20	1449	57·05	236	192
Campbeltown (Devaar)	Board of Northern Lights ..	..	3	4	120	1247	49·11	178	..
d Skipness Castle	R. F. Graham, Esq.	5	1	1	14	1309	51·54	232	191
11.—LOCH FYNE. 264 sq. mi.									
Otter Ferry (Ballimore)	Lt. Col. MacRae-Gilstrap ..	..	..	..	..	1249	49·16	..	..
d Ardrishaig (Canal Office)	E. A. Bly, Esq.	5	1	6	48	1847	72·71	241	215
d Loch Fyne (Castle Lachlan)	Mr. R. Pearson	5	1	0	42	1882	74·09	247	224
Crarae (Kennels)	Mr. W. T. Rae	5	1	0	20	2237	88·07	..	..
d Loch Fyne (Brenchoillie)	A. E. Lewis, Esq.	5	1	0	240	2314	91·10	..	162
d Inveraray Castle Gardens	A. E. Lewis, Esq.	5	1	0	40	2579	101·55	250	232
d Ardkinglas	Mr. J. Payne	8	1	6	37	1999	78·71	219	211
12.—FIRTH OF CLYDE & COWAL. 242 sq. mi.									
d Toward (Knockdow Gardens)	Sir Norman Lamont, Bt. ...	5	1	6	101	1558	61·33	205	195
d Innellan (Lilybank)	P. H. Coats, Esq.	5	..	..	..	1649	64·92	252	201
Tighnabruaich (Wellpark)	R. Paton, Esq.	12	7	0	50	1477	58·15	189	179
d Dunoon (Reservoir)	W. Rodger, Esq., C.E.	12	3	6	245	2344	92·29	219	199
d Dunoon (Redhurst)	Dr. J. Banks	5	1	0	60	2215	87·21	216	199
d Holy Loch (Ardnadam)	Rev. J. Cairns Mitchell ..	5	1	0	40	2237	88·08	240	202
d Loch Eck (Benmore)	Mr. R. R. Greenlaw	5	1	3	40	2595	102·16	219	214
Lochgillhead (Ardgoil)	J. Whitton, Esq.	5	0	6	20	2556	100·64	..	..

DIVISION XV.—WEST MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.	Days with ·01 in. or more.	Days with ·04 in. or more.	
		Diam.	Height Ground	above Sea Level.	1921				
ARGYLL—(con.).		in.	ft.	in.	ft.	mm.	in.		
13.—CLYDE—Leven. 4 sq. mi.									
14.—INSULAR. 900 sq. mi.									
d Islay (Ardbeg)	Colin E. Hay, Esq.	5	7	0	46	1174	46·21	223	180
Islay (Rhinn)	Board of Northern Lights..	7	3	6	150	1009	39·72	223	..
Islay (Lochindaul)	Board of Northern Lights..	3	0	6	52	1193	46·99	193	..
Islay (McArthur's Head)	Board of Northern Lights..	3	0	4	128	1421	55·96	178	..
d Islay (Eallabus)	James MacKillop, Esq. ...	5	1	0	68	1376	54·16	262	222
Islay (Rhuvaal)	Board of Northern Lights..	3	1	3	147	999	39·35	200	..
d Jura (Ardfin)	Colin Campbell, Esq.	5	1	0	160	1495	58·87	251	212
Fladda Lighthouse	Board of Northern Lights..	3	1	0	42	1296	51·02	208	..
Lismore (Mousedale)	Board of Northern Lights..	7	3	10	105	1158	45·60	204	..
d Eriska (Ledaig)	Mr. J. M. Webster	5	1	6	30	1668	65·68	249	244
d Mull (Iona Manse)	Rev. A. Macmillan	5	1	2	45	1247	49·08	230	215
d Mull (Bunessan)	Duncan Cameron, Esq. ...	5	1	0	50	1326	52·19	255	226
d Mull (Ulva)	F. W. Clark, Esq.	5	1	0	30	1550	61·02	262	226
d Mull (Knock)	Duncan Cameron, Esq. ...	5	1	0	50	2218	87·33	217	214
d Mull (Glencannel)	Duncan Cameron, Esq.	5	1	0	140	3197	125·85	270	239
d Mull (Gruline)	J. W. Melles, Esq.	8	1	0	101	1967	77·46	264	228
d Mull (Quinish)	J. N. Forsyth, Esq.	5	1	3	35	1476	58·10	266	222
Mull (Glengorm Castle)	Miss M. Lithgow	5	1	0	365	1239	48·77	..	..
Mull, Sound of	Board of Northern Lights..	3	1	4	55	1606	63·23	218	..
d Tiree (Cornaigmore School)	W. Agnew, Esq.	5	1	3	26	1078	42·43	307	214

DIVISION XVI.—EAST MIDLAND COUNTIES.

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	3	0	40	821	32·34	155	131
w	Alloa W.W. (Gartmorn Res.) . .	Andrew Mackie, Esq., C.E.	11	1	0	172	853	33·60	..	..
d	Tillicoultry (Westbourne)	Mrs. Willison	5	1	0	66	815	32·07	193	150
d	Tillicoultry Public School	W. D. Robieson, Esq.	5	1	0	71	877	34·52	181	144
d	Dollar (Wellhall, Dollarbeg) . .	James Bleloch, Esq.	5	0	9	265	989	38·92	210	144

KINROSS. (Area, 87 sq. mi.)

1.—FORTH, LOWER—Left Bank Tributaries. 15 sq. mi.

Dollar (Blairingone Manse) ...	Rev. J. F. Cameron	5	1	6	296	1034	40·71	208	149
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2.—LEVEN & C. 67 sq. mi.

m Kelty (Blairadam Wood)	C. A. Alexander, Esq.	5	1	0	670	878	34·56
d Loch Leven Sluice	Mr. David Hay	8	0	9	306	807	31·79	172	128
d Milnathort (Ledlanet)	J. C. Calder, Esq.	5	1	0	750	1126	44·33	187	154

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)	The Supt. Engineer	8	1	0	53	607	23·91	149	105
d Kincardine (Tulliallan)	J. C. Wilson, Esq.	5	1	0	80	881	34·70	159	140
d Dunfermline (Victoria Place) ..	J. Blyth, Esq.	5	1	2	365	790	31·11	182	128
d Culross (Brankston Grange)	Mrs. S. Dalgleish	5	0	10	200	802	31·58	185	153
Culross (Luscar House) ...	No.1 Lt.-Col. A. Mitchell	5	0	10	430	824	32·43	..	..
Culross (Luscar House) ...	No.2 Lt.-Col. A. Mitchell	5	0	10	430	824	32·45	..	..
Carnock (Craigluscar Res.)	R. Muir Morton, Esq.	12	0	4	280	1036	40·80	..	..

2.—LEVEN & C. 208 sq. mi.

Dunfermline (Fordell House) ..	Earl of Buckinghamshire..	5	1	0	250	761	29·94	..	..
d Kirkcaldy (Munro Street)	F. Braid, Esq.	5	1	0	67	670	26·38	170	123
d Cowdenbeath (Stenhouse St.) ..	C. A. Alexander, Esq.	5	1	0	474	857	33·76	173	137
d Cleish Hills (Deanhead Farm) ..	C. A. Alexander, Esq.	5	1	0	725	832	32·75	168	121
m Cleish Hills (Craiggaveral)	C. A. Alexander, Esq.	5	1	0	760	1012	39·84	..	..

DIVISION XVI.—EAST MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
FIFE—(con.).		in.	ft.	in.	ft.	mm.	in.		
2.—LEVEN & C.—(con.).									
M Cleish Hills (Roscobie Res.)	C. A. Alexander, Esq.	5	1	0	660	961	37·84	..	..
M Cleish Hills (Lochglow Res.)	C. A. Alexander, Esq.	5	1	0	900	723	28·46	..	..
D Leven (The Rectory)	Rev. F. C. Newbery	5	1	0	25	561	22·10	151	120
D Leslie (Lothrie Reservoir)	R. Ritchie, Esq.	5	0	6	702	822	32·35	221	139
D Elie (The Castle)	Miss E. E. Scott Moncrieff	5	0	5	9	533	21·00	158	100
D Elie (The Terrace)	C. D. Broadfoot, Esq.	5	1	0	32	580	22·82	140	108
D Colinsburgh (Balcarres)	Mr. W. H. Adams	5	1	0	300	637	25·08	162	106
D Carnbee (Ovenstone W.W.)	A. P. Watson, Esq.	5	1	0	168	588	23·16	..	101
3.—EDEN & C. 205 sq. mi.									
Ceres (Woodburne)	Ralph Richardson, Esq.	5	0	9	300	610	24·03	..	..
D Ceres (Castlebank)	Mr. Alex. Smith	5	2	0	280	628	24·74	179	128
D Cameron Water Works	W. Watson, Esq., C.E.	5	1	0	478	615	24·22	149	119
D Cupar (Rankeillour)	Mr. J. McLaren	5	1	0	240	542	21·34	..	..
D Cupar (Rankeillour)	Major J. Kerr	5	1	0	240	573	22·54	172	123
D Cupar (Fife & Kinross Asylum)	Dr. J. H. Skeen	5	1	0	210	540	21·25	161	106
D St. Andrews (Water Works)	A. D. Watson, Esq., C.E.	5	1	0	217	559	22·00	156	114
D St. Andrews (Queen's Gardens)	Miss I. J. R. Macadam	5	1	0	55	562	22·13	150	107
D St. Andrews	W. Watson, Esq., C.E.	5	1	0	20	569	22·41	143	115
Kilmany (Lochmalony)	W. Marshall, Esq.	5	0	6	260	562	22·14	..	..
4.—FIRTH OF TAY. 25 sq. mi.									
D Newport (Tayfield)	W. Berry, Esq.	5	0	7	100	551	21·71	..	110
Tayport (Lighthouse)	J. H. Thompson, Esq., C.E.	5	1	0	27	507	19·95	165	107
5.—TAY—Earn. 1 sq. mi.									
6.—INSULAR.									
Inchkeith	Board of Northern Lights	..	..	..	160	358	14·08	..	..
Isle of May	Board of Northern Lights	6	3	0	..	417	16·41	..	..
PERTH. (Area, 2535 sq. mi.)									
1.—FORTH—Right Bank Tributaries. 17 sq. mi.									
2.—FORTH, UPPER—Left Bank Tributaries. 64 sq. mi.									
D Gartmore House Gardens	Mr. H. B. Matheson	5	0	6	160	1709	67·29	248	196
D Aberfoyle (The Inn)	J. R. Sutherland, Esq., C.E.	8	0	6	60	1673	65·85	..	198
D Loch Dhu	J. R. Sutherland, Esq., C.E.	8	0	6	325	2211	87·05	..	213
w Ledard	J. R. Sutherland, Esq., C.E.	8	0	6	1500	2028	79·85	..	..
3.—FORTH—Teith. 221 sq. mi.									
w Loch Drunkie	J. R. Sutherland, Esq., C.E.	8	0	6	420	1867	73·50	..	..
D Inverrossachs	Sir James R. Wilson, Bt.	5	1	0	350	1656	65·18	245	182
w Ben Venue (Glasahole)	J. R. Sutherland, Esq., C.E.	8	1	0	1150	2355	92·70	..	..
D Loch Venachar	J. R. Sutherland, Esq., C.E.	8	0	6	275	1500	59·05	..	186
D Bridge of Turk	J. R. Sutherland, Esq., C.E.	8	0	6	275	1640	64·55	..	165
w Loch Katrine (Tunnel Hill Top)	J. R. Sutherland, Esq., C.E.	8	0	6	830	2282	89·85	..	..
w Ben Ledi	No. 2 J. R. Sutherland, Esq., C.E.	8	0	6	1400	1801	70·90	..	..
D Achnahard	J. R. Sutherland, Esq., C.E.	8	1	0	474	1737	68·40	..	171
Callander (Leny House)	Capt. M. Murray Buchanan	5	0	6	340	1511	59·50	..	..
w Strone Bridge	J. R. Sutherland, Esq., C.E.	8	1	0	380	2011	79·17	..	..
w Glen Meann	J. R. Sutherland, Esq., C.E.	8	1	0	800	2132	83·95	..	..
w Glen Finglas	J. R. Sutherland, Esq., C.E.	8	1	0	1200	2217	87·30	..	..
D Glengyle	J. R. Sutherland, Esq., C.E.	8	0	6	380	2504	98·60	..	221
w Upper Glengyle	J. R. Sutherland, Esq., C.E.	8	1	0	750	2798	110·15	..	..
w Allt a' Choin	J. R. Sutherland, Esq., C.E.	8	1	0	1250	2584	101·75	..	..
w Balquhidder (Blaircreach)	J. Carnegie, Esq.	5	1	0	460	2589	101·91	..	..
D Balquhidder (Stronvar)	J. Carnegie, Esq.	5	1	0	422	1688	66·44	..	..
4.—FORTH, LOWER—Left Bank Tributaries. 107 sq. mi.									
D Dunblane	A. Reid, Esq.	5	1	0	250	1258	49·54	196	175
Dunblane (Kippendavie)	Mr. F. Barnes	8	2	9	300	1257	49·49	..	..
D Glendevon (Glenquey Res.)	H. F. Hodge, Esq., C.E.	11	0	11	945	1476	58·10	..	152
Glendevon	No. 2 Fife County Council	8	1	0	1333	1996	78·58	..	..
Glendevon	No. 8 Fife County Council	8	1	0	1721	1411	55·57	..	..

DIVISION XVI.—EAST MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.	1921			
PERTH—(con.).		in.	ft. in.	ft.	mm.	in.		
4.—FORTH, LOWER—(con.).								
D Glendevon (Tormaukin)	Mr. W. Phillips	5	1 6	770	1424	56·07	170	146
D Glendevon (Frandy)	Fife County Council	8	1 0	911	1675	65·95	210	173
Glendevon (Glensherup)	R. Muir Morton, Esq.	12	0 4	945	1660	65·35	..	..
Glendevon	No. 1 Fife County Council	8	1 0	1202	1651	65·02	..	..
Glendevon	No. 9 Fife County Council	8	1 0	1067	1661	65·39	..	..
D Glendevon (Backhill)	Fife County Council	8	1 0	1067	1695	66·72	217	184
Glendevon	No. 10 Fife County Council	8	1 0	1408	1454	57·24	..	..
5.—LEVEN. 1 sq. mi.								
6.—EDEN. 4 sq. mi.								
7.—TAY—Earn. 376 sq. mi.								
D Gleneagles House	Mr. Andrew Todd	8	1 0	447	1011	39·82	220	146
Slateford Burn (Shire End) ..	Messrs. Leslie & Reid, C.E. ..	8	1 0	930	980	38·59	..	..
Slateford Burn (Whitehill) ..	Messrs. Leslie & Reid, C.E. ..	8	1 0	810	932	36·68	..	..
Upper Farg (Plains)	Messrs. Leslie & Reid, C.E. ..	8	1 0	900	855	33·65	..	..
Upper Farg (Heatherieleys Q'ry)	Messrs. Leslie & Reid, C.E. ..	8	1 0	715	821	32·31	..	..
Upper Farg (Main Bank)	Messrs. Leslie & Reid, C.E. ..	5	1 0	..	656	25·83	..	..
D Dunning (Kippen House)	Lady Wilson	5	1 0	450	1059	41·71	175	147
Auchterarder (Belhie)	Miss D. Cairns	5	0 10	100	773	30·43	145	125
Bridge of Earn (Ballendrick) ..	Capt. O. A. Taylor	5	1 2	30	713	28·06	172	110
D Lochearnhead (Edinchip)	Sir Malcolm MacGregor, Bt. ..	5	1 0	513	1742	68·60	240	202
D Crieff (Bargary Hill)	Mrs. Wilkie Brown	5	1 0	297	944	37·16	180	135
D Crieff (Strathearn Hydro.) ..	Dr. G. Meikle	5	1 0	478	955	37·58	203	146
8.—TAY—Almond & c. 149 sq. mi.								
D Perth (Wellshill Cemetery)	J. Ritchie, Esq., jun.	5	1 0	77	681	26·81	134	121
D Perth (Moulin Almond)	Col. D. M. Smythe	5	1 0	140	798	31·41	160	132
w Logiealmond Lodge	Earl of Mansfield	5	0 11	1020	1186	46·70	..	..
9.—TAY—Strathay below Dunkeld. 33 sq. mi.								
Murthly (Douglasfield)	W. A. Rae, Esq.	5	0 6	237	805	31·71	..	..
D Murthly (Glendelvine)	A. P. Lyle, Esq.	5	0 9	240	697	27·45	141	120
D Dunkeld (Snaigow)	W. H. Cox, Esq.	5	1 0	370	827	32·58	162	124
10.—TAY—Bran. 81 sq. mi.								
11. TAY—Strathay above Dunkeld. 95 sq. mi.								
D Aberfeldy (Dall Avon)	Dr. N. D. Mackay	5	1 0	320	866	34·09	213	134
D Grandtully (Dunros)	H. W. Johnston, Esq.	5	1 0	400	809	31·83	208	147
12.—TAY—Loch Tay. 241 sq. mi.								
D Killin (The Manse)	Rev. G. W. Mackay	5	1 0	400	1815	71·45	193	184
D Kenmore (The Manse)	Rev. W. A. Gillies	5	1 0	500	1015	39·97	167	140
13.—TAY—Lyon. 142 sq. mi.								
D Glenlyon (Meggernie Castle) ...	Mr. J. Currie	5	1 0	700	1631	64·22	210	196
w Fortingall (Glenlyon House) ..	Mr. J. W. Ford	5	1 0	425	1099	43·27	..	..
14.—TAY—Tummel. 587 sq. mi.								
D Loch Rannoch (The Barracks) ..	Mr. D. Macdonald	5	1 0	690	1288	50·71	220	185
D Loch Rannoch (Dall)	Mr. D. Robertson, jun.	5	1 0	772	1152	45·37	200	162
D Pitlochry (Dunfallandy)	D. Stewart-Fergusson, Esq. ..	5	1 10	405	783	30·82	185	146
D Pitlochry (Manse of Foss)	Rev. R. J. Davidson	8	1 0	530	1000	39·36	221	149
D Pitlochry (Bonskeid)	Dr. G. F. Barbour	5	1 0	540	831	32·70	205	151
D Fincastle House	Mr. N. McKay	5	1 0	980	915	36·01	189	145
D Trinafour (Druimchruaidh) ..	A. D. Cameron, Esq.	5	1 0	850	1381	54·36	219	170
D Blair Atholl	George Forrest, Esq.	5	1 0	420	812	31·96	200	145
D Blair Atholl (Blair Castle Grdns)	Mr. J. Dickson	5	1 0	500	825	32·46	186	142
D Glen Tilt (Marble Lodge)	Mr. J. Stewart	5	1 0	1000	779	30·65	..	..
D Glen Garry (Dalnaspidal Lodge)	Mr. J. Macbeth	5	1 0	1414	1620	63·77	201	194
D Glen Bruar (Bruar Lodge) No. 1	Mr. A. McLauchlan	5	1 0	1600	1040	40·93	198	170
D Glen Bruar (Bruar Lodge) No. 2	Mr. A. McLauchlan	5	1 0	1600	1100	43·31	198	172
D Glen Garry (Sronphadrick Lo.)	Mr. W. MacPherson	5	1 0	1525	1323	52·07	..	..
D Glen Tilt (Fealar Lodge)	Mr. D. M. McDougall	5	1 0	1760	789	31·07	205	160

DIVISION XVI.—EAST MIDLAND COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
PERTH—(con.).		in.	ft.	in.	ft.	mm.	in.		
15.—TAY—Isla. 282 sq. mi.									
D Coupar Angus (Public School)	A. Reid, Esq.	5	2	2	183	613	24·13	156	126
Blairgowrie (Kinloch Manse)	Ian Milne, Esq.	5	1	0	280	692	27·25	175	120
D Kirkmichael (Ballintuim Ho.)	Miss M. A. Macdonald	5	1	4	700	924	36·38	218	144
16.—TAY—Left Bank Tributaries. 51 sq. mi.									
D Kinfauns (Balthayock)	R. Wylie Hill, Esq.		4	6	323	714	28·11	139	109
D Scone Palace	Earl of Mansfield	5	0	11	91	703	27·67	184	126
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	583	22·97	164	111
d Glamis Castle	Mr. D. McInnes	5	0	9	250	654	25·74	..	109
D Forfar (Lilyfield)	D. M. Mackie, Esq.	5	0	5	225	581	22·86	154	113
Forfar (Orchardbank Sew. Farm)	A. Watterston, Esq., C.E.	4	1	0	214	545	21·46	..	..
D Kirriemuir (Lintrathen)	G. Baxter, Esq., C.E.	8	1	0	700	699	27·50	186	119
M Kirriemuir (Lintrathen)	G. Baxter, Esq., C.E.	8	1	0	700	726	28·60	..	..
M Kirriemuir (Balnakeilly)	G. Baxter, Esq., C.E.	8	1	0	700	729	28·70	..	..
M Kirriemuir (Creich Hill, S.)	G. Baxter, Esq., C.E.	8	1	0	1482	640	25·20	..	..
M Kirriemuir (Creich Hill, Top)	G. Baxter, Esq., C.E.	8	1	0	1500	592	23·30	..	..
M Kirriemuir (Creich Hill, N.)	G. Baxter, Esq., C.E.	8	1	0	1491	747	29·40	..	..
2.—FIRTH OF TAY. 80 sq. mi.									
Buddonness (Low Light)	J. H. Thompson, Esq., C.E.	5	1	0	27	572	22·52	158	110
D Dundee (Harbour)	J. H. Thompson, Esq., C.E.	5	0	11	14	513	20·20	164	105
d Dundee (Eastern Necropolis)	Mr. A. Macrae	3	1	0	199	565	22·25	..	145
D Dundee (Eastern Necropolis)	Mr. A. Macrae	5	1	0	199	571	22·47	174	127
D Dundee (Dens Works)	Messrs. Baxter, Bros., Ltd.	5	on roof		119	537	21·13	209	115
d Dundee (Camperdown Works)	Messrs. Cox, Bros., Ltd.	5	1	2	290	582	22·92	..	..
Dundee (Inniscarra)	H. G. Walker, Esq.	5	1	0	130	537	21·15	..	..
Dundee (Balruddery)	J. Martin White, Esq.	5	1	0	266	510	20·09	..	..
D Dundee (Kirkton of Mains)	A. Duncan, Esq.	8	1	0	244	561	22·07	169	115
Murroes (Craig Mills)	John Grant, Esq.	5	1	6	300	547	21·53	..	..
3.—SOUTH ESK & C. 371 sq. mi.									
D Carnoustie	D. Maxwell, Esq., C.E.	8	1	0	39	516	20·28	163	100
D Craigton	G. Baxter, Esq., C.E.	8	1	0	484	658	25·90	156	123
M Craigton	G. Baxter, Esq., C.E.	8	3	0	484	657	25·87	..	..
M Craigton (Hillhead)	G. Baxter, Esq., C.E.	8	3	0	570	644	25·36	..	..
M Crombie Reservoir	G. Baxter, Esq., C.E.	8	3	0	522	652	25·67	..	..
M Monikie (Fallaws)	G. Baxter, Esq., C.E.	8	3	0	585	659	25·93	..	..
D Arbroath (Dishland Hill)	Mr. J. Campbell	5	1	0	69	448	17·63	144	101
Arbroath (Muirheads Res.)	D. H. Shaw, Esq.	5	1	0	251	558	21·97	..	..
Forfar (Pitscandly House)	W. T. Farquhar, Esq.	5	1	9	300	566	22·28	..	..
Montroseness	Board of Northern Lights	3	1	0	124	397	15·62	..	..
D Montrose	S. L. Christie, Esq., C.E.	5	1	0	16	457	18·03	155	103
D Montrose (Melville Gardens)	S. L. Christie, Esq., C.E.	5	9	0	25	480	18·90	132	103
D Forfar W.W. (Den of Ogil)	A. Watterston, Esq., C.E.	12 x 4	0	3	633	759	29·89	171	123
D Glenogil Waterworks	D. H. Shaw, Esq.	5	1	0	770	792	31·19	166	122
D Glen Prosen (Pearsie House)	Mr. J. Scott	5	1	0	600	773	30·44	198	143
D Glen Prosen (Lednathie)	Mr. W. G. Lindsay	5	4	0	720	931	36·66	141	120
d Glen Prosen (Balnaboth Gdns.)	Mrs. Ogilvie	5	1	0	975	948	37·31	..	..
4.—NORTH ESK & C. 213 sq. mi.									
d Brechin (Trinity)	Miss E. A. Steventon	8	1	0	295	565	22·25	..	..
D Montrose (Sunnyside Asylum)	C. K. Alexander, Esq.	5	1	0	200	469	18·45	133	104
D Montrose (Kinnaber W.W.)	S. L. Christie, Esq., C.E.	5	1	0	38	452	17·80	153	111
Brechin (Stracathro Gardens)	Mr. A. Dunlop	5	1	0	200	529	20·83	..	..

DIVISION XVII.—NORTH-EASTERN COUNTIES.

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
KINCARDINE. (Area, 382 sq. mi.)		in.	ft.	in.	ft.	mm.	in.		
1.—NORTH ESK & C. 99 sq. mi.									
Marykirk (Balmakewan)	W. Low, Esq.	5	1	1	120	521	20·49	161	108
d Fettercairn (Police Station)	Mr. J. F. Brown.	5	1	0	235	502	19·78	137	106
Fettercairn (Fasque)	Sir John R. Gladstone, Bart.	5	1	0	330	559	22·02	173	..
2.—BERVIE, COWIE, & C. 139 sq. mi.									
d Stonehaven (Mains of Cowie) ..	John Hart, Esq.	5	1	0	93	430	16·92	191	107
3.—DEE. 144 sq. mi.									
Drumoak (Durriss House) ..(R)	Mr. A. Reid	5	3	6	200	443	17·44	..	..
d Banchory (Invercannie)	George Mitchell, Esq., C.E.	5	1	0	205	447	17·61	155	123
Crathes (Pinewood)	James Smith, Esq.	5	1	0	145	431	16·95	..	..
d Crathes (Schoolhouse)	W. S. Kemp, Esq.	5	1	0	269	409	16·09	188	99
ABERDEEN. (Area, 1974 sq. mi.)									
1.—DEE. 672 sq. mi.									
d Glen Muick	George Mitchell, Esq., C.E.	5	1	0	1370	842	33·15	198	157
d Glen Tanner (Aitnach)	George Mitchell, Esq., C.E.	5	1	0	1260	749	29·47	146	126
d Braemar (Bank)	A. M. Shirran, Esq.	5	1	0	1114	681	26·81	176	154
d Braemar (Derry Lodge)	George Mitchell, Esq., C.E.	5	1	0	1400	845	33·25	220	168
d Balmoral Castle Gardens	Mr. R. F. Chalmers	5	1	0	927	558	21·96	200	121
d Abergeldie Castle Gardens	Mr. J. Durran	5	1	0	850	503	19·79	..	100
d Ballater (Irrigation Farm)	George Mitchell, Esq., C.E.	5	1	0	637	527	20·73	170	130
M Bienn Bhreac	George Mitchell, Esq., C.E.	5	1	0	2700	777	30·61	..	..
Dinnet	"Aberdeen Journal" . . . . .	..	..	..	..	451	17·75	..	..
d Aboyne	George Mitchell, Esq., C.E.	5	1	0	412	471	18·53	130	106
d Dess House	Lt.-Col. D. F. Davidson.	5	1	8	480	455	17·91	115	105
d Glen Gairn (Gairnshiel Lodge)	George Mitchell, Esq., C.E.	5	1	0	1100	541	21·30	178	139
d Glen Gairn (Corndavon)	George Mitchell, Esq., C.E.	5	1	0	1500	684	26·92	185	144
d Torphins (School House)	Dr. George Davidson	5	1	6	480	436	17·16	130	101
M Lumphanan	George Mitchell, Esq., C.E.	5	1	0	490	464	18·27	..	..
d Drumoak (Drum Castle)	late A. F. Irvine, Esq.	5	0	8	320	397	15·65	165	100
d Logie Coldstone School	J. B. Anderson, Esq.	5	1	0	608	504	19·86	199	111
d Logie Coldstone (Loanhead)	Mr. A. Farquharson	5	1	0	743	474	18·65	195	106
d Aberdeen (Mannofield Res.)	George Mitchell, Esq., C.E.	5	1	0	171	432	17·01	194	115
d Aberdeen (Cranford House)	Mr. W. C. Smith	5	1	0	120	479	18·86	171	119
d Aberdeen (Cornhill Road)	J. B. Innes, Esq.	5	1	0	150	415	16·33	160	115
2.—DON. 512 sq. mi.									
d Aberdeen (King's College)	Air Ministry	8	1	0	44	423	16·68	168	106
d Strathdon (Estates Office)	C. Christie, Esq.	5	1	2	990	555	21·87	163	117
d Dyce (Craibstone House)	Prof. J. Hendrick.	5	1	0	276	454	17·86	178	120
d Dyce (Parkhill House)	J. E. Crombie, Esq.	8	0	11	170	475	18·68	171	129
M New Machar (Straloch)	Mrs. Irvine . . . . .	..	4	0	320	456	17·95	..	..
d Inverurie (Westfield)	James Skinner, Esq.	5	1	0	..	389	15·31	170	101
3.—YTHAN & C. 285 sq. mi.									
d Ellon (Esslemont House)	Col. J. Wolrige-Gordon, CMG	5	1	6	100	495	19·47	186	124
d Haddo House	Earl of Haddo	5	0	6	186	484	19·06	190	129
d Fyvie Castle	Col. C. R. Burn, M.P.	5	0	6	200	516	20·32	142	127
4.—UGIE & C. 257 sq. mi.									
Buchanness	Board of Northern Lights	3	3	0	130	393	15·47	129	..
d New Deer School House	J. A. Thomson, Esq.	5	1	0	397	543	21·36	..	..
d Peterhead (Stock Bridge)	J. Robertson, Esq.	5	1	1	150	472	18·59	207	124
d Peterhead (Mains of Buthlaw)	W. Johnston, Esq.	5	1	6	120	502	19·75	195	136
d Peterhead (Forehill Works)	J. Dickie, Esq., C.E.	5	0	7	133	503	19·79	199	150
Brucklay Castle	A. Dingwall Fordyce, Esq. MP	8	1	0	300	640	25·19	183	146
Kinnairdhead	Board of Northern Lights	3	2	6	120	434	17·08	161	..
5.—DEVERON & C. 248 sq. mi.									
d Drumblade Public School	G. Harper, Esq.	5	1	6	485	561	22·09	203	176
Huntly (Union Bank)	Alex. Smith, Esq.	5	1	0	405	575	22·63	..	..
Huntly (Cruchie)	Miss A. Joss	5	4	0	400	555	21·83	187	142

DIVISION XVII.—NORTH-EASTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in or more.
		Diam.	Height Ground	above Sea Level.	1921				
		in.	ft.	in.	ft.	mm.	in.		
BANFF. (Area, 630 sq. mi.)									
1.—YTHAN. 1 sq. mi.									
2.—DEVERON & C. 344 sq. mi.									
D Drummuir Castle	T. Gordon Duff, Esq.	5	1	0	605	660	26·00	206	139
D Keith Station.....	Mr. A. Kennedy	5	1	0	364	668	26·29	187	155
Turriff (Forglen Gardens)	Mr. G. Stuart	5	1	0	220	583	22·96	216	148
Buckie (Roughonnie)	W. Hendry, Esq.....	5	1	4	334	627	24·68	..	..
Buckie (West Church Street) ..	W. Hendry, Esq.....	5	1	4	76	539	21·22	..	..
D Banff (Duff House)	A. J. Leigh, Esq.	5	1	0	7	539	21·23	206	143
Cullen House Gardens	Mr. F. Low.....	5	1	0	100	527	20·73	..	..
3.—SPEY—Right Bank Tributaries. 285 sq. mi.									
D Dufftown (Fife Street)	Miss B. Walker	5	2	0	579	680	26·78	201	142
D Aberlour Orphanage	J. G. White, Esq.	5	1	0	350	630	24·82	171	138
MORAY. (Area, 477 sq. mi.)									
1.—DEVERON & C. 7 sq. mi.									
2.—SPEY—Right Bank Tributaries. 35 sq. mi.									
D Aberlour (Wester Elchies)	Mr. A. Ross.....	5	1	0	550	621	24·44	166	141
D Gordon Castle	Mr. C. Webster.....	5	1	0	104	593	23·36	190	136
3.—SPEY—Left Bank Tributaries. 133 sq. mi.									
D Grantown-on-Spey	W. Duncan, Esq.	5	1	1	700	616	24·25	179	137
D Knockando (Schoolhouse)	Charles Watt, Esq.	5	1	0	600	566	22·27	201	142
4.—LOSSIE & C. 154 sq. mi.									
D Lhanbryde (Blackhills House) ..	T. N. Christie, Esq.	5	3	6	310	624	24·57	211	148
Elgin (The Manse)	Rev. Dr. R. Macpherson ..	6	1	3	38	617	24·28	..	..
D Duffus House	Mr. W. Ogg	5	1	0	55	588	23·14	177	138
5.—FINDHORN & C. 148 sq. mi.									
Darnaway Castle Gardens	Earl of Moray.....	5	1	6	200	592	23·32	159	122
D Brodie (Earlsmill House)	James Fenwick, Esq.	5	0	10	135	615	24·21	201	127
Forres (Knockonnie).....	W. Fraser, Esq.....	6	0	10	100	561	22·10	..	..
NAIRN. (Area, 163 sq. mi.)									
1.—FINDHORN & C. 102 sq. mi.									
D Ardclach (Glenferness)	Mr. A. McKenzie	8	1	6	750	756	29·75	160	151
2.—NAIRN & C. 61 sq. mi.									
Cawdor Castle	(R) Mr. D. Chapman	8	4	3	225	643	25·33	143	119
D Nairn (Balblair).....	Major H. C. H. Allanby ...	4	1	0	94	554	21·82	215	122
D Nairn (Achareidh)	H. A. Clarke, Esq.	8	1	0	59	552	21·75	208	131
D Nairn (Delnies)	Air Ministry	8	1	9	42	533	20·99	214	128

DIVISION XVIII.—NORTH-WESTERN COUNTIES.

INVERNESS. (Area, 4146 sq. mi.)

1.—TAY—Tummel. 28 sq. mi.									
D Loch Ericht (Ben Alder Lodge)	Mr. F. Macintosh	5	1	0	1175	1470	57·87	249	210
2.—SPEY—Right Bank Tributaries. 437 sq. mi.									
D Dalwhinnie (Drumochter Lo.) ..	Mr. D. Kennedy	5	1	0	1375	1331	52·40	215	197
D Glen Tromie (Gaick Lodge)	Mr. C. Chisholm	5	1	0	1500	1191	46·87	234	190
Nethy Bridge (U.F. Manse)	Rev. A. Sutherland	5	1	0	750	536	21·10	148	117

DIVISION XVIII.—NORTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1921	Days with ·01 in. or more.	Days with ·04 in. or more.		
		Diam.	Height Ground	above Sea Level.					
INVERNESS—(con.).		<i>in.</i>	<i>ft.</i>	<i>in.</i>	<i>ft.</i>	<i>mm.</i>	<i>in.</i>		
3.—SPEY—Left Bank Tributaries. 257 sq. mi.									
D Cluny Castle.....	Mr. A. Macdonald	5	0	10	900	1136	44·73	245	194
D Alvie Gardens	Mr. J. G. Fraser	5	1	3	800	772	30·40	218	162
D Alvie Manse	Rev. Dugald Maclean ...	5	1	0	760	689	27·14	..	..
Aviemore (Rothiemurchus) ...	W. Dempster, Esq.	5	1	0	706	681	26·79	..	..
D Carr Bridge (Crannich)	Mrs. A. Doak	5	1	0	900	669	26·36	215	144
D Grantown (Muckerach Lodge) ..	Mr. James Fraser.....	5	1	6	750	612	24·10	183	151
4.—FINDHORN. 164 sq. mi.									
5.—NAIRN & C. 131 sq. mi.									
Gollanfield House	The MacKinnon of MacKinnon	5	0	8	80	576	22·68	168	132
6.—NESS—Right Bank Tributaries. 252 sq. mi.									
D Fort Augustus (St. Benedict's) The Procurator	5	1	0	68	1092	42·98	202	168	
Loch Ness (Killin, Whitebridge) British Aluminium Co. Ltd.	8	1	0	1200	1226	48·28	..	..
D Loch Ness (Garthbeg)	British Aluminium Co. Ltd.	8	1	0	645	1026	40·40	235	168
Loch Ness (Foyers)	British Aluminium Co. Ltd.	8	1	0	52	1050	41·34	195	149
Loch Ness (Aberchalder)	British Aluminium Co. Ltd.	8	1	0	700	805	31·70	192	172
7.—NESS—Garry & c. 185 sq. mi.									
M Loch Quoich (Loan)	Col. D. W. Cameron	5	1	0	650	5125	201·78	..	..
D Loch Quoich (Kinlochquoich) ..	Col. D. W. Cameron	5	1	0	560	3768	148·36	..	205
D Loch Quoich (Glenquoich)	Mr. C. Macrae.....	5	1	2	569	3381	133·13	240	239
D Glen Garry (Inchlaggan).....	Mr. M. Matheson.....	5	1	0	370	1738	68·44	236	221
D Invergarry Gardens	Mr. Donald Stewart	5	1	0	130	1980	77·94	217	193
D Invergarry Schoolhouse	W. M. Aitken, Esq.	5	1	0	180	1725	67·92	243	205
8.—NESS—Moriston. 120 sq. mi.									
9.—NESS—Enrick. 131 sq. mi.									
D Inverness (High School).....	V. M. Galbraith, Esq.	5	1	0	98	667	26·26	208	131
10.—BEAULY. 341 sq. mi.									
D Kirkhill (Moniack)	R. Robertson, Esq., C.E....	5	1	0	65	701	27·61	183	137
11.—CROMARTY FIRTH. 13 sq. mi.									
12.—SOUND OF SLEAT. 259 sq. mi.									
D Loch Nevis (Inverie Gardens) ..	Mr. J. Huggins	5	0	6	15	2460	96·85	263	244
D Glenelg Manse	Rev. A. Mactaggart	5	1	0	85	1270	50·01	229	204
13.—SOUND OF ARISAIG. 126 sq. mi.									
D Moidart (Kinlochmoidart)	J. C. Stewart, Esq.	5	1	0	13	2094	82·47	250	237
D Moidart (Roshven)	Mrs. Wm. Blackburn	5	1	0	40	1948	76·71	277	237
D Arisaig (Faire-na-Sguir)	Miss C. C. Astley	5	1	0	30	1656	65·20	266	224
D Arisaig House	Mr. W. Grant.....	5	1	0	45	1809	71·22	253	241
14.—LOCH LINNHE—Right Bank Tributaries. 48 sq. mi.									
D Corpach (Ravensdale).....	G. J. Ewen-Watson, Esq. ...	5	1	1	17	1749	68·86	265	219
D Loch Eil (Achdaliu)	Col. D. W. Cameron	5	1	0	100	1871	73·66	235	211
15.—LOCHY—Right Bank Tributaries. 143 sq. mi.									
D Loch Arkaig (Achnacarry).....	Col. D. W. Cameron	5	1	0	128	2642	104·03	256	223
D Loch Arkaig (Glen Dessary) ...	Col. D. W. Cameron	5	1	0	300	3376	132·91	235	231
D Clunes	Col. D. W. Cameron	5	1	0	128	2194	86·39	233	214
16.—LOCHY—Left Bank Tributaries. 362 sq. mi.									
M Ben Alder (Loch a' Bhealaich) ..	Mr. F. Macintosh	5	1	0	2300	2957	116·40	..	..
M Ben Alder (Lochan Sgoir)	Mr. F. Macintosh	5	1	0	2250	3005	118·30	..	..
M Loch Pattaig.....	Sir J. F. Ramsden, Bt.	5	0	6	1442	1805	71·05	..	..
M Loch Laggan (Ardverikie)	Sir J. F. Ramsden, Bt.	5	0	3	820	1556	61·25	..	..
17.—LOCH LINNHE—Left Bank Tributaries. 120 sq. mi.									
D North Ballachulish (Alltshellach) ..	B. Chinnery-Haldane, Esq.	5	2	1	80	2167	85·21	268	236
D Glenleven (Blackwater Dam, N) ..	British Aluminium Co. Ltd.	8	1	0	1072	2343	92·26	..	..
D Kinlochleven (Kinlochmore Lo.) ..	Brian Bibby, Esq.	5	1	0	115	2779	109·40	240	226
D Kinlochleven (Mamore Lodge) ..	Brian Bibby, Esq.	8	1	0	600	2886	113·61	..	..

DIVISION XVIII.—NORTH-WESTERN COUNTIES—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain. 1921	Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.				
INVERNESS—(con.).		in.	ft.	in.	ft.	mm.	in.	
17.—LOCH LINNHE—Left Bank Tributaries—(con.).								
Glenleven (Iavercaim)	No. 6 British Aluminium Co. Ltd.	8	1	0	1070	2296	90·39	.. ..
Glenleven (Chiaron Ho.) No. 3	British Aluminium Co. Ltd.	8	1	0	1200	2703	106·43	.. ..
Glenleven (Loch Eilde Mòr) . . .	British Aluminium Co. Ltd.	8	1	1	1130	3385	133·25	.. ..
Glenleven (Loch Eilde Beg) . . .	British Aluminium Co. Ltd.	8	1	1	1125	3515	138·40	.. ..
Glenleven (Corrour)	No. 5 British Aluminium Co. Ltd.	8	1	0	1260	2183	85·95	.. ..
Fort William (Atholl Bank) . . .	W. T. Kilgour, Esq.	5	1	0	171	2299	90·51	260 228
18.—INSULAR, INNER HEBRIDES. 786 sq. mi.								
Hyskier	Board of Northern Lights	..	..	..	..	1173	46·19	237 ..
Skye (Oronsay)	Board of Northern Lights	..	0	6	58	1519	59·79	211 ..
Skye (Duisdale House)	R. A. Noël Paton, Esq.	5	2	0	67	2459	96·80	230 229
Skye (Kyleakin, Dunringell) . . .	Maj. A. D. Mackinnon, C.M.G.	5	2	1	80	1847	72·70	267 225
Skye (Kyleakin Lighthouse) . . .	Board of Northern Lights	5	4	6	53	1449	57·06	237 ..
Skye (Scalpay Island)	Mr. D. Gunn	5	1	0	4	2213	87·12	266 249
Skye (Portree)	D. Dewar, Esq.	5	1	0	65	1682	66·23	274 237
Skye (Dunvegan)	Mrs. Mackenzie	5	3	0	47	1811	71·30	278 250
Rona	Board of Northern Lights	3	1	3	212	736	28·99?	236 ..
19.—INSULAR, OUTER HEBRIDES. 243 sq. mi.								
Barra (Barrahead)	Board of Northern Lights	7	3	0	683	882	34·72	173 ..
Barra (Castle Bay)	Air Ministry	8	1	0	38	890	35·04	264 184
South Uist (Ushenish)	Board of Northern Lights	3	1	0	178	1411	55·53	226 ..
North Uist (Monach)	Board of Northern Lights	8	5	6	20	971	38·25	232 ..
Harris (Island Glass)	Board of Northern Lights	7	4	2	130	715	28·17	221 ..
ROSS & CROMARTY. (Area 3237 sq. mi.)								
1.—NESS—Moriston. 35 sq. mi.								
2.—BEAULY. 109 sq. mi.								
3.—MORAY FIRTH COAST STREAMS. 64 sq. mi.								
Fortrose	A. Thom, Esq.	5	1	0	69	491	19·34	180 115
4.—CROMARTY FIRTH. 714 sq. mi.								
Achnashellach (Glenuaig)	W. M. Christy, Esq.	5	1	0	1150	3518	138·50	.. ..
Achnasheen (Ledgowan)	Mr. J. W. Macrae	5	1	0	500	2124	83·61	247 228
Strathpeffer	W. Macrae, Esq.	8	1	0	125	761	29·95	146 132
Cromarty House	Brig.-Gen. W. C. Ross, C.B.	5	1	0	60	547	21·52	198 130
Cromarty	Board of Northern Lights	3	1	0	28	457	17·99	178 ..
Invergordon (The Ord)	W. G. Paterson, Esq.	5	1	1	50	499	19·65	159 ..
Alness (Ardross Castle)	Mr. W. L. Minty	5	1	0	450	855	33·67	220 142
5.—DORNOCH FIRTH. 355 sq. mi.								
Tarbetness	Board of Northern Lights	8	4	0	175	485	19·10	129 ..
6.—ENARD BAY. 78 sq. mi.								
7.—LOCH BROOM & C. 367 sq. mi.								
8.—LOCH EWE, LOCH TORRIDON & C. 423 sq. mi.								
Loch Torridon (Bendamph) . . .	Earl of Lovelace	5	1	0	20	2343	92·23	255 247
Rudh Ré Lighthouse	Board of Northern Lights	..	..	..	..	1083	42·64	254 ..
9.—LOCH CARRON, LOCH ALSH & C. 401 sq. mi.								
Glen Shiel (Shiel House)	Mr. Colin Campbell	5	1	6	30	2129	83·83	.. ..
Loch Carron (Plockton)	Mrs. Anstruther Mackay	5	1	0	8	1484	58·41	242 212
Loch Carron (Dunhulladale) . . .	Mrs. G. J. Campbell	5	1	0	9	2179	85·79	276 246
Applecross Gardens	Mr. D. McCowan	5	1	0	70	1411	55·54	.. ..
Glencarron Lodge	Mr. D. D. Munro	5	1	0	504	2422	95·36	260 230
Glencarron Lodge	Mr. D. D. Munro	5	1	0	504	2677	105·40	.. ..
10.—INSULAR, OUTER HEBRIDES. 691 sq. mi.								
Stornoway Lighthouse	Board of Northern Lights	8	4	9	20	1024	40·30	203 ..
Stornoway	Air Ministry	8	1	0	52	1333	52·47	268 227
Triumpanhead	Board of Northern Lights	..	..	..	170	979	38·56	186 ..
Butt of Lewis	Board of Northern Lights	8	4	6	170	982	38·67	230 ..

DIVISION XIX.—NORTHERN COUNTIES.

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.	
		Diam.	Height Ground	above Sea Level.	1921				
SUTHERLAND. (Area, 2080 sq. mi.)		in.	ft.	in.	ft.	mm.	in.		
1.—DORNOCH FIRTH. 413 sq. mi.									
2.—FLEET, BRORA & C. 309 sq. mi.									
D Dornoch (St. Gilbert's)	G. J. Campbell, Esq.	5	1	0	35	587	23·09	171	128
D Golspie (Technical School)	E. W. Read, Esq.	6	1	9	105	747	29·43	206	135
D Dunrobin Castle	The Duke of Sutherland ..	5	1	6	14	727	28·63	180	134
3.—HELMSDALE & C. 226 sq. mi.									
4.—NORTH COAST STREAMS. 736 sq. mi.									
D Tongue Manse	Rev. David Lundie	5	1	0	180	1004	39·54	245	200
D Melvich Schoolhouse	A. MacIntosh Esq.	5	1	0	200	871	34·27	191	164
Cape Wrath	Board of Northern Lights ..	7	4	8	400	1150	45·26	246	..
5.—LOCH LAXFORD & C. 256 sq. mi.									
D Loch More (Achfary)	Mr. J. Munro	5	1	0	137	2486	97·87	273	250
6.—ENARD BAY. 138 sq. mi.									
Stour Head	Board of Northern Lights ..	..	..	..	..	701	27·61	182	..
7.—INSULAR. 2 sq. mi.									
CAITHNESS. (Area, 696 sq. mi.)									
1.—BERRIEDALE, DUNBEATH & C. 169 sq. mi.									
d Berriedale (Langwell Gardens) ..	Mr. J. Murray	5	1	6	150	701	27·61	..	..
Cyثness	Board of Northern Lights ..	..	..	..	..	557	21·94	173	..
2.—WICK & C. 184 sq. mi.									
D Wick	Air Ministry	8	1	2	82	642	25·27	249	161
Nosshead	Board of Northern Lights ..	7	4	7	175	518	20·39	150	..
3.—THURSO & C. 238 sq. mi.									
D Thurso (Buckies)	J. H. M. Davidson, Esq. ...	5	0	11	240	982	38·67	239	204
Thurso (Holburn Head)	Board of Northern Lights ..	3	0	8	75	768	30·24	186	..
Dunnet Head	Board of Northern Lights ..	3	1	0	246	969	38·14	171	..
4.—FORSS & C. 104 sq. mi.									
D Reay (The Manse)	Rev. Dugald Carmichael ..	8	1	0	49	904	35·58	252	194
5.—INSULAR. 1 sq. mi.									
Stroma	Board of Northern Lights ..	..	..	..	104	643	25·32	166	..
Pentland Skerries	Board of Northern Lights ..	7	3	9	170	1106	43·53	219	..
ORKNEY. (Area, 389 sq. mi.)									
Hoy (Cantickhead)	Board of Northern Lights ..	3	1	0	115	742	29·23	193	..
Hoy (Graemsay Sound, High) ..	Board of Northern Lights ..	5	0	4	115	732	28·83	235	..
Hoy (Graemsay Sound, Low) ..	Board of Northern Lights ..	8	4	3	55	932	36·68	217	..
Copinsay	Board of Northern Lights ..	..	..	..	..	601	23·66	150	..
D Pomona (Deerness)	Air Ministry	5	4	0	161	1025	40·35	266	199
Hellyar Holm	Board of Northern Lights ..	3	1	0	60	833	32·78	163	..
Shapinsay (Balfour Castle) ...	Mr. W. Liddell	5	0	6	50	803	31·60	..	..
Auskerry	Board of Northern Lights ..	3	2	6	10	467	18·38	182	..
Sanday (Start Point)	Board of Northern Lights ..	3	1	0	80	902	35·52	238	..
Westray (Noup Head)	Board of Northern Lights ..	3	1	0	260	833	32·79	201	..
North Ronaldshay	Board of Northern Lights ..	3	0	4	140	721	28·38	208	..
Sule Skerry	Board of Northern Lights ..	3	0	6	113	933	36·72	195	..
SHETLAND. (Area, 558 sq. mi.)									
Fair Isle, North	Board of Northern Lights ..	..	..	..	262	520	20·46	171	..
Sumburgh Head	Board of Northern Lights ..	..	..	..	..	443	17·44	..	..
Bressay	Board of Northern Lights ..	3	1	0	105	641	25·24	186	..
D Lerwick	Air Ministry	8	1	0	54	1064	41·92	265	203
D Fetlar (The Manse)	Rev. J. A. Campbell	5	1	0	30	817	32·16	216	176
D Unst (Balta Sound, Halligarth) ..	Dr. T. E. Saxby	5	1	0	31	1186	46·71	294	214

IRELAND.

DIVISION XX.—MUNSTER.

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height above Ground	above Sea Level.		1921			
CORK. (Area, 2873 sq. mi.)		in.	ft.	in.	ft.	mm.	in.		
1.—SHANNON—Left Bank Tributaries. 79 sq. mi.									
2.—DINGLE BAY. 4 sq. mi.									
3.—KENMARE & C. 47 sq. mi.									
4.—BANTRY BAY. 197 sq. mi.									
Bantry House	W. Stevens, Esq.	5	1	8	30	1251	49·26	..	177
5.—DUNMANUS BAY. 57 sq. mi.									
6.—BANDON & C. 694 sq. mi.									
d Castletownshend (Glenbarrabane)	Major H. Chavasse	5	1	3	100	827	32·58	..	132
d Castletownshend (Seafeld) ...	Major H. Chavasse	5	0	8	40	952	37·47	185	151
Skibbereen (Hollybrook Farm)	Col. A. H. Morgan, D.S.O.	8	1	6	60	1191	46·90	179	..
d Caheragh (The Rectory)	Rev. A. W. Whitley	5	1	0	98	1271	50·03	205	172
d Clonakilty (Shannon Vale Ho.)	T. J. Bennett, Esq.	5	1	3	135	877	34·51	163	121
d Ballineen (Kilmeen Rectory) ..	F. W. Dobbin, Esq., M.D. ...	5	1	0	350	1192	46·93	196	153
d Kinsale (Scilly House)	J. J. Orr, Esq., M.D.	5	1	0	62	716	28·20	155	117
d Dunmanway (The Rectory) ...	Rev. Canon A. Wilson ...	5	1	6	205	1310	51·57	190	154
d Dunmanway (Carbery)	Dr. W. H. Fitzmaurice ...	5	1	6	204	1354	53·29	189	165
7.—CORK HARBOUR. 726 sq. mi.									
d Roches Point	Air Ministry	8	1	0	33	739	29·10	235	125
d Ballinageary (Inchibeg)	H. N. Walsh, Esq.	5	1	0	400	1659	65·30	..	155
Crookstown (Bellmount)	Irish Rainfall Association.	8	2	6	400	1090	42·93	182	..
d Ballintemple (Blackrock Road)	Michael Murphy, Esq.	12	1	0	96	637	25·07	165	118
d Cork (Corn Market)	D. J. O'Mahony, Esq.	5	1	0	19	668	26·31	154	111
d Cork (University College)	H. N. Walsh, Esq.	5	1	0	65	733	28·87	178	123
d Cork (University College) ..(R)	H. N. Walsh, Esq.	6	1	6	65	722	28·43	175	124
d Cork (Wellington Road)	R. C. Sikes, Esq., C.E. ...	5	2	2	120	738	29·07	161	121
d Middleton (Ballinacurra)	J. H. Bennett, Esq.	8	0	8	25	659	25·92	189	111
d Queenstown (Fota Island)	Mr. R. Forbes	5	1	6	35	805	31·70	189	145
d Glanmire (Lota Lodge) .. No. 1.	A. F. Sharman-Crawford Esq	5	1	0	200	785	30·89	189	131
d Glanmire (Lota Lodge) .. No. 2.	A. F. Sharman-Crawford Esq	5	1	0	100	721	28·37	185	124
d Blarney (St. Anns Hill Hydro)	Dr. R. H. Barter	8	1	0	216	731	28·78	180	128
d Dripsey Woollen Mills	H. N. Walsh, Esq.	5	1	0	250	793	31·21	198	128
8.—WOMANAGH & C. 118 sq. mi.									
d Shanagarry (Kinoith)	Miss L. P. Strangman	5	1	0	75	649	25·56	..	116
9.—BLACKWATER. 922 sq. mi.									
d Mallow (Longueville)	R. E. Longfield, Esq.	5	1	0	315	745	29·32	188	136
Ballyhooley	H. Beddington, Esq.	5	0	9	..	802	31·57	..	148
Kanturk (Castlecarr)	Mrs. Norton Barry .....	..	..	..	..	801	31·54	210	144
d Mitchelstown Castle	W. D. Webber, Esq.	8	3	0	345	819	32·25	191	149
10.—SUIR. 3 sq. mi.									
11.—INSULAR. 26 sq. mi.									
KERRY. (Area, 1851 sq. mi.)									
1.—SHANNON—Left Bank Tributaries. 372 sq. mi.									
d Ballybunion (Wireless Station)	H. J. Cross, Esq.	5	1	1	50	920	36·21	217	165
2.—TRALEE BAY & C. 221 sq. mi.									
Castlegregory (Kilgobbin Rec.)	Rev. E. A. Hackett	5	3	0	25	1452	57·15	..	..

DIVISION XX.—MUNSTER—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.	
		Diam.	Height Ground	above Sea Level.	1921				
KERRY—(con.).		in.	ft.	in.	ft.	mm.	in.		
3.—DINGLE BAY. 789 sq. mi.									
M Cahirciveen Water Works	L. H. G. Dines, Esq., C.E.	5	0	11	420	1414	55·68	..	..
D Cahirciveen (Valencia Observty)	Air Ministry	8	1	0	30	1172	46·15	230	168
M Gap of Dunloe (Gearahameen)	Air Ministry	8	3	0	75	2045	80·50	..	..
d Killarney (Flesk Mills)	D. E. McDonnell, Esq., C.E.	8	2	6	95	945	37·19	..	..
D Killarney (District Asylum)	E. W. Griffin, Esq., M.D.	5	0	10	178	1029	40·51	223	156
Killorglin (Callinafercy)	Irish Rainfall Association	5	0	6	40	1141	44·93	..	..
4.—KENMARE & C. 426 sq. mi.									
D Darrynane Abbey	Miss M. O'Connell	5	1	0	13	1169	46·03	235	174
D Kenmare (Derreen)	Mr. W. H. Arrowsmith	5	1	0	74	1713	67·44	226	193
D Kenmare (Sheen Falls)	Earl of Kerry	5	0	8	25	1413	55·63	201	183
Kenmare (Dunkerron Castle)	Miss L. Palmer	5	1	6	70	1147	45·16	207	174
D Kenmare (Dromore Castle)	Major E. Hood	5	0	9	90	1368	53·86	237	184
5.—BLACKWATER. 30 sq. mi.									
6.—INSULAR. 13 sq. mi.									
D Valencia (Glanleam)	Miss A. F. Payne	8	1	0	75	1244	48·99	209	177
WATERFORD. (Area, 715 sq. mi.)									
1.—BLACKWATER. 243 sq. mi.									
d Lismore Castle	Duke of Devonshire	5	2	9	115	694	27·31?	..	135
Cappoquin (Mt. Melleray Abbey)	Irish Rainfall Association	5	1	0	760	940	37·00	..	..
2.—COLLIGAN & C. 259 sq. mi.									
d Tramore (Midvale)	E. B. Jacob, Esq.	5	1	0	115	768	30·22	..	..
3.—SUIR. 213 sq. mi.									
D Knockaderry Reservoir . . No. 1	J. J. Fleming, Esq., C.E.	5	7	7	247	794	31·27	168	120
D Knockaderry Reservoir . . No. 2	J. J. Fleming, Esq., C.E.	5	7	7	248	692	27·23	162	107
D Waterford (Brook Lodge)	C. P. Bolton, Esq., C.E.	5	1	0	104	857	33·73	161	130
d Waterford (Tycor Waterworks)	J. J. Fleming, Esq., C.E.	5	0	7	171	818	32·21	..	128
D Waterford (De La Salle College)	Rev. M. J. Healy	8	1	0	16	823	32·38	190	136
D Waterford (Gortmore)	Mrs. N. H. White	5	1	2	137	779	30·66	170	131
D Portlawn (Mayfield)	J. Anderson, Esq.	5	1	6	70	901	35·47	178	138
Portlawn (Curraghmore Gdns.)	Mr. D. Crombie	5	1	0	95	829	32·62	142	132
D Carrick-on-Suir (Seskin)	J. Ernest Grubb, Esq.	8	1	0	542	884	34·81	192	126
TIPPERARY. (Area, 1660 sq. mi.)									
1.—SHANNON—Left Bank Tributaries. 582 sq. mi.									
Cappaghwhite (Greenfields Stud)	Irish Rainfall Association	5	1	0	350	825	32·48	..	..
Killaloe (Ballina)	Office of Public Works	5	2	0	126	1016	40·00	211	..
D Nenagh (Traverston)	Miss A. H. Norris	5	1	0	333	899	35·41	221	159
D Nenagh (Kilboy)	The Lady Dunalley	8	2	0	326	948	37·32	210	166
D Nenagh (St. Mary's Rectory)	Rev. Canon C. W. McDowell	5	1	0	..	784	30·87	190	137
D Nenagh (Castle Lough)	S. Parker-Hutchinson, Esq.	5	1	3	120	889	35·02	227	147
D Terryglass (Old Court)	M. D. Hickie, Esq.	5	1	0	150	835	32·88	204	150
D Terryglass (Slevoyre)	Gen. Sir W. B. Hickie, K.C.B.	8	1	6	143	809	31·83	196	144
2.—BLACKWATER. 21 sq. mi.									
3.—SUIR. 965 sq. mi.									
Clogheen	Irish Rainfall Association	5	0	7	180	864	34·00	..	..
d Clonmel (Bruce Villa)	Late J. H. Grubb, Esq.	8	1	3	110	834	32·85	173	143
Cahir (Abbey)	Mrs. W. Rochfort	5	1	0	160	833	32·81	194	142
D Tipperary (The Vale)	Major G. H. Pomeroy Colley	5	1	8	350	749	29·47	180	142
D Tipperary (Kingswell)	Irish Rainfall Association	5	1	0	350	763	30·05	158	140
D Fethard (Coolmore)	Miss Murphy	5	1	0	347	839	33·04	204	143
D Cashel (Ballinamona)	E. W. M. Murphy, Esq.	5	1	0	257	811	31·94	203	139
d Thurles (Brittas Castle)	Mrs. Knox	6	1	0	360	718	28·27	..	..
Templemore (Barnane)	Capt. A. Carden, R.A.	5	1	0	650	975	38·39	176	162

DIVISION XX.—MUNSTER—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
TIPPERARY—(con.).		in.	ft.	in.	ft.	mm.	in.		
4.—BARROW—Nore. 92 sq. mi.									
D Roscrea (Timoney Park)	S. Parker-Hutchinson, Esq.	5	1	0	475	759	29·87	185	133
LIMERICK. (Area, 1040 sq. mi.)									
1.—SHANNON—Right Bank Tributaries. 7 sq. mi.									
2.—SHANNON—Left Bank Tributaries. 944 sq. mi.									
D Knocklong (Kilfrush)	F. J. B. Gubbins, Esq.	5	1	0	314	750	29·51	197	143
Glin (Shannon Lawn)	C. V. Hickie, Esq.	4	3	0	12	970	38·19	..	..
D Foynes (Coolnanes)	Lord Monteagle	5	1	0	50	917	36·11	219	151
D Foynes (National School)	W. Purtill, Esq.	5	1	8	15	900	35·43	189	137
Limerick (O'Connell Street)	R. Davison, Esq., C.E.	5	1	0	51	899	35·38	194	142
Limerick (Mulgrave Street)	Sir A. W. Shaw	5	1	1	60	858	33·77	199	137
Limerick (Strand)	W. J. C. Horne, Esq.	5	1	0	50	839	33·02	196	140
D Glenstal Castle	Sir Charles Barrington, Bt.	8	1	0	400	922	36·29	189	157
D Castleconnell Rectory	Mrs. Davis	5	1	0	88	935	36·79	174	152
3.—BLACKWATER. 64 sq. mi.									
4.—SUIR. 25 sq. mi.									
Galbally Rectory	Rev. J. F. Young	5	1	0	380	900	35·42	..	..
CLARE. (Area, 1270 sq. mi.)									
1.—GALWAY BAY, SOUTH. 100 sq. mi.									
2.—MAL BAY & C. 294 sq. mi.									
D Inagh (Mount Callan)	Lt.-Col. F. Tottenham	5	1	0	479	1584	62·36	234	202
D Quilty	Air Ministry	5	1	0	21	1011	39·80	..	..
D Ennistymon House	H. V. Macnamara, Esq.	5	1	0	37	1189	46·79	236	188
3.—SHANNON—Right Bank Tributaries. 854 sq. mi.									
D Limerick (Derravoher)	Sir A. W. Shaw	5	1	0	40	809	31·85	207	146
D Newmarket-on-Fergus	Mr. A. Barker	5	1	0	86	964	37·96	201	157
D Broadford (Hurdlestown)	Lt.-Col. W. A. Bentley	5	1	0	167	1006	39·59	217	165
4.—INSULAR. 22 sq. mi.									

DIVISION XXI.—LEINSTER.

WEXFORD. (Area, 902 sq. mi.)

1.—BARROW. 43 sq. mi.**2.—OWENDUFF & C. 240 sq. mi.**

D Foulkesmill (Longraigue)	Miss J. Deane	5	1	1	220	833	32·78	146	121
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3.—SLANEY & C. 467 sq. mi.

D Enniscorthy (Summerville)	W. Waring, Esq.	5	6	0	106	672	26·44	176	116
Enniscorthy (Monksgrange)	Goddard H. Orpen, Esq.	5	1	0	525	1017	40·05	172	143
Enniscorthy (Woodbrook)	E. C. Blacker, Esq.	5	1	0	370	1055	41·52	175	157

4.—OWENAVORRAGH & C. 146 sq. mi.

D Oulart (Wells)	C. M. Doyne, Esq.	5	1	0	220	815	32·08	180	129
D Gorey (Courtown House)	Earl of Courtown	5	3	0	60	750	29·52	164	112

5.—OVOCA & C. 6 sq. mi.

KILKENNY. (Area 798 sq. mi.)

1.—SUIR. 162 sq. mi.

D Piltown (Bessborough)	Mr. T. E. Tomalin	8	3	7	60	746	29·36	175	122
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2.—BARROW—Nore. 527 sq. mi.

D Inistioge (Woodstock Gardens)	Mrs. Tighe	5	1	0	400	887	34·94	153	138
D Kilkenny Castle	Marquis of Ormonde, K.P.	8	1	6	194	688	27·11	178	127
Kilkenny (Lavistown House)	Miss F. E. Butler	5	2	5	170	659	25·95	162	117
D Castlecomer House	Capt. R.H. Prior-Wandesforde	5	1	0	380	905	35·63	210	167

DIVISION XXI.—LEINSTER—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground.	above Sea Level.		1921			
KILKENNY—(con.).		in.	ft.	in.	ft.	mm.	in.		
3.—BARROW. 109 sq. mi.									
d	Goresbridge (Barraghcore House) H. de M. Fleming, Esq. . .	5	1	0	130	685	26·96	193	127
WICKLOW. (Area, 781 sq. mi.)									
1.—BARROW. 12 sq. mi.									
2.—SLANEY. 200 sq. mi.									
d	Shillelagh (Coollattin Gardens) Duncan Brough, Esq.	5	0	9	383	847	33·35	174	144
3.—OVOCA & C. 241 sq. mi.									
d	Arklow Rectory. H. W. Strong, Esq.	5	1	0	186	703	27·66	167	120
	Rathdrum (Avondale) A. C. Forbes, Esq.	5	0	6	420	877	34·51	..	..
4.—VARTRY & C. 193 sq. mi.									
d	Wicklow (Wentworth House) . . E. N. Wynne, Esq., C.E. . .	5	1	1	23	806	31·72	182	124
d	Rathnew (Clonmannon) Rev. W. H. A. Truell . . .	5	1	6	27	725	28·55	172	119
	Roundwood (Vartry Lodge) . . . Dublin Corporation	5	1	8	720	865	34·04	176	..
	Roundwood Dublin Corporation	5	1	8	800	855	33·67	190	..
	Roundwood (Knockatemple) . . Dublin Corporation	5	1	8	700	852	33·53	189	..
d	Newcastle (Killadreenan) . . . Dr. F. O'B. Kennedy . . .	8	1	2	256	792	31·19	168	131
	Tithewer Dublin Corporation	5	1	6	1000	853	33·58	..	..
	Annacarter Schoolhouse Dublin Corporation	5	1	6	750	887	34·92	..	..
d	Greystones (Rathmore) Dr. B. D. Crichton	5	1	4	20	637	25·07	155	112
d	Greystones (Rathdown) Miss L. Armstrong	5	0	6	160	726	28·60	166	125
5.—LIFFEY & C. 135 sq. mi.									
CARLOW. (Area, 346 sq. mi.)									
.—BARROW—Nore. 9 sq. mi.									
2.—BARROW. 216 sq. mi.									
	Bagnalstown (Fenagh House) . . D.R.P. Beresford, Esq. O.B.E. .	5	1	0	340	717	28·25	177	118
m	Bagnalstown (Fenagh House) . . D.R.P. Beresford, Esq. O.B.E. .	5	1	0	340	692	27·25	..	..
	Carlow (Browne's Hill) Col. Browne Clayton	5	1	0	291	841	33·12	..	156
3.—SLANEY. 121 sq. mi.									
d	Rathvilly (Lisnavagh Gardens) . Irish Rainfall Association .	5	4	3	..	686	27·01	142	118
d	Hacketstown Rectory Rev. C. S. S. Ellison	5	1	2	590	801	31·52	216	152
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	924	36·38	203	151
d	Mountrath (Baunreagh) D. McCaw, Esq.	5	1	0	810	1345	52·94	207	182
3.—BARROW. 300 sq. mi.									
	Carlow (Sunnyside) E. Shackleton, Esq.	5	1	0	178	807	31·79	142	127
d	Mountmellick W. A. Robinson, Esq. . . .	5	1	0	252	871	34·30	180	148
KING'S COUNTY. (Area, 772 sq. mi.)									
1.—SHANNON—Left Bank Tributaries. 560 sq. mi.									
d	Birr Castle Earl of Rosse	8	1	0	175	768	30·25	212	148
	Birr (Moneyguynen) Irish Rainfall Association .	5	1	6	400	798	31·42	196	..
	Meelick (Victoria Lock) Office of Public Works . . .	5	2	0	121	595	23·43	183	139
d	Tullamore (Rathrobin) Lt.-Col. M. W. Biddulph . .	5	1	0	400	793	31·21	192	138
d	Tullamore (St. Catherine's Rect.) . Rev. R. S. Craig	5	1	6	201	686	27·00	204	137
	Tullamore (St. Vincent's Hosp.) . Dr. G. A. Moorhead	5	1	0	225	703	27·69	246	155
d	Ferbane (Turraun Peat Works) A Leinster Carbonizing Co. Ltd. .	8	1	2	170	741	29·19	185	137
d	Ferbane (Turraun Peat Works) B Leinster Carbonizing Co. Ltd. .	8	1	2	170	741	29·17	185	137
2.—BARROW—Nore. 5 sq. mi.									
3.—BARROW. 156 sq. mi.									
4.—BOYNE. 51 sq. mi.									

DIVISION XXI.—LEINSTER—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground.	above Sea Level.		1921			
KILDARE. (Area, 654 sq. mi.)		in.	ft.	in.	ft.	mm.	in.		
1.—BARROW. 332 sq. mi.									
2.—LIFFEY. 246 sq. mi.									
d Sallins (Palmerstown).....	The Countess of Mayo	5	1	0	321	713	28·08	192	141
d Straffan House	Mr. F. Streeter	5	2	0	256	772	30·40	168	150
d Clongowes Wood College.....	Rev. K. J. Ward	8	1	0	246	623	24·55	..	..
3.—BOYNE. 76 sq. mi.									
DUBLIN. (Area, 354 sq. mi.)									
1.—VARTRY & C. 23 sq. mi.									
Shankill (Sherrington)	Irish Rainfall Association.	5	8	0	123	603	23·76	..	..
Carrickmines (Claremont)	John Read, Esq.	5	0	11	300	626	24·64	..	108
Ballybrack (Marino)	Rt. Hon. L. A. Waldron ..	5	3	6	..	493	19·41	..	99
Foxrock (Kilteragh)	Irish Rainfall Association .	5	1	0	250	615	24·20	149	..
2.—LIFFEY & C. 188 sq. mi.									
d Glen-na-Smoel(RathminesWW)	Dublin Corporation	5	1	0	510	851	33·51	232	156
d Stillorgan (Farmleigh)	T. Jackson, Esq.	5	1	2	220	706	27·78	221	143
d Dundrum (The Castle).....	Dr. A. S. Goff	5	3	0	170	630	24·81	210	133
d Kingstown (People's Park)	Kingstown U.D.C.	8	1	0	48	558	21·96	176	117
d Kingstown (Harbour Yard).....	Office of Public Works ...	8	1	0	52	566	22·29	148	115
d Belgard Castle	Capt. A. F. Maude	5	1	0	400	611	24·04	172	129
d Baldonnell	Air Ministry	8	1	0	283	659	25·93	192	133
d Harold's Cross (Westfield Park)	F. P. Dixon, Esq., C.E. ...	5	0	9	125	541	21·32	178	123
d Harold's Cross(Pretoria Terrace)	E. H. Cannon, Esq.	5	0	11	155	528	20·78	190	117
d Rathmines (Ormond Road)	W. R. Stephens, Esq., C.E.	5	1	0	99	571	22·49	207	115
d Rathmines (Dartrey Road)	T. Mason, Esq.	5	6	0	130	603	23·74	158	124
d Ranelagh (Sandford Lodge)	H. Fayle, Esq.	5	0	11	61	552	21·74	173	110
d Donnybrook (Belmont Avenue)	Douglas Waring, Esq.	5	0	9	100	583	22·96	164	..
d Donnybrook (Anglesea Road)	F. C. D. Joynt, Esq.	5	1	0	30	517	20·37	158	109
d Dublin (FitzWilliam Square)	Sir J. W. Moore, M.D.	8	1	6	54	578	22·75	188	118
d Dublin (Trinity College)	Prof. W. E. Thrift	8	1	0	13	552	21·75	173	111
d Dublin (Phoenix Park).....	Ordnance Survey Office ..	8	1	0	156	660	25·99	205	135
d Dublin (Ringsend Pumpg.Stn.)	Dublin Corporation	10	1	1	25	551	21·71	170	110
d Clontarf (Pumping Station)	Dublin Corporation	5	4	9	22	498	19·62	167	102
d Sutton (Tower Cottage).....	J. P. Campbell, Esq.	5	1	0	30	485	19·11	..	..
d Glasnevin (Roy.Botanic Gdns.)	Sir F. W. Moore	8	1	0	55	633	24·91	211	128
d Howth Castle	Com. J. G. St. Lawrence, R.N.	5	1	9	35	586	23·06	170	118
3.—NANNY, DELVIN & C. 142 sq. mi.									
d Malahide (Seamount)	J. G. Jameson, Esq.	5	1	0	150	633	24·90	172	128
d Skerries (Milverton Hall)	Capt. E. G. Woods	5	1	6	190	592	23·31	180	127
d Balbriggan (Ardgillan)	No. 1 Capt. E. R. Taylor	5	1	0	211	699	27·52	192	129
d Balbriggan (Ardgillan)	No. 3 Capt. E. R. Taylor	5	1	0	211	696	27·41	..	..
4.—INSULAR. 1 sq. mi.									
d Lambay Island	Hon. Cecil Baring	5	1	0	20	605	23·80	151	130
MEATH. (Area 909 sq. mi.)									
1.—SHANNON—Left Bank Tributaries. 32 sq. mi.									
2.—LIFFEY & C. 72 sq. mi.									
d Dunboyne (Stirling, Clonee)	Mr. J. Pilkington	8	1	0	231	819	32·26	191	..
3.—NANNY, DELVIN & C. 150 sq. mi.									
4.—BOYNE. 560 sq. mi.									
d Summerhill House	Mr. W. Lauder	5	1	0	372	772	30·40	175	148
d Athboy (Mitchelston)	W. J. Hopkins, Esq.	5	1	0	260	767	30·21	199	149
d Athboy (Frankville)	C. P. Coghill, Esq.	8	1	3	227	831	32·72	184	148
d Navan (Staffordstown)	R. J. Butler, Esq.	5	1	0	250	717	28·21	188	141
d Kells (Headfort)	The Marquis of Headfort..	8	0	8	227	736	28·99	192	139
5.—DUNDALK BAY. 95 sq. mi.									

DIVISION XXI.—LEINSTER—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground.	above Sea Level.		1921			
WESTMEATH. (Area, 712 sq. mi.)		in.	ft.	in.	ft.	mm.	in.		
1.—SHANNON—Left Bank Tributaries. 517 sq. mi.									
D Moate (Coolatore)	H. A. S. Upton, Esq.	5	1	6	369	742	29·22	225	148
D Streamstown (Windmill)	F. W. Jeeves, Esq.	5	1	6	..	767	30·18	204	141
Athlone	Office of Public Works	5	2	0	132	566	22·29	194	117
D Athlone (Twyford)	J. P. Hodson, Esq.	5	1	0	187	812	31·97	200	145
D Mullingar (Belvedere)	Mr. J. Bayliss	5	1	0	367	727	28·62	189	124
Mullingar (Ballynegall Gardens)	Irish Rainfall Association	5	2	0	340	824	32·45	206	..
D Rathowen (Cromlyn)	(R) Maj.-Gen. J. P. Battersby, CB	8	1	6	250	759	29·87	216	151
D Castlepollard (Gillardstown Ho.)	W. Hardy, Esq.	5	1	0	290	708	27·88	165	136
D Castlepollard (Pakenham Hall)	Mr. W. Allan	5	1	6	300	802	31·59	192	156
2.—BOYNE. 195 sq. mi.									
D Athboy (Lisclogher)	Lt.-Col. J. E. Knott, C.M.G.	5	1	0	271	689	27·12	188	131
LOUTH. (Area, 316 sq. mi.)									
1.—BOYNE. 32 sq. mi.									
2.—DUNDALK BAY & C. 264 sq. mi.									
D Dundalk (Town Hall)	M. Sellars, Esq., C.E.	8	55	0	82	627	24·67	187	139
D Dundalk (Aughneskea Res.)	M. Sellars, Esq., C.E.	5	1	3	207	891	35·06	193	158
D Dundalk (Ballymacallet)	M. Sellars, Esq., C.E.	5	2	3	670	867	34·14	..	..
3.—CARLINGFORD LOUGH. 20 sq. mi.									
D Greenore	T. Chambers, Esq., C.E.	5	1	0	20	726	28·58	205	138
LONGFORD. (Area, 424 sq. mi.)									
1.—ERNE. 61 sq. mi.									
2.—SHANNON—Left Bank Tributaries. 363 sq. mi.									
D Ballymahon (New Castle)	Miss B. King-Harman	5	2	5	200	720	28·34	206	149
Longford (The Rectory)	Rev. H. Justice	5	1	0	185	710	27·96	209	150
Cloondraha	Office of Public Works	5	2	0	130	495	19·48	212	128
D Castle Forbes Gardens	The Earl of Granard	8	1	0	161	761	29·96	200	159

DIVISION XXII.—CONNAUGHT.

GALWAY. (Area 2377 sq. mi.)									
1.—ERIFF & C. 141 sq. mi.									
2.—GALWAY BAY, NORTH. 277 sq. mi.									
3.—CORRIB. 846 sq. mi.									
D Galway (Grammar School)	V. M. Hinchy, Esq. . . . .	..	..	..	..	983	38·71	216	167
D Galway (Waterdale)	L. R. Reed, Esq. . . . .	..	..	30	..	996	39·20	200	168
D Ballynahinch Castle	R. Berridge, Esq.	5	1	9	41	1438	56·63	277	228
Tuam (Gardenfield)	R. J. Kirwan, Esq., C.E.	5	1	0	155	915	36·04	..	..
4.—GALWAY BAY, SOUTH. 281 sq. mi.									
D Woodlawn	Mr. C. Farmer	5	3	6	300	865	34·05	245	169
5.—SHANNON—Right Bank Tributaries. 803 sq. mi.									
D Killimor (Ramore)	Miss N. Macdermott	5	1	0	220	916	36·07	166	147
D Ahascragh (Clonbrock)	Lord Clonbrock, K.P.	10	5	6	198	976	38·44	171	158
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	642	25·26	154	125
Jamestown (Albert Lock)	Office of Public Works	5	2	0	146	478	18·82	172	..

DIVISION XXII.—CONNAUGHT—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground	above Sea Level.		1921			
MAYO. (Area, 2149 sq. mi.)		in.	ft.	in.	ft.	mm.	in.		
1.—SLIGO BAY. 10 sq. mi.									
2.—MOY & C. 797 sq. mi.									
d Castlebar House	A. C. Larminie, Esq.	5	3	3	..	1077	42·41	241	181
d Swinford Rectory	Rev. F. T. Cockle	5	1	3	..	916	36·07	..	..
d Crossmolina (Enniscoe)	J. Pratt, Esq.	5	0	11	74	1274	50·15	246	220
3.—BLACKSOD BAY & C. 411 sq. mi.									
d Blacksod Point	Air Ministry		0	10	10	1159	45·65	..	..
4.—CLEW BAY. 254 sq. mi.									
d Westport House	The Marquis of Sligo	5	1	0	35	1093	43·03	221	198
d Mallarany	M. C. Forbes, Esq.	5	1	0	128	1678	66·07	235	213
5.—ERIFF & C. 121 sq. mi.									
d Aasleagh House	The Marquis of Sligo	5	1	6	80	2119	83·42	266	227
d Delphi Lodge	The Marquis of Sligo	5	1	0	110	2342	92·20	257	232
6.—CORRIB. 432 sq. mi.									
d Cong (The Glebe)	Rev. Canon R. Y. Lynn	5	1	11	112	1130	44·48	..	..
d Ballinrobe (Cranmore)	H. H. C. Knox, Esq.	5	0	9	112	1066	41·97	..	..
7.—SHANNON—Right Bank Tributaries. 35 sq. mi.									
8.—INSULAR. 89 sq. mi.									
SLIGO. (Area, 716 sq. mi.)									
1.—DROWES & C. 49 sq. mi.									
2.—SLIGO BAY. 444 sq. mi.									
d Collooney (Markree Obsy)	J. R. Armstrong, Esq.	5	1	0	122	1039	40·89	241	195
d Collooney (Markree Obsy)	J. R. Armstrong, Esq.	5	16	6	138	1045	41·13	..	..
d Sligo (Ard-na-veagh)	R. J. Kirwan, Esq., C.E.	5	1	0	90	930	36·61	244	184
3.—MOY & C. 166 sq. mi.									
4.—SHANNON—Right Bank Tributaries. 56 sq. mi.									
5.—INSULAR. 1 sq. mi.									
LEITRIM. (Area, 615 sq. mi.)									
1.—ERNE. 152 sq. mi.									
2.—DROWES & C. 85 sq. mi.									
3.—SLIGO BAY. 135 sq. mi.									
4.—SHANNON—Right Bank Tributaries. 47 sq. mi.									
5.—SHANNON—Left Bank Tributaries. 196 sq. mi.									
d Ruskey	Office of Public Works	5	2	0	141	627	24·70	215	177
d Drumshanbo (Lough Allen Sluice)	Office of Public Works	5	2	0	169	670	26·38	203	144

DIVISION XXIII.—ULSTER.

CAVAN. (Area, 753 sq. mi.)									
1.—ERNE. 489 sq. mi.									
d Belturbet (Cloverhill)	Mrs. Sanderson	5	1	0	202	687	27·04	206	152
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 Enniskillen (Portora)	W. N. Tetley, Esq.	5	1	0	251	890	35·05	..	..
d Belleek (Heronshaw)	T. Beacom, Esq.	5	1	5	150	1017	40·05	202	181
2.—DROWES & C. 46 sq. mi.									

DIVISION XXIII.—ULSTER—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground.	above Sea Level.		1921			
MONAGHAN. (Area, 498 sq. mi.)		in.	ft.	in.	ft.	mm.	in.		
1.—ERNE. 208 sq. mi.									
2.—DUNDALK BAY. 132 sq. mi.									
3.—BANN—Lough Neagh, West. 158 sq. mi.									
d Monaghan (Workhouse)	Dr. J. Campbell Hall		5	6	240	622	24·48	143	126
ARMAGH. (Area, 514 sq. mi.)									
1.—DUNDALK BAY. 118 sq. mi.									
2.—CARLINGFORD LOUGH. 23 sq. mi.									
d Bessbrook (The Woodhouse)	J. S. W. Richardson, Esq.	5	1	0	260	814	32·06	204	153
3.—BANN—Lough Neagh, East. 37 sq. mi.									
d Lurgan (Belle Vue)	S. A. Bell, Esq.	5	0	5	200	682	26·84	188	138
4.—BANN, UPPER. 144 sq. mi.									
d Tanderagee	Dr. J. Taylor	5	1	6	198	730	28·73	196	140
5.—BANN—Lough Neagh, West. 192 sq. mi.									
d Armagh Observatory	Air Ministry	8	1	0	204	724	28·49	221	148
Richhill (Sandymount)	Mrs. C. B. Lamb	5	1	0	200	661	26·03	..	..
DOWN. (Area, 961 sq. mi.)									
1.—CARLINGFORD LOUGH. 104 sq. mi.									
d Warrenpoint (Clonallon)	Lt.-Col. A. W. Mansergh	5	1	3	15	775	30·51	203	159
d Newry (Bridge Street Ho.)	C. Blaney, Esq.	5	1	0	23	770	30·32	187	150
2.—DUNDRUM BAY & C. 173 sq. mi.									
d Mourne Mount's (Fofanny Res.)	J. H. H. Swiney, Esq., C.E.	5	1	0	938	1316	51·81	204	181
d Seaforde	Major W. G. Forde	8	0	5	180	947	37·27	185	157
3.—STRANGFORD LOUGH. 260 sq. mi.									
d Saintfield House	Rev. E. H. Blackwood-Price	5	0	9	300	781	30·73	197	143
d Newtownards (Scrabo Hill)	Newtownards U.D.C. . . . .	..	1	6	540	807	31·77	183	153
4.—COAST STREAMS. 47 sq. mi.									
d Donaghadee (Coastguard Stat.)	Air Ministry	8	1	0	35	767	30·20	209	144
d Donaghadee (Craigmore)	Dr. S. B. Coates	5	1	0	60	723	28·46	198	133
5.—BELFAST LOUGH. 206 sq. mi.									
d Bangor	C. T. Ingold, Esq.	7	0	11	67	773	30·43	..	117
6.—BANN—Lough Neagh, East. 7 sq. mi.									
7.—BANN, UPPER. 162 sq. mi.									
Banbridge (Observatory)	Mr. H. D. Fleming	5	1	6	210	693	27·27	189	130
d Banbridge (Milltown)	J. E. Kennedy, Esq.	5	1	0	200	707	27·81	201	142
Banbridge (Millbank)	Mrs. J. W. Mulligan	5	1	0	257	691	27·21	193	149
Portadown (Moyallon House)	Mr. J. Lynas	5	0	5	130	771	30·34	194	149
8.—INSULAR. 2 sq. mi.									
ANTRIM. (Area, 1193 sq. mi.)									
1.—BELFAST LOUGH. 107 sq. mi.									
d Lisburn (Ulster Provincial Sch.)	J. Woolman, Esq.	5	1	6	208	875	34·47	198	149
d Belfast (Queen's University)	Mr. G. Robinson	5	1	0	62	849	33·44	202	140
d Belfast (Cave Hill Road)	Miss C. Firth	5	1	0	200	928	36·55	226	168
d Belfast (Sewage Outfall Wks.) (R)	H. A. Cutler, Esq., C.E.	8	2	11	26	816	32·13	215	143
Belfast (Oldpark Filters)	F.W. McCullough, Esq., C.E.	5	3	6	203	809	31·87	180	132
Carrickfergus (Dorisland)	F.W. McCullough, Esq., C.E.	5	3	0	250	783	30·84	206	138
Carrickfergus (South Woodburn)	F.W. McCullough, Esq., C.E.	5	3	0	640	933	36·72	238	157
Carrickfergus (North Woodburn)	F.W. McCullough, Esq., C.E.	5	3	0	735	981	38·62	237	170
Carrickfergus (Copeland)	F.W. McCullough, Esq., C.E.	5	3	0	424	781	30·74	209	137
Carrickfergus (Lough Mourne)	F.W. McCullough, Esq., C.E.	5	3	0	596	911	35·85	213	151

DIVISION XXIII.—ULSTER—(con.).

STATIONS.	AUTHORITIES.	Rain Gauge.				Depth of Rain.		Days with ·01 in. or more.	Days with ·04 in. or more.
		Diam.	Height Ground.	above Sea Level.		1921			
ANTRIM—(con.).		in.	ft.	in.	ft.	mm.	in.		
2.—GLENARM & C. 186 sq. mi.									
D Larne (Sallagh Springs)	W. G. Younger, Esq.	5	1	0	566	1155	45·48	208	182
D Glenarm Castle	Mr. J. Smith	5	1	0	70	1022	40·25	196	175
3.—BUSH & C. 193 sq. mi.									
4.—BANN, LOWER. 112 sq. mi.									
5.—BANN—Lough Neagh, East. 590 sq. mi.									
Stonyford (Belfast W.W.)	F.W. McCullough, Esq., C.E.	5	1	6	437	757	29·80	191	146
D Antrim (Ardnaveigh)	H. B. Murray, Esq.	5	1	6	210	699	27·51	187	144
D Ballymena (Harryville)	J. R. Williams, Esq.	5	1	5	150	975	38·39	238	193
D Broughshane (Quolie)	H. O'Hara, Esq., C.E.	5	1	4	864	1035	40·74	239	173
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	905	35·64	235	179
2.—BUSH & C. 9 sq. mi.									
3.—BANN, LOWER. 240 sq. mi.									
D Garvagh (Woodbank House)	Lt.-Col. R. C. S. Macausland	5	1	6	300	1016	40·01	236	184
4.—BANN—Lough Neagh, West. 196 sq. mi.									
5.—FOYLE & C. 365 sq. mi.									
M Glendra (Spelhoagh Mountain)	M. A. Robinson, Esq., C.E.	5	1	0	1333	1383	54·44	..	..
D Glendra Hill.	M. A. Robinson, Esq., C.E.	5	1	0	1333	1511	59·48	244	231
D Glendra Lodge	M. A. Robinson, Esq., C.E.	5	1	0	950	1298	51·09	245	205
D Londonderry (Creggan Res.)	Mr. W. Hutchison	8	1	0	320	990	38·97	277	209
Limavady (Drenagh)	M. M. McCausland, Esq.	5	1	6	80	806	31·72	227	..
Bellarena	Irish Rainfall Association.. . . .	5	1	3	7	917	36·09	239	..
TYRONE. (Area, 1257 sq. mi.)									
1.—ERNE. 46 sq. mi.									
2.—BANN—Lough Neagh, West. 442 sq. mi.									
D Tullyhogue (Rockdale House)	Major R. Stevenson.	5	1	0	275	932	36·71	222	167
3.—FOYLE. 769 sq. mi.									
D Omagh (Edenfel)	Lt.-Col. J. B. Buchanan	8	1	6	280	1020	40·15	236	189
D Newtown Stewart (Baron's Court)	Mr. R. Bell	5	1	0	250	963	37·92	232	174
D Sion Mills (Sion House)	Capt. J. C. Herdman	5	3	0	100	926	36·44	229	179
DONEGAL. (Area, 1875 sq. mi.)									
1.—DONAGH & C. 146 sq. mi.									
d Malin Head	Air Ministry.	8	1	0	208	737	29·00	245	170
2.—LOUGH SWILLY. 273 sq. mi.									
D Letterkenny (Mental Hospital)	E. E. Moore, Esq., M.D.	5	1	0	183	1106	43·54	249	196
d Rathmullen (Fort Royal)	Col. C. Montgomery.	5	1	4	35	1030	40·56	..	..
3.—SHEEPHAVEN & C. 307 sq. mi.									
D Milford (The Manse)	Rev. W. J. Young	5	1	6	150	1015	39·96	236	181
D Dunfanaghy (St. Helen's)	J. J. MacGrath, Esq., M.D.	8	0	9	50	1083	42·65	246	196
4.—GWEEBARRA & C. 341 sq. mi.									
D Narin (Kiltoorish)	Lt.-Col. E. P. H. Gardner.	5	1	6	100	1166	45·90	253	203
5.—DONEGAL BAY. 322 sq. mi.									
D Killybegs (Rockmount)	Com. G. G. Philipps, R.N.. . . .	5	1	0	65	1470	57·86	247	211
6.—ERNE. 68 sq. mi.									
D Belleek (The Island)	Mr. J. McBrien.	5	1	0	154	999	39·35	218	171
7.—DROWES & C. 10 sq. mi.									
8.—FOYLE. 396 sq. mi.									
9.—INSULAR. 12 sq. mi.									

BRITISH RAINFALL 1921.

PART IV.

THE DROUGHT OF 1921.

There can be little doubt that the year 1921, the rainfall of which is discussed in the present volume, will rank as one of exceptional significance in the history of British climatology. The series of annual issues of *British Rainfall*, of which this is the sixty-first, contains a fairly comprehensive history of the fluctuations to which the precipitation has been observed to be subject during that period, and sufficient data exist to carry the survey back for a considerably longer time. In applying the word "unprecedented" to the conditions occurring over a large portion of the country in 1921 one is therefore employing no empty phrase. It is true that a perusal of the records of the last ten years will bring to light quite a considerable number of "unprecedentedly" heavy individual rains, and that the significance of the expression is in that case somewhat illusory, for it has always to be borne in mind that such rains are usually very local and that in the earlier days of rainfall observing the network of stations was far less close than it is to-day. We have, therefore, no guarantee that equally heavy storms may not have occurred and passed unrecorded. A shortage of rainfall, on the other hand, is seldom, if ever, extremely local, and the insufficient number of records available in earlier years would probably tend to exaggerate the intensity of any dry period which may have occurred, since local rains mitigating their severity may well have failed to be recorded.

Pressure Conditions during Drought Periods.

The rainfall of the British Isles is derived in common with that of most of the maritime regions of north-western Europe, almost entirely from the so-called "south-westerly variable winds" or "anti-trades" which blow on the northern fringe of the high-pressure belt of the northern hemisphere. This great stream of air, carrying large quantities of moisture from the Atlantic Ocean, blows across the British Isles with varying intensity for about three-quarters of the year, being at its maximum, both for frequency and velocity, at mid-winter and at its minimum at mid-summer. The bulk of the water which these winds precipitate during their passage undoubtedly falls as orographical rain on the high mountain barriers in the west, a fact sufficiently obvious from the prevailing type of distribution, but the region of the south-westerly winds is also a particularly fertile breeding ground for cyclonic depressions, about one hundred of which pass on the average every year either over or in the immediate vicinity of the British Isles, accompanied in most cases by rainfall in some

locality or other. The association of true summer thunderstorm rains with the south-westerly wind-drift is probably less close, though it is no doubt to the constant renewal of the supply of moisture from this source that many of our thunderstorms owe their capacity for producing heavy rainfall.

The frequency and intensity of orographical, and to a less extent of cyclonic, rainfall are so clearly bound up in the relative persistence of the south-westerly winds that, in studying the circumstances of any droughty period, it is natural in the first place to examine the pressure conditions which form the controlling factor.

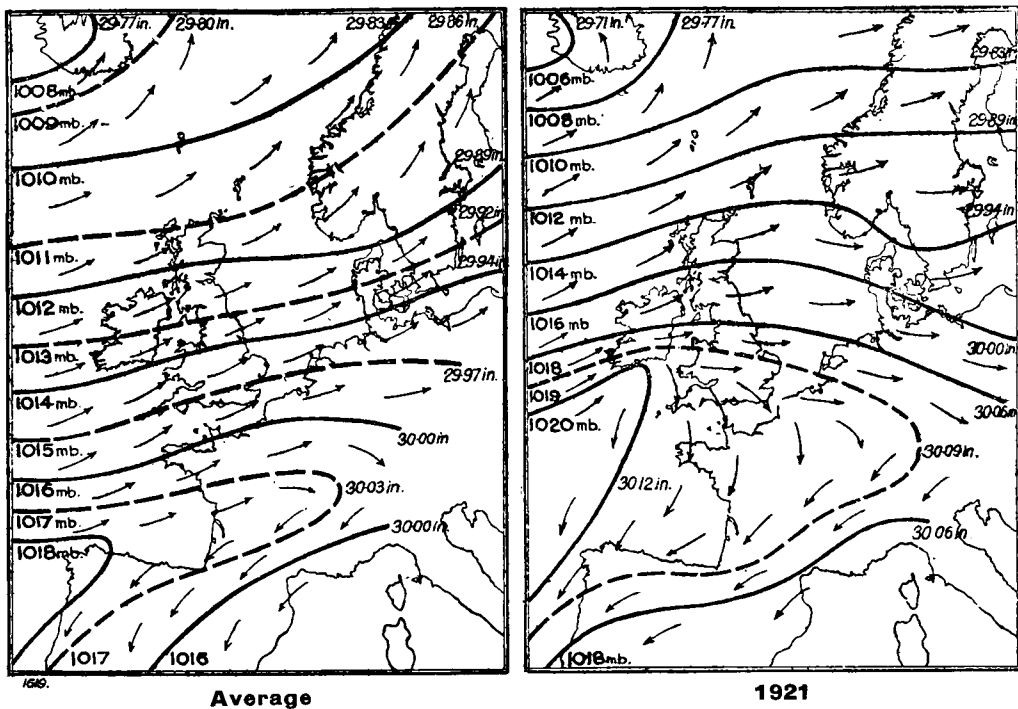


FIG. 1. Mean Distribution of Atmospheric Pressure, and approximate Prevailing Winds, in North-Western Europe, February to October, inclusive.

In the first place, as will be seen from Fig. 1, the normal pressure distribution over the British Isles from February to October inclusive, the nine months over which the dry period in the south-east of England extended, is represented by practically parallel isobars with a gradient from S.S.E. to N.N.W. This type of distribution is, as a matter of fact, nearly identical throughout the year, but the gradient is steeper in winter.

Turning to 1921, the distribution of pressure exhibits a very striking anomaly. Over the north of the British Isles the isobars were practically normal in their trend, though the pressure was distinctly high. In the south, however, a wedge of high pressure stretched from the Azores and Madeira towards the British Isles, the isobar

of 1020 millibars following the normal direction as far as the south of Ireland and then turning abruptly to the south-south-west. The distribution thus shown to have prevailed in the south of England resembles in fact that which normally prevails over the north-west of Spain, or in other words the conditions which are normally proper to the Western Mediterranean extended to the British Isles.

It is interesting to consider the effect of this type of pressure distribution. Normally the winds traversing the British Isles tend to be nearly parallel to the isobars, thus producing the prevalent south-westerly currents. In 1921 such south-westerly winds appear to have occurred only in the west and north, while in the south-east of the country the tendency must have been for the prevailing winds to fan out as shown by the arrows on the map. Recent work on the conditions under which rain falls shows that converging winds give rise to rainfall since they must of necessity bring about ascensional movements in the atmosphere. Diverging currents, on the other hand, are invariably associated with fine weather since they induce a general tendency to downward motion in the atmosphere. It is now thoroughly established that rain is caused by ascending currents, and that descending currents almost invariably give rise to dry conditions. It may further be noted that under such conditions as obtained in the south-east of England in 1921 the amount of rain-bearing air passing over any given area will be less than would pass with parallel isobars and that if the rain from any given quantity of air were to be precipitated it would be distributed over a larger area. These generalisations being true in regard to specific occasions must be equally true when applied to a considerable period of time. We may therefore draw the broad conclusion that the circumstances which gave rise to the prolonged drought were that the high pressure belt, which normally occupies a position some ten degrees of latitude farther south, was during 1921 abnormally displaced to the northward.

It has been shown* that the driest periods known to have occurred in the British Isles for the past seventy years may be grouped under two types from the point of view of pressure distribution :—

Type " A " has abnormally high pressure to the north giving dry polar winds over the British Isles. In this type nearly all the cyclonic depressions pass well to the south of the British Isles. Owing to the origin of the air currents the temperature is usually very low should the dry spell occur during the winter or spring. If such conditions should prevail in full summer the temperature is sometimes extremely high. The outstanding examples occurred in the spring of 1895 and the summer of 1911. The former was notable for remarkably low temperature and the latter for great heat.

* See *Q. J. R. Met. Soc.*, p. 156. Drought of 1921. By C. E. P. Brooks and J. Glasspoole.

Type "B," which is the more common, is that into which 1921 falls. In this type the pressure is high to the south and the Atlantic depressions pass well to the north of the British Isles, and on this account it is not uncommon to find the north-westerly coasts and the coasts of Norway experiencing a rainfall in excess rather than in defect of the average. This type was very strongly developed in 1921, and the phenomenon described occurred, as can readily be seen by reference to the map facing page 150, showing the distribution of rainfall during the year in relation to the average. It also occurred in a less pronounced degree in 1887, the only year which may be regarded as a serious competitor with 1921 from the point of view of defective rainfall. Under these conditions it will be observed that the supply of air is drawn from the Atlantic, not, as in type "A," from polar sources.

Some evidence as to the fact that the frequency of Atlantic winds was not subnormal during 1921 is given by the number of observations of winds from the S.W.—N.W. quadrant at St. Ann's Head and Holyhead. These were respectively 209 and 239, the average values being 219 and 238 days respectively. In 1911 the values were 202 and 229, being among the lowest ever recorded.

The air supply during a drought of type "B" is therefore of similar origin to that which accompanies normal weather in the British Isles. It is air which under ordinary conditions would produce rain, but which on account of special pressure conditions described above, causing a tendency to dispersion, is unable to do so. This air, however, retains its normal properties in regard to temperature, and drought periods of type "B" are not as a general rule notable for cold in winter, nor are they marked by excessive heat in summer.

Rainfall during the 1921 Drought Period.

The history of the drought of 1921 may be regarded as extending back to August of the previous year, when, after a very wet July, anti-cyclonic conditions became established over the British Isles generally. During August less than half the average rainfall was observed over a large part of England and Wales, the deficiency being greatest in the Midlands. September was somewhat wetter, and in particular gave more than the average in the south-east of England, but a tendency to dryness still persisted, and although there were local wet patches in October, the south-eastern counties of England were abnormally dry, less than a quarter of the average falling in places. November was still drier, it being notable that the area with less than a quarter of the average corresponded very closely with that so affected in October, so that for the two months together a considerable area in the east of England had already experienced a pronounced deficiency of rainfall. December and January, 1921, were distinctly wetter, particularly January, which in the north-west was notable for the

persistence of orographical rains with mild, damp winds, but in the east of Kent there was still a considerable deficiency from the average.

With the commencement of February the drought proper may be said to have set in. This month was dry in all parts of the country, and nearly everywhere in Great Britain had less than a quarter of its average rainfall. The most conspicuous dry areas were in a broad tract stretching from Northumberland to Cornwall, in parts of which less than 5 per cent. of the average fell. In the south-west of England long absolutely rainless periods occurred, there being no measurable rain at Dorchester, Taunton and Clifton from February 1st or 2nd to 23rd inclusive. Partial droughts occurred over a considerably wider area extending across England from Devonshire to Forfarshire. The duration was greatest in East Anglia, where at one station less than half an inch of rain fell between January 28th and March 16th.

The conditions during February were of exceptional interest, because at this period the drought was more widespread than at any other time, except possibly during part of June. Even considered apart from the rest of the drought period, the low rainfall of February merits special mention. Dry Februaries are not uncommon, but taking the British Isles as a whole, there is very little doubt that the only Februaries within memory with lower rainfall than in 1921 were those of 1891 and 1895. With regard to the former a full account will be found in *British Rainfall*, 1891, pp. 19-23. There appears to be little doubt that practically no rain fell over a large part of the south of England and that less than a tenth of an inch was measured practically everywhere in England except in the extreme west. In February, 1895, the dry area was even more widespread, and there was no pronounced excess in the western Highlands. This month has already been mentioned in connection with the pressure distribution, and it is interesting to observe that the east coast was considerably less dry than the remainder of the country. In February, 1921, areas with as little as a tenth of an inch were extremely limited. It is notable that the rainy areas of the western Highlands had little short of their normal rainfall, and that similar conditions prevailed in this district in 1891.

The general rainfall for these three remarkable months, when expressed as a percentage of the average, was as follows :—

General Rainfall as percentage of Average, February.

PERIOD.					England and Wales.	Scotland.	Ireland.	British Isles.
1891	..	..	..	..	5	42	10	15
1895	..	..	..	..	19	36	29	26
1921	..	..	..	..	17	40	49	30

It will be observed that for the country as a whole, February, 1921, was far less dry than February, 1891, and differed but slightly from February, 1895. As a matter of fact February, 1891, was the driest month of any name both absolutely and relatively to the average for which records are available for the British Isles.

Soon after the beginning of March, 1921, there was a pronounced break in the weather, and all western districts at this time were experiencing excessive rainfall. In the west of Scotland the month was so wet that the deficiency of February was far more than wiped out, and in no westerly districts can the main dry period of 1921 therefore be regarded as having set in until April. In the east of England, on the other hand, although March was not conspicuously dry, it was quite sufficiently so to be noteworthy, and cannot be regarded as having constituted an interruption of the drought.

With April, widespread shortage of rainfall again set in, and the whole country had a deficiency with the exception of a small area in east Anglia. In this region the average for April is so small that the rainfall exceeded it, although it nowhere reached 2·00 inches. At this season the droughty conditions were most conspicuous in the south-west of the British Isles, including the south of Ireland, which districts appear to have had even a greater deficiency for a few weeks than the south-east of England. In spite of the relatively wet March, the rainfall of the three months, February to April, was sufficiently abnormal to warrant a special comparison with previous periods of similar length.

During these three months taken together the only part of the British Isles where the rainfall reached the average was in the west of Scotland, and even there the excess was very moderate. Almost everywhere in England, south-east of a line drawn from Berwick-on-Tweed to the Lizard, less than half the average rainfall was observed, and locally rather less than one-third.

The comparison of these three months as a whole with similar dry periods of the same length brings 1921 into competition with the famous dry year 1887, with which we shall have occasion to deal more fully later. It is probable that 1887 was the only year since observations first became available that the rainfall of February to April, inclusive was so low as in 1921. The period presented the same feature as 1921 of an excessive rainfall in the Western Highlands. The greatest deficiency occurred in the extreme south, less than half the average falling between Cork Harbour and the Isle of Wight, and less than 40 per cent. over the Devon-Cornwall peninsula. The area with a pronounced deficiency was rather larger than in 1921, and the general percentage deficiency for the whole country was greater, being 40 per cent. compared with 31 per cent. in 1921.

Relatively to the average, periods of three months at other times of the year have occasionally proved substantially drier. March to May, 1893, which formed part of the great spring drought of that year for

example, differed little from February to April, 1921. There was, moreover, a very remarkable period from May to July 1868, which should be mentioned in this connection. During these three months we again find an excessive rainfall in the west of Scotland, a feature which appears to be extraordinarily persistent in the type of weather under consideration. The rainfall was less than half the average over practically the whole of England and Wales, in the east and south of Scotland and in the east of Ireland. Nearly the whole of the north of England appears to have had a deficiency exceeding 70 per cent., and considerable areas in Durham, Denbighshire, Cheshire and the Fen district actually had a deficiency of more than 80 per cent., or in other words, had less than one-fifth of their normal rainfall. The dry period of 1868 seems to have been confined mainly to these three months. The general rainfall of the British Isles as a percentage of the average was 47 per cent. in defect. For England and Wales it was as much as 62 per cent. in defect.

There was another partial interruption to the severity of the drought of 1921 in May when the rainfall reached the average in most parts of the country, again especially in the north-west. There were, however, considerable areas which still had a pronounced deficiency, lying principally in the south-east of England. In the latter area the rainfall of May cannot be regarded as in any sense putting an end to the drought, though it afforded a temporary relief.

In June droughty conditions returned with greater intensity even than in February and April, and in many places July also was extraordinarily dry; though in the latter month good rains fell in the west, particularly in Ireland. On the 27th and 28th heavy cyclonic rains in this district culminated in falls of more than 4 in. in the two days in Co. Waterford.

During June the rainfall failed to reach a quarter of the average nearly everywhere in Wales and Ireland, and fell below a tenth of the average in the south. The month was absolutely rainless in parts of Co. Cork, Pembrokeshire, Carmarthenshire, Hampshire, Sussex and Kent. A curious feature was the occurrence of a thunderstorm of considerable severity on a line stretching from the mouth of the Shannon to Lincolnshire. The rainfall associated with this storm was extremely local.

Taken as a whole, June 1921 was almost certainly the driest June since observations first became available. In July which differed from the summer months generally in that it was notable for the heat which prevailed during the greater part of the month, the great dryness was far more local, less than half the average occurring only to the south-east of a line stretching from Yorkshire to Cornwall. In part of the south-eastern Midlands, and in the east of Kent, less than a tenth of the average fell in this month, and in the south-east generally June and July together were probably drier than any two consecutive

months in living memory. In parts of Kent and Sussex absolute drought lasted from early in June to the middle of July, and at Tenterden rain fell on one day only from June 1st to July 22nd, a period of 52 days. At the same station partial drought lasted from May 8th to August 4th, a period of 89 days.

Up to the end of July it may be said that droughty conditions had lasted with only minor interruptions for six months in the south-east of England, whilst almost all other parts of the country except the Highlands had experienced short spells of very dry weather broken by relatively wet periods. In the south-east of England the drought

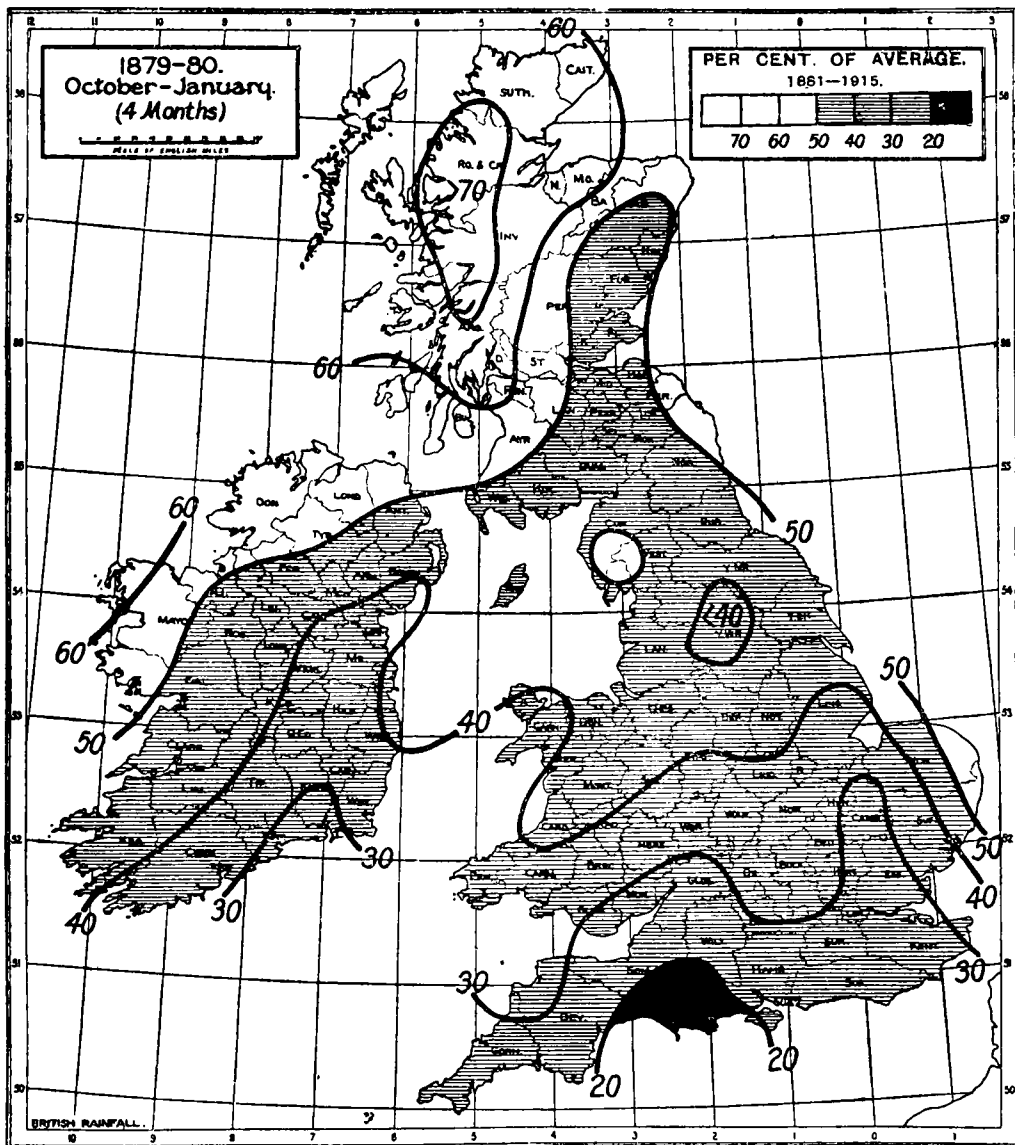


FIG. 2. Rainfall of the four months October, 1879, to January, 1880, as percentage of Average, 1881-1915.

up to this time had become so pronounced that it seems worth while to compare the conditions in some detail with those in one or two other notoriously dry periods. Two of the most remarkably dry periods on record were the four months from October 1879 to January 1880 and from March to June 1893, the latter comprising the well remembered spring drought already mentioned. A very full account of this drought appears in *British Rainfall*, 1893, pp. [137]—[147]. Taking four monthly periods, 1921 did not approach either of these periods for dryness, a fact which exemplifies the characteristic elsewhere dwelt upon that the drought of 1921 was more remarkable for persistence than for intensity over short periods.

From October 1879 to January 1880, inclusive, there does not appear to have been any part of the British Isles where the rainfall was less than 20 per cent. in defect. The least dry area in relation to the average was as usual in the north-west. A line crossing the British Isles from Galway Bay to Aberdeenshire and thence passing southward along the east coast formed the northern limit of an area over which these four months had a total rainfall of less than half the average. The deficiency rapidly increased towards the south, exceeded 60 per cent. over the south-east of Ireland and the south of England and Wales, and culminated in an extraordinarily dry patch in Wessex where less than one-fifth of the average rainfall occurred. There can be little doubt that this period was the driest of the same length ever known to have occurred over the country as a whole. It was certainly the driest period of that length in Dorsetshire.

In 1893 the dry period coincided approximately with the four months March to June. No area reached the same degree of dryness in relation to the average as was found locally in October to January 1879-1880, but less than half the average fell over the greater part of the British Isles, principally in the south, whilst the deficiency exceeded 70 per cent. and nearly reached 80 per cent. in places.

Fig. 4 shows the distribution of rainfall during the six months, February - July, 1921, expressed as a percentage of the average. This brings out the unique nature of the drought of 1921 better than a map dealing with any shorter period. The drought continued locally, as will be shown subsequently, for several months longer, but it is for the six months February to July, that the conditions over the country as a whole may be regarded as reaching a climax. It will be seen that a slight excess occurred over Argyllshire and that the total just reached the average in Queen's County where the storm of June 26th was at its maximum. In spite of the great rains in the south of Ireland on July 27th-28th the total fall in that district was still well below the average. The whole of the eastern half of Scotland and practically the whole of England and Wales had a deficiency of more than 20 per cent., and east of a line from Berwick-on-Tweed to Milford Haven the deficiency exceeded 40 per cent. The most remarkable

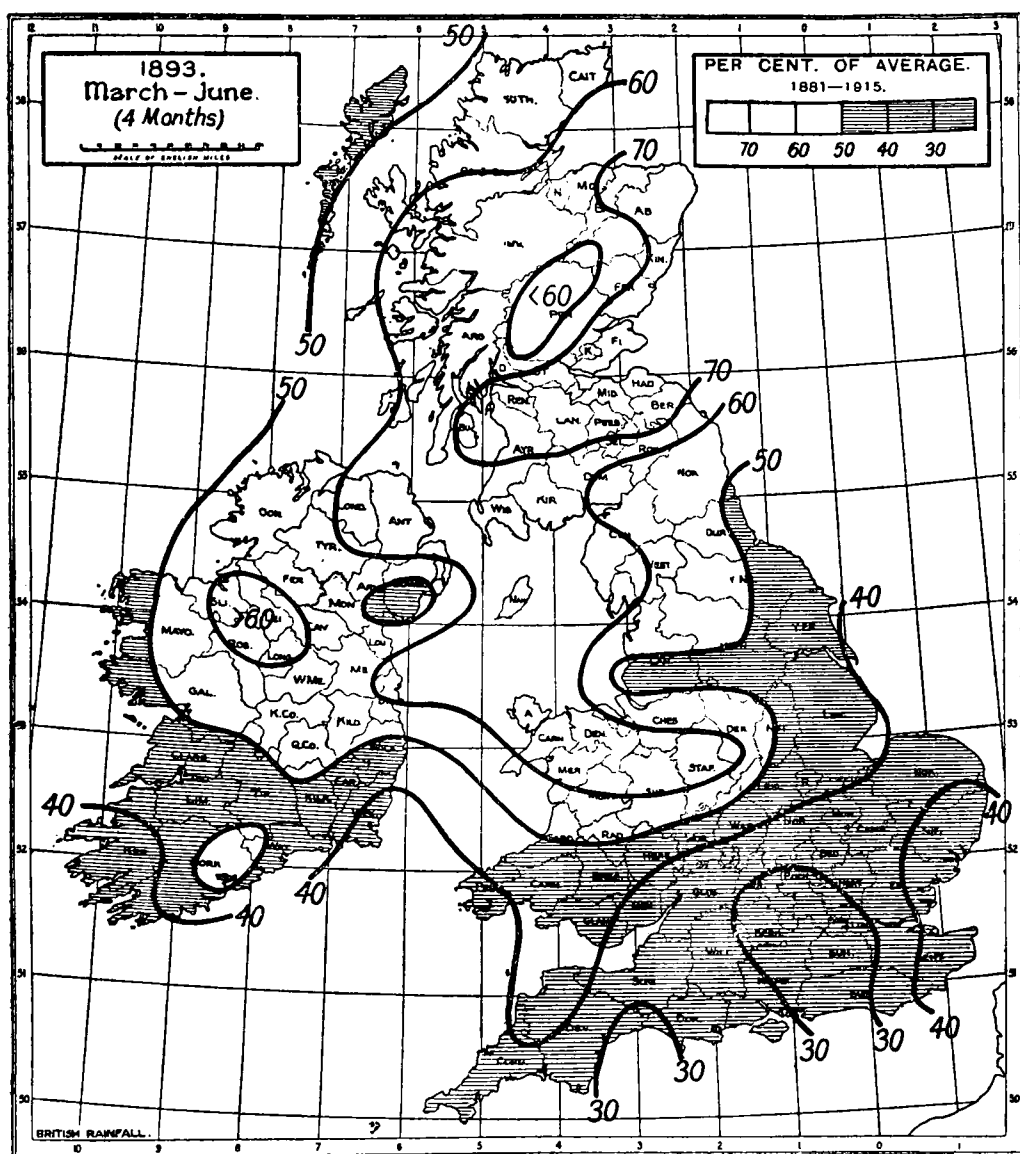


FIG. 3. Rainfall of the four months, March to June, 1893, as percentage of Average, 1881-1915.

area, however, was in the south Midlands where a thoroughly well substantiated deficiency of 60 per cent. occurred. This dry area extended from the neighbourhood of Lincoln to the borders of Suffolk on the east, to Monmouthshire on the west, and to Berkshire and Surrey on the south. There was another equally dry patch in Hampshire, including the Isle of Wight. Among the records examined the lowest percentage values were at Wellingborough, 33 per cent.; Ross-on-Wye, 34 per cent.; and Totland Bay, 34 per cent.

The remarkably dry autumn and winter of 1879-1880 was preceded by months of exceptionally rainy conditions and followed by a period

of quite average rainfall, so that this drought does not give any six-monthly period in any respect comparable with 1921. It is interesting however, to notice that the eight months October 1879 to May 1880 inclusive, taken as a whole proved drier than any eight months in 1921, and, the dryness being more widespread, the general percentage value for the whole British Isles was as much as 35 per cent. in defect.

The most interesting examples of dry six-monthly periods were from March to August 1893 and from February to July 1887. The 1893 drought was, however, practically over by the end of June, and it was only the great intensity during the preceding four months which made the total of the six months conspicuous. During the whole period the deficiency exceeded 30 per cent. over the greater part of England and Wales and approached 60 per cent. in many parts of the south.

February to July 1887 showed a much greater resemblance to February to July 1921. As in practically every other case the west of Scotland did not participate in the drought, but the deficiency exceeded 40 per cent in the east and south and culminated in Devonshire and Cornwall where it exceeded 60 per cent. The general rainfall of this period was until 1921 the lowest for any six-monthly period ever recorded in England and Wales, but the drought in 1887 was more extensive and Scotland and Ireland were drier than was the case in 1921, so that although the deficiency of rainfall in 1921 is seen to have been more remarkable in England and Wales during the period considered than in any other period of similar length, for the British Isles as a whole 1887 stands unrivalled.

The percentage values were as follows :

General Rainfall as percentage of Average.

PERIOD.	England and Wales.	Scotland.	Ireland.	British Isles.
Feb.-July 1887	57	73	56	62
Feb.-July 1921	49	84	80	67

After the end of July the drought of 1921 may be regarded as having come to an end so far as the country at large is concerned. In the south-eastern counties, however, the deficiency of rainfall persisted, and it is necessary to carry the description of the year's rainfall further. During August a considerable number of depressions of a normal summer type with occasional thunderstorms brought widespread rainfall in most parts of the country, and on the 12th about 2 in. of rain fell locally in the east of Kent, but with this exception the conspicuous evasion of the south-east of England by heavy rains continued, and only about two-thirds of the average rainfall was

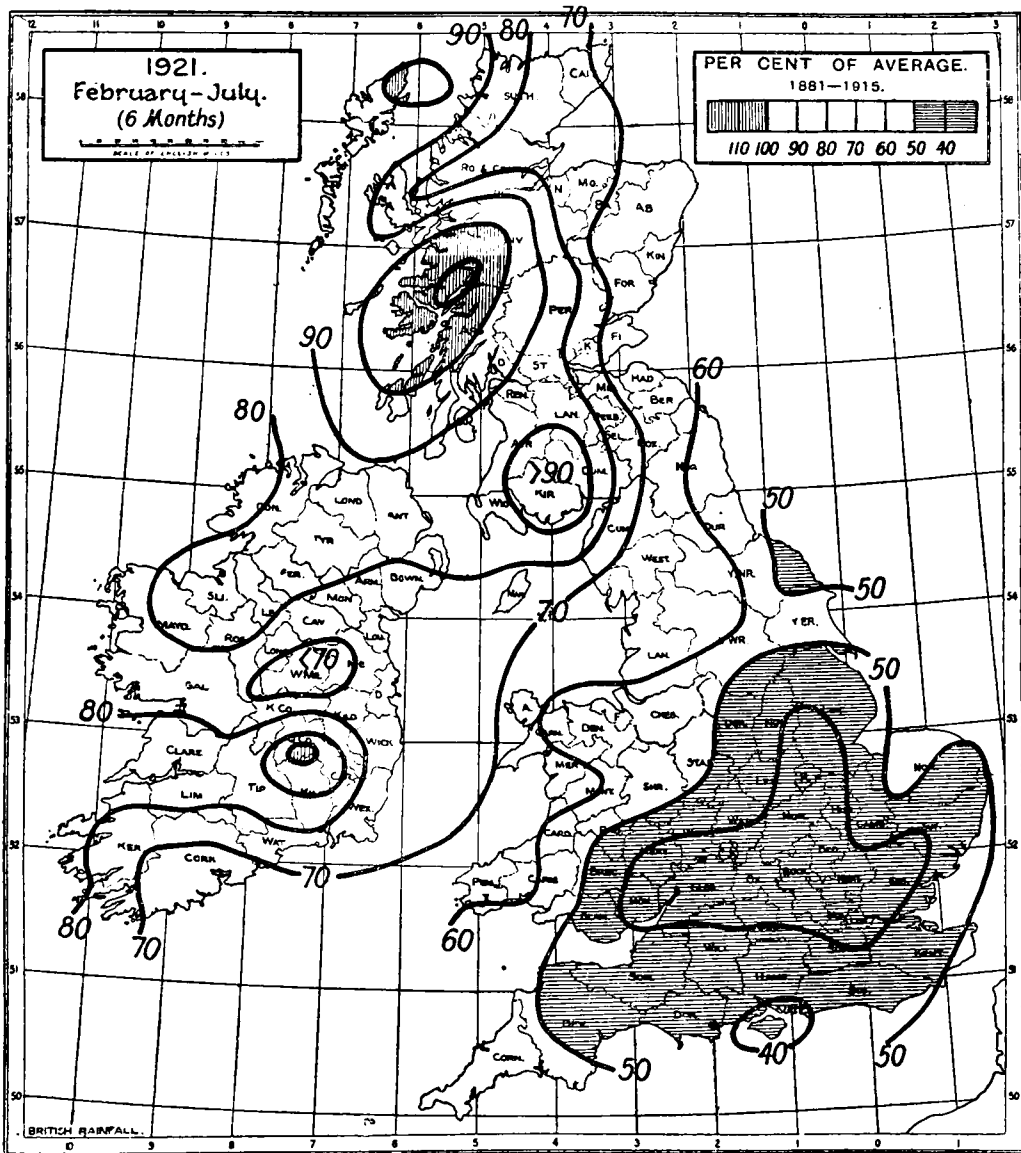


FIG. 4. Rainfall of the six months February to July, 1921, as percentage of Average, 1881-1915.

recorded during the month, whilst in Cambridgeshire less than half the average fell. In parts of the Fen district and in Essex absolute drought was again experienced towards the end of August.

September was marked by one interesting incident, *viz.*, the occurrence on the 11th of a very well defined cyclonic rain which affected a tract of country extending from the Bristol Channel to Suffolk. This very beneficial rain brought much needed relief over the home counties, but the whole of the south coast and again the extreme south-eastern counties did not participate in it. In these districts the rainfall of September was less than half the average, and in places

on the south coast less than a quarter of the average fell. Absolute drought in September occurred in many parts of the east of England and partial drought in the south.

Nor was this the end, for October in the south of England proved to be one of the driest Octobers ever experienced, the early days of the month being abnormally warm. Less than half the average rainfall occurred everywhere south of a line from Cardigan to Cromer, whilst less than a quarter of the average occurred over a strip from Exeter to Margate. At Tenterden, in the east of Kent, partial drought lasted

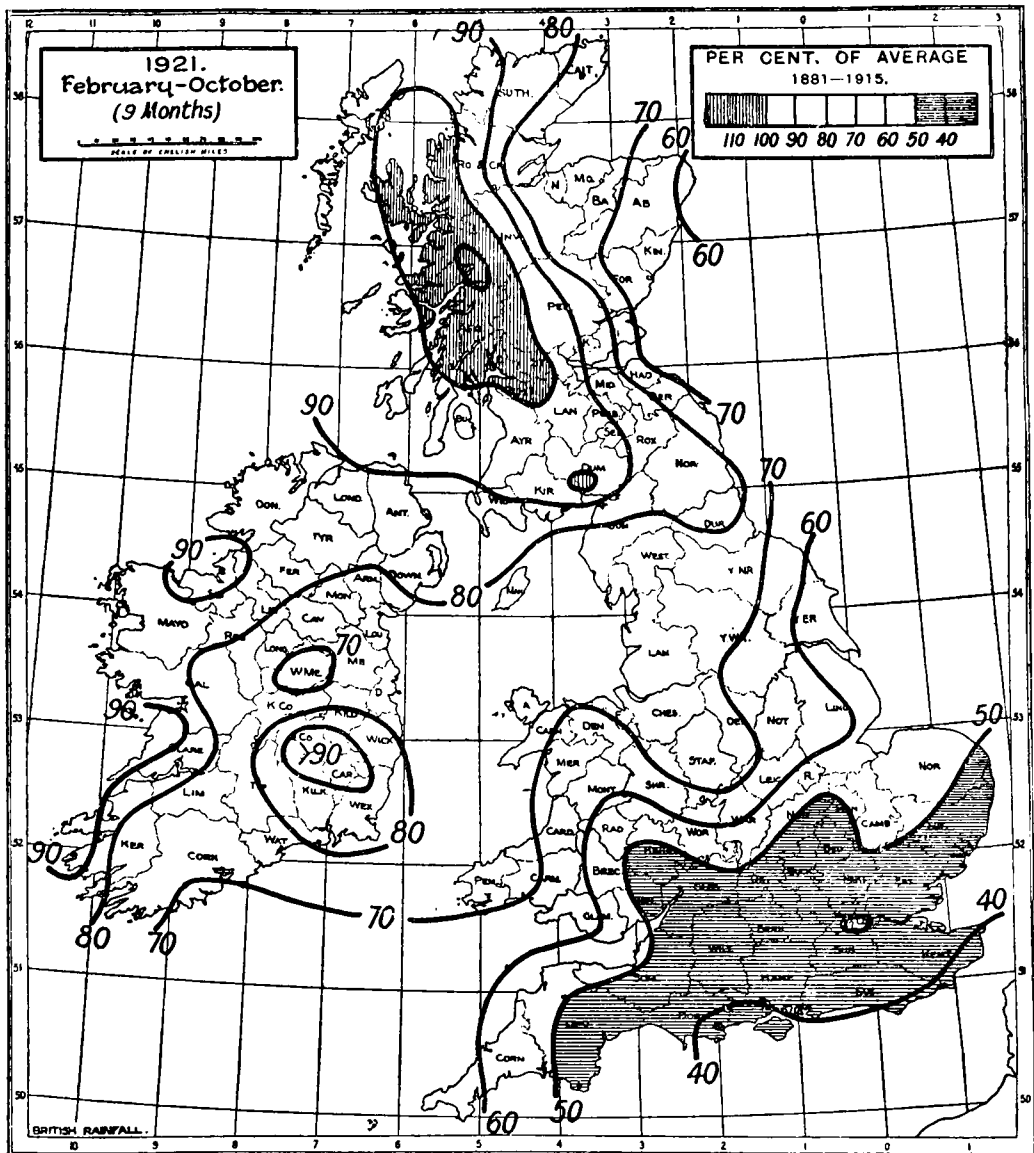


FIG. 5. Rainfall of the nine months February to October, 1921, as percentage of Average, 1881-1915.

from September 12th to November 1st, a period of 51 days, and at other stations in the south-east of England partial drought continued until the middle of October.

November and December were less dry but neither had much more than half the average in Kent, where indeed every month in the year had a deficient rainfall, a phenomenon which there is little doubt is absolutely unprecedented in this country. Partial droughts occurred again in November in parts of East Anglia.

In the south-east of England the period which will probably rank as the most remarkable of this remarkable year was from February

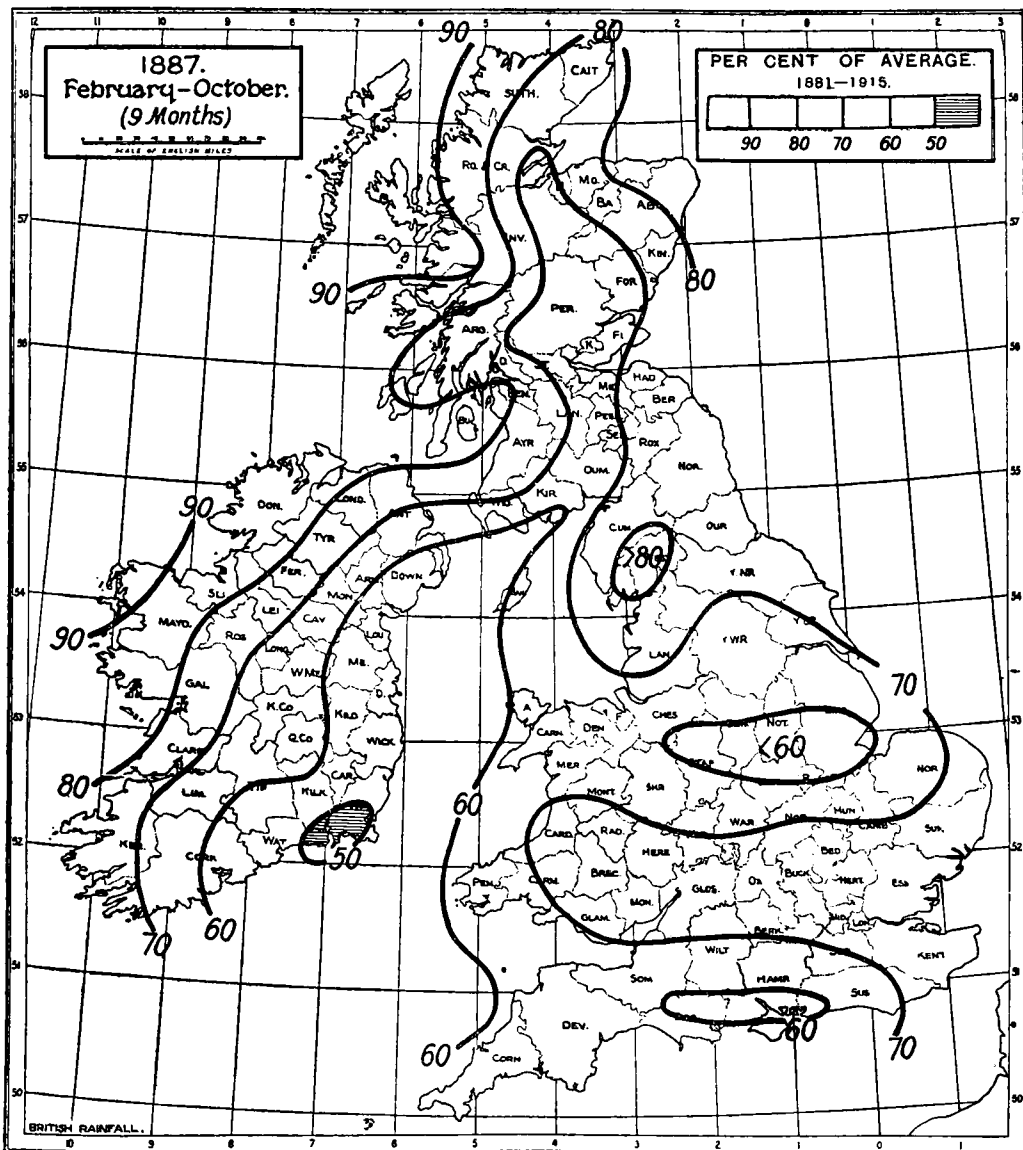


FIG. 6. Rainfall of the nine months February to October, 1887, as percentage of Average, 1881–1915.

to October, inclusive. Over a strip of the south-east coast the deficiency of rainfall during these nine months exceeded 60 per cent., the shortage being nearly 10 per cent. in excess of that observed anywhere during the corresponding nine months of 1887. We give for comparison maps showing the distribution of rainfall in relation to the average during these two periods. It will be observed that the areas with deficiency of 50 and 40 per cent. respectively were far larger in 1921 than in 1887, but that in 1887 the area with a deficiency of 20 per cent. exceeded that in 1921. The latter period was definitely wetter in the north-west than was the corresponding period of 1887. The general percentage values for the two nine-monthly periods were as follows :—

General Rainfall as percentage of Average.

PERIOD.	England and Wales.	Scotland.	Ireland.	British Isles.
Feb.-Oct. 1887	68	77	66	70
Feb.-Oct. 1921	58	89	83	74

Some other features of the Drought.

Reference to other sections of this volume provides ample elaboration of the facts as set out in this article and attention may be especially directed to the remarkable records of duration of rainfall and of percolation and evaporation. In the south of England all the records of rainfall duration were extraordinarily low, being in nearly every case the lowest ever recorded. An interesting feature was that, broadly speaking, the percentage deficiency of duration was approximately the same as that of the total fall. In the same way the percentage deficiency of days with rain was of about the same magnitude as that of the total rainfall. These observations suggest that the drought of 1921 may be regarded as the result of rainfall being extremely infrequent, such rain as did fall being of about normal intensity. A large number of observers comment on the infrequency of thunderstorms, and it may be added that although a fair number of cyclonic rains occurred, cyclonic rains were certainly scarcer than usual and very few of them were of notable intensity.

With regard to observations of percolation and evaporation it is somewhat doubtful whether these records represent the actual facts of nature with the same precision as can be attained in regard to the amount of rainfall, but they can be at least accepted as giving some evidence of the conditions which prevailed. The records of evaporation from an exposed water-surface agree in indicating that the loss of moisture due to this cause was greater during 1921 than has been

found to be the case in any previous year, except in the north. At Camden Square, London, where observations have been continued since 1885, the amount of evaporation exceeded the average by 4·19 inches, and was for the first time in the 37 years actually larger than the total rainfall.

The records of percolation were equally interesting, especially in the south. At Timsbury, near Romsey, no measurable water appears to have entered the subsoil after the end of February, and similar records at other stations showed only negligible amounts of percolation. It is probably to this very significant fact rather than to the mere data of total rainfall that we must look in considering the economic effects of a dry period like that of 1921. The great bulk of the water which is drawn upon for domestic and industrial purposes in the south-east of England is water which has percolated into the porous rocks many months before it is utilized, and the effects of so disastrous a drought must, therefore, inevitably continue long after its termination, since subsequent heavy rains must be required to help to restore the sub-soil water level.

The maps on pp. 277–283 are reproduced by permission of the Royal Meteorological Society.

RAINFALL AND SCARLET FEVER.

By JOHN BROWNLEE, M.D., D.Sc.

(National Institute for Medical Research.)

In April, 1880, the late Dr. Longstaffe read a paper to the Epidemiological Society, in which among other things he associated the periodicity of the rainfall with the periodicity in the number of deaths from scarlet fever. The statistics he used referred to the years from 1855 to 1880. In these years the swing of the rainfall and the swing of scarlet fever was nearly inverse, that is to say, that the dry years were epidemic years of scarlet fever. The subject has been before my notice at various times, and was brought again to the front during last summer, when a great epidemic of scarlet fever synchronized with a very dry year. A large number of figures have been taken out, referring to London, Liverpool, Manchester, Birmingham, Newcastle, and Glasgow. This was done because in some of these towns the periodicity of scarlet fever was very definite, and thus some chance was afforded of comparing the data with the rainfall, of which the Meteorological Office gave me the necessary records.

In the first place, London was examined, and it was observed that the phenomena were not constant. The period between the epidemics of scarlet fever from 1855–1880 was on the average about five years. During this time the swing of the rainfall was almost inverse to this. So much so was this the case that the correlation between the amount of scarlet fever and the rainfall was -0.46 . When, however, the next succeeding period was considered, 1875–1890, due allowance being made for the fall in the mortality of scarlet fever, a correlation coefficient of $+0.58$ was obtained. After the year 1890 a further change took place in London. A very great epidemic of scarlet fever occurred in 1892–1893, and from that time the interval between the epidemics has been seven years with one exception, the epidemic wave due in the year about 1900 being missing. In this case again a negative correlation between the rainfall and scarlet fever is found. It is curious, however, that the epidemic which should have occurred about 1900 did not appear, although that was a period of little rainfall.

Turning now to Glasgow, and comparing the rainfall with the notifications of scarlet fever from 1891–1920, thirty full years, it is to be noted that in this period in Glasgow the epidemics of scarlet fever occurred regularly at intervals of five years, with again the curious phenomenon of the absence of the epidemic due at the period 1904–1905, a corresponding phenomenon to that already noticed in London. With the five-yearly swing of scarlet fever in Glasgow, there has been no

corresponding swing in the rainfall, the correlation obtained for these 30 years being $-.08$. Newcastle, for the years 1883–1920, the years for which notifications of scarlet fever existed, has epidemics occurring with no great regularity. On the whole, the interval between them is six years, but this period is not nearly so marked as those observed in the towns hitherto referred to. A case like this, without any very great periodicity, seems favourable to determine association with rainfall, but when the correlation is worked out between the rainfall and scarlet fever, it is found to be in the neighbourhood of zero.

One of the most interesting cases, however, from an epidemiological point of view is Liverpool. From 1857–1874 the periodicity of scarlet fever was regularly four years, with an occasional intercurrent epidemic. In this period there is no correspondence between the rainfall and scarlet fever.

It must be accepted that, on the whole, the evidence of exact correspondence between rainfall and scarlet fever must be set aside, but I do not think that this presents the whole truth. Scarlet fever is an autumnal disease, occurring after the summer or dry season of the year. Some connection with weather is evident. Epidemics of scarlet fever, however, quite clearly have periods of their own, varying from time to time in the same place or in different places. If it be granted that these periods exist because of some physiological change of the organism causing the epidemic, epidemics will occur at definite times because of the organism. A secondary influence in which I feel inclined to believe, is that if an epidemic is due a dry summer will cause it to be of greater extent while a wet summer will tend to limit its spread. I have not, however, succeeded up to the present in getting any statistical method which will allow this to be determined beyond question. It is quite easy to give instances of this kind of association but it is very difficult to avoid the charge of picking and choosing your data, and I hesitate at present to say that it is more than a probability.

THE FLUCTUATIONS OF ANNUAL RAINFALL.

By JOHN GLASSPOOLE, B.Sc.

Some knowledge of the range of the annual fluctuation of rainfall in the British Isles is of interest not only as a meteorological question, but over a considerably wider field. It is, for example, essential that the agriculturist should know something of the annual variation in the rainfall which he is likely to experience, and of the frequency with which exceptionally wet and dry years will occur. In all problems of water-supply these fluctuations are of paramount importance, and in hydro-electric schemes an engineer designing works must aim at utilizing the rainfall of the wet years to the fullest possible extent, whilst maintaining the supply of electricity in years of small fall, it being possible to store water, while the storage of electricity in bulk is at present not practicable. In any of these spheres some forecast must be made, either deliberately or subconsciously, of the probable variations of rainfall, and the only source of precise information is the study of the accumulated experience of the past since accurate data became available. With this object in view a preliminary analysis has been made of selected records of rainfall taken in all parts of the British Isles.

In dealing with fluctuations of rainfall it is convenient to adopt a fixed standard for comparison, and it is usual for such purposes to refer to the average fall over a considerable period. The compilation of a new series of averages of rainfall for stations reporting to the British Rainfall Organization has thus given an opportunity of extending the study of the fluctuations of annual rainfall. The actual averages of annual rainfall for the period 1881-1915 were discussed in an article in *British Rainfall*, 1920, pp. 254-271, and the averages were introduced for the first time in that volume as standards. In the process of extracting these averages any obviously defective records were eliminated, so that the series may be regarded as of reasonably high accuracy.

It is necessary to bear in mind that the period chosen for the average is arbitrary, and that the values differ slightly from those of other periods. The precise variation of the rainfall of one thirty-five years from that of other periods of similar length in the British Isles has not yet been fully investigated, but the general conclusion has been arrived at that for annual rainfall the average of any period of thirty-five years is not likely to differ from the true normal by more than 3 per cent.* This statement, however, may ultimately prove to require qualification.

* See *Rainfall of the British Isles*, by M. de Carle S. Salter, p. 224.

It was natural that the identification of the wettest and driest places in the British Isles and of the wettest and driest years should be among the first aspects of rainfall study to receive attention. As early as 1875 the late Mr. Symons computed a relationship between the mean and the wettest and driest years at numerous stations. His conclusion was that as a rough rule the driest year would have two-thirds of the mean, and that the rainfall of the wettest year would be twice that of the driest.* In *British Rainfall*, 1883, page 32, the fluctuations of annual rainfall for forty-five stations during the period 1840-1882 were discussed and the following conclusions enumerated:—

- (1) The wettest year will have a rainfall nearly half as much again as the mean.
- (2) The driest year will have one-third less than the mean.
- (3) The driest three consecutive years will each have one-fifth less than the mean.

These appear to be applicable to all parts of the country subject to one slight modification, viz:—at wet stations the extremes both of wetness and dryness are less pronounced than at dry ones.”

Reference should also be made to a paper by the late Sir Alexander Binnie, C.E., “On Mean or Average Annual Rainfall, and the Fluctuations to which it is Subject,” read before the Institution of Civil Engineers in 1892. He examined a large number of long-period records both for this country and abroad, extending in some cases back to the early 17th century. No attempt was made to define any geographical distribution of regions of large or small annual fluctuations. On the other hand, he emphasized the uniformity in the amounts of the fluctuations from place to place. The last paragraph of the paper will serve to give some indication of the conclusions arrived at by the author.

“ . . . at uncertain times, and as far as can be seen at present at irregular intervals, both as regards any one or more stations, as well as among any large number of stations, there occur certain deviations from the mean which are similar in kind, and that some general and widespread cause keeps all the fluctuations within the limits discovered in the tables, irrespective of the distribution of the stations or the coincidence of the fluctuations at any of them.”†

The present paper, written some thirty years later, may be regarded as an elaboration of these results for a particular area and for a definite period.

* See *Q. J. R. Met. Soc.*, 1875, p. 395.

† See “*Proc. Inst. Civil Engineers*,” Vol. CIX, Part iii, p. 34. Also Vol. CLV, Session 1903-04. Part i. “On the Distribution of Mean and Extreme Annual Rainfall on the British Isles,” by Hugh Robert Mill.

Mean Deviation of Annual Rainfall.

An examination of the extreme rainfall recorded at the stations in the British Isles with the longest homogeneous records as set out in Table I, indicates that excesses of more than 50 per cent. have occurred, but that they are rare. Deficiencies of 40 per cent. and more were experienced at many stations in the south-east of England during 1921, but this was almost certainly unique for that area for more than a century and a half.* The area of extremely deficient rainfall in 1921 is represented in Table I by Greenwich and Spalding. At stations in the extreme east of Kent, however, deficiencies of more than 50 per cent. occurred.

TABLE I. *Extremes of Annual Rainfall during long periods.*

Station.	Period.	No. of Years.	Average of whole period.	Percentage of Average.			
				Wettest Year.		Driest Year.	
			in.	%	Year.	%	Year.
Rothsay, Bute ..	1800-1921	122	49·92	143	1811	69	1855
Kendal, Westmorland.	1800-1921	122	51·50	134	1872	63	1887
Greenwich, London	1815-1921	107	24·28	146	1903	52	1921
Radcliffe Observatory, Oxford.	1815-1921	107	25·66	158	1852	58	1921
Spalding, Lincolnshire.	1829-1921	93	24·48	152	1880	52	1921
Chichester, Sussex	1834-1921	88	34·07	149	1852	57	1921
Armagh Observatory	1836-1921	86	31·90	129	1845	70	1870
Seathwaite, Cumberland.	1845-1921	77	135·69	135	1861	65	1855

It appears from Table I that the greatest range occurs in the east of the British Isles, and the least range in the west. It is not clear, however, whether the range varies with the amount of rainfall, as suggested by Symons, or whether it is a geographical factor expressing a difference between the east and west of the British Isles. In order to elucidate this question, the mean fluctuation of the annual rainfall at certain stations for the years 1881-1915 was worked out. The most convenient way of doing this for any rainfall record is to express the rainfall of each of the thirty-five years as a percentage of the average, to write down the arithmetical departures from 100, to take the sum of these departures irrespective of the sign, and divide by the number of years, viz., thirty-five, thus obtaining the mean deviation. The values so obtained are set out in Table II, together with the value of the average annual rainfall.

* See ante, p. 155, and *Q. J. R. Met. Soc.*, Vol. XLVIII, p. 141, "The Drought of 1921," by C. E. P. Brooks and J. Glasspoole.

The "standard deviations" were also computed and the values plotted on a map. The distribution over the British Isles was found to be nearly identical with that of the mean deviation, but at the present stage of the investigation attention has been confined to the mean deviation as the simpler method of dealing with fluctuations.

The stations utilized were chosen so as to give as representative a distribution as possible. In regions where data are scanty it was necessary in one or two cases to work up records which were not strictly homogeneous. In these cases the figures are printed in italics. The total number of records used was 124.

TABLE II. *Average Rainfall, 1881-1915, and Mean Deviations of Annual Rainfall, 1881-1915, the rainfall being expressed as a percentage of the average.*

Station.	Average Rainfall.	Mean Deviation.	Station.	Average Rainfall.	Mean Deviation.
ENGLAND.					
	ins.	%		ins.	%
St. Pancras (Camden Square) ..	24.47	11.9	Quedgeley House	27.90	15.6
Haslemere (Courts Hill) ..	35.62	11.9	Kington (Lynhales)	32.82	15.4
Tenterden (View Tower) ..	27.50	10.8	Ross (Birchlea)	28.22	17.3
Margate (Cliftonville) ..	22.80	11.8	Church Stretton (Wolstaston) ..	31.90	13.4
Edenbridge (Falconhurst) ..	30.71	12.5	Wolverhampton (Wrotesley) ..	25.61	12.6
Brighton (Lewes Road) ..	29.94	14.1	Pinkridge (Rodbaston) ..	27.80	12.6
Ventnor (Royal National Hosp.)	28.86	13.3	Bromsgrove (Tardebigge Res.)	27.48	14.5
Southampton (East Park) ..	30.93	13.1	Rugby School	25.58	13.3
Tring (Cowroast Lock) ..	28.41	12.6	Spalding (Pode Hole)	23.53	13.7
Royston (Therfield Rectory) ..	25.19	11.3	Louth (Westgate)	28.00	12.3
Newport Pagnell (The Croft) ..	23.69	14.5	Worksop (Hodsock Priory) ..	23.63	12.7
Oxford (Radcliffe Observatory)	24.82	15.5	Mickleover Manor	26.05	16.0
Wellingborough (Swanspool) ..	24.27	14.7	Macclesfield (West Park) ..	34.11	10.2
Wisbech (Bank House) ..	22.99	12.9	Stonyhurst College	46.55	10.5
Chelmsford (High Street) ..	22.49	12.3	Southport (Hesketh Park) ..	31.99	10.6
Bury St. Edmunds (Westley) ..	25.14	11.3	Rotherham (Moorgate Grange)	25.42	12.5
Beccles (Geldeston)	23.66	11.5	Wetherby (Ribston Hall) ..	26.49	13.6
Worsted (Dilham)	26.29	10.0	Hull (Pearson Park)	25.38	12.9
Swaffham (Little Dunham) ..	27.19	13.1	Northallerton (Osmotherly) ..	25.80	13.2
Marlborough (Mildenhall) ..	30.33	14.6	Scarborough (Osgodby) ..	26.13	13.8
Shaftesbury (Abbey House) ..	32.48	12.5	Middlesbrough (Albert Park) ..	23.67	12.9
Ashburton (Druid House) ..	51.72	14.8	Wolsingham	33.25	13.5
Sidmouth (Sidmount)	32.38	13.4	Newcastle (Town Moor) ..	27.22	11.4
Barnstaple (N. D. Athenaeum)	36.64	13.8	Rothbury (Craigside)	33.78	11.2
St. Austell (Trevarna)	45.84	13.3	Howick Hall	28.23	11.6
Silly Isles (Tresco Abbey) ..	32.63	12.5	Borrowdale (Seathwaite) ..	129.48	9.4
Street (Millfield)	29.47	13.7	Kirkby Stephen (Redman Ho.)	42.34	13.9
WALES.					
Cardiff (Ely Pumping Station)	42.12	12.7	Lake Vyrnwy (Bank Cynon Isaf) ..	55.31	13.0
Carmarthen (The Friary) ..	48.30	11.9	Northop (Soughton Hall) ..	32.05	9.4
Haverfordwest (Grammar Schl)	46.37	11.8	Llandudno	30.04	10.2
Aberystwyth (Gogerddan) ..	46.49	10.5	Criccieth (Talarvor)	36.58	10.0
Aberdare (Nanthir Reservoir) ..	59.57	14.2			
ISLE OF MAN.					
				ins.	%
Douglas (Borough Cemetery) ..				41.19	9.4

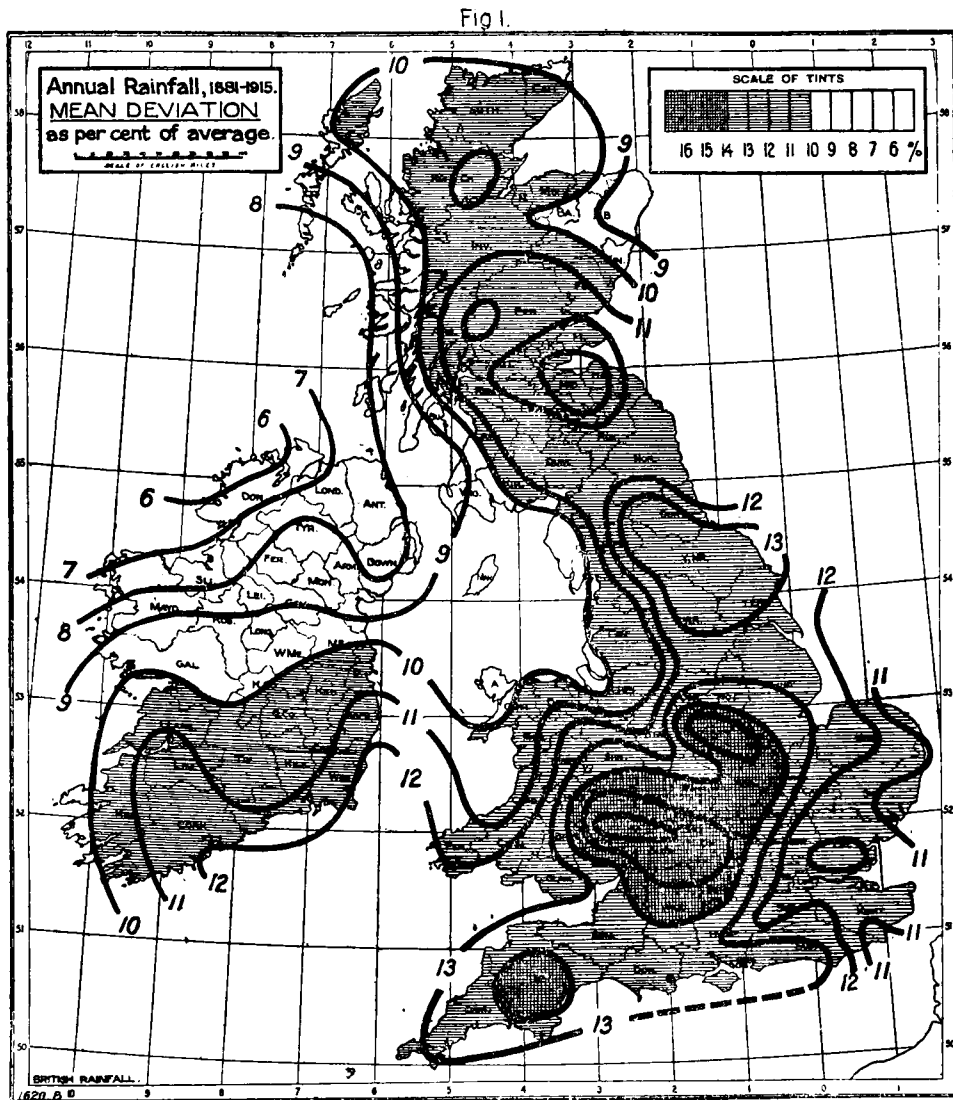
TABLE II.—(continued).

Station.	Average Rain-fall.	Mean Deviation.	Station.	Average Rain-fall.	Mean Deviation.
SCOTLAND.					
	ins.	%		ins.	%
Auchencairn (Torr House) ..	47·05	10·4	Crieff	40·86	11·9
Dumfries (Cargen) ..	44·81	11·8	Bair Atholl	33·09	11·2
Hawick (Braxholme) ..	33·36	11·2	Montrose (Sunnyside Asylum) .	27·03	10·9
Galashiels (Abbotsford Road) .	31·75	13·4	Logie Coldstone (Loanhead) ..	31·22	9·9
Marchmont House ..	32·18	11·4	Aberdeen (Cranford House) ..	31·74	8·9
North Berwick Reservoir ..	25·39	14·7	New Deer School	32·34	8·7
Edinburgh (Charlotte Square) .	25·12	13·3	Gordon Castle	29·77	11·5
Airdrie (Hillend Reservoir) ..	37·32	10·5	Grantown-on-Spey	31·15	9·8
Kilmarnock (North Craig Res.)	41·23	11·2	Loch Quoich (Glenquoich) ..	110·75	10·2
Girvan (Pinmore) ..	49·84	8·7	Drumnadrochit	35·64	10·9
Shaws W.W. (Loch Thom) ..	65·36	12·1	Fort William (Atholl Bank) ..	78·80	11·0
Lochgilphhead (Poltalloch) ..	52·71	11·6	Alness (Ardross Castle) ..	38·54	11·2
Islay (Eallabus) ..	48·86	8·0	Loch Torridon (Bendamph) .	85·12	10·3
Mull (Quinish) ..	56·75	7·8	Stornoway	49·85	10·5
Loch Dhu ..	79·77	11·7	Dunrobin Castle	31·65	10·5
Glengyle ..	89·90	12·1	Wick	29·92	10·1
IRELAND.					
Cork (University College) ..	39·97	11·7	Greenore	31·91	8·0
Valencia (Glanleam) ..	56·97	9·6	Tuam (Gardenfield)	44·08	9·7
Killarney (District Asylum) ..	54·71	10·9	Ballinasloe	36·71	10·0
Darrynane Abbey ..	51·02	10·7	Crossmolina (Enniscoe) ..	53·27	7·3
Waterford (Brook Lodge) ..	39·47	11·1	Ballinrobe (Cranmore) ..	48·68	9·7
Clonmel (Glenam) ..	41·74	10·5	Collooney (Markree Obsy.) ..	43·53	7·8
Nenagh (Castle Lough) ..	39·52	9·9	Belturbet (Cloverhill) ..	34·63	8·8
Foynes (Coolnanes) ..	39·43	11·7	Armagh Observatory	31·75	8·2
Miltown Malbay ..	45·70	10·6	Donaghadee	31·30	8·9
Gorey (Courtown House) ..	34·67	12·2	Banbridge (Milltown) ..	30·99	7·9
Bagnalstown (Fenagh House) .	34·95	10·8	Ballymena (Harryville) ..	41·50	7·9
Abbey Leix (Blandsfort) ..	36·55	9·4	Garvagh (Moneydig) ..	38·83	7·6
Dublin (Fitz-William Square) .	27·37	10·6	Omagh (Edenfel)	40·12	8·6
Mullingar (Belvedere) ..	36·34	9·8	Buncrana (Rockfort) ..	41·02	6·0

See *ante* pp. 156-160 for Counties.

The mean deviation of annual rainfall obtained for each station was plotted on a map and the distribution emphasized by means of isopleths. This map is reproduced on page 293. The figures proved to be remarkably consistent, and it was only in the extreme north of Scotland and along the north-west coast of Ireland that sparcity of records left doubt as to the general distribution.

With regard to the evidence for the minimum values in the north-west of Ireland, no station gave a value for the mean deviation of less than 6 per cent. of the annual average, but the figure of 6 per cent. obtained for Buncrana in Donegal seems perfectly reasonable and a line has been drawn to give effect to it. Turning to the maximum values in the centre of England the results were not quite so accordant as elsewhere, and in order to obviate the risk of error rather more stations were utilized. The 16 per cent. lines in Herefordshire and



Leicestershire are on the whole well supported by records at Ross-on-Wye, Quedgeley near Gloucester, and Mickleover near Derby.

The general distribution of the mean deviation of annual rainfall shows a central core of large fluctuation stretching practically the whole length of Great Britain, with a subsidiary one running parallel in the south of Ireland. These maxima were most pronounced in the centre and south, falling away in the north and on either side to areas of small fluctuation. Fluctuations of more than 13 per cent. of the annual average rainfall were confined to the main central core in Great Britain. The principal area stretched from Land's End and the Isle of Wight in the south, to Sheffield and the Wash in the north. The value of more than 13 per cent. also occurred further north in a patch

stretching from Hull to Durham, and again in the neighbourhood of Edinburgh. Fluctuations of more than 14 per cent. were confined to the more southerly area, and in the English Midlands isolated patches, notably in Herefordshire and in Leicestershire, had a mean deviation exceeding 16 per cent. As large a value as 17 per cent. mean deviation from the annual average rainfall occurred at Ross-on-Wye. Both to the east and to the west of the central core the value of the mean deviation decreased, the diminution being more pronounced in the north than in the south. Less than 10 per cent. appeared in the east of Aberdeenshire, the north and west coast of Scotland and along the west coast of the north of England as far south as Chester. It occurred also in the northern half of Ireland. Towards the south-east of Ireland the values increased to a maximum of 12 per cent. of the average in parts of Counties Cork and Wexford, whilst to the north-west they decreased conspicuously. In Co. Donegal the mean deviation was as low as 7 per cent., decreasing on the coast to about 6 per cent.

For the British Isles as a whole it may thus be said that the range of the value of the mean deviation of annual rainfall is from about 6 per cent. to 17 per cent. In other words, during the thirty-five years 1881-1915 the fluctuation of annual rainfall was relatively to the average approximately three times as great in the centre of the British Isles as it was in the north-west of Ireland.

The map indicates that the distribution is not simply controlled by the amount of rainfall, nor is the decrease purely from east to west. The rainiest parts of the British Isles are the English Lake District, Snowdonia, and the central Western Highlands, and these districts are by no means marked out as regions of small deviation. On the contrary, the Devon-Cornwall peninsula gives the largest deviations for any of the rainy areas, and in this region it is the more central portion, or, in other words, the wettest district, which has the largest deviation. Similarly, small deviations do not occur exclusively in the west, for the value of 9 per cent. of the annual rainfall is found as far east as Aberdeen. The variation is apparently primarily a measure of the insularity of the climate, the largest deviations occurring in the centres and south-east of the land masses, whilst the coastal regions and the north-west have small deviations. The influence of proximity to the continent is clearly shown, and the general distribution may be described as the resultant of continental effects and sub-continental effects, being probably primarily dependent upon distance from the sea. In other words, the lines representing equal mean deviation might very roughly be resolved into lines of equal deviation running in a north-east to south-west direction, representing the influence of the continent of Europe and lines of equal deviation running parallel to the coast of the British Isles representing the influence of the land masses of the British Isles themselves.

Frequencies of Occurrence of Specified Percentage Departures.

Another method of studying the variation factor of annual rainfall is to group the annual departures in order of magnitude as set out in Table III. It will be observed that of the four representative stations

TABLE III. *Frequency of Occurrence of Specified Percentage Departures at four representative stations.*

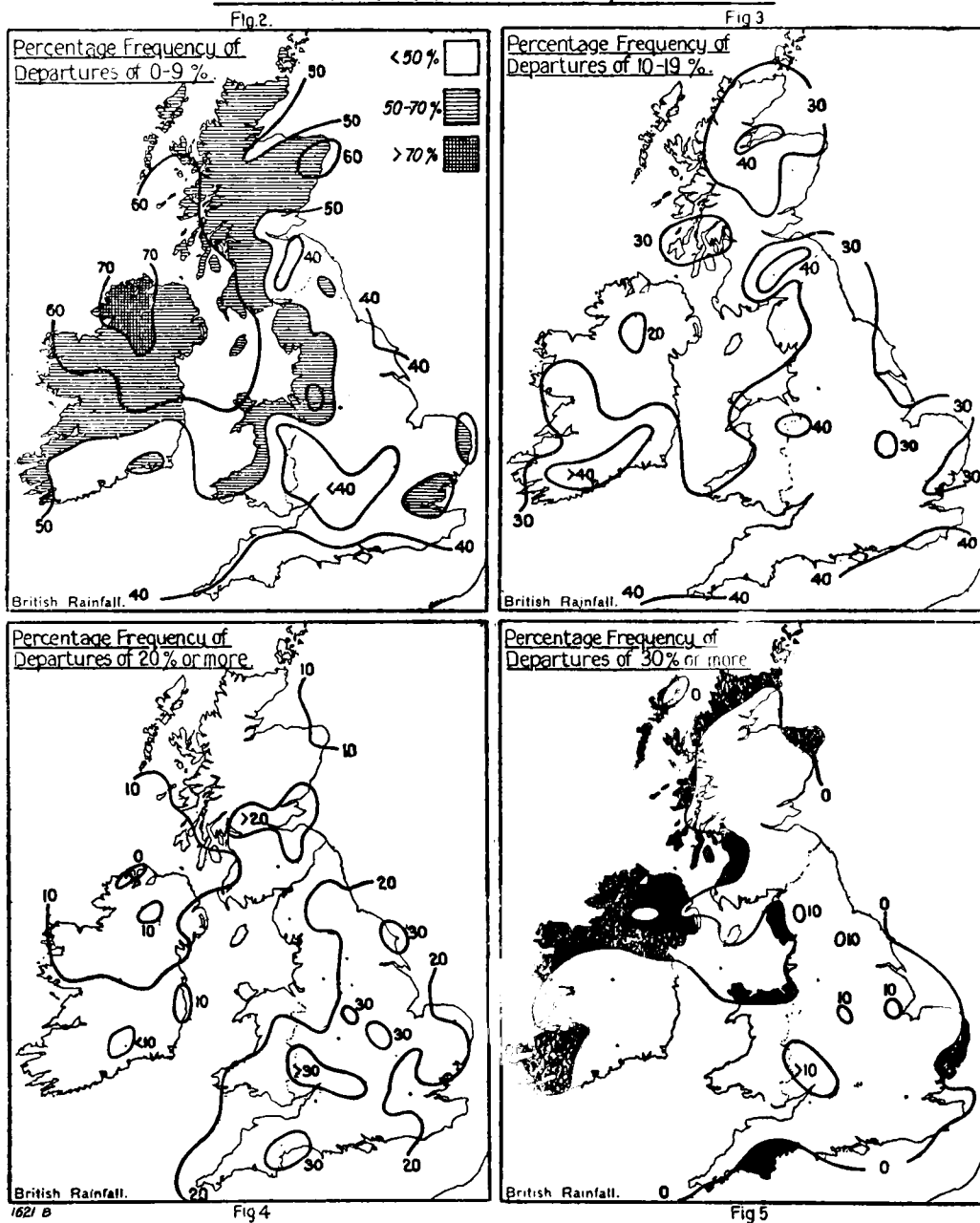
Departures from Average.					Tenterden, Kent.	Welling- borough, Northants.	Southport, Lancs.	Eallabus, Islay, Argyll.
Per cent.					No. of Years.	No. of Years.	No. of Years.	No. of Years.
0- 9	..	..	..	..	17	14	18	23
10-19	..	..	..	..	14	9	11	11
20-29	..	..	..	..	4	9	5	1
30-39	..	..	..	..	0	2	1	0
40 or more	..	..	..	..	0	1	0	0

dealt with, departures exceeding 30 per cent. of the annual average rainfall occur with greatest frequency at Wellingborough in the English Midlands, and that departures of less than 10 per cent. are most frequent at Eallabus, Islay, in the north-west. The records for the thirty-five years 1881-1915 at all the 124 stations utilized in Table II have been examined in this manner, and maps showing the number of departures of between 0 and 9 per cent., between 10 and 19 per cent., of 20 per cent. or more and of 30 per cent. or more respectively are reproduced in Figs. 2, 3, 4, and 5. It must be borne in mind that the period dealt with is only thirty-five years, so that the occurrence of departures between specific limits on, say, seven occasions would represent a frequency of 20 per cent. of the possible number. It was found convenient in drawing the isopleths on the maps to represent the frequencies as percentages of the possible number of occurrences.

(a) *Departures from the Average of from 0 to 9 per cent.*—It is clear from Fig. 2 that departures within this range were most frequent, occurring on more than half the possible number of occasions, principally in the north-west, including practically the whole of Scotland and Ireland and parts of the north-west of England and Wales. Departures of this magnitude occurred as frequently as 60 per cent. of the possible number of occasions over the northern half of Ireland and extreme west of Scotland, reaching as much as 70 per cent. only in the north-west of Ireland from Donegal to Cavan. Over the greater of England and Wales departures of this magnitude were less frequent, occurring on less than 40 per cent. of the possible number of occasions along the south coast and in parts of the English Midlands.

(b) *Frequencies of departures from the average of from 10 to 19 per cent.* were more uniformly distributed over the British Isles.

ANNUAL RAINFALL, 1881-1915.



Over the northern half of Ireland, the north-west of England, and parts of the west and centre of Scotland, the frequency was less than 30 per cent. of the possible number of occurrences, reaching in the neighbourhood of Tyrone as low a frequency as 20 per cent. Over far the greater part of the British Isles the percentage lay between 30 and 40, while in isolated areas, notably in the extreme south-east

of England, of Scotland and of Ireland the frequency reached 40 per cent.

(c) *Frequencies of departures from the average of 20 per cent. or more.*—This map (Fig. 4) is extremely interesting in comparison with the first map of the series (Fig. 2), showing as it does that large departures are distinctly more frequent in the south-east, whereas small departures were seen to be most frequent in the north-west. These maps should be studied in comparison with the map of mean deviation (Fig. 1). In all three maps the general run of the lines is similar, since they all represent the same data from different aspects. Departures of 20 per cent. or more are naturally much less frequent than those of less than 20 per cent. The greatest number occurred south-east of a line from Pembrokeshire to Newcastle-on-Tyne, and in the neighbourhood of the Firth of Forth. In isolated areas in England the frequency reached 30 per cent. In the north-west of Ireland departures of the magnitude dealt with were rare, occurring generally on less than 10 per cent. of the possible number of occasions. At Buncrana, in Donegal, during these thirty-five years no year had a rainfall departing from the average by 20 per cent.

(d) *Frequency of departures from the average of 30 per cent. or more.*—During the thirty-five years for which observations have been considered, departures of more than this amount were recorded nowhere in the north of Ireland nor in the west of Scotland. In England the areas with no such departures were in all cases on or near the coast. The maximum frequency was clearly in England, where locally in the centre as many as three such years occurred, reaching a maximum of four years in Herefordshire and Gloucestershire.

At all the 124 stations, each with records for thirty-five years, that is, out of 4,340 annual values, there was only one instance of rainfall below 60 per cent. of the average, and there were only two of more than 150 per cent. of the average. These extremes were recorded at Waterford in 1887 (59 per cent.) and at Camden Square (London), in 1903, and Wrottesley, in Staffordshire, in 1882 (in each case 156 per cent.). It should, of course, be remembered that the years 1872 and 1921, remarkable for wetness and dryness respectively, did not fall within the period considered.

Number of Years out of Thirty-five with Rainfall Below the Average.

One of the disadvantages of dealing with fluctuations as percentages of the average annual rainfall is that the extremes of deficiency and of excess are not equally balanced about the mean. An illustration of this is afforded by an examination of the monthly rainfall at Greenwich. In July, 1888, 6·75 in. of rain was recorded, which is as much as 285 per cent. of the average monthly rainfall for July in the 100 years 1815 to

1914. Since it is obviously impossible to have a deficiency of more than 100 per cent., it follows that this one heavy fall of July, 1888, must be balanced by more than one month of deficient rain relatively to the average, or, in other words, the tendency is for there to be more months of rainfall below the average than above it, whilst the departures in the wettest months are greater than the departures in the driest months. The same kind of inequality occurs, although to a much less marked degree, in dealing with yearly periods. Binnie, in the paper to which reference has already been made, points out this inequality, and adds that "from the gross average of the 153 records" (all long and in various parts of the world), "it appears that in any long record 47·1 per cent. of the years will be above the mean, and 52·9 per cent. of the years below the mean."

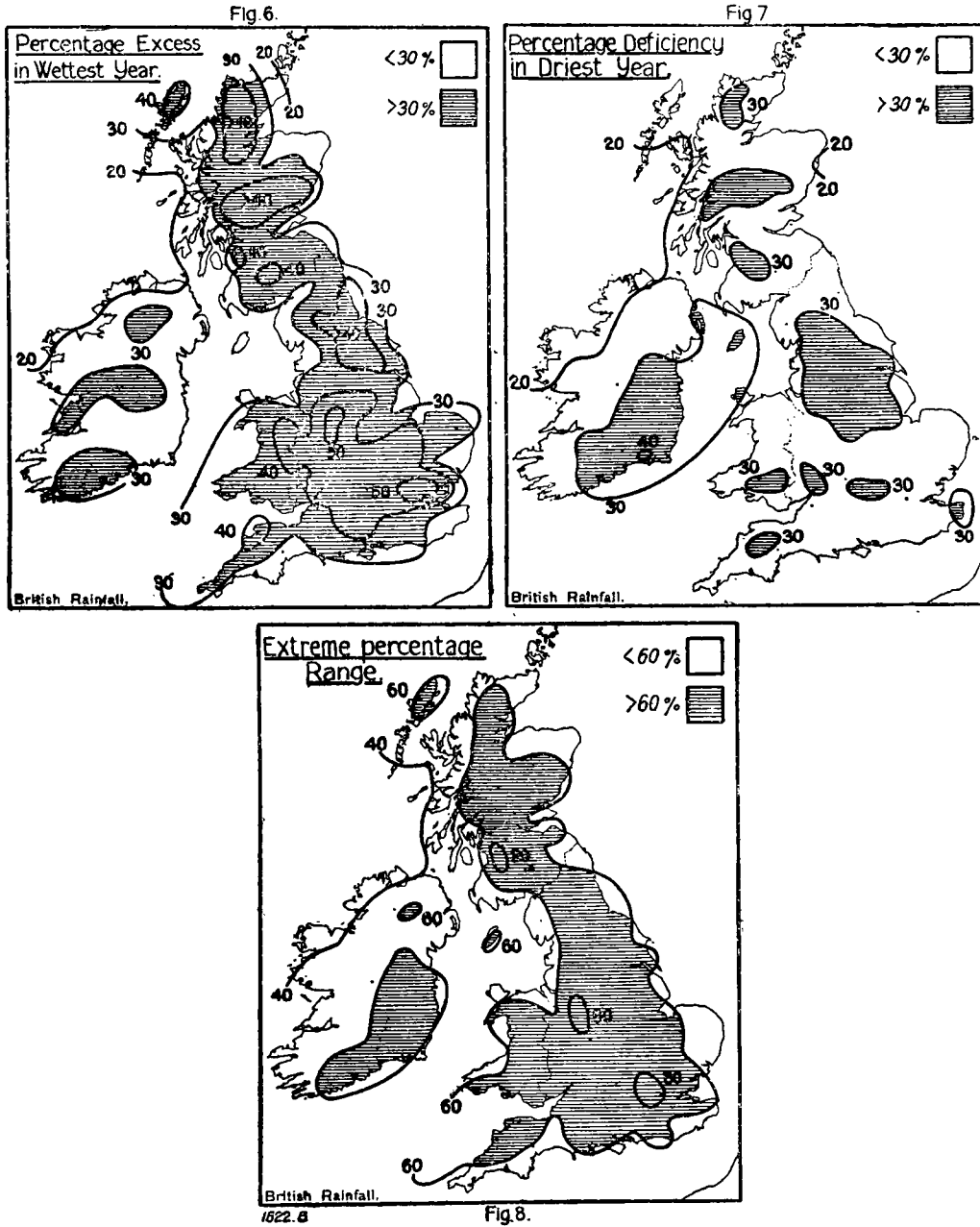
During the thirty-five years, 1881–1915, by far the greater part of the British Isles had more years of deficient than of excessive rainfall relatively to the average. The chief exceptions were the north and extreme south of Ireland, the north of Scotland and the north-west of England, where locally as few as 45 per cent. of the years had rainfall less than the average. Over isolated patches in the centre of England, the extreme south-east of England and of Scotland, and in the centre of Scotland from Blair Atholl to Aberdeen, the number of years with rainfall below the average reached as many as 55 per cent. The general distribution of these areas does not seem to suggest any special geographical control, but rather appears to be a matter of chance, depending probably in the main on the period chosen. There is no doubt that over the British Isles generally the number of years with rainfall below the average is only slightly in excess of the number with rainfall above the average.

Extremes of Annual Rainfall.

As has been previously pointed out,* a consideration of the mean deviation of annual rainfall, as illustrated by the map on page 293, gives an indication of the areas in the British Isles where extremes of annual rainfall are most likely to occur. This is elaborated by the maps on page 296 (Fig. 2 to 5). It appears from maps of the percentage of the average annual rainfall prepared for each of the years 1881 to 1915, that the areas which most frequently exhibit large excesses of rainfall are in general those which also give the most striking deficiencies. So far as it is possible to judge from the observations for the thirty-five years, it is in the centre and south-west of England and Wales that we should expect the largest excesses and deficiencies most often to occur.

In Fig. 6 the general distribution is given of the amount of the greatest annual excess relative to the average recorded in any one

* *Q. J. R. Met. Soc.*, Vol. XLVIII, *The Drought of 1921*, p. 150.

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year, during the thirty-five years 1881-1915, at the various stations utilized in Table II. It becomes at once clear that the values when plotted on the map have a distinct geographical significance, e.g., the line of 30 per cent. coincides in a remarkable manner with the coast line of Great Britain. On the coast very few stations recorded an excess of as much as 30 per cent. in any one year from 1881-1915, whereas inland such excesses have occurred practically everywhere.

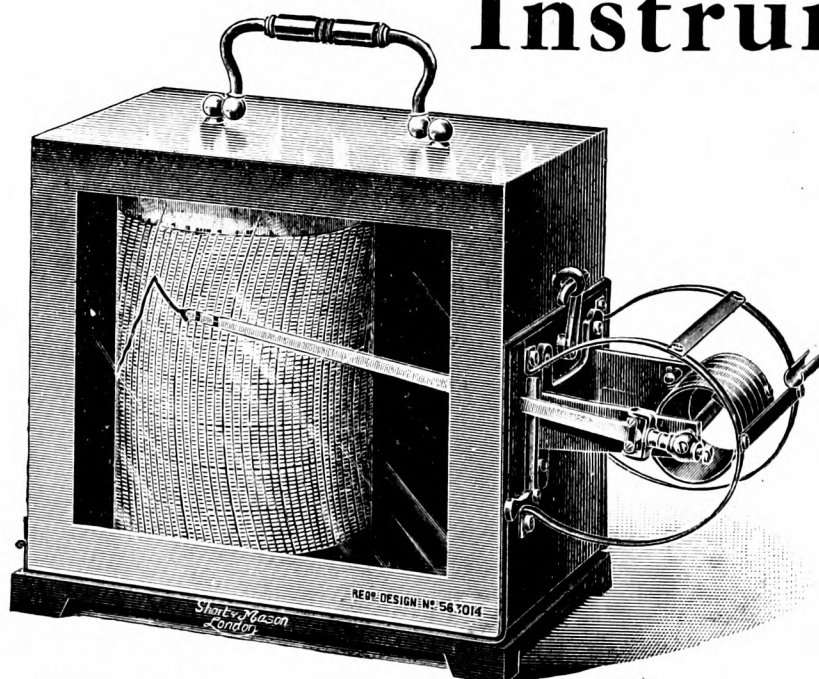
In the interior of Great Britain years with excesses of 40 per cent. were common, and as much as 50 per cent. was reached in places in the centre of England. In the extreme west the excess in the wettest year has never reached 20 per cent., and in Ireland as much as 30 per cent. has been recorded only in the interior and extreme south.

The map showing the percentage deficiencies in the driest year (Fig. 7), though less obvious, presents the same characteristics, the largest deficiencies having occurred inland and the smallest on the coast. Broadly speaking, this map exhibits a somewhat similar distribution to that of Fig. 6. It is noteworthy that the values of the largest excesses (Fig. 6) are nearly everywhere greater than the values of the largest deficiencies (Fig. 7). Had the year 1921 come within the range of the thirty-five years considered, the distribution of the extreme deficiency in the south-east of England would have been modified. This emphasizes the importance of remembering that these maps are constructed on data for a particular period, viz., the thirty-five years 1881-1915.

The geographical distribution of the range of annual rainfall is even more clearly demonstrated by Fig. 8, giving the extreme percentage range for the period. This is as low as 40 per cent. on the west coast, and reaches 80 per cent. in the English Midlands.

It is a matter of some interest to note that the area in which the fluctuations of rainfall are greatest coincides approximately with that in which the bulk of the rainfall is generally retained in the sub-soil. This natural storage must compensate in a very marked degree for the greater uncertainty as to the rainfall of any individual year. It is probably to this that the British Isles owe their comparative freedom from the disastrous effects of drought.

Meteorological Instruments



**Official Pattern
THERMOGRAPH**

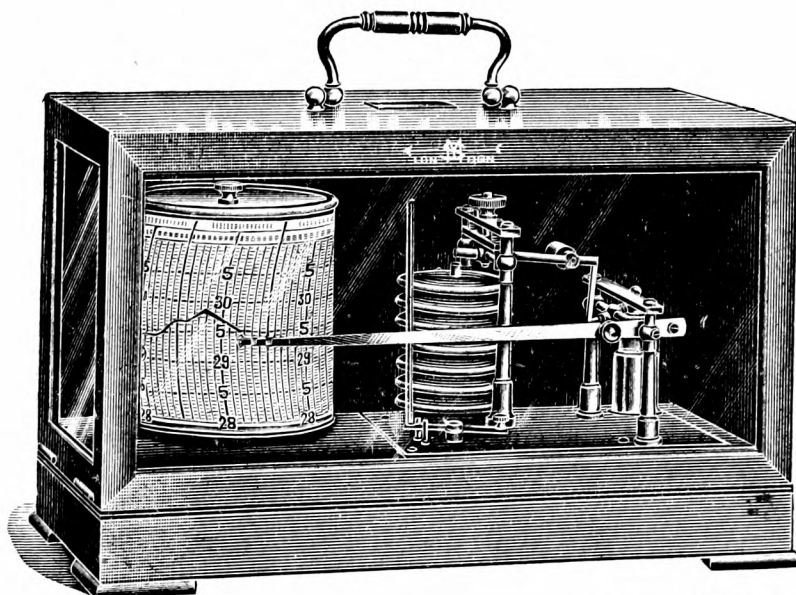
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