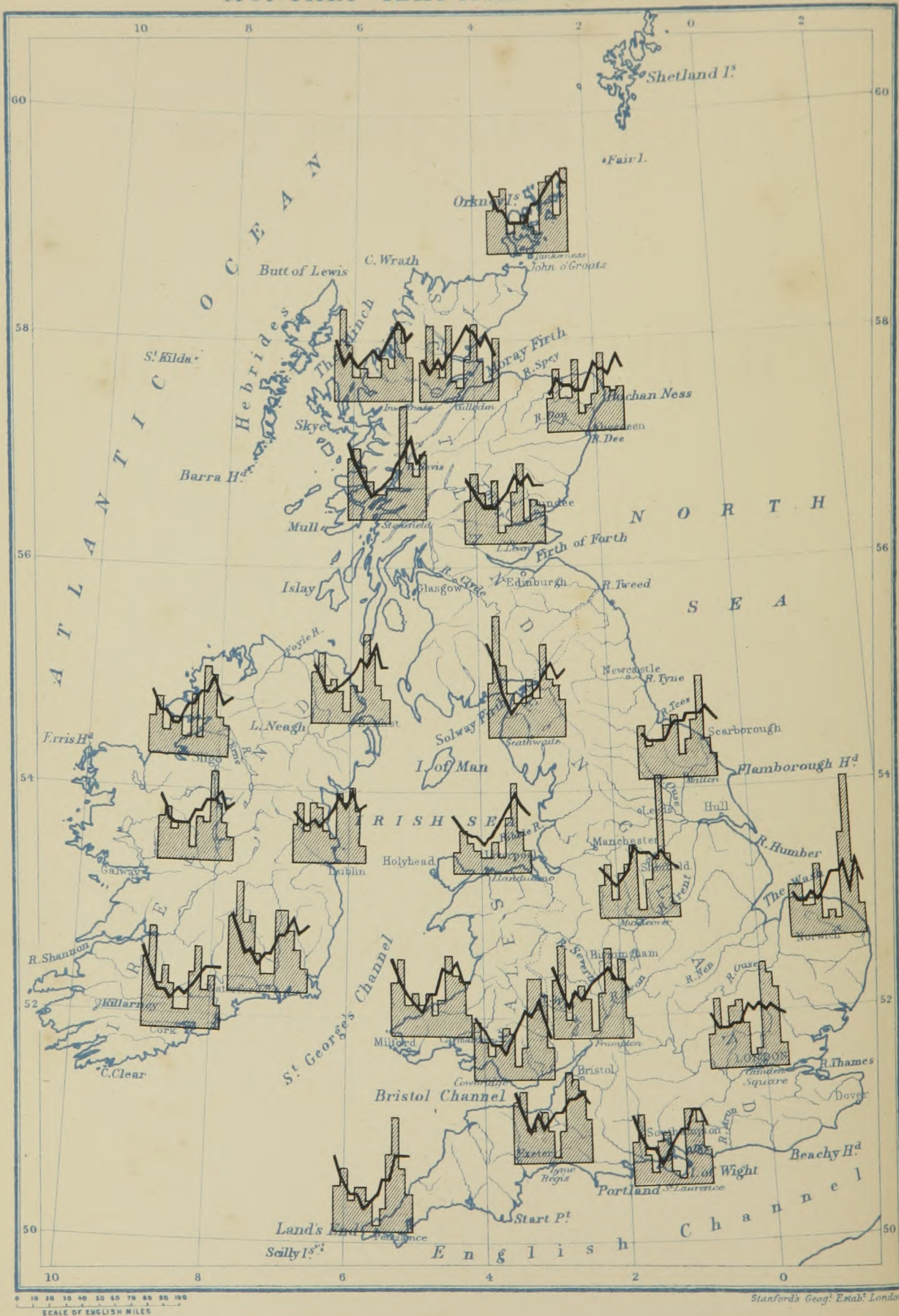


BRITISH RAINFALL,
1885.

See page 135



BRITISH RAINFALL, 1885.

ON

THE DISTRIBUTION OF RAIN

OVER THE

BRITISH ISLES.

DURING THE YEAR

1885,

AS OBSERVED AT MORE THAN 2000 STATIONS IN

GREAT BRITAIN AND IRELAND,

WITH ARTICLES UPON VARIOUS BRANCHES OF RAINFALL WORK.

COMPILED BY

G. J. SYMONS, F.R.S.,

*Secretary Royal Meteorological Society; Membre du Conseil Société Météorologique de France;
Member Scottish Meteorological Society; Member of Council Royal Botanic Society;
Registrar and Member of Council Sanitary Institute; Fellow Royal Colonial
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Membre correspondant étranger Soc. Royale de Médecine Publique de
Belgique; Hon. Mem. Hertfordshire Nat. Hist. Soc., Essex Field Club,
&c. &c. &c.*

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—
1886. '

CONTENTS OF BRITISH RAINFALL, 1885.

	Page.
PREFACE	7
REPORT—General—Rules for Observers—Days with Rain—Inspection of Rain Gauge Stations—Instruments—Evaporation—Mean Monthly Rainfall—The Nunes Bequest—Lake District Rainfall—Finance ...	8
DR. WILD ON THE INFLUENCE OF DIMENSIONS AND POSITION UPON THE INDICATIONS OF RAIN GAUGES	14
ON THE RELATIVE FALL OF RAIN DURING THE DAY AND DURING THE NIGHT	24
A RAIN GAUGE AT SEA	28
ROTHERHAM EXPERIMENTAL RAIN GAUGES...	31
RAINFALL AT THE ROYAL OBSERVATORY, GREENWICH	35
THE STAFF OF OBSERVERS	36
OBITUARY	53

RAINFALL AND METEOROLOGY OF 1885.

ON THE METEOROLOGY OF 1885, WITH NOTES ON SOME OF THE PRINCIPAL PHENOMENA	[3]
OBSERVERS' NOTES ON THE MONTHS OF 1885	[38]
OBSERVERS' NOTES ON THE YEAR 1885	[87]
HEAVY RAINS IN SHORT PERIODS...	[118]
HEAVY FALLS IN 24 HOURS DURING 1885...	[119]
MONTHLY RAINFALL IN 1885	[134]
MONTHLY RAINFALL OF 1885 COMPARED WITH THE MONTHLY MEANS 1870-79	[143]
NOTES ON THE MONTHLY FALL IN 1885	[147]
RELATION OF THE TOTAL RAINFALL IN 1885 TO THE AVERAGE 1870-79	[151]
EXTREMES OF RAINFALL IN 1885	[155]

GENERAL TABLES OF TOTAL RAINFALL.

EXPLANATION OF THE ARRANGEMENT OF GENERAL TABLES...	[158]
COUNTY INDEX TO GENERAL TABLES	[159]

ILLUSTRATIONS.

MONTHLY RAINFALL OF 1885 ..	...<i>Frontispiece</i>
RAIN GAUGE EXPERIMENTS—ST. PETERSBURGH...	... <i>face p. 22</i>
DIAGRAM OF NIGHT RAINFALL .....	... 27
MONTHLY RAINFALL IN 1885 .....	... <i>between pp. [142] & [143]</i>
ANNUAL RAINFALL IN 1885 .....	... <i>face p. [150]</i>

ERRATA.

BRITISH RAINFALL, 1878-81.

HYTHE.—On careful examination of this record it appears that the observations made for several years prior to 1882 are incorrect; the amounts are certainly too large for each year from 1878 to 1881, and possibly are also too large in some previous years. It appears that the assistant who kept the record was discharged in December, 1881, and since that date the observations appear to be accurate.

BRITISH RAINFALL, 1882.

In the diagram forming the frontispiece the value for 1870 is drawn as being 122, *i.e.*, 22 per cent. above the average; it should have been 78, *i.e.*, 22 per cent below it.

BRITISH RAINFALL, 1884.

Page [185].—Dunsfold total should be 20·30 *not* 19·30.

Page [192].—Bennington. In some copies the altitude was given as 480 ft. instead of 408 ft.

BRITISH RAINFALL, 1885.

Page [140].—Inverury, May, should be 4·50, and total 35·25.

Page [142].—Donaghadee should be Sydenham.

BRITISH RAINFALL, 1885.

SPECIAL brightness and a special gloom have accompanied the preparation of this volume, which begins the second quarter of a century of continuous rainfall work.

I should not have mentioned the brightness but for the gloom, for I regarded the very handsome present made to me by about 400 of the observers as a personal rather than a public matter, and though proud of it and hoping to enjoy it as long as I live, I should not have referred to it in print but for the touchingly solemn end. The originator and the prime mover of the whole scheme was the Rev. CLIFFORD MALDEN, M.A., my excellent observer and friend; for surely I may call him so, although, as with many of my correspondents, I had not seen him for 18 years. As Treasurer of the Fund, he completed his duties on June 4th, beginning his letter with the kindly words—

“MY DEAR MR. SYMONS,—My labour of love is finished.”

Nine days later, on Whit-Sunday, he was seized with inflammation of the lungs, and in four days he passed away—his work on earth done, and in his own words, his “labour of love finished.”

Could I do less than dedicate this page to his memory?

G. J. SYMONS.

62, CAMDEN SQUARE, N.W.

July 1st, 1886.

Checking Returns.—This work becomes heavier with each succeeding year ; there is no doubt that the severe examination which the returns that the observers are kind enough to send me, have to pass through renders the values finally published very free from errors, and that is the great object at which I am bound to aim. But the work involved is what some persons would describe as “appalling,” and it necessarily drives the publication later and later. From about 1,500 stations I receive records of the fall of rain on every individual day in the year—suppose that there were on the average 150 days with rain, then these returns alone contain at least 240,000 entries, which require more or less individual examination, and they contain 18,000 columns of figures, the addition of every one of which has to be reworked, for it is surprising how few persons can add up correctly ; and in every case of error the return is sent back to the observer, because it is impossible to know whether the error is really in the addition, or whether some one entry has been incorrectly copied. Nothing is more pleasant than the way in which the observers accept my criticisms, but the time occupied by, and the cost of, all this correspondence is great.

This, however, is only a preliminary. There are several publications which contain tables of rainfall, *e.g.*,

<i>Quarterly Record Roy. Met. Soc.</i>	contains returns from about 78 stations.
<i>Monthly and other Publications of the Met. Office</i>	„ „ 94 „
<i>Quarterly Return of the Reg. Gen. England</i>	„ „ 43 „
„ „ „ „ „ Scotland	„ „ 56 „
<i>Wiltshire Rainfall Tables</i>	„ „ 61 „

besides which there are local tables of rainfall published monthly for Hertfordshire, Cambridgeshire, Essex, Norfolk, Devon, Cornwall, Gloucester, Hereford and other counties, comprising perhaps 200

stations, and at the end of each year perhaps 300 observers send summaries of their observations for publication in local newspapers. I hold it to be my duty to check the returns sent to me against all these publications, and to sift to the bottom all discrepancies; and the result, though generally proving the figures sent to me to be correct, is by no means always so. Hence I am not only able to hunt down errors which have crept or might creep into other publications, but also greatly to improve the value of my own. Any one, however, can see that all these comparisons must absorb much time and thought, and that they alone afford a strong reason for the lateness of the period in the year at which the finally verified tables can be published.

Rules for Observers.—Several hundred copies of the little pamphlet entitled *Arrangements for the Systematic Observation of Rainfall* have been gratuitously distributed during the year, but there are, I am sure, some observers who have never seen or read a copy. I wish that all such persons would send me a post card, when a copy shall be sent by return, for it is absolutely necessary that every observer should read them through, make himself thoroughly familiar with them, and obey them implicitly.

Days with Rain.—I think that there is perceptible improvement in the returns of this element, but there are still too many stations at which small amounts are, through sheer laziness, left in the gauge, to the great diminution of the accuracy of the record. As it is certain that in all parts of the British Isles there were *at least* 100 days on which .01 in. or more fell, all records of less than 100 have been suppressed as self-evidently erroneous.

Inspection of Rain Gauge Stations.—The increasing amount of office work, already partly described under the head of “Checking Returns,” has again limited operations in this branch.

Instruments.—Nothing special to report.

Evaporation.—The observations on the amount evaporated from the large Strathfield Turgiss tank (6 ft. × 6 ft. × 2 ft., and sunk 1 ft. 8 in. in a grass plot at Camden Square) have been continued, and give the following results in inches. January, 1885, is only an estimate :—

	Jan.	Feb.	March.	April.	May.	June	July.	Aug.	Sep	Oct.	Nov.	Dec.	Total
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	..	...	...	...	...	...	...

It will be seen that there is a close agreement between the amounts

evaporated in the first six months of each year, and that the total for 1885 was only 15·62 in. against a rainfall of 26·64 in. When the water in the tank is cold, relatively to the air, condensation occurs; and on one occasion when a warm south-west wind was blowing and ice remained from a previous frost, as much as ·06 in. was deposited. This over the area of 6 ft. by 6 ft. amounted in total volume to 311 cubic inches, or about 11 lbs. weight, or rather more than one gallon. On the other hand, the evaporation on July 28th, 1885, reached ·17 in., and in June, 1886, there were three days each with ·16 in.

Mean Monthly Rainfall.—Nothing has yet been done towards utilizing fully the details 1866-85, to which reference was made in the last volume. It is, however, desirable here to mention that a very beautiful series of maps of monthly rainfall was published last year by Mr. Stanford, in his *Parliamentary County Atlas and Handbook of England and Wales*.

The Nunes' Bequest.—Nearly all the rain gauge stations equipped out of the £100 left to me by Miss Eleanor Nunes have continued in perfect order during 1885, and the records will be found in their proper places in the general tables.

Lake District Rainfall.—As several of the mountain gauges in this district are nearly worn out (many have been in use for twenty years), I applied to the Royal Society for a sum of £30 out of the Government Grant, in order to defray expenses of renewal. My application was acceded to, and I hope this autumn to visit that district and put all upon a proper footing.

Finance.—This is the part of rainfall work which grows most slowly, and though I am very thankful for the help which I receive, I cannot help remembering that not one observer in seven pays as much as £1 per annum, and that not more than three out of seven pay anything at all. There is a popular error which it seems impossible to eradicate, viz., a firm belief that this work is supported by Government, and this error prevents its receiving much help which it otherwise would. Observers will be doing good service who, whenever occasion arises, explain to their friends that the Rainfall Organization is entirely a voluntary association, and wholly dependent on volunteer help both as regards observations and funds.

LIST OF ALL SUMS OF £1 AND UPWARDS RECEIVED IN PAYMENT
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Pleydell, J. C. M., Esq.	1	1	0	Turner, F. J., Esq.	1	10	0
Powell, G. D., Esq., M.D.	1	0	0	Twamley, C., Esq.	1	0	0
Preston, Rev. T. A.	3	0	0	Tyacke, Dr.	1	0	0
Prince, C. L., Esq.	1	1	0	Tyndall, W. H., Esq.	1	1	0
Rankin, J., Esq.	1	0	0	Vibert, J. E., Esq. (the late) ...	1	1	0
Read, R. Esq., C.E.,	1	0	0	Wainwright, B. C., Esq.	2	12	0
Reade, T. M., Esq. C.E.	1	6	0	Walker, A. O., Esq.	1	10	0
Rendell, Rev. A. M.	1	0	0	Ward, H., Esq.	1	10	0
Rendlesham, Rt. Hon. Lord ...	3	0	0	Wardrop, J. C., Esq.	1	0	0
Reynolds, J., Esq.	1	1	0	Waring, Colonel, M.P.	1	0	0
Ridout, Rev. G.	1	1	0	Watkins, Mr. H.	1	0	0
Rigby, J., Esq.	1	1	0	" J., Esq.	2	7	6
Ripon, Corporation of.	1	1	0	Wells, E., Esq.	1	1	6
Roberts, I., Esq.	2	0	0	" L. B., Esq., C.E.	1	6	0
Robertson, H., Esq., M.P.	2	7	0	Wigram, J. R., Esq.	1	5	0
Robinson, H. H., Esq.	1	0	0	Wildgoose, R., Esq.	1	1	0
" J., Esq.	2	0	0	Wilkin, F., Esq.	1	10	0
Robson, J. W., Esq.	1	5	0	Wilson, J., Esq., C.E.	1	0	0
Rolle, The Hon. Mark	1	1	0	" J. B., Esq., C.E.	1	0	0
Ross, Rev. J. C.	1	2	0	" Miss.	1	5	0
Rylands, T. G., Esq.	1	1	0	Wingfield, Rev. C. L.	1	0	0
Ryves, Rev. G. T.	1	0	0	Woodd, C. H. L., Esq.	1	0	0
Sconce, A., Esq.	1	10	0	Woodhouse, A. J., Esq.	2	0	0
Scott, J. W., Esq.	1	1	0	Woollams, Mrs.	1	10	0
" Mrs.	2	2	0	Woollett, G. C., Esq.	1	0	0
" Miss.	1	5	0	Wortham, H., Esq.	1	10	0
Searle, G. von U., Esq.	1	1	0	Wright, Philip, Esq.	1	10	0
Senhouse, H. P., Esq.	1	1	0	Yool, H., Esq.	2	2	6
Shackleton, J., Esq.	1	1	0	Young, W. B., Esq.	1	5	0

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DR. WILD ON THE INFLUENCE OF DIMENSIONS AND POSITION UPON THE INDICATIONS OF RAIN GAUGES.*

THE writings of Dr. Wild always merit attention upon two grounds : first, because of the very solid foundation upon which they rest—one never catches Dr. Wild building an elaborate theory upon a mere handful of observations—and secondly, because of the position which he holds as director of the meteorological organization of the great Russian empire.

A few years since Dr. Wild published a memoir on the temperature of Russia† which, for its completeness and extent, is without an equal. He purposes shortly to issue a similar work upon the rainfall of that vast empire, but as a prelude he has been investigating the influence of the shape, size, height above ground, and protection, upon the indication of rain gauges, and read a paper upon the subject before the St. Petersburg Academy on April 23rd, 1885. This paper makes about 25 4to pages of the *Repertorium*, and although some of the data employed were originally published in *British Rainfall*, others of a very different type are added, and, moreover, we learn from it how far Dr. Wild is and is not prepared to adopt the conclusions at which we have arrived.

1.—Influence of Shape and Material.

Dr. Wild quotes the Calne and Strathfield Turgiss experiments and shows that they lead to the following results :—

CIRCULAR.					SQUARE.	
Diameter 5 in.	8 in.	12 in.	24 in.		Side 5 in.	10 in.
99·6	101·3	100·0	100·0	.....	97·3	96·1

He then gives the results of observations made with four rain gauges, viz., (1) a circular one (of the pattern generally used at the Russian stations) 10 inches in diameter ; (2) an 8 inch diameter Glaisher gauge ; (3) a circular Moritz gauge, 7 inches in diameter ; and (4) a

* Einfluss der Qualität und Aufstellung auf die Angaben der Regenmesser von H. WILD. *Repertorium für Meteorologie*. Band IX. 4to. St. Petersburg, 1885.

† Die Temperaturverhältnisse des Russischen Reiches. 4to, St. Petersburg.

square one whose sides were about 13 inches in length. The results appear to have been :—

	Diameter 10 in.	CIRCULAR.			SQUARE.
		8 in.	7 in.		13 in. x 13 in.
1872	100·0	101·4	—	.....	109·4
1873	100·0	—	—	.....	100·9
1873 (Aug.-Dec.)	100·0	—	125·8	.....	105·5

It appears that Moritz's guage is surrounded by a $2\frac{1}{2}$ inch flat rim so that, as Dr. Wild points out, it collects more than is due to its proper area. He also shows that round gauges agree better with one another than square ones do, and concludes by urging that only one pattern should be used and that a round gauge is the best. He also shows from the Strathfield Turgiss and Hawsker experiments that it is immaterial, as regards the amount collected, whether gauges be of zinc or of copper. He quotes also six months' observations at St. Petersburg to show that no influence of importance is produced by the colour of the outside of the gauge.

2.—Influence of Size of Gauge.

This section opens with three lines from the British Association report on the experiments ($4\frac{1}{2}$ years) at Calne and (2 years) at Strathfield Turgiss, viz. :—

	Diameter 1 in.	2 in.	4 in.	5 in.	6 in.	8 in.	12 in.	24 in.
Calne	91·4	95·6	99·7	99·6	102·6	103·6	100·0	100·0
Strathfield Turgiss ...	96·1	97·8	100·2	97·8	100·9	99·1	100·0	101·3

From the above, Dr. Wild concludes that gauges between 4 and 24 inches in diameter may be regarded as agreeing within about 1 per cent. He then gives the results for 24 summer months in the years 1872-76 obtained with two gauges, respectively 10 inches and $44\frac{1}{2}$ inches in diameter, which make the fall in the large gauge about 2 per cent greater than in the 10 inch one. Dr. Wild refers to Professor Eastman's observations at Washington with rain gauges of from 1 inch to 6 inches in diameter as showing that even down to $2\frac{1}{2}$ inches the error is not likely to exceed 1 per cent, but, he points out, that as the quantity of water in these small gauges is very minute, larger ones are preferable.

3.—Influence of the Height of the Gauge above ground.

The author explains that as this factor is one of great importance many more observations have been made respecting it than concerning previous ones.

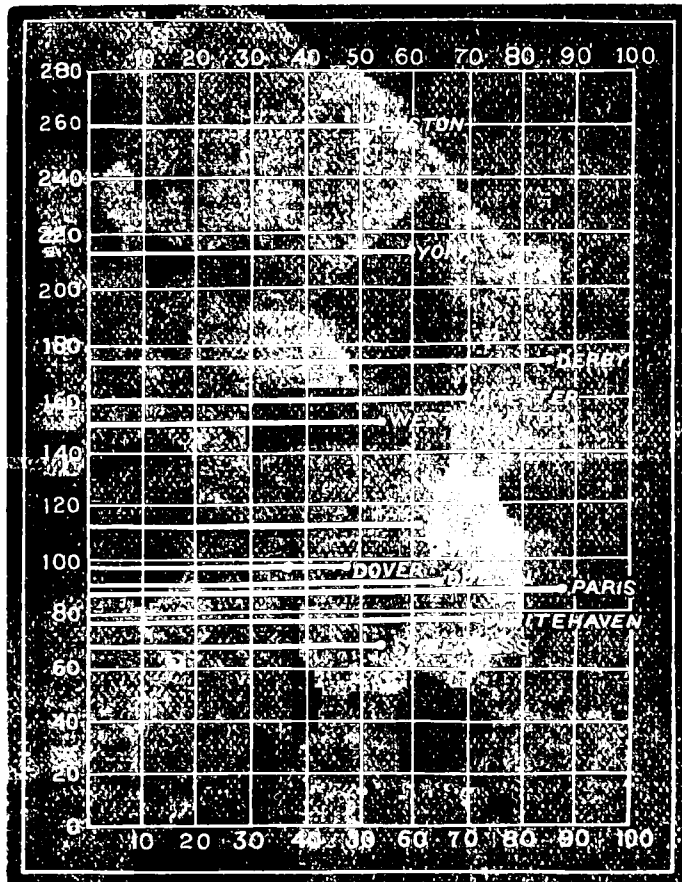
He gives first the analysis of the Calne observations, which forms Table VII. of the *British Association Report*, 1870, and remarks there-

upon that the gauge level with the ground, and that 2 inches above it were evidently vitiated by insplashing; that the upper gauges caught less snow; that the decrease with height is first rapid and then gradual that the decrease is always greater in winter than in summer; and that Table X. of the same series proves that this is due to wind velocity and to the imperfect collection of snow.

Dr. Wild then remarks that, as it was to be expected that with different velocity of wind and with more snow the correction for altitude would be different, he decided upon trying some experiments at St. Petersburg, and had six precisely similar circular gauges, 10 in. diameter, erected on posts at the back of the central observatory at 0, 3, 7, 10, 13 and 16 ft. above the ground, besides which there was a similar one on the roof of the tower 82 ft. above the ground. Most of these gauges were observed during the whole ten years 1873—82, but two of them broke down rather before the latter date.

The lowest of the gauges was sunk in a hollow like the pit gauge at Calne. During the last two years all the gauges except the pit one were provided with circular protectors (like loose Snowdon rims?) during the winter months. Although latterly the pit gauge was protected by a wire netting (inch mesh) 2 ft. 6 in. high it was often filled full of snow when none was in the other gauges. In such cases Dr. Wild has substituted, for the actual reading, values as accordant as possible with the other gauges. As Dr. Wild has often seen snow whirled off the ground and into the 3 ft. high gauge, sometimes even into the 10 ft. one, he reduces the observations not merely to the datum of the pit gauge, but also to that of the 7 ft. one. We need not reproduce all the tables which Dr. Wild gives, but merely epitomize the results. He shows that in times of wind and snow his tower gauge does not collect one-seventh of the quantity collected by the pit gauge, and even after rejecting the pit gauge and, taking as unity the gauge 7 ft. above the surface, he gets a decrease with elevation far greater than occurs in this country. It has long been known that the most difficult branch of rainfall observation is the accurate measurement of snow, and also that for that purpose rain gauges high above the ground are of little use, as the snow is swept out of them by the wind. Dr. Wild's experiments remind us of the opposite error (which occurred at some English stations in 1881) of snow already fallen being lifted by the wind and re-deposited. The decrease with elevation at St. Petersburg in the summer months agrees closely with that found in this country, but

in the winter it is, as has already been intimated, enormously greater. Dr. Wild then gives data proving that the diminution with elevation is greater with increased velocity of wind, and he remarks that the discussion of the English observations proves that the explanation of the increase in the amount collected cannot, as was originally thought, lie in any growth of rain drops and snowflakes during their passage through moist air, but is more probably due to the whirling of snow out of the gauges and to the more vertical fall of the rain where, by proximity to the earth's surface, the wind's velocity is reduced. Hence he thinks that the true rainfall will be most easily obtained from a pit gauge if it can be protected from driven snow, and that if this cannot be done, then its indications must be corrected by calculations from the indications of a higher gauge by the application of corrections based upon such experiments as those at Calne and St. Petersburg, but as these latter were at times vitiated by driven snow, he thinks that similar comparisons should be made in other localities. He then works up various English observations



and compares them with the St. Petersburg ones, and finds that although small gauges always show a greater elevation-difference than large ones placed near them, still the large St. Petersburg gauges give by far the greatest decrease of all, and then he passes to that which we believe to be the true explanation—viz., that at St. Petersburg there are on an average about 100 days in each year with snow. The last paragraph of this section is the only one with which we do not quite agree. In *British Rainfall*, 1880, we gave various records of decrease with elevation, and also the preceding diagram, and stated our conclusion that “*there is no evidence of any difference between the fall of rain at various heights from 60 to 260 ft. above the ground.*”

Dr. Wild has been examining these data, and has for different reasons struck out three sets of observations,* and having taken some means has arrived at the following result :—

Height.		Relative Rainfall.		Limit of
Metres.	Feet.			Variation.
0	0	.....	100	..... 0
13	43	.....	75 ± 4
26	85	.....	64 ± 7
59	194	.....	58 ± 6

This of course appears to justify him in stating that our inference was incorrect, and that there is a decrease between 85 and 194 ft. We adhere to our original opinion, and proceed to show why we do so. We take nothing but the figures in the *Repertorium*, and all those which affect our statement as to the lack of evidence of decrease between 60 ft. and 260 ft., and arrange them according to their height.

Station.	Elevation.		Ratio.
	Metres.	Feet.	
Sheerness Waterworks	20·4	67	..... 52
Whitehaven	23·8	78	..... 66
St. Petersburg	25·0	82	..... 59
Paris	27·0	89	..... 81
Monkstown	27·4	90	..... 64
Oxford	34·1	112	..... 59
Westminster Abbey	46·0	151	..... 52
Chester	48·8	160	..... 61
Wolverhampton	54·9	180	..... 69
York Minster	64·9	213	..... 60
Boston	79·2	260	..... 47

* We quite agree with Dr. Wild's objections to these returns, but it is difficult to know where to draw the line. Dr. Wild would have obtained different mean values had he omitted the Paris record, the discordance of which he attributes (we think) to a wrong cause : he ascribes it to the different size of the gauges ; we believe that it was due to poplar trees in the adjoining convent garden.

Now first let us take the lowest three, the middle three, and the highest three stations we have.

	Mean Altitude.	Mean Ratio.
Lowest Three Stations	75 ft. 8 in.	59.0
Middle „ „	117 „ 8 „	58.3
Highest „ „	217 „ 8 „	58.7

The ratios are practically identical, while the heights differ by 142 ft. Moreover, the table bristles with contradictions; the lowest gauge has the *least* ratio but one, instead of the greatest, as, according to Dr. Wild, it should have. We have a *greater* ratio at 180 ft. than at any lower height (except at 89 ft.), instead of its being *less* than at all the lower ones.

4. Influence of the Position of the Rain Gauge.

This section gives first the irregular results of the position series (the two sides and the top of the barn, attached to the chimney-pots, and in the gutter) at Strathfield Turgiss, and also the discordant values produced by the slope of the ground at Ulley Reservoir. Dr. Wild then mentions two gauges kept by himself at the Berne Observatory (1) 4 ft. above ground and 13 ft. S.W. of a building about 20 ft. high, and (2) on the roof of the building 16 ft. above the ground, of which the upper gauge (2) caught 11 per cent. more than the lower one.

Then follow the results for 1869 and 1870 of two gauges in the court of the Central Institute at St. Petersburg:—

(a) 6 ft. above ground, 10 ft. distant from the 20 ft. high observatory.
 (b) 12 ft. „ „ 26 ft. „ „ „ „ „ „

	Amount.		Ratio.	
	(a)	(b)	(a)	(b)
	Protected by Observatory. 6 ft. above ground.	Free. 12 ft. above ground.	Protected by Observatory. 6 ft. above ground.	Free. 12 ft. above ground.
Ratio, 1869.....	110	100	100	91
„ 1870.....	104	100	100	97

In rare cases some little snow from the roof of the Observatory was blown into these gauges.

In 1872 a new gauge (c) was started, 3 ft. above ground and surrounded by a fence 3 ft. high, and in 1873 it was removed to (d) a

large open space (200 ft. square), 130 ft. from any building, and left without a fence. The ratios then were—

	(a) Protected by Observatory, 6 ft. above ground.	(c) Protected by Fence, 3 ft. above ground.	(a) Protected by Observatory, 6 ft. above ground.	(c) Protected by Fence, 3 ft. above ground.
1872	100	101	99	100
	(a) Protected by Observatory, 6 ft. above ground.	(d) Quite Open, 3 ft. above ground.	(a) Protected by Observatory, 6 ft. above ground.	(d) Quite Open, 3 ft. above ground.
1873	100	95	106	100

This shows that the effect of the shelter by the building and by the fence was nearly the same, and that about 5 per cent. less was collected by the gauge in the open field; but *strict* comparability is prevented by the different heights of the two gauges.

Towards the end of 1876 Dr. Wild had a 10 in. diameter gauge fitted with a sort of quadrantal segmentation by strips of zinc, and by the side of it an ordinary funnel attached to the same post. The results were as follows:—

ST. PETERSBURGH.

Gauges, with and without segmentation, 6 ft. above ground.

	1877		1878		1879		Mean.	
	With Segmentation.	Ordinary.	With Segmentation.	Ordinary.	With Segmentation.	Ordinary.	With Segmentation.	Ordinary.
Whole year	102	100	101	100	101	100	101	100
Winter	105	100	103	100	103	100	104	100

They were then raised to 16 ft. above the ground and recorded for three years.

	1880		1881		1882		Mean.	
Whole year	104	100	103	100	102	100	103	100
Winter	111	100	109	100	106	100	109	100

The next experiments consisted in recording three gauges, all 3 ft. above ground and in the open field. (d) a gauge placed in the centre of a boarded enclosure 8 ft. high and about 16 ft. square.

(*e*) an ordinary gauge, (*f*) a gauge fitted with segmental divisions. the results were as follows:—

	1880		1881		1882	
	(<i>d</i>)	(<i>e</i>)	(<i>d</i>)	(<i>f</i>)	(<i>d</i>)	(<i>f</i>)
Whole year	100	92	100	96	100	97
Winter	100	90	100	89	100	96

Dr. Wild then discusses these observations rather carefully, and shows that especially in winter and in times of light drifting snow the ordinary gauge (*e*) catches much less than either the one in the boarded enclosure (*d*) or the one with the segmental divisions (*f*).

The article refers to papers by Professor Nipher and Herr Börnstein, and gives a short comparison of gauge (*d*) with a gauge said to be of Nipher's pattern.

The concluding paragraph of the paper is to the following effect, and considering how long we have struggled to ensure the approximate uniformity which now prevails at British stations it is a great comfort to us to find almost identical views enunciated by Dr. Wild.

“In conclusion, if we compare the effect upon the total amount collected by a rain gauge we shall find that the form, material, colour and magnitude of a gauge are much less influential than the mode of exposure, and the height of the rain gauge above the soil. In order, therefore, to render more comparable the measurements of rainfall at one and the same place at different times, or simultaneous observations with various instruments differently placed, which effects may influence the results to the extent of 10 per cent., it is necessary to endeavour to determine the corrections requisite to reduce them to uniformity. In some cases this may safely be done, but in others lack of information as to the precise surroundings may lead one far astray. *Therefore if it is desired to have yearly totals true within 5 per cent., and monthly totals true within 10 per cent., it is necessary that much greater uniformity as to the mode of exposure and height of rain gauges above the ground should be secured.*”

After writing the foregoing notice, it appeared very desirable to ascertain exactly the nature of the arrangements adopted, and, as no engravings were given in the *Repertorium*, we asked Dr. Wild to

favour us with drawings; he not only did so (and they are reproduced in the following plate), but was also kind enough to send the following letter :—

PHYSIKALISCHES CENTRAL OBSERVATORIUM,
ST. PETERSBURGH, 3/15, *April*, 1886.

SIR,—In accordance with your request I enclose drawings of the two rain gauges : No. 1 with the wooden protection against indrifting snow, No. 2 with Dr. Nipher's funnel protector. In my paper in the *Repertorium* I was able to give the comparison of only four months ; it would be interesting to state in your epitome the results for the whole year, and I therefore give them :—

Rainfall at St. Petersburg.

	No. 1. In Wooden enclosure. Above ground	No. 2. With Nipher's funnel. 10 ft.	No. 3. Unprotected. 10 ft.
	3 ft. in.	10 ft. in.	10 ft. in.
1885—January	1·18	1·13	·80
February ...	1·72	1·89	1·61
March.....	·49	·48	·40
April	·83	·80	·74
May.....	1·97	1·88	1·86
June.....	1·58	1·54	1·57
July.....	3·39	3·34	3·34
August	2·62	2·50	2·53
September ...	3·83	3·86	3·78
October	2·62	2·77	2·45
November ...	1·15	1·18	1·01
December ...	·66	·64	·46
	22·04	22·01	20·55

Hence it is clear that these two gauges on the average agree within one per cent, and therefore they may evidently be trusted as giving correct results.

I have stood inside the wooden enclosure during snow and strong wind, and seen the flakes falling in parabolic paths gently into the rain gauge, and I have seen an anemometer inside recording 1·5 metres per second ($3\frac{1}{2}$ miles an hour) while outside the enclosure it was recording 14 metres per second (31 miles an hour).

As Dr. Nipher's arrangement is much simpler than mine, I think of supplying it to such of our stations as specially need it.

Yours very truly,

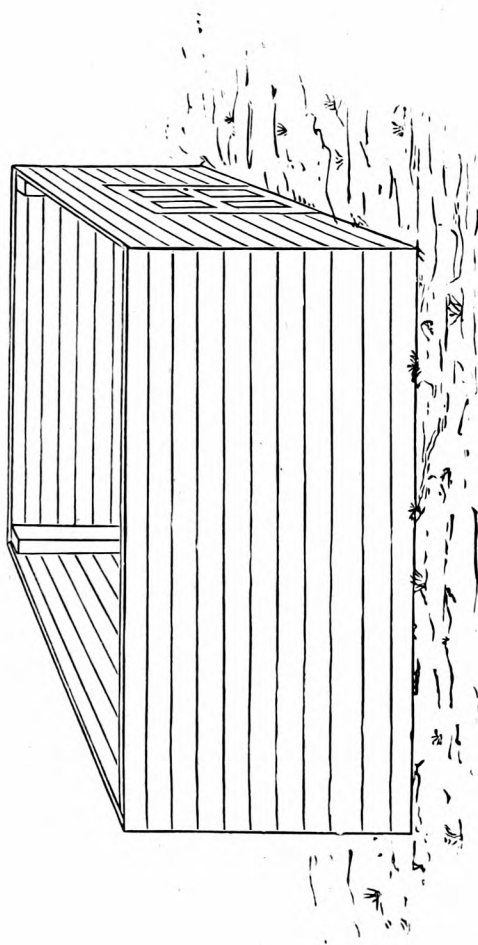
F. WILD.

G. J. SYMONS, Esq.

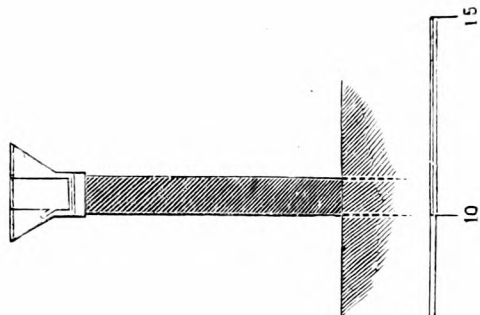
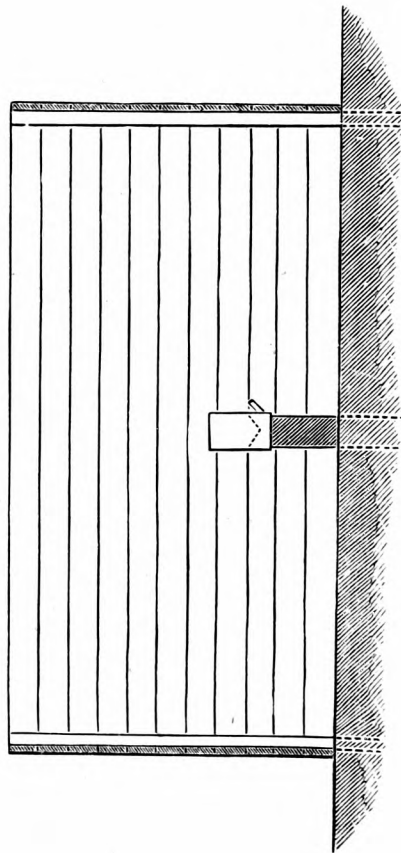
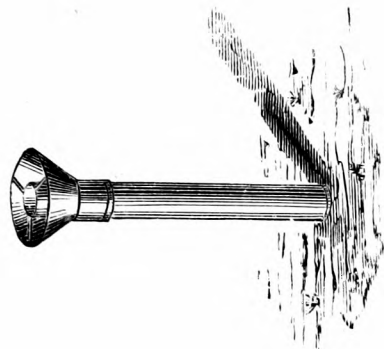
Here we must, for the present, leave the subject; and we do so fully intending to resume its consideration, and with some regret, with

RAIN GAUGE EXPERIMENTS — ST. PETERSBURGH.

WILD'S ENCLOSURE.



NIPHER'S FUNNEL.



SCALE OF FEET.



just a tinge of shame, but with, we hope, strong “extenuating circumstances.”

It appears that there have been at least three long papers written and published respecting Professor Nipher’s gauge, and yet until we began to translate Dr. Wild’s article we knew nothing of them. We have repeatedly stated our opinion that the multiplicity of publications is a great evil. It will be remembered that Dr. Hellmann showed that, even in 1883, meteorological publications were appearing at the rate of 800 per annum, or more than two each day, and that this rate was increasing. Those, therefore, who, like ourselves, have masses of original matter to work up, unavoidably miss much that is printed, and hence they fail as we have done. Curiously enough, Dr. Nipher has long been in the habit of favouring us with copies of his papers, but the one that started all these investigations never came.

The papers are :—

- (1.) On the Determination of the True Amount of Rain by Means of Gauges at Great Heights above the Ground. By F. E. Nipher, Proc. American Ass. Advan. Sci. ; St. Louis, 1878.
- (2.) Translation of the above into German. Zeits. d. Osterr. Gesell. f. Met. ; Wien, 1879, p. 250.
- (3.) Ueber den von Nipher vorgeschlagenen Schutztrichter für Regenmesser, Von Prof. R. Börnstein. Met. Zeits. Band I. Berlin, 1884, p. 381.

Curiously enough the volume containing the first of these papers seems to be very rare—we should be very glad to hear of a copy—there is not one at the Royal Society, the British Association, the Royal Institution, the Royal Meteorological Society, University College or in the Ronalds Library. Our American friends are generally so liberal with their publications that this scarcity is quite phenomenal.

ON THE RELATIVE FALL OF RAIN DURING THE DAY AND DURING THE NIGHT.

FOR rather more than twenty years the fall of rain at Camden Square, London, has been measured twice daily, viz., at 9 a.m. and at 9 p.m.

I thought that it would be of interest to discuss these records, and accordingly tabulated the whole of the twenty years, 1865-84.

I do not want to load this article with figures, and therefore give only the summaries. Moreover, although of course 6 a.m. to 6 p.m. would have been the proper "day," and 6 p.m. to 6 a.m. the proper "night," I am by the fact of the observations being made three hours later in each case obliged to take as "day," the fall between 9 a.m. and 9 p.m., and as "night," that between 9 p.m. and 9 a.m.

In the first place I dealt with the yearly totals, but the results were not striking. I divided the 20 years into two decades to see that each gave approximately similar results, and found as follows:—

	TOTAL RAIN.		Excess by Day.	PER CENT.		Excess by Day.
	Day.	Night.		Day.	Night.	
	in.	in.	in.			
1865 to 1874...	133·39	124·45	8·94	100	93	7
1875 to 1884...	143·49	137·27	6·22	100	96	4
1865 to 1884...	276·88	261·72	15·16	100	94	6

As far therefore as the gross yearly totals go, we find that the rain by day and by night is nearly equal, that there is one seven-teenth more by day than by night, but that of course is a difference of no importance.

I then took out each of the months separately, and in the follow-

ing table give the monthly totals for each decade, and for the twenty years.

MONTHS.	1865-74.			1875-84.			1865-84.		
	Excess by Day. in.	Excess by Night. in.		Excess by Day. in.	Excess by Night. in.		Excess by Day. in.	Excess by Night. in.	
January ...	—	4·27	.....	1·01	—	.....	—	3·26	.....
February..	·26	—	.....	—	3·80	.....	—	3·54	.....
March.....	—	1·18	.....	—	1·74	.....	—	2·92	.....
April	1·64	—	.....	—	1·44	.....	·20	—	.....
May	2·46	—	.....	·36	—	.....	2·82	—	.....
June	—	·18	.....	8·59	—	.....	8·41	—	.....
July	·23	—	.....	7·70	—	.....	7·93	—	.....
August ...	2·68	—	.....	6·28	—	.....	8·96	—	.....
September	·63	—	.....	—	4·20	.....	—	3·57	.....
October ...	4·51	—	.....	—	·22	.....	4·29	—	.....
November	·88	—	.....	—	3·56	.....	—	2·68	.....
December.	1·28	—	.....	—	2·76	.....	—	1·48	.....
	14·57	5·63	.....	23·94	17·72	.....	32·61	17·45	.....
Deduct	5·63	—	.....	17·72	—	.....	17·45	—	.....
Excess by Day	8·94	—	.....	6·22	—	.....	15·16	—	.....

No one could contend that these figures look satisfactory, and yet perhaps, after all, they afford some useful information. We will group the months in seasons.

			AMOUNT.		PER CENT.	
			Total. in.	Mean per Month. in.	Day.	Night.
Winter (November to March),	Excess by night		13·88	2·78	100	114
Spring (April and May)	„ „ day		3·02	1·51	100	92
Summer (June, July, August)	„ „ day		25·30	8·43	100	70
Autumn (Sept. and October)	„ „ day		·72	·36	100	99

This may be delusive, but I do not think that it is so. It gives an excess at night in winter, nearly equality in spring and autumn, and a great excess by day in summer.

The great difficulty in determining anything like a symmetrical curve is the extreme irregularity of the fall of rain—the two Sunday thunderstorms in June, 1878, in the first of which 3·28 in. fell in 56 minutes, have largely contributed to the different values for June in the two decades, but even allowing 5 in. for them, there would still be a day excess of 20 in. On the whole, therefore, I incline to accept the figures as approximately correct and as showing that—

- (1.) *In winter the nights are wetter than the days.*
- (2.) *In spring and autumn there is not much difference.*
- (3.) *In summer nearly half as much again falls by day as by night.*

I venture to suggest that this summer excess is chiefly due to thunderstorms, especially those above mentioned, and that the investigation proves that the condensation produced by the nocturnal fall of temperature is very trifling. Possibly the explanation of its smallness lies in the small altitude above the ground to which the extremes of daily range of temperature rise.

In this country, only two attempts have been made to determine the relative fall of rain in different hours of the day.

In the *Proc. Met. Soc.*, March 1868, Mr. Glaisher, F.R.S., gave an analysis of the records of the rain gauge attached to Osler's anemometer on the roof of the Royal Observatory Greenwich, during the six years, 1861-66. The results worked up on exactly the same plan as the Camden Square ones give—

	TOTAL RAIN.		Excess during Night.		PER CENT.	
	Day. in.	Night. in.	in.	in.	Day.	Night.
1861-66 ...	40·45	45·26	...	4·81	100	112

Seasons.		AMOUNT.		PER CENT.	
		Total.	Mean per Month.	Mean per Month.	Day. Night.
Winter (Nov.-March)	Excess by Night	2·09	·42	100	116
Spring (April, May)	„ „ „	1·79	·90	100	127
Summer (June, July, Aug.)	„ „ Day	1·21	·40	100	91
Autumn (Sept., Oct.)	„ „ Night	2·13	1·06	100	126

In the *Quarterly Weather Report* for January-March, 1877, Mr. R. H. Scott, F.R.S., discussed the rain records from the seven Observatories of the Meteorological Council during ten years, 1871-80. I have re-arranged his values for Kew on the same plan as the other two records already quoted, with the following results:—

	TOTAL RAIN.		Excess during Day.		PER CENT.	
	Day. in.	Night. in.	in.	in.	Day.	Night.
1871-80 ...	133·40	116·30	...	17·10	100	87

Seasons.		AMOUNT.		PER CENT.	
		Total.	Per Month.	Mean per Month.	Day. Night.
Winter (Nov.-March)	Excess by Day...	2·90	·58	100	93
Spring (April, May)	„ „ „	1·60	·80	100	92
Summer (June, July, Aug.)	„ „ „	10·20	3·40	100	76
Autumn (Sept., Oct.)	„ „ „	2·40	1·20	100	91

We may now see whether there is any harmony in the results of these three trials, but we must premise that it seems to us that it is rather a forlorn hope to expect any symmetrical curve from six or even ten years' observations of so variable an element as hourly rainfall.

First as to yearly totals, *i.e.*, ignoring seasons, the following are the ratios :—

	Day.	Night.
Greenwich (6 years), 1861-66.....	100	112
Kew (10 years) ...1871-80.....	100	87
Camden (10 years), 1865-74....	100	93
„ (10 „), 1875-84.....	100	96
„ (20 „), 1865-84.....	100	94

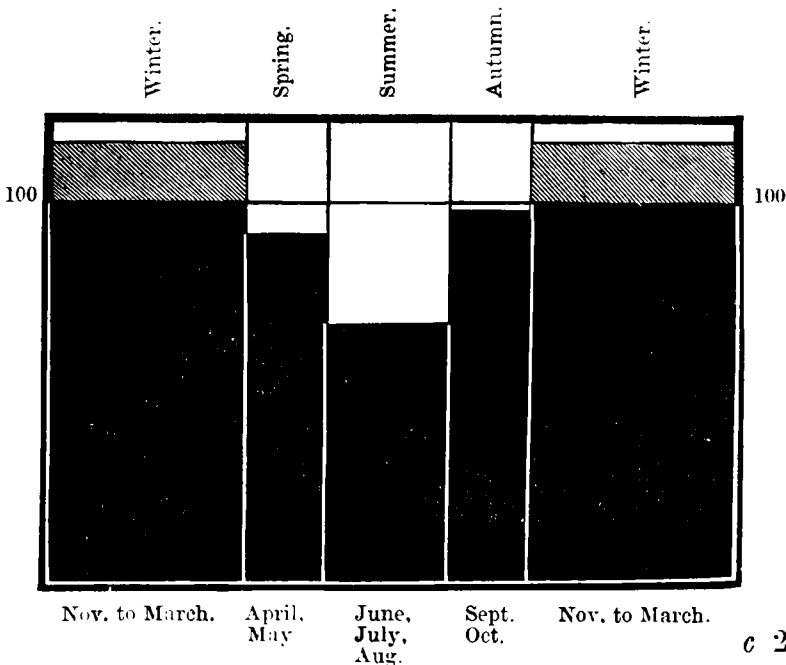
As Greenwich and Kew give exactly opposite results, there is probably not much harm in assuming that the Camden value is near the truth, and that the rainfall by day, 9 a.m. to 9 p.m., is slightly, but only slightly greater than that by night.

In the following table it is to be understood that the fall by day is uniformly taken as 100, therefore an entry of 116 as the night ratio indicates that 16 per cent. more rain falls at night than by day ; an entry of 87 that 13 per cent. less rain falls by night than by day :—

Seasonal.	Greenwich.	Ratio of Night Rainfall.		Camden.
Winter (Nov.-March)	116	.....	93	114
Spring (April, May)	127	.....	92	92
Summer (June, July, Aug.)...	91	.....	76	70
Autumn (Sept., Oct.).....	126	.....	91	99

Here, again, the figures are terribly erratic, but happily they all agree as to the principal fact which has come out of the whole enquiry, *viz.*, the great excess of rain by day in summer, and therefore I conclude by giving with some confidence a diagram of the results of my own 20 years' record :—

NIGHT RAINFALL.



A RAIN GAUGE AT SEA.

THERE are so many difficulties attendant upon attempting to record at sea the amount of rainfall that most persons regard it as hopeless.

Of course, in a cyclone or heavy storm the probabilities are that, if the gauge were up aloft, it would be carried away ; if on the deck, that it would be filled with sea water. Even in fair weather, a gauge is surrounded with difficulties. If up aloft, it will be no more trustworthy than a gauge on a church steeple in a breeze, and if on deck it is not easy to find a place free from shelter of masts, funnel, or tackle. Then there is the list of the ship and its change of position rendering obedience to Rule III. (Level), not easy even if the gauge be supported on gimbals. There is the effect due to the fact that the gauge is always being carried into a fresh place, and therefore, if it *meets* a shower, it only registers perhaps half of it ; if it *runs with* a shower, it may collect two or three times as much as falls on any *one* spot, and as it may traverse a shower at any angle, it may apparently collect anything between half and three times as much as a stationary gauge.

About twenty years since we had to face these difficulties, or rather some of them, when it was decided that the Trinity Brethren should be requested to allow a rain gauge to be placed upon the Nore Lightship, and regularly observed.* Our first idea was to weight the gauge heavily and suspend it from gimbals, but the fear of setting up pendulous motion and the certainty that it would not take its proper position as quickly as the angle of falling rain would change, led us to think that perhaps, after all, the errors due to the rolling of the lightship would mostly neutralize one another, and therefore we fixed it on a dwarf post. It must be remembered that as a lightship carries no sail and little rigging, she does not have the list of a vessel under way.

In Mr. Gaster's paper on "Ocean Rainfall," in *British Rainfall*, 1866, p. 13, the question of rainfall measurement at sea was considered, and a suggestion made which merits more attention than it

* *British Rainfall*, 1866, p. 7.

has received. Mr. Gaster pointed out some of the many difficulties attaching to quantitative measurements, and suggested that it would at any rate afford a ground common to observers both on land and on sea, if each would record the total duration of rain in hours. This would be easier for the sea observers than for the landmen, for on board ship some one is always keeping watch, whereas observations at land stations between midnight and 6 a.m. are rarer than black swans. The landmen could, however, beat the sailors if Messrs. Richard Frères, or somebody else, would give us a good self-recording rain gauge at a low price.

The chief, if not the only, worker in this field at present is Surgeon-Major Black, who for ten or a dozen years has been interviewing captains, providing them with rain gauges designed by himself, and with blank forms for recording the results. But the subject has not (to our knowledge) been taken up by the Meteorological Office, and it is very uphill work for a private individual.

In August, 1885, Dr. Black was a passenger on that excellent steamer, the "Ceylon," when she went for a fortnight's yachting tour round the British coast. He took with him a rain gauge and a vaporimeter, and has favoured us with the following description of the instruments and table of the results :—

Extract from Log S.S. "Ceylon," Captain Lunham ; rig, barque ; tonnage, 2,200 ; horse power, 200 ; rain gauge and vaporimeter, 6 inches diameter ; hour of observation, 6-7 a.m. ; position, wheel house.

August, 1885.	Latitude.	Longitude.	Rain. inches.	Evap. inches.	Miles run.	Localities.
6th	51 27 N.	0 24 E.	...	...	...	Thames River, Gravesend.
7th	50 37 N.	1 47 W.	·02	·05	221	English Channel.
8th	50 58	7 7	...	·13	241	Atlantic Ocean.
*9th	51 51	8 17	·50	·09	85	Cork Harbour.
*10th	...	...	·65	...	...	Cork Harbour.
11th	51 25	9 49	...	·15	125	Glengariff Harbour.
12th	...	...	·20	·08	...	Glengariff Harbour.
13th	53 17	6 8	·01	·25	240	Kingston Harbour.
14th	53 17	6 8	...	·08	...	Kingston Harbour.
15th	56 19	6 29	...	·23	230	Iona Bay.
16th	56 24	5 27	·01	·15	60	Oban Harbour.
17th	58 33	2 53	·20	...	243	Pentland Straits.
18th	56 0	3 14	...	·10	187	Frith of Forth.
19th	54 3	0 5 E.	·01	·15	182	Flamboro' Head.
20th	57 27	0 24 E.	·01	·06	211	Thames River, Gravesend.
Totals	..	...	1·61	1·52	2020	.....

* Cyclone passing.

The Rain Gauge is one suspended on a pivot to secure its horizontality, and enclosed in a box, open above, so that it is defended from wind and sun, and moveable anywhere. The Evaporating Dish was cylindrical, of 6 inches diameter, painted white, and contained 1 in. depth of fresh water, which was measured and renewed every morning. The Rates of Evaporation are found in this, as well as in other voyages, to be independent of the speed of the ship, and to be due to the direction and velocity of the winds as much as is the rain.

ROTHERHAM EXPERIMENTAL RAIN GAUGES.

THE records for 1885 from these gauges, originally established at the cost of Mr. Chrimes, are given on subsequent pages. They have, as explained in previous volumes, already solved several difficulties, and their work is now nearly done.

DIRECTION WHENCE MOST RAIN COMES.

As regards the five-mouthed gauge, we some years since pointed out the interest which would attach to the erection of a few similar ones in widely distant and different localities, so that we might know to what extent the prevailing direction of rain-bearing winds differed in different localities.

It will be remembered that this gauge has one horizontal mouth (like an ordinary rain gauge), and four vertical ones (like a rain gauge laid on its side), one facing each of the four cardinal points. From the records of this gauge the precise direction whence most rain fell can be determined ; we think that it will suffice to give the directions approximately, viz. :—

1875.....	N.W.	1879.....	E.N.E.	1883.....	N.E.
1876.....	W.S.W.	1880.....	N.E.	1884.....	S.E.
1877.....	E.S.E.	1881.....	S.S.W.	1885.....	E.
1878.....	N.N.W.	1882.....	N.W.	Mean of 11 years N.E.	

This is certainly scarcely the result which most persons would have expected, but it must be remembered that Rotherham is upwards of 100 miles from the St. George's Channel, and that to the S.W. of it rise the high Derbyshire hills ; both these causes will have drained the ordinary rain-bearing S.W. clouds before they reach Rotherham, and hence doubtless the explanation of the N.E. rains *there* being slightly heavier than the S.W. ones.

DISTRIBUTION OF RAIN ALONG THE RESERVOIR BANK.

In *British Rainfall*, 1883, we gave a plan and section of the Reservoir bank, and explained that the old elevation-series of gauges having yielded all necessary data on that head, had been cut down

to 5 ft. each, and placed at distances of 110 ft. apart along the length of the bank.

We have now records complete for three years from these ten gauges, all the same size, all similarly mounted, and in all respects as nearly as possible identical. The bank (unfortunately for this enquiry) runs from S.W. to N.E. ; the gauges are in pairs, one read daily, the other monthly ; the stations are numbered from the S.W. end, which is No. 2, to the N.E. which is No. 6 ; No. 4 is near the middle, and has been taken as the standard, the quantities of rain being expressed as ratios, No. 4 being taken as 100.

		No. 2.	No. 3.	No. 4.	No. 5.	No. 6.
Daily Gauges.	1883.....	101	97	100	97	103
	1884.....	103	101	100	99	103
	1885.....	99	98	100	99	104
	Mean ...	101·0	98·7	100·0	98·3	103·3
Monthly Gauges.	1883.....	110	101	100	101	107
	1884.....	115	104	100	102	108
	1885.....	106	96	100	102	103
	Mean ...	110·3	100·3	100·0	101·7	106·0
Mean of Daily and Monthly Gauges }		105·6	99·5	100·0	100·0	104·6

Nobody would expect gauges on a reservoir bank to agree within less than 1 or 2 per cent., but on the average of three years they might perhaps be expected to agree with one another within those limits. But of course to say that, is not to say that on any reservoir bank one is likely to get the same rainfall as on a level field.

We may now look at the results in the table, and some of them are very startling. Gauges Nos. 3, 4 and 5, which are those in the middle of the bank, agree on the average marvellously well, only a half per cent. of difference—1-200th of the total amount. The four end gauges being in rather less exposed positions, collect more, but the daily and monthly gauges do not agree well, the former making the excess rather more than 2 per cent., while the latter make it 5 per cent.

The whole of the records have been re-grouped in seasons, and the ratios worked out separately for each season of each year, and for each gauge, but no marked result having been obtained, it does not seem necessary to print the mass of figures.

Seeing that the daily and monthly gauges, though they agree as to the nature of the influence of position, differ as to its amount, it

is possible that the difference is due to some small error in the gauges, I therefore purpose asking Mr. Berry to exchange the gauge now at No. 2 with the one now at No. 3, and No. 5 with No. 6, on the 1st of January, 1887, and that I think will clear up the only doubt now remaining.

**RAIN GAUGE EXPERIMENTS, ULLEY RESERVOIR,
ROTHERHAM, 1885.**

Lat. $50^{\circ} 22' 59''$ N. Lon. $1^{\circ} 19' 9''$ W. Altitude 184 ft.

Months.	FIVE MOUTHED GAUGES. 5 ft. above ground.					INCLINED ROTATING GAUGES. 5 ft. above ground.			
	Facing East.	Facing North.	Facing West.	Facing South.	Horizon Centre.	$22\frac{1}{2}^{\circ}$	45°	$67\frac{1}{2}^{\circ}$	90°
January	5·470	1·609	·999	·874	·855	1·800	2·547	3·011	3·120
February	4·497	1·560	·707	1·855	1·723	3·046	4·126	4·392	4·265
March	2·478	·826	·366	·540	·790	1·375	1·651	1·855	1·722
April	4·000	1·204	·163	·572	1·123	1·903	2·412	3·052	2·592
May	1·957	·872	·554	·503	1·323	1·918	2·190	2·202	1·901
June	·279	1·630	·493	·053	2·227	2·565	2·893	1·635	1·865
July	·044	·017	·137	·256	·522	·607	·663	·575	·434
August	·493	·751	1·174	·744	2·442	3·069	3·393	2·943	2·143
September ...	·676	·245	·380	1·067	1·537	2·151	2·466	2·242	1·856
October	7·531	4·396	4·393	·921	5·322	6·886	6·894	7·873	7·030
November ...	3·212	·712	·414	1·744	1·945	2·801	3·766	3·410	3·521
December ...	·629	·321	1·170	·196	·365	·875	1·149	1·568	1·618
Year	31·266	14·143	10·950	9·325	20·174	28·996	34·144	34·758	32·067

Months.	POSITION No. 1. 1 ft. above ground.			POSITION No. 2. 5 ft. above ground.			POSITION No. 3. 5 ft. above ground.		
	Read Daily.	Read Mnthly.	Diff.	Read Daily.	Read Mnthly.	Diff.	Read Daily.	Read Mnthly.	Diff.
January	1·069	1·182	+·113	·864	·953	+·089	·934	·944	+·010
February	1·942	1·989	+·047	1·556	1·789	+·233	1·726	1·550	—·176
March	·998	1·024	+·026	·670	1·020	+·350	·788	·834	+·046
April	1·355	1·400	+·045	1·130	1·368	+·238	1·100	1·135	+·035
May	1·471	1·569	+·098	1·146	1·399	+·253	1·165	1·186	+·021
June	2·290	2·450	+·160	2·062	2·224	+·162	2·144	1·941	—·203
July	·587	·582	—·005	·502	·522	+·020	·500	·500	·000
August	2·704	2·768	+·064	2·531	2·418	—·113	2·518	2·544	+·026
September ...	1·772	1·799	+·027	1·605	1·579	—·026	1·508	1·478	—·030
October	5·614	5·613	—·001	5·210	5·113	—·097	4·851	4·892	+·041
November ...	2·122	2·163	+·041	1·869	2·056	+·187	1·808	1·572	—·236
December ..	·441	·445	+·004	·347	·370	+·023	·324	·326	+·002
Year	22·365	22·984	+·619	19·492	20·811	+1·319	19·366	18·902	—·464

Months.	POSITION No. 4. 5 ft. above ground.			POSITION No. 5. 5 ft. above ground.			POSITION No. 6. 5 ft. above ground.		
	Read Daily.	Read Mnthly.	Diff.	Read Daily.	Read Mnthly.	Diff.	Read Daily.	Read Mnthly.	Diff.
January	·921	·907	—·014	·902	·931	+·029	·944	·953	+·009
February.....	1·780	1·687	—·093	1·772	1·737	—·035	1·871	1·779	—·092
March	·806	·789	—·017	·807	·789	—·018	·885	·862	—·023
April	1·164	1·160	—·004	1·158	1·150	—·008	1·282	1·300	+·018
May	1·172	1·290	+·118	1·213	1·344	+·131	1·288	1·358	+·070
June	2·236	2·197	—·039	2·306	2·294	—·012	2·438	2·390	—·048
July... ..	·495	·492	—·003	·466	·469	+·003	·478	·484	+·006
August	2·484	2·324	—·160	2·452	2·490	+·038	2·362	2·430	+·068
September ...	1·490	1·494	+·004	1·455	1·464	+·009	1·550	1·222	—·328
October	5·147	5·191	+·044	5·065	5·331	+·266	5·353	5·364	+·011
November ...	1·735	1·841	+·106	1·665	1·803	+·138	1·814	1·766	—·048
December ...	·290	·323	+·033	·286	·325	+·039	·298	·348	+·050
Year	19·720	19·695	—·025	19·547	20·127	+·580	20·563	20·256	—·307

RAINFALL AT THE ROYAL OBSERVATORY, GREENWICH.

Lat. 51° 28' 38" N. Long. 0° 0' 0"

Communicated by W. H. M. CHRISTIE, Esq., M.A., F.R.S., F.R.A.S., &c.,
Astronomer Royal.

1885	No. of days on which rain fell.	MONTHLY AMOUNT OF RAIN COLLECTED IN EACH GAUGE.							
		Osler's Anemometer.		On roof of Octagon Room.	On roof of Magnetic House.	On roof of Photographic Thermometer Shed.	Gauge partly sunk in the ground.		
		Self-registering Gauge.	Second Gauge.				a	b	c
Diameter of Gauge in inches. }	...	10 × 20	10	8	8	8	8	8	8
Height above Ground. }	...	50ft. 8in.	50ft. 8in.	38ft. 4in.	21ft. 9in.	10ft. 0in.	0ft. 5in.	0ft. 5in.	0ft. 5in.
Height above Mean Sea Level. }	...	206ft.	206ft.	193ft.	177ft.	165ft.	155ft.	155ft.	155ft.
January	15	in. 591	in. 599	in. 916	in. 1107	in. 1317	in. 1424	in. 1396	in. 1422
February	19	1575	1504	1891	2008	2213	2335	2301	2333
March	8	925	993	1281	1456	1551	1496	1541	1548
April	9	1656	1655	1829	1940	2041	2049	2028	2051
May	19	1465	1434	1684	1873	2049	2111	2000	2081
June	7	1147	1163	1440	1572	1641	1666	1600	1639
July	5	383	350	413	469	491	503	475	494
August	10	1013	1025	1117	1183	1236	1322	1196	1254
September	21	2899	2867	3296	3576	3742	3732	3702	3739
October	23	2390	2426	2798	3189	3391	3410	3399	3455
November	17	1902	2080	2394	2605	2822	2827	2831	2820
December	13	556	538	732	969	1053	1127	1128	1097
Sums	166	16502	16634	19791	21947	23547	24002	23597	23933

In regard to the ground gauges, (a) is the ordinary ground gauge, a new copper gauge having been substituted on January 1 for the old gauge; (b) the old monthly gauge; and (c) an additional ground gauge. The gauges are all read daily.

A rainy day is considered to be one on which 0·005 in., or more, is collected in the ground gauge (a).

April 22, 1886.

WILLIAM ELLIS,
For the Astronomer Royal.

THE STAFF OF OBSERVERS.

COUNTY ORGANIZATIONS.

OUR impression is that on the whole there is a decrease in the energy shown for this class of work. We enumerate in the order of the general tables the organizations known to exist, and add a few words embodying our latest impression respecting each.

KENT.—*Sittingbourne District*.—Mr. R. M. Mercer has sent us a considerable number of returns, especially some very welcome ones from Sheppey, but we have not seen any local tables published by him.

KENT.—*Rochester District*.—The Rev. C. H. Fielding has not sent a copy of the *Rochester Naturalist* for many months, and we do not know whether he is still collecting the returns or not.

HERTFORDSHIRE.—The collection of records from this county, and from a few outlying stations, is still continued by the Rev. C. W. Harvey, and the returns are published monthly in a local paper, and at the end of each year in the *Transactions of the Hertfordshire Natural History Society*.

NORTHAMPTONSHIRE.—The monthly totals and maximum falls for this county are collected by Mr. H. Terry, published in the local papers, and subsequently by the *Northamptonshire Natural History Society*.

CAMBRIDGESHIRE.—Monthly and extreme values and comparisons with averages are collected by Mr. H. F. Fryer, of Chatteris, and published monthly.

ESSEX.—The daily falls at the majority of the Essex stations are collected and tabulated by Mr. D. Radford Sharpe, of Bocking, and printed *in extenso* in the *Essex Weekly News* and other local papers.

NORFOLK.—This, the earliest of the county organizations, and the one which was the pattern to Wiltshire and to Essex, is still conducted by the Rev. Canon Du Port, with no alteration except a steady growth. The whole of the daily values are still published monthly in the *Norfolk Chronicle*.

WILTSHIRE.—As intimated in our last, the care of the large system built up by the Rev. T. A. Preston has passed out of his hands, the Rev. C. Soames, of Mildenhall, having kindly assumed the responsibility. His last table contains the daily fall at 53 stations, besides remarks upon the month, and a watershed map of the county, showing the total fall at each station.

DEVON AND CORNWALL.—Abstracts from about 30 stations in these two counties are collected and published by the editor of *The Western Morning News*.

GLOUCESTER.—A compact table of abstracts is prepared monthly by Mr. Tyrer, of Cheltenham, and published by him in a local paper.

HEREFORD.—Monthly abstracts from stations in this county and in Radnor are collected and published under the direction of the editor of *The Hereford Times*.

ENGLAND AND WALES.

ABSENT RECORDS.

INSERTIONS.

MIDDLESEX (52).*

Hampton Wick (The Grove)— <i>Observer dead.</i>	Staines.
Hillingdon (Highfield)— <i>Record imp.</i>	Isleworth (Dunster Lodge) <i>2nd g.</i>
London (Springfield Road), N. W.— <i>Obs. moved.</i>	Ealing (Local Board Office).
„ („ „) <i>2nd g.—Observer moved.</i>	„ (Ashburne).
Holloway (Manor Road), N.— <i>Record imp.</i>	Kensington (Holland House).
Hampstead (Branch Hill Lge.)— <i>Rec. unreliable</i>	„ (Addison Gardens).
„ („ „) <i>2nd g.—Rec. unreliable.</i>	Child's Hill (Helenslea) N. W. <i>2nd g.</i>
Finchley East (Ardencaple)— <i>Observer moved.</i>	Upper Clapton.
„ Avenue House— <i>No reply.</i>	Crouch End.
Great Stanmore (Springlands)— <i>Observer moved.</i>	Winchmore Hill.
„ „ („ „) <i>2nd g.—Observer moved.</i>	
Enfield Chase— <i>Record ceased.</i>	
„ „ <i>2nd g.—Record ceased.</i>	
„ „ <i>3rd g.—Record ceased.</i>	

SURREY (76).

Redhill (Thornielee)— <i>No reply.</i>	Reigate Hill (Lovelands, Kingswood)
Nutfield (Claremont)— <i>Record ceased.</i>	Titsey (Botley Hill)
Croydon (Addiscombe) <i>2nd g.—Record ceased.</i>	Wallington (Harcourt Road).
„ („ „) <i>3rd g.—Record ceased.</i>	Croydon (Combe Lane).
	South Norwood (Cumberlow) <i>2nd g.</i>
	Virginia Water (Northlands).

* These and similar figures denote the total number of perfect records for the country which are given in the general tables p. [160] *et seq.*

KENT (95).

Gowdhurst Vicarage—*Record imp.*
 Ashford (Kennington)—*No reply.*
 Tunbridge (Clare House)—*Observer moved.*
 Maidstone (Tovil House)—*Record imp.*
 Forest Hill (Newfield House)—*Gauge upset.*
 Eltham Green—*Record ceased.*
 „ „ 2nd g.—*Record ceased.*

Dungeness.
 Hythe (Hillhurst Farm).
 Acrise Park.
 Tunbridge (St Mary's) 3rd g.
 Edenbridge (Falconhurst).
 Maidstone (Mote Park Gardens).
 „ (Debtling).
 „ Canterbury (Harbledown).
 Sittingbourne (Sharsted Court).
 Keston 2nd g.
 Birchington (Thor).
 Herne Bay.
 Reculver (Brook).
 Hayes (Layham's Farm).
 „ Common (The Warren)
 Sheppey (Leysdown).
 Rochester (Cooling Castle).
 Shooters Hill.
 Erith (Belvedere).

WEST SUSSEX (22).

Arundel (Dale Park)—*Record burnt.*
 Midhurst (Lynch)—*Record imp.*

Horsham (Rusper).

EAST SUSSEX (41).

Brighton (W.W. Goldstone Bottom)—*Rec. un-
 [reliable.]*
 St. Leonard's (Carisbrooke Rd.)—*Gauge moved.*
 Winchelsea—*Observer dead.*
 Burgess Hill—*Gauge moved.*
 Rye (Peasmarsh Place)—*No reply.*
 Hayward's Heath Asylum—*Record ceased.*
 Maresfield (Fletching) *Gauge moved.*

Beachy Head 2nd g.
 Lewes (Southmalling).
 Winchelsea (The Friars).
 Wivelsfield (Lyoth).
 Mayfield Vicarage.
 Balcombe Place.
 Forest Row (Ashdown Cottage).

HAMPSHIRE (65).

Sandown (Belgrave House) *old g.—Rec. ceased.*
 Newport (Lugley House)—*Record imp.*
 Ryde—*No reply.*
 Southampton (Red Lodge) 2nd g.—*Record imp.*

Shanklin (Bondi).
 Yarmouth (The Towers).
 Alton (The Wakes, Selborne).
 „ (Thedden Grange).
 Farnborough Grange.
 Fleet (Claremont House).
 Bramley.

BERKS (21).

Newbury (Weston)—*No record.*
 Long Wittenham 2nd g.—*Gauge moved.*

Hungerford (Poughley).
 Wantage (Letcombe Regis).
 Little Wittenham Rectory.

HERTS (38).

Great Berkhamstead (High St)—*Observer dead.*
 „ „ (Lower Mill)—*Record ceased.*

Great Berkhamstead (Rosebank).
 Baldock (Toggs Clothall).

BUCKS (14).

Brill—*No reply.*Cliveden.
Aylesbury (Mentmore)

OXFORD (28).

Henley-on-Thames (Stonor Park)—*Return not received.*Dorchester.
Oxford (Elsfield).
Chipping Norton (Kingham).

NORTHAMPTON (34).

Northampton (Holdenby House)—*Record ceased.*Weedon (Floore).
Northampton (Sedgebrook) 2nd g.
Holdenby Rectory.
Hazelbeach.
Kettering.

HUNTS (6).

Somersham—*Return not received.*

BEDFORD (22).

Woburn (Experimental Farm).
Amphill (Haynes Park).

CAMBRIDGE (31).

Pampisford Hall—*No reply.*
" (The Cottage)—*No reply.*
March—*Record imperfect.*
" *No observations.*

Trumpington.

ESSEX (37).

Clacton-on-Sea—*No observations.*
Braintree (Bocking)—*Record imperfect.*
Dedham (Lower Park)—*Gauge moved.*
Hedingham (Toppesfield)—*Record ceased.*Leyton Observatory.
Colchester (Beverley Road).
Manningtree (Lawford).

SUFFOLK (32).

Woodbridge (The Grange)—*Gauge moved.*
Newmarket (Moulton Rectory)—*Record imp.*
Lowestoft (Kirkley)—*Record unreliable.*

Aldborough (Aldringham).

NORFOLK (55).

Yarmouth (Dene Side)—*Record ceased.*
Norwich (Thorpe Hamlet)—*Gauge moved.*
Mattishall—*Observer moved.*
Holkham 2nd g.—*Record imperfect.*Denver.
Downham (Crimplesham).
Norwich (Higham).
South Walsham.

WILTS (50).

Donhead St. Andrew—*Record imp.*
Bradford—*Record imperfect.*
Trowbridge (Holt)—*Record ceased.*
Burbage (Wolfhall)—*Record imp.*
Shalbourne—*Record ceased.*
Durley—*Record imperfect.*
Corsham—*Record imperfect.*
Malmesbury (Charlton Pk)—*Return not received*Donhead St. Mary (Charlton House.)
Amesbury.
" (Figheldean).
Trowbridge (Rodney House).
Great Bedwyn.
Malmesbury (Minety Down).

DORSET (21).

Corfe Castle (Creech Grange).
Lyme Regis.

DEVON (83).

Paignton (Hollacombe)— <i>Record imp.</i>	Torquay (Watcombe Park).
Dartmoor (Lee Moor)— <i>No reply.</i>	Walkhampton (Lowery) <i>2nd g.</i>
Torquay (Rocombe House)— <i>Record ceased.</i>	Princetown (Cowsic Valley).
Ashburton (Widcombe Vicarage)— <i>Rec. imp.</i>	Chagford (Batworthy).
Bovey Tracey— <i>Record ceased.</i>	Rousdon [Lyme Regis] <i>2nd g.</i>
Clyst St. George— <i>Record ceased.</i>	Exeter (The Elms, Wonford).
Exeter (St. Leonard's Road)— <i>Record imp.</i>	Axminster (Great Trill).
„ (Brampford Speke) <i>2nd g. Record ceased</i>	Petrockstow (Heanton Satchville).
„ („ „) <i>3rd g. „ „</i>	Torrington (Beare Ho. Langtree).
Holsworthy (Cookbury Week)— <i>Record ceased.</i>	
Tiverton (Rose Bank)— <i>Record imp.</i>	
Church Stanton— <i>No observations.</i>	

CORNWALL (36).

Rame Rectory [Plymouth] *No observations.*
Stratton (Week St. Mary)—*No reply.*

SOMERSET (40).

Milverton (Fitzhead Court), <i>Return not received</i>	Yeovil, West Coker.
Watchet (Williton)— <i>Observer dead.</i>	Glastonbury.
Weston-super-Mare— <i>Record ceased.</i>	
Flax Bourton (Bourton Grange)— <i>Rec. ceased.</i>	Watchet (Old Clecve).
Bristol Docks— <i>Record imp.</i>	Radstock (Downside).

GLOUCESTER (50).

Stroud (Brimscombe Port)— <i>Record ceased.</i>	Minchinhampton (The Close).
Gloucester (Barnwood)— <i>Gauge moved.</i>	Cirencester (Further Barton).
	Alscot Park [Stratford-on-Avon].

HEREFORD (22).

St. Devereux (Whitfield Court)— <i>No reply.</i>	Brockhampton Court.
Ledbury (West Bank)— <i>No observations.</i>	Hereford.

SHROPSHIRE (31).

North Cleobury (Burf Cottage).
Bridgenorth (Aldenham Park).
Pontesbury (The Villa).
The Bulthy [Middletown].
Cheswardine (Knighton Res).

STAFFORD (29).

Lichfield (St. Michael's Rectory)— <i>Obs. dead.</i>	Netherton (Lodge Farm Res).
Weston-under-Lyziard— <i>No observations.</i>	Bloxwich (Sneyd Res).
Burton (Truman's Brewery)— <i>Record ceased.</i>	Hammerwich (Cannock Chase Res).
	Brewood (Belvide Res).
	Alstonfield Vicarage.

WORCESTER (26).

Malvern Wells— <i>Record ceased.</i>	Upton-on-Severn (Willow Bank.
Bewdley (Tanner's Hill)— <i>Gauge moved.</i>	Worcester.

WARWICK (22).

Kenilworth (Park Hill)— <i>Record imperfect.</i>	Farnborough Vicarage.
„ (Fern Bank)— <i>Observer dead.</i>	
Birmingham (Bloomsbury Street)— <i>Obs. dead.</i>	
„ (Winson Green) <i>2nd g.—Return</i>	
not received.	

LEICESTER (28).

Market Bosworth (Osbaston Hall).
 Bardon Hill House.
 Rotherby Hall.
 Whitwick (Mt. St. Bernard Abbey).
 Charley (Oaks Church).
 Black Brook (Spring Barrow).
 „ „
 Loughborough (NanPanton) *2nd g.*

RUTLAND (7).

Uppingham (Ayston)—*Observer dead.*
 Whitwell Rectory—*Record imp.*

LINCOLN (57).

Lincoln (Longhills)— <i>Record ceased.</i>	Boston (Churchyard).
Spilsby— <i>Record imp.</i>	Lincoln (Branston).
	„ (D'Isney Place).
	Alford (Mablethorpe).
	Riby.

NOTTS (34).

Nottingham (Park Hill).— <i>Gauge moved.</i>	Nottingham (Waterworks Office).
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DERBY (33).

Stapenhill Road [Burton]— <i>Gauge moved.</i>	Derby (Spondon).
Milford— <i>Record ceased.</i>	Chesterfield (Tapton House).
Wirksworth (Biggin)— <i>Observer moved.</i>	
Castleton— <i>Record imp.</i>	
Hathersage (Bamford)— <i>Record imp.</i>	

CHESHIRE (54).

Nantwich (Cholmondeley Castle)— <i>Observer dead.</i>	Chester (Waterworks).
Macclesfield (Wincle)— <i>Record imp.</i>	Siddington (Thornycroft Hall).
Chester (Abbots Hayes)— <i>Observer moved.</i>	Northwich.
Chelford (Astle Hall), <i>2nd g.—No observations.</i>	Thelwall.
Bowdon (Erlesdene)— <i>Record ceased.</i>	

LANCASHIRE (141).

Liverpool (Hope Street)— <i>Gauge moved.</i>	Ashton (Knott Hill).
Heaton Moor [Stockport]— <i>Gauge moved.</i>	Oldham (Brushes Clough) <i>new g.</i>
Bolton (Moss Bank)— <i>No observations.</i>	Milnrow (Coldgreave Piethorne).
Preston (Green Bank Railway)— <i>Record imp.</i>	Clayton-le-Moors (Oakenshaw).
Burnley (Rosegrove Cemetery)— <i>Record imp.</i>	Wyresdale (Wardstone).
„ (Mechanics' Institute)— <i>Record imp.</i>	
„ (Simonstone)— <i>Record imp.</i>	
„ (Briercliffe Vicarage)— <i>No observations</i>	
Galgate— <i>No reply.</i>	

YORK, WEST RIDING (162).

Huddersfield Cemetery— <i>No reply.</i>	Wortley.
Goole (Tillage Works)— <i>Record ceased.</i>	Denshaw (Ready Con Dean).
Todmorden (Stansfield Hall)— <i>Record ceased.</i>	Marsden (Deer Hill).
Halifax (Thorpe) 3rd g.— <i>Record ceased.</i>	Wakefield (Walton Hall).
Bradford (Heaton Res.)— <i>Record imp.</i>	Pontefract (Fern Hill).
„ „ „— <i>Record imp.</i>	Bradford (Leeshaw Res.)
Leeds (Crag Hill, Horsforth).— <i>Record ceased.</i>	York (Manor House).
Guiseley (Tranfield Lodge).— <i>Record ceased.</i>	Pateley Bridge (Castle Stead).
Skipton (Rye Croft, Crosshills).— <i>Observer dead</i>	Arneliffe (Halton Gill).
Ilkley (Myddelton Lodge).— <i>No observations.</i>	Oughtershaw School.
Skipton (Counter Hill).— <i>Record imp.</i>	
„ (Thorpe Fell, Barden).— <i>Record imp.</i>	
„ (Sandbed Beck, Burnsall).— <i>Record imp.</i>	
Settle (Austwick Hall).— <i>Record ceased.</i>	
Ripon (The Red House).— <i>Gauge moved.</i>	

YORK, EAST RIDING (20).

Hull (Alexandra Dock)— <i>Record ceased.</i>	Market Weighton (Houghton).
Cottingham— <i>Record imp.</i>	Bridlington Quay.
Beverley (Leconfield)— <i>Record imp.</i>	
Hornsea (East Gate House)— <i>No reply.</i>	
Hunmanby (Foxholes Rect.)— <i>No observations.</i>	
Ganton Hall [Scarborough]— <i>No reply.</i>	

YORK, NORTH RIDING (38).

Mickleton [Middleton]— <i>Gauge moved.</i>	Masham (Burton House), 2nd g.
	Leyburn (Bolton Hall).
	Swaledale (Summer Lodge).

DURHAM (30).

Sunderland (The Limes)— <i>Record ceased.</i>	Durham.
	Weardale W.W. (Waskerley) 1.
	„ „ „ 2.
	„ „ „ 3.
	„ „ „ 4.
	„ „ „ 5.
	„ „ „ 6.

NORTHUMBERLAND (47).

Wylam (Holeyn Hall)— <i>Record unreliable.</i>	Alnwick Castle.
Newcastle (Denton Burn)— <i>Observer moved.</i>	
Stamfordham— <i>Record ceased.</i>	
Morpeth (Bothalhaugh Lawn)— <i>Return not re-</i>	
„ („ „) <i>2nd g. [ceived.</i>	

CUMBERLAND (62).

Sprinkling Tarn— <i>Record imp.</i>	Scawfell Pike.
The Sty, 2nd g.— <i>Record imp.</i>	Arledon (Kirklandhow).
Threlkeld (Blencathra)— <i>Gauge broken.</i>	Cockermouth (Derwent House).
Silloth Rectory— <i>Observer dead.</i>	Penrith (Culgaith Vicarage).
Stapleton— <i>Record ceased.</i>	„ (Newton Reigny) 2nd g.

WESTMORELAND (33)

Kirkby Lonsdale (Casterton)— <i>Observer moved.</i>	Arnside.
„ „ (Whelprigg)— <i>Record ceased.</i>	Kirkby Lonsdale.
Sharrow Bay, 2nd g.— <i>Record imp.</i>	Kendal (Underfell) 3rd g.
	Ambleside (Brathay Vicarage).

MONMOUTH (16).

Newport (Llangibby Castle)— <i>Gauge moved.</i>	Marshfield (Llwynarthan).
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GLAMORGAN (23).

Cardiff (East Moors)— <i>Record ceased.</i>	Cardiff (New Cemetery).
„ (Pentyrch)— <i>Record ceased.</i>	Mountain Ash Waterworks.
Caerphilly (Aber-tri-dwr)— <i>Record ceased.</i>	Neath (Fairy Land).
	Treherbert.
	Castell Llwhwr (Penllergare).
	Merthyr Tydvil (Gwainvarren).

CARMARTHEN (7).

Llanelly (Old Market Place).
Llandilo (Golden Grove).

PEMBROKE (9).

Lower Solva.
St. David's.

CARDIGAN (3).

BRECKNOCK (15).

Cardiff W.W. (Cwm Taff Fawr No. 5).
„ „ („ „ No. 1).
„ „ („ „ No. 6).
Crickhowel (Gwernvale)
Hay (Gwernyfed Park).
Builth Vicarage.

RADNOR (7).

Old Radnor (Walton Court)— <i>No reply.</i>	New Radnor (Downton). (Ednol).
	Llandegley (Gwern-i-Arglwydd). Pen-y-bont.

MONTGOMERY (13).

Llanidloes (Dolenog)— <i>Record ceased.</i>	|
„ (Broomcliffe) 2nd g.— <i>Record imp.</i>	
Llanwddyn (Cefn-glas)— <i>Record ceased.</i>	

FLINT (8).

| Hawarden.

DENBIGH (17).

Denbigh (Vale Street)— <i>No reply.</i>	Cerrig-y-druidon.
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MERIONETH (6).

CARNARVON (14).

| Carnarvon (Belan Fort).

ANGLESEA (4).

Llangadwaladr (Bodorgan).
Holyhead.

ISLE OF MAN (11).

Port Erin— <i>Record imp.</i>	Ramsey.
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ISLES OF SCILLY (2).

| Treseo Abbey.

JERSEY (3).

GUERNSEY (3).

SCOTLAND.

WIGTON (4).

KIRKCUDBRIGHT (9).

| New Galloway (Glenlee).

DUMFRIES (9).

Canobie (Byreburnfoot)— <i>Record imp.</i>	
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ROXBURGH (11).

| Hawick (Wilton Hill).

SELKIRK (4).

PEEBLES (6).

Peebles (Stobo Castle)— <i>Record imp.</i>	Innerleithen (Leithen Lodge).
Cairnmuir— <i>Record imp.</i>	|

BERWICK (5).

HADDINGTON (4).

EDINBURGH (21).

Pentland Hills (Harehill)— <i>Record imp.</i>	Pentland Hills (Swanston).
„ „ (Loganlea)— <i>Record imp.</i>	
Dalkeith— <i>Record imp.</i>	

LINLITHGOW (3).

| Uphall.

LANARK (11).

Douglas (Newmains)— <i>Record imp.</i>	| Glasgow.
Lanark (Ridge Park)— <i>Record ceased.</i>	|

AYR (16).

Ayr (Cassillis)— <i>Record ceased.</i>	Loch Finlas.
	Old Cumnock (Glaisnock House).

RENFREW (24).

DUMBARTON (5).

STIRLING (6).

Kippen (Boquhan)— <i>Return not received.</i>	
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BUTE (4).

ARGYLL, MAINLAND (17).

Dalmally— <i>Observer left.</i>	Ballachulish.
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ARGYLL, INSULAR (21).

Islay (Ardbeg).
Coll (Acha School).

CLACKMANNAN (3).

KINROSS (3).

FIFE (10).

St. Andrews (Newton Bank)— <i>Record ceased.</i>	| Cupar (District Asylum).
„ „ (The Priory)— <i>Record ceased.</i>	|

PERTH (27).

Lochearnhead—*Return not received.*
 Aberfeldy (H.R.S.)—*Record imp.*
 Blair Athol—*No reply.*

| Dunkeld Station (H.R.S.)

FORFAR (13).

| Camperdown Linen Works.

KINCARDINE (3).

ABERDEEN (22).

Monymusk (Cluny Castle)—*No reply.*

BANFF (4).

ELGIN (6).

NAIRN (2).

WEST ROSS (12).

EAST ROSS (8).

Invergordon Castle—*Record ceased.*

Fearn (Lower Pitkerrie)—*Record unreliable.*

| Dingwall, H.R.S.

WEST INVERNESS (15).

Isle of Skye (Sligachan)—*Record ceased.*

N. Uist (Monach)—*Return not received.*

| Borrodale (Arisaig).

Isle of Skye (Armada Castle).

(Dunvegan).

S. "Uist (Ardkenneth).

„ (Ushenish).

EAST INVERNESS (7).

Kingussie—*Record imp.*

Glen Strathfarrer—*No reply.*

Inverness (High School)—*Record imp.*

SUTHERLAND (11).

Kinbrace (H.R.S.)—*Record imp.*

CAITHNESS (7).

ORKNEY (9).

Pomona (Sandwick)—*Record ceased.*

SHETLAND (4).

Olnefirth School—*Record imp.*

IRELAND.

CORK (9).

Cork (Royal Institution)—*No observations.* | Ballyhooly (Wood Cottage).

KERRY (10).

| Kenmare (Inishfea).

WATERFORD (4).

Waterford (Selborne)—*Observer moved.* |

TIPPERARY (7).

Ballina [Killaloe]—*Record imp.* | Nenagh (Clashnevin).

LIMERICK (3).

CLARE (3).

Corofin—*No reply.* |

WEXFORD (4).

KILKENNY (6).

| Graigue (Brandondale).
| Kilkenny Castle.

WICKLOW (1).

Enniskerry (Parknasilloge) *Record imp.* |

CARLOW (1).

QUEEN'S COUNTY (1).

KING'S COUNTY (3).

Parsonstown (Birr Castle) *2nd g.—Record imp.* |

KILDARE (1).

DUBLIN (8).

Monkstown (Easton Lodge)—*No reply.* | Glentiesmoel (Rathmines W. Wks.)

MEATH (4).

WESTMEATH (2).

LOUTH (5).

| Ardee (Lissrenny).

LONGFORD (1).

GALWAY (9).

Galway (Spiddle)—*Observer moved.* | Clifden (Kylemore).

MAYO (5).

| Belmullet.

SLIGO (5).

| Collooney (Markree Observatory)
3rd g.

LEITRIM (2).

CAVAN (1).

FERMANAGH (4).

MONAGHAN (1).

ARMAGH (4).

Armagh Observatory, 2nd g.—*Obs. ceased.* |

DOWN (12).

Bryanston—*No reply.*

Rathfryland—*Record imp.*

Newtownards—*Record imp.*

ANTRIM (12).

Broughshane (Quolie)—*Record imp.* | Belfast (Divis Mountain) 2nd g.

LONDONDERRY (11).

TYRONE (8).

DONEGAL (7).

Buncrana (Sea View)—*No reply.* | Moville Rectory.
Malin Head.

REMARKS.

KENT.—The increase of stations in this county is again very marked; many of the new stations are in the north-west of the county and about the Isle of Sheppey. Returns are most wanted now from the neighbourhood of Staplehurst.

HAMPSHIRE.—Stations are much wanted in the New Forest, and there are few in the N.W. of the county.

BUCKINGHAM.—The number of stations in this county is disproportionately small, and the loss of Brill is to be regretted.

HUNTINGDON.—A small county with very few stations, and none in its western half.

ESSEX AND SUFFOLK.—Although the number of stations in these counties is considerable, they are both large, and more records are desirable, especially from a large district in the N.W. of Suffolk, but fortunately the distribution as a rule is good.

DORSET.—More stations are wanted over the whole of the central part of this county.

DEVON.—The failure of the old-established station at Lee Moor leaves Dartmoor almost unrepresented, and there is scarcely a return from the district bounded by Moreton Hampstead, Okehampton, South Molton, Tiverton and Exeter.

CORNWALL.—Returns are much wanted from nearly all parts of the northern half of the county ; the failure of Week St. Mary, is a distinct loss.

SOMERSET.—The returns from this county are poor both in number and distribution, and additional stations are wanted almost everywhere but in the S.W. and in the neighbourhood of Frome, of Glastonbury, and of Milverton.

SHROPSHIRE.—The stations are very thinly scattered in this county, the N. faring worse than the S., and, unfortunately, those in the neighbouring counties are as scarce, for in this part of the country we could draw a circle including more than 1,000 square miles of ground and less than ten rain gauges.

STAFFORD.—The whole of the centre of the county from Stone towards the N., to Penkridge towards the S., and from Burton in the E. to half-way through Shropshire in the W. is without a record.

WARWICK.—Stations as a rule are “few and far between,” especially in the N. and W.

LEICESTER.—The new stations are a great improvement ; Market Bosworth and the records from Charnwood Forest helping to fill up two large blanks which have previously existed.

LINCOLN.—A large county, but fortunately the stations are fairly well distributed ; additions are most wanted in the southern half.

DERBY.—Castleton and Bamford are both important losses as they are both on the borders of “The Peak,” where additional records *were* much wanted, and *are now* still more desirable.

LANCASHIRE.—As regards both total and proportional number of stations, one of the richest of the English counties, and, fortunately, owing to the water requirements of a manufacturing district, there is not much to complain of as to distribution. The rainfall of the high lands being so valuable as to be carefully looked after.

YORKSHIRE.—Although the total number of stations is adequate, if properly distributed, there are great areas without a single station. We may sum up briefly by saying that observations are most wanted from everywhere where they are the least likely to be made, viz., on all the thinly populated high lands; in this respect Halton Gill, and Oughtershaw, are important gains.

DURHAM.—The Weardale Waterworks records are a most important addition.

NORTHUMBERLAND.—Records are much wanted from the W. of the county, *i.e.*, from the Cheviots to Haltwhistle and from Rothbury into Cumberland. It is a great pity that the stations established by the Tyneside Naturalists' Field Club, along the Border Counties railway, were so soon neglected. The whole Cheviot Range is without one observer, except at Broadstruther, where a most careful record is kept by direction of Mr. G. P. Hughes, of Middleton Hall.

CUMBERLAND AND WESTMORELAND.—Owing to the special characteristics of these counties the records from almost innumerable stations would be interesting, but with the exception of the northern half of Cumberland the distribution is good, better than the sparsity of the population would lead one to expect. I have, however, always felt it a duty to do all in my power to perfect the records from the wettest district in Europe, and have, therefore, a considerable number of paid observers, besides the usual volunteers. Hence, also, the steps mentioned on an earlier page (10) of this volume.

In WALES, taken as a whole, the number of stations per 100 square miles is exactly half that of the number in England, and excepting the neighbourhood of two or three centres of industry, such as Cardiff, additional returns are wanted from all parts. Mr. J. Willis-Bund, the Chairman of the Severn Fishery Board, has recently established several new gauges on the head waters of the Severn, which will be very useful, and will probably by awakening interest in the subject lead to a still further increase of Observers in the district. Special mention should also be made of the several records

sent by Col. Pearson, from the Radnor Forest district, and to the gauges of the Cardiff Water Works, just south of Brecknock beacons.

The counties from which additional returns are most wanted are :—Cardigan, the West of Montgomery, the West of Denbigh and the East of Carnarvon.

SCOTLAND has fewer gauges per 100 square miles of country than even Wales, and additional stations are greatly wanted from all the Highland districts. The most important losses are—Douglas, Lanark ; Dalmally, Argyll ; Aberfeldy and Blair Athol, Perth ; Sligachan, Kingussie and Glen Strathfarrer, Inverness ; and Sandwick, Orkney ; and these are scarcely compensated by the gain of Loch Finlas, Ayr ; Ballachulish, Argyll ; Dingwall, Ross ; and Arisaig. Armadale Castle, Dunvegan, and Ardkenneth, Inverness. Stations are much wanted in the N. of Wigtown, in the N. and W. of Kirkcudbright, the N. and W. of Berwick, the S. of Haddington, and over the whole of the Central and Northern parts of the country.

IRELAND has little more than one fourth of the number of stations per 100 square miles that England possesses, two thirds of the country having less than one rain gauge to each hundred square miles. Stations are, therefore, so urgently needed over almost the whole of the country, that it is impossible to particularize, but the West and South-west are most poorly represented, if indeed they can be said to be represented at all. The most important additions are :—Kylemore, Galway ; Belmullet, Mayo, and Malin Head, Donegal.

The following little table cannot possibly be made out until all the rest of the tables have received their final revision, and as this is always late in the year, and this table is one of curiosity rather than of importance, it has often been worked up when “exhausted nature needs repose,” and I suppose that happened last year, for a clumsy error (which had I been awake I can hardly discredit myself by believing I should have passed) did pass muster. The Westmoreland returns were counted twice over—once properly as part of Div. X., once improperly as part of Div. XI., so that Wales was credited with 175 stations instead of 143. This year I believe that the figures are all perfectly accurate ; they show a slight increase in the total number of stations, but that which I still (and always shall) have to strive for is the establishment of stations in sparsely populated districts. The great difficulty is to get stations on such districts as Dartmoor.

*Number of perfect rainfall records published in the volumes of British
Rainfall for the undermentioned years :—*

Years.	England.	Wales.	Scotland.	Ireland.	Gross Total.
1860	163	5	—	—	168
1861.....	334	9	109	20	472
1871.....	1038	88	311	67	1504
1881.....	1548	131	313	153	2145
1882.....	1710	145	335	148	2338
1883.....	1785	145	357	146	2433
1884.....	1812	143	353	155	2463
1885.....	1825	161	346	154	2486

Difference from 1884.

Increase..	13	18	—	—	23
Decrease .	—	—	7	1	—

OBITUARY.

WE have this year one of the longest lists of deceased observers which it has yet been our duty to prepare—it contains no fewer than 54 of our past helpers, and includes (as is shown by the asterisk to their names) three of those who contributed to the first table—that for 1860. The three observers who sent in the longest records were :—

Mr. A. Turnbull, Bothwell Castle, Hamilton N.B.	...	42 years.
W. C. Spooner, Esq., Eling House, Southampton	...	38 „
W. Squire, Esq., Berkhamstead	... ..	37 „

We believe that we have previously drawn attention to the long age frequently reached by observers of rainfall. The records of the past year fully support this, for although we do not know the age of a third of the deceased observers, yet among the few that we do know, four were between 80 and 85, and one each at 86, 87, 89, 91 and 95, the last being the Rev. H. T. Ellacombe, who when within a year or so of 90, rang one of the bells in the inaugural peal of the new bells in Worcester Cathedral, and whose mental vigour was equal to his physical strength.

No figures appear against Mr. Heathcote's name ; that is not as might be supposed an error, but it is because he was for many years superintendent of the rain gauges established by the Manchester, Sheffield and Lincolnshire Railway Company. It would be absurd to credit him with all the records, and it would, on the other hand, be improper to omit his name.

OBSERVERS DECEASED TO JUNE, 1886.	PERIOD OF OBSERVATION.	
	DATE.	Perfect Yearly Records.
Best, T., Esq., Red Rice, Andover	1867-85	19
Birchby, W. G., Esq., Monton, Eccles, Manchester	1880-83	4
Brougham, Rt. Hon. Lord, Brougham Hall, Penrith	1851-85 C	33
Budden, Mr., Winchelsea, Sussex.....	C 1874-84 T	11
Clarke, A., Esq., Achareidh, Nairn. N.B.	1874-85	12
Clode, N., Esq., Rockdale, Sevenoaks	C 1879 imp -83 imp T	3
Cooke, J. H., Esq., Berkeley, Gloucester	C 1869-85 C	17
Coryton, G. E., Esq., Liss Place, Petersfield, Hants.	C 1853-85	33
Cutbush, J. Esq., Highgate.....	C 1862-85 C	24
DeLessert, C. G., Esq., Waterloo Rd., Wolverhampton	C 1866-72 T	7
Divett, J., Esq., Bovey Tracey, Devon	{ 1852-3 imp 56 imp } -84 T	28
Dockeray, J., Esq., Long Lane, Sedbergh, Yorks ..	1876-85 T	10
Eagles, Rev. C. L. { Longtown Vicarage, Hereford	C 1873 imp-84 imp T	10
{ Hafod Ho., Tupsley, Hereford	C 1885 imp T	

OBSERVERS DECEASED TO JUNE, 1886.	PERIOD OF OBSERVATION.	
	DATE.	Perfect Yearly Records
Ellacombe, Rev. H. T., Clyst St. George, Topsham.	C 1865 imp -84 T ...	19
Fawcett, H., Esq., Wainsford, Lymington ...	C 1866-83 T	18
Forrest, S., Esq., Fern Bank, Kenilworth	C 1883 imp -84 T	1
Garrett, Mrs., Carleton Hall, Saxmundham	C 1861 imp -83 T ...	22
Gilchrist, Dr., Crichton Inst., Dumfries	C 1860-85 C	26
Glen, G., Esq., Stratton Audley Park, Bicester ...	C 1865-85 C	21
Graves, Rev. J., Inisnag, Stoneyford, Kilkenny ...	C 1865-76 T C 79-85 T	18
Grey, G. A., Esq., Milfield, Wooler, Northumberland	C 1864-85 T ..	22
Hannam, H. J., Esq. { Burcote, Abingdon	1872-85 T	14
{ Northbourne, Deal	1873 85	12
Hartland, A. H., Esq., Fern Hill, West Malvern ...	C 1861 imp -85	24
*Hartnup, J., Esq. { Liverpool Observatory ...	C 1846-66 T	21
{ Bidston Observatory	C 1867-85 C	19
Heathcote, R. D. Esq., Canal Office, Manchester ...		
Hewitt, Rev. T. S., Leysters, Tenbury	C 1861-74, 76-77	16
Holloway, Mr. S. P., Vine Cottage, Oundle	C 1880 imp -85 C	5
Holme, H. P., Esq., Mardale, Haweswater ...	C 1881-84 imp T	3
Hopkins, Rev. T. H. T., Magdalen College, Oxford...	C 1867 T	1
Hoskins, T. A., Esq., Higham, Cockermouth	1864-85 C	12
Ingram, J. S., Esq., Williton, Taunton	1880-84 T	5
Knollys, E. H., Esq., Fitzhead Court, Taunton.....	1879 imp -84	5
Majendie, L. A., Esq., Castle Hedingham, Essex ...	1864-68	5
Malcolm, Mr. J., Cholmondeley Castle, Nantwich...	C 1866 imp -84 T	18
Malden, Rev. C., St. Lawrence, Isle of Wight	C 1865 imp -86 imp ...	20
Martin, W. L., Esq., Lee Moor, Plympton, Dartmoor	C 1860 imp -84	24
Metcalfe, Rev. W. R., Buckden, Skipton ...	C 1870-79 imp	9
Parkinson, G., Esq., Rye Croft, Crosshills, Skipton..	1875-84 T	10
Phippen, Mr. G., Forbury Gardens, Reading	1872-73	2
Preece, J. H., Esq., Mechanics' Inst., New Swindon	1873 imp -85 C	12
*Redford, Rev. F., Silloth Rectory, Carlisle	C 1854 imp -84 T	29
Redmayne, G., Esq., Brathay Hall, Ambleside.....	C 1873-81 T	9
Robson, Mr. J., Linton Park, Kent	C 1855-76 T	22
Sergeantson, Rev. J. J., St. Michael's, Lichfield...	1873-79, 81-84 T ...	11
Singleton, Miss, Great Givendale, Pocklington	1866-80 imp T	12
Smith, D., Esq., Bloomsbury, Street Birmingham...	C 1861-80, 82-84 T ...	23
Spooner, W. C., Esq., Eling House, Southampton...	1848-85	38
*Squire, W., Esq., Berkhamstead	C 1848-84 T	37
Talmage, C. G., Esq., Observatory, Leyton	{ C 1861 T C 63 T C 65 imp. 67 imp T 78-85	11
Tippinge, F. G., Esq. { Llwyn Onn, Wrexham...	C 1867 imp -71 imp T	3
{ Sansaw Hall, Shrewsbury	C 1871 imp -85 T	14
Turnbull, Mr. A., Bothwell Castle, Hamilton	1844-85	42
Vibert J. E. Esq., St. Aubin's, Jersey	1874 imp -85 T	11
Williams, Rev. S. G. A., Cefn, Llangybi	C 1864 imp -85	21
Yardley, Lady, Hadlow Park, Tunbridge	1880-83 T	4

RAINFALL AND METEOROLOGY
OF
1885.

SYMBOLS EMPLOYED.

H.—Hail.

H.R.S.—Highland Railway Station.

L.—Lightning.

R.—Rain.

S.—Snow.

T.—Thunder.

TS.—Thunderstorm.

ON THE METEOROLOGY OF 1885.

WITH NOTES OF SOME OF THE PRINCIPAL PHENOMENA.

[These Notes should be read in conjunction with those on Heavy Rains in 1885.]

JANUARY.

- 1st.—*Colmonell* (XIV). S showers.—*Lawderdale* (XXII). S. gale.
2nd.—*Miltown Malbay* (XX). S. gale.
3rd.—*Watten, H.R.S.* (XIX). Easterly gale at night.
4th.—*Miltown Malbay* (XX). S.W. gale, with L and H.
5th.—*Dalnaspidal, H.R.S.* (XVI). T, L and S.—*South Uist, Ardkenneth* (XVIII). H, S on hills, L at night.
7th.—*Watten, H.R.S.* (XIX). S.E. gale at night.—*Miltown Malbay* (XX). Gale S. to N.W., with T and L.
8th.—*Torquay, Babbacombe* (V). S. gale in morning.—*Ashburton, Druid House* (V). Heavy storm of wind, R, H and S.—*Galway, Queen's College* (XXII). Gale at night, with heavy squalls.
9th.—*St. Lawrence* (II). Gale, with L and H.
10th.—*Emsworth, Redlands* (II). S.W. gale.—*Northampton* (III). Severe S.W. gale.—*Leyton* (IV). Heavy H storm at 5.30 p.m.—*Babbacombe* (V). W.S.W. gale in afternoon; H and S.—*St. John's [Devonport]* (V). Heavy S.W. wind with R.—*Ross* (VI). Smart gale in the night.—*Melton Mowbray, Coston* (VII). L at night, with heavy R.—*Nottingham, Beeston Fields* (VII). A loud clap of T occurred at 5.35 p.m. accompanied by a roaring wind.—*Nottingham, Strelley Hall* (VII). TS at 5.30 p.m.—*Derby, Elvaston* (VII). Heavy S.W. gale, with much R, H, and L.—*Builth, Abergreskin* (XI). Very stormy with H at night.—*Douglas, Victoria Road* (XI). Strong W.N.W. gale.—*Miltown Malbay* (XX). N.W. gale with H.—*Carndonagh* (XXIII). Strong wind and severe H showers.
10th and 11th.—*London, Lansdowne Crescent, W.* (I). S.S.W. gale with R.—*Diss* (IV). Severe gale from S.—*Llanfrehfa Grange* (XI). Heavy S.W. gale.
11th.—*Emsworth, Redlands* (II). W. gale.—*Billerica* (IV). S 4 in. deep.—*Babbacombe* (V). W.N.W. gale and H.—*Beaford* (V). L 4 a.m.

Ketton Hall [*Stamford*] (VII). Gale at night.—*Lerrick, Mountfield* (XIX). Heavy gale.

12th.—*Winslow, Addington* (III). Stormy with S.—*Northampton, Sedgebrooke* (III). Heavy S storm.—*Rendlesham Hall* (IV). Strong N.W. to N. wind with S.—*Diss* (IV). Heavy S.—*Downham, Crimplesham* (IV). Severe S storm, S 7 in. deep.—*Baldersby* (IX). S 3 in. deep.—*Lower Solva* (XI). Heavy H showers.

13th.—*Rendlesham Hall* (IV). 5 in. of S on ground.—*Weybread Vicarage* [*Harleston*] (IV). S 3 in. deep.—*Baldersby* (IX). S 4 in. deep.

14th.—*Rodmersham* (II). S ; a parhelion at 4 p.m.—*Woodbridge, The Grange* (IV). S 6 or 8 in. deep.—*Sunderland, West Hendon House* (X). S 3½ in. deep.—*Llanstephan* (XI). T from 10 a.m. to noon.

16th.—*Pinner Hill* (I). N.E. gale.—*Emsworth, Redlands* (II). N.E. gale.—*Macclesfield* (VIII). N.E. gale from 10 p.m. to 6 a.m.

20th.—*Rodmersham* (II). Very foggy.

22nd.—*Nottingham, Strelley Hall* (VII). The coldest day of the year ; mean temp., 25°·5.

24th.—*Rodmersham* (II). Solar halo.

25th.—*Ashburton, Druid House* (V). Dense fog in afternoon.

26th.—*Weybread Vicarage* [*Harleston*] (IV). The only day's skating of the winter.—*Douglas, Victoria Road* (XI). Thrush singing.

27th.—*Lawderdale* (XXII). S.W. gale at night.

29th.—*Wallington* (II). Splendid lunar rainbow 6.55 p.m., lasting about three minutes.

30th.—*Penzance* (V). Great fall of pressure, accompanied by a sudden and heavy S. to S.W. gale and much R.—*Woodbridge, The Grange* (IV). Heavy gale.

31st.—*Dorking, Abinger Hall* (II). T and vivid L.—*Redhill, Oxford Road* (II). Heavy gale, H, L and T.—*Wallington* (II). L, T and H at 7 p.m.—*Rodmersham* (II). H.—*Littlehampton* (II). T and H.—*St. Lawrence* (II). Gale, with H.—*Beaminster* (V). TS, 3 to 9 p.m.—*Plymouth* (V). Gale and TS.—*Babbacombe* (V). The parish church of St. Marychurch was struck by L at 2.48 p.m. A large hole was made in the earth about a yard from the conductor on the N. side of the tower, and some plaster was knocked off the inner wall of the chancel, on the S. side, close to a gas bracket, probably by the L descending by a rain pipe and shoot from the tower, by the roof, and to the ground by another pipe. A precisely similar accident occurred to the chancel in the TSS of May 6th, 1883.—

Ashburton, Druid House (V). Heavy storm, T, L and H.—*Beaford* (V). Continued L in evening.—*Crewkerne, Bincombe House* (V). TSS with H and vivid L at night.—*Cirencester, Further Barton* (VI). Violent TS.—*Derby, Elvaston* (VII). L at night.—*Macclesfield* (VIII). L in evening.—*Builth, Llanwrtyd Wells* (XI). Terrific H storm in afternoon, and TS later.—*Builth, Abergwessin* (XI). Distant T.—*Llanstephan* (XI). T and L 4 to 5 p.m.—*Douglas, Victoria Road* (XI). S.S.W. gale.—*Cork, Sunday's Well Road* (XX). The flat of the city was covered by a tidal flood principally due to diminished atmospheric pressure.

FEBRUARY.

1st.—*Torquay, Babbacombe* (V). S.W. gale, L.—*Penzance* (V). S.W. gale with heavy R (1·00 in.) at night.—*St. John's [Devonport]* (V). Half gale S.S.W., with heavy R.—*Truro, Moresk House* (V). Very heavy R (1·23 in.), with spring tide and storm at sea; the wind, being about S., drove the tide up 6 in. higher than was ever known before, flooding all cellars, stores, &c., in what is termed the city, and doing immense damage.—*Ross, The Graig* (VI). H squall at 3 p.m., gale at night.—*Llandovery* (XI). Very stormy and wet.—*Newcastle West* (XX). L early.

2nd.—*Plymouth* (V). Heavy gale.—*Babbacombe* (V). Heavy S.S.W. gale, with low pressure and very high sea and tides; max. velocity of wind 56 miles per hour.—*St. John's [Devonport]* (V). S.W. gale.—*Wells, Westbury* (V). L.—*Derby, Elvaston* (VII). S.W. gale.—*Shap* (X). Gale with heavy R.—*Abergwessin* (XI). Very stormy with 1·21 in. of R.

4th.—*Llanstephan* (XI). T.—*Newtownards* (XXIII). Storm of S and sleet.

6th.—*Rodmersham* (II). Gale at night with H.—*Emsworth, Redlands* (II). Violent S. to W. gale.—*Ashburton, Druid House* (V). Heavy storm after 2 p.m.—*Ross* (VI). Gale and R.—*Shap* (X). Strong gale with heavy R.—*Castle Malgwyn* (XI). T and H at night.—*Loch Shiel, Glenaladale* (XVIII). Much S low down on hills.

7th.—*Leyton* (IV). S.W. gale all day.—*Llanstephan* (XI). L and H.—*Miltown Malbay* (XX). Gale from W.

8th.—*Rodmersham* (II). Gale and L in evening.—*Mayfield* (II). S. gale.—*Emsworth, Redlands* (II). Violent S. to W. gale.—*Diss* (IV). Gale from S., increasing at night.—*Ashburton, Druid House* (V). Heavy storm all day, with 1·21 in. of R.—*Ross* (VI). Gale and R.—

Ketton Hall [*Stamford*] (VII). Gale and heavy showers at night.—*Shap* (X). Awful gale all day, with 2·12 in. of R.—*Aberguessin* (XI). Very stormy, with 1·24 in. of R.—*Newcastle West* (XX). Deel flooded and low lands under water.—*Galway, Queen's College* (XXII). Gale at night.

9th.—*Rodmersham* (II). L in evening.—*Ashburton, Druid House* (V). Hills white with S.—*Melrose* (XII). S on the Eildons.—*Watten, H.R.S.* (XIX). W. gale at night.

10th.—*Lawderdale* (XXII). N.W. gale.

11th.—*Galway, Queen's College* (XXII). Gale at night.

12th.—*South Uist, Ardkenneth* (XVIII). Grand display of aurora.

13th.—*Lancaster* (VIII). Thrushes singing.

14th.—*Llanstephan* (XI). Thick fog.

14th to 16th.—*Great Stanmore, Springlands* (I). Three days of heavy R, yielding 1·56 in., very nearly half the total for the month.

15th.—*South Uist, Ardkenneth* (XVIII). S.

17th.—*Winslow, Addington* (III). Brook flooded, the first time for many months.—*Wakefield, Stanley Vic.* (IX). S all day.

18th.—*Downham, Crimplesham* (IV). S.—*Colmonell* (XIV). S showers.—*South Uist, Ardkenneth* (XVIII). Heavy sleet and S showers.

19th.—*Babbacombe* (V). Solar halo.—*Colmonell* (XIV). S showers.—*Watten, H.R.S.* (XIX). Intense frost.

20th.—*Rodmersham* (II). H.—*Northampton, Sedgebrooke* (III). S.

21st.—*Calne, Compton Bassett* (V). Sharp frost.—*Plymouth* (V). Heavy gale.—*Penzance* (V). Heavy gale and R.—*St. John's [Devonport]* (V). S.E. gale at night.—*Gloucester, Maisemore Lock* (VI). S.W. gale.—*Cheltenham* (VI). Very stormy, with S on hills.—*Macclesfield* (VIII). Gale and S.—*Buldersby* (IX). S, with strong S.W. wind.—*East Layton [Darlington]* (IX). Severe gale.—*Shap* (X). Strong gale; great S storm.—*Llandoverly* (XI). Violent gale.—*Aberguessin* (XI). Very stormy night.—*Port Madoc* (XI). Strong gale from E.—*Colmonell* (XIV). S showers.—*Balquhiddier* (XVI). Storm, with heavy S, reported to have been over 12 in. deep before midnight, but went down to 5 in. before morning, as R set in; hence but few sheep were lost.—*Conpar Angus* (XVI). 10 in. of S.—*Loch Shiel, Glenaladale* (XVIII). Very stormy from S.E., with 1·86 in. of S and R.—*South Uist, Ardkenneth* (XVIII). Exceptionally severe storm of wind and R (·96 in.), flooding the country.—*Budgate [Cardor]* (XVIII). Gale, with S and R.—*Forsinard, H.R.S.* (XIX). High wind and heavy S drifts.—*Watten, H.R.S.* (XIX). Severe S.W. gale with heavy S

drifts.—*Lerwick, Montfield* (XIX). Violent S. gale, reaching its greatest force about 10 p.m.—*Olafirith* (XIX). Very heavy S.S.W. gale.—*Nenagh, Castle Lough* (XX). Severe S. gale with heavy R.—*Newcastle West* (XX). Violent S.W. storm.—*Miltown Malbay* (XX). Storm from S. veering to W.—*Galway, Queen's College* (XXII). Gale at night.—*Ballinasloe, Kilconnell* (XXII). Great storm from S.S.W.—*Lawderdale* (XXII). Southerly gale.—*Newtownards* (XXIII). Very heavy gale from S.—*Belfast, New Burnsley* (XXIII). The most severe storm of the winter.—*Londonderry, Knockan* (XXIII). Severe gale and heavy R following hard frost.—*Ramelton, Killygarvan* (XXIII). Heavy S.S.E. gale with R and sleet.—*Carndonagh* (XXIII). Strong gale.

22nd.—*Littlehampton* (II). S.W. gale —*Diss* (IV). S. gale.—*Barnard Castle, Whorlton*.—(X). High wind, with S and R.—*Blencowe* (X). Very heavy S; drifts in some cuttings of the Keswick Railway 15 ft. deep.—*Shap* (X). R, H, S and sleet 1·01 in.—*Glasgow, Queen's Park* (XIV). Gale, R and sleet.—*Lochbroom* (XVIII). Hurricane, with T, L and R.—*Tipperary, Henry St.* (XX). Great storm of wind and R.

23rd.—*Diss* (IV). Gale from N. at night.—*Downham, Crimplesham* (IV). Gale.

25th.—*Tipperary, Henry Street* (XX). Great gale at night.

26th.—*Ashburton, Druid House* (V). Torrents of R all day, 1·84 in.—*Crewkerne, Bincombe House* (V). S.W. gale and heavy R all night.—*Shap* (X). Gale with R all day, 1·91 in.—*Glasgow, Queen's Park* (XIV). Gale.—*Watten H.R.S.* (XIX). S.E. gale at night.—*Ramelton, Killygarvan* (XXIII). TS in evening.—*Carndonagh* (XXIII). Heavy T shower.

27th.—*Banbury, Wroxton* (III). T.—*Melton Mowbray, Coston* (VII). T in afternoon.—*Mansfield* (VII). T and L.—*Newcastle West* (XX). Gale during night.

28th.—*Lerwick, Montfield* (XIX). Severe gale from N.—*Olafirith* (XIX.) W.S.W. gale and S at night.

MARCH.

2nd.—*Rodmersham* (II). Solar halo.

3rd.—*Llanfrechfa* (XI). T and L at 2.45 p.m.

5th.—*Horsham Compton's Lea* (II). S.—*Teignmouth* (V). T at 5.30 p.m.—*Mansfield* (VII). Great darkness prevailed from 11 a.m. to noon, without R, fog, or T; it nearly resembled a total eclipse, but

was purely atmospheric.—*Melrose, Abbey Gate* (XII). Hills white with S.

6th.—*Berkhampstead* (III). Heavy fall of S at 4.50 p.m.—*Winslow, Addington* (III). Stormy with S and sleet.—*Northampton, Sedgebrooke* (III). Cold with S storms and R.

8th.—*London, Lansdowne Crescent, W.* (I). Sharp frost; min. in shade $25^{\circ} \cdot 5$.—*Rodmersham* (II). Fog.—*Brough, Brantinghamthorpe* (IX). Sharp frost injuring fruit blossom.—*South Uist, Ardkenneth* (XVIII). S on mainland hills.

9th.—*Babbacombe* (V). E.N.E. gale.—*Watten H.R.S.* (XIX). Stormy from N. with S and sleet.

10th.—*Babbacombe* (V). E.N.E. gale.

11th.—*Chelford, Astle Hall* (VIII). A violent W. gale at night.

12th.—*Cheltenham* (VI). Ice on pond.

15th.—*Babbacombe* (V). Aurora.—*Ross* (VI). Aurora, arc 30° N.W. to N.E. till 11 p.m., the finest and brightest observed here for a considerable time.—*Elterwater* (X). Very fine aurora from 9.45 p.m. for nearly an hour.—*Melrose* (XII). Aurora 8.30 p.m.—*Dalnaspidal, H.R.S.* (XVI). Aurora.

17th.—*Diss* (IV). S.W. gale in evening.—*Barnard Castle, Whorlton* (X). Westerly gale.—*Llundoverry* (XI). H and sleet.—*Miltown Malbay* (XX). Gale from N. with S showers.—*Galway, Queen's College* (XXII). Gale at night.—*Ballinasloe, Kilconnell* (XXII). Heavy S storm.—*Clifden, Kylemore* (XXII). Stormy all day.

18th.—*Ashburton, Druid House* (V). Heavy S showers, hills white.—*Ross* (VI). Mountains covered with S.—*Macclesfield* (VIII). S storm 1.15 p.m. lasting 30 minutes.—*East Layton [Darlington]* (IX). Heavy shower of S.—*Shap* (X). S storm in morning.—*Miltown Malbay* (XX). Storm from N.E. with S showers.—*Galway, Queen's College* (XXII). Heavy S showers with heavy squalls.—*Ramelton, Killygarvan* (XXIII). Northerly gale.—*Carndonagh* (XXIII). Strong wind, S and sleet.

19th.—*Dalnaspidal, H.R.S.* (XVI). Gale from S.—*Lochbroom* (XVIII). Fearful hurricane.—*Forsinard, H.R.S.* (XIX). High wind with showers of sleet.—*Watten, H.R.S.* (XIX). N.W. gale at night.

20th.—*Diss* (IV). Heavy S.W. gale all day.—*Otterburn* (IX). Great gale.—*Barnard Castle, Whorlton* (X). S.W. gale.—*Melrose* (XII). N.W. gale for 24 hours.—*Cambuslang* (XIV). Wind accompanied by 20 in. of R, covered the windows with sea salt.—*Balquhiddler, Stronvar* (XVI). Gale, and half an inch of S.—*Watten, H.R.S.* (XIX). Stormy

with R, H and S.—*Ramelton, Killygarvan* (XXIII). N.W. gale all day.

21st.—*Muswell Hill* (I). Heavy fall of S, over 6 in. deep.—*Pinner Hill* (I). S about 6 in. deep.—*Stunmore* (I). 6 in. of S, yielding .62 in.—*Wallington* (II). Severe S storm, doing great damage to firs and other evergreens.—*Wrotham* (II). Very heavy S, depth 7 in.—*Maresfield, Forest Lodge* (II). S, yielding .57 in.—*Buckingham, Adstock* (III). Heavy S.—*Oxford, Magdalen Coll.* (III). Heavy S and R.—*Banbury, Wroxton* (III). S.—*Northampton, Sedgebrooke* (III). S all night, about 3 in. deep.—*Bath, Queen's Parade* (V). S.—*Cirencester, Further Barton* (VI). S.—*Andoversford, Hampen* (VI). Heavy fall of S.—*Douglas, Victoria Road* (XI). H and S.

22nd.—*London, Lansdowne Crescent, W.* (I). Heavy R and S (.68 in.) between 5 a.m. and 9 a.m.—*Dorking, Abinger* (II). Very heavy fall of S in early morning, doing some damage to the trees.—*Redhill, Oxford Road* (II). Heavy fall of S, yielding .77 in.—*Tenterden* (II). Heavy S.—*Keston Tower* (II). Heavy S storm all the morning.—*Littlehampton* (II). R fell heavily till 8.15 a.m. with S.W. wind; the wind changed to E., and thence to N., and S came down for three hours very heavily; the sun shone out about noon and melted it in a few hours, though some lay for a day or two on the hills.—*Horsham, Rusper* (II). Severe S storm.—*St. Lawrence* (II). Gale and S from 9 a.m. to 1.15 p.m.—*Berkhampstead* (III). S 4½ in. deep on the ground.—*Buntingford, Throcking* (VII). S storm from E., S 3 in. deep.—*Winslow, Addington* (III). Heavy S, about 5 in.—*Leyton* (IV). S and R; S 3 in. deep.—*Billericay* (IV). S 4 in. deep.

23rd.—*Horsham, Compton's Lea* (II). S.

24th.—*Banbury, Wroxton* (III). T.

25th.—*Olnafirth* (XIX). Heavy gale S. to N.W.

26th.—*Derby, Elvaston* (VII). S.W. gale.—*Rothwaite, Castle Lodge* (X). S on hill tops.—*Shap* (X). Strong gale with heavy showers.—*South Uist, Ardkenneth* (XVIII). Sudden storm from N.W. at night.—*Watten, H.R.S.* (XIX). Southerly gale at night.—*Miltown Malbay* (XX). N.W. gale.—*Lawderdale* (XXII). N.W. gale.—*Ramelton, Killygarvan* (XXIII). S.W. gale.

27th.—*Derby, Elvaston* (VII). N.W. gale.

28th.—*Newcastle West* (XX). Violent S.W. gale with very heavy R from midday to 6 p.m.—*Clifden, Kylesmore* (XXII). Heavy storm from N.W. with 2.50 in. of R.

29th.—*Douglas, Victoria Road* (XI). S.E. gale.—*Strathmiglo, Loden*

Urquhart (XVI). S, the heaviest fall of the year.—*Clifden, Kylesmore* (XXII). Strong gale from N.W.

30th.—*Melrose* (XII). Eildons covered with S.

31st.—*Blarwith* (VIII). In 12 hours 1·81 in. of R fell.—*Douglas, Victoria Road* (XI). S.W. gale and deluge of R after 4 p.m.—*Melrose* (XII). Gale.—*South Uist, Ardkenneth* (XVIII). Storm from S., R all day (·56 in.), S on hills.—*Miltown Malbay* (XX). Heavy fall of cold R (1·20 in.)

APRIL.

1st.—*Colmonell* (XIV). S showers.—*South Uist, Ardkenneth* (XVIII). Heavy S showers.—*Olunafirth* (XIX). Stormy from S.W. to N.W. with S.—*Londonderry, Knockan* (XXIII). S.

2nd.—*Melrose* (XII). Nearly two in. of S.—*Glasgow, Queen's Park* (XIV). Half an inch of S and sleet.—*Dunkeld, Inver Braan* (XVI). S. *Lochbroom* (XVIII). Severe S storm.—*Watten, H.R.S.* (XIX). S showers.—*Miltown Malbay* (XX). S, H and R.

3rd.—*Littlehampton* (II). First butterfly seen.—*Mansfield* (VII). Temp. in shade fell to 23°·0.—*Wakefield, Stanley Vic.* (IX). Severe frost.

4th.—*Ashburton, Druid House* (V). Ice on ponds.—*Newcastle West* (XX). H stones measuring a quarter to half an inch, conical with hemispherical bases.—*Miltown Malbay* (XX). Southerly gale.

5th.—*Winslow, Addington* (III). Very sharp frost.—*Penzance* (V). Strong S.E. to E. gale with heavy R.—*Llandovery* (XI). S on adjacent hills.—*Kilconnell* (XXII). Gale from S.E.

6th.—*Littlehampton* (II). Solar halo.—*St. Lawrence* (II). First swallow seen.—*Northampton, Sedgebrooke* (III). H.—*Diss* (IV). S.E. gale in morning.—*Culne, Compton Bassett* (V). T, L and H at 1 p.m.—*Ashburton, Druid House* (V). S, H and R.—*Cheltenham* (VI). T and H.—*Knutsford* (VIII). TS.

7th.—*Shap* (X). Gale from E.

9th.—*Shap* (X). Gale all day.

11th.—*Rodmersham* (II). Fog and deep gloom.

12th.—*Penzance* (V). A peculiar darkness came over the sky about mid-day, lasting from two to three hours.

13th.—*Newcastle West* (XX). L and T.

15th.—*Northampton, Sedgebrooke* (III). R from 11.30 p.m. to 8.30 a.m. 16th, 1·04 in.—*Wem, Sansaw* (VI). S 2 in. deep.—*Llan-*

urtyd Wells (XI). Sleet at night; mountains covered with S.—*Abergwessin* (XI). S and R.—*Carno* (XI). S at night.

16th.—*Winslow, Addington* (III). Swallow arrived.—*Banbury, Wroton* (III). S.—*Burwarton* (VI). S storm.

17th.—*Coupar Angus* (XVI). Very severe frost.

19th.—*St. Lawrence* (II). At 9 a.m. there was a difference of 10° between the wet and dry bulb thermometers, a most unusual circumstance here; nightingale heard.

19th to 21st.—*Buntingford, Throcking* (VII). Max. temp. remarkably high; 19th 68°·9, 20th, 72°·1, 21st 71°·5; the max. on the 20th was higher than that of any day in July, 1880, or June, 1882.

21st.—*Lower Walmer* (II). First swallow seen.—*Nottingham, Strelley Hall* (VII). Max temp., 69°·8, the highest recorded in April since observations commenced in 1879.

22nd.—*St. Lawrence* (II). Fog till noon.—*Shap, Copy Hill* (X). Cold, with heavy fog.

23rd.—*Banbury, Wroton* (III). T.—*Melrose* (XII). T.—*Carn-donagh* (XXIII). Stormy, with continuous R.

24th.—*St. Lawrence* (II). T in distance over the sea.—*Plymouth* (V). Gale.—*Penzance* (V). Heavy S.W. to S. gale.—*Dumfries* (XII). One of the heaviest falls of R recorded in 24 hours, 1·84 in.

25th.—*Wallington* (II). Distant T.—*Rodmersham* (II). H.—*Emsworth, Redlands* (II). S. to S.W. gale, and T.—*Winslow, Addington* (III). H, and high wind, blowing young rooks out of nests.—*Diss* (IV). S.S.W. gale.—*Plymouth* (V). Gale.—*Torquay, Babbacombe* (V). S.S.W. gale.—*Cirencester, Further Barton* (VI). S.W. gale and H storm 11.15 a.m.—*Burwarton* (VI). T, L and H.—*Derby, Elvaston* (VII). S.W. gale.—*Elterwater* (X). TS at 3 p.m.—*Llanfrechfa* (XI). Very stormy from S.W. with driving R and H.—*Melrose* (XII). T.

25th and 26th.—*Halifax, Thorpe* (IX). TSS.

26th.—*Oundle, Vine Cottage* (III). Heavy clap of T at noon.—*Mansfield* (VII). T.—*Macclesfield* (VIII). T in afternoon.—*Walton, Breeze Hill* (VIII). T.—*Lancaster, Southfield* (VIII). T and R at 3 p.m.—*Baldersby* (IX). Severe TS with H at 2.30 p.m.—*Wotton, H.R.S.* (XIX). Stormy from S.E.

27th.—*Northampton, Sedgebrooke* (III). Cuckoo heard.

28th.—*Galway* (XXII). Gale at night.

29th.—*Rumelton, Killygarvan* (XXIII). S.W. gale.

30th.—*Littlehampton* (II). Hot day after a frost; cuckoo heard.

MAY.

1st.—*Littlehampton* (II). W.S.W. gale.—*Lancaster, Southfield* (VIII). T at night.

2nd.—*Diss* (IV). Showers and distant T.—*Langtree* (V). Heavy H storm.—*Nottingham, Strelley* (VII). TS with heavy R and H, 5.15 to 5.45 p.m.—*Derby, Elvaston* (VII). T, L and H.—*Melrose* (XII). T 3 p.m.—*Cambuslang* (XIV). T.—*Balquhadder* (XVI). T and L, 3.30 p.m. to 5 p.m.—*Miltown Malbay* (XX). T, H and R.

3rd.—*Wallington* (II). TS.—*Berkhampstead* (III). T and L at 6.25 p.m., R and H at 6.35 p.m.—*Northampton, Sedgebrooke* (III). T.—*Ross* (VI). T at 5 p.m.—*Castle Malgwyn* (XI). T.—*Abergwessin* (XI). Distant T.—*Forsinard, H.R.S.* (XIX). S at night with cold N. wind.—*Galway* (XXII). T at 2 p.m.

4th.—*Dorking, Abinger* (II). Heavy TS.—*Emsworth, Redlands* (II). TS 3 p.m. to 6 p.m.—*Alton, Ashdell* (II). T, L and H.—*Plymouth* (V). TS.—*Ashburton, Druid* (V). Single flash of L with tremendous T, and H which made the moor white at 2.15 p.m.—*St. John's [Devonport]* (V). T at 0.30 p.m. and at 2.30 p.m.—*Dalnaspidal, H.R.S.* (XVI). S and H.—*Miltown Malbay* (XX). T and H.

5th.—*Emsworth, Redlands* (II). Heavy R and H squalls.—*Melton Mowbray, Coston* (VII). Heavy R with S at night.—*Melrose* (XII). Eildon Hills white with S.

6th.—*Tenterden* (II). Severe TSS.—*Rodmersham* (II). H and distant T.—*Littlehampton* (II). White frost.—*St. Lawrence* (II). Distant L.—*Emsworth, Redlands* (II). T.—*Northampton, Sedgebrooke* (III). S.—*Leyton* (IV). At 9.30 a.m. an exceedingly black cloud came up from the west; rain fell and it was quite black; paths all looked black.—*Harlow, Sheering* (IV). The wettest day since Nov. 15th, 1882; 1.10 in. of R.—*Babbacombe* (V). TS (same date as in 1883 and 1884).—*Curtmel, Holker* (VIII). Frost damaging plums.—*Abergwessin* (XI). S.—*Lochbroom* (XVIII). S, H and sleet.—*South Uist, Ardkenneth* (XVIII). H, heavy S shower in evening.—*Nenagh, Castle Lough* (XX). H, S and R.—*Miltown Malbay* (XX). S on mountains.

7th.—*Dorking, Abinger* (II). S.—*Tenterden* (II). TS at 3 a.m.—*Rodmersham* (II). S and H, L in evening.—*Berkhampstead* (III). Heavy fall of S from 4.40 p.m. to 4.55 p.m.—*Buntingford, Throcking* (III). S followed by sharp frost at night. Min. on grass 28°·3.—*Oxford* (III). A few flakes of S and H.—*Northampton, Sedgebrooke* (III). S storms.—*Downham, Crimbleham* (IV). TS.—*Ashburton, Druid* (V). H and R at night.—*Langtree* (V). Heavy H storm.—*Cheltenham*

(VI). S.—*Melton Mowbray, Coston* (VII). Heavy shower with S at 5 p.m.—*Derby, Elvaston* (VII). Sleet and S.—*Macclesfield* (VIII). S storm at 11 a.m., lasting 30 minutes.—*Knutsford* (VIII). Frost, S, H, T and L, and unusual darkness.—*Sheffield, Chapeltown* (IX). S.—*Hull, Derringham* (IX). At noon, after a clear bright morning a sharp TS broke over the town followed by a heavy fall of sleet and S, with unusually large flakes, which continued for about 90 minutes, yielding .50 in.—*Market Weighton, Dalton Hall* (IX). S storm and frost.—*Wetwang* (IX). TS and S.—*Thirskdale* (IX). Sharp frost in morning with N. wind; T was heard at 2 p.m., and S soon followed, lasting an hour and a half.—*Llandoverry* (XI). S and H, surrounding hills covered with S.—*Douglas, Victoria Road* (XI). S at 8 a.m., T at 10 a.m.—*North Esk Res. [Penicuik]* (XIII). T and L.

8th.—*London, Cumden Road* (I). Remarkable “pocky clouds” seen about 6.15 p.m. after a shower.—*Wallington* (II). H storm.—*Tenterden* (II). Severe frost, doing much damage.—*Alton, Ashdell* (II). H storm.—*Berkhampstead* (III). Min. temp. 29°·2 in screen, 16°·8 on grass.—*Winslow, Addington* (III). Sharp frost, blackened potato tops.—*Andoversford, Hampen* (VI). S and H storms.—*Maisemore Lock* (VI). S and H.—*Nottingham, Strelley Hall* (VII). Frost, injuring potatoes.—*Shap* (X). R, S, H and sleet.—*Melrose* (XII). S and H; Eildon hills white.—*Dalnaspidal, H.R.S.* (XVI). S and H.—*Forres, H.R.S.* (XVII). S and H.—*Loch Shiel, Glenaladale* (XVIII). S low down on hills.—*South Uist, Ardkenneth* (XVIII). Heavy S showers.

9th.—*Nottingham, Strelley* (VII). H at 10.30 a.m.—*South Uist, Ardkenneth* (XVIII). More S between noon and 5 p.m. than in winter.—*Ramilton, Killygarra* (XXIII). S.W. gale all day.

10th.—*Tenterden* (II). H.—*Emsworth, Redlands* (II). Strong squalls from S.W. and W.—*Cirencester, Further Barton* (VI). H storm and T.—*Derby, Elvaston* (VII). N.W. gale.—*Walton, Breeze Hill* (VIII). S, H, T and L.—*Shap* (X). S storm at night.—*Douglas, Victoria Road* (XI). S.W. gale with S and H.—*North Esk Res. [Penicuik]* (XIII). T.—*Forres, H.R.S.* (XVII). TS between 4 p.m. and 5 p.m.—*South Uist, Ardkenneth* (XVIII). S.—*Londonderry, Knockan* (XXIII). Heavy H showers.

11th.—*Rendlesham Hall* (IV). Heavy H storm.—*Cartmel, Holker* (VIII). Frost.

12th.—*Littlehampton* (II). T and R.—*Winslow, Addington* (III). Sharp frost.—*Coventry, Priory Row* (VI). Sharp frost, doing much damage to fruit blossom.—*Nottingham, Strelley* (VII). Very thick fog in early morning.—*Seaforde* (XXIII). S.

13th.—*Nottingham, Strelley* (VII). T and R at 0.45 p.m.—*Macclesfield* (VIII). T at 1 p.m.—*Cambuslang* (XIV). T.

14th.—*Pinner Hill* (I). H.—*Babbacombe* (V). S, the latest yet observed in spring.—*Bath, Queen's Parade* (V). TS.—*Cheltenham* (VI). T.—*Nottingham, Strelley* (VII). T at 1.30 p.m.—*Derby, Elvaston* (VII). T and heavy showers.—*Macclesfield* (VIII). T at 1.30 p.m.—*Barnard Castle, Whorlton* (X). T.—*Melrose* (XII). Distant T.—*North Esk Res. [Penicuik]* (XIII). T.

15th.—*Weybread [Harleston]* (IV). TSS.—*Miltown Malbay* (XX). Storm from N.W. with H.

16th.—*London, Lansdowne Crescent, W.* (I). Loud T at 4 p.m., R and H at 5.15 p.m.—*Pinner Hill* (I). T and H.—*Great Stanmore* (I). L and T about 5 p.m.—*Wallington* (II). TS with H and R.—*Northampton, Sedgebrooke* (III). Heavy R and H storms.—*Diss* (IV). Heavy gale from W.N.W.—*Ketton Hall [Stamford]* (VII). TS at 1 p.m. with H.—*Barnard Castle, Whorlton* (X). T and L.—*Melrose* (XII). R, T, and L at 2.30 p.m.—*North Esk Res. [Penicuik]* (XIII). T and L.

17th.—*London, Lansdowne Crescent, W.* (I). T at 2 p.m. ; frequent showers of R and H.—*Great Stanmore* (I). Heavy peals of T about noon.—*Dorking, Abinger* (II). Very stormy with H.—*Redhill, Oxford Road* (II). L and T.—*Wallington* (II). TS.—*Tenterden* (II). H.—*Dover* (II). Terrific TS with a deluge of R and large H stones, which lay an inch and a half deep long after the storm had ceased ; many sheep killed.—*Rodmersham* (II). TS with heavy R.—*Littlehampton* (II). T and R.—*St. Lawrence* (II). L and T at 6 p.m.—*Emsworth* (II). Distant T.—*Alton, Ashdell* (II). T, L and H.—*Berkhampstead* (III). T and L from 1 p.m. to 1.10 p.m., R and H at 5.15 p.m.—*Winslow, Addington* (III). TSS.—*Northampton, Sedgebrooke* (III). Heavy H storm and T.—*Diss* (IV). Heavy showers and distant T from W.—*Pewsey* (V). T.—*Calne, Compton Bassett* (V). T, L and H at 3.30 p.m.—*Bath, Queen's Parade* (V). TS.—*Cirencester, Further Barton* (VI). T.—*Cheltenham* (VI). T and H.—*Melton Mowbray, Coston* (VII). T to westward at times during afternoon.—*Nottingham, Strelley* (VII). T with H and a few flakes of S at 1.45 p.m.—*Derby, Elvaston* (VII). High wind and TS.

18th.—*Diss* (IV). H and frequent showers from N.W.

20th.—*Emsworth, Redlands* (II). S. to S.W. gale.—*Winslow, Addington* (III). H, 3.30 p.m.—*Babbacombe* (V). W.S.W. gale.—*Shap* (X). R, S and H.—*Llandovery* (XI). H.—*Seaford* (XXIII). S.

21st.—*Littlehampton* (II). Frost.—*Berkhampstead* (III). R and

large H at 8.40 a.m.—*Winslow, Addington* (III). T and heavy showers.—*Oundle* (III). Heavy H storm.—*Leyton* (IV). T at 9 a.m.—*Langtree* (V). H storm; very cold.—*Melton Mowbray, Coston* (VII). T and L in afternoon.—*Ketton Hall [Stamford]* (VII). T at 4 p.m.—*Partney* (VII). L.—*Nottingham, Strelley Hall* (VII). Very heavy H storm 11.40 to 11.50 a.m.; the stones were the size of small marbles, and covered the ground to the depth of half an inch. TS 2.50 p.m.—*Mansfield* (VII). T with heavy R and H.—*Derby, Elvaston* (VII). T and H.—*South Uist, Ardkenneth* (XVIII). L at night.

22nd.—*Winslow, Addington* (III). T, L and heavy showers.—*Plymouth* (V). TS.—*Babbacombe* (V). W.S.W. gale.—*Langtree* (V). H storm, very cold.—*St. John's [Deronport]* (V). Very stormy all day with heavy R and T.—*Temple Combe, Stowell Rectory* (V). T in afternoon.—*Budgate [Cawdor]* (XVIII). R, H and T.

23rd.—*London, Lansdowne Crescent, W.* (I). TS with heavy R and H at noon.—*Wallington* (II). T.—*Emsworth, Redlands* (II). Violent squalls from S. and S.W.—*Leyton* (IV). H and T at 2 p.m.—*Coupar Angus* (XVI). TS.—*Miltown Malbay* (XX). Strong N.W. gale.

24th.—*Cheltenham* (VI). Horse chestnut in bloom.

25th.—*Cheltenham* (VI). Hawthorn in bloom.

27th.—*Miltown Malbay* (XX). Heavy S.W. gale.

28th.—*Ramilton, Killygarraun* (XXIII). S. gale all day.

29th.—*Shap* (X). Strong gale.

30th.—*St. Lawrence* (II). Distant L.

JUNE.

3rd.—*St. Andrews* (XVI). T.—*Balquhiddler* (XVI). Distant T at 7.30 p.m.

4th.—*Plymouth* (V). TS.—*Melton, Coston* (VII). Intensely hot all day.—*Miltown Malbay* (XX). S. gale.

4th and 5th.—*Meltham, Harewood Lodge* (IX). Very warm days, the min. temp. of the night between them, being 61°·1, by far the warmest night of the year, and the highest min. since July 4th, 1881.

5th.—*Rodmersham* (II). Two mock suns.—*Miltown Malbay* (XX). Frost killing potato stalks.

6th.—*St. Lawrence* (II). Sea fog.—*Andoversford, Hampen* (VI). T.—*Nottingham, Strelley Hall* (VII). Heavy rain at night, 74 in.

7th.—*Tenterden* (II). TS.—*Rodmersham* (II). TS at 3 a.m.; solar halo.—*Cirencester, Further Barton* (VI). T and L about 8 p.m.—

Cheadle, The Heath House (VI). T.—*Nottingham, Strelley* (VII). T at 5.30 p.m.—*Macclesfield* (VIII). T at 5.30 p.m.—*Walton, Breeze Hill* (VIII). T and L.—*Wakefield, Stanley Vic.* (IX). T.—*Holifax, Thorpe* (IX). TSS.—*Shap* (X). Strong gale all day.—*Watten, H.R.S.* (XIX). T.

8th.—*London, Lansdowne Crescent, W.* (I). 1.23 in. of R fell between 5 a.m. and 5 p.m.—*Wallington* (II). Very heavy R, 1.07 in.—*Beddington* (II). R 1.18 in., the heaviest fall since August, 1882.—*Emsworth, Redlands* (II). 1.10 in. of R in six hours in early morning.—*Berkhamstead* (III). Heavy R all day, .67 in.—*Oundle* (III). Heavy R, 1.46 in.—*Ashburton, Druid* (V). Deluge of R at 4 p.m., .54 in.—*Teignmouth* (V). The thickest mist since January 19th, 1883, trees distant 350 yards not visible, and indistinct at 54 yards distance.—*Andoversford, Hampen* (VI). Continuous R all day, .75 in.—*Holt Lock* (VI). Stormy from N.W.—*Nottingham, Strelley* (VII). R from 11 a.m. till night, .71 in.—*Ketton Hall [Stamford]* (VII). R all day, 1.39 in.—*Mansfield* (VII). Fog and heavy R, 1.17 in.—*Neath, Fairyland* (XI). In a very few hours 2.06 in. of R fell, doing some damage; it was, however, very local, places ten miles distant getting little or no R.

10th.—*Downham, Crimlesham* (IV). Severe frost.—*Thirvendale* (IX). Sharp frost.

11th.—*Winslow, Addington* (III). Frost on grass.—*Downham Market, West Dereham* (IV). Sharp frost in morning.—*Calne, Compton Bassett* (V). Frost on grass.

14th.—*Babbacombe* (V). L.—*Llandovery* (XI). Distant T.

16th.—*St. Lawrence* (II). Heavy R all night, 1.30 in.—*Melrose* (XII). T and L.—*North Esk Res. [Penicuik]* (XIII). T.—*Miltown Malbay* (XX). Frost damaging potato stalks.

17th.—*Dunaspidal, H.R.S.* (XVI). T.

18th.—*Buntingford, Throcking* (III). A white frost, grass min. 32°·0.—*Downham Market, West Dereham* (IV). Sharp frost in morning.—*Wakefield, Stanley Vicarage* (IX). A slight shock of earthquake.—*Shap* (X). T and R at 4 p.m.

19th.—*Littlechampton* (II). Rough gale at night.—*Emsworth, Redlands* (II). Gale S.W. to W.—*Diss* (IV). Gale from S.W. at night.—*Llanfrechfa* (XI). Blowing hard from S.W.—*South Uist, Ardkenneth* (XVIII). Heavy mist.—*Miltown Malbay* (XX). Hard gale from N.W.

20th.—*Calne, Compton Bassett* (V). Half a gale.—*Babbacombe* (V). W. gale.—*Andoversford, Hampen* (VI). Cold and stormy.—*Budgate [Cawdor]* (XVIII). Very stormy.

20th and 21st.—*Shap* (X). Strong gale.

21st.—*Wallington* (II). Strong gale.—*Lundoverly* (XI). Very cold, fires lighted.—*St. Andrews* (XVI). W. gale.

22nd.—*Emsworth, Redlands* (II). W. gale.

23rd.—*Truro, Moresk House* (V). Twenty hours continuous R, 1.42 in.—*Nottingham, Strelley* (VII). R at night, .73 in.—*Diglis Lock* (VI). Heavy R in night, 1.13 in.—*Wakefield, Stanley Vicarage* (IX). Hay-making commenced.

23rd and 24th.—*Macclesfield* (VIII). Twenty-five hours continuous R, 1.22 in.—*Ingleby Vicarage* (IX). Continuous R, 1.98 in.

24th.—*Emsworth, Redlands* (II). Distant T.—*Northampton, Sedgbrooke* (III). Heavy R all night.—*Darlington, Cleveland Parade* (X). Raining all day, 1.18 in.—*Miltown Malbay* (XX). Frost, doing slight damage to potatoes.

25th.—*Wallington* (II). Strong gale.

26th.—*Castle Malgwyn* (XI). Frost on grass.—*South Uist, Ardkenneth* (XVIII). Fog at sea.—*Watten, H.R.S.* (XIX). Frost.

27th.—*Macclesfield* (VIII). Potatoes on Dane's Moss blackened by frost.—*Thirskdale* (IX). Sharp frost nipping kidney beans and potatoes.—*Dalnaspilul, H.R.S.* (XVI). L.

28th.—*Wallington* (II). Distant T at 8 p.m.—*Berkhampstead* (III). Min. temp. on grass 26°.2.—*Melrose* (XII). Very distant T.

29th.—*Babbacombe* (V). Solar halo.—*Andoversford, Hampen* (VI). Thick wet fog in evening.—*St. Andrews* (XVI). T.—*Dunmanway* (XX). Strong N. wind.—*Miltown Malbay* (XX). Cold N. gale.

30th.—*Wallington* (II). Strong gale.

JULY.

2nd.—*Derby, Findern* (VII). Whirlwinds occurred in many places about 3 p.m., hay being lifted to a great height and carried away.—*Shap* (X). T.

3rd.—*Ketton Hall [Stamford]*. (VII). T at night.—*Penrith, Newton Reigny* (X). .70 in. of R fell in 40 minutes from 4 p.m. to 4.40 p.m. T was heard but no L seen.—*Blencowe* (X). .51 in. of R fell in one hour, between 3.28 p.m. and 4.28 p.m.—*Shap* (X). Loud T at 2 p.m.—*Corwen, Rhug* (XI). TS.

5th.—*Hailsham* (II). Heavy TS in afternoon, and 1.32 in. of R; 1 in. at least fell between 2.30 and 3.30 p.m.—*Muyfield* (II). Severe TS with very heavy R, 1.34 in. falling in about an hour from 3 p.m. to

4 p.m.—*Emsworth, Redlands* (II). A sultry cloudy day, but a strong S.W. wind blew from noon to 4 p.m.; it was then dead calm till 6 p.m., when distant T and slight R commenced from W. The storm travelled round N. and E., and at 6.40 p.m. a severe squally N.E. gale broke with crashing T, vivid L, and deluges of R and H; 1.36 in. fell in 50 minutes (6.40 to 7.30 p.m.); trees a few yards distant were hidden by the thickness of R and H, as though wrapped in fog; by 8 p.m. the storm passed S. to sea as rapidly as it came. Comparatively little R fell a mile E. or W. of Redlands. Pressure steady before, during, and after the storm.—*St. Andrew's* (XVI). Gale from W.

6th.—*Shap* (X). Strong gale.

6th and 7th.—*Whitehaven, Gilgarron* (X). Between noon of the 6th and noon of the 7th 2.89 in. of R fell.

7th.—*Castle Malgwyn* (XI). Very rough wind with driving R.

8th.—*Melrose* (XII). T.

9th.—*South Uist, Ardkenneth* (XVIII).—Stormy from S.W. with R and H.

10th.—*Carno* (XI). Frost.—*Miltown Malbay* (XX). T.

11th.—*St. Lawrence* (II). Distant T.—*St. Andrew's* (XVI). Gale from S.W.—*South Uist, Ardkenneth* (XVIII). Stormy from N.W. with R.

12th.—*Peterborough, Springfield House* (III). One inch of R fell in 15 minutes at 8 a.m.

13th.—*Wallington* (II). L in afternoon.—*Leyton* (IV). T at 9.45 a.m.—*Castle Malgwyn* (XI). Night extremely cold, temp. down to 32°.

14th.—*Babbacombe* (V). Solar halo.

15th.—*Rodmersham* (II). Thick fog at 5 a.m.

20th.—*St. Andrews* (XVI). T and L.

21st.—*Ashburton, Druid* (V). Thick fog in evening.—*Babbacombe* (V). Fog.—*Shap* (X). T.

22nd.—*Melrose* (XII). Distant T.

EXTRAORDINARY RAINFALL.

Cappoquin.—Last evening (22nd) one of the heaviest downpours of rain ever witnessed in this locality by the oldest inhabitant took place, and had more the appearance of a waterspout than a heavy shower. A large number of the tourists that had come here by steamer were overtaken by the rain between this and Lismore, and in a few minutes were wet through, while others, who had taken shelter under the trees in the grounds of Sir R. Kane, were

drenched. The roads were flooded in many places, and small rivulets were quickly converted into torrents, while not a drop of rain fell at places a mile distant.

Cork.—Yesterday afternoon (22nd) a waterspout broke over the Cordal Mountains, near Castleisland, and caused a torrent which swept down the mountain sides, carrying away everything in its course, and inundating the low-lying grounds in the valley. The houses and dairies of two farmers named Gary and Brosnan, living at Cloun, were entered by the waters, which carried away the produce of 30 cows, and also the furniture. Several bridges were carried away near Mounteagle, and several tenants on the property of Mr. Herbert W. Sandes and Lord Ventry sustained damage. No R at Ardferit.

23rd.—*Babbacombe* (V). Solar halo.—*Melrose* (XII). L in evening.—*Newcastle West* (XX). L and T.

24th.—*Roedmersham* (II). Very thick fog at sunrise.—*Shap* (X). T.—*South Uist, Ardkenneth* (XVIII). Heavy fog over sea and land; great heat.

25th.—*Buntingford, Throcking* (III). The hottest day; max temp. $84^{\circ}3$, mean $72^{\circ}1$.—*Nottingham, Strelley* (VII). Max. in shade $87^{\circ}2$, the highest recorded in six years.

26th.—*Ystalyfera, Tan-yr-allt* (XI). An exceedingly hot day.

29th.—*Shap* (X). T.

30th.—*Tralee, Castlemorris* (XX). At 2 a.m. a waterspout burst in the Cordal mountains, 5 miles N.E. of Castleisland, and did considerable damage, taking away four acres of potatoes; several houses were flooded, roads torn up, and bridges injured. About the same time a similar one occurred at the Paps mountains, 17 miles S.E. of Castleisland; it swept along the slopes of Mangerton, flooded the river Flesk, and drowned three young cows.

[This seems to be a wrongly dated account of the phenomenon of the 22nd.]—ED.

AUGUST.

4th.—*Calne, Compton Bassett* (V). T, L and R at 3.30 p.m.—*Bath, Queen's Parade* (V). Severe TS.—*Gloucester, Maisemore Lock* (VI). TS. *Ludlow, Ashford* (VI). R, 1.74 in., commencing about 5 p.m., and very heavy till 7 or 8 p.m., but continuing almost without cessation till early morn.—*Ludlow, Broomfield* (VI). R, 2.62 in., more than eight times as much as the total for July, and the heaviest fall recorded in five years.—*Bishop's Castle, Castle Street* (VI). TS at 3.30 p.m.; R

continuously till 6 a.m. on 5th, 2·37 in. in 14 hours, the heaviest fall for 11 years.—*Bishop's Castle, More Rectory* (VI). R, 2·22 in., the heaviest fall recorded in 17 years; T and L at 4 p.m.; 1·49 in. fell between 2 p.m. and 7.30 p.m.—*Church Stretton, Woolstaston* (VI). The heaviest R recorded here during 20 years, 1·81 in. falling between 3 p.m. and 11 p.m.—*Llanfrechfa* (XI). Distant T.—*Churchstoke, Mellington Hall* (XI). R, 2·37 in., the heaviest fall in 11 years.

4th and 5th.—*Welshpool, Buttington* (XI). R, 2·53 in.; T on 4th.

5th.—*Wallington* (II). T.—*Rodmersham* (II). TS at 5 p.m.—*Littlehampton* (II). T.—*Winslow, Addington* (III). TS.—*Northampton* (III). T, L and heavy R.—*Northampton, Sedgebrooke* (III). Heavy TS; ·48 in. of R fell in 40 minutes from 1.5 to 1.45 p.m.—*Babbacombe* (V). L in S.W., 11 to 11.30 p.m.—*Gloucester, Maisemore Lock* (VI). Dense fog.—*Sunderland, West Hendon House* (X). 1·94 in. of R, a fall which has not been equalled since August, 1859, though on July 19th of that year there was a fall doubtless heavier.—*North Shields, Rosella Place* (X). R, 1·91 in., nearly all of which fell between 6 p.m. and 6 a.m. on 6th, the heaviest fall since 1862, excepting August 22nd, 1882, when 2·04 in. fell.—*Llanfrechfa* (XI). T and L at 5.45 p.m.—*Dolnaspidal, H.R.S.* (XVI). T and R.

6th.—*Wallington* (II). T.—*Rodmersham* (II). Fog at sunrise; L in evening.—*St. Lawrence* (II). L and T, 5 p.m. to 6.10 p.m.—*Emsworth, Redlands* (II). T and L 6 p.m.—*Berkhamstead* (III). T from 4.6 p.m. to 4.30 p.m., L after 7.45 p.m.—*Winslow, Addington* (III). Sharp TS at 5 p.m.; many sheep killed at Hartwell, Aylesbury.—*Oxford* (III). TSS.—*Banbury, Wroton* (III). T, L and H.—*Northampton, Sedgebrooke* (III). Severe TS at 5.30 p.m.; an elm tree struck by L and partly barked.—*Oundle* (III). Heavy TS, with R and H.—*Leyton* (IV). Very heavy R, ·70 in. fell between 6.45 p.m. and 6.55 p.m.; roads, fields, &c., were all under water.—*Southend* (IV). L at 10 p.m.

A WATERSPOUT.—During a severe thunderstorm on the evening of August 6th, a waterspout was seen over the Essex coast in the neighbourhood of Tilbury, and it burst over Horndon, doing considerable damage, and it is reported that a horse was killed. Such a phenomenon created great curiosity.—*South Eastern Gazette*, August 10th.

6th.—*Pewsey* (V). T.—*Babbacombe* (V). TS.—*Truro, Moresk House* (V). Severe TS with H and heavy R.—*St. John's [Devonport]* (V). T in morning.—*Temple Combe, Stovell* (V). TS.—*Cheltenham* (VI). TS.

Wem, Sansar (VI). T.—*Little Malvern, The Farm* (VI). TS from S. to N.E., .38 in. of R falling between 6.30 p.m. and 7 p.m.; thirteen sheep were killed under a yew tree on the hill above the station.—*Melton Mowbray, Coston* (VII). TS from 5 p.m. to 10.30 p.m.—*Ketton Hall [Stamford]* (VII). Severe TS with heavy R at 8.20 p.m. A dovecot about 200 yards from the house was struck by L and eleven pigeons were killed, and at Colleyweston, Northamptonshire, eight lambs were killed by L.—*Nottingham, Strelley* (VII). T from 7 p.m., R and L from 8.30 p.m. all the evening.—*Mansfield* (VII). T and heavy R.—*Derby, Elvaston* (VII). Severe TS and heavy R, .64 in.—*Macclesfield* (VIII). L.—*Knutsford, Heathside* (VIII). TS.—*Liverpool, Walton-on-the-Hill* (VIII). T and L.—*Meltham, Harewood Lodge* (IX). TS at midnight.—*Shap* (X). T from 3.25 p.m. to 6 p.m.—*Abergwessin* (XI). TS.—*Melrose* (XII). Distant T.—*Colmonell* (XIV). TS.—*Nenagh, Castle Lough* (XX). T. *Newcastle West* (XX). L.

6th to 8th.—*Barkby* (VII). Heavy TSS accompanied by much R, 2.32 in. fell in 44 hours.

7th.—*London, Lansdowne Crescent, W.* (I). A heavy shower of R, (.19 in.) between 3.15 p.m. and 3.30 p.m.—*Great Stanmore* (I). T.—*Wallington* (II). T.

A WHIRLWIND passed over Nettlestead, near Maidstone, on August 7th, and was witnessed by several persons. Passing through a field of oats, it carried several sheaves along in its course, and it is stated that it deposited one on the top of a large oak tree. Several oilcloths, which were used to cover a stack of hay, were lifted from their position and carried across the river. While crossing the stream the whirlwind caused a small waterspout. A barn close by also suffered by having its thatched roof partly carried away. It is reported that several of these phenomena have recently occurred in the parishes of Watlington and East Farleigh, but on a much smaller scale.—*South Eastern Gazette, August 10th.*

7th.—*Alton, Ashdell* (II). TS.—*Winslow, Addington* (III). T, H and R, .37 in. fell in 15 minutes.—*Southend* (IV). T at 9 a.m.—*Downham, Crimplesham* (IV). TS.—*Pewsey* (V). T.—*Fairford, Kempsford* (VI). Very heavy TS.—*Cheltenham* (VI). T and H.—*Melton Mowbray, Coston* (VII). T and L.—*Ketton Hall [Stamford]* (VII). TS with H at 11.50 a.m. R .56 in.; of which .42 in. fell in 30 minutes. About 4 miles E. of Stamford the H stripped all plants and covered the ground to a depth of about 6 inches.—*Horncastle, Bucknall* (VII). Destructive H at

3.30 p.m.—*Nottingham, Strelley Hall* (VII). T, H and R.—*Mansfield* (VII). T and heavy R.—*Macclesfield* (VIII). T.—*Sheffield, Weston Park* (IX). Severe TS from 1 p.m. to 4 p.m., during which time it was very dark and .70 in. of R fell.—*Llanfrechfa* (XI). Much distant T.—*Glasgow, Queen's Park* (XIV). T.—*Balquhilder* (XVI). T and L 2 p.m. to 5 p.m.—*Coupar Angus* (XVI). T and heavy R, 1.21 in.—*Dalnaspidal H.R.S.* (XVI). T and R.

8th.—*Emsworth, Redlands* (II). T, L and H.—*Castle Malgwyn* (XI). S.W. gale.—*Melrose* (XII). T at 3 p.m.—*Newcastle West* (XX). Violent S.W. gale.

9th.—*Douglas, Victoria Road* (XI). S.W. gale, destructive to foliage.—*Lawderdale* (XXII). S.W. gale.—*Ramelton, Killygarraun* (XXIII). Gale from S. all day.

10th.—*Emsworth, Redlands* (II). S.W. to W. gale all night.—*Southend* (IV). Gale at noon, L in E. at 10 p.m.—*Barnard Castle, Whorlton* (X). S.W. gale.—*Elterwater* (X). Gale and heavy R.—*Shap* (X). Gale.—*Melrose* (XII). Gale.—*Watten, H.R.S* (XIX). TS.

11th.—*Miltown Malbay* (XX). Stormy from N.W. with H.

12th.—*Great Stanmore, Springlands* (I). Tremendous squall of wind from S.S.W., and drenching R for 5 or 10 minutes at 5.45 p.m.—*Wallington* (II). Gale.—*Downham, Crimplesham* (IV). Heavy gale and L.—*Diss* (IV). Gale from S.—*Babbacombe* (V). S.W. gale.—*Bath, Queen's Parade* (V). TS.—*Gloucester, Maisemore Lock* (VI). Gale from W.—*Nottingham, Strelley* (VII). TS 3 p.m. to 3.30 p.m.—*Hulifar, Thorpe* (IX). Heavy T showers and very stormy.—*Barnard Castle, Whorlton* (X). TS.—*Douglas, Victoria Road* (XI). N.N.W. gale.—*Cambuslang* (XIV). T.—*Midmar, Blackstock* (XVII). R, 2.52 in. in about 11 hours; the heaviest fall in one day during 20 years.

TREMENDOUS RAINFALL ON DEESIDE.—A rainfall of unprecedented severity, and to which even an approximate parallel has not occurred within the memory of the present generation, took place at Braemar, and generally over upper Deeside, on the afternoon and night of Wednesday last, August 12th. The weather was stormy, and a strong northerly wind prevailed. With nightfall the drenching rain seemed to descend literally in sheets of water. Throughout Thursday morning the temperature fell rapidly, and daylight revealed the whole stretch of the Ben Macdhui and Cairngorm range thickly sheeted in new-fallen snow. Lochnagar and some of the southern Grampians had also snowy nightcaps. On the Dee the flooding was very considerable. On Mr. Hutchinson's Allanmore farm some sheep

were surrounded by the flood, one being drowned. At the Castle-town observatory the rain gauge registered 3·44 inches in something less than twelve hours—a record so high that nothing like it exists in the annals of the observatory, now thirty years. A portion of Quoich Bridge was swept away near Invercauld. The Milton Burn carried away some twenty yards of a stone dyke, opening up a new channel to the Dee. Yesterday was fine. Our Banchory correspondent says a gale of wind, accompanied by a downpour of rain, raged in that district during Wednesday night and yesterday morning. The river Dee has not been so much swollen for years. Field crops and gardens in exposed places have been terribly destroyed.—*Scotsman, August 15th.*

12th.—*New Deer, Artamford* (XVII). R, 2·15 in., the heaviest fall recorded.—*Newcastle West* (XX). Mock sun.—*Miltown Malbay* (XX). H.—*Ramelton, Killygarvan* (XXIII). Gale at night from N.W.

13th.—*Wallington* (II). Gale.—*Miltown Malbay* (XX). Frost, ice on pools.—*Mullingar, Belvedere* (XXI). Frost at night cutting down potatoes on the bogs.

14th.—*Buntingford, Throcking* (III). White frost at night, dahlias, &c., slightly touched in low situations.—*Winslow, Addington* (III). Grass crisp with frost in places.—*Diss* (IV). Frost in morning.—*Strathmiglo, Loden Urquhart* (XVI). Sharp frost injuring potatoes on low-lying lands.

14th and 15th.—*Douglas, Victoria Road* (XI). Frosts, blackening marrows, &c.

16th.—*South Uist, Ardkenneth* (XVIII). Heavy fog.

19th.—*Isleworth, Dunster Lodge* (I). Heavy TS.

20th.—*Pinner* (I). H.—*Great Stanmore* (I). T about 2 p.m.—*Wallington* (II). TS.—*Tenterden* (II). TS.—*Rodmersham* (II). TS at 5 p.m.; waterspout reported in afternoon.—*Southend* (IV). T in N. at noon and 2 p.m.

21st.—*Keston Tower* (II). Between 7 and 7.30 p.m. ·30 in. of R fell.—*Southend* (IV). L in E. at 10.30 p.m.—*Pewsey* (V). T.—*Wincanton, Stowell* (V). L at 3 p.m.—*Melton Mowbray, Coston* (VII). T with heavy R.—*South Uist, Ardkenneth* (XVIII). Great heat, sudden squalls from N. later; cold and winterlike at night.

22nd.—*Wincanton, Stowell* (V). T.—*Macclesfield* (VIII). T.—*Llanfrechfa* (XI). Distant T.—*Abergwesin* (XI). Distant T.

23rd.—*Babbacombe* (V). TS with much R (·87 in.) ·22 in. falling in 5 minutes, 0.44 to 0.49 p.m.—*Ashburton, Druid* (V). T.—*Llan-*

frechfa (XI). Distant T.—*Llandovery* (XI). T.—*Abergwesin* (XI). Distant T.

24th.—*Pewsey* (V). Fog.

25th.—*Shap* (X). Strong gale.

26th.—*Southend* (IV). Gale.—*Wincanton, Stowell Rectory* (V). L and heavy R.—*Macclesfield* (VIII). Easterly gale.—*Douglas* (XI). Strong E. gale.—*Watten, H.R.S.* (XIX). Frost at night.

27th.—*Wincanton, Stowell* (V). .80 in. of R fell between 9 a.m. and 1 p.m.—*Forsinard, H.R.S.* (XIX). Sharp frost at night.

28th and 29th.—*Rodmersham* (II). Gale bruising the hops.—*Littlehampton* (II). Gale from E.—*Mayfield* (II). Strong E. and N.E. wind, doing much harm to hop plantations.—*Southend* (IV). Gales.

29th.—*Watten, H.R.S.* (XIX). Frost at night.

30th.—*Melrose* (XII). L at 2 p.m.—*Lochbroom* (XVIII). Sharp frost, blackening potatoes.

31st.—*Cullen House* (XVII). Severe frost, temp. 25°0.

SEPTEMBER.

1st.—*Biggar, Wiston* (XIV). Frost, damaging potatoes.—*Biggar, Cambus Wallace* (XIV). Severe frost, doing great injury to the cereals, as well as to the potato crop.—*Cullen House* (XVII). Sharp frost.—*Fermoy* (XX). L, T, and R.—*Miltown Malbay* (XX). T and L.

2nd.—*Plymouth* (V). 1.02 in. of R.—*Ashburton, Druid* (V). Heavy R all day, 1.23 in.—*Bath, Queen's Parade* (V). TS.—*Halifax, Thorpe* (IX). 1.60 in. of R, the heaviest fall of the year.—*Shap* (X). Strong gale.—*Newcastle West* (XX). T, L, and R; telegraph lines destroyed.

3rd.—*Winslow, Addington* (III). T.—*Bicester, Stratton Audley* (III). T.—*Banbury, Wroxton* (III). T and H.—*Langtree* (V). Heavy T and L.—*Bath, Queen's Parade* (V). TS.—*Melton, Coston* (VII). T.—*Nottingham, Strelley* (VII). TS 2 p.m. to 3 p.m.—*Mansfield* (VII). TS.—*Macclesfield* (VIII). T at noon and 6 p.m.—*Scarborough* (IX). TS.—*Douglas, Victoria Road* (XI). Easterly gale.—*Melrose* (XII). L.

4th.—*Liverpool, Walton-on-the-Hill* (VIII). T, L, and heavy R.—*Scarborough* (IX). L.—*Melrose* (XII). T.—*St. Andrews* (XVI). T, L, and heavy R, .34 in. fell in 50 minutes.—*Balquhiddy* (XVI). T at 5 p.m.—*Dalnaspidal, H.R.S.* (XVI). T and L.

5th.—*Northampton, Sedgebrooke* (III). H.—*Rendlesham* (IV). Heavy TS at 3.30 p.m.—*Diss* (IV). TS in afternoon.—*Ketton Hall* [*Stamford*]

(VII). T.—*North Esk Res.* [*Penicuik*] (XIII). T and L at midnight.—*Dunkeld, H.R.S.* (XVI). TS.—*Lochbroom* (XVIII). T.

6th.—*Babbacombe* (V). TS.

7th.—*London, Lansdowne Crescent, W.* (I). T, L, and R at 8.50 a.m. ; heavy R at noon.—*Keston* (II). 1.11 in. of R, all of which fell after 9 p.m., the heaviest fall of the year.—*Keston Tower* (II). Heavy R. 1.16 in.—*Rodmersham* (II). L in evening.—*Emsworth, Redlands* (II). Distant T.—*Alresford, Ovington* (II). 1.03 in. of R fell during a TS, .75 in. falling between 9.10 a.m. and 11.15 a.m.—*Elsfield* (III). 1.15 in. of R fell in 40 minutes.—*Culne, Compton Bassett* (V). T, L, and R throughout the day.—*Bath, Queen's Parade* (V). TS.—*Cheltenham* (VI). TS.—*Ross* (VI). TS.—*Melton, Coston* (VII). T.—*Ketton Hall [Stamford]* (VII). T.—*Nottingham, Strelley* (VII). Heavy R and T.—*Derby, Elvaston* (VII). TS at noon.—*Llanfrechfa* (XI). Sharp T and L 3 p.m. to 4.30 p.m.—*Corwen, Rhug* (XI). TS.

8th.—*Rodmersham* (II). Dense gloom with peculiar odour.—*Newcastle West* (XX). T, vivid L, H, and R.—*Miltown Malbay* (XX). T and L.

9th.—*Wallington* (II). H.—*Rodmersham* (II). L in evening.—*Langtree* (V). Heavy T.—*Macclesfield* (VIII). T at 11 a.m. and 6 p.m.—*Knutsford* (VIII). TS.—*Shap* (X). T.—*Douglas, Victoria Road* (XI). S.E. gale.—*Melrose* (XII). L and high wind.—*North Esk Res.* [*Penicuik*] (XIII). L at night.—*Dalnaspidal, H.R.S.* (XVI). L.

10th.—*London, Lansdowne Crescent, W.* (I). Very heavy R, 1.02 in. falling in about five hours.—*Regents Park, Royal Botanic Gardens* (I). R 1.43 in., 1.13 in. of which fell between 9 p.m. on 10th, and 9 a.m. on 11th.—*Hackney, E.* (I). R 1.46 in.—*East Finchley, Elmhurst* (I). 1.68 in. of R fell, mostly in a continuous downpour during the night.—*Great Stanmore* (I). 1.52 in. of R.—*Haslemere* (II). R 2.30 in., the heaviest fall in 24 hours during 13 years.—*Reigate, Springfield* (II). R 1.73 in., the max. fall of the year.—*Littlehampton* (II). Gale, R and T all night.—*Worth Rectory* (II). R 1.59 in. most of which fell after 5 p.m.—*St. Lawrence* (II). W. gale.—*Emsworth, Redlands* (II). N.E. gale, T, L, and heavy R, 1.08 in.—*Basingstoke, Chapel Hill* (II). R, 1.60 in.—*Blackwater, Hurstleigh* (II). R, 1.76 in., the heaviest fall since the record commenced in 1876.—*Reading, Russell Street* (II). R, 1.60 in., the heaviest fall since July, 1875.—*Maidenhead, Cookham Vicarage* (II). R 1.62 in., nearly all falling in 12 hours, the heaviest fall since July, 1881.—*Buntingford, Throcking* (III). 1.25 in. of R, the heaviest fall of the year.—*Slough, Langley* (III). 1.78 in. of R, the

heaviest fall since observations commenced in 1872.—*Northampton* (III). Heavy storm of wind and R at night doing much damage; 1·52 in. of R fell.—*St. Neots, Tetworth* (III). 1·45 in. of R fell during the night of 9th—10th.—*Woodbridge* (IV). R, 2·33 in.—*Rendlesham Hall* (IV) 2·18 in. of R fell between 9 p.m. of 10th, and 9 a.m. of 11th.—*Diss* (IV). Very heavy R at night, 1·40 in.—*Geldeston [Beccles]* (IV). 2·02 in. of R, the heaviest fall recorded except 2·06 in, on September 29th, 1871.—*Trowbridge* (V). R, 2·52 in., nearly all of which fell in 12 hours, from 5 p.m. on 10th, to 5 a.m. on 11th.—*Minterne Rectory* (V). R, 2·54 in.—*Babbacombe* (V). Heavy R (1·14) and S.S.E. gale.—*Polapit Tamar [Launceston]* (V). 2·41 in. of R, most of which fell in the night, the greatest amount recorded here in 24 hours.—*Holsworthy, Clurton* (V). R 2·46 in., the heaviest fall recorded since observations were commenced in 1866.—*Langtree* (V). Heavy R from 2 p.m. on 10th, to 4 a.m. on 11th, 2·82 in.—*Torrington, Little Silver* (V). Remarkably heavy R, 2·61 in.—*Penzance* (V). S.W. gale in evening, hurricane from N. with torrents of R (1·53 in.) at night.—*Bodmin, Fore Street* (V). The heaviest fall of R ever recorded here, 3·10 in.—*Crewkerne, Bincombe House* (V). Very heavy R with strong wind.—*Wincanton, Stowell* (V). Very heavy R, 2·53 in. commencing at 6 p.m.—*Milverton, Halse* (V). 2·50 in. of R fell between 5 p.m. of 10th and 6 a.m. of 11th.—*Glastonbury, Street* (V). Very heavy R, 2·52 in.—*Winscombe* (V). The greatest R recorded in one day 1·94 in., nearly all of it falling in 12 hours.—*Clifton* (VI). R commenced at 5 p.m., and fell continuously till past midnight, amounting to 2·05 in.—*Cirencester, Further Barton* (VI). Heavy R, 1·80 in.—*Ross* (VI). R from 6 p.m. to 3 a.m. of 11th; ·75 in. fell.—*Little Mulvern, The Farm* (VI). TS; ·56 in. of R fell between 1.50 and 2.30 p.m., followed by ·75 in. in the night.

10th and 11th.—*Hatherleigh, Winsford* (V). In the evening of 10th and forenoon of 11th, 3·31 in. of R fell; everything was swimming, and the river Torridge was quite like a sea.

11th.—*Canterbury, Harbledown* (II). 1·54 in. of R fell between 9 p.m. on 10th and 9 a.m. on 11th.—*Worthing, Bedford Row* (II). 1·34 in. of R fell in about 14 hours, commencing at 6 p.m. on 10th.—*Emsworth, Redlands* (II). N.W. gale.—*Watford, Oaklands* (III). In 12 hours, commencing 6.30 p.m. on 10th, 1·65 in. of R fell, the largest fall in that period of time registered here in 18 years except from TSS. *Witham, Rivenhall* (IV). Between 7 p.m. on 10th, and 10 a.m. on 11th 1·96 in. of R fell.—*Babbacombe* (V). N. gale.—*Wiveliscombe*,

Willett House (V). In 12 hours during the night 3·20 in. of R fell.—*Frome, Rock House, Mells* (V). Between 6 p.m. on 10th, and 4 a.m. on 11th 2·60 in. of R fell.—*Clifden, Kylemore* (XXII). Gale from W. and heavy R.

11th and 12th.—*Seathwaite* (X). 4·27 in. of R fell in seven hours, causing a flood such as had not been known for a generation.—*Elterwater* (X). Very wet, 2·62 in. in the two days.—*Loch Shiel, Glenaladale* (XVIII). Very heavy R, 4·05 in. fell in the two days, and on 12th, 1·12 in. fell in two and a half hours.

12th.—*Rodmersham* (II). Strong gale.—*Emsworth, Redlands* (II). S.W. gale.—*Northampton, Sedgebrooke* (III). High W.S.W. wind and heavy R all night.—*Diss* (IV). S gale at night.—*Babbacombe* (V). S.W. gale.—*Macclesfield* (VIII). Gale from W.—*Shap* (X). Strong gale and heavy R.—*Balquhiddier* (XVI). High wind and heavy R, 1·74 in.—*Dalnaspidal, H.R.S.* (XVI). L and heavy R, 1·24 in.—*Galway* (XXII). Gale at night and heavy R.—*Ramelton, Killygarvan* (XXIII). S.S.W. gale all day.

12th and 13th.—*Douglas, Victoria Road* (XI). S.W. gale.

13th.—*Dalnaspidal, H.R.S.* (XVI). L.—*South Uist, Ardkenneth* (XVIII). Storm from W.—*Watten, H.R.S.* (XIX). Gale from W.—*Ramelton, Killygarvan* (XXIII). Strong W. gale.

13th and 14th.—*Lochbroom* (XVIII). Very wild gale, and 2·25 in. of R in the two days.

14th.—*Lerwick, Montfield* (XIX). W. gale.

15th.—*Berkhampstead* (III). 9½ hours of bright sunshine.—*Cartmel, Broughton Hall* (VIII). 41 in. of R fell in 45 minutes.—*Shap* (X). Strong gale all day.—*North Esk Res. [Penicuik]* (XIII). Gale from 11 a.m. to 3 p.m.

16th.—*Tenterden* (II). Severe TS with very heavy R, 1·17 in.—*Rodmersham* (II). TS in S at 8 p.m. Solar halo.—*Lower Walmer* (II). 1·23 in. of R between 8 p.m. and 8 a.m.—*Littlehampton* (II). T and L and heavy R at night.—*Warbleton* (II). TS at midnight.—*Maresfield, Forest Lodge* (II). R 1·09 in., the heaviest fall in the year.—*St. Lawrence* (II). L and T to S.W.—*St. Andrew's* (XVI). W. gale.

17th.—*Canterbury, Harbledown* (II). R 1·45 in. the second fall in the month exceeding one inch.—*Rodmersham* (II). Severe TS with very heavy R at 1 a.m.—*Douglas, Victoria Road* (XI). S.W. gales.

18th.—*Littlehampton* (II). Thick fog.—*Calne, Compton Bassett* (V). Dense fog.—*Watten, H.R.S.* (XIX). Southerly gale at night.—*Clifden, Kylemore* (XXII). Very stormy from W. with 2·20 in. of R.

19th.—*Bicester, Stratton Audley* (III). Dense fog.

20th.—*Douglas, Victoria Road* (XI). S.W. gale.—*Lerwick, Montfield* (XIX). Gale from W.—*Newcastle West* (XX). Gale.—*Miltown Malbay* (XX) S.W. gale.

21st.—*Watten, H.R.S.* (XIX). S.W. gale at night.

23rd.—*St. Andrew's*, (XVI). Gale all day.—*Loch Shiel, Glenaladale* (XVIII). S on the hills above 2,000 ft.—*Newcastle West* (XX). H

24th.—*Liverpool, Walton-on-the-Hill* (VIII). H and heavy R.—*Castle Malgwyn* (XI). H.—*Melrose* (XII). L.—*Dalnaspidal, H.R.S.* (XVI). L and S.—*Forsinard, H.R.S.* (XIX). Sleet, H and R.

25th.—*London, Lansdowne Crescent, W.* (I). Showers of R and wet S at 3.45 p.m.—*Wallington* (II). S, H, R and T.—*Tenterden* (II). H.—*Bicester, Stratton Audley* (III). Ice.—*Peterborough, Springfield* (III). Frost on this and two succeeding nights.—*Babbacombe* (V). TS, H, parhelion.—*Melton, Coston* (VII). S and R, followed by very sharp frost.—*Marblesfield* (VIII). Kidney beans, &c., killed by frost.—*Douglas, Victoria Road* (XI). H, S and L.—*Melrose* (XII). S on ground.—*Cawdor [Nairn]* (XVIII). Stormy with S showers.

26th.—*St. Lawrence* (II). L and a few flakes of S at 6 p.m.—*Winslow, Addington* (III). S.—*Banbury, Wroxton* (III). H and S.—*Pewsey* (V). T.—*Calne, Compton Bassett* (V). Distant T.—*Nottingham, Beeston Fields* (VII). Sharp frost.—*Nottingham, Strelley Hall* (VII). Frost killing dahlias.—*Shap* (X). High Street and the hills above Mardale covered with S.—*Llanwrtyd Wells* (XI). S and sleet.—*Biggar, Wiston* (XIV). Frost injuring corn.—*Douglas, Victoria Road* (XI). H.—*North Esk Res. [Penicuik]* (XIII). S and H.—*Cawdor [Nairn]* (XVIII). Stormy with H.—*Miltown Malbay* (XX). Frost.

27th.—*Wallington* (II). Sharp frost.—*Rodmersham* (II). L in evening.—*Berkhampstead* (III). Min. temp. 30°·5 in screen, 23°·3 on grass; vegetable marrows killed.—*Diss* (IV). Fog in morning.—*Cheltenham* (VI). A sharp and very destructive frost.

28th.—*Wincanton, Stowell* (V). First frost in screen.—*Cirencester, Further Barton* (VI). Frost.—*Cheltenham* (VI). Severe frost, tender plants killed.—*Ross* (VI). Geraniums, dahlias and beans killed by frost.—*Llanfrehfa* (XI). Hard frost.—*Lerwick, Montfield* (XIX). S. gale.

29th.—*Littlehampton* (II). Terrific H storm.—*Wimborne Minster, Chalbury* (V). Beautiful mirage seen in the west at 5 p.m.—*Newcastle West* (XX). H.

30th.—*Littlehampton* (II). S.W. gale at night.—*Diss* (IV). S. gale

in afternoon.—*Babbacombe* (V). S.W. gale.—*Nottingham, Strelley Hall* (VII). Sky lit up with sheet L all evening.—*Derby, Elvaston* (VII). L at night.—*Shap* (X). TS at 4.35 p.m.—*Miltown Malbay* (XX). Heavy H showers.—*Galway, Queen's College* (XXII). Gale at night with heavy squalls.

OCTOBER.

1st.—*Rodmersham* (II). Solar halo, L in evening.—*Dalnaspidal, H.R.S.* (XVI). Gale and S.—*South Uist, Ardkenneth* (XVIII). N.W. storm.—*Ramelton, Killygarvan* (XXIII). N.W. by W. gale all day.

2nd.—*Wallington* (II). Gale.—*St. Lawrence* (II). Gale.—*Emsworth, Redlands* (II). Gale 4 p.m. to midnight.—*Diss* (IV). S.W. gale in evening.—*Babbacombe* (V). S.W. gale.—*St. John's [Deronport]* (V). W.S.W. gale.—*Gloucester, Maisemore* (VI). Southerly gale.—*Meltham, Harewood Lodge* (IX). Very stormy between 6 and 8 p.m.—*Barnard Castle, Whorlton* (X). S.W. gale.—*Port Madoc* (XI). S.W. gale.—*Melrose* (XII). Gale lasting 12 hours.—*Dalnaspidal, H.R.S.* (XVI). Wind, mist, S and R, 1.01 in.

3rd.—*Mansfield* (VII). T.—*Miltown Malbay* (XX). S.W. gale with L.

4th.—*Shap* (X). Strong gale.—*Loch Shiel, Glenaladale* (XVIII). S on hill tops.—*South Uist, Ardkenneth* (XVIII). H.—*Clifden, Kylemore* (XXII). Strong N.W. gale.

5th.—*Dalnaspidal, H.R.S.* (XVI). Sleet, S and L.—*South Uist, Ardkenneth* (XVIII). H.

6th.—*Dorking, Abinger* (II). Very severe frost, destroying all tender things.—*Wallington* (II). Gale.—*Littlehampton* (II). "Red Admiral" butterfly seen.—*Emsworth, Redlands* (II). Gale 3 p.m. to 3 a.m. of 7th.—*Weybread [Harleston]* (IV). R commenced at 2 p.m. and continued all night, .92 in. falling.—*Diss* (IV). S.W. gale.—*Plymouth* (V). TS.—*Nottingham, Strelley* (VII). R in afternoon and evening, .87 in.—*Derby, Elvaston* (VII). Heavy R, 1.27 in.—*Shap* (X). Hard frost.—*Port Madoc* (XI). S.W. gale with heavy R, 1.10 in.

8th.—*Rodmersham* (II). L in evening.—*Littlehampton* (II). W. gale.—*Babbacombe* (V). W. gale, L, solar halo.—*Miltown Malbay* (XX). Stormy from N.W. with H and L.

9th.—*Leyton* (IV). L.—*Calne, Compton Bassett* (V). Heavy R in early morning, .110 in.—*Ashburton, Druid* (V). Heavy R and H.—*Glostonbury, Street* (V). Heavy R, 2.12 in.

10th.—*St. Lawrence* (II). Gale.—*Babbacombe* (V). N.N.E. gale.—

Ashburton, Druid (V). L.—*St. John's [Devonport]* (V). W.S.W. gale with T.—*Elterwater* (X). S on Scawfell.

11th.—*Babbacombe* (V). L.—*Shap* (X). Hard frost.—*Llandovergy* (XI). Adjoining hills covered with S.—*Abergwessin* (XI). H and S.—*Ranmelton, Killygarvan* (XXIII). N.W. gale.

12th.—*Babbacombe* (V). L.—*Ashburton, Druid* (V). L.—*Melrose* (XII). Eildons white with S.—*Balquhilder, Stronvar* (XVI). Gale in evening.—*Dalnaspidal H.R.S.* (XVI). Gale and S.—*South Uist, Ardkenneth* (XVIII). S on hills.—*Watten H.R.S.* (XIX). Northerly gale.

13th.—*Diss* (IV). W. gale in evening.—*Ashburton, Druid* (V). Ice on pools.—*Balquhilder* (XVI). Gale.—*South Uist, Ardkenneth* (XVIII). H.

15th.—*Ashburton, Druid* (V). Fog.—*Partney* (VII). Gale from 11 p.m. to 2 a.m.—*Wetwang* (IX). S.—*Shap* (X). Strong gale.—*Douglas, Victoria Road* (XI). E. gale.

16th.—*Babbacombe* (V). E. gale and H.—*Port Madoc* (XI). Easterly gale.

17th.—*Rodmersham* (II). Very thick fog till 10 a.m.—*Winslow, Addington* (III). Fog in morning.

21st.—*St. Lawrence* (II). Gale at night.—*Babbacombe* (V). Fog.—*Ashburton, Druid* (V). Very heavy R in afternoon.—*Forsinard, H.R.S.* (XIX). S and hard frost.

21st–23rd.—*Meltham, Harewood Lodge* (IX). Almost continuous R, 2·14 in. in the three days.

21st–24th.—*Wetwang* (IX.) Three and a half inches of R fell in the four days; of this 1·91 in. fell on 23rd, the heaviest fall yet recorded for one day; wind N.E.

22nd and 23rd.—*Middleton-on-the-Wolds* (IX). In the two days, 2·86 in. of R fell, an exceptionally heavy fall.

22nd–24th.—*Derby, Elvaston* (VII). Heavy N.E. gales, with heavy R on 23rd (1·28 in.) causing a flood in the river Derwent.

23rd.—*Hayes Common* (II). R, 1·12 in., the heaviest fall in the year.—*Weybreul [Harleston]* (IV). R ·91 in. commencing at 2 p.m., and continuing all night.—*Melton, Coston* (VII). R began about noon and continued all night, causing a high flood; on 24th, 1·54 in. fell.—*Partney* (VII). R, 1·97 in., most of which fell between 3 p.m. and 2 a.m.—*Louth* (VII). 1·51 in. of R, the heaviest fall of the year.—*Brigg* (VII). The heaviest fall of R recorded here, 2·14 in.—*Nottingham, Strelley* (VII). R from 11.30 a.m. very heavy all night,

1·56 in., the heaviest fall yet recorded, excepting a fall of 2·03 in. on June 25th, 1883.—*Newark, East Stoke* (VII). 1·55 in. of R, most of which fell between 4 p.m. of 23rd, and 7 a.m. of 24th.—*Mansfield* (VII). Violent gale with heavy R, 2·25 in.—*Stuffynwood Hall* [*Mansfield*] (VII). R 2·26 in., the heaviest fall in 24 hours ever recorded here.—*Tickhill, Sandbeck Park* (IX). 1·60 in. of R fell during the night and early morning, with very high W. wind.—*Driffield, Beverley Road* (IX). R 1·72 in., the heaviest fall ever recorded here.—*South Uist, Ardkenneth* (XVIII). Ice on lakes.

24th.—*Nottingham, Strelley* (VII). N. gale in morning.—*Melrose* (XII). Lunar rainbow at 7.30 p.m.

25th.—*Abergwesin* (XI). Very stormy, with heavy R, 1·11 in.—*South Uist, Ardkenneth* (XVIII). H and heavy R, ·60 in.—*Newcastle West* (XX). Heavy R, 1·09 in. and flood along the Deel.

26th.—*Diss* (IV). S.S.W. gale in morning.—*Bingfield House* (X). Lunar rainbow.

27th.—*Rodmersham* (II). Sleet H and S in afternoon.—*Winslow, Addington* (III). T, H and R.—*Melton, Coston* (VII). R and H with T about 1 p.m.—*Derby, Elvaston* (VII). W.N.W. gale with H and L.—*Knutsford* (VIII). TS.—*Thixendale* (IX). Vivid L.—*Douglas, Victoria Road* (XI). S.W. to N.W. gale.—*Loch Shiel, Glenaludale* (XVIII). Very stormy with H and heavy R.—*Miltown Malbay* (XX). Heavy gale from N.—*Rumelton, Killygarvan Glebe* (XXIII). W.N.W. gale with heavy squalls.

28th.—*Dorking, Abinger* (II). H and S.—*Emsworth, Redlands* (II). L.—*Teignmouth* (V). Heavy H storm about 11 a.m.—*Knutsford* (VIII). TS.—*Lancaster, Southfield* (VIII). L at night.—*Bingfield House* (X). Lunar rainbow.—*Douglas, Victoria Road* (XI). S.S.E. gale and heavy H storm.—*Clifden, Kylemore* (XXII). Strong westerly gales.

29th.—*Lancaster, Southfield* (VIII). L at night.

30th.—*Babbacombe* (V). Fog.—*Douglas, Victoria Road* (XI). S.E. gale and heavy R, 1·10 in.—*Watten, H.R.S.* (XIX). Southerly gale at night.

30th and 31st.—*Derby, Elvaston* (VII). Heavy R, 1·22 in., causing a flood on the Derwent on November 1st.

31st.—*Wallington* (II). About noon a very dense yellow fog curtain appeared high up in the air, and by 0.30 p.m. it was so dark that lamps and candles were an absolute necessity; there was very

little fog on the ground.—*Emsworth, Redlands* (II). N. gale 7 p.m. to midnight.—*Diss* (IV). Easterly gale in morning, and incessant R for 20 hours.

NOVEMBER.

1st.—*Rendlesham Hall* (IV). Stormy from N.E.—*Babbacombe* (V). Solar halo.

2nd.—*Port Madoc* (XI). 3·10 in. of R fell in ten hours.

3rd.—*Winslow, Addington* (III). Heavy R (·97 in.) causing a large flood on the 4th.—*Calne, Compton Bassett* (V). Heavy R all day ; 1·05 in.—*Newcastle West* (XX). L, H, with violent gusts of wind, and R.—*Galway* (XXII). Gale at night.

3rd and 4th.—*Weybread [Harleston]* (IV). Almost continuous R (1·18 in.), causing a flood, probably higher than any since 1879.

4th.—*Babbacombe* (V). Solar halo.—*Ashburton, Druid* (V). Heavy gale at night.—*Colmonell* (XIV). T and L.—*Dalnaspidal, H.R.S.* (XVI). S.—*South Uist, Ardkenneth* (XVIII). S on hills.—*Miltown Malbay* (XX). W. gale, L.

5th.—*Dorking, Abinger* (II). H storm, sharp frost at night.—*Littlehampton* (II). S.W. to N.W. squalls.—*Oxford* (III). H.—*Babbacombe* (V). N.W. gale and H.—*Shap* (X). S.—*Douglas, Victoria Road* (XI). H storm.—*Miltown Malbay* (XX). N.W. gale.

12th.—*Rothwaite, Castle Lodge* (X). S on hill-tops.

13th.—*Dalnaspidal, H.R.S.* (XVI). Gale from W. with S and R.—*Watten, H.R.S.* (XIX). Stormy from W.N.W.

14th.—*Meltham, Harewood Lodge* (IX). First S on hills.—*Scarborough* (IX). H.—*Balquhadder* (XVI). S.—*Dalnaspidal, H.R.S.* (XVI). S.—*Forres, H.R.S.* (XVII). H and S.—*Watten, H.R.S.* (XIX). S and H.

15th.—*Ashburton, Druid* (V). Ice on pools.

16th.—*Littlehampton* (II). E. gale.—*St. Lawrence* (II). E. gale.

16th and 17th.—*Babbacombe* (V). Easterly gales.

17th.—*Rodmersham* (II). L in evening.—*Plymouth* (V). Gale.

18th.—*Cheltenham* (VI). Ice on pond $\frac{1}{4}$ in. thick.—*Lancaster, Southfield* (VIII). Skating in Williamson Park.

20th.—*Trulee, Castlemorris* (XX). Storm at night.

22nd.—*Winslow, Addington* (III). Fog all day.

23rd.—*Newcastle West* (XX). Stormy at night from W. and S.W.

24th.—*Littlehampton* (II). S.E. to S.W., rough with R.—*Melton*,

Coston (VII). S.—*Shap* (X). H.—*Douglas, Victoria Road* (XI). S.E. gale.

25th.—*Babbacombe* (V). Heavy R, 1·21 in.—*Shap* (X). H.

25th to 27th.—*Ashburton, Druid* (V). Gales and torrents of R, 4·2 in. in the three days.—*Cheltenham* (VI). Very stormy.

26th.—*Scarborough* (IX). S.E. gale.—*Shap* (X). Strong S.E. wind and heavy R, 1·05 in.—*Balquhiddler* (XVI). H and heavy R, 1·82 in.—*Strathmiglo, Loden Urquhart* (XVI). Heavy gale with R in evening.—*Coupar Angus* (XVI). 1·57 in. of R, causing high floods.—*Dalnaspidal, H.R.S.* (XVI). R, S and sleet, 1·56 in.—*Watten, H.R.S.* (XIX). E.S.E. gale.—*Tralee, Castlemorris* (XX). S.W. gale at night.—*Milton Malbay* (XX). Storm from S.W., veering to N.W., and 60 in. of R.—*Ramelton, Killygarra* (XXIII). E.S.E. gale.

26th and 27th.—*New Radnor, Downton* (XI). Heavy R, 2·22 in.—*Douglas, Victoria Road* (XI). A whole gale blew from S.S.E. on 26th, and at midnight the wind shifted to S.S.W., and blew with great force during 27th.

27th.—*Rodmersham* (II). Gale.—*Babbacombe* (V). S.W. gale and heavy R, 97 in.—*St. John's [Devonport]* (V). S.S.E. gale with heavy R.—*Ketton Hall [Stamford]* (VII). TS with very large H at 11.30 a.m.—*Derby, Elvaston* (VII). S.W. gales.—*Blencowe* (X). 1·06 in. of R, the heaviest fall in the year.—*Llundoverry* (XI). 1·59 in. of R and a very heavy flood.—*Corwen, Rhug* (XI). Heavy R (1·22 in.) day and night.—*Tralee, Castlemorris* (XX). Great S.W. gale.

28th.—*Mayfield* (II). S.W. gale.—*Leyton* (IV). S.W. gale all day.—*Rendlesham Hall* (IV). Gale from S.W.—*Plymouth* (V). Gale.—*St. John's [Devonport]* (V). Heavy S.E. to W.S.W. gale with heavy R.—*Shap* (X). Strong gale and heavy R, 1·01 in.

DECEMBER.

1st.—*Ross* (VI). River Wye in high flood.—*Dalnaspidal H.R.S.* (XVI). L.

2nd.—*Littlehampton* (II). Frost, fog and R.—*Oxford* (III). H, R and high wind.—*Ashburton, Druid* (V). Fog in the valley.—*Macclesfield* (VIII). Sleet.—*Wetwang* (IX). A tortoiseshell butterfly seen.—*Shap* (X). Strong gale.—*Dunkeld H.R.S.* (XVI). Stormy with sleet.—*Dalnaspidal H.R.S.* (XVI). L, R and S.—*Cawdor [Nairn]* (XVIII). S shower.

3rd.—*Emsworth, Redlands* (II). S.W to W. gale.—*Babbacombe* (V).

S.W. gale.—*Macclesfield* (VIII). L and sleet.—*Shap* (X). A very severe gale and heavy R.—*Balquhilder* (XVI). Very heavy R and sleet, 1·82 in.—*Dalnaspidal H.R.S.* (XVI). Heavy R and S, 1·31 in.—*South Uist, Ardkenneth* (XVIII). L.—*Newcastle West* (XX). Great storm with L.—*Ramelton, Killygarraun* (XXIII). Heavy gale from S.

4th.—*Pinner Hill* (I). H.—*Oxford* (III). S.—*Babbacombe* (V). S.W. gale.—*Ketton Hall [Stamford]* (VII). L in evening.—*Derby, Elraston* (VII). L at night.—*Elterwater* (X). Very stormy with H.—*Dalnaspidal H.R.S.* (XVI). S and sleet.—*Miltown Malbay* (XX). T and L.

5th.—*Oxford* (III). S.—*Babbacombe* (V). E.N.E. gale.—*Ashburton, Druid* (V). Fog in the valley, torrents of R in afternoon, 1·25 in.—*Penzance* (V). Strong S.W. wind and heavy R, 1·50 in.—*St. John's, [Devonport]* (V). Heavy R from S.E. all day.—*Wincanton, Stowell* (V). L, T and strong gusts of wind.—*Cirencester, Further Barton* (VI). S.—*Rhayader* (XI). S.—*Cawdor [Nairn]* (XVIII). S and frost.—*Newcastle West* (XX). S, sleet and L.—*Miltown Malbay* (XX). S and sleet.—*Londonderry, Knockan* (XXIII). S on mountains.

6th.—*Northampton, Sedgebrooke* (III). S.—*Ross* (VI). S.—*Melton, Coston* (VII). S.—*Scarborough* (IX). S.—*Castle Malgwyn* (XI). S.—*Abergwessin* (XI). S.—*Dalnaspidal, H.R.S.* (XVI). Aurora.—*Forsinard, H.R.S.* (XIX). Frost and S.—*Ramelton, Killygarraun* (XXIII). S.

7th.—*Northampton, Sedgebrooke* (III). S.—*Woodbridge* (IV). S.—*Babbacombe* (V). E. gale.—*Douglas, Victoria Road* (XI). S.—*Coatbridge, Lochwood* (XIV). Temp. fell to 6°·0.—*Colmonell* (XIV). S showers.—*Lerwick, Montfield* (XIX). Aurora.—*Cushendun* (XXIII). S.—*Londonderry, Knockan* (XXIII). S and hard frost.

8th.—*Rendlesham Hall* (IV). S storm.—*Diss* (IV). S and some skating.—*Babbacombe* (V). E.N.E. gale.—*Lancaster, South Road* (VIII). Skating in Williamson Park.—*Scarborough* (IX). S and H.

9th.—*Pinner Hill* (I). S.—*Hythe* (II). S.—*Wrotham* (II). S and sharp frost.—*Rodmersham* (II). S in evening.—*Oxford* (III). S.—*Sandy, The Lodge* (III). S.—*Southend* (IV). S.—*Cheltenham* (VI). S.—*Melton, Coston* (VII). S.—*Ketton Hall [Stamford]* (VII). S.—*Horncastle, Bucknall* (VII). S.—*Nottingham, Strelley* (VII). First S at 6 a.m.—*Macclesfield* (VIII). S.—*Wakefield, Stanley* (IX). S.—*Shipley, Esholt* (IX). S.—*Shap* (X). S.—*Castle Malgwyn* (XI). S.—*Abergwessin* (XI). S.—*Balquhilder* (XVI). S showers.—*Dunkeld, Inver Braan* (XVI). S.—*Cawdor [Nairn]* (XVIII). S.—*Golspie, H.R.S.* (XIX). S.

10th.—*Rodmersham* (II). Brilliant mock sun at 8.30 a.m.—*Dorn-*

ham, Crimplesham (IV). 4 in. of S.—*Forsinard, H.R.S.* (XIX). Hard frost, S and drift.

10th and 11th.—*Ross* (VI). Skating.

11th.—*Buntingford, Throcking* (III). The coldest day ; max. temp. 33°·6, min. 20°·3.—*Bingfield House* (X). Severe frost, min. 7°·0.

12th.—*Reigate, Springfield* (II). Skating.—*Rodmersham* (II).—*Loch Shiel, Glenaladale* (XVIII). W.S.W. gale and heavy R, 2·56 in.

13th.—*Oxford* (III). Dense fog.

14th.—*Ross* (VI). Dense fog.

15th.—*Nottingham, Strelley* (VII). Thick fog.

16th.—*Hythe* (II). Fog.—*Douglas, Victoria Road* (XI). Heavy W.S.W. gale.—*Melrose* (XII). S.W. gale.

17th.—*Littlehampton* (II). Dense fog.—*Calne, Compton Bassett* (V). Dense fog.—*Shap* (X). Dense fog.

18th.—*Rodmersham* (II). Dense fog in morning.—*Ashburton, Druid* (V). Dense fog.—*Nottingham, Strelley* (VII). Thick fog all day.—*Douglas, Victoria Road* (XI). Thick fog all day.—*Balquhiddy* (XVI). Fog.

19th.—*Llanfrechfa* (XI). Fog all day.—*Melrose* (XII). Heavy fog.

21st. *Babbacombe* (V). Solar halo.—*Cirencester, Further Barton* (VI). Fog.—*Ross* (VI). Dense fog.—*Shap* (X). Fog all day.—*Dalnaspidal, H.R.S.* (XVI). S and sleet.

22nd.—*Rodmersham* (II). Very thick fog about noon.—*Forsinard H.R.S.* (XIX). S and sleet.

23rd.—*Balquhiddy* (XVI). S showers.

24th.—*Tring* (III). A remarkable lunar halo with prismatic colours was observed in the evening.

25th.—*Cirencester, Further Barton* (VI). Fog.—*Macclesfield* (VIII). Fog.

27th.—*Dorking, Abinger* (II). Very foggy all day and night.—*Littlehampton* (II). Dense fog.—*Winslow, Addington* (III). Dense fog.—*Wincanton, Stowell* (V). Dense fog.—*Llanfrechfa* (XI). Thick fog all day.

27th—31st. *Loch Shiel, Glenaladale* (XVIII). Very stormy from S.W. and N.W. with much S and R, 6·89 in. in the five days.

28th.—*Pinner Hill* (I). H storm.—*Keston Tower* (II). Westerly gale.—*Rodmersham* (II). Gale with H in evening.—*Littlehampton* (II). Gale and continuous R.—*St. Lawrence* (II). W. gale.—*Emsworth, Redlands* (II). Gale from noon to 7 p.m.—*Diss* (IV). N. gale all day and night.—*Calne, Compton Bassett* (V). High wind.—*Babbacombe* (V). S.W.

gale.—*Nottingham, Strelley* (VII). S storms at night.—*Derby, Findern* (VII). A sudden storm of H and sleet about 4 p.m.—*Derby, Elvaston* (VII). Heavy S.W. gale.—*Stuffynwood Hall [Mansfield]* (VII). S.—*Macclesfield* (VIII). H storm.—*East Layton [Darlington]* (IX). Heavy gale with S.—*Barnard Castle, Whorlton* (X). S.W. gale all day.—*Elterwater* (X). Previous to 1.30 p.m. the wind was strong from S.W. with much R, but at that time there was a flash of L and a loud clap of T, the wind veered to N.N.W. with a squall of H and S, and the temp. fell from 47°·0 to 38°·0 in 15 minutes.—*Shap* (X). A very heavy gale all day.—*Douglas, Victoria Road* (XI). S.W. gale veering to N, with heavy H and loud T at noon, and S at night.—*Melrose* (XII). S. gale with S.—*North Esk Reservoir* (XIII). T and L with S and drifts.—*Colmonell* (XIV). S showers.—*Balquhiddier* (XVI). Gale and 3 in. of S.—*Dunkeld, Inver Braan* (XVI). S.—*Dalnaspital, H.R.S.* (XVI). S and R.—*South Uist, Ardkenneth* (XVIII). High wind and S storm.—*Watten, H.R.S.* (XIX). Storm of wind with R, S, and sleet.—*Miltown Malbay* (XX). Stormy from N.W. with H.—*Ramelton, Killygarraun* (XXIII). Strong W.S.W. gale at night with S.

28th and 29th.—*Ross* (VI). S.—*Melton, Coston* (VII). S.—*Mansfield* (VII). Severe storm of wind, H and S.—*Chesterfield, Brimington Hall* (VII). A severe storm of wind, H and S.—*Shipley, Esholt* (IX). S and sleet.—*Forsinard, H.R.S.* (XIX). S and drift.—*Lerwick, Montfield* (XIX). S.—*Belfast, New Barnsley* (XXIII). Heavy S.—*Cushendun* (XXIII). Heavy S.—*Londonderry, Knockan* (XXIII). S.

29th.—*Hythe* (II). S.—*Rodmersham* (II). Solar halo, S at 6 p.m. L in evening.—*Emsworth, Redlands* (II). Sleet and slight S.—*Winslow, Addington* (III). S.—*Northampton, Sedgebrooke* (III). S about an inch deep.—*Sandy, The Lodge* (III). Heavy S.—*Woodbridge* (IV). S.—*Weybread [Harleston]* (IV). Gale and S storm at 6 p.m.—*Diss* (IV). S.—*Downham, Crimplesham* (IV). S.—*Babbacombe* (V). L, H and S.—*Wincanton, Stowell* (V). L at 8 p.m.—*Cirencester, Further Barton* (VI). S and L.—*Cheltenham* (VI). S.—*Derby, Elvaston* (VII). N.W. gale and S storm.—*Macclesfield* (VIII). S.—*Lancaster, South Road* (VIII). S, T and L.—*Wakefield, Stanley Vic.* (IX). S and T.—*York, Cherry Hill* (IX). S.—*Scarborough* (IX). S.—*East Layton [Darlington]* (IX). S.—*Barnard Castle, Whorlton* (X). S.—*Elterwater* (X). High wind and S showers.—*Shap* (X). H and S.—*Llanfrechfa* (XI). Storm from N.W. with sleet.—*Llandovery* (XI). S.—*Abergwesin* (XI). R, H and S.—*Carno* (XI). S.—*Douglas, Victoria Road* (XI). Strong N.W. gale with S.—*Melrose* (XII). S and

H.—*Colmonell* (XIV). 1 in. of S.—*Glasgow, Queen's Park* (XIV) S about 4 in. deep.—*Balquhiddar* (XVI). S.—*South Uist, Ardkenneth* (XVIII). S storm.—*Watten, H.R.S.* (XIX). S.—*Tralee, Castlemorris* (XX). Westerly gale at night.—*Ramelton, Killygarvan* (XXIII). S and heavy squalls.

30th.—*Pinner Hill* (I). 2 in. of S.—*Dorking, Abinger* (II). S.—*Rodmersham* (II). R, H and S in evening.—*Diss* (IV). Heavy squall from W. at 5 p.m., with driving S.—*Wincanton, Stowell* (V). S.—*Ivem, Sansaw Hall* (VI). S, lying about 24 hours.—*Horncastle, Bucknall* (VII). S.—*Woolton, Roseleigh* (VIII). 1·10 in. of R, the heaviest fall in the year.—*Elterwater* (X). S and R nearly all day.—*Cardiff* (XI). S.—*Corwen, Rhug* (XI). S.—*Dunkeld, Inver Braan* (XVI).—*Miltown Malbay* (XX). Fog.

OBSERVERS' NOTES ON THE MONTHS.

JANUARY.

I. *Lunsdowne Crescent, W.* Cold with slightly deficient R. Mean temp. $36^{\circ}9$. Frost in air on 15 nights.—*Muswell Hill*. R less than three-quarters of the average of 13 years. There were two distinct wet periods, viz., from 8th to 15th, and from 26th to 31st.

II. *Dorking, Abinger*. An open month for the most part, with a good spell of fine weather.—*Wallington*. Very cold and dull with very little sunshine. Mean amount of cloud 8·2 ; mean temp. $36^{\circ}2$. S on two days.—*Hythe*. Very wet and wintry.—*Wrotham*. Many changes of weather occurred during the month, S, sleet and slush, hard dry frost, and warm, unhealthy weather alternating ; farm work was for the greater part of the month almost at a standstill, although the frosty mornings were very valuable for some operations. The ground at the close was in a sodden state, R having been almost continuous during the last days of the month.—*Littlehampton*. No S seen on the ground on this side of the South Downs.—*St. Lawrence*. R 1·11 in. below the average of 15 years ; vegetation kept back by the long continuance of frosty nights.—*Emsworth, Redlands*. Very little sunshine, cold and cheerless from 1st to 25th, but no severe frost ; rough and stormy from 10th to 17th, and still more so from 26th to 31st.—*Winchester, Harestock*. Very windy, with much cloud and very little S.

III. *Banbury, Wroxton*. A remarkable absence of sunshine ; no very hard frost and no skating ; much damp and dirty weather, yet only small amounts of R ; wells generally very low.—*Northampton*. R ·63 in. below the average of 19 years.

IV. *Southend*. Remarkably fine, very little S, and no dense fogs.—*Harlow, Sheering*. The fourteenth consecutive month with R below the average, the total fall being ·83 in. less than the average of 15 years.—*Ipswich, Bishop's Hill*. R just two-thirds of the average ; 8 or 9 days of bright frosty weather, and many dull and gloomy days, but

on the whole a fairly seasonable month with nothing special to remark.—*Woodbridge, The Grange*. The first three weeks very dull with little or no sunshine, and all flowers in greenhouses kept back to an unusual extent by want of light, though weeds in gardens and grass in meadows kept growing.—*Diss*. The month commenced with five days of cloudy, still weather, which were followed by two of great brilliancy, and then by nine of daily R. The rapid fall of pressure from 7th to 11th, with gales and heavy rains, was noteworthy, as was its rise during the following week. From 17th to 26th there was no R, but sharp frost and skating. On the 26th a thaw set in, and warm weather with R terminated the month. Much severe illness in the form of pulmonary complaints after the first week.

V. *Calne, Compton Bassett*. The month was cold, cloudy and wet, with very little S, and only three sharp frosts.—*Plymouth*. A cold drizzling month, with only 11 per cent. of the possible amount of sunshine. R 41 per cent. below the average. Mean temp. about 4° below the average. E. winds unusually prevalent.—*Torquay, Babbacombe*. Rather cold and dry, with an average humidity and amount of cloud, and rather low pressure. R three-fifths of the average. Wet from 7th to 11th, and from 23rd to the end. The mean daily range of temp. (6°-9) was the least observed in any month since observations commenced in August, 1876. With the exception of the 5th and 10th, it was cold till 22nd; but warm after. S.E. winds prevailed on 8 days, S.W. on 9; gales on 11 days; S on 3 days.—*Holsworthy, Clawton*. Unusually fine. From 10th to 22nd, wind N. and N.E., very cold but very fine for agricultural work, roads perfectly dry and beautiful for travelling.—*Hatherleigh, Winsford*. Extremely favorable winter weather, with comparatively small rainfall and no severe frost.—*Beaford*. No S during the month; duration of bright sunshine 50 hours.

VI. *Cirencester, Further Barton*. Cold and dark, with much E. and N.E. wind; two weeks, from 13th to 27th, without any sunshine; on the 5th and 10th the temp. rose, the wind shifting to S.W., but no permanent change took place till after the 25th, when it became wet and windy.—*Cheltenham*. Mean temp. about the average; uniformly low temp., with very slight range, between the 11th and 25th; afterwards tempestuous with high temp. No ice to bear except on exposed pools on the hills; the hills were covered with a thin sheet of S for several days in the middle of the month.—*Ross*. Till the 25th,

with the exception of 4th, 5th, 9th, 10th and 11th, which were only slightly warmer, the weather was cold but the frost not severe, so that the ponds hardly bore for skating. The last 15 days were almost uniformly overcast, and the last six very wet.

VII. *Melton Mowbray, Coston.* Cold and dull, except after 26th. Mean temp. below the average.—*Ketton Hall [Stamford].* Cold until 26th, when it became much milder; R very slight, weather generally very dull and gloomy, only three bright days.—*Nottingham, Strelley.* Cold and winterly to the 26th, with frost almost every night; after that date much milder. R about half an inch, and temp. $2^{\circ}0$ below the average.—*Mansfield.* R $\cdot 13$ in. below the average of 15 years; the first week was frosty but not severe; the third week was foggy, and the last dull, dirty, and sunless, with almost continuous drizzle, with high winds and much atmospheric disturbance at the close.—*Worksop, Hodsock.* Many alternations between frost and thaw. Though the frost was never severe or of long duration, the mean temp. ($36^{\circ}1$) was lower than that of the last three years and as much as 7° lower than that of 1884; R less than in the last three years, and slightly below the average; sunshine very deficient, only 6 per cent. of the possible duration.

VIII. *Chelford, Astle Hall.* Very frosty till the 26th, ponds being frozen hard most of the time.—*Walton, Breeze Hill.* Dull and unsettled, and although there were some very cold days with E. winds, it was on the whole, and especially towards the end, very mild. R considerably below the average.

IX. *Wakefield, Stanley.* R below the average and water still very scarce.—*Scarborough.* Generally dull and cold; stormy from 11th to 17th; last week very mild and damp.—*East Layton [Darlington].* Moderately fine but with some wintry weather; S with strong N. winds about the middle of the month; very little sunshine but somewhat cloudy and heavy skies; all out-door work forward.

X. *Barnard Castle, Whorlton.* Cold and unusually foggy.—*Blencowe.* Frost prevailed with little interruption till the 24th, when a thaw and great mildness set in.—*Elterwater.* R considerably below the average; many frosty days, but no intense frost; generally very windy from N. and N.E.—*Shap.* Very damp with no very heavy gales, though strong winds were frequent. The land at the close was very wet, but fresh and green, and spring flowers were appearing.

XI. *Llanfrechfa.* Fine seasonable weather with moderate frosts at night till 24th; afterwards temp. 10° higher. The steady moderate

rains of this month were much required to replenish springs, which had become very low and weak.—*Llechryd, Castle Malgwyn*. R hardly up to the average and frost not severe, but there were very cold winds from N., N.E. and E.—*Douglas, Victoria Road*. Strong S.E. winds and very cold weather until 9th ; on 10th the wind shifted to N.W., blowing a strong gale, and polar winds and slight frost held till 17th ; this was succeeded by S.E. winds, more or less strong and extremely cold, until 25th, when it became mild and genial ; the period 11th to 23rd was very fine and dry.

XII. *Dumfries, Crichton Inst.* Mean temp. $5^{\circ}0$ below the average, owing no doubt more to the absence of sunshine than to the intensity of frost ; pressure and R about the average ; no S or violent storms, but though equable, the month throughout was damp, cloudy and cold.—*Hawick, Wilton Hill*. Fine frosty weather from 14th to 25th.—*Melrose*. Cold, mean temp. $2^{\circ}6$ below average ; rainfall $\cdot64$ in. below average ; S and sleet with occasional R and H fell almost daily from 3rd to 18th. Wind N. and E. 19 days, S. and W. 12 days, generally moderate.

XVI. *St. Andrews, Newton Bank*. Very fine with a good deal of frost, but little S.—*Balquhadder, Stronvar*. No heavy S storm, and although S lay pretty deep on the hills, sheep did not suffer much ; frost though frequent not at all severe.—*Coupar Angus*. Mean temp. $33^{\circ}2$, considerably lower than that of the three preceding years ; frost on 20 nights.

XVIII. *Lochbroom*. The most beautiful January remembered, most days being quite springlike.—*Loch Shiel, Glenaladale*. Beautiful winter weather throughout, except from 4th to 10th, when it was wet, cold and stormy, with sleet and S on the hills. There was a marked absence of high wind ; prevailing directions, E.S.E. and S.S.E.

XIX. *Watten, H.R.S.* Fine open winter weather with moderate frosts.—*Lerwick, Montfield*. Exceedingly mild ; breezy from 1st to 12th, but there were no violent storms.—*Olnafirth*. A rare month ; such fine dry weather has not occurred in January for very many years.

XX. *Cork, Sunday's Well Road*. The tenth consecutive month of deficient R, the total being one inch below the average.—*Traler, Castlemorris*. Showery with frequent outbursts of sunshine ; frosty weather prevailed during the middle of the month, but was not of long duration. Rivers throughout the country very low.—*Tipperary*. Generally cold and damp, and a rather severe frost lasted for some

days in the middle of the month.—*Nenagh, Castle Lough*. For the most part mild and damp.—*Miltown Malbay*. On the whole, a mild January with moderate rainfall; the ground was very dry, and there was no interruption to farming work up to the 24th; thence to the end it was cold, raw, boisterous and rainy, S.W. winds prevailing.

XXII. *Galway*. Wet, squally and gloomy.—*Lauderdale*. Mild from 1st to 11th; hard frost from 12th to 21st; very mild again from 22nd to 31st.

XXIII. *Belfast, New Barnsley*. Fine, the slight frost not being sufficient to injure vegetation, but of service in preparing the ground for working.—*Ramilton, Killygarvan*. Not at all a bad month; R half-an-inch below average and very little high wind; there were a few nights of sharp frost, but the sky was so clear in the daytime that the sun melted it a good deal about here. Mean temp. $37^{\circ}4$.—*Corndonagh*. Very little frost; the month, as a whole, was rather mild, and the weather for the most part unsettled.

FEBRUARY.

I. *London, Lunsdowne Crescent, W*. Very mild and wet. The warmest February since 1877. Mean temp. $44^{\circ}1$.—*Muswell Hill*. R just 50 per cent. above the average of 13 years; number of rainy days also large.

II. *Redhill, Oxford Road*. R fell on 16 consecutive days from January 26th to February 8th.—*Wallington*. Wet and dreary, though the total R was not excessive.—*Hythe*. Very wet and unsettled.—*Littlehampton*. "February fill dyke" came true this year; two days were specially warm; vegetation all through the month luxuriant, and birds pairing.—*St. Lawrence*. R $\cdot 64$ in. above the average of 15 years; constant R delayed gardening work, and prevented potatoes being planted.—*Emsworth, Redlands*. Rough, cold weather prevailed till the 21st, thence to the 28th it was very mild; vegetation backward.

III. *Buntingford, Throcking*. The warmest February in the six years, 1880-85. R slightly above the average.—*Northampton*. Total R $1\cdot 02$ in. above the average of 19 years.

IV. *Harlow, Sheering*.—R $\cdot 70$ in. above the average of 15 years.—*Ipswich, Bishop's Hill*. R three quarters of an inch above the average, but a fine pleasant month.—*Weybread [Harleston]*. Dry from 17th to 23rd, otherwise the month was wet. Frequent calms, and gales only

on two or three occasions.—*Diss.* Pleasant, with little frost ; light R during the first nine days ; heavier from 14th to 17th, inclusive ; then a week of fine dry weather, and R on the last four days ; gardens and fields looking well ; much sickness, particularly bronchial affections.

V. *Calne, Compton Bassett.* Cool, cloudy and rainy throughout, with very little sunshine, no S and only one sharp frost.—*Plymouth.* Temperature about 2° above the average, frost on only three days. Pressure nearly a quarter of an inch below the average ; sunshine 18 per cent. of the possible duration. Wind chiefly from S.W.—*Babraham.* Warm, stormy and wet with low pressure ; R one-sixth more than the average ; it was warm and damp till the 16th, and after the 22nd, but cold and dry from 17th to 21st. S.W. winds blew on 22 days ; gales on 10 days, H on five, fog on five.—*Beaford.* Duration of bright sunshine 65 hours.—*Penzance.* The first week was unsettled, cold and raw, with frequent R ; the following ten days were very changeable, although somewhat milder ; from 18th to 23rd, stormy, and the remainder of the month mild and damp with S. wind.—*Wells, Westbury.* The first week was unusually breezy, high winds prevailing, especially from 1st to 4th, accompanied by heavy storms of R and H ; the third week opened with warm R, which was, however, quickly superseded by frosts, though not severe enough to do any damage to vegetation. Throughout the month there was no water out on the moors about here, which is unusual for the time of year.

VI. *Cirencester, Further Barton.* Much R and S.W. wind, with intervals of sunshine and some frosty nights.—*Loss.* The seventh February in succession with an excessive R, the total (4.50 in.) being more than twice the average of 35 years, and the greatest recorded in February during that period with the exception, of 1880, when 4.88 in. fell.

VII. *Melton Mowbray, Coston.* Wet, with extremes of temp. within short periods, *e.g.*, a range of nearly 37° between 21st and 24th.—*Nottingham, Strelley.* Very warm ; temp. 2°·0 above the average. R a quarter of an inch above the average.—*Mansfield.* Very unsettled and changeable, with R .72 in. above the average of 15 years ; the first half was mild, wet, and sunless ; the third week frosty at night with cold days, the temp. on several days varying 20° in 24 hours ; the last week was unsettled, with one or two beautiful spring days ; much tempestuous wind.—*Worksop, Hodssock.* Excepting a week of

very cold weather from the 15th to the 22nd, this was a very mild month, and proved to be the only one in the year in which the mean temp. was above the average; the min. temp. ($18^{\circ}8$ on 21st) was the lowest, with one exception, for 10 years. R above the average, but not excessive; sunshine considerably less than in the last three years, only 14 per cent. of possible duration. The wind was almost entirely between S. and W.—*Derby, Elvaston*. Variable, unsettled, and rather stormy; westerly winds prevalent; S on 4 days; frost on 6 days.

VIII. *Walton, Breeze Hill*. Although there were some very cold periods, the temp. was on the whole high, especially towards the close; R and number of wet days somewhat in excess of the average.

IX. *Wakefield, Stanley*. Vegetation fortunately checked by several frosts.—*Scarborough*. The first and third weeks were cold; the second and fourth very mild.

X. *Barnard Castle, Whorlton*. Temp. very variable; mild in the middle of the month, followed by severe frost and S with high wind, succeeded again by warm weather.—*Keswick, Shu-le-Crow*. Unusually wet with only five dry days, the total R being 11.02 in., the next highest fall for February during ten years being 7.87 in. in 1883.—*Blencowe*. Very changeable; R with warm springlike days being its main feature. The mean temp. was higher than that of any other February for 15 years. R 1.22 in. above the average.—*Shap*. One of the wettest and wildest months for a long time; heavy floods both at the beginning and end—in fact a month of floods.

XI. *Llanfrechfa Grange*. Most of the R in the first half of the month fell at night, the days being sunny. The R of January and February together is below the average, and the springs, which were very low, have scarcely recovered.—*Douglas, Victoria Road*. Very wet and stormy.

XII. *Dumfries, Crichton Inst.* Wet, cloudy and sunless, there being only eight days without R; total fall double the average, the falls being heaviest in the first half of the month; several severe S. gales, and the month generally was windy; mean temp. about the average.—*Melrose*. Mean temp. $34^{\circ}5$, $0^{\circ}8$ below the average. R .72 in. below average. S. or W. winds on 23 days.

XVI. *Dollar*. Dull, wet weather nearly all the month.—*Balquhinder, Stronvar*. Pressure and temp. very low; all farm work very backward. S on hills nearly all the month.

XVIII. *Lochbroom*. A wretched month, with every kind of bad weather and very little good.

XIX. *Lerwick, Montfield.* The weather was mild till 13th, with southerly winds, but on 14th the wind changed to N. and S fell ; it was then fine, but extremely cold till 21st, when a violent S. gale occurred ; mild weather again prevailed till 28th, when another severe gale blew from the north.

XX. *Dunmanway, Coolkelure.* Singularly mild ; heavy storms of R and wind from S. and S.W.—*Tralee, Castlemorris.* The first half rather mild, but the latter half was very squally and showery ; S fell for a few days in the middle of the month, but was principally confined to the mountains.—*Tipperary.* A wet month, and towards the end very stormy.—*Nenagh, Castle Lough.* Generally mild and damp with occasional high winds and high temp. ; a severe gale on 21st with heavy R was preceded by two of the hardest frosts of the winter.—*Newcastle West.* Dry ; ground in good condition, and tillage operations actively proceeding at the close.

XXII. *Clifden, Kylemore.* Wet and stormy.—*Larderdale.* Cold, wet and bleak.

XXIII. *Belfast, New Barnsley.* A good deal of R fell, but not sufficient to retard out-door work much ; from 14th to 20th the weather was very fine, and the last two days were springlike.—*Ramelton, Killygarvan.* Rainfall about three-quarters of an inch above the average ; there were some very fine days, and only two gales. Little S and few hard frosts.—*Carndonagh.* Very little frost ; stormy and very unsettled from 15th to 26th, then more settled.

MARCH.

I. *Muswell Hill.* The general character of the month was decidedly dry, though, owing to two heavy falls, the average R was slightly exceeded.—*Great Stanmore, Springlands.* Dry ; more particularly as regards the small number of days on which R or S fell.

II. *Wallington.* Cold, dry and dreary, but very favourable for the agriculturists, who have been enabled to get the land into first-rate condition. Winds mostly N. and E.—*Hythe.* Upon the whole a fine seasonable month.—*Wrotham.* With the exception of the 3rd and the 21st, remarkably dry and cold E. winds and frequent sharp frosts retarded vegetation.—*Keston Tower.* Bright and tolerably dry, with little high wind ; vegetation not so forward as last year.—*Littlehampton.* Cold, especially at night ; hardly any growth in garden or pasture. Hyacinths in full bloom in the garden were hidden by

S on 22nd but not hurt.—*St. Lawrence*. R .33 in. below the average of 15 years.

III. *Buntingford, Throcking Rect.* R below the average ; from 3rd to 21st scarcely any R fell. Mean temp. ($39^{\circ}6$), 2° lower than that of the previous month.—*Winslow, Aldington*. A fine month for the land ; very little R after 3rd, and generally cold, keeping vegetation in check.—*Northampton*. Very dry, giving the proverbial “peck of dust,” R .51 in. below the average of 19 years.

IV. *Harlow, Sheering*. R .53 in. below the average of 15 years.—*Ipswich, Bishop's Hill*. Fine and dry, R .25 in. below the average ; frost nearly every night.—*Diss*. Fine and often brilliant, with dust enough to pay ransom for many kings ; R fell on only six days, and none between the 9th and the 26th ; white frosts were frequent throughout the month. Everything was favourable for agricultural operations, but vegetation was somewhat backward ; public health improved.—*Geldeston, Beccles*. Dry ; R little more than half the average for 20 years.

V. *Pewsey*. Fine but cold.—*Calne, Compton Bassett*. Fine and seasonable for all out-door operations.—*Plymouth*. The number of rainy days and the R were much below the average, only about 62 per cent. of the average R having fallen ; sunshine 38 per cent. of the possible duration ; winds light and mostly easterly.—*Babbacombe*. Very dry, fine, and rather cold ; R only one-third of the average, none being measured in the 12 days, 5th to 16th ; N.E. winds prevailed on 11 days, gales on three days, solar halos on three days. Vegetation backward after the middle of the month.—*Penzance*. March commenced sombre and cold with hoar frost and strong S.E. wind, with occasional R ; then N.E. winds set in and continued for a fortnight, the weather being often bitterly cold with hoar frost and fine bright sunshine.

VI. *Cirencester, Further Barton*. Cold, but dry and good for agriculture ; many clear and frosty nights ; much northerly wind.—*Andoversford*. Although a rather small quantity of R fell during the month, and not on many days, it was so dispersed as to materially hinder working on the land, and until the 10th little could be done ; from then to the 21st things went well, but from the 21st to the end the weather was very hindering, nights very cold with frequent frosts and E. winds.—*Ross*. R below average, scarcely any S ; wind more or less easterly on 16 days and more or less northerly on 15. Vegetation kept back by continued cold winds and frost, though there

was a good deal of sunshine. On the whole a favourable month for agriculture and gardening, although spring flowers were nipped.

VII. *Melton Mowbray, Coston*. Dry and cold; mean temp. $38^{\circ}9$, more than 2° lower than that of February.—*Ketton Hall [Stamford]*. Cool with changeable winds, and very dry; vegetation of all kinds very backward, but a fine time for putting in the seed corn.—*Horn-castle, Bucknall*. Polar winds prevailed almost throughout the month, which was harsh, cold, and dry.—*Nottingham, Strelley*. Cold and dry; temp. $1^{\circ}0$, and R $\cdot 50$ in. below the average.—*Mansfield*. March commenced with a bright, calm day, but the remainder of the first week was dull, cold, and wet; the temp. of the last three weeks was variable, with cold nights, but no excess of frost. R $\cdot 54$ in. below the average.—*Worksop, Hodsock*. Cold, dry, and dull. Temp. was below the average, and the mean, which had only twice been lower during nine years, was 2° below that of February. R below the average; three quarters of the total fell between 3rd and 8th, so that the rest of the month was very dry; sunshine again very deficient, only 22 per cent. of the possible duration. The weather was favourable for farm work, but vegetation was very backward.—*Derby, Elvaston*. Dry and cold; vegetation backward; 13 frosty nights; S on two days.

VIII. *Macclesfield*. A very cold month, the average day temp. not exceeding $44^{\circ}6$, while the temp. was below 32° on 19 mornings; spring flowers very late, furze blossom nearly all killed.—*Chelford, Astle Hall*. Cold, with N.E. wind almost throughout.—*Walton, Breeze Hill*. Somewhat cold and stormy, but temp. very steady; R just the average.

IX. *York, Cherry Hill*. R $\cdot 10$ in. below the average of 36 years.—*Scarborough*. The month, with the exception of the first week, was fine and dry, but with a great deal of cold northerly wind, and frosts at night. S on three days.—*East Layton [Darlington]*. A favourable month, dry generally, and fine for sowing, the land never having been known to work better.

X. *Barnard Castle, Whorlton*. Most changeable, seldom two days alike; chiefly cold with high winds.—*Blencowe*. March was noted for its cold nights, the temp. being above the freezing point on only seven, and then very slightly; grass was quite brown; corn was sown towards the close.—*Shap*. A seasonable month, with some very fine warm days; farm work generally forward. S on three days.

XI. *Llanfrechfa*. Fine and sunny on most days, and generally calm; very favourable for agriculture.—*Llechryd, Castle Malgwyn*.

This month has been our winter; the air was frosty nearly all through, and sometimes very severe, with S and H, but the S did not lie long enough to cover the ground.—*Douglas, Victoria Road*. With the exception of the gale and heavy R of the 31st, the month was marked by the absence of heavy R, S, severe gales, or great cold; still the temp. was uniformly low, and vegetation very backward.

XII. *Dumfries, Urichton Inst.* Dry, cold, and ungenial; R small, and nearly half fell on the last day. S on the hills two or three times, but no serious drifts; vegetation nearly three weeks later than last year.—*Melrose*. Mean temp. ($33^{\circ}6$) $3^{\circ}5$ below the average; R 1.13 in. below the average; wind from S. or W. on 21 days; a favourable month for putting in the seed, being dry, with sharp frosts at night.

XVI. *Dollar*. Dry and fine.—*Balquhiddar, Stronvar*. Frequent alternations of R and frost; farmers well up with their work; sheep wintered fairly, but have gone back this month.—*Coupar Angus*. Generally cold, dry and bright; mean temp. $38^{\circ}4$.

XVIII. *Lochbroom*. The first half was beautiful, the latter half stormy, at times exceedingly boisterous, amounting on some days to a perfect hurricane.—*Loch Shiel, Glenaladale*. The first fortnight was beautiful May-like weather; the remainder thoroughly March-like in character, boisterous, changeable, cold, wet and stormy, with occasional fine gleams.

XIX. *Watten, H.R.S.* The beginning of the month was cold and frosty, the middle and end boisterous; there were occasional showers of H, sleet and S, accompanied and succeeded by bitterly cold winds, which often rose to gales.

XX. *Dunmanway, Coolkelure*. Generally bright and fine, with some frosts at night; wind principally between N. and E.; a very favourable month for agricultural work.—*Tralee, Castlemorris*. The weather during the first 16 days was very changeable; from 12th to 16th frost prevailed; after the 17th it was very squally and showery, with the exception of a few days, when it was very fine during the morning, but towards evening R came down, accompanied by cold showers of sleet. On the whole not much R fell, except at the end of the month.—*Tipperary*. Dry, but severe.—*Nenagh, Castle Lough*. Cold and dry, with frequent night frosts, especially from 9th to 12th, the lowest reading in shade for the whole winter having occurred early on the morning of the 10th.—*Newcastle West*. A splendid March, with no storms till nearly the close, and only one at all violent.—

Kilkishen. Mean temp. $41^{\circ}4$. From the 4th to the 21st the R was very slight, the wind mostly N. or N.E., the nights cold and the days warm.—*Miltown Malbay*. The first half everything the farmer could desire, fine and dry, with slight night frosts and beautiful sunny days; the latter half proved the reverse, being stormy and cold, with heavy R, the fall of the 31st leaving the land saturated to an unusual extent, a bad omen for the ensuing season.

XXII. *Clifden, Kylemore*. Fine, with not much E. wind, and very little hard weather.—*Lawderdale*. Dry and seasonable.

XXIII. *Rathfryland*. Dry and frosty, with E. wind.—*Belfast, New Barnsley*. Very fine and dry, with frosty air till the 15th, stormy, with S, H and R after; very changeable but open, and good for the land.—*Ramelton, Killygarvan*. A pretty good month; R below the average, very little falling till near the end of the month; there were two or three gales, not very heavy, and there was a good deal of frost, with some bright days; mean temp. 2° below the average.—*Carndonagh*. Colder than usual; on the whole very dry, but spring late. H on three days.

APRIL.

I. *London, Lansdowne Crescent*. The first half cold and dry, the latter part warm and showery; N.E. winds very prevalent.—*Muswell Hill*. R nearly 40 per cent. above the average of 13 years, the greater part falling on four days.

II. *Dorking, Abinger*. Very fine and bright, no very severe frosts; vegetation about as forward as usual; one of the best springs remembered.—*Wallington*. The earlier half cold, with E. and N.E. winds, the latter warm and rather showery, with W. and S.W. winds. Vegetation which had been checked during the earlier part, rapidly improved in the latter part. Mean temp. $47^{\circ}5$; duration of bright sunshine 197 hours.—*Hythe*. Fine, with sharp N.E. winds; vegetation backward.—*Wrotham*. Up to 15th, very cold with E. winds; but after the heavy R on that day a change occurred, and for some days the weather was very hot; cold winds prevailed again in the latter part of the month.—*St. Lawrence*. The driest April since 1873, the total R being 1.12 in. below the average for 15 years.—*Emsworth, Redlands*. Strong N. to N.E. winds prevailed, with bright sunshine, and cold nights; grass and crops much wanting R.

III.—*Buntingford, Throcking*. R nearly an inch above the average

of the preceding five years ; warm, especially from 18th to 23rd.—*Winslow, Addington*. Cold N.E. winds kept everything in check, till after the 18th, when a considerable rise of temp. took place, the wind shifting to S.W. ; after that day vegetation made rapid progress, and fruit trees were well in flower by the end of the month.—*Northampton*. R 27 in. above the average of 19 years.

IV. *Harlow, Sheering*. R 10 in. below the average of 15 years.—*Weybread [Hurleston]*. A fairly mild April, in spite of its E. winds, and free from gales. From 12th to 22nd no R fell.—*Diss*. A month of lovely weather ; gentle daily rains from 6th to 11th, 23rd to 26th, and on the last two days, the rest of the month brilliant, and the latter half very warm. Young crops looking well ; vegetation backward at the beginning of the month, but making rapid progress afterwards. Cuckoo late, and nightingale not heard till 29th. Fruit blossom abundant, uninjured by frost. A good deal of illness about in the shape of sore throats and glandular affections.

V. *Calne, Compton Bassett*. A variable month ; 17 bright and sunny days, four sharp night frosts, and 13 days on which R fell.—*Plymouth*. The number of rainy days and the R were above the average, the latter being 40 per cent. in excess ; temp. more than 3° below the average ; frost on one night ; sunshine 42 per cent. of the possible duration.—*Babbacombe*. Variable ; cold till the 16th, warm afterwards. R more than one-third above the average, but fewer wet days than usual ; most of the R fell from 5th to 7th and after the 22nd. Mean temp., pressure, humidity and amount of cloud all below the average. Very fine and warm from 17th to 21st ; the max. temp. (68°·7) on the 20th being the highest recorded in April during eight years. H fell on 3 days. Vegetation backward till the 16th, but afterwards made rapid progress.—*Penzance*. Cold and uncongenial for vegetation, with a continued absence of dew and a great want of R, though showers falling at long intervals produced 3·12 in. The temperature generally was very trying, the range being great.

VI. *Cirencester, Further Barton*. Rather dry with cold E. and N.E. winds till the 17th, when the temp. rose and a few cloudless days followed, succeeded on 22nd by showery, changeable weather, which lasted until the end of the month.—*Andoversford*. Cold, and everything backward until about the 17th, when a change took place, and spring made up for lost time.

VII. *Melton Mowbray, Coston*. From 1st to 16th wet and cold, and from 17th to 30th very fine and warm, although the nights were

occasionally cold.—*Ketton Hall* [*Stamford*]. Not so showery as usual, and altogether unfavourable to vegetation; the land got very dry and parched; E. winds were very prevalent up to 20th. A good shower on night of 28th was very welcome, and greatly refreshed vegetation.—*Mansfield*. The month commenced with a wet, cold day, followed by four bright sunny days and a rainy period succeeded; cold nights frequent during the first half, the latter part mild and sunny with promise of abundant fruit; rainfall 18 in. below the average of 15 years.—*Worksop, Hodsock*. The first 16 days were cold with N.E. winds, but the rest of the month was warm with S.W. winds; mean temp. rather below the average, but the range of temp., both diurnal and total, was very large, the min. ($20^{\circ}7$) being the lowest recorded in April in 10 years, while the max. was the highest, with one exception. R and sunshine were about the average, the duration of the latter being 124 hours.—*Derby, Elvaston*. Fine; dry after the 16th, very warm from 18th to 22nd, more wind than usual. Seven frosty nights.

VIII. *Walton, Breeze Hill*. Unsettled and cold until about the 16th, but after that brighter and considerably warmer, remaining so until the end; R slightly below the average.

IX. *Scarborough*. Cold northerly winds prevailed till the 18th, but the remainder of the month was very warm.

X. *Barnard Castle, Whorlton*. Cold with E. winds during the early part; fine and warm, with occasional R in the latter part.—*Blencowe*. Cold and ungenial, with frost on eleven nights, plenty of moisture, but no warmth to encourage vegetation.—*Shap*. The early part dry and cold, with strong E. winds and hard frost at night; but the latter part mild and warm, with plenty of showers; there were several gales, and T was frequent, often at night.

XI. *Llanfrechfa*. Fine, but with rather low temp. especially at night; vegetation very healthy, but a fortnight or three weeks later than usual.—*Llechryd, Castle Malgwyn*. Cold and wet, with N. and N.E. winds and frosts at the beginning; vegetation very backward.—*Douglas, Victoria Road*.—With the exception of heavy R on the 5th, the weather up to the 19th was cold and dry, with E. and N.E. winds; from 20th to 28th inclusive, considerable quantities of R fell daily, making the total fall far in excess of that of any other April (except 1882), during 11 years, although the number of wet days was small; vegetation unusually backward.

XII. *Dumfries, Crichton Inst.* Clear, with frosty mornings and S on

the hills, and only one or two slight showers until the 20th, when wet weather set in, continuing more or less to the end. Although R fell on only 11 days, the total was greatly above the average ; mean temp. rather below the average ; season generally favourable, though two or three weeks late.—*Melrose*. Mean temp. (40°), $1^{\circ}\cdot2$ below the average ; R $\cdot57$ in. above the average. Vegetation very backward.

XVI. *Dollar*. Cold, very suitable for agricultural operations.—*St. Andrews, Newton Bank*. Very cold, with R above the average ; farming operations very backward.—*Balquhiddier, Stronvar*. Very cold and backward ; sheep farms suffering greatly from want of grass for sheep and lambs ; no severe frost, but very low mean temp.—*Coupar Angus*. Very dry till the 23rd, but continuously wet afterwards.

XVIII. *Lochbroom*. A glorious month for the cultivation of the soil ; rather dry for grazing, but in every respect a beautiful month.—*Loch Shiel, Glenaladale*. Fine throughout ; grass forward, but trees, &c., late in breaking.—*Armadale Castle*. Very dry and warm up to 20th, with no R ; after that cold and wet.

XIX. *Watten, H.R.S.* Cold winds, with bright sunny days and frosty nights.

XX. *Dunmanway*. The first half unusually dry and bright, with E. winds, and frosts at night ; after the 17th, S.W. to W. winds prevailed with a good deal of R.—*Tralee, Castlemorris*. From the 1st to the 6th, very showery and cold ; from the 7th to the 19th, very fine with the exception of two dull days, and the remainder variable, at times showery and dull. Mean temp. rather low.—*Nenagh, Castle Lough*. The earlier part dry and cold, the nights frequently frosty ; the last ten days showery and milder.—*Newcastle West*. Fine, but no rapid vegetation ; at the close the nights were very cold—frequently frosty.—*Kilkishen*. A fine month, suitable for tilling the ground.—*Miltown Malbay*. Ungenial up to the 18th, dry and raw, with searching cold winds, followed by a few mild days which stimulated vegetation ; the month ended with boisterous rainy weather.

XXII. *Galway, Queen's College*. Sunshine and showers, with light breezes.—*Clifden, Kylemore*. On the whole fine and very good for farming and out-door work of every description.

XXIII. *Belfast, New Barnsley*. The commencement of the month was cold, with S showers ; but on the 6th, E. wind set in, and the weather was very fine till the 19th, after that date it was showery and cold ; a grand month for farmers.—*Ramelton, Killygarvan*. Fine

up to the 20th, and even after that date the rainfall was only sufficient, but there was a good deal of cold wind during the last week ; R and temp. both near the average. Mean temp. $45^{\circ}0$.

MAY.

I. *London, Lansdowne Crescent*. Dull, wet and cold ; the coldest May since 1879. Mean temp. $50^{\circ}1$.—*Muswell Hill*. R $\cdot 71$ in., or about 40 per cent., above the average of thirteen years.

II. *Wallington*. Very wet and rather cold ; the cold, however, did little harm except to gooseberry and currant bushes. Duration of bright sunshine 191 hours ; mean temp. $48^{\circ}6$.—*Hythe*. Very unsettled and showery.—*Wrotham*. Wet, and until the storms of 20th and 21st very cold ; afterwards the wind changed, and the rest of the month was seasonable. The month was chiefly remarkable for the extraordinary rapidity with which, after the change in the weather on 22nd, nature clothed herself in her garb of green. The change was very visible from day to day.—*Keston Tower*. Wet and very cold, until towards the end ; fortunately, however, there was very little frost. Promise of a good fruit crop.—*St. Lawrence*. R $\cdot 85$ in. above the average of 15 years ; the R after the 17th was most acceptable, as grass was very short. Cold also, the min. temp. being below 50° every night till the 27th, and the max. reaching 60° on only three days.—*Emsworth, Redlands*. Cold boisterous weather prevailed with very cold nights, not much sun, and frequent strong winds.

III. *Buntingford, Throcking Rect*. Cold and showery, with R nearly 2 in. above the average of five years. Mean. temp. unusually low, $47^{\circ}7$.—*Winslow, Addington*. Cold and backward, with frequent frosts on grass, not severe enough to injure the blossom on fruit trees, though potato tops were touched on 8th and 12th. R rather heavy for May, but the ground being dry it was beneficial.

IV. *Harlow, Sheering*. R $1\cdot64$ in. above the average of 15 years.—*Ipswich, Bishop's Hill*. R $\cdot 75$ in. above the average ; cold and unsettled, with many slight frosts. Blossom on cherry, pear and apple trees remarkably profuse ; a backward season.—*Diss*. Wet, but few days without sun ; the last week was warm and pleasant. Night frosts were frequent, but not severe, and did little or no damage. No great amount of illness.—*Geldeston [Beccles]*. R more than an inch above the average of 20 years.

V. *Calne, Compton Bassett*. Generally cold and wet with N.E. winds; finer during the last seven days and more summerlike.—*Plymouth*. The coldest May for 21 years; temp. more than 3° below the average; R and number of rainy days nearly double the average; sunshine only 34 per cent. of the possible amount.—*Babbarombe*. Very cold and cloudy, with low pressure and R about three-fifths above the average. R (though not always in measurable quantity) fell on every day except 12th and 13th; the wettest May since 1878 and the coldest since 1879; temp. exceeded 60° on only two days, and the max. ($65^{\circ}\cdot6$) was $3^{\circ}\cdot1$ lower than that of April; S.W. winds prevailed on 17 days, variable on eight, N.W. on four, and E. on two; H on six days, solar halos on three, fog on three; vegetation backward.—*Penzance*. Until the 18th generally fine, with bright sunshine and great range of temp. and winds from cold quarters; thence to the 25th wet, and the remainder of the month chilly though S. winds were prevalent, accompanied by fog and misty R.

VI. *Cirencester, Further Barton*. Unsettled, with constant showers and S.W. winds, and a few night frosts which cut off early potatoes; hawthorn not in blossom till the end of the month.—*Andoversford*. Cold, wet, and miserable, which caused much damage to the spring corn and checked the hay crop.—*Cheltenham*. Cold and ungenial, with heavy R and S, much retarding vegetation. Mean temp. ($47^{\circ}\cdot9$) $3^{\circ}\cdot2$ below the average.—*Ross*. Remarkable for the absence of hot days, the max. temp. scarcely reaching 60° till the last week, and the max. for the month ($65^{\circ}\cdot8$) being very low. R very frequent, the number of rainy days having been only once equalled, though the total fall was only the average. Vegetation quite a fortnight backward; little severe frost, and the range of temp. not nearly so great as usual.—*Wem, Sansaw*. R slightly above the average for 15 years.—*Cheuille, Heath House*. Very cold, with sharp frosts throughout and occasional H storms; distant T at times; vegetation backward.

VII. *Melton Mowbray, Coston*. Cold and chilly, differing very much in character from the preceding month; vegetation much retarded by the cold winds and colder nights.—*Ketton Hall [Stamford]*. Showery, wind very changeable, blowing on several days from N.E., with weather more like March than May.—*Nottingham, Strelley*. Very cold, temp. $3^{\circ}\cdot6$ below the average; R about half an inch below the average.—*Mansfield*. Dull and showery, with cold nights, for the first three weeks, but the closing week delightfully warm and genial. R $\cdot13$ in. below the average, but number of rainy days excessive. The

foliage of the ash and oak appeared about the same time.—*Worksop, Hodsock*. Cold and dull with average R. Mean temp. lower than in any of the previous nine years, except 1879. The number of rainy days was large, and sunshine was much less than in any of the previous four years, only 30 per cent. of the possible duration being recorded. Vegetation made scarcely any progress except during the last week.—*Derby, Elvaston*. Variable and ungenial, with much cold wind ; vegetation very backward.

VIII. *Macclesfield*. Exceptionally cold, the mean temp. being 5°·0 below the average of ten years. R ·45 in. below the average ; H fell daily from 16th to 24th.—*Walton, Breeze Hill*. Temp. throughout very low, reaching 60° on only 8 days ; R about the average.

IX. *Wakefield, Stanley*. The sun shone so much and the air was so dry that early potatoes four or five inches high were able to resist 2° or 3° of frost on many nights ; blossom on fruit trees abundant and uninjured by frost.—*York, Cherry Hill*. Cold ; grass and vegetation very backward ; R ·50 in. above the average for 36 years.

X. *Barnard Castle, Whorlton*. Wet and cold.—*Shap*. Very cold ; more like November than any other month ; hard frosts frequent ; S on 5 days.

XI. *Lludover*. Very cold, excepting the last day, which was warm and sunny.—*Llechryd, Castle Malgwyn*. Very cold and damp ; vegetation very backward.—*Douglas, Victoria Road*. A wretched May ; extremely cold, with R on 19 days. S fell daily from 6th to 9th, lying for a short time only on the low lands, but the hills were thickly coated. Trees were all but leafless on 15th, ash, and even many sycamores, hardly breaking at the close, laburnums and thorns not in bloom.

XII. *Dumfries, Crichton Inst.* R below the average, though spread over 18 days ; mean temp. and pressure also low ; the month on the whole was rather ungenial, though the latter part was fine. TSS occurred twice, and S was seen on the hills several times ; vegetation late but vigorous.—*Melrose*. The coldest May for 13 years ; mean temp. 4° below the average, and frosts occurred on 22 nights ; with only two exceptions R, H or S fell every day, the total fall being 1·66 in. above the average, so that vegetation was greatly retarded, and there was little or no grass until the last week, when the weather slightly improved.

XVI. *Dollar*. Cold and wet ; no growth of vegetation ; grass

scarce, and oak and ash only just coming into leaf at the close.—*St. Andrews, Newton Bank*. Very wet and cold, with showers of S and H; all farm operations very backward.—*Balquhiddar, Stroncar*. Very cold, more frost than usual, and S on the hills most of the month; crops backward, but improved during the last week.—*Coupar Angus*. From 4th to 16th a period of very low night temp. occurred, and the mean temp. of the month ($42^{\circ}\cdot4$) was about 1° lower than that of the preceding April.

XVIII. *Lochbroom*. The coldest, wettest and latest May ever known in the Highlands; cold R and sleet fell almost daily, and the hills were deeply covered with S at the close.—*Loch Shiel, Glenaludale*. Cold and backward; the weather to the 25th inclusive very cold, always inclined to frost at night, mitigated only by clouds and S showers. On the whole, the frequent drizzling kept grass fairly in condition, which, with absence of high wind, made it favourable for lambing. Prevailing wind between N.N.W. and E.N.E. After the 25th the temp. was higher, with strong W. wind on 30th and 31st.—*Armadale Castle*. Cold and wet with frequent showers of S.

XIX. *Watten, H.R.S.* Exceptionally cold throughout, with but little sunshine; wind generally N., and frost frequent.—*Olnefirth*. The roughest, coldest and most unseasonable May within the memory of living man.

XX. *Dunmanway*. For the first three weeks the weather was very hard and cold; wind from E. through N. to N.W. with frequent frosts.—*Fermoy*. Very wet and windy.—*Tipperary*. Very severe, owing to the prevalence of N. winds.—*Nenagh, Castle Lough*. Generally cool and showery.—*Newcastle West*. A really bad month, the prevalent N.W. winds and constant succession of H showers, together with frosty nights, completely checked vegetation from 3rd to 29th. *Kilkishen*. Sharp night frosts from the 7th to the 12th cut off early potato stalks; growth favourable in the latter part of the month.—*Miltown Malbay*. A cold bad month, more like winter than May; showery, cold and wild throughout, night frosts cutting off all the potatoes and destroying and putting a stop to all vegetation.

XXII. *Galway*. Gloomy and cold.—*Clifden, Kylemore*. Cold, wet and stormy, with H and T, most unusual here.—*Lawderdale*. A harsh, cold month.

XXIII. *Belfast, New Barnsley*. Cold and backward with little or no growing weather; a very late season.—*Londonderry, Knockan*. Very cold and ungenial.—*Ramelton, Killygarvan*. May was very cold

up to the 18th, and although there was a little rise of temp. during the remainder of the month, the mean temp. ($47^{\circ}0$) was more than 3° below the average; R about half-an-inch above the average; several rough days.—*Buncrana, Rockfort*. Unusually cold, with a good deal of H; the spring was consequently late, although the weather was favourable for getting seed sown.—*Carndonagh*. Exceedingly cold, if not indeed the coldest May within recollection; vegetation in general at a standstill almost the entire month.

JUNE.

I. *London, Lansdowne Crescent*. The first week very warm; the remainder of the month rather cold. Of the total R ($2\cdot32$ in.) $1\cdot70$ in. fell in three days.—*Muswell Hill*. Rather dry, R about 14 per cent. below the average of 13 years; the wettest period was from 5th to 9th, during which more than four-fifths of the total fell.

II. *Wallington*. Rather cold, there being only nine days with temp. over 70° ; the weather, however, was very favourable for the crops. Mean temp. $59^{\circ}3$; duration of sunshine 205 hours.—*Hythe*. Very dry and fine, but with low temp.—*Lower Walmer*. Cold N.E. winds prevalent.—*Wrotham*. Very dry, and as a rule hot, although E. and N. winds were frequent; splendid weather at the close for hay harvest, but most other crops were suffering from lack of moisture and complaints were beginning to be heard of failure of wells in the chalk.—*Keston Tower*. Fine but cold except three or four warm days; hay cut in the middle of the month, a heavy crop; all kinds of fruit looking well except plums.—*St. Lawrence*. The R would have been much below the average but for a great downpour ($1\cdot30$ in.) on the 16th; magnificent hay crops.—*Emsworth, Redlands*. Strong winds throughout; hay harvest commenced about the 22nd; crop much heavier than was anticipated, and saved in good condition.

III. *Buntingford, Throcking*. Bright and fine; but for the heavy fall of R on 8th ($\cdot94$ in.), the monthly total would have been considerably below the average.—*Winslow, Addington*. The first four or five days were settled and fine, but afterwards the weather was changeable, the difference of temp. between two consecutive days being often very great.—*Northampton*. R $\cdot51$ in. below the average of 19 years.

IV. *Harlow, Sheering*. R $\cdot27$ in. below the average of 15 years.—

Ipswich, Bishop's Hill. R little more than half the average, and of this the chief part fell before the 9th. Temp. very low generally, with some exceptionally hot days, notably the 4th and 5th; white frost on the mornings of the 11th and 27th. Vegetation very backward.—*Diss.* Dry and fine, with much sun, and only six days on which a measurable quantity of R fell; nights somewhat cool. Gardens particularly gay, but the strawberry crop very generally a failure; other fruits promised well, and the young crops looked extremely well, but R was wanted at the close of the month. A great epidemic of measles of a fairly mild type prevailed, but the public health otherwise was good.—*Geldeston [Beccles].* Very dry, R exactly one-third of the average of 20 years.

V. *Calne, Compton Bassett.* Dry and cold throughout.—*Plymouth.* The R and number of rainy days equalled the average of 21 years. The temp. was below the mean, the days being especially cold and the nights warmer, giving a diminished daily range; sunshine 42 per cent. of the possible duration; N. and E. winds prevailed.—*Babbacombe.* Dry and rather fine, R less than half the average and the least observed in June during the past nine years. Fog on six days. Vegetation rather backward, but the hay crop good.—*Ashburton, Druid House.* Fog or haze on 11 days.—*Penzance.* Ungenial; there was a considerable amount of sunshine, but this being accompanied generally by cold N. and E. winds, extremes of temperature prevailed as in May; S.W. wind was not observed once, an incident previously unknown here.

VI. *Cirencester, Further Barton.* Many sunny days, but no great heat.—*Cheltenham.* Dry, with R 3·18 in. below the average. Mean temp. 57°·6.—*Ross.* There were only a few warm days during the month, so that vegetation, which was very backward at the commencement, had not at the close overtaken the season. R fell at intervals, and on two days (8th and 23rd) heavily, and was very useful; there was a remarkable absence of TSS.

VII. *Melton Mowbray, Coston.* Dry, more than half of the R falling on three days; the nights were cold, especially from 20th to 22nd.—*Ketton Hall [Stamford].* More than half the total R fell on one day (1·39 in. on 8th); wind and weather very changeable throughout; temp. very low at times.—*Spilsby, Partney.* N. and E. winds prevalent, but the mean temp. high; the R did little good to plants not deeply rooted, and wells began to fail.—*Worksop, Hodsock.* R more than in any June of the last ten, except 1882, but the month as a

whole was dry ; max. temp. the highest since 1878, and min. temp. the lowest, with one exception, in ten years, so that the range of temp. was very large ; sunshine 35 per cent. of possible duration, being rather more than in any of the previous four years.—*Derby, Elcaston*. Variable and windy, yet fair and fine on many days ; no T ; mean temp. $57^{\circ}5$.

VIII. *Walton, Breeze Hill*. Although there were some very fine and warm days, the temp. was generally low ; winds variable throughout ; R somewhat below the average.

IX. *Scarborough*. Very changeable ; R $\cdot 75$ in. above the average of 19 years.—*East Layton [Darlington]*. A very rich month on the whole ; a good amount of sunshine and moderate R, making everything grow rapidly ; country generally looking well, and promising a fruitful season, though not an early one.

X. *Barnard Castle, Whorlton*. Fine and warm with the exception of the fourth week, when the wind was cold from N.—*Shap*. Rather dry ; the early part was somewhat cold with frost at night, but some very hot days occurred towards the close with distant T.

XI. *Llechrhyd, Castle Malgwyn*. Extremely cold throughout, with frost on grass on two days.—*Douglas, Victoria Road*. Dry, with low temp. and cold, parching winds, therefore the very backward season was more than maintained, the leaves of late trees, such as poplar, being not fully out, lilac hardly over, and laburnum, syringa, pink and white thorns in full bloom at the close.

XII. *Melrose*. The driest June for 14 years, and the R $1\cdot 25$ in. below the average ; mean temp. $52^{\circ}9$.

XVI. *Dollar*. The nights were cold, and vegetation made little progress.—*St. Andrews, Newton Bank*. Extraordinarily dry, the only fall of R exceeding $\cdot 10$ in. occurring on the night of the 28th ; as a natural result the country was completely parched. E. or S.E. winds blew on ten days, and were at times very cold, one frost in air and three on grass being recorded.—*Coupar Angus*. Mean temp. $53^{\circ}7$; night temp. comparatively high until 8th, when three nights followed approaching to frost, and on nine nights the temp. fell to or below $40^{\circ}0$.

XVIII. *Lochbroom*. An unseasonable month, cold, wet and drizzly, keeping everything far back, crops of all kinds being about a month late.—*Tain, Springfield*. Some sharp frosts occurred at night about the beginning of the month, and seriously affected early sown turnips. *Loch Shiel, Glenaladale*. Cold and backward.—*South Uist, Ardkenneth*.

An excellent month for vegetation, genial warm weather prevailing ; favourable to farmers, tourists and sportsmen ; no storms, though the wind was high on some days.

XIX. *Watten, H.R.S.* Dry and cold, with some gleams of hot sunshine ; frost on several nights.—*Olnefirth.* Most unseasonable and cold.

XX. *Fermoy.* Very warm and dry.—*Tralee, Castlemorris.* Very fine.—*Tipperary.* Very fine.—*Kilkishen.* Fine and warm, with small R, but the temp. twice fell below 40°. Mean temp. 53°·2.—*Miltown Malbay.* Cool and dry, with little R ; crops on the whole a month late. Frost damaged the potato crop in all low-lying and undrained situations.

XXII. *Clifden, Kylemore.* Very fine and pleasant weather, with little R or storm.—*Lawderdale.* During the first half the weather was seasonable, but the latter half, though dry, was cold, with occasional frosty nights.

XXIII. *Seaforde.* Very cold and dry ; N. and N.W. winds prevailed from 20th to close ; crops very late.—*Belfast, New Barnsley.* Dry and cold till the 7th ; thence to 24th showery, doing immense good to all crops ; a backward season, but everything promising abundance.—*Londonderry, Knockan.* The driest June remembered.—*Ramelton, Killygarean.* Fine and dry, with R much below the average, but hardly as much sunshine as might have been expected from the number of days without R. Mean temp. 54°·0.—*Carndonagh.* Exceedingly dry, great complaints of want of moisture ; crops looking fairly well.

JULY.

I. *Muswell Hill.* The driest July during 13 years ; R (·45 in.) less than one-sixth of the average ; the number of rainy days was also remarkably small, being only five.—*Great Stanmore, Springlands.* Extraordinarily dry, R having been recorded on four days only, giving a total of ·31 in.

II. *Dorking, Abinger.* Very dry and warm ; towards the end vegetation suffered a good deal. Garden crops scanty, fruit abundant but small.—*Furnham, Bourne Vicarage.* Singularly dry, R only ·20 in. falling on 3 days.—*Wallington.* Very warm and exceedingly dry. The summer weather enabled the farmers to gather in splendid hay crops and to begin early to cut the oats ; fruit, with the exception of strawberries, was fairly abundant, and the hard

fruits, as apples and pears, were plentiful and looked well ; all other garden produce, and, as a rule, field produce suffered from drought. R .33 in. ; 235 hours of bright sunshine were recorded.—*Tenterden*. R .19 in., the smallest recorded here for July ; in 1864 .35 in. fell, in 1869 .21 in., and in 1876 .40 in. This year the total fall in 53 days from June 8th was .41 in.—*Hythe*. Great drought and heat, and water was getting very scarce on the summits of the chalk hills at the close.—*Canterbury, Burgate St.* R .19 in., the smallest in any month for several years.—*Wrotham*. R remarkably small ; the drought was beginning to be much felt ; water was being carted four or five miles ; grass was drying up on the chalk ; hops were beginning to turn yellow ; spring corn was ripening prematurely, and in many gardens the dry weather was disastrous. The drought, in conjunction with the almost unprecedented attacks of aphides, killed a great many of the more tender vegetables.—*Keston Tower*. Very dry ; about four or five days of hot weather in the latter half, but otherwise very cool.—*St. Laurence*. R 1.56 in. below the average of 15 years. A splendid month, but R was wanted at the close ; the best honey harvest for many years ; plenty of apples and pears, but plums and stone fruit scarce.—*Southampton, Cadland*. The driest July since 1864. R 2.19 in. below the average of 25 years.—*Alton, East Worslham*. R only .14 in.

III. *Kensworth [Dunstable]*. R .21 in., the smallest amount recorded in any month during 20 years.—*Buntingford, Throcking*. A very dry month, probably the driest since 1868 ; R only about one-eighth of the average. Mean temp. 61° 0.—*Winslow, Addington*. A month of fine weather ; splendid for haymakers, thousands of acres being secured without a drop of R. Vegetation was suffering at the close from drought, the rainfall being the smallest recorded in any month since observations were commenced in 1871.—*Woburn Sands, Sandymount*.—July was the driest month ever registered here, only .27 in. of R being recorded.—*Banbury, Wroton*. The driest month that can be remembered, but except from 25th to 27th not very hot, and the nights always cool.—*Northampton*. R 2.49 in. below the average of 19 years, and with one exception the smallest in July since 1866.—*Peterborough*. A hot month, temp. reaching 91° on 25th.—*Sandy Rectory*. The scarcity of R was such that market gardening crops were much injured.—*Bedford*. Crops on dry lands suffered from drought ; turnips also were stunted, and the yield of potatoes was below the average.—*Wisbech*. The driest July since 1878, but July, 1869 and 1864 both had smaller falls.

IV. *Southend*. A small R in June followed by one much less in July, in conjunction with the small fall for twelve months past, resulted in a deficient water supply to country villages.—*Harlow, Sheering*. R 1·96 in. below the average of 15 years.—*Ipswich, Bishop's Hill*. Very dry, R 1·19 in. below the average.—*Weybread [Harleston]*. Very fine and hot with no high winds; from 20th to 26th was a period of intense heat culminating on 26th with a max. in shade of $86^{\circ}0$, the max. reached 80° or upwards on 9 days; from the 27th to the 31st cloudy and comparatively cold. Peas and beans proved a failure through drought, and root crops looked wretched at the close.—*Diss*. Fine. The small amount of R ($\cdot72$ in.) was exactly the same as in June, and the whole of it fell on 7 days between 7th and 19th; on the last four days of this period the sun hardly put in an appearance and the temp. fell, but the remainder of the month was nearly cloudless. Many of the nights were cool, but the heat in the third week was great and oppressive, the shade temp. reaching 84° on 24th and 25th.—*Geldeston [Beccles]*. Very dry; R scarcely more than one quarter of the average of 20 years.

V. *Trowbridge, Steeple Ashton*. The driest month ever registered here.—*Culne, Compton Bassett*. The weather during the month was dry, bright, and sunny, and owing to the continued drought water was becoming scarce at the close.—*Broad Hinton*. An unusually dry month.—*Plymouth*. The driest July for 21 years, only about one-ninth of the average R having fallen; sunshine 48 per cent. of the possible duration; winds chiefly N. till the latter part, then E.; temp. rather below the average.—*Babbarcombe*. Fine and very dry, with mean temp. slightly above the average. R only one-tenth of the average and the least in any month during nine years, except November, 1879, and the number of wet days the least in any month. The max. temp. ($85^{\circ}6$) was the highest during the same period. The finest and driest July observed, with the largest range of temp. ($40^{\circ}7$.) A great rise of temp. occurred from 24th to 26th.—*Kingsteignton, Teign-bridge Ho.* The smallest R in any month during the 11 years recorded here.—*Teignmouth*. The smallest R ($\cdot16$ in.) in any month during 14 years, the nearest was in November, 1879, when $\cdot20$ in. fell.—*Holsworthy, Claverton*. The driest and finest month for many years; intensely hot, with heavy dew at night from 23rd to 27th.—*Penzance*. Fine, bright and beautiful, excellent for the hay harvest, but not for the corn and green crops, owing to the lack of R. Cold nights and moderately warm days marked the first three weeks; then a few days were very

hot, and the closing four days the reverse, fresh E. winds having set in. Easterly or northerly winds prevailed during most of the month.—*Wincanton, Stowell*. Very hot, with exceptionally little R.—*Wells, Westbury*. Very dry; towards the latter end there was great scarcity of water; throughout the neighbourhood the water in wells sank considerably, and all streams were quite dry. Pastures suffered to such an extent that one farmer had to feed his cattle with hay, having no grass for them. As a rule the mornings were cool, with N.E. wind, but towards the middle of the day the heat was intense.

VI. *Cirencester, Further Barton*. Remarkable for dryness and sunshine, which rendered the heat at times very great; after the 27th, a reduction of temperature took place, owing probably to TSS having occurred at a distance; water in a well 100 ft. deep, sank 3 ft. 9 in. during the month.—*Andoversford*. The extreme smallness of the R (·15 in.) had a very injurious effect on grass land, and on the root crops, which are almost a failure, and the spring corn was stunted and often badly corned. Generally fine, bright, hot and cloudless, but towards the end of the month the nights were rather cold.—*Cheltenham*. Very remarkably dry, almost unprecedentedly so. From June 25th to August 3rd, a period of 38 days, only ·09 in. of R fell; consequently everything was burnt up at the end of the month, fruit such as currants and raspberries shrivelled, potatoes not half an average crop, leaves falling from the trees, and the whole ground parched and baked dry. Mean temp. (61°·3) 1°·1 above the average. Atmospheric pressure extremely regular and high, the range being only ·610 in.—*Ross*. R ·31 in., the smallest fall since 1818, the nearest being ·38 in. in 1825, and ·41 in. in 1868; from records in the neighbourhood it seems that excepting July, 1800, when ·14 in. fell, there was no July with less than ·50 in. from 1771 to 1813, and excepting 1803, with ·56 in., and 1786, with ·80 in., none with less than 1·00 in.; there was no dry July from 1813 to 1818 inclusive, except 1818, when 1·22 was measured; July, 1885, was therefore drier than any July since 1771, except 1800; yet there was no interval of 28 days with as little as ·25 in. of R, and no absolute drought of 14 days. The correspondence between 1864 and 1885, is somewhat close; in 1864, from June 24th to August 28th, a period of 66 days the total R was 1·26 in., R falling on 17 days, and the heaviest fall being ·32 in.; in 1885, from June 25th to August 25th, 62 days, precisely the same amount fell on 20 days,

the heaviest fall being .21 in. In 1864, the dry weather was nearly continuous from April 7th to August 28th, 144 days, in which period 3.41 in. fell, so that the drought lasted much longer than in 1885. Very hot on 4th and 5th, and from 23rd to 27th, inclusive; the max. ($90^{\circ}5$ on 26th) being the highest since 1876.—*Leadbury, Colwall*. R .28 in., the smallest recorded for any month in the nine years during which observations have been made, that of August 1880 (.31 in.) being the nearest approach to it.

VII. *Melton Mowbray, Coston*. A very dry month, far the driest since observations were commenced in 1873; everything parched up; wells failing and ponds exhausted. Temp. variable, the only excessively hot period being from 24th to 27th, the prevalent N.E. winds tempering the heat.—*Ketton Hall [Stamford]*. July was very dry all through, and at times very bright and hot, but the wind and weather were both very changeable, many days being very cloudy and showing indications of R.—*Spilsby, Partney*. The smallness of the R (.68 in.) had an injurious effect on the grass and some other crops; little T.—*Horncastle, Bucknall*. A month of severe drought, root crops suffering.—*Nottingham, Strelley*. R less than that of any month since January, 1880; the total (.37 in. on three days) was the only R that fell during 40 days from June 24th to August 3rd. Mean temp. $1^{\circ}4$ above the average. There was a complete absence of TSS. The weather was very favourable for hay harvest, but the crops were light.—*East Bridgford*. Unusually dry, R only .18 in.—*Mansfield*. Remarkably warm and dry, with R 2.40 in. below the average of 15 years and less by one-half than in any other July during that period. Temp. very high on 25th and 26th, but it was cool and dry from 27th to the end. No T. Hay crops housed in excellent condition, but root crops suffering from want of R.—*Worksop, Hodsock*. The driest month during the last ten years, except January, 1880; mean temp. about the average, daily range large; max. temp. the highest recorded in July since 1876; duration of sunshine 33 per cent. of possible duration. A grand month for haymaking, but R was wanted at the close.—*Derby, Elvaston*. Very extraordinary drought, R falling on only four days. No T.—*Stretton, Lindway*. Very dry and warm, R only .38 in.—*Stuffynwood Hall [Mansfield]*. R .39 in., the smallest monthly fall since observations commenced in 1876.

VIII. *Macclesfield*. Very fine and dry without T; splendid hay harvest; showers on 7th, 18th and 19th prevented root crops suffer-

ing greatly.—*Liverpool, Walton-on-the-Hill*. Generally fine, and the temp. high and steady ; winds very light.

IX. *York, Cherry Hill*. R 1·72 in. below the average of 36 years.—*Scarborough*. R 1·93 in. below the average of 19 years ; warm from 1st to 11th and 23rd to 26th inclusive, otherwise cool for the time of year.—*East Layton [Darlington]*. After July fairly set in, a week of dull weather prevailed, but with that exception fine sunny weather was enjoyed, and the heat on many days was quite tropical ; hay harvest successful, but R much needed for all growing crops.

X. *Barnard Castle, Whorlton*. Very fine and often hot with very small R, ·32 in. only.—*Blencowe*. Almost rainless ; excepting 1878, when only ·74 in. of R fell, it was by far the driest July for 15 years. The month is generally noted for its troublesome rains, but this year great scarcity of water prevailed, the Petteril being very low ; great heat also prevailed in the latter part of the month.

XI. *Llanfrechfa*. Very hot all the month, though cooler after the 27th, with cloudy mornings and sunny afternoons ; hay saved very well.—*Llechryd, Castle Malgwyn*. The month was drier than usual, and the nights generally cold ; from the 22nd to the close the weather was very hot.—*Douglas, Victoria Road*. The very cold weather which prevailed all through May and June continued up to the 19th, but the remainder of the month was marked by an unbroken spell of brilliantly fine and warm weather, the temp. exceeding 70° on several days. R much below the average.

XII. *Melrose*. Exceedingly dry throughout, excepting the 18th, when ·54 in. of R fell ; the total R being 3·63 in. below the average of 14 years, and coming as it did after the driest June in that period, told severely on the crops. Mean temp. (56°), 1°·9 below the average. Winds S. or W. on 20 days, and generally moderate.

XV. *Ballachulish*. From 1st to 17th unsettled, the remainder of the month very fine.

XVI. *Dollar*. Cold and wet during the first half, warm and mild during the second.—*St. Andrews, Newton Bank*. Another very dry month, and R much needed ; turnips suffering much ; the last 10 days very warm.—*Balquhiddar, Stronvar*. The best month for growth that we have had for years, although the nights were mostly cold ; hay good and pastures looking well.—*Coupar Angus*. Light rainfall and wide range of temp. ; the first week had cold nights and warm days, the second week was cloudy with warm nights and cold days ; the temp. of the last nine days was much above the average.

XVII. *The Burn [Breachin]*. R .90 in., the driest July since 1841, with the exception of July, 1868, when only .30 in. fell, and July, 1876, when also .90 in. fell.

XVIII. *Lochbroom*. A very lovely month, such as the country required after the long continuance of cold, wet, dark weather. Things were fully three weeks backward, but the weather at the close brought them forward wonderfully.—*Loch Shiel, Glenaladale*. Up to the 18th wet and unseasonable with very low temp.; from the 18th to the end of the month beautiful, bright and exceedingly hot.—*Armadale Castle*. For the first half of the month it rained day and night, but the latter half was very dry and warm.—*South Uist, Ardkenneth*. A good deal of R with S.W. wind in the early part; dry weather with oppressive heat later.

XIX. *Watten, H.R.S.* Dry, with more than the average amount of sunshine and often hot, though one or two nights were very cold.—*Olnafirth*. We had no summer in Shetland this year; nothing in the memory of man can be compared to it; there were just three summer days in the month.

XX. *Dunmanway*. An unusually dry and warm month.—*Glencville*. The smallest R recorded for July.—*Fermoy*. Very hot and windy.—*Tipperary*. Very fine.—*Nenagh, Castle Lough*. The last 10 days very fine and hot.—*Newcastle West*. The best July for a long while; intensely hot from 24th to the close, the temp. being higher than had been known for several years.—*Miltown Malbay*. On the whole a good month for agriculturists; remarkable for absence of T and for the excessive heat of the last 10 days.

XXII. *Ballinamore, Larderdale*. From the 5th to the 26th wet and sultry, thence to the end very hot and dry.

XXIII. *Belfast, New Barnsley*. Very fine and hot, forcing vegetation rapidly forward.—*Ramelton, Killygarvan*. Dry with about 10 days of brilliant weather; R 1.59 in. below average; mean temp. (58°) slightly below average.—*Buncrana, Rockfort*. Very fine, but rather too dry for green crops.—*Carndonagh*. The warmest and driest July for many years; crops looking well.

AUGUST.

I. *Muswell Hill*. R not quite three-fifths of the average of 13 years. It is worth notice that this is the fourth consecutive year in which August has had a very deficient R.

II. *Dorking, Abinger.* A very dry month. R much needed for all root and fruit crops, and also for things in general. Harvest nearly completed at the end of the month, all corn being in good condition.—*Wallington.* Another dry month; the deficiency of R prevented all garden produce from growing and swelling, though it was favourable for the ripening of all stone fruits and of the corn. Duration of sunshine 151 hours, rather a small amount, on three days there was none, and on each of two others less than ten minutes.—*Lower Walmer.* This part of Kent suffered very much in August through the long drought, but the corn was nearly all stacked in splendid condition. *Keston Tower.* Cold throughout except the first few days; a moderate amount of R fell, but at the close the country was still suffering from drought.—*Littlehampton.* Exceptionally cold at night all the month; fruit not ripening; swallow tribe rare; wind generally E.N.E.—*St. Lawrence.* Continued drought caused feed for cattle to be scarce. R 2·19 in. below the average of 15 years. Harvest nearly all finished by the end of the month. Rain water tanks empty and springs running very low.

III. *Buntingford, Throcking.* Dry; R little more than half the average for the five preceding years. Mean temp. 57°·2.—*Winslow, Addington.* The weather generally speaking was rather unsettled, and the R, though hindering harvesting, was very much needed and most beneficial to the root crops and grass, though even at the close of the month the land was extremely dry and the pastures were very brown.

IV. *Southend.* Little R, none to affect the surface springs, and at the close the district was suffering from deficient water supply. Gales on six days.—*Harlow, Sheering.* R 1·12 in. below the average of 15 years.—*Ipswich, Bishop's Hill.* Still very dry; R 1·58 in. below the average.—*Diss.* Dry, with cold nights, and actual frost on the morning of 14th. Sunshine below the average; the brightest weather was in the second week, the trifling R fell mostly in the third, while the fourth was decidedly cold with N.E. winds and rather dull. The total absence of TSS is noteworthy. Good crops of wheat and barley, but root crops failed through drought; garden produce short, and fruit good in quantity but small in size, and late in ripening; very little sickness.

V. *Culne, Compton Bassett.* Dry and moderately hot; vegetation much injured by the long drought, and many wells nearly dry.—*Plymouth.* Cold and dry, favourable to harvest operations. Both

the R and the number of rainy days below the average ; sunshine 49 per cent. of the possible duration. N. winds prevailed, but there was a greater proportion of calm mornings than usual.—*Babbacombe*. Cold and rather fine ; R one-tenth above the average ; temp. very variable, the max. on the 17th ($80^{\circ}6$) was the highest, the max. on 31st ($56^{\circ}1$) was the lowest, and the total range ($35^{\circ}9$) was the greatest observed in any of the last ten Augusts. Variable winds on 15 days ; solar halos on six days, fog on three. Pastures very bare till the 23rd, but green on the 31st ; foliage on many trees changed colour and dropped off prematurely through the drought.—*Holsworthy, Clavton*. Especially fine from 13th to 25th inclusive, with drying winds, a remarkably glorious harvest time : wheat crops good, oats very fine, barley tolerable, but not equal to wheat and oats ; root crops rather below the average owing to dry weather.—*Penzance*. Beautifully fine, though dubious weather prevailed for about a week after a heavy fall of R on the 6th ; and it was unsettled from 25th to the close. The nights were cold, and the days not unbearably hot.—*Truro, Moresk House*. After the heavy R of 5th and 6th (2.32 in.), vegetation was very rapid, particularly in maize, scarlet runners, &c., as all through July there had not been sufficient R to reach their roots, and the earth temp. was high.

VI. *Gloucester, Further Barton*. Very fine and dry with few exceptions.—*Andoversford*. For the harvest month a great deal too much R fell, though the R in the earlier part did not affect this district in any great degree, as the harvest can scarcely be said to have commenced before about the 18th ; but after the 21st, the weather was distinctly unfavourable, and the fall of .78 in. on 26th did not mend matters.—*Cheltenham*. Fine ; rainfall and temp. considerably below the average of eight years. Fruit ripening much more slowly and later than usual. Potato crop very clean and free from disease, but tubers very small and by no means so numerous as usual.—*Ross*. The dry period which commenced with June 25th, continued (with a slight interruption from 4th to 12th of August) to the 25th of this month, the 62 days yielding only 1.26 in. of R. In 1869, from June 19th to September 5th, inclusive (79 days), 1.45 in. fell ; in 1868, from May 28th to August 4th (68 days), .77 in. ; in 1864, from June 19th to August 28th (70 days), 1.45 in. In North Herefordshire the drought was not nearly so severe, the rainfall in the beginning of the month being locally heavy on two or three days. Harvest commenced about the 11th, and at the close was about half

completed ; grass very brown ; turnips and potatoes suffered much from the drought.

VII. *Melton Mowbray, Coston.* R and temp. both below the average ; very little T and L.—*Ketton [Stamford].* August was much more showery than any previous month in the year, temp. very variable, and at times very low.—*Spilsby, Partney.* N. and E. winds prevalent.—*Hornucastle, Bucknall.* Polar winds frequent throughout the last half of the month with cold weather.—*Nottingham, Strelley.* Very dull and cold, but dry. Mean temp. 4° , and R 1 in. below the average.—*Mansfield.*—Comparatively cool, dull, and sunless, with only about six bright sunny days. R $\cdot 62$ in. below the average of 15 years ; wind usually calm, but boisterous on 10th ; crops ripening slowly for want of sunshine.—*Worksop, Hodsock.* Very cold and dull, with average R. Mean temp. considerably lower than in any of the previous ten years, and about 4° below the average, daily range also very small. The number of rainy days was small, as most of the R came in TSS ; sunshine (total duration 94 hours) very deficient. Prevailing winds N. and N.E. and rather strong. Harvest began in the first week, but progressed very slowly, much wheat being still uncut at the close.

VIII. *Macclesfield.* Very cold, polar currents prevailing on 18 days.—*Walton-on-the-Hill.* Excessively cold, with a rainfall much below the average ; reservoirs drying up.

IX. *Wakefield, Stanley.* Dry and cold, and pastures very bare ; fruit small, and potatoes very small, but free from disease.—*York, Cherry Hill.* R $\cdot 76$ in. below the average of 36 years.—*Scarborough.* Exceptionally dull and cold ; mean. temp. $4^{\circ}\cdot 1$ below the average ; rainfall $\cdot 30$ in. below the average of 19 years.

X. *Barnard Castle, Whorlton.* Wet at the beginning of the month, a few warm days in the middle, then cold with N.E. winds to the end.—*Blencowe.* R fell daily with two exceptions till 12th, when a serious drought set in, which continued till September 2nd, and the want of water was severely felt.—*Shap.* After the 4th the weather was wet and cold, and from the 9th to the 12th very stormy and wet, doing much harm to garden and orchard fruits ; hay harvest finished during the last week.

XI. *Llechryd, Castle Malgwyn.* The month began fine, but from the 8th to the 12th severe gales prevailed, thence to the end the days were bright and the nights very cold, several times approaching frost.—*Douglas, Victoria Road.* Another fine, dry, but very cold month,

remarkable for the ground frosts, which occurred on 14th and 15th, turning vegetable marrows, nasturtiums, and other tender things quite black; a strong gale from S.S.W. from 8th to 11th destroyed all foliage exposed to it as if it had been burnt, and a gale from E. prevailed from 26th to 29th, which destroyed such foliage as had previously escaped; in the latter part of the month, during which strong N. and E. winds prevailed, the temp. seldom exceeded 54°.

XII. *Melrose*. The coldest August during 14 years; mean temp. (49°·5), 6°·6 below the average; frost on four nights. Wind N. or E. on 17 days. Rainfall 1·83 in. below the average. Favourable weather for the harvest, which commenced on 18th; no R after the 14th except slight showers (·03 in.) on 28th and 29th.

XVI. *Dollar*. Fine weather all the month, except a few days in the second week.—*St. Andrews, Newton Bank*. R set in on the 2nd, and more or less fell up to the 12th; it came too late, however, to do much good to the root crops. Some wells and springs dried up, which had not been dry for years, and the R was not sufficient to affect them, and the drought from the 12th was very severely felt.—*Balquhiddar, Stronvar*. During the heavy rains of the second week the weather was cold, but as a rule though the nights were cold, the days were warm; N. and N.E. winds were unusually prevalent; crops no later than last year.—*Coupar Angus*. Very wet up to 12th, with excessive falls on 7th and 9th. Temp. below the average.

XVIII. *Lochbroom*. The first nine days were fine, then a stormy week ensued, followed by the most beautiful and seasonable weather for agricultural purposes and ripening crops that could be desired; the month closed with sharp frost, blackening potatoes.—*Loch Shiel, Glenaladale*. A beautiful month, the latter half exceptionally fine with continuous sunshine, very warm and calm, though the evenings and nights were inclined to be chilly; from the 8th to the 16th the weather was wet with rather low temp.; from the 17th to the end E. winds prevailed and no R fell.—*Armadale Castle*. The driest month for years, wells and streams very low.—*South Uist, Ardkenneth*. Dry with only four rainy days, otherwise marked by great and sudden changes.

XIX. *Watten, H.R.S.* Dry, dull and cold, with frost on several nights followed by hot sun.—*Lerwick, Montfield*. Very cold, there being very little sunshine, and the wind blowing from N. or N.E. for the whole period.

XX. *Fermoy*. Very wet and windy.—*Tralee, Castlemorris*. A fine

harvest month with 19 rainless days.—*Newagh, Castle Lough*. After some wet weather in the early part of the month we had 12 very fine warm days, though the nights were cool with N. and E. winds.—*Newcastle West*. An excellent harvest month, though broken towards the close ; from the 12th to the 25th the nights were chilly and some even frosty.—*Killishen*. From the 12th to the 26th fine dry weather prevailed, favourable for securing a large and heavy crop of hay in good condition.—*Miltown Malbay*. Dry and without T. The finest August for many years for harvesting purposes.

XXII. *Clifden, Kylemore*. A very fine and dry month, very warm and good for all crops.—*Lawderdale*. Dry, hot and seasonable, and most springs ran dry.

XXIII. *Belfast, New Barnsley*. Very fine and dry, and after the 12th at times hot.—*Stewartstown*. R less than the average.—*Ramelton, Killygarvan*. Fine with the exception of one week, which was rather stormy and wet ; the temp. was about $2^{\circ}5$, and the R about an inch and a half below the average.

SEPTEMBER.

I. *Muswell Hill*. R $\cdot 93$ in. greater than that of any previous September during 13 years, and 79 per cent. above the average for that period, exceeding any monthly total since October, 1882, when $5\cdot53$ in. fell.

II. *Haslemere*. R $7\cdot42$ in., the heaviest in September during 13 years, the nearest being $4\cdot57$ in. in 1876.—*Dorking, Abinger*. Very wet, with three destructive frosts towards the end.—*Redhill, Oxford Road*. Very wet ; R fell on 19 consecutive days.—*Wallington*. Very wet ; the R, however, did a great deal of good to the land generally, and produced a fine growth of grass and other feeding crops, including mangolds and turnips. The frost, however, on 27th did a great deal of mischief, the grass min. being as low as $27^{\circ}1$. Duration of sunshine 108 hours.—*Hythe*. Remarkably wet, reviving vegetation rapidly after three months drought. *Wrotham*. An uncomfortable month, with very little sunshine and but few days without R ; very trying for hop-pickers.—*Keston Tower*. Wet and somewhat cold ; frost on ground between 24th and 29th, though the shade thermometer only touched 32° on one night.—*St. Lawrence*. R $\cdot 82$ in. above the average.—*Southampton, Cadland*. R $1\cdot92$ in. above the average of 25 years.—*Emsworth, Redlands*. Exceptionally unsettled and rough, with

every description of weather ; the cold wave of 26th to 28th was not so severe here as in other parts.

III. *Buntingford, Throcking*. The first really wet month of the year, and the wettest September during six years, the R being about an inch above the average of the previous five years. R fell daily from 2nd to 20th inclusive, except on 14th.—*Winslow, Addington*. R fell on an unusually large number of days, and the quantity was much above the average ; sharp frosts towards the end cut off tender plants, and a little S fell on 26th.—*Banbury, Wroxton*. Wet, and at the end unusually cold, the min. temp. (30°) being the lowest recorded in September during 35 years ; mean temp. $54^{\circ}\cdot5$, being 2° below the average of 18 years.—*Northampton*. R $\cdot83$ in. above the average.

IV. *Ipswich, Bishop's Hill*. R more than double the average, and temp. generally low.—*Weybread [Harleston]*. One of the wettest Septembers on record ; root crops were wonderfully revived ; there were high winds on several occasions, and there was more T and L than at any other time in the year.—*Diss*. The R for this month made up for the shortcomings of the previous months ; temp. generally low, with cold nights and slight frosts. The harvest, which had gone well up to the beginning of the month, was checked by the R, and although much of the corn and nearly all the wheat were secured in excellent condition, a considerable quantity of barley was left about, and some of it uncut ; the root crops, however, which during the late drought threatened to come to nothing, improved wonderfully, as did also the apples and pears and late garden produce generally ; public health excellent.—*Geldeston [Beccles]*. R nearly double the average of 20 years.

V. *Trowbridge, Wingfield*. The excessive R of this month caused the greatest floods of the year, which were worse than the average.—*Calne, Compton Bassett*. Cold and wet, R falling on 23 days ; frosts occurred on 26th, 27th and 28th sharp enough to destroy tender plants.—*Plymouth*. Cold and wet ; sunshine 36 per cent. of the possible duration. Moderate W. winds prevailed.—*Torquay, Babbacombe*. Cold, cloudy, showery and windy ; R one-seventh below the average, but the number of wet days the greatest observed in any September of the past ten ; the max. on 26th ($53^{\circ}\cdot8$) was the lowest max., and the min. on 28th (36°) the lowest min. observed in September. S.W. winds prevailed on 13 days, gales on 4 days ; solar halos were frequent.

VI. *Clifton*. The min. temp. ($32^{\circ}\cdot5$ on 28th) is the lowest observed here in September during 33 years.—*Cirencester, Further Barton*. Changeable with frequent showers and heavy R on 10th, which restored the burnt pastures; there were many warm days till the last week, when a sharp frost occurred.

VII. *Melton Mowbray, Coston*. Wet, though the R was not much above the average; harvest operations somewhat hindered, but frequent high winds enabled the crops to be got in well.—*Horncastle, Bucknall*. Wet, excepting the third week, with much wind on several days.—*Nottingham, Strelley*. Cold and showery with no harvest weather from 1st to 14th; R slightly above, and mean temp. 2° below the average.—*Mansfield*. The weather was very showery and unsettled during the greater part of the month and very hindering to harvest operations; the latter half of the month was unusually cold; R almost exactly equal to the average of 15 years.—*Worksop, Hodsock*. Cold, bright and showery, R below the average, but number of rainy days large; the min. ($28^{\circ}\cdot7$) was the lowest recorded in September for 7 years. 150 hours of sunshine were recorded, which is much more than in any corresponding month of the previous four years. Harvest, which was three weeks later than last year, was much hindered by the showery weather, but the low temp. prevented the corn from sprouting.—*Derby, Eleaston*. Variable, unsettled, windy and ungenial, with frost on two nights.

VIII. *Macclesfield*. A very wet month, and after the 22nd very cold.—*Walton-on-the-Hill*. Generally wet and cold, with variable winds; R much in excess of the average.

IX. *Wakefield, Stanley*. The R of this month was most valuable for green crops; harvest good and corn housed in very fair condition.—*York, Cherry Hill*. Rainfall $\cdot09$ in. below the average of 36 years.—*Scarborough*. Dull, cold and showery nearly all the month, with a few fine and warm days.

X. *Barnard Castle, Whorlton*. Showery and cold with a few very fine days.—*Shap*. A very unfavourable harvest month, and much corn out at the close.

XI. *Llanfrechfa*. The harvest, which promised to be early, was much retarded by the R of the first fortnight, and some corn was spoilt.—*Ystalyfera, Tan-yr-allt*. Exceedingly wet, corn harvest a failure.—*Tegfynydd [Narberth]*. R $8\cdot09$ in. the heaviest fall for September since 1869.—*Llandovery*. Very wet and very bad for the late harvests.—*Llechryd, Castle Malgwyn*. Very wet, and the latter part

very cold, H remaining on the ground for several hours in sheltered places, and the nearest mountains being white ; the frost of the 26th was unusually severe for the time of year.—*Port Mador*. Strong wind and much R all the month.—*Douglas, Victoria Road*. A worse September could hardly be ; a month of gales, excessive R, and unusual cold ; very little harvest saved at the close.

XII. *Melrose*. The coldest September during the 15 years, 1871–1885 ; mean temp. ($46^{\circ}3$). $3^{\circ}9$ below the average ; frost occurred on 10 nights ; R 1.3 in. above average. S fell on the evening of 25th and the Eildons remained white until noon of 26th. Wind S. and W. on 24 days.

XVI. *Dollar*. Very wet at the beginning and end ; bad harvest weather.—*Callander, Leng*. R 10.20 in., the heaviest monthly fall since observations commenced in 1854 ; the nearest approach to it occurred in September, 1869, when 10.00 in. was recorded.—*Balquhadder, Stroncar*. Very cold and backward, crops very late and ripening badly, a great want of sunshine.

XVIII. *Lochbroom*. Only five dry days in the month. Such a mid-harvest month was never known before in this country, not a sheaf in stack in the whole parish and very little cut, and as little ripe ; not a dry day after the 7th, and the month closed with a perfect flood and hurricane.—*Armadale Castle*. Very wet, not one dry day in the whole month.—*South Uist, Ardkenneth*. The most stormy and wet September ever experienced here.

XIX. *Watten, H.R.S.* A succession of storms of wind, at times accompanied by R and H almost throughout the month.—*Lerwick, Montfield*. Owing to the comparative absence of sunshine during the whole season, and the excessive rainfall of this month, the crops were very immature at the close, but beans and some oats were cut, the latter being very good.

XX. *Dunmanway*. Exceptionally wet.—*Fernoy*. Very wild and stormy.—*Tipperary*. Wet and cold.—*Derry Castle [Killaloe]*. The wettest September during a record of seven years.—*Nenagh, Castle Lough*. A very wet month, the constant R greatly damaging the corn crops.—*Kilkishen*. Rather wet, confirming the rule that a dry summer is generally followed by a wet September. R fell on 27 days. Temp. remarkably low ($30^{\circ}5$) on 27th.—*Miltown Malbay*. An exceedingly wet and bad harvest month ; R in excess of that of any other September for the past ten years ; only two days without R ; temp. very low during the last eight days.

XXII. *Ballinasloe, Kilconnell*. Exceptionally wet and cold. As a rule September is a fine month in Ireland, and the people calculating on this probability suffered severely from injury to their hay crops.—*Lawderdale*. Wet, cold, and unseasonable.

XXIII. *New Barnsley*. The wettest September recorded here, nearly as much R falling as in the previous three months; from the 24th to the end the weather was bitterly cold and stormy; the low temp. kept the ungathered grain from suffering much, and potatoes and turnips were promising.—*Ramelton, Killygarvan*. Rather wet and stormy, with occasional fine weather suitable for harvest work; R 1·75 in. above the average; mean temp. ($52^{\circ}\cdot2$) about 2° below average.

OCTOBER.

I. *London, Lansdowne Crescent, W.* Very wet and cold, mean temp. $46^{\circ}\cdot1$.—*Muswell Hill*. R nearly 30 per cent. above the average of 13 years. R fell on 20 days, and the only fine period was the week from the 16th to the 22nd, inclusive.

II. *Wallington*. Cold, wet and foggy, with very little frost; but the weather was on the whole favourable for the winter crops, which were looking well at the close, and the land generally was in good condition. Duration of sunshine only 80 hours.—*Keston*. Cold and wet.—*Littlehampton*. Another unusually cold and wet month, yet not cold enough to drive away the swallows and the butterflies; summer flowers and roses were still flourishing at the close.—*St. Lawrence*. R $\cdot29$ in. below the average of 15 years; swallows still with us at the end of the month.

III. *Buntingford, Throcking*. Another wet, cold month, R 1·75 in. above the average. Mean temp. $44^{\circ}\cdot3$.—*Winslow, Addington*. Wet and cold; very stormy at the end. R above the average.—*Banbury, Wroxton*. Wet and cold; mean temp. ($44^{\circ}\cdot7$), $3^{\circ}\cdot6$ below the average of nine years.—*Luton*. The heaviest monthly R (4·79 in.) recorded since October, 1882, when 5·24 in. fell.

IV. *Southend*. The first week was warm and clear: but afterwards the weather was damp and foggy, with a lower temp.—*Harlow, Sheering*. R 1·33 in. above the average of 15 years.—*Ipswich, Bishop's Hill*. Wet, cold and very unsettled. R 1·63 in. above the average.—*Weybread [Harleston]*. A very rainy month, and twice the river was bank full, temp. low: decidedly a bad month for agriculturists.—

Diss. Wet, cold and windy ; farming operations delayed.—*Geldeston* [*Beccles*]. R more than twice the average of 20 years.

V. *Calne, Compton Bassett.* A changeable month ; some cold days towards the end, but no hard frosts.—*Plymouth.* Cold and wet with only 29 per cent. of the possible sunshine. R about 46 per cent. above the average, and there were only four dry days in the month. Northerly winds prevalent ; temp. about 4° below the average.—*Babbacombe.* Wet and very cold. The mean (48°) and max. (60°·8) temp. were the lowest, and the total range of temp. (25°·2) was the least in any of the past ten Octobers. R one-third above the average, and the heaviest in any month since February, 1883. R (though not always in measurable quantity) fell on every day but four.—*Teignmouth.* R 1·40 in. above the average of 14 years.—*Penzance.* R 8·41 in., the heaviest fall for October since 1865, when 8·21 in. was recorded ; there were only three days without R.—*Redruth, Trewinzie.* The wettest month for six years, R 8·95 in.—*Crewkerne, Bincombe House.* Very cold and wet with N. to N.W. winds.

VI. *Gloucester, Further Barton.* A month with many wet days, but without much heavy R ; wind generally N. and often cold, but never very strong ; a few slight frosts ; dahlias in bloom at the close ; water in a deep well steadily rising during the latter half of the month.—*Andoversford.* Very wet, leaving the ground in a sodden condition. Wheat planting was mostly finished during the month, but all farm work was much hindered by the very wet autumn.—*Boss.* The coldest October, except that of 1880, since observations commenced in 1859 ; mean temp. 45°·8. R nearly the average in amount, but an excess of rainy days ; no heavy falls of R or severe gales, but much windy, squally weather, interspersed as usual in this month, with several very fair days. At the close many trees were nearly bare of leaves. The months of August, September and October show a lower temperature than any corresponding period since 1833.—*Wem, Sanson Hall.* R 5·04 in. In the 13 years previous to 1885 there were only 13 months in which 5 in. of R, or more, fell.

VII. *Melton Coston.* Very wet, the R exceeding the average of 12 years by more than 4 in. ; wheat sowing much hindered by continued wet.—*Ketton* [*Stamford*]. Very wet, with 23 wet days ; temp. moderately steady, wind variable ; frost not so severe as usual.—*Stubton* [*Newark*]. Very wet ; wheat sowing prevented after the commencement until late.—*Partney.* Very rainy, and from 10th

remarkably gloomy.—*Horncastle, Bucknall*. Much N.W. wind, much R, and a low mean temp.—*Nottingham, Strelley*. The coldest October since 1880, mean temp. 3° below the average; R 3 in. above the average.—*Worksop, Hodsock*. Very wet, cold and dull. During 10 years only two months, December, 1876, and October, 1880, have had a larger R. Duration of sunshine (68 hours) below the average. Prevailing winds W. and N.W.—*Derby, Elvaston*. Very unsettled and stormy with much wind and an exceptionally heavy R.—*Stretton, Lindway Reservoir*. Wet, cold and dull, with R double the average of 15 years.—*Stuffynwood Hall [Mansfield]*. R 6.22 in., the heaviest fall since October, 1880.

VIII. *Runcorn, Weston Point*. R 7.98 in., the greatest monthly fall on record.—*Aigburth, Kelton*. R 6.79 in., the heaviest recorded here during 13 years.—*Walton-on-the-Hill*. R 2.50 in. above the average; temp. and pressure low.

IX. *Halifax, Thorpe*. R 8.24 in. on 26 days, the heaviest fall in any one month, with three exceptions, during 15 years.—*York, Cherry Hill*. R 1.29 in. above the average for 36 years.—*Driffield, Beverley Road*. The wettest month for three years.—*Scarborough*. Very dull and wet. Rainfall 1.66 in. above the average of 19 years.

X. *Shap*. Rather a cold, unsettled month, with strong gales at times; land in a very cold, wet state at the end, and rivers full.

XI. *Llanfrechfa*. Wet, wheat sowing much hindered; temp. unusually low.—*Mold, Bryn Alyn*. October is generally the wettest month of the year, but the R of this October (6.65 in.) exceeded all others during the 20 years recorded here, except 1872, when 9.84 in. fell.—*Nannerch, Penbedw Hall*. R 7.75 in., a fall which has not been equalled since October, 1880, when 8.03 in. fell.—*Douglas, Victoria Road*. A cold month; very wet and stormy weather prevailed from 21st to the end; all summer flowers were in good bloom in sheltered situations at the close, and harvest operations were over, the corn crops being fairly well saved.

XII. *Melrose*. Another very cold month, mean temp. ($37^{\circ} \cdot 9$) $5^{\circ} \cdot 2$ below the average, and frosts occurred on 23 nights. R .87 in. above the average; potatoes a very poor crop, but no disease.

XVI. *Dollar*. Cold and wet in the beginning of the month; dry and fine about the middle and till near the end; wheat uncut.—*Balquhadder, Stronvar*. With the exception of the first week, the weather was good for securing late crops, but there was more frost than in any other October during 10 years; the wind during the first

week was W., for the next fortnight N. and N.E., and the last week very changeable. Potato crop good with little or no disease.—*Coupar Angus*. A very dry month, R and number of wet days both below the average.

XVIII. *Lochbroom*. This month with the preceding will be long remembered as the “bad harvest” in this district. From September 7th to October 15th, there was not one dry day, and there were only seven in the latter half of October, and they principally consisted of calm and severe frost. Near here, on a large early farm on low ground, only a few feet above sea-level, half the crop was still out at the close, much remaining to be cut, though no favourable opportunity was lost day or night; frost, S, H, R, and almost incessant storms.—*Loch Shiel, Glenuladale*. Very fine with the exception of the first week and three rough days towards the end; temp. generally rather low.—*Armadale Castle*. Very wet and cold, with heavy showers of S and sleet; crops greatly damaged by frost, wet, and wind.—*South Uist, Ardkenneth*. A very fine harvest month on the whole, though the first part was rather stormy and wet, yet not sufficiently so to stop out-door work on more than one day.

XIX. *Watten, H.R.S.* The first half of the month was stormy, gales with R occurring almost every day, the latter half was dull and wet, making a protracted harvest.

XX. *Fermoy*. Very cold and stormy.—*Nenagh, Castle Lough*. Another wet and cold month.—*Newcastle West*. A month of R, H, and wind.—*Miltown Malbay*. A succession of gales bitterly cold, sometimes with H and L, from N. and N.E., prevailed nearly all the month, and there were only seven days without R.

XXIII. *Belfast, New Barnsley*.—A month of open weather, but with a good deal of R; roots improved and were still growing at the close; potatoes the best known for a long time, not a heavy crop but all good.—*Ranelton, Killygerran*. Cold, with R about 90 in. above the average, a good deal of wind, and frequent H showers and squalls; mean temp. about 4° below average.

NOVEMBER.

I. *Muswell Hill*. Very wet, the total fall (3.67 in.) being 30 per cent. above the average of 13 years; the wettest November since 1877, when 3.96 in. fell.

II. *Dorking, Abinger.* Very mild and genial ; from the 5th to the 22nd there was very little R, but much fog and damp. R fell plentifully during the last few days.—*Wallington.* Dull and sunless, from the 1st to the 23rd was very cold, but the remainder was unseasonably warm. The middle of the month though misty was dry. Farming as a rule progressed favourably, though the land was too wet for sowing. There were 21 days on which no sunshine was recorded, and 36 hours was the total for the month.—*Hythe.* Very gloomy and wet.—*Wrotham, The Elms.* The first three weeks were very dry, but the last week was excessively wet.—*Keston.* Another rainy month, and for November unusually few fogs and mists, although the atmosphere was very still until towards the close.—*Littlehampton.* Very dull, yet thrushes and blackbirds sung all through the month. There was a wonderful display of green leaves on trees and shrubs ; the sap which was checked in the summer, seemed to flow all through the autumn.—*Horsham, Rusper.* Fair to the 22nd, but the last week was very stormy, 2·50 in. of R falling in seven days.—*St. Laurence.* The most sunless November remembered, drought prevailed from the 5th to the 22nd, and though there was heavy R on the last nine days, the fall for the month was ·53 in. below the average of 15 years. From the 3rd to the 14th inclusive there was only one day on which the sun shone.

III. *Buntingford, Throcking.* Wet and dull, the wettest November during six years. R about an inch above the average.—*Winslow, Addington.* The early part and the end of the month were wet, and four or five heavy floods occurred ; sharp frost in the middle of the month.—*Northampton.* R 1·34 in. above the average of 19 years.

IV. *Southend.* The month began with almost summer weather, but towards the middle there were frequent fogs, and dull weather with R every day prevailed during the last week.—*Harlow, Sheering.* R ·54 in. above the average of 15 years.—*Ipswich, Bishop's Hill.* R ·50 in. above the average ; the first and last weeks were wet and dull, the two middle weeks fine, dry and bright.—*Weybread [Harleston].* Another month remarkable for the absence of wind, a force of 6 being only once recorded. From 3rd to 5th, and again from 23rd to 30th, there was a fairly steady downpour, otherwise the month was dry and favourable to farmers. On 3rd and 4th R fell almost continuously, and though it amounted to only ·74 in. and ·44 in. respectively, owing to the saturated condition of the land it caused a flood probably higher than any since 1879.—*Diss.* A month of change

from bright to dull and drizzle, and back again ; some sharp frosts, too, in the third week, the temp. falling to 28° ; then hot muggy weather set in again with mists and drizzle, but hardly any fogs ; colds and sore throats rather prevalent.

V. *Calne, Compton Bassett*. Cold and wet at the beginning, hazy with several sharp frosts in the middle, and in the latter part incessant R prevailed.—*Plymouth*. R 25 per cent. above the average, no frost. Sunshine only 15 per cent. of the possible duration ; N. winds prevalent.—*Babbarcombe*. Very dull, gloomy and damp, rather warm and wet. R one-fifth above the average, most of it falling in the first and last weeks. The cloudiest month since observations commenced in August, 1876, and the sky was continuously overcast from the 9th to the 12th, and from the 20th to the 23rd. The mean daily range of temp. ($7^{\circ}\cdot4$), the total range ($21^{\circ}\cdot2$), and the number of grass frosts (6), were the least, and the min. on grass ($29^{\circ}\cdot2$) was the highest observed in November. E. wind prevailed on 14 days ; fog on 5 days.—*Teignmouth*. There was an unusual amount of mist during the last ten days of the month.—*Penzance*. The first three weeks were fine for the season though there was a good deal of heavy cloud, with mild temp., occasional cold E. winds, and no great amount of R ; from the 22nd to the end the weather was very unsettled, with heavy gales and much R.

VI. *Gloucester, Further Barton*. Remarkable for R and fog, only broken by four days of clear sky and frost from the 15th to the 18th inclusive.—*Andoversford*. Remarkably wet ; all farm work was thrown very much into arrear, but wheat sowing was mostly over in this district.—*Cheltenham*. Mean temp. $1^{\circ}\cdot3$ above the average for eight years, that of the last week ($46^{\circ}\cdot8$) being very high, as much as $2^{\circ}\cdot8$ above that of the month of October. R $\cdot76$ in. above the average ; the wettest November, that of 1882 excepted, for the past eight years.—*Ross*. From 1st to 8th warm ; from 9th to 23rd the temp. below the average, the max. scarcely rising above 40° , with much fog and gloom, little wind and very little R ; from 23rd to 30th very wet with fog and gloom, the last few days being much warmer.

VII. *Melton, Coston*. Dull and damp, with the exception of the period from the 15th to the 22nd, when it was bright and cold ; R a little above the average.—*Ketton [Stamford]*. Another wet month, R falling on 23 days ; the weather was mostly dull, but there was not much fog, and the temp. was not low, except on a few days in the middle of the month.—*Horncastle, Bucknall*. A few sharp frosts with

E. wind occurred about the middle; E. wind prevailed on 15½ days; R about the average.—*Nottingham, Strelley*. Mean temp. and rainfall about the average; many wet days but no heavy falls; only 17 per cent. of the possible duration of sunshine.—*Mansfield*. With the exception of the opening and closing days, the month was generally dull, dirty, and foggy, with temp. and pressure very changeable. R 1.17 in. below the average of 15 years.—*Worksop, Hootsok*. R, temp., and pressure all very near their averages, but sunshine very deficient, only 36 hours or two-thirds of the average of five years. An unusually sharp frost occurred during the third week with a min. temp. of 19°·9. Winds were very light, and the mean velocity was less than in August.—*Derby, Elceston*. A tolerably fair month, but stormy during the last week; frost on five nights.

VIII. *Walton-on-the-Hill*. Generally unsettled, and except from the 14th to the 18th, very mild. R somewhat above the average.

IX. *Scarborough*. Exceptionally dry and sunless. R 1.65 in. below the average of 19 years. *East Layton [Darlington]*. A beautiful month with little frost, except on two or three occasions when it was rather severe. In sheltered positions grass was looking quite fresh and green at the close, and Christmas roses were in many instances in bloom; holly berries exceptionally plentiful.

X. *Barnard Castle, Whorlton*. Generally warm but dull; with little sunshine; heavy R in the last week.—*Shap*. The beginning showery; the middle cold and dry; the end very wet.

XI. *Llechryd, Castle Malgwyn*. R about the average, but with no heavy falls or floods as is usually the case; the strong S.E. wind on 15th, 16th and 17th, was extremely cold, otherwise it was a mild month.—*Douglas, Victoria Road*. The month began with a wet and very mild week following the cold of October; from 7th to 22nd calm, dry, gloomy weather, with E. wind prevailed. R below the average.

XII. *Melrose*. Mean temp. (33°·1) 2°·8, and R 1.80 in. below their respective averages; high wind on two days, frost on 26 days.

XVI. *Dollar*. A fine quiet month, with sharp frost for a few days at the end of the first half.—*Balquhiddar, Stronvar*. The early part mild, and good seasonable weather for securing the turnip crop, the grass also kept good; very severe frost prevailed in the middle of the month, the ice being 3½ in. thick on a lake; the latter part was cold and wet.—*Coupar Angus*. Cold, especially from 15th to 19th, frost on eight nights.

XVIII. *Lochbroom*. November was a much better month than its two predecessors ; enabling the farmers to finish their harvest.—*Loch Shiel, Glenaladale*. A fine winter month on the whole, with a good deal of frost.—*Armadale Castle*. A favourable month with some heavy gales, but hardly any S or frost.—*South Uist, Ardkenneth*. Calm and warm, more like a summer month ; prevailing winds S. and W. Aurora frequent.

XIX. *Watten, H.R.S.* The month opened fine, and from the 9th to the 20th, sharp frost prevailed ; the latter part was mild and fresh.

XX. *Dunmanaway*. Unusually mild, especially the latter part.—*Fermoy*. Very hard and stormy.—*Tipperary*. Damp and cold.—*Nenagh, Castle Lough*. On the whole a finer and milder month than October, though there were two nights of sharp frost.—*Newcastle West*. A fine and bright month for November.—*Kilkishen*. A rather mild month, though there was sharp frost on 15th. Mean temp. 45°·5.—*Miltown Malbay*. On the whole a good month for agricultural purposes, with less than the average R ; the first and last weeks were rainy and stormy, and the middle of the month was dry and cool, with four frosty nights.

XXII. *Clifden, Kylemore*. The early part of the month was very stormy and cold, with strong wind and R, but an improvement set in towards the middle of the month, which continued to the end.

XXIII. *Belfast, New Barnsley*. Very fine and clear for November, and there were no fogs ; sharp frost prevailed from the 14th to the 19th, but the rest of the month was quite mild.—*Londonderry, Knockan*. Fine, with night frosts from 15th to 19th.—*Ramelton, Killygarraun*. Fine ; R about 1·80 in. below the average, the greater part of it falling at night. Mean temp. (41°·8) about the average

DECEMBER.

I. *London, Lansdowne Crescent, W.* Very cold from 4th to 14th ; changeable during the remainder of the month. During the 21 days ending 27th only ·08 in. of R fell.—*Muswell Hill*. Dry as regards the amount of R, though not as regards the number of rainy days, the total fall being less than half the average of 15 years.

II. *Wallington*. Remarkable for dryness, and for the wide range of temp. and pressure ; dull and rather sunless, but on the whole seasonable. Sunshine recorded on 11 days only : duration 44 hours. Prevailing winds S.W. and W.—*Dorking, Abinger*. Fogs frequent

and sometimes continuous, and strong frost prevailed from 9th to 11th, but the weather allowed agricultural work to be carried on throughout the month.—*Keston Tower*. Sudden alternations of mild weather and frost; not much R and hardly any S; holly and all kinds of berries in great profusion.—*Midhurst, Cocking*. December was characterized by most remarkable alternations of temperature.—*St. Lawrence*. The month was remarkable for sudden fluctuations of temp. The sharp frost from 8th to 12th killed many shrubs and flowers that had lived through the last three winters. The min. thermometer in Stevenson's stand registered 26° on 12th, and $42^{\circ}\cdot3$ on 13th.—*Emsworth, Redlands*. Hard frost from 7th to 11th; dull, gloomy weather, with much damp fog from 13th to 21st.

III. *Buntingford, Throcking*. Dry and cold. R the smallest, and mean temp. ($36^{\circ}\cdot9$) the lowest observed in December during five years.—*Winslow, Addington*. Very unsettled, the changes of temperature being frequent and rapid; from the 8th to the 13th sharp frost prevailed, followed by much milder weather.—*Northampton, Haslewood Road*. R $1\cdot57$ in. below average.

IV. *Harlow, Sheering*. R $1\cdot37$ in. below the average of 15 years.—*Woodbridge*. Rapid alternations of temp. and stormy weather.—*Ipswich, Bishop's Hill*. R just three-quarters of an inch below the average; temp. very variable.—*Weybread [Harleston]*. Dry, and, with the exception of two cold spells, mild. The first cold period prevailed from 8th to 13th, and enough S fell to spoil all chance of skating; after R on the 28th, a sharp frost occurred lasting three nights, followed by a quick thaw; and at the close the S had wholly disappeared, and the river was bank high.—*Diss*. The month commenced brightly, but the weather soon became damp and dull, and on the 3rd and 4th a heavy S.W. gale blew; severe frost prevailed from 7th to 12th, followed by fine dry weather, and the end of the month was gloomy; young cereals were looking well at the close; sore throats and glandular swellings very prevalent.—*Geldeston, [Beccles]*. R less than half the average of 20 years.

V. *Calne, Compton Bassett*. Variable and unsettled, with R, frost, and high wind, but only one slight shower of S.—*Plymouth*. The R and number of rainy days were both below the average, as was also the mean temp., frost having occurred on nine nights; sunshine 20 per cent. of the possible duration; wind variable and very light, with a large proportion of calm mornings.—*Babbacombe*. Cold and dry; R two-fifths below the average, most of it falling between the 1st and

7th, and none being measured in the ten days ending 16th; the coldest December since 1879; the first frost in air of the season occurred on the 8th, the latest date yet observed.—*Penzance*. The first week was stormy; the following week was marked by bitterly cold N.E. to E. winds, frost and bright sunshine; the third week was dull, sombre and milder, with fog and much moisture, but no R till the 20th, winds S. to S.E.; the remainder of the month was mostly overcast, with very little R.—*Crewkerne, Bincombe House*. Fine and dry, with very high pressure and a fair amount of sunshine; cloudless from 8th to 10th and on 27th.

VI. *Cirencester, Further Barton*. A quiet month, damp and foggy, with two short periods of sudden and severe frost, and very little sunshine or bright moonlight.—*Andoversford*. But for the wet mist which prevailed from the 13th to the 20th, and at the end of the month, depositing measurable quantities of water in the gauge, the number of wet days would have been, like the total fall, remarkably small. The weather generally was open, and farm work progressed well.—*Ross*. Dry, with temp. below the average. There was much foggy and gloomy weather, but quite the average, if not more, of brilliant clear days, though on only three days did the max. temp. reach 50°, and on four the mean temp. was below 32°. The severe frost in the middle of the month caused the number of plants in flower to be less than usual. The month was almost without gales or storms.

VII. *Melton Mowbray, Coston*. Fine, though dull, with a small R and great alternations of temp., the total range being 35°.—*Horncastle, Bucknall*. Very dry; mean temp. 3°·3 below the average; min. temp. (11°) on 11th, the lowest since January, 1881. Severe frosts prevailed from 6th to 12th.—*Nottingham, Strelley*. R nearly 2 in. below the average, the total fall being only ·70 in.; from 4th to 28th only ·16 in. fell.—*Mansfield*. R about 2 in. below the average; the first and last days were mild and fine; sharp frost prevailed from 4th to 12th, and there was much fog thence to the 19th; subsequently it was mild and fine till the 27th, with unusual red sunrises; stormy weather closed the month.—*Workeup, Hodsock*. Dry and rather cold; R less than in any of the previous ten Decembers; only one slight fall of S occurred; mean temp. slightly below the average, and daily range rather large, so that the nights were comparatively colder than the days. Only 28 hours of sunshine were recorded, 16

days being sunless.—*Derby, Elvaston*. Very dry ; stormy on 28th, 29th, and 30th ; frost on 13 nights.

VIII. *Macclesfield*. Very dull and changeable ; temp. and R both below the average.—*Walton-on-the-Hill*. Excepting a few days early in the month the weather was very mild throughout ; R much below the average.

IX. *Halifax, Thorpe*. Mild, especially about Christmas ; severe frost prevailed during the second week ; the last few days were stormy and very changeable.—*York, Cherry Hill*. R 1·14 in. below the average of 36 years.—*Scarborough*. Generally cold, though with sudden variations of temp. and no heavy R or S.—*East Layton [Darlington]*. The commencement of the month was very fine and fresh ; followed by a very severe frost which lasted about a week, then fine mild weather again prevailed till the closing days which were very wintry.

X. *Barnard Castle, Whorlton*. Very sudden changes from cold to warmth were frequent.

XI. *Llanfrecfa*. The early part cold, with sharp frost from 7th to 11th ; the last day very warm ; wind variable and stormy towards the close.—*Cardiff*. Though the R was small there was much fog and haze, especially about the middle of the month ; skating on 11th and 12th.—*Llechryd, Castle Malgwyn*.—Generally damp and cloudy, R below the average, temp. very variable, changing suddenly from thaw to frost and back again.

XII. *Melrose*. Mean temp. (34°·3), 1° above the average ; R 1·24 in. below the average. Hard frost from 7th to 11th.

XVI. *Dollar*. Dry generally, but with S towards the close.—*Balquhidder, Stroncar*. Very changeable, though on the whole good, R about half the average ; there were several severe storms, followed by exceptionally mild weather.—*Coupar Angus*. Temp. from 5th to 11th, very low ; from 12th to 18th, high ; mean temp. 35°·7. Prevailing wind, S.W.—*Dunkeld, H.R.S.* Remarkably mild until the last three days, hardy shrubs actually began to bud.

XVIII. *Lochbroom*. Most variable, with an unusually heavy R ; the keenest frost remembered, and some lovely summerlike weather.—*South Uist, Ardkenneth*. Warm, and free from violent storms, but misty and cloudy ; there were few heavy falls of R, and few dry days ; S and frost occurred on a few days ; bright aurora was seen daily for a week about the 9th.

XIX. *Watten, H.R.S.* The first week was stormy, and hard frost with S prevailed to the 10th; the two following weeks were fine, exceptionally free from frost, and even mild at times; in the last week a storm of wind occurred, followed by a heavy S storm.

XX. *Dunmanway.* Very fine and generally very mild, excepting the first week.—*Glenville.* A remarkably fine month.—*Tralee, Castle-morris.* Very changeable; frost from 8th to 11th, after which the weather was dull, foggy, and at times very showery; mean. temp. 44° .—*Graigie, Brandondale.* R $\cdot 67$ in., a very small fall.—*Nenagh, Castle Lough.* The first week was rainy, then a few days of hard frost followed, after which the atmosphere grew gradually warm and damp, until on the 16th thrushes were singing and wild pigeons cooing as if it were spring; thence to the end the weather was on the whole mild, though with some rapid variations of temp.—*Kil-kishen.* Very mild and damp, with very light R, but hard frost prevailed from 8th to 11th. Mean temp. $40^{\circ}\cdot 9$.—*Miltown Malbay.* With the exception of a few days at the beginning and at the end, this month was very calm, mild and dry, with little R.

XXI. *Abbey Leix, Blandsfort.* R $\cdot 86$ in., the smallest December R for 12 years.

XXII. *Clifden, Kylesmore.* Fine, with the exception of two stormy nights; very little S or frost, and a small R for December.

XXIII. *Belfast, New Barnsley.* Very fine; sharp frost prevailed from 5th to 10th, and on 23rd and 24th; heavy S fell on 28th and 29th, and the close of the month was very fine and mild.—*Ramelton, Killygarcan.* Fine; R more than an inch below the average; temp. above the average; mean temp. $39^{\circ}\cdot 7$.

OBSERVERS' NOTES ON THE YEAR 1885.

ENGLAND.

DIVISION I.—MIDDLESEX.

ISLEWORTH, SPRING GROVE.—R about 4·50 in. above the average ; number of rainy days small ; drought prevailed in July, and excessive R in September and October.

KENSINGTON, ADDISON GARDENS.—TSS were few and slight ; three in May, one in August, and one in September being all that were recorded.

LONDON, LANSDOWNE CRESCENT, W.—Wet and cold. Mean temp. 48°·9, the lowest since 1879.

HAMPSTEAD, ROSLYN HOUSE.—The summer was dry, but the total R was large, September, October and November being very wet.

CROUCH END.—Generally dry till September, but wet during the remainder of the year.

MUSWELL HILL.—R ·65 in. above the average of 13 years. The irregularities of some of the months were remarkable ; ten months differed much from their average, July being as much as 2·31 in. below, and September 2·10 in. above the average. Only two falls of an inch in 24 hours occurred during the year.

DIVISION II.—SOUTH EASTERN COUNTIES.

HASLEMERE.—From June 21st to August 4th, a period of 45 days, only ·50 in. of R fell.

DORKING, ABINGER HALL.—Another good year with average R ; crops of all kinds were good, except roots, which suffered from want of R early in August ; the weather of harvest and hay time was good ; the winter was mild, the summer dry, and autumn mild, and there were no severe storms.

GUILDFORD, GUILDOWN.—R 1·08 in. below the average of 13 years.

REDHILL, OXFORD ROAD.—During the year there were ten periods of 7 or more consecutive dry days, the longest periods being sixteen days from July 20th to August 4th, and twelve days from June 25th to July 6th; the wet periods were not so numerous, the number of 7 days' duration or upwards being only 4; the longest were nineteen days from September 2nd to 20th, and fourteen days from January 26th to February 8th. From June 25th to July 10th, a period of 16 days, only ·05 in. of R fell, and from July 12th to August 4th, 24 days, only ·02 in. fell, while from September 7th to 10th, 4 days, 2·67 in. fell.

REIGATE, DOODS.—A great deficiency of R in June, July and August, but this was compensated for in September, October and November.

WALLINGTON.—Remarkable for the very dry July and the very wet September; fruit and flowers though plentiful were not of first rate quality.

BENENDEN, EAST END.—Frost prevailed from 12th to 26th of January, which, though not severe, made this the coldest January since 1881; a wet February hindered spring sowing, and a cold March retarded growth; the wet May, however, brought luxuriant grass, and the hay crop was much larger than in 1884; by the heavy R of June 5th to 8th, and the slight showers from 16th to 20th, the supply of keep was still further augmented, but the extraordinary drought which followed used it all up and, to a large extent, destroyed the root crops. Harvest good, but delayed by cold weather in August. July, the driest since 1869, followed by the third dry August in succession, and the seventh wet September. Hop picking, hindered by the wet, continued into October. The dry November made a good time to finish sowing and the ground was very firm at the close of the year. Wells very low, and the water supply deficient in the summer.

TENTERDEN.—Another dry year with R 2·25 in. below the average of 20 years; the heat, however, was not excessive, the temp. rising above summer heat on only one day in August. September and October were very wet, fourteen times as much R falling as in July and August; November was not so rough as usual, and December was drier than in any year recorded except 1864, 1873 and 1879. 63 nights of frost were registered, of which 21 were in January, 16

in March, and 14 in December ; the frost of May 8th did great damage, and the hail and frost at the end of September were remarkable. Little S and very few TSS. There were ten absolutely rainless weeks, and twenty-six with less than .25 in. of R. There was some high wind in January and February, not much in March, nor so much as usual in October. The drought seems to have begun earlier and continued longer here than in many parts ; for a period of exactly three months, from June 8th, when .32 in. of R fell, to September 8th, when .37 in. fell, there was no fall exceeding .19 in., and the total for the period was only 1.41 in., .59 in. of which fell in the six days September 2nd to 7th ; after .87 in. on 10th and 1.17 in. on 16th, with daily showers of small amounts, the brown fields were turning green and the ground was well soaked, though ponds were still low.

CRANBROOK, HARTLEY.—The third successive year with R below the average of 20 years, there being a deficiency of about ten inches in the three years.

TUNBRIDGE WELLS, CAMDEN PARK.—The R of the three months June, July and August was extraordinarily small, amounting to only 1.98 in., but the fall of the last four months was as exceptionally great : 14.02 in., 47 per cent of the total for the year. The heat and drought of the end of July and beginning of August scorched up, and indeed killed, tender vegetation.

ASHFORD, BETHERSDEN.—From June 8th to September 1st, a period of 12 weeks, only .76 in. of R fell, but between the latter date and October 31st 8.52 in. fell.

SEVENOAKS, RIVER HILL.—The land became so dry during June, July and August that the heavy R (11.60 in.) of the succeeding months failed to saturate it.

OSPRINGE, LORENDEN.—The local springs failed in June, and had not recovered at the close of the year.

KESTON TOWER.—A wet year on the whole, except June, July and part of August, when the country suffered much from drought.

RAMSGATE, THE VALE.—R 3.62 in. and number of rainy days 11 below the average of 10 years.

MARGATE, APSLEY HOUSE.—R below the average for the third year in succession, but the water supply of the district was not at all affected. From June 26th to July 11th was a rainless period, and from June 20th to August 1st only .24 in. fell ; no daily fall in the year exceeded an inch.

BECKENHAM, FOXGROVE.—R one inch below the average of 17 years, with no fall of an inch in 24 hours ; from June 10th to August 4th, 56 days, only .59 in. of R fell. No gooseberry grubs, hardly any wasps and few butterflies all the season. A good average hay crop, but owing to summer drought and early frosts it was a bad year for flowers and roots, especially beet, of all sorts.

ERITH, CROSSNESS.—The R (taking the mean of three gauges) was 3.06 in. below the average of 23 years, and the number of wet days 11 below the average ; there were very few heavy falls of R.

WORTHING, BROADWATER ROAD.—Ground very dry in July and August, and the subsequent R not enough to fill the ditches. Slight S fell on three days, and melted at once.

HORSHAM, COMPTON'S LEA.—Although there was a scarcity of water the wells did not fail so soon as in 1884.

BRIGHTON, BLATCHINGTON ROAD.—An unusually dry summer, yet with little sunshine. Only 2.43 in. of R fell during June, July and August, a marked contrast to the three months following, in which 12.59 in. fell. The R as a whole was about the average, though unequally distributed. Hardly any TSS.

HASTINGS, THE HOLLIES.—R 2.27 in. below the average of 15 years.

UCKFIELD.—Notwithstanding the long summer drought the R for the year was only .18 in. below the average of 43 years.

MARESFIELD, FOREST LODGE.—R 1.25 in. below the average of 30 years ; but for the heavy falls of September, October and November, the deficiency would have been markedly greater. The R of July (.34 in.), though small, was by no means unprecedentedly so, as the same amount fell in May, 1880, .23 in. in July, 1869, and actually only .06 in. in September, 1865.

CROWBOROUGH, THE OBSERVATORY.—In consequence of the comparatively short period of the Crowborough register, the R for the past year showed a deficiency of 5.86 in. upon the average of 15 years, whereas at Uckfield the deficiency was only .18 in. upon the average of 43 years. The summer was the driest since 1869, the R for the three months being only 2.02 in.

WITHYHAM, LEYSWOOD.—A fruitful year ; springs almost failed during August and September, and many shrubs died from the drought and heat in these months.

EAST GRINSTEAD.—June, July, and August were dry and cold.

ISLE OF WIGHT, YARMOUTH.—The year was marked by a great

profusion of bloom on flowering shrubs, and abundance of fruit and winter berries. The months of November and December were exceptionally dark and foggy.

CHRISTCHURCH, MUDEFORD.—Very severe drought in July and August ; only .72 in. of R fell in the two months, and this was spread over 20 days. The coldness of the nights throughout the year was remarkable ; the mean min. temp. on the ground being below the average of 15 years in every month but February and November. T was heard only twice during the year.

PORTSMOUTH, CLOSEWOOD, COSHAM.—There was considerable deficiency of R in the months of June, July, and August, the aggregate fall for these three months being only 2.91 in. The defect in July, followed by want of sunshine in September and October, proved fatal to the turnip crops.

EMSWORTH, REDLANDS.—The first four months cold, cheerless, and boisterous, with great absence of sun and cold nights, but without severe frost. By the end of April crops and grass were much in want of sun and R. May was remarkably cold, with strong winds and not much sun. June was marked by a series of gales and strong winds. Hay harvest commenced about the 22nd ; the crop was light, but saved in good order. The R of August was remarkably small. September exceptionally unsettled and rough. December was dull and gloomy, with much fog and four days hard frost, and the year finished with mild, muggy weather.

PETERSFIELD, LISS.—R about the average, but there was an exceptional number of rainless weeks.

ROPLEY.—In the winter of 1884–5 springs were lower than they had been for more than 40 years, and a well of 315 ft. deep was cleaned out. February, however, was very wet. May was very cold, boisterous, and stormy, and the cold, bitter E. winds lasted to Midsummer ; then followed a long drought which lasted from the middle of June till the end of August ; ponds to collect surface water are the chief source of supply on the high ground, those that are highest up lasting the longest ; these, with one exception, failed. November and December were remarkably dark and sunless, and even here, where fogs are all but unknown, we had some foggy days.

ALTON, EAST TISTED.—R about four inches in excess of 10 years average, notwithstanding the drought of July and August.

ALTON, THEDDEN GRANGE.—The three summer months were very

dry, causing an almost complete failure of the root crops in this district.

ROTHERWICK, TYLNEY HALL.—R less than two inches below the average, but this being the third dry year in succession, springs were very low at the close.

BLACKWATER, HURSTLEIGH.—Very small R in the three months, June, July and August, the total being only 2·77 in., of which 1·93 fell in June, leaving only ·84 in. for July and August, but this was partly made up for in September, when 4·53 in. fell. The R for the year was ·62 in. below the average of ten years.

HECKFIELD PLACE.—Great drought prevailed in June, July and August; springs failed at the end of July, and did not regain their usual height till quite the end of September, in which month 3·90 in. of R fell, the wet weather continuing throughout October and November.

READING, EAST THORPE.—R 1·86 in. below the 10 years' average, and number of rainy days 11 above the average.

YATTENDON.—Deficient R in spring and summer, which affected all green crops; in the autumn and early winter R was abundant, but the autumn temperature was too low for vegetation to make much growth.

LAMBOURNE.—A prolonged and trying spring, and a very dry summer. Owing to want of moisture all corn crops were short in the straw, and the turnip crop was an almost total failure. In the autumn several surface wells dried up. On the 17th October, the bed of the Lambourne stream was dry, and the river did not recommence running till December 7th. Had the severe spring weather terminated a fortnight earlier than it did, the fruit crop would have been magnificent; as it was, it was below the average.

MAIDENHEAD, LOWOOD.—The R was again below the average; the summer was very dry, and gardens and grass on high land suffered much.

LONG WITTENHAM.—The weather was dry up to September, especially in July and August, but the autumn was wet; there was much blight, and destruction by grubs; E. winds prevalent.

DIVISION III.—SOUTH MIDLAND COUNTIES.

WATFORD, WANSFORD HOUSE.—The R was above the average; the summer was very dry, July excessively so, but the autumn was

very wet, the winter and spring had about the average fall. From January 25th to February 8th, a period of 15 days, R fell daily, 2·72 in. falling in that time; from July 20th to August 3rd, likewise a period of 15 days, no R was recorded.

BUNTINGFORD, THROCKING RECTORY.—July was extremely dry and seems to have had no equal in that respect since 1868. The fall of the three autumn months (11·88 in.) equalled that of the first six months (11·87 in.) and was about 45 per cent. of the total fall.

SLOUGH, LANGLEY.—R ·52 in. below the average of 13 years; only 6 per cent. of the yearly total fell in the two months, July and August; in September and October, 32 per cent. fell.

WINSLOW, ADDINGTON MANOR.—R only ·11 in. below the average of 15 years. July exceptionally dry; the heavy R of September, October and November was bad for all agricultural operations on heavy soils.

WHITCHURCH RECTORY.—The drought of July and August was the severest remembered here, and showed the need of storing water.

OXFORD, MAGDALEN COLLEGE.—July and August were very dry, and there were clouds of aphides in the first week of August, pastures and lawns were quite burnt up until the R of September.

STANTON ST. JOHN'S, WOODPERRY.—July was the driest remembered here, causing a failure of root crops, while September and October were the wettest, and very bad for getting in autumn corn.

BANBURY, BLOXHAM GROVE.—The spring was very cold and ungenial, and grass very deficient; July remarkable for the almost entire absence of R, and for the heat at the latter part; August and September were very unfavourable for the corn harvest, the crops being much injured in the field and in the rick.

NORTHAMPTON, SEDGEBROOKE. — Agriculturally speaking, the seasons were excellent, except, perhaps, spring, which was cold, especially the nights. A serious drought prevailed from August 12th to September 2nd, which following an exceptionally dry July, caused a great want of water, the Petteril never having been known so low before. S was on the hills by September 26th, unusually early, but beyond a few flakes none fell in the valleys till the 28th of December, a rare occurrence. The later months of the year were unusually quiet, and, with some exceptions, genial and mild. Very little electrical disturbance occurred during the year.

BRIXWORTH.—The winter of 1884-5 was very favourable to agri-

culture, there being scarcely any frost, though the average temperature of January was rather low ; a dry and somewhat cold spring followed, with a very cold May, then a fine dry summer, at times very hot, with very little T. August was showery and very cold, with E. and N.E. winds throughout the month. Scarcely any S during the year.

THRAPSTONE, HARGRAVE.—From an agricultural point of view, the year proved a fair average season. The showery weather during April, May and June produced excellent crops of grass, which were converted into first-rate hay during the long drought from June 25th to August 3rd ; this drought, however, was fatal to the root crops with the exception of those sown very early. The crops of spring-sown beans were destroyed, and winter beans and other crops seriously damaged by green fly during the dry weather. The continuous R during October and November greatly impeded the autumnal seeding, which was, however, for the most part completed during the fine weather in December.

ST. NEOT'S, WARESLEY VICARAGE.—R 34 in. above the average of 23 years.

AMPTHILL.—From June 25th to August 3rd inclusive, a period of 40 days, only 19 in. of R fell, the smallest amount ever recorded here in the same space of time.

TEMPSFORD HALL.—R 62 in. above the average of 12 years. Ponds, brooks and wells were low all the summer, and did not really fill till November ; July and December were very dry, and November and December cold, though the frosts did not last.

GRANCHESTER MILL.—During 1885 the mill was stopped ten days by floods.

CAMBRIDGE, BEECH HOUSE.—R two inches above the average.

ELY, LITTLEPORT.—Notable for the absence of severe TSS.

CHATTERIS, THE PRIORY.—The R in the spring months was small, but the fall was above the average in the autumn ; very few TSS.

WISBECH, COLDHAM HALL, ELM.—Fine on the whole ; spring cold and backward, hawthorn and chestnut only blooming at the end of May ; summer dry and cold with short periods of heat in July, and not a single TS ; August very cold but dry and favourable for the harvest, which was excellent ; autumn wet, but December dry.

DIVISION IV.—EASTERN COUNTIES.

DUNMOW, HIGH RODING.—R 1·42 in. above the average of 20 years.

IPSWICH, ORWELL PARK.—R 1·94 in. above the average of 11 years.

IPSWICH, BISHOP'S HILL.—R one inch above the average, August very dry, but September and October very wet; remarkable absence of T and L.

WOODBIDGE, BANK HOUSE.—R 3·50 in. above the average of 13 years.

RENDLESHAM HALL.—The R of September and October was very heavy; the winter was singularly free from gales, and atmospheric pressure was high during December.

BURY ST. EDMUNDS, WESTLEY.—The year was remarkable for the dryness of June and July and for the absence of L and T.

DISS.—The year opened with fair winter weather, and there was good skating in the third week of January; the spring and early summer were mild, but the nights cold, and a month's drought, with a week's intense heat between the middle of July and the middle of August, injured garden produce. The hay crop and corn harvest were both good and well carried, but the roots were poor. The R of September and October was unusually heavy. Public health was good till the last month, when colds and a severe epidemic of whooping cough occurred.

GELDESTON [BECCLES].—R ·83 in. above the average of 20 years.

LODDON, BERGH APTON.—The R of the three months, September, October, and November (14·56 in.), is the largest recorded in that period during 47 years.

NORWICH, POSTWICK.—The summer very dry, and the R below the average till September and October, during which two months the large amount of 10·65 in. fell.

NORWICH, THORPE HAMLET.—May wet; June, July, and August excessively dry, the total fall for the three months being only 2·56 in.; September and October were excessively wet, the fall being 11·27 in. for the two months. The summer was remarkable for the sudden changes from heat to cold and for the coolness of August. The autumn was very cold and wet, and the valleys were flooded at the end of October; S and frost prevailed in the second week in December, and again on 29th and 30th.

NORWICH, ESSEX STREET.—June, July, and August very dry, with a comparatively low temp., rendering the harvest somewhat late and causing the fruit to ripen slowly; three unusually wet months followed, producing an aggregate of 14·63 in., or more than half the year's R.

EAST DEREHAM.—R about 2 in. above the average. In April and May there were some warm days, and in June and July the weather was very hot and very dry; August was dry but very cold; September, October, and November were all wet, October especially so.

AYLSHAM, WOODGATE.—A remarkable absence of electrical disturbance during the year; drought was very severe till September, and grass land was scorched up; a very heavy R (8·00 in.) in October.

HOLT, LETHERINGSETT HALL.—July exceptionally dry, but September, October, and November very wet.

DIVISION V.—SOUTH WESTERN COUNTIES.

LUDGERSHALL.—June, July, and August were very dry, and there was a very short crop of roots in consequence.

TROWBRIDGE, STEEPLE ASHTON VICARAGE.—July was the driest month ever registered here, and in March and December the R was just under an inch, yet on the whole year the usual average was maintained.

WEYMOUTH, LANGTON HERRING.—R 4·95 in. below the average of 10 years. Mean temp. 1°·2 below the average of 13 years, and the lowest in any year, with the exception of 1879. The drought in summer was very remarkable, only 2·70 in. of R falling in June, July, and August, and of this only ·25 in. fell in July.

SALCOMBE, THE MOLT.—There was a marked absence of TSS and of heavy gales throughout the year.

PLYMOUTH, NAVIGATION SCHOOL.—R 95 per cent. of the average of 21 years; mean temp. 1°·7 below average; 32 per cent. of the possible duration of sunshine was recorded. There was a greater number of calm mornings, but fewer with S.W. wind than usual.

TORQUAY, BABBACOMBE.—A cold, dry year; R 13 per cent. below the average, but the usual number of rainy days was registered. The longest consecutive wet period was 17 days from January 23rd to February 8th; the longest dry period, 13 days, from July 22nd to August 3rd. A long partial drought occurred from June 25th to

August 5th, only .26 in. of R falling on six days during the period of 42 days. Falls of R exceeding an inch occurred on three days ; mean temp. $49^{\circ}4$; mean humidity at 9 a.m. 80. The summer was dry, fine and cool, excepting about July 26th, on which day the max. shade temp. ($85^{\circ}6$) exceeded any registered since observations were commenced in August, 1876 ; the latest frost in spring was on May 21st ; the earliest in autumn on September 26th. S fell on eight days, but never covered the ground ; H on 25 days ; TSS or T on only 6 days, L on 12, fog on 35, solar halos on 34, lunar halos on 12. Vegetation was backward in the spring, but the hay and corn harvests were good ; the pastures were very bare from the summer drought, but the grass grew rapidly after the autumnal rains set in on August 23rd.

BUDLEIGH SALTERTON.—The drought from May 21st to August 26th caused a general failure in garden and root crops. Although the total fall exceeded that of 1883 and of 1884 by nearly five inches no flood occurred in the Otter valley.

BUDLEIGH SALTERTON, EAST BUDLEIGH.—The remarkable features of the year were the want of R in July and the consequent general failure of the root crop ; the absence of floods ; the very heavy hay crop resulting from the rains of April and May, the sunny hay time in July and harvest time in August, and the exceptional lowness of the springs throughout the year.

CLEVELANDS, [LYME REGIS].—R .59 in. below the average of 18 years.

AXMINSTER, FURZEBROOK.—No S fell during the year, and there were no TSS ; springs were low during the summer ; fruit and corn crops were above the average both in quantity and quality, but in consequence of the drought in July there were no roots.

AXMINSTER.—Unusually few high winds ; July and August very dry and hot ; pressure exceptionally high during October, November and December.

HATHERLEIGH, BROOMFORD MANOR.—Temp. fell below 32° on 57 days during the year ; the heavy R of September 10th (1.47 in.) so cooled the ground that vegetables made but little growth after.

TORRINGTON, LITTLE SILVER.—The R of July was very small ; hay harvest was good with heavy crops, root crops an average, harvest in September much delayed and injured in late districts by R ; springs very low until October.

WEST BUCKLAND, DEVON COUNTY SCHOOL.—A very dry July

and August, followed by a very wet September and October ; there was very slight S on January 17th and March 18th, the only days in the year on which S fell.

TRURO, PORTHWIDDEN.—The heavy R of September, October and November (20·73 in.) is greatly in excess of that for any other three consecutive months recorded here.

MAKER VICARAGE [DEVONPORT].—A dreary year ; a cold period set in with the first dry period commencing March 6th, and continued practically unbroken to the end of the year.

LISKEARD, DEAN TERRACE.—R 3·94 in. below the average of 22 years ; number of wet days 4 above the average. The fall of September 10th (2·85 in.) is the largest recorded in 24 hours during the whole period.

CREWKERNE, BINCOMBE HOUSE.—R 1·07 in. below the average of 17 years ; there were some long periods of dry weather, but several very heavy falls of R.

YEOVIL, HENDFORD.—Very few TSS during the year.

MILVERTON.—R slightly below the average.

SOMERTON, BUTLEIGH COURT.—Water was very scarce during June and July, and continued so till the end of August.

GLASTONBURY, STREET.—A dry, cold summer, for though the days were hot the nights were cold.

EXFORD RECTORY.—The spring and summer months, with the exception of May, were remarkably dry and the wet autumn did not quite raise the total to that of an average year.

SHEPTON MALLET.—The springs supplying the town were very low from May to September, and the moors lying from 6 to 10 miles distant S.W. of the town suffered considerably from the drought ; only 3·40 in. of R fell in June, July and August ; heavy rains fell during September, October and November to the extent of 15·36 in.

FROME, ROCK HOUSE, MELLS.—Great drought from May 25th to August 25th, only 2·35 in. of R falling during that time, the greatest quantity in one day being ·37 in. on August 12th ; the wind during 56 days of the period being N. or E. and the nights and mornings cold.

STON EASTON.—R 1·21 in. below the average of 17 years.

EAST HARPTREE, HARPTREE COURT.—The R for the months March to July was about 7·25 in. below the average, June being nearly 2 in. and July more than 3 in. deficient. The summer was the driest ever known ; from May 26th to August 20th, a period of

87 days, only 3·28 in. of R fell ; springs were naturally very low, and one called the Holy Well, in Harptree Combe, which was always supposed to be perennial, was dry in the middle of July ; had the R not come as it did at the end of August serious consequences must have ensued. At the beginning of September two springs which supply this village were yielding only about one-fifth of their usual summer supply.

BATH, QUEEN'S PARADE.—A dry summer and a wet autumn ; July was very dry, September, October and November were all very wet, and the heavy rains on the closing days of November caused floods ; S fell on only three days ; TSS occurred on seven days.

DIVISION VI.—WEST MIDLAND COUNTIES.

LECHLADE.—The great drought from June 25th to August 3rd, during which only ·21 in. of R fell, was the ruin of the turnip crop.

GLOUCESTER, LOWER BARTON STREET.—From June 24th to August 2nd, a period of 40 days, only ·18 in. of R fell.

BOURTON-ON-THE-WATER.—Large amounts of R fell in February, September, October and November ; but in July only ·20 in., an exceptionally small amount.

CHELTENHAM.—A remarkable drought lasted from the 25th of June to the 3rd of August, during which period only ·09 in. of R fell ; the low temperature of May, August and October, and the sudden and sharp frost at the end of September, deserve mention. There was very little electrical disturbance. The R was 3·94 in. below the average of eight years, and there was only one day on which more than one inch fell.

ROSS, THE GRAIG.—R about 7 per cent. less than the average, and mean temp. 1° below the average ; there were no specially heavy falls of R, and the number of rainy days was very large for the amount gauged ; February was the only month with any large excess of fall, although there were slight excesses in April and in November. March, August, and December were deficient, and an unusually small amount fell in July, the drought extending from June 25th to August 3rd, inclusive. The year was remarkable for the absence of gales, TSS, and S, for a late spring, a cold May, and a very cold autumn.

MUCH DEWCHURCH, BRYNGWYN.—A dry summer with no high temperatures, and an absence of TSS.

LEDBURY, ORCHARDLEIGH.—A sunny but cool summer, and a damp and foggy autumn.

HEREFORD, BURGHILL.—R below the average; a remarkable drought prevailed from June 25th to August 3rd, and springs were still very low at the close of the year.

PEMBRIDGE, MARSTON.—During a period of 39 days, from June 25th to August 3rd, only .30 in. of R fell, on five days, and a period of continuous wet occurred from August 31st to November 14th, there being only twice two consecutive dry days, and only once three consecutive dry days during the whole period of 76 days.

LUDLOW, ASHFORD.—The wells reported dry at the close of 1884 did not supply water till quite the latter end of February, 1885. The Teme was in flood several times during the autumn.

BISHOP'S CASTLE, MORE RECTORY.—Remarkable for the variations of temp. and R. The R of July was less than that of any other month recorded, and that of October has only been once exceeded; the year was on the whole very free from great storms, winds and tempests.

BROSELY, BENTHALL HALL.—R about three inches below the average, and remarkably small during the first six months; on three days falls exceeding one inch occurred.

WEM, SANSAW HALL.—R 2.10 in. below the average of ten years.

BURTON, SHOBNALL.—R 3.14 in. below the average of ten years. S and H fell on only two days. Longest consecutive dry period, 11 days.

CHEADLE, TEAN VICARAGE.—R less than that of any of the previous ten years, except 1884, and 6.24 in. less than the average. No serious drought or period of a fortnight without R; in July, the driest month, there were refreshing showers in the first and third weeks, and although the total R was only .78 in. it was quite sufficient, coming after 3.52 in. in the previous month, to stave off any serious hurt to vegetation during the haymaking season.

EVESHAM, LANSDOWNE.—Fine, dry, warm, and very seasonable; June, July, and August unusually dry.

EVESHAM, THE BANK.—The distribution of the R was advantageous to this district, excepting that the heavy fall of August and September retarded the harvest and injured the quality of the grain.

WORCESTER.—R nearly two inches below the average of ten years. The continued fine weather from June 24th to August 3rd, during

which time only $\cdot 32$ in. of R fell, has had no parallel for many years. The fall for July ($\cdot 27$ in.) is the smallest for any one month in the ten years recorded here.

KENILWORTH, THE SPRING.—During the 39 days between June 24th and August 3rd only $\cdot 08$ in. of R fell on four days.

COVENTRY, PRIORY ROW.—Fine and fruitful, though a sharp frost on May 12th did much damage to fruit blossom. A remarkable feature of the summer was the drought of July, the total R between June 25th and August 3rd being only $\cdot 08$ in. ; the water sources were, however, not wholly exhausted, nor were the pastures so much dried up as in some former years, so that the dry weather was, on the whole, beneficial.

DIVISION VII.—NORTH MIDLAND COUNTIES.

MELTON MOWBRAY, COSTON.—R below the average of 12 years, although the fall for October was very heavy, and the falls for September and November above the average. A marked feature, however, was the long drought from June 26th to August 3rd inclusive, with only $\cdot 11$ in. of R on two days.

SPALDING, PODE HOLE.—Owing to the lack of R to cause the needful scour, the tides in the river Welland brought up a large amount of deposit ; the harvest weather for hay and corn was very fine.

SLEAFORD, BLOXHOLM.—July very dry, and water very scarce ; September and October wet, injuring the late harvest.

HORNCASTLE, BUCKNALL.—The R up to August 1st was rather less than even that of the corresponding period of the very dry year, 1884. The frost of the second week in December was more severe than any since January, 1881.

LOUTH.—R $\cdot 71$ in., and mean temp. $1^{\circ} \cdot 1$ below the average of 21 years.

ULCEBY, LIMBER GRANGE.—Very cold ; there was very little sunshine ; pastures were wretched, hay was very scarce, and corn crops were very slow and late in ripening. The fall in October ($6 \cdot 69$ in.) was the heaviest ever known here.

NOTTINGHAM, PARK HILL.—R average ; July and December very dry, September and October wet ; almost entire absence of S, which fell only in small quantities on five days ; heavy R was not frequent, only one fall exceeding an inch.

NOTTINGHAM, STRELLEY HALL.—Dry, but cold and sunless, the mean temp. being about 1° , and the R about 2 in. below the average; the only large excess of R (3 in.) was in October, and the chief deficits were in July and December. Only 25 per cent. of the possible amount of sunshine was recorded.

NEWARK, EAST STOKE.—Owing to the extreme dryness of the summer the springs were low, and pastures bare, so that the very heavy R of October did not flood the country so much as might have been expected, though the land was rendered unfit for working or drilling wheat; the Trent was once in flood during October.

MANSFIELD.—March, April, May, July and December, were all drier than the average; July being the driest recorded here; October was very wet (6.64 in.) There were three days on which the R exceeded 1 in.

WORKSOP, HODSOCK PRIORY.—Uniformly cold and dull, and of average rainfall. The mean temp. ($46^{\circ}8$) is lower than that of any of the previous nine years, except 1879. July and December were very dry, and October was very wet, while some heavy falls brought up the total for June to a rather large figure. S was recorded on only 12 days. Sunshine was very deficient throughout, the total for the year was only 1,119 hours (or 29 per cent. of the possible duration), which is 155 hours less than the average of the five years 1881-85. September was the only bright month. Vegetation was very backward in the spring, and keep was consequently scarce, but the weather was favourable for spring work, the spring corn was got in well, and a good opportunity occurred for cleaning the land. The heavy rains in June saved the turnips, the crops of hay and seeds were fair, and were got in in capital order. There was a good crop of strawberries, but much fruit blossom was damaged by the spring frosts, and the absence of sun prevented it from ripening properly. The harvest was very long and slow, partly owing to the showery weather, and partly from the corn ripening very slowly. The wheat crop was very poor, barley and oats fair. The turnips varied much in different places, in some within a few miles they were quite a failure, just here they are a very good crop. The wet October rather hindered wheat sowing, but it was eventually got in well. The year has been a healthy one for live stock, and except swine fever no serious diseases have been prevalent.

DERBY, ELVASTON.—Remarkably dry in July (R .30 in.), and excessive R in October (5.89 in.), which was the wettest month for at

least nine years. Very few TSS and those of no great violence ; temp. rather low throughout the summer, exceeding $80^{\circ}0$ in the shade on only four days ; there were no very low minima. Mean temp. $46^{\circ}1$.

DERBY, CHRISTCHURCH VICARAGE.—R below the average ; July remarkably dry.

STONY MIDDLETON.—August very dry ; and the springs were affected.

DIVISION VIII.—NORTH WESTERN COUNTIES.

CHESTER, ROWTON GRANGE.—The greatest number of successive days without R was 12 ; the greatest number with R was eight.

NESTON, HINDERTON.—R nearly 13 per cent. below the average of 16 years.

FRODSHAM, FOXHILL.—A very dry spring and summer, and a very wet autumn ; more R fell in October than in any other month during the last ten years ; in no case did an inch of R fall in 24 hours during the year.

THELWALL.—The distinctive feature of the year was the dryness and low temp. of the summer months ; at no time was the heat oppressive, and a fall of S occurred in May ; E. winds were very prevalent ; the hay harvest was good.

AIGBURTH, KELTON.—R $4\cdot31$ in. below the average of 10 years. The first eight months were remarkably dry, the fall during that period being only $14\cdot48$ in., while in the last four months it was $16\cdot00$ in. On no day was a fall of one inch recorded.

BLUNDELLSANDS.—July was exceptionally dry, and in consequence of the dryness of 1884, and the first eight months of this year the Rivington Reservoirs nearly gave out and the supply of Liverpool was only saved by the wet months of September and October.

BOLTON-LE-MOORS, THE FOLDS.—R $6\cdot35$ in. more than that of 1884, but $11\cdot39$ in. less than the average of 54 years.

BOLTON-LE-MOORS, BELMONT ROAD.—April, May, July and August were exceptionally dry, whilst October was unusually wet.

SOUTHPORT, HESKETH PARK.—R less than in any of the previous 14 years, with one exception.

THE HALL [TODMORDEN].—July was a specially dry month both as to the amount, and the number of days on which R fell. September and October remarkably wet.

LYTHAM.—R smaller than that of any other year since 1877, when the register commenced ; 9·25 in., or nearly one-third of the total, fell in September and October.

BLACKPOOL, SOUTH SHORE.—R 4·16 in. below the average of 30 years, and the smallest for 12 years.

ECCLESTON, ELSWICK LODGE.—A dry and cold summer, with much N. wind and bright sunshine. R less than that of any of the previous 14 years, except 1879, when it was the same ; mean temp. 45°·3, also lower than that of any of the previous 14 years, except 1879.

ST. MICHAELS-ON-WYRE.—The wettest September (6·13 in.) and the driest December (1·77 in.) since observations commenced in 1876.

GARSTANG, CALDER MOUNT.—The driest year of the 15 observed here.

CLITHEROE, DOWNHAM HALL.—The smallest R recorded since observations commenced in 1865, and 12·32 in. below the average of the previous 20 years.

LANCASTER.—R 17·2 per cent. below the average of 24 years.

BARROW-IN-FURNESS, CAVENDISH PARK.—R 4·54 in. below the average of 13 years, and the smallest since 1880.

CARTMEL, HOLKER.—R 5·65 in. below the average of 12 years. The spring was cold and backward, N.E. winds causing vegetation to be quite a fortnight late ; and frost in May injured fruit blossom ; the heat was never excessive, only reaching 80° once in June and 82° in July, still these months, with August, had some beautiful summer weather.

CARTMEL, BROUGHTON HALL.—R 5·32 in. and number of rainy days seven below the average of 17 years ; cold E. winds prevailed in January, February, March and the first half of May, and much frost in January.

DIVISION IX.—YORKSHIRE.

SHEFFIELD, WESTON PARK.—July very dry, with R on only four days, the total being 70 in. ; in October 6·82 in. fell ; the greatest number of consecutive rainy days was 19, from September 2nd to 20th ; the longest interval without R was 14 days, from July 21st to August 3rd.

WATH-UPON-DEARNE, CHAPEL STREET.—Dry ; R nearly 4 in.

below the average of 20 years ; the summer temp. was below the average, and there was much cloud ; there were very few TSS.

WATH-UPON-DEARNE.—R 3·50 in. below average ; a cold summer.

STAINBOROUGH, WENTWORTH CASTLE.—R 3·68 in. below the average of nine years. July exceptionally dry, only ·58 in. of R falling, and some of the mining villages were short of water. The dryness of this month favoured haymaking, and caused silos to be little used. August and September were good harvest months, but October was wet (6·98 in.), which delayed the harvest in the high-lying late districts. Potatoes generally good and free from disease.

BARNSELY, CHURCH STREET.—R 4·07 in., and number of rainy days four below the average of 20 years.

MELTHAM, HAREWOOD LODGE.—A dry year (with the exception of October and November), but colder than any since 1879. Though the R was only three inches more than that of 1884, the reservoirs which were almost empty in that year showed scarcely any signs of failing in 1885. It seems worth remarking that since the close of the very stormy period at the end of January, 1884, the character of the R here seems to have altered, for whereas during the 23 months preceding February 1st, 1884, there were 13 daily falls above ·75 in., eight above 1·00 in. and one above 2·00 in., there have been during the 23 months ending December, 1885, only seven falls above ·75 in., and one above 1·00 in., *i.e.*, 22 falls above three quarters of an inch in the former period to eight in the latter.

HUDDERSFIELD, DALTON.—R 6·21 in. below the average of 20 years.

PONTEFRAC, FERN HILL.—The R of the first six months was very near the average of ten years, but that of the third quarter was 4·72 in. below it, and of the whole year 5·27 in. below the average.

WAKEFIELD, ALVERTHORPE HALL.—The severe frosts in April and the early part of May seriously damaged the fruit crop ; through the latter part of June and the months of July and August the weather was fine and dry, with a very enjoyable temperature, July having only six rainy days with a fall of ·81 in.

WAKEFIELD, STANLEY VICARAGE.—Exceedingly dry, R six inches below the average.

HALIFAX, THORPE.—R 4·92 in. below the average of 16 years ; number of days on which R fell 26 above the average of eight years.

BRADFORD, FARCLIFFE.—No violent storms, and R 8·97 in. below the average of seven years.

LEEDS, OLIVER HILL, HORSFORTH.—The night temperatures were singularly low in every month except June, November and December.

LEEDS, HORSFORTH.—Although the R was almost exactly the same as in 1884, the water supply by the company (see *British Rain-fall*, 1884) was kept up on constant service throughout, showing how much depends on the distribution of the R. The wells and springs did not fail any more than in 1884.

OTTERBURN.—R fifteen inches below the average of 14 years.

BOROUGHBRIDGE, ALDBOROUGH.—The early winter months of 1885 were very mild. The spring was dry and the hay crops late, but July was the one hot month, and hay was very well secured. The last half of August was very cold and cloudy, and corn could not ripen, and as September and October were the two wettest months in the year, much of the corn harvest was late and stacked in bad condition.

OUGHTERSHAW.—Very fine summer, wet autumn; the best hay season for many years; very little T.

SEDBERGH, BRIG FLATTS.—More cloudy than usual, and the weather often disagreeable; December more foggy than usual.

SEDBERGH, THORNS HALL.—Fine, especially the early summer; September and October wet, September being the wettest month of the year with a fall of 6·75 in.; no violent gales or TSS.

HULL, BEVERLEY ROAD.—An average R for the year, but unequally divided, July and December being very dry, and October very wet; the summer months were very cold, particularly August, which was the coldest August for 35 years.

HULL, DERRINGHAM.—Sudden and great changes of temp. The R, taking the whole year, was nearer the average than for several years past. All the months, except February and June, were in their mean temp. below the average of 35 years, May, August, September and October conspicuously so; in August, which was the coldest August since 1849, the deficiency was 5°. 990 hours of bright sunshine were recorded in the year.

BEVERLEY, ALEXANDRA TERRACE.—The first half of the year was cold and dry. S and three night frosts in the first week in May destroyed fruit blossom. August and September were cold, and September and October wet.

THIXENDALE.—The early part of April was remarkable for severe frosts, May was cold, and frost at the end of June cut down kidney beans and potatoes. Harvest late, not beginning till the first week

in September, (at which time in 1884 it was nearly finished) and it was still about in the first week in November. All November and the first week of December the weather was singularly quiet and mild.

HUNMANBY, WOLD NEWTON.—Drier than usual; the Gypsey, a winter stream which usually begins to run about the middle of December, was still dry at the close of the year.

MALTON.—R 3·01 in. below the average of 27 years.

SCARBOROUGH, WESTBOROUGH. — July very dry, August and September very dull and cold, and October very wet; the R of both November and December small.

INGLEBY MANOR.—The summer very cold, with much E. winds and cold nights; hardly any TSS.

RICHMOND, FORCETT PARK.—R about the average; the early part of May cold, with S storms, but the summer temp. was above the average.

DIVISION X.—NORTHERN COUNTIES.

DARLINGTON, CLEVELAND PARADE.—A dry year on the whole, with few TSS.

BARNARD CASTLE, WHORLTON.—R below average, summer not very hot, and the closing months mild.

SEAHAM HARBOUR.—R slightly below the average, and temp. low, N. and E. winds being unusually prevalent; the worst months were August, September, October and November, which were cold and unsettled, with a rainfall of 12·09 in.; the spring having been cold and late, the ripening and harvesting of the crops were thrown into these months. The year as a whole was ungenial and unproductive.

SHOTLEY BRIDGE.—An unproductive year for farmers; the wet May and dry June and July injured the turnip crop, and the corn was very much damaged by continuous R in October.

SUNDERLAND, WEST HENDON HOUSE.—The R was very near the average of 20 years. Both in May and October there was the extraordinary number of 30 days on which R or S fell. There was a marked deficiency of W. wind, especially in February, September and November, S.W. prevailing in its stead; the amount of cloud was constantly in excess of the average, especially in the latter half of the year, while the amount of fog was in defect.

BINGFIELD HOUSE.—The spring was cold, especially May, and drought prevailed in June, July and August.

ROTHBURY, BRECKBURN PRIORY.—The coldest and wettest May remembered, was followed by cold dry weather all the remainder of the year.

ALWINTON, BIDDLESTON.—A wet spring and a dry cold summer.

PAWSTON [COLDSTREAM].—June and July exceptionally dry, and turnip and oat crops nearly ruined in consequence, as the soil here is light.

WOOLER, MILFIELD.—A year of great drought and failure of water supplies, many of which never failed before.

BRAYSTONES.—R 1·71 in. below the average of 21 years.

ST. BEES, ABBOT'S COURT.—R 2·76 in. below the average of 10 years.

WHITEHAVEN, IRISH STREET.—R ·94 in. above the average of nine years.

KESWICK, SHU-LE-CROW.—With the exception of February, which was an unusually wet month, the year was dry in this districts the R of November being specially small.

WHITEHAVEN, GILGARRON HALL.—Spring very late and cold ; late frosts checked vegetation, which seemed never to recover.

COCKERMOUTH, WHINFELL HALL.—R ·70 in. below the average of 30 years ; from 1879 to 1883 the R increased each year, and since then has yearly decreased.

BASSENTHWAITE, MIREHOUSE.—Temp. low in summer, especially at night.

COCKERMOUTH, BROUGHTON GRANGE.—R below the average of 13 years ; on no less than 94 days out of the 199 days on which R fell, less than ·10 in. was recorded ; summer dry, but autumn damp, somewhat retarding the harvest ; crops as a whole quite up to the average.

PENRITH, EDENHALL, THE LUHAM.—Exceedingly dry ; R 8·98 in. below the average of 12 years, and the smallest in any year of that period.

CARLISLE, WREAY VICARAGE.—R 7·23 in. below the average of nine years ; number of rainy days slightly below the average.

CARLISLE, ROSE HILL.—People in the village of Scotby complained of pump wells being dry, which they do not recollect happening before.

KIRKANDREWS-ON-ESK RECTORY.—R the smallest registered in any year since observations commenced in 1874.

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

LLANFRECHFA GRANGE.—In the last 20 years there have been only five in which the R was less than that of 1885, though there have been 11 in which the number of rainy days has been less; fruits much blighted in May; hay harvest well secured.

HAVERFORDWEST.—Mean temp. of January 1°·1, and of February 1°·0 below the average; strong E. winds prevailed through March and part of April, with very sharp night frosts. May cold up to the 12th, after which the temp. was more genial: summer fine and dry, and sometimes very warm; autumn one of disastrous R—one of the worst ever remembered; November and December drier, especially December, when low temp., S and frost prevailed.

LLECHRYD, CASTLE MALGWYN.—R about the average, but no very heavy falls; the dry N. and N.E. winds prevalent through the summer quickly dried up the moisture and made the season appear drier than it really was; night temp. very low through the summer, frost being registered in every month.

CRICKHOWEL, GWERNVALE.—Very little S; E. wind and haze prevailed to an unusual extent; summer very dry.

NEW RADNOR, DOWNTON.—The early part of the year was favourable for all agricultural work, February only, out of the first four months of the year, having been a decidedly wet month, and the bountiful rain which fell on the 24th and 25th of April (1·77 in.) had a very beneficial effect on the grass lands. May, however, was a cold and sunless month, as was also the greater part of June, and all vegetation was consequently much retarded; but the heavy R of the 23rd and 24th of June (1·22 in.), and the magnificent weather that followed, favoured the growth of the grass and enabled the hay crop generally to be gathered in the best possible condition. July was exceptionally dry, only ·56 in. having fallen on six days, and August was a good harvest month, for the R of the 4th to 6th (1·58 in.) was succeeded by a hot, dry period, very favourable for gathering the grain crops, though the root crops very generally failed owing probably to the drought in July and August. Autumn was very wet, 16·85 in. of R having fallen in September, October, and November on 73 out of 91 days. December was a dry month.

CHURCHSTOKE, MELLINGTON HALL.—The amounts of R for July (·60 in.) and December (·89 in.) are the smallest recorded in 11 years.

WELSHPOOL, BUTTINGTON VICARAGE.—Mean temp. $47^{\circ}5$. The smallest monthly R ever registered here was that of July ($\cdot50$ in.), the largest that of October ($6\cdot07$ in.) and the fall of $2\cdot14$ in. on August 4th was the heaviest daily fall recorded; falls exceeding an inch occurred on three days, only six such falls having occurred in the previous four years.

MOLD, BRYN ALYN.—R about an inch and a half below the average.

RHYL.—Very dry, with low temp.; no great fall of R on any one day; October the only wet month.

ROSSET, TREVALYN HALL.—R $5\cdot10$ in. below the average of 15 years; the only wet months were February, September and October; in all the remaining months the fall was deficient, March, July and December being remarkably dry. A mild winter was followed by a cold and ungenial spring, a dry but cool summer, and a prematurely cold and rather wet autumn.

GLYNLLIVAN NURSERY GARDEN.—There has always been an old tradition that more R fell in this garden than anywhere else in the immediate neighbourhood. Observations prove the saying to be correct.

DOUGLAS, VICTORIA ROAD.—Rainfall moderate, and for the second year in succession below the average, the yield being almost identical with that of 1884, while the number of wet days, 177, is the smallest observed here. Cold late spring, very cold summer, a cold, early autumn. Excepting a period of exactly twelve days (July 20th to August 1st) of warm summer weather, June, July and August, were very cold and dry, with nine and eight and nine days with R respectively. Ground frosts occurred on 14th and 15th August, and frequent heavy gales throughout. September was a month of storms, excessive rain and abnormal cold, followed by a cold October, a pleasant, somewhat mild November, and up to the 27th, a fair dry December.

JERSEY, ST. AUBIN'S.—Mean temp. ($51^{\circ}4$) $0^{\circ}7$ below the average; January, April and September had an average R. February, May and October were wet, and the remaining six months dry.

GUERNSEY, BUEN RETIRO.—February, September, October and November unusually wet; June and July unusually dry.

SCOTLAND.

DIVISION XII.—SOUTHERN COUNTIES.

GARLIESTOWN, GALLOWAY HOUSE.—Very late spring, very cold from May 12th to 22nd, short hot summer, and the smallest R recorded in any year since observations commenced in 1879.

NEW CASTLETON, THE FLATT.—A cold year, and except February and September, a dry one also, which is an unusual combination.

MELROSE, ABBEY GATE.—The driest of the years 1872-85, the R being 8·44 in. below the average; it was also unusually cold, the mean temp. being 2°·7 below the average; December was the only month with a mean temp. above the average; the river Tweed was lower than can be remembered previously.

DIVISION XIII.—SOUTH EASTERN COUNTIES.

MARCHMONT HOUSE.—Temp. very low throughout the year, frost occurring every month. May, September and October were the wettest months.

HADDINGTON ASYLUM.—R the smallest in any year since observations commenced in 1876; in 1883, however, the fall was only ·08 in. greater.

DIVISION XIV.—SOUTH WESTERN COUNTIES.

CAMBUSLANG, BUSHY HILL.—The driest year since 1871.

COATBRIDGE, LOCHWOOD.—Spring mild, with no S and no continued frost, though on a few nights in January and February, severe frosts were registered; summer fine, and exceptionally free from R; no very great heat except during the last ten days of July, and no T and L or heavy falls of R; autumn fine and pleasant, and crops, which were good, were well secured; the closing months of the year were conspicuous for the small amount of R, and for fine mild weather, except a few days in December, from 5th to 11th, when the frost was very severe, unaccompanied, however, by the usual fog.

BARRHILL, DOCHROYLE.—R 6·35 in. below the average of 10 years.

COLMONELL.—The year was dry and cold, with more dry days and fewer with less than ·10 in. of R than any of the previous nine years; R 7·75 in. below the average; and mean temp. 1°·9 below the average.

DIVISION XV.—WEST MIDLAND COUNTIES.

HELENSBURGH, LYLESTON.—The driest year since 1880, when the R was 37·20 in.

KIPPEN.—R unusually small.

ISLAY, ARDBEG.—Dry ; November and December unusually so.

DIVISION XVI.—EAST MIDLAND COUNTIES.

TILlicouLTRY.—Very dry summer, though showers always came in time to keep the crops growing ; an unusually good honey year.

STRATHMIGLO, LODEN URQUHART.—Very little S, the heaviest fall occurring on March 29th, which was very stormy and unseasonable ; May very cold, wet and dull ; June and July unusually dry, and no R fell from August 12th to September 2nd ; in September there were unusually heavy showers, but these were always followed by drying weather, and little or no damage was done to the crops : October mostly sharp and frosty.

KILMANY, MOUNTQUHANIE HOUSE.—Remarkable drought in June and July, and great scarcity of water during autumn.

CALLANDER, LENY.—R about seven inches below the average.

COUPAR ANGUS STATION.—There were nine days on which falls of half an inch or more were recorded, four of which exceeded one inch ; two of the latter occurred early in August, in which month also the longest dry period occurred, extending to 20 days.

LOCHEE, CAMPERDOWN.—Springs dry which were never known so before.

DIVISION XVII.—NORTH EASTERN COUNTIES.

ABOYNE CASTLE.—A very bad year for corn and grass crops, which were very light in consequence of want of R in June and July ; fruit crops very heavy.

DRUMOAK, DRUM CASTLE.—R the smallest in any year since 1866, when 25·68 in. fell.

CROMAR, TILLYPRONIE.—A cold frosty summer.

ABERDEEN, ROSE STREET.—R 4·53 in. below the average of 25 years.

ABERDEEN.—R about 4 in. below the average ; the year being comparatively dry throughout.

MIDMAR, BLACKSTOCK.—Summer cold and ungenial, and frosts frequent ; crops much damaged.

ELLON, KERMUCK.—After a dry spring May was very rainy till near its close; the summer was dry, but September and October (the harvest months for the North of Scotland) were wet and stormy, the weather drying up again at the end of October.

CULLEN HOUSE.—Early months very dry, with bright sunshine and frequent frost, which kept vegetation very much behind; spring very cold and backward; sharp frosts occurred on August 31st and September 1st, an unprecedented experience, everything tender being killed.

CRAIGELLACHIE, WESTER ELCHIES SCHOOL.—Early frosts between August 26th and September 2nd nipped vegetation, potatoes and corn crops being more severely damaged than can be remembered.

GORDON CASTLE.—The first seven months unusually dry with cold E. winds; the last five on the whole wet and sunless with low temp., which caused fruits and crops of all kind to ripen badly.

DIVISION XVIII.—NORTH WESTERN COUNTIES.

ALNESS, ARDROSS CASTLE.—June, July, and August were cold and dry.

EDDERTON.—The second year of abnormal dryness, May being the only month in which the R exceeded the average; some wells failed early in the summer, and remained dry to the close of the year.

TAIN, SPRINGFIELD.—Dry; the temp. of spring and summer low; the winter months, both at the commencement and at the close, mild, with some short intervals of severe frost.

MOIDART, ROSHVEN.—A backward spring and summer, a fine August, and a very wet September; the latter half of October and all November fine; blackberries and elderberries did not ripen, but coloured in the middle of November.

SOUTH UIST, ARDKENNETH.—The first two months wet and stormy, March dry and warm, May cold; great heat prevailed in August; November mild and warm; December mild, but wet and misty; some frost and S in November and December; no violent storms during the year, and no fall of R exceeding an inch in 24 hours.

DIVISION XIX.—NORTHERN COUNTIES.

DUNROBIN CASTLE.—A fairly good year, but early frosts spoiled potatoes and corn in high districts.

SCOURIE.—Spring very cold, wet, and stormy, with frost and S up to the month of May; early summer very wet, with occasional T and L; several very thick mists in June and July succeeded by heat; the whole of the autumn excessively wet and stormy, crops being secured two months later than in former years; the latter months of the year were stormy, wet, and cold, with occasional frost and S.

WATTEN, H.R.S.—An open winter; cold, late spring; dry, cold summer; exceptionally wet and cold autumn; frosts occurred in every month of summer.

POMONA, KIRKWALL.—R 3·69 in. below the average of 22 years.

IRELAND.

DIVISION XX.—MUNSTER.

CLOYNE, ROSTELLAN CASTLE.—The R was about the average, but distributed irregularly; during June and July the fall was only 2·50 in., while the mean of the previous five years is 6·70 in.; on the other hand during August and September, the most critical period for the farmer, 11·06 in. fell, the mean being 5·50 in.

CORK, BLACKROCK.—R 2·32 in. above the average of 20 years.

CORK, SUNDAY'S WELL ROAD.—R a little below the average, the last three months having had but half the mean fall; there was one absolute drought of 14 days ending June 20th, and one partial drought with only ·20 in. of R in 28 days ending August 3rd, while on the other hand there were 21 consecutive days with R, ending February 10th. Not more than an inch of S fell during the whole year.

KILLARNEY, WOODLAWN.—The months from April onwards were singularly dry, and the two closing months afforded a great contrast to recent years; there was no flood in the river Flesk the whole year, an exceptional occurrence.

TRALEE, CASTLEMORRIS.—A very changeable year; October very wet and stormy, with frequent L, especially at night; during November gales were frequent; the latter part of December very wet and foggy.

GLENAM, CLONMEL.—A remarkable absence of T and L.

NENAGH, CASTLE LOUGH.—A fine year with a small R, although the number of days on which R fell was 221; on no occasion was one

inch registered in 24 hours, and T occurred only once or twice. May cold; parts of July and August very fine, with a hot sun, though N. and E. breezes kept the nights cool. Some ten weeks of almost continuous R followed a sudden break in the weather on August 26th, with low temp. for the time of year.

NENAGH, CLASHNEVIN.—R of the year small, but the fall in April, May and June was sufficient to secure much better crops of hay and straw than in 1884; root crops were not good, owing to wet and cold in September; December very dry.

NEWCASTLE WEST.—A dry year; January and February wild, and March very fine; no vegetation in April or May, the latter being remarkable for frosts and bitter E. winds; in June plant growth was wonderfully rapid, and the weather of July and August was splendid; September cold and stormy.

SIXMILEBRIDGE, KILKISHEN.—Dry weather prevailed up to the end of August, but September and October were very wet; December dry.

MILTOWN MALBAY.—The first five months were ungenial and cold, light frosts and occasional parching winds retarding vegetation; from June to September warm seasonable weather prevailed; September very wet, October wild and unusually cold, and the closing months fine and mild. Remarkable for the absence of severe storms, and very little T; the first half was unfavourable to agriculture; the second half, with the exception of September and October, was most favourable; R below the average.

DIVISION XXI.—LEINSTER.

NEW ROSS, LONGRAIGUE.—R '67 in. below the average of 17 years.

STONEFYORD, INISNAG.—The first three months were wet, but not abnormally so; severe frosts were experienced in the early spring; the summer was dry, with some hot weather in August, the autumn was cold and sunless, and November and December, with one short interval of severe frost, were abnormally dry and mild, but dark and sunless.

STRAFFAN HOUSE.—Spring cold, ungenial and late, summer hot and dry, autumn wet and cold; no growth in any garden crops after August. September was the wettest month, and December the driest, though March was almost as dry.

DUBLIN.—R 1·40 in. below the average of 20 years ; number of wet days slightly in excess ; T and L occurred on only four occasions.

DUBLIN, PHOENIX PARK.—R 5·69 in. below the average of ten years.

TRIM.—March, April and May dry and seasonable ; June, July and August gave beautiful weather for making up the hay crop, which was unusually good ; September and October so wet that it was most difficult to harvest the crops. The R of November and December was very small.

LOUTH, STEPHENSTOWN.—R much below the average.

EDGEWORTHSTOWN.—R nearly seven inches below the average of seven years and remarkable for having no heavy fall in one day. During June and July the heat was intense, and all the usual water supplies ran short, rendering it necessary to carry long distances, and in some cases cattle suffered severely.

DIVISION XXII.—CONNAUGHT.

BALLINASLOE.—The R of the year was unusually small, being more than eight inches below the average.

DIVISION XXIII.—ULSTER.

BELTURBET, RED HILLS.—The driest year since the record commenced in 1870.

ENNISKILLEN, FLORENCE COURT.—R about the average ; January and February wet, March, April, May and June comparatively dry, and during July and August there were long dry intervals ; September and October very wet, November and December rather dry and mild ; a favourable year for garden and farm produce.

WARINGSTOWN.—The driest of the last 25 years, except 1864, when only 25·44 in. of R fell.

AGHALEE [LURGAN].—R about eight inches below the average of 16 years, with 14 less than the average number of rainy days.

BELFAST, NEW BARNSELY.—Dry frosts up to the middle of March rendered the land in good order for the seedtime. Spring very cold and backward, continuing so until June 17th, when R fell and the weather became warmer. The following month being dry and hot, vegetation made rapid progress. September rainy, with low temp., tantalising to the farmers. Most crops were abundant, and gathered in good condition. The year closed with mild and open weather.

BALLYMENA, HARRYVILLE.—Remarkably dry ; R much below the average.

LIMAVADY, DRENAGH.—The driest year since 1868.

COLERAINE.—The driest year since the record commenced in 1879 ; June and July very dry ; no fall of one inch of R in 24 hours.

OMAGH, EDENFEL.—The smallest R recorded during 21 years. January and February fairly seasonable, the former rather drier and the latter wetter than the average, but March, April and May formed one of the most ungenial and unpropitious spring quarters ever experienced, from the effects of which, and three nights frost in June (also unprecedented here), cereals received a “back-set,” from which they never wholly recovered. The summer up to September 1st was bright, genial and charming, with more than the average sunshine, and much less than the average R, but from that date to October 14th a cold, tempestuous, and thoroughly inclement period prevailed, during which there were but three rainless days, and the harvest was seriously imperilled ; November and December were abnormally mild and calm, with scanty R.

RAPHOE, CONVOY HOUSE.—The R was considerable, and the year generally was rather cold ; a fairly good year as to general produce, but it could not be called a fine year.

RAMELTON, KILLYGARVAN.—The year was a fine dry one, with a R six inches below the average. June, July, August and November were the months in which the fall was most deficient ; the number of days on which R fell was large, but as it fell mostly at night, and the falls were small, this was not much remarked. There was not much frost or S, and there were no remarkable gales.

MOVILLE RECTORY. — Spring most favourable for agricultural operations, but the harvest rather trying, though not much grain was lost where proper measures were adopted.

HEAVY RAINS IN SHORT PERIODS IN 1885.

THE following is, we believe, the 17th annual list of heavy rains falling in short periods of time, and we believe it to be also the shortest and the least important of the whole series which we have prepared. And this is just that which very slight consideration proves we ought to have expected.

Heavy falls of rain in *short periods* are, in the British Isles, almost always due to thunderstorms or to waterspouts.—Any person who has read the thirty or forty pages immediately preceding this one must have been struck with the frequency of remarks upon the rarity of thunderstorms in 1885. Obviously when thunderstorms were exceptionally scarce, heavy falls of rain in *short periods* also, must have been scarce and thus we have a table short and poor beyond all precedent.

There are only three records (marked by an *) that can be regarded as important, and they have all been exceeded on previous occasions.

Heavy Falls in Short Periods in 1885.

Date.	Division.	Station.	Amount.	Duration.		Rate per hour.
			in.	hr.	min.	in.
Aug. 23 ...	V.	Babbacombe.....	·22	...	5	2·64
„ 6 ...	IV.	*Leyton... ..	·70	...	10	4·20
July 12 ...	III.	*Peterboro', Springfield House	1·00	...	15	4·00
Aug. 7 ...	III.	Winslow, Addington.....	·37	...	15	1·48
Sept. 7 ...	III.	Oxford, Elsfield....	1·15	...	40	1·73
July 3 ...	X.	Penrith, Newton Reigny... ..	·70	...	40	1·05
Sept. 10 ...	VI.	Little Malvern, The Farm.....	·56	...	40	·84
July 5 ...	II.	*Emsworth, Redlands.....	1·36	...	50	1·63
„ „ ...	II.	Mayfield	1·34	1	0 ?	1·34
„ „ ...	II.	Hailsham	1·00	1	0 ?	1·00
Aug. 4 ...	VI.	Bishop's Castle, More Rectory	1·49	5	30	·27
Sept. 10 ...	I.	Camden Square	1·20	5	30	·22
„ 11,12	X.	Seathwaite	4·27	7	0	·61
Aug. 4 ...	VI.	Church Stretton, Woolstaston	1·81	8	0	·23
Nov. 2 ...	XI.	Port Madoc	3·10	10	0	·31
Sept. 10 ...	V.	Frome, Rock House, Mells ...	2·60	10	0	·26
Aug. 12 ...	XVII.	Midmar, Blackstock	2·52	11	0	·23

HEAVY FALLS IN 24 HOURS DURING 1885.

IN the following pages we deal only with the amounts of R falling in the rainfall day, *i.e.*, in the 24 hours ending at 9 a.m. of the following civil day, and almost exclusively with the amounts which are, at each station, the largest in the year. In order to save time, trouble, circumlocution, and printing, the symbol M is used throughout this article to express "Maximum amount in any rainfall day during the year."

PART I.—CHRONICLE.

In this section we give a running commentary upon the principal M during the year, but as there are more than 1,800 such values, it is obvious that a selection has to be made. This, for some few years, has been effected by noticing as important only those daily rains which, at some one station, either (1) exceeded 2·00 in., or (2) the fall amounted to more than 6 per cent. of the total fall in the year.

JANUARY 28TH.

A M at about 20 stations in the wet districts of South Wales and Yorkshire.

IX.	Slaidburn, Brennand	2·14 in.	or 3·6 per cent.
XI.	Tredegar, Bedwellty Ho. ...	2·45 „	3·3 „
„	„ The Willows	2·09 „	3·4 „
„	Nanthir Reservoir	2·65 „	4·4 „
„	Trecastle, Llywel Vic.	2·16 „	4·1 „
„	Treherbert.....	3·49 „	3·8 „

FEBRUARY 8TH.

The M at 15 stations, nearly all in the Lake District, but a few just over the border, this M being, like that of January 28th, over a wet district, it yielded low per centages.

X.	Keswick Post Office.....	2·28 in.	or 3·8 per cent.
„	Shap	2·12 „	3·7 „

FEBRUARY 23RD.

Another M in a wet district, though only at a few stations close to Ambleside and in Wales; one amount exceeds 3 inches, but none reaches 4 per cent.

VIII.	Monk Coniston Park	2·98 in.	or 3·5 per cent.
X.	Ambleside, Nook Cottage ...	2·45 „	3·2 „
„	„ Lesketh Howe...	3·15 „	3·9 „
„	„ Brathay Vic. ...	2·07 „	2·9 „

FEBRUARY 26TH.

The M at 23 widespread stations in the neighbourhood of high ground in the west of Great Britain, where the yearly fall is large, so that although there are five falls exceeding 3 inches and eleven exceeding 2 inches the inferior limit of 6 per cent. is nowhere reached, that is to say the amounts are not at all unusual at the respective stations.

V.	Holne Vicarage	2·29 in.	or 3·5 per cent.
X.	Seathwaite	4·62 „	3·2 „
„	Keswick Barrow House	3·04 „	4·2 „
„	„ Deer Close.....	2·53 „	4·4 „
„	„ DerwentIsland(old)	2·47 „	4·9 „
„	„ „ „ „ (new)	2·35 „	4·4 „
„	„ „ Shule Crow	2·22 „	3·9 „
„	Elterwater, Woodlands	3·32 „	3·8 „
„	Grasmere	3·57 „	4·6 „
„	Patterdale Hall	3·07 „	3·5 „
XI.	Tredeggar, Ebbw Vale	2·05 „	3·1 „

MARCH 4TH.

An insignificant M at a few stations, nearly all in North Lancashire, but as there was one fall exceeding 2·00 in. it claims mention here.

VIII.	Ulverstone, Swarthdale	2·02 in.	or 4·7 per cent.
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MARCH 28TH.

The M at seven stations, one in the Isle of Man, one in Fife, and five in the N. and N.W. of Ireland; the fall at only one station calls for mention.

XXIII.	Newcastle, Fairleigh	2·77 in.	or 6·1 per cent.
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MARCH 29TH.

The M at six stations in the S. and E. of Scotland, but only one record exceeded 1·50 in.

XII.	Dalbeattie	3·50 in.	or 7·2 per cent.
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MARCH 31ST.

The **M** at 19 stations chiefly in the N.W. of England, but with isolated ones in Scotland and Ireland ; the falls were, however, by no means exceptionally heavy.

XXII. Clifden, Kylesmore 2·55 in. or 3·2 per cent.

APRIL 10TH.

A heavy **R** at about a dozen stations in Northumberland and the South of Scotland, but the **M** exceeded the usual limits at only one station.

XIII. East Linton 1·30 in. or 6·4 per cent.

APRIL 24TH.

The **M** at 15 stations, mostly in the S. and S.E. of Scotland, but at only one station did the fall exceed 2 in.

XVI. Stronvar..... 2·42 in. or 3·2 per cent.

JUNE 7TH.

The **M** but a very insignificant one, at 15 stations in the West Midland counties and in Lancashire.

VI. Shrewsbury 1·65 in. or 6·7 per cent.

JUNE 8TH.

A rainfall yielding the **M** at about 60 stations nearly all in Southern, Eastern, and Central England, chiefly between Surrey and Nottingham, but three or four in Wales, these districts being generally dry ; there are few falls above the limit of quantity and not many above the limit of 6 per cent.

I.	Kidderpore Res.	2·10 in.	or 7·2 per cent.
III.	Trumpington	1·52 „	6·2 „
„	Granchester Mill ...	1·77 „	7·0 „
„	Cambridge, W. W. Cherryhinton	1·42 „	6·0 „
„	„ Beech House	1·66 „	6·8 „
„	„ Sidney Street.....	1·40 „	6·5 „
„	Papworth Hall.....	1·70 „	6·4 „
„	Ely, Stretham Ferry	1·33 „	6·0 „
„	Chatteris, Aylesby House... ..	1·79 „	7·9 „
„	„ Priory.....	1·80 „	7·7 „
„	„ Horseway Lock	1·12 „	6·0 „
XI.	Neath.....	2·12 „	4·0 „
	„ Fairy Land	2·06 „	3·9 „

AUGUST 3RD.

An unimportant local fall producing the M at seven stations in Northumberland and at one in the Isle of Man.

X.	Morpeth, Meldon Park	1·90 in.	or 6·8 per cent,
„	Felton.....	1·63 „	6·2 „

AUGUST 4TH.

On this day TSS appear to have occurred over the West Midland Counties of England, Wales and in the East of Ireland, producing the M fall at 35 stations in those districts.

VI.	Ludlow, Bromfield Vic.....	2·62 in.	or 8·1 per cent.
„	Bishop's Castle, Castle Street	2·39 „	6·9 „
„	„ „ More Rect.	2·22 „	6·4 „
„	Bridgenorth, Aldenham Park	2·05 „	6·3 „
„	Middleton-in-Chirbury	2·19 „	7·2 „
„	Worcester, Bevere Lock ...	1·72 „	6·2 „
„	„ Hawford Lodge	2·38 „	7·2 „
„	Stourport, Areley Court.....	1·93 „	6·6 „
XI.	Welshpool, Buttington Vic.	2·14 „	6·3 „
„	Bala, Henblas	2·31 „	5·0 „
XXI.	Dublin, Fitzwilliam Square	1·72 „	6·5 „

AUGUST 5TH.

Another day on which TSS and heavy rains occurred in many parts of the country, the M occurring at very nearly the same number of stations (37) as on the 4th, mostly in the northern counties.

III.	Castle Ashby	1·99 in.	or 6·7 per cent.
IV.	Chelmsford, Great Baddow	2·25 „	8·3 „
„	„ High Street ...	1·61 „	6·5 „
X.	Hartlepool, Hart Reservoir	1·40 „	6·4 „
„	Seaham Harbour	1·98 „	7·6 „
„	„ Vicarage	2·21 „	8·2 „
„	Sunderland, W. Hendon Ho.	1·94 „	7·5 „
„	„ Fever Hospital	1·92 „	7·1 „
„	South Shields, Boro' Hospital	2·01 „	7·6 „
„	Newcastle, Clifton Road ...	1·61 „	6·7 „
„	„ Portland Road...	1·56 „	6·5 „
„	„ Gladstone Terrace	1·68 „	6·9 „
„	N. Shields, Rosella Place ...	1·91 „	7·3 „
„	„ Tynemouth	1·39 „	6·1 „
„	„ Clementhorpe ...	1·83 „	7·0 „

AUGUST 9TH.

A quite unimportant fall in the Highlands of Scotland, where a fall of 2 in. is no great rarity ; the M at four stations.

XVIII.	Skye, Dunvegan	2·23 in.	or 3·1 per cent.
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AUGUST 12TH.

The M at a great majority of the stations in the North Eastern counties of Scotland, both the falls and the per centages being great.

XVII.	Braemar	3.44 in.	or 8.8 per cent.
„	Aboyne Castle.....	2.09 „	7.3 „
„	Logie Coldstone Manse	2.40 „	8.1 „
„	„ „ „ „ Loanhead ..	2.40 „	8.4 „
„	Midmar, Blackstock	2.52 „	9.0 „
„	New Deer, Artamford Cottage	2.15 „	6.1 „
„	Old Deer	1.87 „	6.1 „
„	Keith, H. R. S.....	2.15 „	7.6 „
„	Banff, St. Leonard's	1.61 „	6.3 „
„	Boyndie, Whitehills	1.85 „	7.3 „
„	Grantown	1.85 „	6.6 „
„	Wester Elchies School	2.52 „	8.5 „
„	„ „ „ „ Garden.....	2.86 „	9.1 „
„	Forres H. R. S.	1.41 „	6.9 „
„	Elgin, Highfield	1.50 „	6.8 „

SEPTEMBER 2ND.

Although this R yielded the M fall at 38 stations (nearly all in Lancashire and Yorkshire), its unimportant character is proved by the fact that only three falls call for special mention, as exceeding the limits laid down of 2·00 in. or 6 per cent.

VIII.	Rochdale, Park Obs.....	2·01 in.	or 4·6 per cent.
„	The Hall [Todmorden]	2·08 „	4·2 „
IX.	Bradford, Stubden	2·08 „	4·5 „

SEPTEMBER 10TH.

The great R of the year yielding the M at 560 stations (a number which we believe has not been approached in previous years), about 540 in the Southern half of England and the rest in S. Wales and the Isle of Man. The fall was heavy over the whole of the Southern counties, and reached exceptional values in the Eastern counties, where at nearly a dozen stations it exceeded 2·00 in., giving very high per centages ; 2·00 in. was also exceeded at many stations in the S.W. and 3·00 in. at about half a dozen; the fall gradually dwindled towards the N., and in the N. Midland counties was less than an inch. The following detailed tables of 142 stations, at which one or other or both of the usual limits were exceeded, should be compared with the data for the very similar fall of September 3rd and 4th, 1884.

I.	Sunbury, Hanworth Road	1.45 in.	or 6.1 per cent.
„	Staines	1.70 „	6.4 „
„	„ Knowle Green	1.84 „	6.7 „
„	Hanworth, Riversdale	1.43 „	6.0 „

I.	Ealing, Local Board	1·38 in.	or 6·0 per cent.
„	Spring Gardens	1·85 „	7·0 „
„	London, Guildhall	1·59 „	6·4 „
„	Hampstead (The Pryors)	1·75 „	6·3 „
II.	Haslemere.....	2·30 „	6·3 „
„	Godalming, Witley.....	2·11 „	6·8 „
„	Guildford, Guildown	1·75 „	6·7 „
„	„ „ „	1·74 „	6·7 „
„	„ „ Wern	1·52 „	6·0 „
„	Chertsey, Long Cross.....	1·58 „	6·1 „
„	Canterbury, Harbledown	1·54 „	6·5 „
„	Portsmouth, Closewood, Cosham	1·71 „	6·0 „
„	Kingsclere, Ramsdale	1·87 „	6·4 „
„	Blackwater, Hurstleigh.....	1·76 „	6·3 „
„	Strathfield Turgiss.....	1·64 „	6·2 „
„	Heckfield, Park Corner	1·68 „	6·3 „
„	„ „ Place	1·68 „	6·2 „
„	Reading, East Thorpe	1·81 „	6·9 „
„	Newbury, Welford Park	1·70 „	6·0 „
„	Lambourne, The Laburnums.....	2·02 „	6·7 „
„	Wallingford Castle	1·44 „	6·5 „
„	Little Wittenham Rectory.....	1·30 „	6·0 „
III.	Watford, Watford House	1·68 „	6·2 „
„	Welwyn, Datchworth Rect.....	1·70 „	6·1 „
„	Slough, Langley	1·78 „	7·0 „
„	„ „ Upton Park	1·80 „	6·4 „
„	Cliveden	1·59 „	6·0 „
„	Greenlands [Henley-on-Thames]	1·85 „	6·3 „
„	Whitchurch Rectory	1·50 „	6·0 „
„	Henley-on-Thames, Assenton	1·87 „	6·0 „
„	Oxford, Radcliffe Observatory... ..	1·13 „	6·5 „
„	Northampton, Hazlewood Road	1·52 „	6·0 „
„	„ „ Gold Street	1·52 „	6·3 „
IV.	Southend	1·62 „	8·0 „
„	Bradwell-on-Sea, Down Hall	1·24 „	6·0 „
„	Witham, Little Braxted Hall	1·96 „	6·9 „
„	Great Bentley, The Lodge	1·87 „	8·2 „
„	Earl's Colne, Chalkney House... ..	1·70 „	6·5 „
„	Colchester, Beverley Road	1·89 „	7·3 „
„	Stutton, Alton Hall	1·75 „	6·7 „
„	Ipswich, Orwell Park.....	2·36 „	8·3 „
„	„ „ Belstead Hall	1·57 „	6·3 „
„	Woodbridge, Bank House.....	2·50 „	8·9 „
„	Rendlesham Hall	2·18 „	8·3 „
„	Stowmarket, Wetherden Rect.	1·75 „	6·1 „
„	Framlingham	2·04 „	7·8 „
„	Weybread Vic. [Harleston]	1·64 „	6·2 „
„	Beccles, Sotterley Hall	2·80 „	9·3 „
„	„ „ Ellough Rectory	2·62 „	9·6 „
„	Lowestoft, Bryn-y-Mor	2·43 „	9·6 „
„	Geldeston [Beccles].....	2·02 „	7·9 „
„	„ „ „	2·00 „	7·9 „
V.	Hindon, Chicklade	2·23 „	5·8 „
„	Maiden Bradley	2·46 „	6·1 „
„	Warminster, Rye Hill	2·64 „	7·1 „
„	„ „ „	2·32 „	7·2 „
„	„ „ Downside	2·32 „	6·7 „

V.	Market Lavington	1·80 in.	or 6·7 per cent.
"	" " Gt. Cheverell	1·75 "	6·1 "
"	Trowbridge, Steeple Ashton Vic.	1·85 "	6·7 "
"	" " Wingfield	2·29 "	7·6 "
"	" "	2·56 "	8·5 "
"	" " Rodney House	2·52 "	8·3 "
"	Pewsey	1·70 "	6·4 "
"	Bradford	2·24 "	7·0 "
"	Bishop's Cannings	1·98 "	6·1 "
"	Buttermere	2·03 "	6·6 "
"	Chippenham, Lacock	1·98 "	6·1 "
"	Marlborough, The Green	1·99 "	6·2 "
"	Calne, High Street	2·09 "	6·9 "
"	Broad Hinton	1·94 "	6·5 "
"	Wootton Bassett	1·87 "	6·0 "
"	Malmesbury, Charlton Cottage	2·32 "	7·0 "
"	Little Bredy	2·04 "	5·5 "
"	Cerne Abbas, Minterne Rectory	2·54 "	5·7 "
"	Beaminster, Chedington	2·11 "	4·8 "
"	Ashburton, Cator Court	2·15 "	3·2 "
"	Polapit Tamar [Launceston].....	2·41 "	6·0 "
"	Chagford, Batworthy	2·21 "	3·4 "
"	Holsworthy, Clawton	2·46 "	6·2 "
"	Cullompton	2·17 "	6·0 "
"	Petrockstow, Heanton Satchville	2·33 "	5·7 "
"	Tiverton, Broomhill	2·18 "	5·4 "
"	" " Ivy Place	2·24 "	5·7 "
"	Beaford	2·48 "	6·1 "
"	Torrington, Beare Ho., Langtree	2·82 "	6·2 "
"	" " Vicarage	2·33 "	5·5 "
"	" " Stevenstone	2·62 "	6·2 "
"	" " Little Silver	2·61 "	6·1 "
"	Bampton, Huntsham	2·67 "	5·7 "
"	Bideford, Horwood.....	2·30 "	6·5 "
"	" " Northam	2·46 "	6·9 "
"	Barnstaple.....	2·15 "	5·7 "
"	St. Austell, Trevarna.....	2·23 "	4·3 "
"	Lostwithiel, Lanwithan.....	2·25 "	4·8 "
"	Liskeard, Dean Terrace.....	2·85 "	6·0 "
"	Bodmin, Lanhydrock.....	2·85 "	5·5 "
"	" " Castle Street	3·13 "	6·1 "
"	" " " "	3·02 "	6·0 "
"	" " " " Fore Street	3·10 "	5·9 "
"	North Tamerton [Holsworthy]... ..	2·50 "	6·4 "
"	Chard, Cricket St. Thomas	2·41 "	6·0 "
"	Yeovil, West Coker	2·52 "	7·2 "
"	" " Hendford	3·00 "	8·5 "
"	South Petherton	1·82 "	6·3 "
"	Wellington, Sunnyside	2·53 "	8·2 "
"	Temple Coombe, Stowell Rec. ...	2·53 "	7·5 "
"	Milverton	2·95 "	8·4 "
"	" " Halse	2·48 "	8·0 "
"	Taunton, Lydeard House	2·76 "	8·4 "
"	Cothelston House	3·21 "	8·7 "
"	Wiveliscombe, Willett House ...	3·20 "	8·2 "
"	Somerton, Butleigh Court.....	2·25 "	7·2 "
"	Glastonbury, Street	2·52 "	8·7 "

V.	Glastonbury, Street	2.52 in.	or 8.2 per cent.
„	„	2.24 „	7.5 „
„	Exford Rectory	2.82 „	5.3 „
„	Bridgwater, Ashford ..	2.57 „	8.0 „
„	Watchet, Old Cleeve	2.69 „	7.1 „
„	Wells	2.09 „	5.8 „
„	„ Westbury	2.00 „	6.2 „
„	Frome, Mells Rectory	2.17 „	6.0 „
„	„ Rock House, Mells	2.70 „	7.3 „
„	Chewton Mendip, Priory	2.47 „	5.3 „
„	Ston Easton	2.55 „	6.2 „
„	East Harptree, Harptree Court..	2.31 „	5.2 „
„	Chew Magna	2.18 „	5.7 „
„	Barrow Gurney Reservoir	2.05 „	5.4 „
VI.	Clifton, South Parade	2.05 „	5.9 „

SEPTEMBER 12TH.

The M at about 20 stations, mostly in the central district of Scotland, but not generally remarkable for large falls or high percentages, though at one station the fall exceeded three inches.

VI.	Brockhampton Court	1.50 in.	or 7.0 per cent.
XIV.	Paisley W.W., Camphill	3.50 „	5.6 „
XVIII.	Moidart, Roshven	2.21 „	3.0 „
„	Loch Shiel, Glenaladale	2.69 „	2.4 „

There was also during the early hours of this day a heavy local rainfall in Borrowdale, South Cumberland. The R seems to have become heavy about 5 a.m., and at Seathwaite 1.82 in. had fallen before 9 a.m., and 2.45 in. fell after it, the total being 4.27 in. This was not an unusual daily total for that station, but as it all fell in seven hours and several previous days had been wet, it produced a flood which one observer says “did much damage,” and another, “had not been known for a generation.”

SEPTEMBER 14TH.

An unimportant R, yielding the M at about half a dozen widely spread stations in Wales and Ireland.

XI.	Pen-y-gwryd	2.50 in.	or 2.2 per cent.
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SEPTEMBER 16TH.

A heavy R in the S.E. of England and the M at about 50 stations, mostly in Kent and Sussex, but a couple just across the Thames in Essex.

II.	Herne Bay	1.55 in.	or 7.9 per cent.
„	Reculver.....	1.17 „	6.8 „
„	Winchelsea, The Friars	1.65 „	7.0 „
IV.	Shoeburyness.....	1.31 „	6.8 „

OCTOBER 23RD AND 24TH.

A heavy R occurred in the latter part of the 23rd and morning of 24th, and although at the majority of stations there is no doubt that by far the larger amount fell on the 23rd, (rainfall day ending 9 a.m. 24th), a considerable number of observers enter the fall to the 24th, some probably entering it to the civil day, during which the greater part fell ; we have, therefore, considered it best to ignore the dates and enter all under the double date. It was the M fall at about 250 stations, distributed over the whole of England, except the S.W. counties and the extreme N., and Wales ; the limits are very clearly defined, not one M occurring in Division V. (South Western Counties), in Division X. (Northern Counties), in Scotland or in Ireland.

VII.	Bardon Hill House	1.90	in.	or	6.7	per cent.
"	Melton Mowbray, Coston Rectory	1.54	"		6.0	"
"	Harston [Grantham].....	1.75	"		6.2	"
"	Bourne, Wytham-on-the-Hill.....	1.80	"		7.8	"
"	Grantham, Saltersford.....	1.95	"		7.3	"
"	Boston, High Street.....	1.54	"		6.6	"
"	" Grand Sluice	1.55	"		6.7	"
"	Leake, Lade Bank Engines.....	1.53	"		6.1	"
"	Navenby	1.63	"		6.3	"
"	Skegness	1.56	"		8.0	"
"	Horncastle, Miningsby	1.86	"		7.2	"
"	Spilsby, Partney	1.97	"		6.8	"
"	Lincoln, Boultham	1.80	"		6.3	"
"	" Doddington	1.90	"		7.9	"
"	" Skellingthorpe Hall.....	1.85	"		7.4	"
"	Horncastle, Hemingby	1.97	"		7.1	"
"	Alford, The Burial Ground.....	1.74	"		6.3	"
"	" The Sycamores	1.72	"		6.3	"
"	" Sutton-by-the-Sea	1.75	"		7.2	"
"	Caistor.....	2.30	"		8.8	"
"	Wroot Engine	1.49	"		7.1	"
"	Brigg	2.14	"		7.5	"
"	Ulceby, Killingholme	2.11	"		7.2	"
"	Cropwell Bishop, Cropwell Grove	1.55	"		6.5	"
"	Nottingham, The Park	1.82	"		6.8	"
"	" Cavendish Crescent.	1.72	"		7.2	"
"	" Waterworks Office	1.72	"		7.3	"
"	" Stoke Bardolph.....	2.00	"		8.1	"
"	" Mapperley Hill.....	1.50	"		6.1	"
"	" Gedling	1.55	"		6.1	"
"	" Woodthorpe	1.84	"		6.8	"
"	East Bridgford	1.83	"		7.4	"
"	Eastwood Colliery.....	1.76	"		6.3	"
"	Greasley, Moor Green	1.75	"		6.5	"
"	Hucknall Torkard, Forge Mills ...	1.76	"		6.8	"
"	Newark, East Stoke	1.55	"		6.0	"
"	Annesley Park	2.14	"		7.7	"
"	Newark, Kirkgate	1.53	"		6.6	"

VII.	Mansfield, Market Place	2.25 in.	or 7.5 per cent.
„	Tuxford, Grammar School	1.70 „	6.6 „
„	Workshop, Osberton	2.36 „	7.6 „
„	„ Hodsock Priory	1.67 „	6.8 „
„	Wirksworth, Holloway	2.12 „	5.7 „
„	Stretton, Lindway Res.	1.48 „	6.9 „
„	Stuffynwood Hall [Mansfield] ..	2.26 „	8.2 „
„	Chatsworth Gardens	2.10 „	6.5 „
„	Chesterfield, Brampton St Thomas	1.83 „	6.8 „
„	„ Gas Works	1.81 „	6.6 „
„	„ Tapton House	1.96 „	8.2 „
„	„ Brimington Hall ...	2.00 „	6.9 „
„	Stony Middleton	2.10 „	6.3 „
IX.	Rotherham, Ulley Reservoir	2.00 „	8.9 „
„	Tickhill, Sandbeck Park	1.60 „	6.7 „
„	Rotherham, Moorgate Grove	1.86 „	7.2 „
„	„ Thrybergh	1.80 „	7.5 „
„	Tickhill	1.58 „	6.8 „
„	Wath-upon-Deane, Chapel St.	1.60 „	7.0 „
„	„ „ West Melton	1.50 „	6.8 „
„	„ „	1.65 „	7.0 „
„	Doncaster, Magdalens	1.27 „	6.1 „
„	Dunford Bridge Reservoir	3.10 „	6.4 „
„	Barnsley ..	1.49 „	6.3 „
„	Wakefield, Walton Hall	1.35 „	6.0 „
„	Goole	1.31 „	6.1 „
„	Pattingham	1.63 „	6.1 „
„	Hull, Beverley Road	1.62 „	6.3 „
„	Brough, Brantinghamthorpe	2.10 „	7.0 „
„	Market Weighton, Houghton ...	2.00 „	7.3 „
„	„ „ Dalton Hall...	1.85 „	6.2 „
„	Holme-on-the-Wolds	1.69 „	6.1 „
„	Middleton-on-the-Wolds ..	1.66 „	6.1 „
„	Driffield, Beverley Road	1.72 „	6.4 „
„	Wetwang	1.91 „	6.5 „
„	Thixendale	2.07 „	6.1 „
XI.	Eglwys-Fach, Bodnant	1.95 „	6.1 „

NOVEMBER 2ND.

The M at nearly 20 stations in Cheshire, Lancashire and N. Wales.

VIII.	Ulverston, Poaka Beck	2.65 in.	or 5.4 per cent.
X.	Whitehaven, Cleator	2.25 „	4.7 „
XI.	Aberystwith, Cwmsymlog	2.18 „	4.3 „
„	Llanystumdwy, Talarvor	2.00 „	5.9 „
„	Port Madoc	3.10 „	5.8 „
„	Llangybi, Cefn	2.31 „	4.9 „

NOVEMBER 27TH.

A heavy R over the West of England and in Wales, the M at about 50 stations, mostly in the above-mentioned district, but a few irregularly distributed over Scotland ; in Wales some exceptionally large falls were recorded.

V.	Buckfastleigh, Bossel Park	2.38 in.	or 4.1 per cent.
„	Ashburton, Leusden Vic.	2.10 „	3.7 „

X.	Wythburn Parsonage	2·41	„	2·3	„
XI.	Mountain Ash, W.W.	3·20	„	4·5	„
„	Aberdare, Mardy	3·00	„	4·9	„
„	„ Abernant	2·35	„	4·1	„
„	Ystalyfera	2·23	„	3·1	„
„	„ Tan-yr-allt	3·15	„	4·5	„
„	Builth, Abergwessin	2·07	„	3·1	„
„	Dolgelly, National School	4·30	„	7·2	„
„	Dinorwic Quarry	2·23	„	3·4	„
XVII.	Aboyne, Glen Tana	3·11	„	8·4	„

NOVEMBER 29TH.

A very local rain, giving the M at three stations near Bristol and one in S. Wales.

VI.	Bristol, Small Street	2·19 in.	or 7·0 per cent.
„	Clifton	2·05 „	5·9 „
„	Chipping Sodbury, Stanshaws Ct.	1·83 „	6·0 „
XI.	Neath, Gtyncorrwg	3·26 „	3·5 „

DECEMBER 3RD.

The M at a few stations in Scotland, heaviest in the N. of Argyllshire, but not at all remarkable.

XV.	Strontian, Laudale	2·02 in.	or 2·4 per cent.
„	Ballachulish	2·06 „	2·3 „
„	Loch Eil, Conaglen	2·42 „	2·7 „

PART II.—ABSTRACT.

THE mode of forming the following five tables has so often been explained that it is not necessary to devote space to that matter ; it is more advantageous to proceed at once to ascertain what are the leading facts which they prove.

Tables I. and II. call for no comment.

Table III. shows that the only days on which rainfalls of at all exceptional amounts occurred were August 12th and September 10th. The latter presenting many features of similarity to the falls of September 3rd and 4th, 1884.

Table IV. shows that the maximum per centages were rather smaller than usual, and that the highest of them was far below the usual value—indeed, with three exceptions, the lowest for twenty years.

Table V. indicates the very great increase in the details of the yearly rainfall which are at present received, as compared with twenty, or even with ten years back.

The total number of **M** falls dealt with in the three years was -

						Increase.
1865	..	...	...	481	...	
1875	...	...	...	1081	...	600
1885	...	...	...	1801	...	720

As regards the values for 1885 they are not important ; they indicate that the year was about 12 per cent. drier than usual, and that **M** falls were below, rather than above, their usual amount.

TABLE I.—*Maximum Falls in 1885.*

Date.	Div.	Station.	Depth.	Per Cent.	Fall in year.
Feb. 26 ...	X.	Seathwaite	4·62in.	3·2	144·01 in.
Nov. 27 ...	XI.	Dolgelly National School ...	4·30 „	7·2	59·78 „
Feb. 26 ...	X.	Grasmere, High Close.....	3·57 „	4·6	77·67 „
Mar. 29 ...	XII.	Dalbeattie, Station Road ...	3·50 „	7·2	48·51 „
Sept. 12 ...	XIV.	Paisley W.W., Camphill ..	3·50 „	5·6	62·60 „
Jan. 28 ...	XI.	Aberdare, Treherbert	3·49 „	3·8	92·64 „
Aug. 12 ...	XVII.	Braemar.....	3·44 „	8·8	39·25 „
Feb. 26 ...	X.	Elterwater, Woodlands	3·32 „	3·8	86·39 „
Nov. 29 ...	XI.	Neath, Glyncoirwg	3·26 „	3·5	93·62 „
Sept. 10 ...	V.	Cothelston House.....	3·21 „	8·7	37·06 „
„ „ ...	„	Wiveliscombe, Willett Ho....	3·20 „	8·2	38·86 „
Nov. 27 ...	XI.	Mountain Ash W.W.	3·20 „	4·5	70·94 „
Feb. 23 ...	X.	Ambleside, Lesketh Howe ...	3·15 „	3·9	81·37 „
Nov. 27 ...	XI.	Ystalyfera, Tan yr-allt	3·15 „	4·5	69·35 „
Sept. 10 ...	V.	Boðmin, Castle Street.....	3·13 „	6·1	51·77 „
Nov. 27 ...	XVII.	Aboyne, Glen Tana	3·11 „	8·4	36·92 „

TABLE II.—*Comparison of Maximum Falls with those in previous years.*

MEAN.				ABSOLUTE.			
Years.	Depth.	Per Cent.	Mean total fall at these stations.	Depth.	Per Cent.	Station.	Division.
	in.		in.	in.			
1865 ...	3·67	6·4	61·8	6·41	5·5	Seathwaite.....	X.
1866 ...	3·40	4·4	86·2	6·38	3·6	Seathwaite.....	„
1867 ...	3·17	9·0	42·5	4·78	17·7	Hartlip	II.
1868 ...	3·32	6·1	65·9	5·60	4·8	Camusinas	XV.
1869 ...	3·68	5·0	77·7	6·70	4·5	Seathwaite.....	X.
1870 ...	3·20	7·5	43·8	6·00	17·1	Tongue	XIX.
1871 ...	3·08	5·7	61·6	4·24	9·6	Melbury.....	V.
1872 ...	4·10	6·6	73·1	5·82	3·2	Seathwaite.....	X.
1873 ...	2·97	6·2	60·7	4·20	2·9	Seathwaite	„
1874 ...	3·96	4·6	86·5	5·32	4·4	Bryn Gwynant ..	XI.
1875 ...	4·52	7·8	63·9	5·33	9·7	Newport W.W. ..	„
1876 ...	3·37	5·9	57·6	4·50	5·5	Foffany	XXIII.
1877 ...	3·77	4·6	93·4	4·98	5·3	Skye, Portree..	XVIII.
1878 ...	3·57	7·4	57·2	4·24	8·6	Springfield ...	XI.
1879 ...	3·66	9·5	50·4	4·05	4·1	Little Langdale	X.
1880 ...	3·50	7·7	51·1	4·75	3·9	Seathwaite.....	„
1881 ...	3·65	4·9	83·1	5·42	4·7	Sligachan	XVIII.
1882 ...	3·28	4·5	84·3	4·51	3·0	Seathwaite	X.
1883 ...	3·69	6·1	72·4	5·27	9·0	Glenesmoel	XXI.
1884 ...	3·45	4·7	80·7	6·78	5·0	Seathwaite	X.
Mean ...	3·55	6·2	67·7	5·26	6·6	.....	...
1885 ...	3·45	5·8	68·2	4·62	3·2	Seathwaite	X.
Diff. ...	—·10	—·4	+·5	—·64	—3·4	.....	...

TABLE III.—*Maximum Per Centages in 1885.*

Date.	Div.	Station.	Per Cent.	Depth.	Fall in year.
Sep. 10 ...	IV.	Beccles, Ellough Rectory ...	9·6	2·62 in.	27·23 in.
" " ...	"	Lowestoft, Bryn-y-Mor	9·6	2·43 "	25·32 "
" " ...	"	Beccles, Sotterley Hall	9·3	2·80 "	30·07 "
Aug. 12 ...	XVII.	Craigellachie Wester Elchies	9·1	2·86 "	31·52 "
" " ...	"	Midmar, Blackstock	9·0	2·52 "	27·89 "
Sep. 10 ...	IV.	Woodbridge, Bank House ...	8·9	2·50 "	28·14 "
Oct. 23 ...	IX.	Rotherham, Ulley Reservoir	8·9	2·00 "	22·37 "
Aug. 12 ...	XVII.	Braemar	8·8	3·44 "	39·25 "
Oct. 23 ...	VII.	Caistor ...	8·8	2·30 "	26·29 "
Sep. 10 ...	V.	Cothelston House	8·7	3·21 "	37·06 "
" " ...	"	Glastonbury Street	8·7	2·53 "	29·07 "
" " ...	"	Yeovil, Hendford.....	8·5	3·00 "	35·42 "
" " ...	"	Trowbridge ..	8·5	2·56 "	30·10 "
Aug. 12 ...	XVII.	Craigellachie, Wester Elchies	8·5	2·52 "	29·70 "
Nov. 27 ...	"	Aboyne, Glen Tana.....	8·4	3·11 "	36·92 "
Sep. 10 ...	V.	Milverton	8·4	2·95 "	35·17 "

TABLE IV.—*Comparison of Maximum Per Centages with those in previous years.*

MEAN.				ABSOLUTE.			
Years.	Per Cent.	Depth.	Mean total fall at these Stations.	Per Cent.	Depth.	Station.	Division.
		in.	in.		in.		
1865 ...	9·9	2·62	28·4	13·0	4·40	Fleckney.....	VII.
1866 ...	8·1	2·31	29·3	10·0	2·48	Burton	VI.
1867 ...	11·0	2·85	25·3	17·7	4·78	Hartlip	II.
1868 ...	8·6	2·55	30·1	11·0	4·00	Tongue	XIX.
1869 ...	7·9	2·17	27·9	10·0	3·40	Tillydesk	XVII.
1870 ...	10·0	2·34	22·9	17·1	6·00	Tongue ...	XIX.
1871 ...	9·0	2·43	26·8	11·5	3·62	Warter	IX.
1872 ...	8·1	3·43	42·5	10·0	3·70	Hillington Hall	IV.
1873 ...	9·7	2·39	24·7	11·8	2·77	Oscott	VI.
1874 ...	9·2	2·16	23·7	11·9	2·50	Welwyn.. [Hall	III.
1875 ...	10·2	3·76	37·5	13·2	3·95	Letheringsett ...	IV.
1876 ...	7·4	2·49	33·7	8·5	3·70	Cragside	X.
1877 ...	8·2	2·73	33·1	9·3	3·09	Wellington.....	VI.
1878 ...	10·2	3·05	30·0	11·8	3·90	Haverstock Hill	I.
1879 ...	10·9	3·31	30·5	12·3	3·80	CambridgeM. V.	III.
1880 ...	9·5	3·06	32·3	11·7	3·34	Marmont Pr. L.	"
1881 ...	8·1	2·42	30·3	10·6	3·20	Aboyne Castle..	XVII.
1882 ...	7·7	2·54	33·4	9·1	2·80	Bothalhaugh ...	X.
1883 ...	9·7	3·00	31·1	12·3	4·31	Skegness.....	VII.
1884 ...	11·7	2·33	20·0	13·8	2·66	Diss(Thelveton)	IV.
Mean ...	9·3	2·70	29·7	11·8	3·62	.....	...
1885 ...	8·9	2·71	30·7	9·6	2·62	Beccles, Ellough	IV.
Diff. ...	—·4	+·01	+ 1·0	—2·2	—1·00	.....	...

TABLE V.—*Comparison of the Mean of all the Maximum Falls of 1885 with similar data for previous years.*

Years.	Number of Returns.	Mean Percentage.	Mean Amount.	Mean Total Fall in year.	1867 being assumed =100.	Total Fall being assumed =34in. Mean Max. =
			in.	in.		
1865.....	481	5·1	1·70	33	106	5·0 per cent
1866.....	590	3·7	1·48	40	129	4·4 „
1867.....	584	4·6	1·44	31	100	4·2 „
1868.....	676	4·3	1·43	33	106	4·2 „
1869.....	637	4·2	1·42	34	110	4·2 „
1870.....	687	4·9	1·30	27	87	3·8 „
1871.....	752	4·9	1·49	30	97	4·4 „
1872.....	743	3·4	1·59	47	151	4·7 „
1873.....	809	4·6	1·35	29	94	4·0 „
1874.....	1010	4·4	1·41	32	103	4·1 „
1875.....	1081	5·0	1·83	37	119	5·4 „
1876.....	1112	3·9	1·49	38	123	4·4 „
1877.....	1180	3·8	1·56	41	132	4·6 „
1878.....	1186	4·3	1·49	35	113	4·4 „
1879.....	978	4·2	1·52	36	116	4·5 „
1880.....	1117	4·8	1·72	36	116	5·1 „
1881.....	1194	4·1	1·45	35	113	4·3 „
1882.....	1463	3·6	1·42	39	126	4·2 „
1883.....	1505	4·0	1·41	35	113	4·1 „
1884.....	1691	4·8	1·32	28	90	3·9 „
Mean ...	974	4·3	1·49	35	112	4·4 „
1885.....	1801	4·5	1·41	31	96	4·2 „
Diff.....	+827	+·2	—·08	—4	—16	—·2 „

MONTHLY RAINFALL OF 1885.

(1). EXPLANATORY OF THE TABLES AND MAPS.

IN *British Rainfall*, 1884, I gave a series of diagrams illustrative of different modes of graphically representing monthly rainfall. I am rather disappointed at not a single word of praise or of censure upon them having come to my knowledge. As regards many of my diagrams of other elements, I have indirect evidence that they are approved, because they are frequently copied, and we all know the proverb about "imitation being the most sincere form of flattery." But with respect to monthly fall and its mode of representation, I have at present no guide, and therefore, I shall give as nearly as possible similar information to that given for 1884, and represent it in the same way.

(1). I have given on pages [38] to [86] the remarks on the several months expressed almost in the *ipsissima verba* of the observers.

(2). I give on pages [136] to [142] the fall in each month at each of 233 stations, or more than twice as many as are given in any other British publication, and with two advantages, each far more important than the total number of stations. (*a*) Year after year these tables will be found to be composed almost entirely of the same stations—this tends greatly to ensure accuracy, uniformity and continuity. (*b*) It will be found that this table is not a mere hotch-potch of any returns which could be got together, but contains stations chosen for equable geographical distribution, and for presumed rigorous accuracy, both as regards the instrument and the registration.

(3). A set of twelve maps, one for each month inserted between pages [142] and [143] have been prepared quite independently of the foregoing, and show by round dots that, at the station which is

in the position occupied by the centre of that dot, the rainfall of that month was within an inch of the 1870-79 average. When the rain was more than 1 in. above that average, a + is used, and when on the contrary the fall was more than an inch below the average, a - is used.

(4). The tables which follow and form pages [143] to [146] are the basis of the map to which we must presently refer, and are so plain and simple that it seems waste of space to write any explanation except perhaps upon one matter. The fourth column for each station, "per centage in each month of 1885," is the per centage which each month in 1885 was of the average yearly fall 1870-79; this is advantageous in two ways—(a) It renders it obvious at a glance whether the rainfall of any month was above or below the average for that month; in the former case the per centage in the column headed "1885," will be larger than that in the column headed "Average," and in the latter case it will be smaller. (b) The total of the monthly per centages in 1885 will show how much the yearly total was above or below the average—*e.g.*, at Camden Square the total of the per centages is 98, whence we at once see that at that station the fall in 1885 was almost exactly the average.

(5). The Map (*Frontispiece*) is the outcome of the enquiry already mentioned. The ground work is of course a map of the British Isles. The data given are those worked up in the tables just mentioned, those in *the last two columns* for each station being alone represented. Each separate diagram may be regarded as built up northward from the place of observation, which forms the base line. Each vertical column represents one month, beginning of course with January. The length of each column shows how much per cent. of the average yearly rain, fell in each month of 1885—*e.g.*, at Camden Square the second month, February, will be seen to be represented by a column twice as long as the first, and reference to page [143] will show that in January 5 per cent. and in February 10 per cent. fell. The flexuous line shows, on the same scale, the average per centage which falls in each month, and thus by noticing whether the solid column or the flexuous line is the higher, one sees at once whether the fall for that month in 1885 was above or below the average.

(6). *Summary.*—Finally, on pages [147] to [149] we give a brief account of the principal features of the monthly distribution of rain in 1885.

MONTHLY RAINFALL AT 233 STATIONS IN THE BRITISH ISLES DURING 1885.

ENGLAND.

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
I.	Middlesex	London (Camden Sq.)	1.43	2.86	1.65	2.32	2.63	1.99	.52	.85	4.30	3.73	3.31	1.05	26.64
"	"	Uxbridge (Harefield)	2.06	3.54	1.75	2.00	2.67	1.88	.23	.94	4.85	4.04	3.32	1.23	28.51
II.	Surrey	Guildford (Guildown)	2.13	2.51	1.79	1.19	3.30	1.88	.39	.86	4.99	3.56	2.53	1.12	26.25
"	Kent	Tenterden	2.79	3.43	1.81	2.21	2.92	1.32	.19	.41	4.13	4.51	2.74	1.03	27.49
"	"	Hythe	2.88	2.94	1.41	1.32	2.40	.78	.47	.47	4.42	5.19	2.37	1.23	25.88
"	"	Sevenoaks (River Hill)	2.21	2.59	1.48	2.03	3.49	1.13	.14	.86	4.56	3.62	3.42	1.12	26.65
"	"	Ospringe (Lorenden)	2.62	3.23	1.28	.91	3.27	.84	.17	.78	4.37	4.07	2.24	1.08	24.86
"	Sussex	Worthing	1.66	3.59	2.15	.84	3.12	1.41	.77	.74	5.40	3.79	3.27	1.35	28.09
"	"	Maresfield (Forest Lodge)	2.84	4.06	2.60	1.32	3.08	1.06	.34	.67	4.83	4.35	3.95	1.33	30.43
"	Hants	I. of Wight (St. Lawrence)	2.15	3.34	1.52	.91	2.33	2.51	.70	.40	3.81	3.73	3.13	1.81	26.34
"	"	Droxford	2.68	4.12	2.81	1.91	3.99	1.52	.33	.89	5.71	4.43	3.16	1.78	33.33
"	"	Basingstoke (Sherborne)	3.40	3.61	1.74	1.77	3.23	1.79	.26	.86	4.64	3.77	3.66	1.18	29.91
"	Betks	Newbury (Welford)	2.67	3.74	1.58	2.01	2.33	1.56	.32	.85	3.84	3.81	4.80	1.07	28.58
III.	Herts	Hertford (Bayfordbury)	1.87	2.74	1.17	2.12	2.50	2.07	.64	1.58	4.07	4.18	3.55	1.11	27.60
"	"	Royston	1.64	1.89	.96	2.12	2.76	2.27	.21	2.06	3.15	4.39	3.06	.89	25.40
"	Bucks	High Wycombe	2.62	2.42	1.19	1.56	2.48	1.44	.38	.63	4.31	4.13	3.16	1.14	25.46
"	"	Buckingham (Adstock)	2.11	2.18	1.31	2.05	2.48	1.67	.36	2.86	4.59	3.84	4.08	.86	28.39
"	Oxford	Oxford (Magdalen Coll.)	2.17	2.67	1.10	1.72	2.03	1.67	.18	1.66	4.36	3.89	3.51	1.02	25.98
"	Northampton	Wellingborough (Swanspool)	1.66	2.62	.93	2.32	2.46	1.76	.57	3.20	3.95	4.34	3.54	.82	28.17
"	Bedford	Bedford	1.27	1.77	1.17	2.23	2.27	1.82	.21	2.00	3.40	3.60	3.25	.70	23.69
"	Cambridge	Ely (Stretham)	1.40	2.15	.95	1.48	3.61	2.16	.89	1.80	3.33	4.37	3.17	.70	26.01
"	"	Wisbech	1.42	2.00	.83	.97	2.35	1.83	.57	1.44	3.64	4.88	3.04	.80	23.77
IV.	Essex	Waltham Abbey	1.50	2.48	1.29	2.00	3.37	1.49	.43	2.00	3.57	3.74	2.76	.83	25.46
"	"	Chelmsford	1.26	2.51	1.52	1.53	1.88	1.46	.48	3.20	4.09	3.47	2.61	.60	24.61
"	"	Braintree (Bocking Place)	1.70	2.87	1.72	2.13	4.42	1.95	.75	2.70	5.29	5.24	3.98	1.07	33.82
"	"	Haverhill (Great Thurlow)	1.74	2.04	1.07	1.98	3.25	1.02	.73	.95	3.33	4.60	2.84	1.12	24.67
"	Suffolk	Ipswich	1.79	2.19	1.20	1.49	2.83	1.10	1.21	.91	5.08	4.45	2.72	1.00	25.97
"	"	Stradbroke	1.79	2.37	1.15	1.37	3.25	.84	1.53	1.33	4.91	5.32	2.72	1.05	27.63
"	"	Geldeston [Beccles]	1.84	2.40	.83	1.40	2.87	.58	.67	1.32	5.15	5.56	2.40	1.00	25.66
"	Norfolk	Swaffham	2.81	2.01	1.28	1.50	2.76	1.30	1.10	1.34	4.57	5.57	3.37	1.39	29.00
"	"	Holt	2.25	2.25	1.21	1.67	2.15	1.74	.78	1.23	4.63	6.85	2.58	1.31	28.65

ENGLAND—(continued.)

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.	
V.	Wilts	Salisbury	2.76	3.77	1.47	1.81	3.21	1.93	.16	.82	4.99	3.71	3.78	1.42	29.83	
	"	Trowbridge(SteepleAshton)	2.11	3.03	.98	2.12	2.28	1.24	.19	2.17	4.49	3.49	4.50	.98	27.58	
	"	Pewsey	2.35	3.51	1.26	1.86	2.62	1.68	.21	.85	3.90	3.78	3.67	1.07	26.76	
	"	Weymouth (Osmington)...	2.85	4.26	1.35	2.41	3.06	1.72	.38	1.03	4.41	4.75	4.37	1.88	32.47	
	"	Wimborne (Chalbury).....	2.91	4.00	1.45	1.87	3.14	2.26	.32	.89	4.22	3.90	4.30	1.73	30.99	
	"	Shaftesbury	3.21	3.58	1.65	2.76	3.97	1.57	.23	.74	6.51	4.49	3.69	2.03	35.18	
	"	Dartmouth (Strete).....	3.10	4.91	.97	2.63	2.82	1.48	.73	1.02	3.47	5.26	4.73	2.14	33.27	
	"	Walkhampton (Lowery)...	4.45	8.85	3.20	6.00	4.40	3.65	1.65	1.55	8.15	9.35	7.05	3.10	61.40	
	"	Ilington (Middlecott Ho.)	3.94	6.45	2.46	6.25	2.95	1.34	.54	.54	3.05	5.89	8.32	2.00	50.01	
	"	Cullompton (Bradninch)...	2.62	4.14	1.51	3.40	3.16	2.70	.71	.71	1.88	4.98	5.77	3.56	2.14	36.57
	"	South Molton (Rose Ash)...	3.03	2.43	1.33	1.91	3.73	2.56	1.30	1.38	4.95	4.95	6.51	3.59	2.23	34.95
	"	Penzance	3.48	4.70	2.21	3.12	3.42	2.12	.69	.69	2.07	5.74	8.41	4.46	2.64	43.06
	"	St. Agnes	2.91	5.09	1.49	3.22	2.40	2.02	.86	.86	4.18	6.21	7.86	4.62	1.63	42.49
	"	Bude	2.88	2.62	.89	2.43	2.43	3.47	1.01	1.01	1.44	6.17	5.18	3.37	1.60	33.49
	"	Ilminster	3.09	4.43	1.06	4.10	2.68	1.29	.17	.17	1.26	4.22	5.88	3.91	1.71	33.80
	"	Glastonbury (Street)	2.22	3.10	1.16	2.60	3.72	1.11	.50	.50	1.80	4.52	4.12	2.84	1.38	29.07
	"	Exford Rectory.	4.33	5.28	1.79	3.23	5.28	2.55	1.53	1.53	2.62	9.12	8.21	6.30	2.58	52.82
	VI.	Gloucester	Clifton	2.74	3.34	1.22	2.18	3.26	1.73	.97	2.32	4.84	4.53	6.42	1.24	34.79
	"	"	Stroud (Upfield)	2.47	3.85	1.26	2.15	2.56	1.95	.35	2.50	3.89	2.95	4.00	1.06	28.99
"	"	Fairford (Hatherop Rec.)...	2.66	3.81	1.32	1.77	2.54	2.16	.65	2.79	3.89	3.19	5.69	1.25	31.72	
"	Hereford	Ross (The Graig)	2.95	4.50	1.44	2.59	2.00	2.33	.31	1.95	3.13	2.75	3.27	1.02	28.24	
"	Salop	Ch. Stretton (Woolstaston)	2.57	3.73	1.36	3.26	2.39	3.81	.63	3.52	4.08	5.62	3.57	.91	35.45	
"	"	Broseley (Benthall Hall)...	1.59	2.25	.95	2.49	2.24	3.42	.43	3.05	3.49	4.68	3.72	.85	29.16	
"	"	Oswestry (Hengoe)	2.27	4.14	1.40	1.60	2.53	2.60	.83	3.38	4.80	6.74	3.86	1.18	35.33	
"	Stafford	Lichfield Museum	1.68	2.75	1.28	2.77	2.58	3.53	.32	3.23	3.33	4.88	2.93	1.27	30.55	
"	"	Burton (Shobnall)	1.40	2.25	.73	2.29	1.97	3.09	.25	1.48	3.34	4.32	3.05	.64	24.81	
"	"	Etruria	1.37	2.30	1.08	1.39	1.79	3.56	.76	1.34	3.90	4.77	3.38	1.29	26.93	
"	Worcester	Blockley	1.66	3.82	.91	1.83	2.72	1.48	.11	2.85	3.60	3.54	2.87	.91	26.30	
"	"	Malvern.....	2.20	2.96	1.55	2.89	3.02	3.22	.09	2.76	4.00	3.43	3.79	.64	30.55	
"	"	Tenbury (Orleton)	2.06	3.92	1.28	2.48	3.40	2.79	.33	2.87	3.78	4.04	3.24	.93	31.12	
"	"	Stourbridge (Longlands)...	1.93	3.25	1.31	2.57	2.34	2.96	.36	2.37	3.56	4.51	3.23	.96	29.35	
"	Warwick	Leamington (Blackdown)...	1.81	2.88	.96	2.37	2.41	2.27	.15	2.50	3.45	4.13	3.79	.62	27.34	
"	"	Wiley Rectory	1.92	2.63	.81	2.55	2.43	2.21	.09	3.25	2.74	4.58	3.72	.79	27.72	
"	"	Loughborough	1.70	2.93	.94	2.64	2.40	3.18	.16	2.91	3.49	6.20	2.98	.65	30.18	
VII.	Leicester	Harston [Grantham]	1.83	2.68	.78	1.97	1.96	2.44	.12	2.88	3.57	6.03	2.79	1.03	28.08	

ENGLAND—(continued.)

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
VII.	Rutland	Market Overton	1.75	2.81	1.01	1.80	2.28	2.00	.27	2.41	3.52	6.37	3.46	1.00	28.68
	"	Horncastle	2.25	3.07	1.14	1.72	1.57	2.25	.90	1.98	3.39	6.01	2.81	1.00	28.09
	"	Brigg (Appleby Vic.)	2.06	2.31	1.65	1.67	1.49	3.05	.71	1.29	1.47	5.41	2.25	1.04	24.40
	"	Ollerton (Thoresby Gardens)	1.69	2.77	1.18	1.79	1.53	3.92	.36	2.40	2.53	5.43	3.06	.78	27.44
VIII.	"	Buxton	4.16	4.23	3.06	2.00	3.06	3.78	2.10	2.47	6.33	9.56	4.76	3.41	48.92
	"	Congleton (Buglawton Vic.)	1.67	2.17	2.11	1.55	2.22	3.52	1.16	1.80	3.83	4.67	2.72	1.65	29.07
	"	Manchester (Withington)	1.55	2.21	2.09	1.22	2.25	3.45	1.16	2.18	4.15	5.40	2.66	2.13	30.45
	"	Ormskirk (Rufford)	1.73	2.88	2.61	1.49	1.06	2.15	1.56	1.92	3.49	5.02	2.91	1.77	28.59
	"	Burnley (Gawthorpe)	2.00	3.10	1.79	2.27	1.92	3.22	1.26	.90	4.93	4.55	2.44	2.10	30.48
	"	Garsang (Vale House)	2.13	3.08	3.29	1.40	1.85	2.69	1.77	1.81	6.13	4.39	2.79	1.40	32.68
	"	Grange (Nutwood)	2.30	4.08	3.29	1.69	1.67	2.06	3.76	2.79	5.38	4.43	3.72	1.95	37.12
	"	Rotherham	1.53	2.48	1.25	1.79	1.56	2.70	.55	3.47	1.90	5.81	2.34	.63	26.01
	IX.	Huddersfield (Dalton)	1.81	3.21	1.62	1.82	1.72	3.46	.88	1.08	2.57	5.91	1.83	1.06	26.97
	"	South Milford	1.37	2.13	1.66	1.36	1.60	2.29	1.43	1.10	2.03	4.26	2.15	.59	21.97
"	"	Malham Tarn	4.01	4.90	4.34	2.25	3.45	3.04	2.09	2.81	6.78	7.63	3.43	3.16	47.89
	"	Ripon (Mickley)	2.31	2.64	2.20	1.82	2.74	3.01	1.06	2.39	2.80	5.37	2.41	.71	29.46
	"	Pattingham	1.60	2.14	1.16	1.59	2.40	2.35	.41	3.56	3.06	5.54	2.21	.66	26.68
	"	Brantinghamthorpe	2.84	2.20	1.65	2.32	2.31	2.70	.82	2.03	2.47	6.52	2.60	1.20	29.81
	"	Pocklington (Warter)	2.37	2.20	1.76	1.78	2.55	2.35	1.56	1.82	3.40	6.94	1.96	1.28	29.97
	"	Malton	2.28	1.52	1.62	1.84	2.17	2.74	1.07	1.64	2.56	4.70	1.65	1.10	24.89
	"	Saarborough	1.97	1.54	1.52	2.15	1.93	2.84	.86	2.27	2.53	4.86	1.49	1.09	25.05
	"	Northallerton	2.13	1.26	1.85	1.72	2.40	2.41	.79	1.70	3.27	3.02	1.42	.74	22.71
	"	Lockwood Beck	2.24	1.51	2.63	2.97	4.24	2.86	1.45	3.90	2.38	7.30	2.34	1.60	35.42
	X.	Darlington (South End)	2.03	1.16	1.86	1.61	3.18	2.02	.56	1.84	2.01	3.85	1.70	.73	22.55
"	"	Hartlepool (Hurworth Burn)	2.41	1.28	1.70	1.86	4.58	1.92	.95	2.29	2.21	4.32	1.39	1.38	26.29
	"	Wolsingham	2.41	2.27	2.30	2.06	4.52	1.53	.90	2.63	2.56	5.62	2.40	1.20	30.40
	"	Haltwhistle (Unthank Hall)	1.68	2.32	2.34	1.74	2.45	1.24	1.69	2.98	2.59	3.77	1.69	1.65	26.14
	"	Morpeth (Meldon Park)	1.74	.94	2.21	2.10	3.95	1.14	1.74	3.36	3.26	4.21	2.34	.92	27.91
	"	Alwinton (Biddleston)	2.48	1.38	2.50	3.12	4.85	.84	1.64	2.36	3.31	4.52	2.72	1.72	31.44
	"	Howick Hall	1.02	1.22	1.67	2.40	3.08	1.14	1.58	1.81	3.43	3.41	1.76	.83	23.35
	"	Borrowdale (Seathwaite)	11.36	26.05	14.86	9.45	6.30	6.15	11.90	8.36	18.90	12.79	10.35	7.54	144.01
	"	Scaley Hall	2.21	2.60	2.01	1.35	2.38	1.52	2.08	3.04	4.80	2.39	2.09	1.40	27.87
	"	Kendal	3.31	6.03	5.22	2.84	2.40	2.43	3.88	3.33	5.58	4.20	3.81	2.80	45.83
	"	Kirkby Stephen	2.59	6.00	2.44	1.90	2.50	1.24	1.24	2.54	4.64	4.45	3.04	1.63	34.21
"	"	Brougham Hall	2.45	4.47	2.09	2.36	2.10	1.23	.72	2.08	3.17	3.60	2.12	1.67	28.06

SCOTLAND—(continued.)

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.	
XIII.	Haddington	East Linton	1.18	1.18	1.47	2.77	3.68	.62	1.41	2.05	2.78	1.02	1.43	.66	20.25	
	Edinburgh	Charlotte Square	1.13	1.74	1.48	1.87	2.13	.40	.88	2.45	2.40	1.30	1.40	.77	17.95	
	Linlithgow	Bathgate	1.77	3.04	1.42	1.91	3.57	.94	1.18	2.37	4.66	2.22	1.81	1.30	26.19	
	Lanark	Bigger (Wiston)	4.00	4.40	2.30	2.70	3.40	.70	1.70	2.00	7.20	4.00	4.60	1.70	38.70	
XIV.	"	Cambuslang	2.51	3.02	1.43	.92	3.17	.52	1.02	2.69	4.35	2.68	2.08	1.50	25.89	
	"	Colmonell	4.21	4.82	4.31	3.62	1.76	.92	1.83	2.63	6.90	5.70	3.20	3.00	42.30	
	Ayr	Ayr (Auchinlee)	2.21	3.67	2.62	1.43	1.48	.90	1.35	2.82	4.32	2.75	1.95	2.80	28.30	
	"	Kilmarnock (North Craig)	2.48	3.60	2.25	1.84	1.88	1.43	1.61	2.74	5.57	3.79	2.51	2.06	31.76	
XV.	Dumbarton	Arrochar	7.97	8.80	4.87	2.60	6.70	3.00	4.03	5.05	10.50	5.70	5.40	7.20	71.82	
	"	Killearn	6.30	6.21	4.07	4.19	3.77	1.60	2.10	3.77	8.46	4.13	3.27	3.78	51.65	
	Stirling	Arran (Pladda)	2.83	4.99	2.77	2.88	2.15	1.02	2.19	3.98	5.02	3.71	2.64	3.10	37.28	
	Bute	Lochgilphead (Kilmory)	5.07	7.41	4.00	2.51	3.11	2.69	3.04	3.79	10.97	5.58	4.32	5.60	58.09	
"	Argyll	Inverary	6.30	9.50	4.90	2.90	2.50	3.40	3.20	2.30	12.00	7.40	5.40	11.80	71.60	
	"	Appin (Airds)	4.28	3.15	1.58	2.43	2.67	3.30	3.30	2.58	9.57	5.47	4.02	4.02	48.55	
	"	Strontian (Laudale)	7.74	12.49	6.10	3.31	4.40	3.38	3.88	3.52	13.41	8.81	4.65	10.28	81.11	
	"	Cantire (Devaar)	2.41	4.66	2.62	2.57	1.75	1.15	2.54	2.32	2.37	8.12	4.34	3.11	4.18	46.47
"	"	Islay (Eallabus)	4.04	5.58	3.94	2.74	3.19	2.55	3.22	1.73	9.35	3.90	4.10	5.80	52.91	
	"	Jura (Fladda)	5.60	7.48	3.05	3.48	2.65	2.85	2.82	3.23	1.98	7.57	4.80	2.57	4.78	46.40
	"	Tyre (Hynish)	4.18	5.83	2.33	3.46	2.85	2.82	1.62	1.67	2.76	6.07	2.22	1.80	2.41	34.44
	"	Tillicoultry	2.97	3.95	3.10	1.93	3.94	1.62	1.05	.66	2.50	4.60	2.40	2.05	1.55	31.07
XVI.	Clackmannan	Kilconquhar (Balcarres)	2.00	2.60	3.85	2.97	3.87	.63	.73	2.92	4.44	1.36	2.42	1.88	30.46	
	Fife	Strathmiglo (Loden Urquht)	7.08	13.56	5.66	4.92	3.90	1.99	2.86	5.51	11.49	5.95	5.51	6.62	75.05	
	"	Stronvar	3.24	5.66	1.88	3.29	5.05	.68	.79	3.77	5.56	2.40	2.74	2.70	37.76	
	"	Dunkeld (Inver Braan)	4.65	8.75	3.86	2.64	5.28	1.46	1.04	4.43	9.29	5.24	5.21	5.28	57.13	
"	"	Dalnaspidal H.R.S.	1.24	2.52	2.24	2.76	3.36	.49	.62	1.79	2.97	1.31	1.71	.89	21.90	
	Forfar	Dundee (Broughty Ferry)	2.62	4.72	.67	2.14	5.57	1.46	1.40	3.78	4.03	2.31	3.63	1.92	34.25	
	"	Kirriemuir (Lintrathen)	2.60	3.60	1.90	2.50	4.20	.60	.90	2.60	4.40	3.00	2.60	1.40	30.30	
	"	The Burn	1.54	1.23	1.89	1.32	4.53	1.45	1.37	3.40	4.71	2.83	3.52	1.81	29.60	
XVII.	Kincardine	Coldstone Manse	2.19	4.50	1.87	1.87	1.50	1.63	1.75	3.94	4.25	3.00	2.75	3.00	32.25	
	Aberdeen	Inverury Manse	1.76	2.42	2.11	1.78	3.77	.93	1.48	3.21	4.55	3.25	2.41	3.09	30.76	
	"	Old Deer	2.04	2.48	2.53	.72	3.73	1.51	.96	2.63	3.47	4.12	1.56	2.49	28.24	
	"	Grantown	1.58	1.79	1.54	1.25	2.22	1.42	1.82	4.01	2.83	2.64	2.06	2.33	25.49	
"	Moray	Gordon Castle	1.45	2.21	1.35	1.36	2.10	1.66	.84	3.02	2.47	2.71	1.29	1.67	22.13	
	"	Elgin	1.43	2.20	1.55	.61	2.94	1.23	.96	2.11	2.95	1.50	.76	1.47	19.71	
	"	Nairn (Acharáidh)														
	"	Nairn														

SCOTLAND—(continued.)

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
XVIII.	Ross	Loch Alsh (Inverinate) . . .	6.50	10.40	6.47	3.10	3.90	2.92	2.65	4.70	3.88	7.70	6.35	5.00	63.57
"	"	Strome Ferry H.R.S.	4.36	8.91	5.10	1.89	4.26	4.14	2.76	2.37	9.97	6.72	4.88	10.71	66.07
"	"	Strathconan	2.54	5.74	4.19	1.82	5.03	1.93	.68	1.63	6.63	9.05	4.97	7.01	51.22
"	"	Ardrass Castle	3.13	3.42	2.84	1.48	4.97	1.18	1.36	1.32	3.57	3.61	2.02	3.85	32.75
"	Inverness	Fort William	5.63	12.67	4.85	4.47	4.11	3.26	3.74	3.12	11.61	8.69	6.64	13.27	82.06
"	"	Skye (Dunvegan)	7.44	8.32	3.75	2.12	3.10	7.97	5.16	3.88	11.65	7.04	6.13	8.12	74.68
"	"	N. Uist (Loch Maddy) . . .	4.00	5.34	2.76	1.55	2.84	3.66	5.05	1.52	7.83	5.72	2.66	5.08	48.01
"	"	Invergarry	5.13	10.78	5.26	2.77	3.39	2.44	2.30	1.60	8.68	5.97	5.39	9.60	63.31
"	"	Aviemore H.R.S.	1.77	2.94	1.75	.69	3.85	.89	.79	2.42	3.99	2.54	1.77	2.12	25.52
XIX.	Sutherland	Invershin	3.27	3.09	2.17	1.46	3.19	1.57	.98	.79	4.56	3.84	3.72	3.90	32.54
"	"	Scourie	2.90	5.30	2.60	.70	2.15	2.70	2.50	1.60	4.00	5.15	2.30	6.00	37.90
"	"	Forsinard H.R.S.	1.61	2.00	2.14	.98	3.41	2.30	1.54	1.50	4.40	4.15	3.73	2.33	30.09
"	Cathness	Wick H.R.S.	1.91	2.69	2.31	.72	1.81	1.52	1.83	.77	3.38	2.57	1.04	2.28	22.83
"	Shetland	Lerwick (Montfield)	2.14	3.76	4.49	1.60	2.24	2.23	1.67	2.08	5.33	3.50	3.84	4.89	37.77

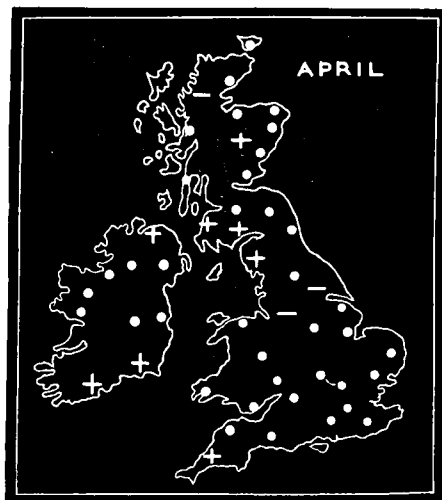
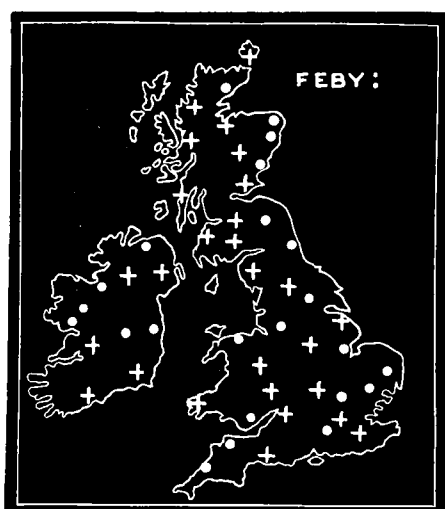
IRELAND.

XX.	Cork	Dunmanway (Coolkelure) ..	8'07	10'65	4'56	5'70	3'66	2'65	3'18	4'79	10'57	4'69	7'48	4'42	70'42
"	"	Cork (Blackrock)	4'99	7'35	3'50	4'93	3'29	1'20	1'32	4'46	6'30	2'74	3'76	1'78	45'02
"	"	Fermoy (Glenville)	5'21	7'47	3'31	4'72	3'30	1'58	1'39	4'50	5'82	4'46	3'60	2'12	47'48
"	Kerry	Dromore Castle.....	6'62	5'87	3'40	2'95	4'33	1'56	2'12	2'98	7'61	6'99	6'23	2'67	53'33
"	"	Dingle	5'69	5'91	4'49	4'21	4'38	1'81	3'84	5'23	5'56	6'14	3'96	3'57	54'79
"	"	Tralee (Castlemorris)	3'14	4'37	2'62	2'98	2'99	1'46	1'57	2'27	4'22	4'41	2'32	2'02	34'28
"	"	Waterford (Gas Works)	4'43	7'10	2'96	4'60	2'54	1'07	1'70	4'56	5'24	4'10	4'29	1'37	43'96
"	"	Tipperary, Henry Street...	4'12	5'21	3'11	3'75	2'49	1'11	1'50	3'93	5'14	4'68	2'71	1'81	37'56
"	"	Nenagh (Castle Lough)	3'54	4'38	2'26	2'62	2'00	2'24	2'34	3'76	5'58	4'79	3'00	1'95	38'46
"	"	Ballingarry (Hazelport)	2'15	2'87	1'83	2'95	1'26	1'51	2'47	3'00	4'24	3'54	1'79	'96	28'57
"	Limerick	Jane Ville	4'33	6'93	3'46	4'64	2'88	1'81	2'04	4'09	4'63	5'05	3'06	1'83	44'75
"	Clare	Ennis	3'95	3'03	2'40	2'54	1'83	1'11	4'62	4'14	5'64	6'21	2'93	1'97	40'37
"	"	Miltown Malbay	3'71	3'75	3'46	2'46	2'31	1'50	4'26	2'14	6'82	3'97	2'51	1'84	38'73
XNI.	Wexford	Ballyhyland	4'59	6'56	3'85	4'12	2'89	1'37	1'90	4'04	4'57	4'51	2'78	1'34	42'52
"	"	Gorey (Courtown)	3'67	5'17	2'13	3'89	1'99	'95	1'01	2'98	4'54	4'35	2'95	1'23	34'86
"	"	Stoneyford (Inisnag Glebe)	2'54	4'25	2'26	3'50	2'00	1'25	1'04	2'06	2'81	3'02	2'85	1'02	29'60
"	Kilkenny	Kilkenny (Lavistown)	2'66	3'39	2'11	3'82	1'96	1'48	1'73	2'38	4'15	3'10	2'09	'91	29'78
"	"	Bray (Fassaroe)	3'92	5'71	3'71	4'87	3'35	2'16	1'08	3'26	5'14	5'17	3'79	1'01	43'17
"	Wicklow	Browne's Hill	3'08	3'51	2'04	3'81	2'39	1'20	1'40	2'29	5'20	2'95	1'83	'82	30'52

IRELAND—(continued.)

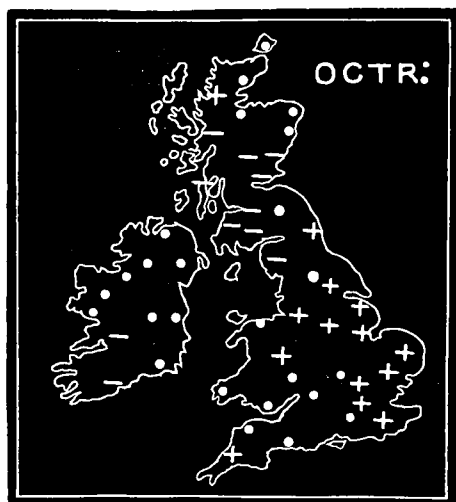
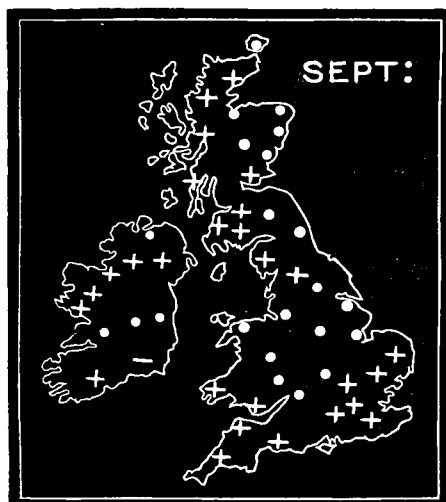
Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
XXI.	Queen's Co.	Abbey Leix (Blandsfort)...	2.91	3.69	2.49	4.36	2.29	1.78	2.30	2.62	4.89	3.44	2.20	.86	33.83
"	King's Co.	Clonbrin	2.79	3.03	1.60	4.58	1.93	1.25	2.11	3.31	4.91	2.33	1.72	.82	30.38
"	Dublin	Glasnevin Botanic Gardens	1.66	2.17	1.26	1.77	1.99	1.06	.82	2.20	2.53	3.21	1.62	.53	20.82
"	Meath	Trim	2.44	3.00	2.18	2.72	1.98	1.00	1.66	3.30	5.54	4.27	1.69	1.39	31.17
"	"	Moynalty (Westland)	2.80	3.65	2.09	3.40	2.81	.98	2.15	2.32	6.47	3.90	2.97	1.41	34.95
"	Westmeath	Mullingar (Belvedere)	2.55	2.68	2.54	2.26	1.67	.86	2.11	3.71	5.45	2.88	2.57	1.07	30.35
"	"	Athlone (Twyford)	2.34	4.45	3.22	3.47	2.26	.89	3.50	3.13	7.20	3.77	3.30	1.07	38.60
"	Louth	Stephenstown	1.98	2.62	1.50	3.10	2.45	.80	1.78	1.24	4.86	3.11	2.43	1.11	26.88
"	"	Greenore	1.99	2.79	2.02	2.87	2.10	1.05	1.42	1.70	5.49	3.11	3.14	.84	28.52
"	Longford	Edgeworthstown	2.22	3.06	2.13	2.91	1.77	.61	2.45	2.15	5.23	3.50	2.08	1.18	29.29
XXII.	Galway	Ballinasloe	2.73	3.20	2.07	2.35	2.09	.73	2.75	2.38	5.30	3.63	2.24	1.62	31.09
"	"	Kylemore	10.46	9.11	10.22	5.38	5.20	1.83	6.32	4.48	11.26	6.16	5.67	2.75	78.84
"	"	Tuam	4.02	3.51	3.04	2.68	2.40	.59	3.11	3.27	6.38	5.34	3.54	2.14	40.02
"	Mayo	Ballinrobe	5.36	5.30	3.35	3.27	2.62	1.04	3.02	3.34	7.50	6.02	4.41	2.56	47.79
"	"	Westport (Oldhead).....	5.60	5.30	4.10	2.50	3.40	1.50	5.70	3.00	6.70	7.00	6.50	2.10	53.40
"	"	Crossmolina (Enniscoc) ...	5.23	5.61	4.40	3.12	3.65	.54	3.81	3.04	7.27	6.05	3.70	2.90	49.32
"	Sligo	Sligo (Mount Shannon) ...	2.40	3.75	1.66	2.38	2.72	1.14	4.26	1.28	5.91	5.43	2.80	2.15	35.88
"	Leitrim	Carrick-on-Shannon	3.27	2.86	1.83	2.02	2.33	.56	1.69	1.80	4.70	3.69	1.84	2.01	28.60
XXIII.	Cavan	Belturbet (Red Hills)	2.67	3.29	2.25	2.13	1.95	.88	2.57	1.65	4.97	3.30	2.63	1.48	29.77
"	Fermanagh	Enniskillen (Lisbellaw) ...	2.25	4.28	2.28	1.75	2.05	.42	3.00	2.15	5.08	4.32	1.89	1.55	31.02
"	Monaghan	Rockcorry	1.88	3.55	1.07	3.55	1.57	1.07	2.24	1.65	5.53	3.47	2.19	1.71	29.48
"	Armagh	Armagh	2.12	3.08	1.69	2.28	1.62	.60	1.91	1.86	4.42	2.92	1.84	1.29	25.63
"	Down	Newcastle (Fairleigh)	4.03	6.71	4.31	2.73	1.99	.90	1.54	1.51	8.11	5.62	3.25	1.54	45.24
"	"	Donaghadee	3.75	4.70	2.27	3.29	1.99	.89	2.11	1.99	5.60	4.83	2.47	1.85	35.74
"	Antrim	New Barnsley	3.03	4.05	3.27	2.16	2.88	1.15	2.32	2.67	5.97	4.53	2.83	2.20	37.06
"	"	Ballymena	2.55	4.11	2.73	2.54	2.88	.77	1.91	1.88	5.83	4.00	2.44	2.48	34.12
"	"	Bushmills	2.10	4.25	1.82	2.26	2.27	1.11	1.81	1.32	5.77	3.55	2.15	2.73	31.14
"	Londonderry	Newtown Limavady	1.61	2.40	2.31	1.44	2.37	.43	1.57	1.99	3.88	3.96	2.28	2.50	26.74
"	Tyrone	Stewartstown (Ardtrae) ...	2.88	3.66	2.01	2.43	2.43	.39	1.73	2.16	5.56	3.43	2.28	2.09	31.04
"	"	Omagh (Edenfel)	2.90	4.04	2.18	1.88	2.39	.78	1.83	1.44	5.43	3.45	2.64	1.86	30.82
"	Donegal	Castlefinn (Finn Lodge) ...	2.70	3.50	2.27	1.52	2.54	.53	1.85	1.52	5.42	3.89	2.25	2.63	30.62
"	"	Ramelton (Killygarvan) ...	3.30	3.66	2.78	1.93	2.58	1.01	1.66	2.19	5.54	5.41	2.90	3.36	36.32

MONTHLY MAPS OF RAINFALL IN 1885.



For explanation see page [134].

MONTHLY MAPS OF RAINFALL IN 1885.



For explanation see page [134].

MONTHLY RAINFALL OF 1885 COMPARED WITH THE MONTHLY MEANS, 1870-9.

ENGLAND.

	(1) I. MIDDLESEX. <i>Camden Square, N. W.</i>				(2) II. HANTS. <i>St. Lawrence, I. of W.</i>				(3) IV. NORFOLK. <i>Norwich.</i>			
	Amounts.		Per cent.		Amounts.		Per cent.		Amounts.		Per cent.	
	Mean	1885.	Mean	1885	Mean	1885	Mean	1885	Mean	1885	Mean	1885
	in.	in.			in.	in.			in.	in.		
Jan.	2·35	1·43	9	5	3·67	2·15	12	7	1·81	2·24	7	8
Feb.	1·64	2·86	6	10	2·43	3·34	8	11	1·79	2·27	6	8
March ..	1·61	1·65	6	6	1·96	1·52	6	5	1·64	1·45	6	5
April..	2·02	2·32	7	9	2·01	·91	6	3	1·83	1·39	7	5
May ...	1·92	2·63	7	10	1·37	2·33	4	7	1·80	3·04	6	11
June...	2·67	1·99	10	7	1·72	2·51	5	8	2·11	·94	8	3
July...	2·47	·52	9	2	2·48	·70	8	2	2·77	1·09	10	4
Aug. ...	2·74	·85	10	3	2·68	·40	9	1	2·78	·73	10	3
Sep.	2·51	4·30	9	16	2·85	3·81	9	12	3·30	4·50	12	16
Oct.	2·70	3·73	10	14	3·62	3·73	12	12	2·08	6·82	7	25
Nov.	2·44	3·31	9	12	3·82	3·13	12	10	3·51	2·96	13	11
Dec.	2·17	1·05	8	4	2·78	1·81	9	6	2·31	1·34	8	5
Year ..	27·24	26·64	100	98	31·39	26·34	100	84	27·73	28·77	100	104

	(4) V. DEVON. <i>Olevelands [Lyne Regis].</i>				(5) V. CORNWALL. <i>Penzance.</i>				(6) VI. GLOUCESTER. <i>Frampton-on-Severn.</i>			
	Amounts.		Per cent.		Amounts.		Per cent.		Amounts.		Per cent.	
	Mean	1885	Mean	1885	Mean	1885	Mean	1885	Mean	1885	Mean	1885
	in.	in.			in.	in.			in.	in.		
Jan.	4·09	3·49	11	9	5·90	3·48	12	7	2·99	2·59	10	9
Feb. ...	2·98	4·42	8	11	4·11	4·70	9	10	2·27	4·13	8	14
Mar. ...	2·14	1·83	5	5	2·88	2·21	6	5	1·64	1·06	5	3
April..	3·03	2·77	8	7	2·75	3·12	6	7	2·17	2·03	7	7
May ...	2·06	3·11	5	8	1·99	3·42	4	7	1·95	2·32	6	8
June ..	2·69	2·03	7	5	2·48	2·12	5	5	2·36	1·82	8	6
July ..	2·87	·26	8	1	2·97	·69	6	1	2·83	·41	9	1
Aug. ...	3·04	1·94	8	5	3·67	2·07	8	4	2·96	2·20	10	7
Sept...	3·68	5·19	10	14	3·88	5·74	8	12	3·17	4·17	11	14
Oct.	4·07	5·06	10	13	5·41	8·41	12	18	2·74	2·63	9	9
Nov.	4·14	4·18	11	11	5·39	4·46	12	10	2·78	3·68	9	12
Dec.	3·48	2·56	9	7	5·37	2·64	12	6	2·26	1·08	8	3
Year ..	38·27	36·84	100	96	46·80	43·06	100	92	30·12	28·12	100	93

ENGLAND (*Continued*).

	(7) VII. DERBY. <i>Mickleover.</i>				(8) IX. YORKS. <i>Malton.</i>				(9) X. CUMBERLAND. <i>Seathwaite.</i>			
	Amounts.		Per cent.		Amounts.		Per cent.		Amounts.		Per cent.	
	Mean	1885	Mean	1885	Mean	1885	Mean	1885	Mean	1885	Mean	1885
	in.	in.			in.	in.			in.	in.		
Jan.	2·26	1·63	8	5	2·01	2·28	7	8	18·75	11·36	14	8
Feb.	1·98	2·51	7	8	1·80	1·52	6	5	11·45	26·05	8	19
Mar. ...	1·48	·83	5	3	1·65	1·62	6	6	9·89	14·86	7	11
April..	1·73	2·01	6	7	1·68	1·84	6	6	4·94	9·45	4	7
May ...	2·15	2·22	7	8	1·93	2·17	7	8	6·98	6·30	5	5
June ..	3·18	3·32	11	11	2·60	2·74	9	10	7·81	6·15	6	5
July ..	3·14	·39	10	1	2·51	1·07	9	4	8·77	11·90	7	9
Aug. ...	2·87	1·81	10	6	2·95	1·64	10	6	11·04	8·36	8	6
Sept...	2·82	2·75	9	9	2·85	2·56	10	9	13·22	18·90	10	14
Oct. ...	3·02	6·51	10	22	2·84	4·70	10	16	16·55	12·79	12	9
Nov. ...	2·71	3·01	9	10	3·09	1·65	11	6	11·82	10·35	9	8
Dec....	2·58	·56	8	2	2·53	1·10	9	4	13·73	7·54	10	6
Year..	29·92	27·55	100	92	28·44	24·89	100	88	134·95	144·01	100	107

WALES.

	(10) XI. GLAMORGAN. <i>Cowbridge.</i>				(11) XI. CARMARTHEN. <i>Carmarthen.</i>				(12) XI. CARNARVON. <i>Llandudno.</i>			
	Amounts.		Per cent.		Amounts.		Per cent.		Amounts.		Per cent.	
	Mean	1885	Mean	1885	Mean	1885	Mean	1885	Mean	1885	Mean	1885
	in.	in.			in.	in.			in.	in.		
Jan. ...	3·94	3·53	10	9	6·31	4·26	12	8	2·96	1·33	9	4
Feb....	2·86	2·45	8	6	4·38	6·36	8	12	2·29	2·31	7	7
Mar. ...	2·32	1·42	6	4	3·39	2·99	6	5	1·88	1·88	6	5
April..	2·42	2·39	6	6	2·89	3·86	5	7	1·88	1·31	6	4
May...	1·67	2·88	4	8	2·54	2·88	4	5	1·62	1·08	5	3
June ..	2·38	2·49	6	7	3·54	3·98	7	7	2·00	·95	6	3
July...	3·68	·70	10	2	3·90	1·97	7	4	2·71	1·57	8	5
Aug. ...	3·96	1·73	11	5	6·03	3·20	11	6	3·19	·91	9	3
Sept...	3·90	6·28	10	16	5·20	7·01	10	13	3·75	2·96	11	9
Oct. ...	4·52	6·15	12	16	6·44	5·72	12	10	4·59	4·66	13	14
Nov....	3·78	4·92	10	13	5·10	4·91	9	9	3·91	2·54	11	7
Dec....	2·69	1·86	7	5	4·79	2·04	9	4	2·85	1·33	9	4
Year..	38·12	36·80	100	97	54·51	49·18	100	90	33·63	22·83	100	68

SCOTLAND.

	(13) XV. ARGYLL. <i>Cantire, Stonefield.</i>				(14) XVI. KINROSS. <i>Loch Leven.</i>				(15) XVII. ABERDEEN. <i>Aberdeen.</i>			
	Amounts.		Per cent.		Amounts.		Per cent.		Amounts.		Per cent.	
	Mean	1885	Mean	1885	Mean	1885	Mean	1885	Mean	1885	Mean	1885
	in.	in.			in.	in.			in.	in.		
Jan....	8·26	7·27	12	10	3·82	2·60	10	7	2·03	1·55	6	5
Feb....	5·75	7·67	8	11	2·96	4·30	8	11	2·38	3·25	8	10
Mar...	5·38	6·07	7	8	2·12	2·90	6	8	2·07	1·44	7	5
April..	3·00	4·07	4	6	2·21	2·30	6	6	2·15	1·68	7	5
May...	3·43	2·98	5	4	2·29	3·90	6	10	1·87	3·53	6	11
June..	4·54	3·00	6	4	2·77	·80	7	2	1·89	1·03	6	3
July...	4·81	3·56	7	5	3·05	1·00	8	3	2·71	1·22	8	4
Aug...	6·16	3·63	9	5	4·08	3·10	11	8	3·52	2·04	11	6
Sept...	6·97	12·65	10	18	3·23	4·90	9	13	3·31	3·80	10	12
Oct....	9·36	6·58	13	9	4·31	1·70	11	4	2·77	2·12	9	7
Nov...	6·66	4·92	9	7	3·55	2·60	9	7	3·82	2·04	12	6
Dec....	7·41	6·89	10	10	3·66	2·10	9	6	3·23	2·09	10	7
Year..	71·73	69·29	100	97	38·05	32·20	100	85	31·75	25·79	100	81

	(16) XVIII. ROSS. <i>Loch Alsh, Inverinate.</i>				(17) XVIII. INVERNESS. <i>Culloden.</i>				(18) XIX. ORKNEY. <i>Pomona, Tankerness.</i>			
	Amounts.		Per cent.		Amounts.		Per cent.		Amounts.		Per cent.	
	Mean	1885	Mean	1885	Mean	1885	Mean	1885	Mean	1885	Mean	1885
	in.	in.			in.	in.			in.	in.		
Jan....	7·30	6·50	10	9	1·77	1·47	7	6	3·25	2·18	10	7
Feb....	4·32	10·40	6	14	1·05	2·93	4	12	2·25	3·10	7	9
Mar...	5·97	6·47	8	9	1·75	1·31	7	5	2·27	3·19	7	10
April..	3·28	3·10	5	4	1·35	·90	5	4	1·75	·95	5	3
May...	4·79	3·90	7	5	1·78	2·96	7	12	1·62	1·75	5	5
June..	5·58	2·92	8	4	2·25	·81	9	3	1·72	1·92	5	6
July...	5·29	2·65	7	4	2·78	·48	11	2	2·47	1·49	8	4
Aug...	5·46	4·70	8	7	3·00	1·89	12	7	2·76	1·04	8	3
Sept...	7·37	3·88	10	5	2·90	3·17	11	12	3·18	3·66	10	11
Oct....	8·95	7·70	12	11	2·29	1·58	9	6	3·72	4·03	11	12
Nov...	6·60	6·35	9	9	2·70	·72	11	3	4·37	1·88	13	6
Dec....	7·46	5·00	10	7	1·84	2·57	7	10	3·59	4·19	11	13
Year..	72·37	63·57	100	88	25·46	20·79	100	82	32·95	29·38	100	89

IRELAND.

	(19) XX. CORK. <i>Blackrock.</i>				(20) XX. WATERFORD. <i>Portlaw, Mayfield.</i>				(21) XXI. DUBLIN. <i>Dublin.</i>			
	Amounts.		Per cent.		Amounts.		Per cent.		Amounts.		Per cent.	
	Mean	1885	Mean	1885	Mean	1885	Mean	1885	Mean	1885	Mean	1885
	in.	in.			in.	in.			in.	in.		
Jan. ...	6·02	4·99	13	11	5·13	4·80	12	12	2·26	1·62	8	6
Feb....	4·59	7·35	10	16	3·74	7·22	9	17	2·16	2·81	7	10
Mar. ...	2·76	3·50	6	7	2·49	4·45	6	11	1·73	1·53	6	5
April..	3·10	4·93	6	10	2·90	4·94	7	12	2·11	2·91	7	10
May ..	2·16	3·29	5	7	2·10	2·67	5	6	1·72	2·53	6	9
June ..	3·55	1·20	7	3	2·58	1·29	6	3	2·20	1·51	8	5
July...	2·84	1·32	6	3	2·55	1·42	6	3	2·42	1·15	9	4
Aug. ...	3·83	4·46	8	9	3·74	5·21	9	13	3·18	3·05	11	11
Sept...	4·15	6·30	9	13	3·85	5·29	9	13	2·41	2·86	9	10
Oct. ...	4·74	2·74	10	6	4·84	4·33	12	10	3·42	3·50	12	12
Nov. ...	4·61	3·76	10	8	3·57	3·01	9	7	2·28	2·40	8	8
Dec....	4·76	1·78	10	4	4·16	1·54	10	4	2·58	·74	9	3
Year ..	47·11	45·62	100	97	41·65	46·17	100	111	28·47	26·61	100	93

	(22) XXII. GALWAY. <i>Ballinasloe.</i>				(23) XXII. SLIGO. <i>Sligo, Mount Shannon.</i>				(24) XXIII. ANTRIM. <i>Belfast.</i>			
	Amounts.		Per cent.		Amounts.		Per cent.		Amounts.		Per cent.	
	Mean	1885	Mean	1885	Mean	1885	Mean	1885	Mean	1885	Mean	1885
	in.	in.			in.	in.			in.	in.		
Jan. ...	4·36	2·73	11	7	4·23	2·40	10	6	3·49	2·63	10	8
Feb....	2·51	3·20	7	8	2·86	3·75	7	9	2·44	3·78	7	11
Mar. ...	2·38	2·07	6	5	2·92	1·66	7	4	1·87	2·21	5	6
April..	2·26	2·35	6	6	2·03	2·38	5	6	1·75	2·27	5	7
May...	2·41	2·09	6	6	2·25	2·72	5	6	2·20	1·84	6	5
June ..	3·19	·73	8	2	3·21	1·14	8	3	2·60	·86	8	2
July...	2·88	2·75	8	7	3·48	4·26	8	10	3·11	2·01	9	6
Aug. ...	4·03	2·38	10	6	4·19	1·28	10	3	3·49	1·89	10	5
Sept...	3·96	5·30	10	14	4·23	5·91	10	14	3·25	4·96	9	14
Oct. ...	4·43	3·63	11	9	5·57	5·43	13	13	4·62	3·77	13	11
Nov. ...	3·00	2·24	8	6	3·63	2·80	8	6	3·01	1·93	9	6
Dec....	3·48	1·62	9	4	3·70	2·15	9	5	3·09	1·42	9	4
Year ..	38·89	31·09	100	80	42·30	35·88	100	85	34·92	29·57	100	85

NOTES UPON THE MONTHLY FALL IN 1885.

JANUARY.

No very marked departures from the average for this month, but on the whole the rainfall was rather below the average—the only noteworthy fact seems to be the deficiency of 6 per cent. (7·39 in.) at Seathwaite.

FEBRUARY.

Rather wetter than usual, but chiefly so in the West of England and of Scotland, and in the S.W. of Ireland. Very wet in the English Lake district, upwards of twenty inches fell at the following stations:—Sprinkling Tarn 24·55, Sty Head Tarn 24·90, the Sty (4 in. gauge) 36·95, (8 in. gauge) 34·50, Seathwaite (4 in. gauge) 26·29, (old 5 in. gauge) 26·05, (5 in. gauge Roy. Met. Soc.) 25·57, (Mr. Marshall's 5 in. gauge) 24·55, Ullscarf 22·00, Castle Lodge 21·25. These amounts though not unprecedented are exceptionally large.

MARCH.

Rainfall very near the average in all parts of the British Isles.

APRIL.

Another month of very nearly average rainfall.

MAY.

Rainfall rather above the average, but not exceptionally so. The excesses were somewhat greater at Eastern, than at other stations.

JUNE.

Generally dry, and exceptionally so in two widely different districts, namely at stations on the East Coast of England and of Scotland, and throughout the Northern half of Ireland. At several of the stations in Roxburghshire the fall was less than half an inch, and it is reported that at Wolfelee no rain fell. I think it most

probable that the small amount which did fall was left to swell the July total, and therefore, have allowed the return to go into the general tables with a ? prefixed.

JULY.

Another dry month, drier than June everywhere except in the North of Ireland. Extremely dry in all parts of England, except the Lake District. A great many stations report as little as .10 in. and under, and the following four report no rain at all :—

SURREY.—Godstone (Tylers Green).

KENT.—Aylesford (Preston Hall).

DORSET.—Cerne Abbas (Melbury).

SOMERSET.—Crewkerne (Bincombe House).

As each of these is surrounded by stations at which rain fell on from one to five days, the evidence in support of the extraordinary fact of an absolutely rainless month does not to me seem overwhelming, and I have therefore prefixed the ? to each entry in the general tables.

AUGUST.

This also was a very dry month. In the S.E. of England, in Wales, and in Scotland it was relatively drier than even July, and yet there is not one record of no rainfall, and there are very few of less than half an inch. This seeming contradiction arises chiefly from the fact that the average for August is higher than that for July, therefore if the rain in 1885 had been identical in the two months, August would have been relatively drier than July, and that is what occurred at some stations, while at others, chiefly in the S.E. of England, the fall in August was actually, as well as relatively, less in August than in July.

JULY AND AUGUST.

Before passing on to September it may be well to mention that there are many stations at which the total for the two months of July and August was less than an inch. These stations were chiefly in Surrey, Kent, Sussex, Hants, Berks, Wilts and Dorset.

SEPTEMBER.

A generally wet month, especially at some Welsh stations and in the West of Scotland.

OCTOBER.

Taken over the whole of the British Isles, this month had only slightly more than the average fall, but there were some parts of

England in which it was enormously in excess (see frontispiece and note the diagrams for Norwich and for Mickleover). The usual total fall in Norfolk being small, the amounts for October, 1885, although about eighteen per cent. above the average, are not extremely large; nevertheless, a monthly rainfall of six or seven inches in a flat district is decidedly unusual. It was, however, in North Derbyshire and South-west Yorkshire that the totals were most unusual. Excluding the Lake District, where, of course, falls of ten inches in October are not remarkable, we find that all the stations with that amount are in a small area of five miles square at the junction of Derbyshire, Cheshire, and Yorkshire, occupied chiefly by the very high ground through which the Woodhead tunnel on the Manchester, Sheffield, and Lincolnshire Railway has been driven. The following are the only stations at which the fall exceeded ten inches, and they are all within an area of five miles from E. to W. and five miles from N. to S.

	Div.	County.	Station.	Fall in October.	
				Amount. in.	Per cent. of Yearly Total.
VII.	Derby	.....	Woodhead Station	11·22	23
VIII.	Cheshire	.....	„ Reservoir	11·12	22
IX.	Yorkshire	.....	Dunford Bridge Station	12·31	24
„	„	.....	„ Res.	10·90	22
„	„	.....	Penistone (Hazlehead)	10·26	21
„	„	.....	Holmbridge(Batley, W. W.)	12·60	20

NOVEMBER.

This was a dry month in all parts, except across the centre of England, from the mouth of the Severn North-eastwards towards the Wash. The deficiency was not however great, except at a few stations in the North-east of Scotland.

DECEMBER.

A dry month, most notably so in the West of England, in Wales and in Ireland. Totals of less than one inch are reported from stations in many parts of the British Isles. In the North-west of Scotland alone, this was a wet month.

ON THE RELATION OF THE TOTAL RAINFALL IN 1885 TO THE AVERAGE 1870-79.

ON the following pages [151] to [154] we give the best information obtainable as to the wetness or dryness of the whole year 1885. We have from no fewer than 161 stations, at each of which the records were absolutely unbroken during the twenty years 1860-79, the corresponding values for 1885. This information is further condensed in the following—

ABSTRACT.

COUNTRIES.	No. of Records.	Mean 1860-69.	Mean. 1870-79.	1885.	Diff. from Average 1870-1879.	
					Amount.	Per cent.
		in.	in.	in.	in.	
England and Wales...	126	34·66	35·61	33·25	2·36	— 6
Scotland	31	38·80	40·82	33·78	7·04	— 12
Ireland	4	37·51	38·54	35·52	3·02	— 9
Mean of all Stations.	161	35·53	36·68	33·41	3·27	— 8

From this we see that 1885 has, on the average of the whole country, been a dry year, but by no means remarkably so.

Examination of the accompanying map will show that there was an area in the Eastern Counties of England in which there was an excess of more than ten per cent., and, on the contrary, that there were very large deficiencies, more than twenty-five per cent., in Northumberland, and throughout all the East, and indeed the greater part, of Scotland.

If now we turn to the details in the following tables we find nearly the same facts. We get excesses in Hertfordshire, Northampton, Bedford, Cambridge, Suffolk, and Norfolk; and in Northumberland we get the startling, but apparently true, deficiency of 38 per cent. at Allenheads, and in Scotland we have thirteen stations with deficiencies of more than 20 per cent., eight with more than 25 per cent. deficiency, and three with more than 30 per cent. deficiency.

The Northumbrian coast and the N.E. of Scotland have, therefore, now had three dry years in succession. If reference be made to the observers' remarks upon pages [111] to [113] their explanation will be found in the above fact.

DIFFERENCE OF TOTAL RAINFALL IN 1885 FROM THE AVERAGE 1870-89.



The round dots indicate a rainfall within 10 per cent. of the average.

The + and — respectively show excess or defect of between 10 and 25 per cent.

The same signs enclosed by a ring indicate a departure from the average of more than 25 per cent.

COMPARISON OF THE RAINFALL OF THE YEAR 1885,
WITH THE AVERAGE OF THE YEARS 1870-79.

ENGLAND & WALES.

DIV.	COUNTY.	STATION.	Average.		Depth in 1885.	Difference from average, 1870-9.	
			1860-9.	1870-9.		Amount.	Per cent.
			in.	in.	in.	in.	
I.	Middlesex ...	London (Camden Square)	25·68	27·24	26·64	·60	— 2
II.	Surrey	Weybridge Heath	25·05	26·18	24·97	1·21	— 5
"	"	Seething Wells	26·55	25·73	21·90	3·83	— 15
"	"	Wimbledon	23·48	25·11	23·48	1·63	— 6
"	"	Kew Observatory	23·28	24·76	26·27	1·51	+ 6
"	Kent	Maidstone (Hunton Ct.)..	26·00	26·06	24·94	1·12	— 4
"	"	Charing (Otterden).....	29·09	31·02	27·49	3·53	— 11
"	"	Greenwich (Royal Obser.)	25·18	25·39	24·00	1·39	— 5
"	West Sussex.	Chichester (Chilgrove) ...	33·22	35·03	33·47	1·56	— 4
"	East Sussex.	Lewes (Glynde Place) ...	33·65	33·75	31·98	1·77	— 5
"	"	Maresfield (Forest Lodge)	31·48	33·37	30·43	2·94	— 9
"	Hampshire ..	Isle of Wight (Osborne).	30·73	29·21	27·36	1·85	— 6
"	"	Petersfield (Liss Place) ...	38·03	36·65	36·94	·29	+ 1
"	Berkshire ...	Newbury (Welford)	28·97	31·92	28·58	3·34	— 10
"	"	Long Wittenham	27·38	27·24	24·71	2·53	— 9
III.	Herts	St. Albans (Gorhambury).	27·85	29·07	33·04	3·97	+ 14
"	"	Hemelhempstead	26·39	28·66	31·56	2·90	+ 10
"	"	Hertford (Bayfordbury) ..	25·01	27·02	27·60	·58	+ 2
"	"	Tring (Cowroast)	27·59	30·62	31·71	1·09	+ 4
"	"	Hitchin	23·92	25·67	28·90	3·23	+ 13
"	"	Royston	23·57	23·74	25·40	1·66	+ 7
"	Buckingham.	High Wycombe	25·71	25·87	25·46	·41	— 2
"	Oxford	Banbury (High Street) ..	26·22	28·51	27·56	·95	— 3
"	Northampton	Northampton (Althorp)..	23·35	26·93	27·34	·41	+ 2
"	"	Wellingborough	24·09	25·72	30·34	4·62	+ 18
"	Bedford	Cardington	22·49	25·13	26·17	1·04	+ 4
"	"	"	21·76	23·69	24·98	1·29	+ 5
"	"	"	20·61	23·11	26·01	2·90	+ 13
IV.	Cambridge...	Ely (Stretham)	23·52	25·51	26·38	·87	+ 3
"	Suffolk	Bury S. Edmund (Westley)	23·68	25·71	26·24	·53	+ 2
"	"	" (Barton)	24·84	26·20	28·16	1·96	+ 7
"	"	" (Culford)	24·29	26·42	27·79	1·37	+ 5
"	"	Carlton Colville	23·98	27·31	28·85	1·54	+ 6
"	Norfolk	Norwich (Honinghm Hall)	24·04	27·44	28·53	1·09	+ 4
"	"	" (Costessey)	23·88	26·21	27·02	·81	+ 3
"	"	Holkham	19·56	23·26	22·85	·41	— 2
V.	Wiltshire ...	Hunstanton	29·28	30·53	27·50	3·03	— 10
		Salisbury Plain (Chitterne)					

ENGLAND & WALES.—Continued.

DIV.	COUNTY.	STATION.	Average.		Depth in 1885.	Difference from average, 1870-9.	
			1860-9.	1870-9.		Amount.	Per cent.
			in.	in.	in.	in.	
V.	Wiltshire ...	Swindon (Pen Hill)	28·59	29·64	27·74	1·90	— 6
"	" ...	Thames Hd. [Cirencester]	28·29	33·06	29·86	3·20	— 10
"	Dorset	Cerne Abbas (Melbury)...	39·99	40·92	39·73?	1·19	— 3
"	Devon	Tavistock Public Library	43·36	52·52	45·44	7·08	— 13
"	" ...	Exeter (D. & E. Inst.) ...	31·76	34·69	35·38	·69	+ 2
"	" ...	Barnstaple	39·91	42·43	37·71	4·72	— 11
"	Cornwall ...	Penzance (South Parade).	41·51	46·80	43·06	3·74	— 8
"	" ...	Bodmin (Castle St.) 2½ ft.	47·71	52·01	50·55	1·46	— 3
"	Somerset ...	Glastonbury (Street) 1 ft.	30·01	33·14	29·07	4·07	— 12
"	" ...	Sherborne Reservoir	42·10	47·26	39·00	8·26	— 17
VI.	Gloucester ...	Clifton	34·09	36·36	34·79	1·57	— 4
"	Hereford ...	Ross (The Graig)	28·21	31·75	28·24	3·51	— 11
"	Shropshire...	Oswestry (Hengoed)	35·65	39·55	35·33	4·22	— 11
"	Worcester ...	Northwick Park	28·02	32·34	29·27	3·07	— 10
"	" ...	Tenbury (Orleton) ...	30·90	33·26	31·12	2·14	— 6
VII.	Leicester ...	Thornton Reservoir	25·61	27·59	27·53	·06	— 0
"	" ...	Loughborough (Cedar Cot)	27·67	29·54	30·18	·64	+ 2
"	" ...	Belvoir Castle	24·48	25·75	26·31	·56	+ 2
"	Lincoln	Spalding (Pode Hole)	25·34	24·82	23·88	·94	— 4
"	" ...	Boston	22·09	23·53	23·42	·11	— 0
"	" ...	Lincoln M.S.&L.R.	20·87	23·70	25·07	1·37	+ 6
"	" ...	Gainsborough M.S.&L.R.	21·66	22·35	20·14	2·21	— 10
"	" ...	Stockwith M.S.&L.R.	21·35	23·20	24·54	1·34	+ 6
"	" ...	Brigg M.S.&L.R.	24·12	23·31	21·22	2·09	— 9
"	" ...	Grimsby M.S.&L.R.	21·39	23·04	25·30	2·26	+ 10
"	" ...	Barnetby M.S.&L.R.	22·16	25·17	26·24	1·07	+ 4
"	" ...	Appleby Vicarage	24·10	26·64	24·40	2·24	— 8
"	" ...	New Holland M.S.&L.R.	22·66	25·29	24·11	1·18	— 5
"	Nottingham.	Worksop M.S.&L.R.	22·47	25·63	25·56	·07	— 0
"	" ...	Retford M.S.&L.R.	22·74	23·04	23·83	·79	+ 3
"	Derby	Bretby [Burton]	27·41	30·97	29·67	1·30	— 4
"	" ...	Chesterfield M.S.&L.R.	26·93	30·54	27·04	3·50	— 11
"	" ...	Combs Moss M.S.&L.R.	49·62	45·71	37·25	8·46	— 19
"	" ...	" Reservoir M.S.&L.R.	50·01	45·67	36·65	9·02	— 20
"	" ...	Chapel-en-le-Frith MS&LR	41·95	42·56	38·81	3·75	— 9
"	" ...	Killamarsh M.S.&L.R.	24·59	26·79	26·93	·14	+ 1
"	" ...	Woodhead Station MS&LR	52·19	49·87	49·31	·56	— 1
VIII.	Cheshire	Bosley Reservoir MS&LR	32·04	34·10	28·98	5·12	— 15
"	" ...	" Minns M.S.&L.R.	32·85	33·90	33·10	·80	— 2
"	" ...	Bollington (Spond's Hill)	37·46	35·52	35·87	·35	+ 1
"	" ...	Whaley M.S.&L.R.	43·89	43·38	41·39	1·99	— 5
"	" ...	Marple Top Lock M.S.&L.R.	35·25	35·94	34·23	1·71	— 5
"	" ...	" Aqueduct MS&LR	34·81	33·73	29·76	3·97	— 12
"	" ...	Godley Reservoir	33·98	34·85	29·98	4·87	— 14
"	" ...	Newton M.S.&L.R.	31·63	29·30	27·26	2·04	— 7
"	" ...	Mottram (Matley's Field)	37·73	36·32	33·82	2·50	— 7
"	" ...	Arnfield Reservoir	37·23	41·38	36·81	4·57	— 11
"	" ...	Rhodes Wood Reservoir..	46·32	44·74	40·85	3·89	— 9
"	" ...	Woodhead Reservoir	51·83	49·74	51·33	1·59	+ 3

ENGLAND & WALES.—Continued.

DIV.	COUNTY.	STATION.	Average.		Depth in 1885.	Difference from average, 1870-9.	
			1860-9.	1870-9.		Amount.	Per cent.
VIII.	Lancashire...	Denton Reservoir	in. 32·97	in. 33·78	in. 28·01	in. 5·77	— 17
		Gorton Reservoir	33·71	34·14	27·79	6·35	— 19
		Manchester (Ardwick) ..	32·60	36·72	31·61	5·11	— 14
		„ (Piccadilly)MS&LR	36·78	34·72	30·37	4·35	— 13
		Fairfield	40·90	37·66	32·53	5·13	— 14
		Ashton WaterhousesMSLR	36·13	39·24	32·33	6·91	— 18
		Bolton (The Folds).....	48·98	47·23	42·28	4·95	— 10
		„ (Heaton)1 ft. 3 in.	44·21	45·11	38·60	6·51	— 14
		Ormskirk (Rufford)	35·00	36·65	28·59	8·06	— 22
		Bolton (Belmont)	56·61	59·91	56·80	3·11	— 5
		Heywood (Nayden Dane).	44·13	44·67	39·72	4·95	— 11
		Blackburn (Guide Res.)..	41·30	44·49	32·74	11·75	— 26
		Blackpool (South Shore).	32·99	34·43	29·22	5·21	— 15
		Stonyhurst College... 1 ft.	48·56	48·74	41·06	7·68	— 16
		Clitheroe (DownhamHall)	44·79	43·40	32·15	11·25	— 26
		Cartmel (Holker)	45·63	45·13	38·63	6·50	— 14
		Monk Coniston Park ...	85·55	74·86	71·70	3·16	— 4
IX.	York, W.R...	Sheffield (Redmires)	39·68	42·80	43·75	·95	+ 2
		„ (Broomhall Pk.)	31·28	32·67	30·76	1·91	— 6
		Dunford Bridge Station..	56·18	52·51	50·23	2·28	— 4
		Penistone.....	30·57	34·37	31·80	2·57	— 7
		Leeds (Leventhorpe Hall)	23·26	24·91	19·02	5·89	— 24
		Halifax (Midgely Moor) ..	50·00	48·07	44·80	3·27	— 7
		„ (Warley)	46·33	45·27	46·26	·99	+ 2
		Leeds (Holbeck)	22·85	25·02	21·02	4·00	— 16
		Arncliffe	60·07	60·95	52·80	8·15	— 13
		„ E.R. .. Hull (Beverley Road) ...	25·02	27·30	26·44	·86	— 3
		„ N.R... Malton.....	27·46	28·44	24·89	3·55	— 12
X.	North'mblnd	Allenheads ...	51·16	48·49	29·99	18·50	— 38
		N. Shields (Rosella Place)	26·06	28·02	26·07	1·95	— 7
		Whittle Dean	25·42	27·75	22·99	4·76	— 17
		Ilderton (Lilburn Tower).	28·66	31·33	23·96	7·37	— 24
	Cumberland.	Seathwaite ...	154·05	134·95	144·01	9·06	+ 7
		Ullswater (Hallsteads) ...	58·13	55·31	48·00	7·31	— 13
		Keswick Post Office 6 ft.	62·40	59·14	61·51	2·37	+ 4
		Bassenthwaite(Mirehouse)	53·76	50·20	42·87	7·33	— 15
	Westmorelnd	Cockermouth(Whin.Hall)	57·37	52·15	53·09	·94	+ 2
		Kendal.....	53·32	51·78	45·83	5·95	— 11
XI.	Glamorgan ..	Cardiff (Ely)	42·02	46·35	42·79	3·56	— 8
	Carnarvon...	Llandudno	31·00	33·63	22·83	10·80	— 32

SCOTLAND.

DIV.	COUNTY.	STATION.	Average.		Depth in 1885.	Difference from average, 1870-9.	
			1860-9.	1870-9.		Amount.	Per cent.
			in.	in.	in.	in.	
XII.	Kircudbright	Cargen [Dumfries]	44·37	46·65	40·93	5·72	— 12
„	Dumfries ...	Dumfries (Crichton Inst.)	39·00	41·84	38·54	3·30	— 8
„	Roxburgh ...	Kelso (Springwood Park)	24·66	27·90	19·22	8·68	— 31
XIII.	Selkirk	Bowhill	33·03	35·21	26·66	8·55	— 24
„	Peebles	North Esk Reservoir ..	38·01	38·66	27·85	10·81	— 28
„	Haddington.	East Linton	23·77	29·36	20·25	9·11	— 31
„	Edinburgh ..	Glencorse	37·52	40·52	33·70	6·82	— 17
„	„ ..	Harlaw ..	37·64	38·04	27·70	10·34	— 27
XIV.	Lanark	Hamilton (Bothwell Cas)	28·89	31·72	22·57	9·15	— 29
„	Ayr	Kilmarnock (N. Craig) ..	43·29	40·16	31·76	8·40	— 21
„	Renfrew	Ryat Lynn	47·80	50·07	40·90	9·17	— 18
„	„ ..	Waulk Glen	49·85	48·41	40·40	8·01	— 17
XV.	Stirling	Stirling (Kerse)	32·96	33·47	22·00	11·47	— 34
„	Argyll	Lochgilphead (Poltalloch)	54·25	56·35	46·56	9·79	— 17
„	„	Stonefield	69·62	71·73	69·29	2·44	— 3
XVI.	Kinross	Loch Leven	36·22	38·05	32·20	5·85	— 15
„	Perth	Aberfoyle	61·82	59·39	53·70	5·69	— 10
„	„ ..	Dunblane (Kippenross) ..	36·16	36·00	27·00	9·00	— 25
„	„ ..	Lanrick Castle	48·48	47·46	38·30	9·16	— 19
„	„ ..	Bridge of Turk	61·89	72·32	69·60	2·72	— 4
„	„ ..	Auchterarder (Colquhalzie)	40·34	40·12	32·85	7·27	— 18
„	Forfar	Craigton	34·88	41·96	30·61	11·35	— 27
„	„ ..	Hill Head	35·19	41·82	30·68	11·14	— 27
„	„ ..	Arbroath	29·05	30·49	23·17	7·32	— 24
XVII.	Kincardine ..	The Burn [Breachin]	34·91	37·85	30·30	7·55	— 20
„	Aberdeen ...	Braemar	33·40	38·14	39·25	1·11	+ 3
„	„ ..	Aberdeen (Rose Street) ..	29·43	31·75	25·79	5·96	— 19
„	Banff	Gordon Castle	29·19	32·26	25·49	6·77	— 21
XVIII.	Inverness ..	Culloden	27·08	25·46	20·79	4·67	— 18
XIX.	Sutherland ..	Golspie (Dunrobin Cas.)M	27·69	31·94	28·70	3·24	— 10
„	Orkney	Shapinsay (Balfour Cas.)	32·41	30·41	30·60	·19	+ 1

IRELAND.

XX.	Waterford ...	Portlaw	44·44	41·65	46·17	4·52	+ 11
XXI.	Kilkenny ...	Inistioge (Woodstock) ...	39·38	46·64	40·72	5·92	— 13
XXIII.	Armagh	Armagh Observatory..1ft.	32·01	30·95	25·63	5·32	— 17
„	Antrim	Belfast (Queen's Coll.)...	34·22	34·92	29·57	5·35	— 15

EXTREMES OF RAINFALL IN 1885.

Largest Rainfall, at The Styre, Cumberland.....	197·92 in.
Least Rainfall, at Leith	16·73 „

ENGLAND.

GREATEST.		LEAST.	
Div.	in.	Div.	in.
X. The Styre	197·92	II. Reculver (Brook)	17·25
„ Seathwaite	145·31	„ Birchington (Thor)	18·06
„ Styhead Tarn ..	129·40	III. Chatteris (Horseway Lock).....	18·78
„ Ullscarf	116·10	IX. Redcar (High Cliffe, Coatham)	19·08
„ Rosthwaite (Castle Lodge)...	108·75	II. Faversham (Oare).....	19·35
„ Wythburn Vicarage.....	103·80	„ Herne Bay	19·53

WALES.

GREATEST.		LEAST.	
Div.	in.	Div.	in.
XI. Pen-y-gwryd	111·50	XI. Rhyl (Sedgley House).....	21·97
„ Llanbedr-y-Cennin(Llyndulyn)	95·70	„ Llandudno (Warwick House)	22·83
„ Neath (Glyncorwg)	93·62	„ St. Asaph (Nantllys)	23·78
„ Treherbert	92·64	„ Prestatyn (Nant).....	24·16
„ Cardiff W. W. (CwmTaffFawr, 6)	84·19	„ Rosset (Trevalyn Hall)	24·61
„ „ „ („ „ „ 1)	79·09	„ Holywell (Bagillt)	24·97

SCOTLAND.

GREATEST.		LEAST.	
Div.	in.	Div.	in.
XVIII. Loch Shiel (Glenaladale) ...	111·95	XIII. Leith	16·73
„ Glenquoich	111·05	„ Edinburgh (Charlotte Sq.)..	17·95
XV. Loch Eil (Conaglen)	91·23	XVIII. Tain (Springfield)	19·13
„ Ballachulish ..	88·37	XII. Kelso (Springwood Park)...	19·22
„ Ben Lomond.....	85·60	XVIII. Dingwall (H. R. S.)	19·43
„ Strontian (Laudale)..	84·39	„ Inverness (H. R. S.)	19·46

IRELAND.

GREATEST.		LEAST.	
Div.	in.	Div.	in.
XX. Killarney (Gap of Dunloe)...	89·20	XXI. Glasnevin (Botanic Gardens)	20·82
„ Mangerton	88·10	XXIII. Banbridge (Katesbridge) ...	22·85
XXII. Clifden (Kylemore)	78·84	XXI. Dublin (Phoenix Park) ...	23·51
XX. Dunmanway (Coolkelure) ...	70·42	„ Dundalk (Farndreg)	23·58
„ Kenmare (Derreen)	68·95	XXII. Shannon Grove [Banagher]...	24·60
„ „ (Inishfea)	59·52	XXIII. Belfast (Divis Mountain) ...	25·00

GENERAL TABLES
OF
TOTAL RAINFALL IN 1885,
AT UPWARDS OF
2000 STATIONS
IN THE
BRITISH ISLES.

EXPLANATION OF THE ARRANGEMENTS OF THE FOLLOWING GENERAL TABLES.

The divisions are the same as those adopted by the Registrars General of England and Scotland. The boundaries of these divisions are shown on the map facing p. 170 of *British Rainfall*, 1876.

The counties follow the same order as in the reports of the before-mentioned officers ; but an alphabetical list of the counties is given, whereby the page or pages on which all returns from each county will be found can be at once ascertained.

The stations in each county are arranged nearly in the order of their latitude from South to North.

To facilitate finding the fall in any part of the country, the first name is almost always that of a place given in *Bradshaw*, the *British Postal Guide*, or the *Clergy Directory* ; the second name is generally added to fix accurately the site of Observation ; but, in a very few instances, this second name is in [] instead of () ; it then shows that the nearest town is in an adjoining county. For instance, “Lowestoft (Gisleham)” means Gisleham, near Lowestoft, both being in one county, but “Geldeston [Beccles]” means Geldeston, Norfolk, near Beccles, in another county—Suffolk.

The contents of the columns are sufficiently explained by the headings, except that in the column headed “diameter,” figures will occasionally be noticed of a different type from the rest of the tables, these figures indicate the length of the sides of rectangular mouthed gauges. These measurements are all in inches.

The letter D denotes that a copy of the daily record has been received, that it is perfect throughout the year, and that the printed amount is the correct total of these daily entries. The letter M indicates a monthly record, *i.e.*, that the observation is made only on the first of each month.

An asterisk * denotes that the gauge was tested before erection, and a † that it has been visited and examined since. A note of interrogation (?) implies doubt, not necessarily error. ... indicates the absence of information.

In the column of altitudes several symbols are used, their meaning is as follows :—A, that a series of levels has been taken from the gauge to an Ordnance bench mark ; T, that the height is estimated or ascertained approximately from the same source ; L, that levels have been taken from the gauge to the sea, or to some datum other than Ordnance mean sea level ; B, that the altitude has been taken by the barometer ; and ?, that the height is uncertain.

COUNTY INDEX TO GENERAL TABLES.

E N G L A N D.

Bedford	171	Hereford	181	Oxford.....	169
Berks	168	Hertford	168	Rutland	185
Buckingham	169	Huntingdon	171	Shropshire	182
Cambridge	171	Kent	163	Somerset.....	179
Cheshire	188	Lancashire	189	Stafford	182
Cornwall.....	178	Leicester.....	184	Suffolk	173
Cumberland	198	Lincoln	185	Surrey	161
Derby	187	Middlesex	160	Sussex	165
Devon	177	Monmouth	201	Warwick.....	184
Dorset	176	Norfolk	174	Westmoreland	200
Durham	197	Northampton	170	Wiltshire	175
Essex	172	Northumberland.....	197	Worcester	183
Gloucester	180	Nottingham	186	Yorkshire	192
Hampshire	166				

W A L E S.

Anglesea	204	Carnarvon	204	Merioneth ..	203
Brecknock	202	Denbigh	203	Montgomery	202
Cardigan	202	Flint	203	Pembroke	202
Carmarthen	201	Glamorgan	201	Radnor	202

I S L A N D S.

Isles of Scilly	204	Guernsey	204	Isle of Man.....	204
Alderney .....	...	Jersey	204	Sark .....	...

S C O T L A N D.

Aberdeen.....	211	Elgin (or Moray) ..	212	Orkney	214
Argyll	209	Fife	210	Peebles	206
Ayr	207	Forfar	211	Perth	210
Banff	211	Haddington	206	Renfrew	208
Berwick	206	Inverness.....	213	Ross.....	212
Bute	209	Kincardine	211	Roxburgh	205
Caithness	213	Kinross	210	Selkirk	206
Clackmannan	210	Kirkcudbright	205	Shetland	214
Cromarty.....	212	Lanark	207	Stirling	208
Dumbarton.....	208	Linlithgow ..	207	Sutherland	213
Dumfries.....	205	Nairn	212	Wigton	205
Edinburgh	206				

I R E L A N D.

Antrim	218	Kerry	215	Monaghan	218
Armagh	218	Kildare	216	Queen's County ..	216
Carlow.....	216	Kilkenny	216	Roscommon .....	...
Cavan.....	218	King's County	216	Sligo	217
Clare ..	216	Leitrim	218	Tipperary	215
Cork	215	Limerick.....	215	Tyrone.....	219
Donegal	219	Londonderry	219	Waterford	215
Down	218	Longford.....	217	Westmeath.....	217
Dublin	216	Louth	217	Wexford	216
Fermanagh	218	Mayo ..	217	Wicklow	216
Galway	217	Meath	217		

ENGLAND AND WALES.

DIVISION I.—MIDDLESEX.

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1885	Days on which ·01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level		
			ft. in.	feet.	inches.	
MIDDLESEX.						
Sunbury (Hanworth Road)	W. B. Bryan, Esq., C.E.	8	1 0	50	23·87	148
Teddington (Gomer House)	R. D. Blackmore, Esq..	5	0 10	26 A	25·70	148
Staines	J. Gundry, Esq.....	5	1 0	51 T	26·76	156
„ (Knowle Green)	Miss Pellatt	5	5 2	...	27·39	145
Hanworth (Riversdale)	G. Anderson, Esq.....	5	1 0	67 T	24·04	...
Isleworth (Spring Grove)	R. W. Peake, Esq. ...	5	1 0	69 T	26·13	121
„ (Dunster Lodge)	Miss Ormerod.....	5	1 0	65 A	25·43	178
„ („ „) ... M	„ „ „	5	1 0	65 A	25·77	...
Gunnersbury Station	E. Mann, Esq.	5	0 11	35	25·49	150
Ealing (Local Board Office)	C. Jones, Esq., C.E. .	5	27 0	110 T	23·08	137
„ (Ashburne).....	Genl. Battersby	5	1 0	...	26·04	141
Westminster (Spring Grdns), S.W.	Sir J. W. Bazalgette, C.E.	8	6 0	35 A	26·52	142
„ { „ „ }	„ „ „	12	65 11	95 A	24·40	142
„ { „ „ }	„ „ „	8	66 4	95 A	21·75	142
Kensington (Holland House) ...	Mr. C. Dixon	5	6 6	68 A	24·53	128
„ (Addison Gardens)...	G. H. M. Whish, Esq..	5	1 1	23 T	25·98	162
„ (Campden Hill, W.)	T. Hack, Esq., C.E. ...	8	4 10	130 A	23·97	147
Kensal Green (Gas Works)	E. Mann, Esq.	5	32 0	132?	21·07	133
London (Lansdowne Cres. W.)...	G. T. Gwilliam, Esq...	5	0 9	79 T	25·55	172
„ (Guildhall), E.C.	Col. Haywood, C.E. ...	8	2 6	49 T	24·70	137
„ { „ „ }	„ „ „	8	51 0	98 T	23·89	137
„ (Old Street), E.C.	The Royal Meteor. Soc.	5	1 0	70 T	28·06	184
Perivale (Sewage Farm)	C. Jones, Esq., C.E. ...	5	1 0	56 T	26·01	152
London (Regent's Pk. R. Bot. Soc.)	W. Sowerby, Esq.....	8	1 0	126 A	27·40	163
„ (Camden Square), N.W. . .	G. J. Symons, Esq. F.R.S	8	0 8	111 A	26·64	165
„ („ „)	M „ „ „	5	1 0	111 A	26·24	...

DIVISION II.—SOUTH EASTERN COUNTIES.

D		Haslemere	J. W. Penfold, Esq.	8	4	0	481	36-82	182
		(Grayswood Hill)	B. E. C. Chambers, Esq.	5	1	0	580	36-04	...
		Godalming (Dunsfold)	Mr. W. Underwood ...	5	2	6	166	27-22	...
		Haslemere (Weycombe)	G. B. Buckton, Esq. FRS.	5	4	0	583	35-83	...
		Godalming (Hascombe)	E. S. Rowcliffe, Esq.	10	1	6	220	28-35	...
		Ewhurst (Heathside)	J. Sparkes, Esq.	5	0	9	600	33-75	161
		Godalming (Witley)	Miss F. I. Foster	5	1	0	350	31-18	152
		Dorking (Holmbury)	Mr. Bayman	5	1	0	553	34-55	174
		(Abinger Hall)	Sir T. H. Farrer, Bt.	8	2	0	320	32-22	153
	†	(Holmwood)	A. Sconce, Esq.	5	1	2	320	31-19	106
		(Fir Tor)	F. Taylor, Esq.	5	0	10	280	33-12	...
		(South Street)	H. Fielder, Esq.	34-50	...
		Betchworth (Brockham Vic.) ..	Rev. A. Cheales	5	1	0	158	31-43	153
		Guildford (Guildown)	Miss J. P. Hadden	5	0	11	220	26-25	165
		(")	J. Rand Capron, Esq.	5	1	1	249	25-92	157
		Farnham (The Bourne Vicarage)	Rev. T. W. Sidebotham	5	1	0	308	27-48	165
		Reigate (Woodhatch Lodge) ...	T. B. Haywood, Esq.	5	1	0	270	29-85	...

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1885	Days on which 101 or more fell
		Diameter	Height Above Ground	Height Above Sea Level		
			ft. in.	feet.	inches.	
SURREY—(con.)						
d Reigate (Ringley Mead)	R. L. Hesketh, Esq.	5	1 1	345 T	30-35	162
Dorking (The Denbies)	Mr. J. Beasley	5	1 0	610 T	32-79	...
+Redhill (Oxford Road)	W. H. Tyndall, Esq....	8	1 0	300 A	30-33	180
Reigate (Dovers Lodge)	R. W. Clutton, Esq....	5	1 0	192	29-19	135
D " (Holmfels)	Miss Baker	5	1 0	264 T	29-81	173
" (Springfield).....	T. P. Newman, Esq....	5	1 0	300 A	31-41	...
D " (Castle Grounds)	Mr. G. Crutchfield.....	5	1 0	325 A	29-45	163
D " (Doods)	G. E. Pym, Esq.	5	1 6	365 T	29-34	173
+ " (Wray Park)	A. Rosling, Esq.....	5	1 0	330 T	33-01	160
D " (Nutwood)	H. E. Gurney, Esq. ...	5	1 4	440 T	29-25	155
D Nutfield Priory	J. Fielden, Esq.....	8	1 2	468 A	27-09	171
D Reigate Hill (Lovelands).....	R. Binns, Esq.	5	0 9	600 ?	32-41	209
D " "	BaldwinLatham EsqCE	5	1 0	687 A	30-47	160
Godstone (Tyler's Green)	" " "	5	1 0	366 A	?25-71	...
Guildford (Wern)	Major Mathew	5	4 0	170	25-36	126
D Titsey [Westerham]	BaldwinLatham EsqCE	5	1 0	448 A	30-72	198
D " (Botley Hill)	" " "	5	1 0	870 A	36-03	176
D " (" " Farm)	" " "	5	1 0	864 A	29-32	143
D Chipstead (Parson's Green)	" " "	5	1 0	506 A	31-71	140
Caterham Asylum	G. S. Elliot, Esq., M.D.	5	1 0	610	30-16	...
D " Valley (Birchwood House)	C. F. Rutley, Esq.....	5	1 0	471 A	29-00	141
D Pirbright Vicarage	Rev. F. Owston	5	1 0	151 A	25-68	195
D+Chelsham (Henley)	BaldwinLatham EsqCE	5	1 0	607 A	33-28	186
D Kenley	" " "	5	1 0	501 A	29-59	133
Woking (Horsell Vic.)	Rev. J. Back	5	1 0	141 A	21-28	156
D Cobham (Leigh Hill House) ...	J. Macaulay, Esq.....	5	2 4	...	22-42	154
D Caterham Junction (Tudor Cot.)	BaldwinLatham EsqCE	5	1 0	216 A	29-44	129
+Weybridge Heath (Bartropp's).M	Mrs. Harrison	8	0 6	150 A	24-97	...
D " (Oakfield)	H. Yool, Esq.	5	1 0	107 A	24-38	171
" (Church Street) ...M	" " "	5	1 0	55 A	24-53	...
Walton-on-Thames (Hershams)..	G. Dines, Esq.	8	4 0	55 A	23-66	...
Addington	BaldwinLathamEsqCE	5	1 0	268 A	27-94	...
v+Wallington (Harcourt Road) ...	F. C. Bayard, Esq. ...	5	4 1	137 A	25-49	161
+Sutton (Mulgrave Road)	W. Goode, Esq.....	5	5 6	230 A	26-90	155
D Croydon (Waddon House)	P. Crowley, Esq.	5	1 0	156 T	25-45	175
D " (Coombe Lane)	BaldwinLatham EsqCE	5	1 0	213 A	27-15	171
D " (Katharine Street)	G. Corden, Esq.....	5	1 0	195	25-07	156
D+ " (Nantwich House)	BaldwinLatham EsqCE	8	4 0	259 A	26-17	159
D " (" " ")	" " "	8	1 0	253 A	26-62	163
D " (Brimstone Sew. Works)	" " "	5	1 0	130 A	24-99	149
D+ " (Addiscombe)	E. Mawley, Esq.	8	0 9	202 A	26-06	152
D+Beddington	S. Rostron, Esq.....	5	1 0	102 T	24-18	161
D Chertsey (Long Cross)	C. H. Berners, Esq. ...	8	1 9	168 T	25-78	147
" (Burley Orchard) . . .	W. Herring, Esq.	5	1 0	47 T	?25-05	...
Surbiton (Seething Wells)	G. Lott, Esq.	10	0 6	25	21-90	174
D East Molesey (Palace Road).....	Mrs. Jenkyns.....	8	6 5	37	23-08	154
South Norwood (Cumberlow) ...	W. F. Stanley, Esq. ...	8	1 0	190 T	24-72	160
" " (" " ") ...	" " "	8	1 0	175 A	26-08	160

DIVISION II.—SOUTH EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.	Days on which -01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level	1885	
			ft. in.	feet.	inches.	
SURREY—(con.)						
D Wimbledon.....	T. Devas, Esq.	12	3 0	157 T	23·48	168
D „ (Sewage Works)....	Baldwin Latham Esq CE	5	1 0	58 A	21·57	137
D† West Norwood	W. Marriott, Esq.	8	1 0	184 T	25·29	172
D Border Lodge [Forest Hill]	J. Porter, Esq.	8	0 11	260 T	26·16	156
D Virginia Water (Northlands)	M. Ashby, Esq.	5	1 0	199 T	27·13	156
Egham (Cooper's Hill)	The Meteor. Council ...	8	1 1	280	26·18	168
D Richmond (Ormond Lodge)	J. F. Billett, Esq.	5	0 9	51	26·68	164
D Kew Observatory	The Kew Committee ...	11	1 9	19 A	26·27	167
Brixton (Acre Lane)	The Meteor. Council ...	8	1 0	77 T	24·45	...
D Battersea Creek	Sir J. W. Bazalgette, CE	8	27 2	41 A	24·38	135
D Vauxhall Cross	„ „ „ „	8	30 9	48 A	22·11	142
KENT.						
Dungeness	The Meteor. Council ...	...	...	...	25 68	...
D Hawkhurst (Sandhurst Rectory)	Rev. G. Ridout	5	1 3	208 A	28·19	140
D Dymchurch (New Hall)	H. D. Good, Esq., C.E.	8	1 0	12 A	26·38	150
Tenterden (Summerhill)	Rev. A. Wilkin	12	1 0	149 A	24·63	111
Benenden (East End)	J. Ellis Mace, Esq.	8	1 5	193 A	27·53	...
„	Snowdon „ „ „	5	1 0	150 T	26·09	...
D Tenterden	„ „ „	8	1 5	190 A	27·49	179
„	Snowdon „ „ „	8	1 5	190 A	26·68	...
„ (Ashbourne)	A. Pinyon, Esq.	5	2 8	45 T	27·04	...
D† Hythe	H. B. Mackeson, Esq. ...	8	0 6	12 T	25·88	166
„ (Hillhurst Farm)	G. F. Deedes, Esq. ...	5	1 10	...	30·22	154
Cranbrook (Swattenden)	R. Appach, Esq.	8	1 8	350 T	27·52	154
† „ (Hartley)	G. Pile, Esq.	5	4 0	405 T	30·09	173
Hythe (Paddlesworth)	Mr. R. Dixon	8	1 0	608 A	36·51	...
D† Dover (Pencester Street)	H. J. Poulter, Esq. ...	5	1 6	32	25·83	168
D „ (Kearsney Abbey)	Mr. C. Maxted	5	0 10	94 A	31·70	166
D Acrise	G. C. Woollett, Esq. ...	8	1 0	504 T	34·51	204
„ Park.....	F. A. Mackinnon, Esq.	8	0 6	485	31·27	...
Tunbridge Wells (Blackhurst)...	The Roy. Meteor. Society	5	1 0	500	29·14	170
D „ „ (Camden Park)	J. Weston, Esq.	5	0 9	424 A	30·03	184
D Ashford (Bethersden)	W. H. Mold, Esq.	5	3 0	112 A	26·07	158
D „ (Beavor Green)	T. Nickalls, Esq.	5	1 0	155 T	27·75	185
Tunbridge Wells (Etherton Hill)	E. W. Winton, Esq. ...	5	1 5	276 A	26·35	145
D „ „ (Pembury) ...	W. Brentnall, Esq. C.E.	8	1 8	181 A	27·34	153
D Tunbridge (St. Mary's).....	W. C. Punnett, Esq. ...	5	1 6	96 A	26·98	155
„ { „ „ } Snowdon	„ „ „	5	1 0	96 A	26·48	155
„ { „ „ } M	„ „ „	8	4 0	98 A	26·91	...
Ashford (Eastwell Rectory)	Rev. J. E. Gwynne	5	0 11	270 T	27·63	...
D „ (Westwell)	Rev. H. H. D'Ombra	5	1 0	293 A	26·68	142
Edenbridge (Falconhurst).....	J. G. Talbot, Esq., M.P.	5	1 0	300	28·53	152
D Lower Walmer	Mr. G. L. Hall	5	1 4	20	24·40	147
D† Maidstone (Hunton Court)	Mr. P. Goddard	8	0 6	80 T	24·94	149
Deal (Northbourne)	The late H J Hannam Esq	5	1 3	60	24·95	...
D Maidstone (Lower Tovil)	L. Green, Esq.	5	1 0	30	24·67	159
„ (Mote Park Gardens).....	.....	10	3 6	95 P	25·72	163

DIVISION II.—SOUTH EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain 1885	Days on which 61 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level		
			ft. in.	feet.	inches.	
KENT—(con.)						
Maidstone	C. A. Case, Esq.....	5	1 0	170 ?	26·18	172
" (Hospital).....	M. A. Adams, Esq. ...	5	...	200	24·65	140
" (Debtling)	R. Cooke, Esq. ....	...	...	...	24·90	161
Charing (Otterden)	Rev. W. A. Paxton ...	5	1 0	507 ?	27·49	112
†Sandwich (Walton House, Eastry)	Colonel Rae	5	2 10	55 †	21·51	...
Sheldwich	Rev. B. S. Malden.....	5	1 0	250 †	27·59	159
d†Selling (Harefield).....	E. Neame, Esq.	5	2 6	217 †	26·60	180
d Canterbury (Burgate Street) ...	B. Rigden, Esq.....	5	9 6	58 ?	24·87	137
" (Harbledown)	Miss Metcalfe.....	5	1 6	165	23·87	147
†Seven Oaks (River Hill)	J. T. Rogers, Esq.....	8	4 0	535 ?	26·65	116
d " (Clare Bank)	J. M. Clabon, Esq....	5	4 0	540 †	29·51	162
d† " (Riverhead Vic.) ...	Rev. J. M. B. Murdoch	5	0 6	300 †	28·65	148
d Westerham (Betsom's Hill)	Baldwin Latham Esq CE	5	1 0	811 ?	32·36	177
Aylesford (Preston Hall)	Mr. A. Waterman... ..	8	1 0	80 ?	29·62	...
d Sittingbourne (Sharsted Court).	Faunce de Laune, Esq.	5	1 0	276	26·41	153
d Bicknor Rectory	Rev. W. G. Waterman.	5	1 0	560 ?	25·51	154
d Wrotham (The Elms)	W. H. Cooper, Esq. ...	5	1 0	418 ?	27·20	165
Ospringe (Lorenden)	W. C. Stunt, Esq.....	5	1 2	180 ?	24·86	138
d Sittingbourne (Rodmersham) ...	R. M. Mercer, Esq.	5	1 0	140 ?	23·53	162
Canterbury (Old Tree, Hoath)... ..	G. Rammell, Esq.	8	2 0	113 ?	20·48	102
Faversham (Oare)	Rev. H. F. Woolrych..	5	1 3	17 ?	19·35	169
d Farnborough (Leaves Green) ..	Baldwin Latham Esq CE	5	1 0	534 ?	29·15	135
d Keston	Miss Holland	5	0 6	420 †	30·85	187
" "	" "	5	0 6	420 †	30·54	...
" Tower	G. Buchanan, Esq., (C.E.	8	0 9	351 †	30·17	157
†Ramsgate (The Vale)	M. Jackson, Esq.	5	1 0	90 †	22·43	125
Birchington (Thor)	M Major Bell	5	1 0	75	18·06	...
d "	E. S. London, Esq.....	5	1 0	70	20·60	133
d Herne Bay	W. Hawksworth, Esq. ...	...	...	...	19·53	138
d Reculver (Brook)	A. Collard, Esq.....	...	...	...	17·25	139
Hayes (Layham's Farm)	H. S. Eaton, Esq.	5	1 0	500	30·12	...
d " Common	A. Hill, Esq.	5	1 0	289 †	28·04	162
d " " (The Warren)..	Miss Akers	5	1 0	296	27·45	163
Chatham	The Meteor. Council....	...	1 3	137	23·62	158
d Rochester (Knights Place)	J. Pye, Esq.	5	2 6	320	25·53	176
d Margate (Renfrew Villa)	T. Twyman, Esq.	5	1 0	50 †	21·83	161
d " (Apsley House)	J. Stokes, Esq.	5	1 0	84 †	21·72	155
Sheppey (Greenborough)	R. M. Mercer, Esq.	5	2 0	...	24·91	...
" (Leysdown)	A. J. Farbrother, Esq..	...	...	...	21·29	140
d Frindsbury (Manor Farm)	Mr. F. Baker .....	...	...	100	22·31	133
d Beckenham (West Wickham) ...	Baldwin Latham Esq CE	5	1 0	230 ?	25·40	160
Bickley (Highfield)	J. Batten, Esq.	5	1 2	285	25·44	...
Chislehurst (Hillside)	Col. Silver	5	1 5	...	24·09	119
d†Beckenham (Foxgrove).....	Percy Bicknell, Esq....	5	0 6	142 ?	24·37	154
d† " "	" "	5	4 0	145 ?	23·64	149
Rochester (Abbot's Court, Hoo.).	Warwick Stunt, Esq....	5	1 6	40	20·72	...
d Gravesend (Park Place)	G. M. Walker, Esq. ...	5	1 0	...	19·65	120
Rochester (Higham)	Mrs. F. Stunt	5	0 9	90	20·02	...

DIVISION II.—SOUTH EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1885	Days on which '01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level		
			ft. in.	feet.	inches.	
KENT—(con.)						
D Eltham (Ellerslea, Southend)....	Capt. M. S. Richardson	5	0 8	218 T	24.50	164
D Rochester (Cooling Castle)	W. Wood, Esq.	5	5 0	10	22.26	126
D " (Hoo St. Mary).....	H. Pye, Junr., Esq. ...	5	5 6	146 T	20.58	154
D Lee (Blessington Road).....	J. Grant, Esq., C.E. ...	10	4 9	49 A	26.58	153
D Shooters Hill	Capt. Sherrard, R.E....	5	1 0	352	24.30	181
Blackheath	J. Glaisher, Esq., F.R.S.	8	0 5	150	22.87	140
Greenwich (Royal Observatory)..	W.H. Christie, Esq. FRS	8	0 5	155 T	24.00	166
Erith (Belvedere)	E. Cleminshaw, Esq....	5	1 0	150 T	22.93	149
D Deptford (Pumping Station).....	Sir J. W. Bazalgette, CE	10	1 3	18 A	28.14	155
D Erith (Crossness)	" " "	14	1 0	16 A	20.18	141
D " (")	" " "	14	1 0	24 A	22.32	141
D " (")	" " "	11	1 0	6 A	25.37	141
WEST SUSSEX.						
D Bognor (Lidsey Lodge).....	H. Neale, Esq.	8	1 2	...	26.51	139
D Littlehampton (Surrey House)...	G. Neame, Esq.	5	1 8	20 T	25.58	134
D† Worthing (Bedford Row).....	W. J. Harris, Esq. ...	8	1 0	18 A	28.09	156
D " (" ")	C. " Kelly, " Esq., M.D....	5	1 0	18 A	28.64	...
D " (Broadwater Road)...	" " " " " " " " " " " "	5	1 0	25 T	29.28	150
D Arundel (Yapton)	W. A. Hounsom, Esq..	5	1 0	24 A	26.15	162
D " (" Drove Farm).	" " " " " " " " " " " "	5	1 0	14 T	25.35	159
D West Thorney	F. Padwick, Esq.	5	0 5	20	25.48	112
Chichester (Westgate Meadow)...	Dr. Tyacke	8	0 6	40	26.80	157
Arundel (Patching)	J. Drewitt, Esq.	5	1 0	180	30.24	157
D " (The Parade)	R. Holmes, Esq.	8	3 1	75	28.44	134
D† Steyning	Col. Ingram	5	1 0	80 T	33.65	121
Chichester (Eartham House) ...	Sir P. Milbanke, Bt....	3	4 6	230 A	27.37	...
D " (West Dean)	Mr. G. Broomfield.....	5	1 6	190 T	38.70	148
D " (Singleton Rectory)...	Rev. F. A. Bowles.....	5	1 0	240	35.18	111
D " (Chilgrove)	J. W. Woods, Esq.	5	0 6	284 T	33.47	...
D Midhurst (Cocking)	Rev. R. Drummond Ash	8	2 6	...	36.84	153
† Petworth Rectory	Rev. C. Holland	5	4 0	180 A	33.30	124
† Horsham (Leonardslee)	Mr. Ford	5	1 6	273 T	28.62	...
D " (Albion Terrace)	R. Sheppard, Esq.	6	5 0	150 A	25.78	143
D " (Compton's Lea)	T. W. Cowan, Esq. ...	5	4 0	253 T	30.40	153
D " (Rusper)	A. F. Parbury, Esq. ...	5	1 0	372 A	31.02	154
EAST SUSSEX.						
Beachy Head	M Miss W. L. Hall	5	1 0	515 T	21.86	...
D " " " " " " " " " " " "	" " " " " " " " " " " "	5	1 0	495 T	26.60	...
D† Eastbourne (The Gore)	" " " " " " " " " " " "	5	1 0	85 T	27.96	140
D " (Osborne House).....	" " " " " " " " " " " "	5	4 0	15 B	31.08	154
D† " (Cemetery)	" " " " " " " " " " " "	5	4 0	160 A	29.30	150
† Brighton (Kemptown)	Mr. A. Wyatt.....	5	1 0	82 T	28.28	144
† " (Old Steine)	Dr. Taaffe	5	1 0	35	28.90	160
† " (Blatchington Road)...	Mr. J. Park	8	0 6	55 T	28.43	...
D† " (Buckingham Place)...	F. E. Sawyer, Esq. ...	5	5 0	206 A	26.47	153

DIVISION II.—SOUTH EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1885	Days on which of or more fell
		Diameter	Height Above Ground.	Height Above Sea Level.		
EAST SUSSEX—(con.)						
†Brighton (W. W., Lewes Road).	Mr. W. Insell	5	3 8	105 T	31·42	171
St. Leonard's (The Grove)	W. B. Young, Esq. ...	5	1 1	110 T	30·44	145
†Hastings (The Hollies)	A. H. Wood, Esq. C.E.	5	1 0	100 T	30·56	178
„ (Buckshole).....	W. Andrews, Esq.	8	0 8	106	29·41	160
Hailsham.....	Rev. F. Clyde Harvey..	5	1 0	105	31·25	141
†Falmer.....	R. R. Verrall, Esq. ...	5	1 6	312 T	35·71	131
Lewes (Iford).....	A. Hillman, Esq.	5	1 0	33 T	32·77	160
† „ (Glynde Place)	Mr. J. McLeod	5	5 6	49 T	31·98	152
„ (Castle Place).....	J. G. Braden, Esq. ...	5	0 11	100 T	31·03	134
„ (Southmallington)	Miss M. H. Rickman...	8	0 5	40 T	29·41	163
†Hastings (High Beech Hollington)	Col. Lewis	5	1 0	320 T	25·56	160
„ (The Firs, Ore)	C. M. Murray, Esq. ...	8	1 0	408 B	30·03	...
Winchelsea (The Friars)	Miss Stileman	5	1 2	115 T	23·64	140
Warbleton Rectory	Rev. G. E. Haviland...	8	1 1	182 T	30·40	159
Wivelsfield (Lyoth)	T. P. Descow, Esq.	5	1 1	...	30·62	..
Newick (Ketches)	Capt. G. Ruck Keene, RN	8	0 7	192 T	26·54	145
Uckfield	Miss L. Day	8	0 8	200 B	29·88	192
†Maresfield (Forest Lodge).....	Capt. W. Noble	8	1 2	247 T	30·43	186
Cuckfield (Borde Hill House) ...	Mr. R. Inglis	5	3 0	270 B	29·07	156
†Mayfield Vicarage.....	Rev. H. T. M. Kirby...	8	0 8	425 T	33·05	178
†Crowborough (The Observatory).	C. L. Prince, Esq.	8	0 8	777 T	31·88	158
Balcombe Place	B. A. Hankey, Esq. ...	8	1 3	289 T	29·03	170
Ticehurst	Mr. J. L. Davies	8	4 9	423 T	33·52	190
Wadhurst (Lower Cousley Wood)	F. Wilkin, Esq.	5	1 0	416 T	29·33	184
Lamberhurst (Scotney Castle) ...	E. Hussey, Esq.	5	4 3	202 T	26·80	...
Frant (Myrtle Villa).....	Miss Appellina Scott...	5	1 0	500 T	30·73	152
„ (Eridge Castle)	Mr. J. Rust.....	6	2 0	400	33·71	106
Withyham (Leyswood)	Mr. T. Moorhouse	8	1 4	420	32·27	145
Forest Row (Ashdown Cottage)...	H. J. Slack, Esq.	8	3 6	386 B	28·56	...
Worth Rectory	Rev. G. W. Banks ...	5	4 6	309 T	32·67	172
East Grinstead	W. V. K. Stenning, Esq.	5	1 3	356 T	30·33	170
„ „ (The Hermitage)	H. Padwick, Esq.	8	0 10	350 T	31·50	144
HAMPSHIRE.						
ISLE OF WIGHT.						
†St. Lawrence	The late Rev. C. Malden	5	1 0	75 T	26·34	170
Ventnor (Consumption Hospital)	Mr. H. Sagar	5	1 0	75 T	26·23	166
Shanklin (Bondi)	A. Parbury, Esq.	5	1 3	100	32·53	...
Sandown (Belgrave House) new g.	W. E. Green, Esq. ...	5	1 0	105	29·24	149
Yarmouth (The Towers)	Ad Sir E. Ommanney FRS	5	0 0	15	32·77	153
Ryde (Thornbrough)	Col. Clarke	5	1 0	143 T	30·85	...
„ (Town Hall)	F. Newman, Esq.	8	1 0	83	28·09	167
†Osborne (Newbarn Cottage)	J. R. Mann, Esq.	8	0 8	172 T	27·36	172
West Cowes (Holmwood)	C. T. Maw, Esq.	8	1 0	30	27·17	174
Hurst Castle	The Meteor. Council ...	8	0 11	9	26·21	...
Bournemouth (Tregew).....	Ad Sir B. J. Sullivan KCB	5	1 0	134	31·08	145

DIVISION II.—SOUTH EASTERN COUNTIES—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.	Days on which 101 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level	1885	
			ft. in.	feet.	inches.	
HAMPSHIRE—(con.)						
Bramley	Rev. C. Eddy.....	8	0 9	230 ∇	28.62	...
∇ Blackwater (Hurstleigh)	Miss Gibson	5	1 0	220 ∇	27.82	173
∇ † Strathfield Turgiss	Rev. C. H. Griffith.....	5	3 0	200 ∇	26.38	151
† Strathfieldsaye	Mr. J. Bell	8	1 0	160 ∇	27.50	...
† Heckfield (Park Corner)	J. Martineau, Esq.....	5	1 3	258 ∇	26.50	...
„ Place.....	Mr. W. Wildsmith ..	8	1 0	262 ∇	27.02	150
BERKS.						
Newbury (Greenham)	Capt. J. Ward, R.N....	5	1 0	260 ∇	28.22	179
„ (Donnington Sq.)	W. J. Cowper, Esq. ...	5	3 6	...	30.09	198
Wokingham (Wellington Coll.)..	S. A. Saunder, Esq. ...	5	1 0	283 ∇	26.82	...
Hungerford (Denford Park).....	G. C. Cherry, Esq.....	5	1 2	430 ∇	29.34	186
Reading (Englefield).....	R. Benyon, Esq.	5	1 1	...	29.66	183
∇ † „ (Russell Street)	Dr. Workman.....	5	1 4	154 ∇	27.43	166
„ (East Thorpe)	A. Palmer, Esq.....	5	3 0	157	26.23	159
∇ „ (Welford Park).....	Mr. C. Ross.....	5	1 0	335 ∇	28.58	179
„ („ „)	„ „	5	1 0	341 ∇	28.33	179
Hungerford (Poughley).....	Mrs. Waldron.....	5	3 6	630 ∇	25.89	...
Yattendon	A. Waterhouse, Esq....	5	1 0	440	26.70	153
∇ Lambourne (The Laburnums) ...	R. C. Mawley, Esq. ...	5	0 9	415 ∇	30.02	185
Maidenhead (Kimbers Cottage)..	Mr. J. Silver	8	1 2	92 ∇	28.72	...
∇ „ (Lowood)	Major-Gen. Davies ..	8	1 0	...	26.40	144
∇ „ (Cookham Vic.)	Rev. R. W. Rogers ..	5	1 3	90 ∇	27.44	182
Shrivenham (Ashbury Vic.)	Rev. H. Miller	5	1 0	479 ∇	27.54	...
∇ Wantage (Letcombe Regis)	S. W. Silver, Esq.....	5	1 0	...	29.91	166
Wallingford Castle	J. Kirby Hedges, Esq..	5	0 9	175 ∇	22.11	107
Little Wittenham Rectory	Rev. Percy Burd	5	1 0	187 ∇	21.54	146
∇ † Long Wittenham	Rev. F. C. Clutterbuck	12	1 6	165 ∇	24.71	127
Faringdon (The Elms)	W. Dundas, Esq.	5	1 0	340 ∇	28.63	175

DIVISION III.—SOUTH MIDLAND COUNTIES.

HERTS.

∇ Southgate (The Lawns).....	G. A. Church, Esq. ...	5	0 6	240 ∇	28.99	171
Rickmansworth (Moor Park).....	Mr. J. C. Mundell	5	2 0	340	30.38	176
„	W. B. Butler, Esq. ...	5	1 0	...	28.77	...
Bushey Station	Mr. R. Savill	5	0 8	...	29.54	...
∇ † Watford (Wansford House).....	J. Hopkinson, Esq. ...	5	1 0	224 ∇	30.02	183
∇ „ (Watford House)	Dr. Brett.....	5	1 3	240 ∇	27.22	172
∇ † „ (Oaklands)	E. Harrison, Esq.	5	5 6	273 ∇	30.97	178
Barnet (Gas Works)	Registrar Gen. Ret. ....	...	...	212	27.13	143
∇ Cheshunt Old Nurseries.....	Messrs. Paul & Son ...	5	1 0	92 ∇	27.82	153
„ College	Rev. Dr. Reynolds.....	5	1 1	87	27.39	...
∇ Broxbourne (Stafford House) ...	G. J. Newbery, Esq....	5	1 0	118?	30.48	188
† St. Albans (Gorhambury).....	Mr. J. Thompson	6	2 6	425	33.04	163
∇ Hemel Hempstead (Nash Mills)..	Messrs. J. Dickinson & Co.	12	3 9	237 ∇	31.56	150

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

STATIONS.	AUTHORITIES.	Diameter	Rain Gauge.		Depth of Rain.	Days on which '01 or more fell.
			Height Above Ground	Height Above Sea Level		
			ft.	in.	1885	inches.
HERTS—(con.)						
Great Berkhamstead (Rosebank)	E. Mawley, Esq.	8	1	0	401	29-77
" " (Gt. Gaddesden)	Rev. W. Tyrwhitt Drake	8	1	0	426	29-91
Hertford (Haileybury College)....	Rev. J. Ll. Dove	5	1	6	388	26-79
" (Bayfordbury)	W. C. Baker, Esq.	8	0	8	250	27-60
"	J. Woodhouse, Esq. ...	8	0	2	...	29-73
Tring Vicarage	Rev. W. Quennell	5	1	0	442	32-26
" (Cowroast)	H. Thomas, Esq., C.E..	10	4	2	345	31-71
Harpenden (Rothamstead)	Messrs. Lawes & Gilbert	5	0	9	420	31-19
" { " }	" " "	8	0	9	420	30-63
" { " }	" " "	8	0	9	420	32-10
Ware (Red House)	J. Francis, Esq., C.E..	12	3	0	114	25-79
" (Fanham's Hall)	Miss Joyce Croft	8	1	0	253	28-40
Welwyn Rectory	Rev. C. L. Wingfield...	5	0	4	228	29-56
Kensworth [Dunstable]	Miss Jones	5	1	5	630	30-60
Ware (Much Hadham)	T. W. Mott, Esq.	5	1	0	222	28-52
Welwyn (Datchworth Rectory)..	Rev. J. Wardale	5	1	0	386	28-01
Stevenage (Knebworth Rectory).	Rev. F. G. Jenyns	5	1	0	391	29-29
Bennington Lodge	Rev. Dr. Parker	5	1	0	408	27-71
Hitchin	W. Lucas, Esq.	5	2	1	238	28-90
" (High Down)	J. Pollard, Esq.	5	1	1	422	29-26
Buntingford (Throcking Rectory)	Rev. C. W. Harvey ...	5	1	0	484	26-22
Stevenage (Weston Manor)	M. R. Pryor, Esq.	5	0	7	480	29-43
Baldock (Toggs Clothall)	Baldwin Latham, Esq. CE	5	1	0	422	27-79
Royston (Therfield Rectory).....	Rev. J. G. Hale	5	4	3	500	27-75
Hitchin	H. Wortham, Esq.	8	0	6	269	25-40
BUCKINGHAMSHIRE.						
Slough (Langley)	R. H. Major, Esq.	8	0	10	85	25-37
" { " Field)	" " "	5	0	10	85	25-04
" (Upton Park)	G. Bentley, Esq.	5	3	0	94	28-14
Cliveden	Mr. J. Ellam	8	0	6	...	26-41
Greenlands [Henley-on-Thames].	Rt. Hon. W. H. Smith M.P.	8	1	3	116	29-20
High Wycombe	H. S. Wheeler, Esq. ...	8	0	9	253	25-46
Aylesbury (Serena Terrace)	J. Copcutt, Esq.	12	1	0	280	28-75
" (Mentmore)	J. Smith, Esq.	6	1	6	...	25-33
Winslow (Addington Manor) ...	E. Hubbard, Esq., M.P.	8	1	0	309	28-86
Buckingham (Adstock)	J. E. S. Weston, Esq. ...	5	0	9	350	28-39
Stony Stratford (Thornton)	Mr. W. Sturdy	5	1	6	...	29-61
Woburn Sands (Sandymount)...	C. P. Stuart, Esq.	5	1	1	...	29-51
Newport Pagnell	R. Littleboy, Esq.	5	2	0	...	26-38
Olney (Filgrave Rectory)	Rev. J. Tarver	8	0	8	285	28-66
OXFORD.						
Whitchurch Rectory	Rev. J. Slatter	10	1	0	150	25-02
Henley-on-Thames (Greys)	Rev. N. Pinder	5	1	8	370	28-76
" " (Assenton)	Mr. J. Ratty	5	1	0	281	31-30
Dorchester	Col. Blunt	5	2	0	...	22-11
Burcote [Abingdon]	Late H. J. Hannam, Esq.	5	1	3	168	24-70

DIVISION III.—SOUTH MIDLAND COUNTIES —(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1885	Days on which 1.01 or more fell
		Diameter	Height Above Ground	Height Above Sea Level		
			ft. in.	feet.	inches.	
OXFORD—(<i>con.</i>)						
Thame (Aston Rowant).....	T. Taylor, Esq.	8	1 0	395 B	28.03	...
D Oxford (Toot Baldon Vic.)	Rev. J. C. Ross	5	1 0	265	23.63	167
D† „ (Mag. Coll. Laboratory) ..	E. Chapman, Esq.	5	1 0	186 A	25.98	167
„ { „ „ „ „ } ..	„ „ „ „ „ „ „ „	5	33 11	223 A	23.21	...
„ { Radcliffe Observatory } ..	E. J. Stone, Esq., F.R.S.	8	1 8	210	25.71	164
D „ { „ „ „ „ } ..	„ „ „ „ „ „ „ „	11	2 4	210 A	26.00	140
„ { „ „ „ „ } ..	„ „ „ „ „ „ „ „	10	22 0	230	24.45	138
„ { „ „ „ „ } ..	„ „ „ „ „ „ „ „	10	112 0	320 A	17.45	167
D „ (Norham Road).....	Rev. C. B. Mount	9	1 0	220 ?	26.92	137
D „ (Elsfield)	H. Parsons, Esq.	6	1 2	330	27.34	178
Stanton St. John's... ..	Mrs. Thomson.....	8	1 0	399 A	26.77	163
„ „ „ (Woodperry) ..	J. Thomson, Esq.	6	1 0	399	28.58	178
Witney (Ringwood Farm)	Mr. J. W. Abraham ...	5	5 0	...	29.05	163
Chipping Norton (Kingham).....	E. Lockwood, Esq. ...	5	4 6	...	29.72	...
D Bicester (Middleton Park)	Mr. B. Hope	5	2 6	390	28.88	170
D* „ (Stratton Audley Park) ..	The late G. Glen, Esq.	5	2 5	381 A	26.71	155
Steeple Aston.....	B. S. Ogle, Esq.	5	0 3	400 T	27.87	172
„ „ „ (The Grange).....	Adl. Bradshaw, R.N., CB.	8	1 0	400	29.74	186
D Banbury (Bloxham Grove)	Rev. G. Warriner	8	3 10	387 A	28.22	157
D „ (Cotefield, Bodicote) ...	T. E. Cobb, Esq.	8	2 0	383 A	27.52	181
D „ (Swalcliffe Park)	G. H. Norris, Esq.....	5	1 0	522 T	30.70	197
D† „ (High Street).....	T. Beesley, Esq.....	6	7 0	330 A	27.56	175
D „ (Wroxton)	A. R. Tawney, Esq. ...	5	3 0	490 A	28.96	191
NORTHAMPTON.						
Brackley	Mr. E. Durran	8	6 10	400 T	26.00	136
D Grimsbury [Banbury]	L. Gunn, Esq.	9	1 0	...	27.61	157
D Thorpe Mandeville [Banbury]...	Mr. S. Baines.....	5	1 0	530	30.65	155
D Towcester (Whittlebury)	W. S. Miller, Esq.....	5	1 2	...	30.84	179
D „	P. Phipps, Esq.	5	1 0	...	26.80	149
„ (Easton Neston)	Mr. E. Clarke.....	8	1 0	340 T	28.48	156
D Litchborough	E. Grant, Esq.	5	1 1	...	31.75	194
D Daventry (Fawsley)	Lady Knightley	5	1 0	477 B	26.73	187
Weedon (Floore)	E. G. Loder, Esq.	5	...	270	28.35	129
D Castle Ashby	R. G. Scriven, Esq. ...	5	1 0	265 T	29.58	170
D Northampton (Little Houghton).	Mr. J. Brawn	5	2 4	...	27.19	159
D „ (The Holly's)	Alderman Macquire ...	8	1 6	232	26.49	164
D „ (Hazlewood Road)	H. Terry, Esq.	5	5 0	253	25.38	152
D „ (Gold Street)	Mr. S. Law	5	6 6	230 A	24.26	158
D „ (Sedgebrooke).....	C. A. Markham, Esq....	5	1 0	311 A	27.24	171
„ { „ „ „ „ } ..	„ „ „ „ „ „ „ „	5	1 0	311 A	26.66	...
D „ (Althorp House) ...	C. S. Groom, Esq.	8	3 10	310 A	27.34	165
D „ (Chapel Brampton) ..	E. Dowdall, Esq.	5	3 0	...	27.87	157
Holdenby Rectory	Rev. C. Bond.....	5	2 0	...	28.57	193
D Wellingborough (Swanspool) ...	N. P. Sharman, Esq. ...	5	0 2	...	28.17	188
D „	E. Sharman, Esq.	5	0 2	...	30.34	194
Brixworth	Rev. J. F. Halford.....	5	1 0	400 A	27.29	...
D Thrapstone (Hargrave)	J. L. Baker, Esq.	5	1 0	219 A	27.61	141

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

STATIONS.	AUTHORITIES.	Diameter	Rain Gauge.		Depth of Rain.	Days on which -01 or more fell.	
			Height Above Ground	Height Above Sea Level	1885		
			ft.	in.	feet.		inches.
NORTHAMPTON—(con.)							
Hazelbeach	Mrs. Pell.....	5	1	0	584 T	29.76	132
d Kettering	J. Wallis, Esq.	8	1	3	300 B	28.84	162
d "	C. W. Lane, Esq.	5	0	8	280	29.35	193
Rothwell	J. More, Esq., M.D. ...	12	1	2	300	27.06	169
Oundle (Pilton Rectory)	Rev. F. G. Hodgson ...	5	1	0	...	29.22	...
d " (Vine Cottage)	Late Mr. S.P.Holloway	5	1	0	105	25.91	164
d Rockingham Castle	Mr. H. Watt	5	3	0	400 L	29.22	144
d Peterborough (Springfield Ho.)..	J. Whitwell, Esq.	8	2	6	50 L	25.43	134
d Easton [Stamford].....	Mr. H. Watkins	5	1	0	278 T	26.77	189
d Maxey Vic. [Market Deeping]...	Rev. W. D. Sweeting...	5	1	0	32 T	24.89	175
" " [" "] M	" " "	5	1	0	32 T	24.84	...
HUNTS.							
d St. Neots (Tetworth Hall)	Mrs. Kaye	5	0	8	190 T	27.24	148
" (Waresley Vicarage)..	Rev. W. M. H. Elwyn	8	1	0	193 T	23.89	145
Huntingdon	Mrs. C. Margetts	5	0	4	52 T	27.85	137
d Alconbury	Rev. R. Conway.....	5	1	0	...	23.31	214
Wistow	Rev. T. Woodruff	5	1	1	...	23.80	108
Whittlesea Mere	R. Lunn, Esq.	8	1	0	...	24.28	175
BEDFORD.							
Luton	W. H. Leete, Esq.....	5	1	0	344 T	29.20	167
Woburn (Experimental Farm)...	Mr. F. E. Fraser	8	3	8	...	25.97	...
Amphill (Silsoe)	H. Trethewy, Esq.....	5	1	0	214 T	26.44	201
" (Wrest Park)	Mr. G. Ford	5	1	1	...	26.09	...
d† Aspley Guise (Oaklands)	E. E. Dymond, Esq. ...	5	1	1	433 T	26.34	168
d Stotfold [Baldock].....	Dr. Swaine	5	0	9	220	25.72	167
Amphill	Mr. J. Brown	5	1	0	313 T	27.35	165
Woburn (Hulcote Rectory)	Rev. B. Chernocke Smith	5	1	0	310	28.35	...
Amphill (Lidlington Vic.)	Rev. F. Veasey .....	...	...	...	...	29.13	...
d " (Haynes Vicarage) ..	Rev. A. E. D. Osborn..	5	0	9	323 T	25.47	140
" (" Park)	F. J. Thynne, Esq. ...	5	2	8	285 T	26.53	161
Biggleswade (Old Warden)	Mr. G. R. Allis	8	1	2	...	25.02	144
"	C. T. Newbery, Esq. ...	5	28	0	...	25.39	...
d Potton (Wrestlingworth)	H. J. King, Esq.	5	1	0	...	25.84	176
Cardington	Mr. J. McLaren	8	0	0	106	26.17	...
"	" "	12	3	6	109	24.98	...
d " (Staff gauge)	" "	5	0	7	...	25.51	125
d Sandy Rectory	Rev. J. Richardson ...	5	0	7	...	24.67	172
d " (The Lodge)	Rt. Hn. A. W. Peel, M.P.	5	1	0	...	23.69	133
Bedford	D. Robie, Esq.	5	0	4	115 T	24.02	149
" (Clapham Park)	J. Howard, Esq., M.P..	8	1	0	220 T	25.15	183
Tempsford Hall	Col. W. Stuart	5	0	9	80 T	25.28	131
Bedford (Milton Ernest)	F. Newbery, Esq.	5	5	0	130 T	...	...
CAMBRIDGE.							
d† Odsey Grange [Royston]	H. G. Fordham, Esq. ...	5	1	0	263 T	24.79	174
d " " [" "]	" "	5	1	0	263 T	25.27	173

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

STATIONS.	AUTHORITIES.	Rain Gauge			Depth of Rain.	Days on which ·01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level		
CAMBRIDGE—(con.)						
† Guilden Morden [Royston]	J. G. Johnson, Esq. ...	5	1 2	106	23·90	161
Trumpington	F. Parsons, Esq.	5	1 0	...	24·48	150
D Granchester Mill	J. Nutter, Esq.	5	5 0	31	25·44	182
D Cambridge (Fulbourn Asylum)...	G. E. Crallan, Esq.....	5	0 10	70	24·26	133
D „ (W.W.Cherryhinton)	W. W. Gray, Esq., C.E.	5	1 0	35	23·71	180
D „ (Beech House)	J. Nutter, Esq.	8	4 0	40	24·36	165
D „ (Sidney Street)	Mr. W. E. Pain	8	60 0	92	21·51	171
„ (Trinity College) ...	J.W.Glaisher, Esq.FRS	8	0 8	40	24·12	179
Hardwicke	Rev. J. S. Brown	5	0 7	...	30·19	148
† Cambridge Observatory.....	Professor Adams, F.R.S.	5	1 0	84	25·61	165
D „ „ „	„ „ „	8	1 0	84	25·43	165
Quy Hall	Mrs. Francis	5	0 5	...	24·68	190
Papworth Hall	Rev. E. Cheere	5	1 0	158	26·36	146
D Ely (Stretham)	Mr. J. Housley	9	4 9	13	26·01	146
D „ („ Ferry)	Mr. C. Wright, Junr....	8	5 0	...	22·02	157
D „ (Littleport Vicarage).....	Rev. Canon Hopkins ...	5	1 0	50	24·01	165
D Chatteris (Aylesby House)	A. A. Ruston, Esq. ...	8	0 6	...	22·57	158
D „ (The Priory)	H. F. Fryer, Esq.....	5	0 7	45	23·47	155
„ (Slade Farm).....	Mr. T. Triplow	8	13 0	44	21·48	...
„ (Horseway Lock)	R. Lunn, Esq.	8	1 0	...	18·78	149
March .....	„ „ .....	...	...	...	21·33	137
Stanground Sluice	„ „	8	1 0	...	23·77	111
* March (Stags Holt)	W. C. Little, Esq.....	5	1 0	15	22·95	...
Upwell (Marmont Priory Lock)..	R. Lunn, Esq.	8	1 0	...	20·18	181
D „ (Euximoor House)	H. West, Esq.	5	0 8	15	21·35	147
D Thorney (Wryde House)	S. Egar, Esq.....	9	2 0	12	22·24	138
Wisbech (Coldham Hall, Elm)...	H. J. Little, Esq.	5	0 8	15	23·40	164
D „ (Bank House)	A. Peckover, Esq.	8	0 8	6	23·77	174
† „ (Observatory).....	Mr. W. J. D. Ward ...	8	0 6	10	23·29	143

DIVISION IV.—EASTERN COUNTIES.

ESSEX.

„ Canning Town [London]	D. Radford Sharpe, Esq.	6	14 6	23	20·77	143
„ Shoeburyness	The Asst. Super. Expts.	8	7 3	18	19·39	176
† Southend	G. Lingwood, Esq. ...	8	1 0	112	20·35	130
„ Romford (North Ockendon Rect.)	Rev. R. T. Crawley ...	5	1 6	100	22·44	133
„ Barking (Little Ilford)	Rev. A. Shadwell	10	1 0	27	23·08	147
„ (Great Gearies, Ilford) ..	Mr. J. Douglas	5	1 6	120	24·47	174
Leyton Observatory	Thelate CG Talmage Esq	8	1 8	90	24·46	...
Romford (Normanhurst)	E. C. Allam, Esq., C.E.	8	2 0	93	21·39	...
„ Walthamstow (Prospet Hill Ldge)	J. E. Goodchild, Esq. ...	5	1 2	140	27·72	155
„ Woodford (The Harts) ...	Miss Spicer	5	3 6	203	27·13	165
„ (Haggan Lane)	W. B. Bryan, Esq., C.E.	8	1 0	176	24·20	126
„ Billericay (Bellhouse)	Mr. J. Holmes	5	1 0	75	27·83	131
„ Brentwood (Sawyer's Hall Farm)	Rogers Field, Esq., C.E.	5	1 0	270	26·54	130
„ Maldon (Norton Hall)	C. Clarke, Esq.	5	2 6	130	22·74	130

DIVISION IV.—EASTERN COUNTIES—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.	Days on which -01 or more fell
		Diameter	Height Above Ground	Height Above Sea Level	1885	
			ft. in.	feet.	inches.	
ESSEX—(con.)						
d. Waltham Abbey (Gunpowder Factory)	The Superintendent ...	2	4 0	70 L	25·46	138
Epping (The Hemnalls)	J. Nicholl, Esq.	8	0 8	345	36·27	144
d Bradwell-on-Sea (Bradwell Hall)	J.C. Chillingworth, Esq.	5	1 1	...	20·38	132
" " (Down Hall)...	R. Page, Esq.	5	1 0	20	20·62	129
Chelmsford (Great Baddow).....	H. Corder, Esq.	5	0 6	...	26·69	...
" " (" " Vineyards)	Rev. A. W. Bullen ...	5	1 0	...	27·11	152
d " (Writtle)	E. Rosling, Esq.	5	1 0	140 T	25·29	161
" (High Street).....	F. Chancellor, Esq. ...	8	1 0	86 T	24·61	132
" (Roxwell)	R. W. Christy, Esq....	5	1 0	76 T	25·12	127
d Harlow (Moor Hall)	Mr. Huntley	8	1 6	273 T	25·28	171
d " (Sheering).....	Rev. Canon Hill.....	5	1 0	214 T	24·92	168
Witham (Little Braxted Hall)...	J. Taber, Esq.	5	1 0	50	28·34	170
" (Rivenhall)	Rev. F. B. H. Bridges	5	1 0	138 T	29·93	...
Great Bentley (Wick, St. Osyth)	A. Harwood, Esq.	5	2 0	91 T	21·41	...
d Dunmow (High Roding)	Rev. E. Maxwell	5	1 0	252 T	26·04	181
" (New Street)	B. H. Warner, Esq. ...	12	1 6	250	27·14	...
Great Bentley (The Lodge)	Capt. W. Delf.....	6	0 6	150	22·83	102
d Colchester (Beverley Road)	W. G. Benham, Esq....	5	...	...	25·92	163
Braintree (Bocking Place).....	S. Courtauld, Esq....	5	2 0	212 T	33·82	178
Earls Colne (Chalkney House)...	H. F. Hills, Esq.	5	1 0	180 T	26·28	140
Manningtree (Lawford)	O. Bendell, Esq.	5	1 0	...	24·08	149
d Saffron Walden (Newport)	Rev. G. F. Tamplin ...	5	4 0	220 T	26·88	167
d " "	J. G. Bellingham, Esq.	5	1 0	179 T	26·28	187
SUFFOLK.						
d Nayland (Tendring Hall)	Mr. G. L. Rushmore ...	8	0 8	135 T	26·36	105
Stutton (Alton Hall).....	J. South, Esq.	5	0 9	...	26·15	...
d Ipswich (Orwell Park)	Mr. J. Wallis	8	1 0	60 T	28·44	175
d " (Belstead Hall)	A. Harwood, Esq.	8	9 0	120 T	24·91	136
" (" ")	" " " " " "	5	8 0	120 T	24·38	...
" (Bishop's Hill).....	G.A. Biddell, Esq., C.E.	5	1 0	104 T	25·97	...
" (Playford)	M. Biddell, Esq.	5	2 6	120 T	26·71	...
Lavenham Hall	W. Biddell, Esq., M.P.	5	1 11	...	27·31	...
d Woodbridge (Bank House)	S. Alexander, Esq. ...	5	1 0	...	28·14	149
d Rendlesham Hall	Rt Hon Lrd. Rendlesham	5	1 9	88 T	26·30	156
d Haverhill (Great Thurlow)	Mr. A. Boa.....	5	1 0	241 T	24·67	153
Ash Bocking Vicarage	Rev. M. B. Cowell.....	5	7 3	231 T	23·64	125
Aldborough, Aldringham.....	F. Garrett, Esq.	8	4 5	50 B	24·43	172
Stowmarket (Upland Hall)	A. Harwood, Esq.	5	12 0	...	24·65	...
d " (Wetherden Rec.)...	Rev. C. J. Goodhart ...	8	0 6	185 T	28·60	168
d Bury St. Edmunds (Drinkstone Pk)	Mr. G. Palmer	8	1 2	220 T	26·45	161
Framlingham (Mount Pleasant).	Mr. R. Whitehead....	5	1 3	...	26·32	134
† Bury St. Edmunds (Westley)	R. Burrell, Esq.	5	1 0	226 T	26·38	...
d† " " (Barton Hall)..	Mr. W. Allan.....	5	1 0	...	26·24	186
d " " (Hengrave)	Mr. W. Nichol	5	1 2	...	23·82	123
d† " " (Culford)	Mr. J. Smith	5	1 6	100	28·16	185
d Ixworth (Walsham-le-Willows).	Miss M. C. Martineau..	5	1 0	...	27·72	167
Stradbroke Vicarage	Rev. Dr. Tate.....	5	2 2	...	27·63	...

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.	Days on which .01 or more fell.
		Diameter	Height Above Ground.	Height Above Sea Level	1885	
			ft. in.	feet.	inches.	
SUFFOLK—(con.)						
†Ixworth (Barningham)	W. Lingwood, Esq. ...	8	1 0	25 P	25.66	...
D Weybread Vic. [Harleston]	Rev. J. H. White	8	1 1	...	26.53	156
D Beccles (Sotterley Hall)	Col. St. J. Barne, M.P. ...	5	0 9	...	30.07	184
D „ (Ellough Rectory)	Rev. S. Earnshaw-Wall ...	5	1 1	103 A	27.23	174
†Lowestoft (Gisleham)	Rev. H. Jodrell	5	1 0	36 T	26.31	...
† „ (Carlton Colville)	G. Edwards, Esq., C.E. ...	8	0 9	6 T	27.79	...
D „ (Bryn-y-Môr)	S. H. Miller, Esq.	5	1 0	86	25.32	172
„ („ „)	„ „ „	8	1 0	86	25.26	...
„ (Somerleyton Rect.)	Rev. Canon Du Port ...	8	1 0	50	28.35	181
NORFOLK.						
D Diss	T. E. Amyot, Esq.	5	1 0	96	27.41	149
„ (Thelveton)	T. Mann, Esq.	8	1 0	...	25.36	140
D Harleston (Rushall Vicarage) ...	Rev. C. Gape	5	1 1	117 T	26.82	177
D†Geldeston [Beccles]	E. T. Dowson, Esq. ...	5	1 0	38 A	25.66	185
„ [„]	M „ „ „	8	1 0	38 A	25.83	...
D „ [„]	R. Dashwood, Esq.	5	1 0	49 B	25.38	167
Ellingham [„]	H. Youngman, Esq. ...	5	1 6	...	25.21	...
Long Stratton (Hapton)	Rev. Canon Du Port ...	...	...	...	31.93	...
D Loddon (Bergh Apton)	Rev. T. F. Lloyd	8	2 5	...	27.46	158
Mulbarton	Rev. Canon Du Port ...	...	...	...	28.75	...
Watton .....	„ „ „ .....	...	...	...	25.96	...
D Downham Market (W. Dereham) ...	Mr. C. Blanchfield	5	0 11	20	24.43	198
Denver	Rev. Canon Du Port ...	8	1 0	82 L	25.39	178
D Stoke Ferry (Wereham) .....	„ „ „ .....	...	...	66	24.18	167
D Downham (Crimpleham)	T. Horn, Esq.	5	1 0	110 T	25.68	180
Swaffham (Pickenham Hall) ...	E. A. Applewhaite Esq. ...	5	1 0	104 A	29.17	172
Outwell Sluice	R. Lunn, Esq.	9	...	16	21.20	132
Yarmouth (Sailors' Home)	The Meteor. Council ...	8	4 0	12	26.41	...
„ (Halvergate Hall)	Rev. Canon Du Port ...	5	3 3	48 A	26.92	129
D Norwich (Postwick)	Rev. Sir W. Vincent, Bt. ...	5	1 0	20 P	26.77	156
D „ (Carrow House)	J. J. Colman, Esq., M.P. ...	5	4 0	30	28.69	111
† „ (Thorpe High House) ...	W. Birkbeck, Esq. ...	5	1 0	137 T	31.55	186
„ (St. Catherine's Close)	Mrs. Evans	5	2 3	120	28.77	171
D „ (Essex Street)	F. Dix, Esq.	9	2 6	85 T	29.00	171
D „ (Heigham)	A. W. Preston, Esq.	5	0 6	34 A	28.39	189
†Acle	Rev. R. W. Kennion ...	8	0 9	40	27.49	133
D*Swaffham (Grammar School) ...	C. J. Drury, Esq.	5	1 10	242 A	29.00	173
D „	W. H. Plowright, Esq. ...	5	5 0	250	27.95	170
D†Honingham Hall	Lady Bayning	5	0 6	110 T	28.85	195
D Costessey	H. Culley, Esq.	5	1 0	...	28.53	177
D Sprowston (Oak Lodge)	T. Cozens Hardy, Esq. ...	5	1 0	101 A	29.30	183
D South Walsham	Rev. Canon Du Port ...	...	...	...	30.18	167
East Dereham	G. H. Cooper, Esq. ...	8	3 0	161	28.19	152
„ „	Rev. Canon Du Port ...	...	...	...	26.06	...
D Drayton	„ „ „	5	1 2	...	27.08	162
D Swaffham (Dunham)	„ „ „	5	1 1	320	30.13	191

DIVISION IV.—EASTERN COUNTIES—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1885	Days on which ·01 or more fell
		Diameter	Height Above Ground	Height Above Sea Level		
NORFOLK—(con.)						
South Walsham (Oby)	Rev. Canon Du Port ...	...	ft. in.	feet.	inches.	
Salhouse	R. "Lunn," Esq. "	8	...	...	31·20	...
Wiggenhall (Outlet Syphons)...	R. "Lunn," Esq. "	8	...	...	23·48	144
D Terrington	J. T. Seecombe, Esq., M.D. ...	5	1 0	15 ∇	25·53	163
Felthorpe	Major Bouchier	5	1 1	75	30·78	139
Cawston	Rev. T. H. Marsh	5	1 0	130 ∇	32·25	201
Aylsham (Woodgate)	B. J. W. Purdy, Esq. ...	5	1 0	120	31·18	178
North Walsham (Worstead).....	Mrs. Cooke	5	0 9	...	28·92	150
D " " (Dilham)	Rev. Canon Du Port ...	...	...	...	32·91	204
†Hillington Rectory	Rev. H. Ffolkes.....	8	1 0	89 ∇	29·28	185
D† " " School	" "	5	3 6	94 ∇	28·98	185
Fakenham (Fulmodeston).....	Rev. Canon Du Port ...	...	...	...	28·39	...
North Walsham (Knapton) .....	" " " .....	...	...	...	32·53	...
D Cromer (Northrepps).....	" " " .....	...	...	...	31·24	207
Holt (Letheringsett Hall).....	W. H. C. Hardy, Esq. ...	8	1 0	...	28·65	130
Cromer (Colne Lodge)	J. Cooper, Esq., M.D. ...	5	1 0	100	29·24	166
Holkham	M. J. Davidson, Esq.	8	1 0	35	27·02	...
Hunstanton Hall	Mr. Nisbet	11	3 8	60 ∇	22·85	...
D Wells-next-the-Sea	H. R. Rump, Esq.	5	1 0	16 ∇	26·77	195

DIVISION V.—SOUTH WESTERN COUNTIES.

WILTS.

D Landford	J. R. Wigram, Esq. ...	5	1 10	167 ∇	31·10	182
D Donhead St. Mary (Charlton Ho.)	Col. G. Best	5	0 7	514	35·57	202
D Broad Chalke	Rev. T. A. Preston ...	8	0 8	315	31·52	178
D†Salisbury (Alderbury)	Rev. R. S. Hutchings... Rev. W. L. W. Eyre...	5	0 8	263 ∇	29·83	163
D† " (West Dean)	Rev. T. A. Preston ...	5	1 0	137 ∇	35·04	162
D " (Britford)	Mr. Challis	8	0 5	180 ∇	31·56	183
D " (Wilton House)	Rev. T. A. Preston ...	5	1 0	...	35·91	191
D Mere	" " "	5	1 0	600 ?	34·68	208
D " Down	" " "	5	0 11	390	38·57	186
D Hindon (Chicklade)	" " "	5	1 0	470	28·00	161
D Winterslow	Henley Eden, Esq.	8	0 10	630 ∇	40·18	199
D Maiden Bradley	Rev. T. A. Preston ...	8	2 0	450	37·29	201
D Warminster (Rye Hill)	" " "	5	1 0	...	24·20	176
D Amesbury	R. "Hayward, Esq.	11	4 0	380 ?	27·50	173
Salisbury Plain (Chitterne House)	E. Cruse, Esq.	5	1 0	387 ∇	32·23	178
D Warminster	W. J. Stent, Esq.	8	4 0	393	34·38	195
" (Downside)	Rev. T. A. Preston ...	5	1 0	260	27·66	176
D Amesbury (Figheldean)	Rev. W. H. Awdry ...	8	0 8	422 ∇	29·53	180
Ludgershall	Rev. T. A. Preston ...	5	1 2	590	31·09	184
D " (Everleigh)	Baldwin Latham Esq CE	5	1 0	470 ∇	30·57	191
D " (Collingbourne Kingston).	Rev. T. A. Preston ...	5	1 0	...	26·81	184
D Market Lavington	" " "	5	1 1	...	28·81	178
D " " (Great Cheverell)	Rev. A. O. Hartley ...	5	1 0	240 ∇	27·58	173
D Trowbridge (Steeple Ashton Vic.)						

DIVISION V.—SOUTH WESTERN COUNTIES—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1885	Days on which 30 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level		
			ft. in.	feet.	inches.	
WILTS—(con.)						
D Trowbridge (Wingfield)	T. H. Clark, Esq.	5	1 0	150	30·12	187
D "	Rev. T. A. Preston ...	5	1 2	...	30·10	184
D " (Rodney House) ...	W. J. Mann, Esq.	5	1 1	140	30·45	181
D Pewsey	Mr. J. J. Prince	5	1 0	...	26·76	173
D Bradford	Rev. T. A. Preston ...	5	1 0	...	31·96	167
Devizes (Southgate House)	B. H. Cunningham, Esq.	8	1 0	436 †	30·33	200
D Alton Barnes	Rev. T. A. Preston ...	5	1 0	430 ?	31·93	175
D Bishop's Cannings	Rev. C. W. Hony	5	1 0	446 †	32·70	187
D Buttermere	Rev. T. A. Preston ...	5	4 9	...	30·91	198
Great Bedwyn	" " "	5	1 0	...	30·91	...
D Devizes (Shepherd's Shore)	" " "	5	1 6	555	32·65	187
D Chippenham (Lacock)	Miss Awdry	5	0 11	250	32·39	205
D† Marlborough (The Green)	Rev. T. A. Preston	5	1 0	472 †	32·13	192
" " "	" " "	5	1 0	472 †	30·73	...
D " (Mildenhall)	Rev. C. Soames	10	1 0	456	30·94	167
D Calne (High Street)	Mr. H. Wilkins, Junr.	5	3 6	244	30·45	176
D " (Compton Bassett)	Mr. J. Allen	8	1 0	400 †	30·51	188
D Ramsbury	Rev. T. A. Preston ...	5	1 0	411	29·84	180
D Ogbourne Maizy	" " "	5	1 0	...	31·70	162
D Broad Hinton	Rev. J. A. Lloyd	5	3 0	630 †	29·83	181
Wootton Bassett	Rev. T. A. Preston ...	5	1 0	...	30·97	...
D Swindon, New	F. J. O'Connor, Esq. ...	8	0 4	378	27·78	182
" (Pen Hill)	H. Arkell, Esq.	5	0 10	400	27·74	...
D Malmesbury (Charlton Cott.) ...	Rev. T. A. Preston ...	...	1 0	...	33·35	166
D " (Minety House) ...	Hon. R. Henley Eden	8	1 6	...	30·61	176
D Thames' Head [Cirencester]	J. H. Taunton, Esq., C.E.	8	4 0	350 †	29·86	146
DORSET.						
Weymouth	The Roy. Meteor. Soc. ...	...	...	...	28·47	167
D " (Langton Herring) ...	Rev. C. H. Gosset	8	1 0	200 ?	28·19	175
D† " (Osmington Lodge) ..	Col. Hall	5	1 0	225 B	32·47	166
Corfe Castle (Creech Grange) ...	Rev. N. Bond .....	...	...	...	45·36	...
† Abbotsbury	Mr. A. Dight	5	3 6	150	28·15	...
D Wareham (Castle Gardens)	S. W. Bennett, Esq. ...	5	3 2	15	30·73	167
Little Bredy	Rev. R. R. Meadows ...	5	1 0	335 ?	36·66	144
D* Westbourne [Bournemouth] ...	E. B. K. Welch, Esq. ..	5	1 0	137 †	30·22	188
D Poole	F. Styling, Esq.	5	1 0	6	28·32	177
" (The Yarrells)	" " "	5	1 0	40	29·40	140
" (Parkstone)	R. H. Barnes, Esq. ...	5	1 0	198 †	30·16	...
D Lyme Regis	M. C. Preston, Esq. ...	5	1 1	...	31·46	184
Bere Regis (Bloxworth)	Col. Cambridge	5	2 0	150 ?	32·46	...
D Beaminster Vicarage	Rev. Canon Codd	5	1 0	...	39·21	179
D Blandford (Whatcombe)	J. Mansel-Pleydell, Esq.	5	0 4	320 B	36·36	136
Cerne Abbas (Minterne Rectory) ..	Rev. H. Pix	5	2 0	566 †	44·82	176
" " (Melbury)	Mr. T. C. Elliott	12	2 9	...	39·73	...
D Beaminster (Chedington)	Miss Creed	5	1 6	...	43·79	198
D* Wimborne Minster (Chalbury) ...	Rev. G. H. Billington..	5	2 0	338 †	30·99	166

DIVISION V.—SOUTH WESTERN COUNTIES—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1885	Days on which 40 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level		
DORSET—(con.)						
D Shaftesbury	T. Ackland, Esq.	5	1 4	722 A	35·18	187
D Gillingham	S. H. Stephens, Esq....	5	1 2	244 T	32·32	186
DEVON.						
Salcombe (Prawle Point)	The Meteor. Council ...	8	1 9	350	25·02	...
D „ (The Molt).....	J. Drew, Esq.....	8	1 2	61 L	31·21	144
† Bolt Tail	G. Balkwill, Jun., Esq.	5	2 0	297	32·02	...
D Kingsbridge	W. H. Webb, Esq. ...	5	1 0	84	39·32	200
D† „ (Ringmore)	Baldwin Latham Esq CE	5	1 0	147	32·32	171
D Dartmouth (Strete)	Dr. Madden	8	1 0	200 B	33·27	164
D Plymouth (Navigation School)...	J. Merrifield, Esq. LL.D.	8	9 2	75 A	34·57	199
D* Devonport (Rowdens Res.)	H. Francis, Esq., C.E.	5	1 0	201 A	37·66	217
Brixham (Lupton)	Mr. J. Gibson	5	1 6	220 T	32·92	146
Plympton (Hemerdon)	Major Woollcombe ...	5	1 0	360	47·45	...
D Totnes	T. H. Edmonds, Esq...	5	1 0	94 L	42·98	203
D Paignton (Madeira Cottage).....	P. Symons, Esq.....	5	6 0	20 T	32·94	180
Bere Ferrers	Rev. F. T. W. Wintle.	5	1 0	100	47·11	202
D† Torquay (Lamorna)	W. Pengelly, Esq. F.R.S	5	1 0	200 A	33·45	190
D* „ (Castle College)	C. J. Harland, Esq. ...	5	1 0	167 A	32·05	176
D† „ (Babbacombe) <i>Snowdon</i>	E. E. Glyde, Esq.	5	1 0	294 A	34·40	188
„ (Watcombe Park)	Col. C. Ichabod Wright	5	1 0	500 B	37·02	149
Buckfastleigh (Bossel Park) ...	J. Hamlyn, Esq.....	5	2 0	150	58·25	182
*Walkhampton (Lowery)	H. Francis, Esq., C.E.	8	1 0	900	61·40	...
D „ „ „	„ „ „	5	1 0	...	53·28	190
Abbots Kerswell (Court Grange)	Mrs. Hare	5	1 0	130 B	36·21	130
D Ashburton (Holne Vicarage) ...	Rev. J. Gill	5	1 0	650 B	64·59	209
D† „ (Druid House)	Fabyan Amery, Esq. ...	5	1 0	572 T	52·58	187
D „ (Leusden Vicarage)...	Rev. F. Gilbert White	5	5 0	850	56·30	197
D Kingsteignton (Teignbridge Ho.)	F. H. Plumtre, Esq. ...	5	1 0	27 A	35·40	174
† Teignmouth (Lower Reservoir)...	W. C. Lake, Esq. M.D.	5	1 0	138 L	41·32	187
„ (Marine Villa)	W. B. Harris, Esq. ...	5	1 0	18	32·85	168
D „ (Woodway)	G. W. Ormerod, Esq....	5	1 0	235	33·72	192
D† Tavistock (Public Library)	Mr. R. Westington ...	8	20 0	283 T	45·44	205
D „ (Kelly College)	R. W. Taylor, Esq. ...	5	0 9	328	45·36	203
*† „ (Mount Tavy)	H. Clark, Esq.	5	1 0	316 T	51·47	...
D† Ilminster (Middlecott House) ...	Alfred Lyon, Esq.	9	3 6	649 T	50·01	154
Princetown (Cowsie Valley).....	H. Francis, Esq., C.E.	8	1 6	1352 T	71·05	...
D Ashburton (Cator Court)	F. H. Firth, Esq.	5	1 0	1060 T	66·39	218
D Dawlish	Capt. Strangways, R.N.	5	1 0	120 B	34·37	210
† Milton Abbot (Endsleigh).....	Mr. W. Prout	5	0 8	180 ?	51·06	...
Budleigh Salterton	R. Walker Esq.	5	1 0	100	31·21	179
„ „ (E. Budleigh)	R. H. Lipscomb, Esq...	5	1 0	70 A	34·43	175
D Starcross (Powderham Castle) ...	J. Drew, Esq.	8	2 0	57 L	34·18	180
Coryton (Lew Down)	Mr. T. M. Symons	5	4 0	445	47·76	190
D Polapit Tamar [Launceston] ...	E. Coode, Esq.	5	2 9	...	40·36	237
D Chagford (Batworthy)	F. N. Budd, Esq.	8	1 0	1250 ?	65·01	200
† Sidmouth (Sidmount)	The Roy. Meteor. Society	5	1 0	149 A	33·21	210
D Rousdon [Lyme Regis].....	C. E. Peek, Esq.	5	1 0	524	34·12	186

DIVISION V.—SOUTH WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1885	Days on which ·01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level		
			ft. in.	feet.	inches.	
DEVON—(con.)						
Rousdon [Lyme Regis]	C. E. Peek, Esq.	3	...	524 T	34·32	...
D†Cleveland [Lyme Regis]	E. L. Ames, Esq.	5	1 11	465 T	36·84	188
D†Exeter (Devon & Exet. Inst.) ..	Mr. E. Parfitt	6	13 7	155 T	35·38	151
D „ (Manston Terrace)	Miss Dymond	5	1 0	166 T	35·53	196
D „ (The Elms, Wonford)	Mrs. Stephenson	5	1 0	...	33·54	...
D†Okehampton (Oaklands)	W. H. Holley, Esq.	5	1 0	521 T	46·87	170
D Axminster (Great Trill)	F. J. Sparks, Esq.	5	1 0	300	37·70	127
D†Exeter (Brampford Speke)	Miss Gamlen	5	1 0	140 T	37·00	211
D Holsworthy (Clawton)	W. W. Melhuish, Esq.	5	1 1	400	39·41	191
D Axminster (Furzebrook)	A. P. Rogers, Esq.	5	1 5	128 T	33·86	163
D „	Mr. S. Griffin	5	4 6	138 T	38·99	157
D Hatherleigh (Broomford Manor) ..	Mr. W. Mortimore	5	1 4	484 T	41·70	199
D Bradninch Vicarage	Rev. W. A. Strong	5	1 0	312 B	36·57	188
Hatherleigh (Winsford)	Mr. A. Muirhead	5	1 5	600	34·93	188
D Cullampton	T. Turner, Esq.	5	1 0	202 T	47·35	...
D Petrockstow (Heanton Satchville) ..	Mr. A. Eames	5	1 0	...	36·50	203
Tiverton (Cove)	W. N. Row, Esq.	11	0 10	450 ?	41·28	190
D „ (Broomhill)	Mrs. Dickinson	5	1 1	380	38·77	...
D „ (Ivy Place)	H. S. Gill, Esq.	5	6 0	270	40·72	189
Beaford .....	...	5	5 0	489 T	39·66	214
D Torrington (Beare Ho., Langtree) ..	Mr. J. Snow	5	0 8	451 T	40·98	192
D† „ Vicarage	Rev. S. Buckland	5	1 3	323 T	45·70	216
D „ (Stevenstone)	R. H. Lipscomb, Esq. ...	5	1 0	400	42·66	181
D „ (Little Silver)	„ „ „	5	1 0	400 T	42·53	200
D Bampton (Huntsham)	Col. Troyte	8	0 6	600 B	43·04	199
South Molton (Rose Ash)	Col. Davy	8	1 0	650 T	46·58	215
D Bideford (Heale House Littleham) ..	R. Sanders, Esq.	8	1 0	280 B	34·95	180
D Hartland Abbey	Mr. G. Sleep	5	1 6	222	38·47	189
D South Molton (East Street)	N. C. Hatherly, Esq. M.D.	5	1 0	430 B	41·10	178
D „ (Castle Hill)	Mr. R. Nicholas	12	3 6	600	43·29	194
*†Bideford (Horwood)	Rev. J. Dene	5	1 0	288 T	40·91	182
D*† „ (Northam)	Rev. M. D. Churchward ..	5	1 0	173 T	35·40	209
D WestBuckland (Devon Cnty Schl.) ..	Rev. J. H. Thompson ..	5	1 0	650	35·94	206
D†Barnstaple	Mr. Knill	8	1 0	31 T	45·51	212
D „ (Arlington Court) ..	Lady Chichester	8	1 1	613 B	37·71	178
D†Ilfracombe Hotel	Mr. W. Tattam	12	9 0	34	52·40	206
†Lynton (Lee Abbey)	C. F. Bailey, Esq.	5	0 6	320	30·49	208
D†Lynmouth (Glenthorne)	Mrs. Halliday	5	0 9	93	35·63	...
CORNWALL.						
Penzance (Penlee)	J. Branwell, Esq.	5	1 0	71 T	39·02	163
† „ (South Parade)	W. H. Richards, Esq. ...	12	3 0	94 T	45·45	218
D „ (St. Clare)	Rev. Preben. Hedgeland ..	5	1 0	213 T	43·06	...
D „ (Poltair)	Miss Trelawny	5	1 0	243 B	44·23	234
Marazion	T. W. Field, Esq.	5	2 0	30 ?	48·31	230
Falmouth	The Meteor. Council ..	11	1 9	...	43·03	207
D „	W. L. Fox, Esq.	8	1 9	167	47·16	211

DIVISION V.—SOUTH WESTERN COUNTIES—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.	Days on which ·01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level	1885	
			ft. in.	feet.	inches.	
CORNWALL—(con.)						
St. Just	Mr. R. B. Searle	5	1 0	400	42·82	...
D Falmouth (Carelew)	Mr. J. Simmons	5	0 9	...	50·41	179
D Redruth (Trewirgie)	A. H. Jenkin, Esq. ...	5	1 0	400 T	49·36	229
D† Truro (Royal Institution)	Mr. Newcombe	5	40 0	56 T	44·59	199
D „ (Porthgidden) ...	Rev. Canon Phillpotts.	5	1 0	50	44·69	211
D Probus (Lamellyn).....	H. Tresawna, Esq.....	5	0 6	...	44·03	172
St. Agnes	Mr. Opie	5	1 3	278 B	42·49	168
St Austell (St. Mewan).....	Rev. G. L. Woolcombe	5	1 0	275 T	49·69	...
„ (Polcarne).....	J. Coode, Esq.	5	1 0	244 T	55·95	166
D†* „ (Trevarna).....	W. Coode, Esq.	5	0 6	300 T	51·59	214
Par Station (Penellick).....	W. E. Geach, Esq. ...	5	0 9	240 B	35·55	...
D Maker Vicarage [Devonport] ..	Rev. P. H. Newnham...	5	1 0	310 T	33·18	217
Empacombe [Devonport]	S. Harvey, Esq.	5	1 6	20	37·92	192
D St. Johns [Devonport]	Rev. J. H. Kirwan.....	5	1 0	20	38·78	195
D Lostwithiel (Lanwithan)	Miss Foster.....	10	1 0	80	46·79	202
D† Liskeard (Dean Terrace)	S. W. Jenkin, Esq., C.E.	5	1 1	375 T	47·40	211
D† Saltash (Pentillie Castle)	Mr. A. W. Cove.....	5	2 0	150 B	53·59	184
† Bodmin (Lanhydrock)	Rev. Prebendary Every	5	2 1	390	52·14	207
„ (Castle Street) ... weekly	Capt. Liddell, R.N. ...	5	0 1	315 T	54·05	218
† „ { „ „ }	„ „ „	5	1 0	316 T	51·77	218
D† „ { „ „ }	„ „ „	8	2 6	318 T	50·55	218
D† „ (Fore Street).....	Mr. A. Hambly	8	2 6	336 T	52·73	219
Liskeard (St. Cleer)	S. W. Jenkin, Esq., C.E.	5	1 1	620 T	50·56	...
D† Callington (Hingston Down).....	Major Richards	5	3 0	850 T	51·11	231
D† Launceston (Altarnun)	Rev. J. Power	5	1 0	570 B	61·24	212
D „ (South Petherwin)...	Rev. H. T. May.....	5	0 7	470 B	42·65	213
„ (Hexworthy)	H. M. Harvey, Esq. ...	5	2 7	410 T	45·37	196
North Tamerton [Holsworthy]..	Major Holt	5	0 10	500	39·26	219
D Bude	J. Arthur, Esq.	5	1 0	16 B	33·49	154
SOMERSET.						
Chard (Cricket St. Thomas)	Rt Hn. Viscount Bridport	5	1 0	400 B	40·00	132
D Crewkerne (Bincombe House) ...	F. J. Sparks, Esq.	5	1 2	250 T	38·50	131
D Yeovil (West Coker).....	Major Aldworth.....	5	1 0	250 T	35·16	198
„ (Hendford).....	J. Curtis, Esq.	5	1 1	...	35·42	145
D Ilminster (White Lackington) ...	Rev. Prebendary Gworing	5	1 0	136 T	33·80	197
D South Petherton	W. Blake, Esq.	8	0 8	110 T	28·87	186
Wellington (Sunnyside)	W. Elworthy, Esq. ...	5	1 0	...	30·83	129
D Temple Combe (Stowell Rect.)...	Rev. H. J. Poole	5	1 0	376 B	33·65	201
D Milverton	J. H. Bere, Esq.	5	1 0	198	35·17	199
D „ (Halse)	J. D. Hancock, Esq. ...	5	1 1	165	31·17	177
D Taunton (Lydeard House).....	C. Smith, Esq. ....	...	...	...	32·72	185
Cothelston House	C. E. J. Esdaile, Esq...	5	1 0	500	37·06	164
Wiveliscombe (Willett House) ..	J. Blommart, Esq.....	5	0 7	380	38·86	184
D Somerton (Butleigh Court)	R. Neville, Esq.....	8	1 2	80	31·45	162
D Glastonbury (Street).....	W. S. Clark, Esq.	8	1 0	70	29·07	190
„ („)	J. Clark, Esq.....	10	1 6	60	30·72	155
D „	Major Swayne	5	1 10	...	29·44	154

DIVISION V.—SOUTH WESTERN COUNTIES—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1885	Days on which ·01 or more fell
		Diameter	Height Above Ground	Height Above Sea Level		
			ft. in.	feet.	inches.	
SOMERSET—(con.)						
D Glastonbury	J. G. L. Bulleid, Esq..	5	1 2	52	29·99	171
D Exford Rectory	Rev. Prebendary Howes	5	1 0	930 B	52·82	232
D Bridgwater (Ashford)	G. B. Laffan, Esq.....	5	1 2	80	32·03	146
D Watchet (Old Cleeve)	Rev. G. J. Ford.....	4	1 0	200	38·15	195
Shepton Mallet	J. Spire, Esq.....	8	3 6	...	35·36	168
D Wells	Mr. R. J. Manning ...	5	44 0	188 T	36·26	173
D „ (Westbury).....	Miss Nalder.....	5	1 0	100	32·36	183
D Frome (Mells Rectory)	Rev. G. Horner	5	1 0	344 T	36·44	190
D „ (Rock House, Mells).....	W. A. Fussell, Esq. ...	7	2 4	326 T	37·18	191
Radstock (Downside).....	Registrar Gen. Returns	8	0 6	596	44·46	197
Chewton Mendip (The Priory)...	Mr. J. Dart	5	1 5	550 T	46·65	160
Ston Easton	H. E. Hippisley, Esq..	5	3 0	480 T	40·90	178
E. Harptree (Sherborne Reservoir)	Bristol Water Works...	5	1 0	338 T	39·00	178
D „ (Harptree Court) ...	W. W. Kettlewell, Esq.	5	1 0	346 T	44·21	189
Axbridge (Winscombe).....	Rev. R. F. Follett	8	1 0	200 T	34·38	159
Weston-super-Mare (High St.)..	The Roy. Meteor. Soc.	5	1 0	20	29·74	185
D „ „ „ (Worle Vic.)	Rev. W. F. Rose	5	1 0	16	34·27	188
„ „ „ (Kewstoke).	Rev. S. G. Gillum	5	0 10	40 ?	32·90	176
Chew Magna	Bristol Water Works...	5	1 0	160 T	37·96	182
D† Bath (Royal Literary Institute).	C. P. Russell, Esq.....	6	8 0	75 T	32·82	178
D „ (Queen's Parade)	H. Stokes, Esq.	5	1 0	100 T	33·56	213
D Batheaston Reservoir.....	A. Mitchell, Esq.	6	2 0	226 T	31·30	153
Barrow Gurney Reservoir	Bristol Water Works...	5	1 0	320 T	37·88	178

DIVISION VI.—WEST MIDLAND COUNTIES.

GLOUCESTER.

Bristol (Small Street)	Bristol Water Works...	12	33 10	52	31·35	175
D† Clifton (South Parade)	Dr. G. F. Burder	8	1 0	192 T	34·79	180
Bristol (Over Court) Park.....	R. C. C. Lippincott, Esq..	5	1 0	148 T	32·95	194
„ „ „ „ Garden ...	„ „ „ „ „	8	0 8	140	32·80	194
ChippingSodbury (FramptonCotl)	J. Marsh, Esq.	5	1 0	180 T	29·50	149
D „ „ „ (StanshawsCt)	R. N. Hooper, Esq. ...	5	1 3	280 T	30·75	173
D Wickwar Rectory	Rev. R. J. Lyon ...	5	1 0	260 T	29·99	177
D Fairford (Kempsford)	R. A. Iles, Esq.....	5	0 8	...	27·79	163
D Berkeley (Salter Street)	H. E. Cooke, Esq.....	5	8 0	60	25·11	173
D Nailsworth (Spring Hill)	E. P. Westley, Esq. ...	8	2 0	267	31·98	177
D Berkeley (Sharpness New Docks)	W. B. Clegram, Esq., C.E	5	3 6	50	30·02	161
D Lechlade	T. Arkell, Esq.	5	1 0	...	28·10	178
D Minchinhampton (The Close) ...	Major Pennington.....	8	1 0	582	33·13	209
Fairford (Park Farm)	A. Iles, jun., Esq.....	5	0 9	295 T	30·16	149
D Cirencester (Claremont Place) ...	R. Gorton, Esq.....	8	1 0	356 T	32·19	216
„ „ „ „ „	„ „ „ „ „	8	2 0	357 T	33·16	216
„ „ „ „ „	„ „ „ „ „	8	0 6	356 T	33·06	216
„ „ „ „ „	„ „ „ „ „	8	11 0	366 T	30·74	216
D „ „ (Royal Agricultural Coll.)	H. H. Robinson, Esq....	5	1 0	443	30·31	196
„ „ (Further Barton)	Miss Brown	5	1 0	425	32·67	198

DIVISION VI.—WEST MIDLAND COUNTIES—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1885	Days on which ·01 or more fell.
		Diameter.	Height Above Ground.	Height Above Sea Level		
			ft. in.	feet.	inches.	
GLOUCESTER—(con.)						
D Stroud (Brimscombe Vic.)	Rev. J. Wilkinson	5	4 0	611 A	33·14	202
D „ (Upfield).....	Miss Stanton	5	1 0	226 A	28·99	177
D Fairford (Hatherop Rectory) ...	Rev. R. P. Davies	8	1 3	411 A	31·72	186
D Frampton-on-Severn(Saul Lodge)	W.B.Clegram, Esq., C.E.	5	3 6	42 A	28·12	198
D Coleford (The Coombs)	I. Trotter, Esq.	5	1 0	660	43·42	202
D Newnham-on-Severn.....	D. J. Wintle, Esq.....	5	0 3	56 A	34·97	151
D Westbury-on-Severn Vicarage...	Mrs. C. J. Jones.....	5	0 8	62 A	32·17	200
D Great Barrington [Burford].....	J. P. Wakefield, Esq... 8	1 0	416 T	30·54	173	
Northleach (Yanworth).....	T. Arkell, Esq.	5	1 0	...	31·69	...
„ (Sherborne Park) ...	Hon. R. Henley Eden..	5	1 0	405	33·01	...
D* „ (Hampnett Rectory).	Rev. W. Wiggin	5	1 0	653 A	29·49	181
Gloucester (Quedgeley House)...	W. G. Robinson, Esq..	5	1 0	65 T	26·85	183
D „ (Birdlip Hill)	A. S. Helps, Esq.	5	1 0	800 B	29·75	182
D „ (Witcombe Res.).....	R. Read, Esq., C.E. ...	8	3 0	297 A	30·28	166
D „ (Llanthony Lock) ...	H.J. Marten, Esq., C.E.	5	1 2	39 A	25·18	192
D „ (Lower Barton Street)	W. P. Brown, Esq. ...	5	1 0	65 A	25·26	168
D Mitcheldean (Edge Hill House)..	W. H. M. Phillips, Esq.	5	1 6	725 A	36·18	195
D Andoversford (Hampen)	S. S. Buckman, Esq....	5	1 0	745 T	32·18	197
D Gloucester (Maise more Lock) ...	H.J. Marten, Esq., C.E.	5	1 1	39 A	26·04	226
D Bourton-on-the-Water	W. C. Coles, Esq., M.D.	5	1 6	435 A	32·14	162
D Cheltenham (Battledown).....	Sir Brook Kay, Bt. ...	5	0 8	393 A	26·12	178
„ (Northfield)	W. McLandsboro', Esq.	8	2 0	520	28·16	154
„ (Hewletts Res.) ...	„ „ „	8	0 9	400	27·13	154
„ (Montpellier Lodge)	Rev. Dr. Kynaston ...	5	1 0	200	26·10	...
D „ (Southam Villa) ...	R. Tyrer, Esq.	5	1 0	184 A	26·45	193
„ („ „) M	„ „ „	5	1 0	184 A	25·14	...
D Moreton-in-Marsh(Longborough)	W. Arkell, Esq.....	5	0 9	...	32·17	189
D Tewkesbury (Upper Lode)	H.J. Marten, Esq., C.E.	5	1 0	41 A	24·72	172
D „ (Beckford)	F. Slade, Esq., C.E. ...	8	1 0	120 A	25·61	177
Alscot Park [Stratford-on-Avon]	Mr. T. B. Wilson	5	1 3	...	25·21	172
HEREFORD.						
D† Ross (The Graig)	H. Southall, Esq.	5	1 0	213 A	28·24	204
Much Dewchurch (Bryngwyn)...	J. Rankin, Esq., M.P.	5	0 10	420 B	28·99	181
D Brockhampton Court.....	Sir C. R. Lighton, Bart.	5	1 10	350	21·54	135
D Much Marcle (Caerswall)	T. Charles, Esq.....	5	1 0	423 B	27·88	174
D Hereford (Fownhope Vicarage)...	Rev. T. West.....	5	1 0	192 B	22·81	149
D Ledbury (Orchardleigh)	M. A. Wood, Esq.....	5	3 0	160	28·06	148
„ (Putley Court)	J. Riley, Esq.....	5	1 0	280	28·04	171
† Hereford (Hagley Park)	A. Hutchinson, Esq....	5	0 6	300 B	22·88	...
D Ledbury (Colwall).....	Mrs. Devas.....	5	0 10	650 B	31·47	182
D „ (Canon Frome Vic.) ...	Rev. M. Hopton.....	8	1 3	252 T	25·94	175
Hereford	C. Anthony, Esq.	8	0 6	275	24·59	176
„ (Brinsop Vic.).....	Rev. W. Elliot	5	1 0	300 T	26·27	176
D „ (Burghill)	T. A. Chapman, Esq. M.D	5	1 0	275	24·57	172
„ („ „)	„ „ „	5	1 0	275	25·27	172
D „ („ Portway).....	Baldwin Latham Esq CE	5	1 0	...	25·91	170
D „ (Thinghill, Withington)	H. Higgins, Esq.	5	1 0	200 ?	23·71	171

DIVISION VI.—WEST MIDLAND COUNTIES—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.	Days on which "01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level	1885	
HEREFORD—(con.)						
Staunton-on-Wye	Rev. H. W. Phillott ...	8	1 1	255 B	32·31	200
Hope-u-Dinmore (Hampton C.) ..	J. H. Arkwright, Esq. ..	8	1 3	212 B	25·03	127
Kington (Lynhales)	S. Robinson, Esq.	8	1 0	...	35·34	147
Pembridge (Marston)	H. Langston, Esq.	5	1 5	345	30·75	201
Leominster (Farm)	H. J. Southall, Esq.	5	1 0	250	32·22	191
Stoke Bliss	Rev. G. E. Alexander..	5	1 0	400 B	31·30	187
SHROPSHIRE.						
Burford	Rt. Hon. Lord Northwick	5	1 3	...	24·62	...
Ludlow (Ashford)	Rev. J. Selwood Tanner	5	1 5	233 A	31·07	191
Dowles [Bewdley]	J. M. Downing, Esq. ..	5	1 3	162 A	29·71	150
Cleobury Mortimer (Neen Savage)	Rev. F. Burd ...	5	0 11	367 T	32·92	192
Ludlow (Bromfield Vicarage) ...	Rev. W. Selwyn ..	5	1 0	300 T	32·40	171
Craven Arms (Stokesay Vicarage)	Rev. J. D. La Touche..	5	1 0	371 A	32·38	192
Burwarton	Rev. A. James	5	1 0	830	38·18	188
North Cleobury (Burf Cottage)..	" " " " " " " "	5	...	...	42·32	...
Bishop's Castle (Castle Street)...	E. Griffiths, Esq.	5	2 10	720 B	34·48	193
" " (More Rectory)...	Rev. A. S. Male	5	1 0	640 A	34·61	222
Much Wenlock (Larden Hall) ...	Miss F. Rouse Boughton	8	1 3	658 A	33·62	204
Bridgenorth (Aldenham Park) ..	H. W. Keary, Esq. ...	5	3 9	430	32·68	187
Church Stretton (Preen Manor)...	A. Sparrow, Esq.	5	1 0	700	32·89	194
" " (Woolstaston)...	Rev. E. D. Carr.	5	1 0	800 A	35·45	207
Middleton in Chirbury	Rev. W. Brewster.....	5	1 2	702 A	31·30	205
Much Wenlock (Willey Park)...	T. H. Thursfield, Esq.	5	1 0	502 A	30·72	196
Broseley (Benthall Hall)	G. Maw, Esq.	8	1 0	600 B	29·16	205
Pontesbury (The Villa).....	W. R. Croft, Esq.	5	1 6	...	30·64	135
Hanwood	John Marshall, Esq. ...	5	2 7	342	28·62	170
Shrewsbury	" " " " " " " "	10	5 6	240	24·47	176
" " (Onslow Hall)	Col. Wingfield	5	2 6	240	24·54	176
" " " " " " " "	" " " " " " " "	8	0 5	...	28·49	167
" " " " " " " "	" " " " " " " "	8	0 3	...	27·98	...
The Bulthy [Middletown].....	R. Gardner, Esq.	5	1 0	698 A	33·32	...
D Wem (Sansaw Hall)	Thelate FG Tippinge Esq	5	1 0	314 A	28·38	187
Cheswardine (Knighton Res.) ...	G. R. Jebb, Esq., C.E.	8	0 0	351 A	28·41	...
Oswestry (Park Avenue)	H. T. Wakelam, Esq.	6	1 3	490 T	36·66	...
" (Hengoed)	Rev. A. R. Lloyd	5	6 0	470 A	35·33	...
Market Drayton (Buntingsdale) ..	Mrs. Tayleur	5	1 0	276 A	27·58	177
D Adderley Rectory	Rev. A. Corbet	5	0 9	287 B	28·93	195
Whitchurch (Green End)	Messrs. Jones & Co. ...	12	2 6	...	28·22	...
STAFFORD.						
Kinver Gram. Schl. [Stourbridge]	E. B. Marten, Esq., C.E.	8	0 6	180 L	30·11	184
Dennis [Stourbridge]	Mr. C. Webb	8	6 6	270 B	27·88	180
D Netherton (Lodge Farm Res.) ...	G. R. Jebb, Esq., C.E.	5	1 0	445 A	28·23	182
Perry Hall [Birmingham]	Mr. G. B. Mitchison ...	6	3 0	...	30·74	191
Walsall	E. B. Marten, Esq., C.E.	8	4 0	463 A	35·26	192
D Wolverhampton (Town Hall) ...	G. E. Thoms, Esq., C.E.	5	15 6	481 A	23·23	184
D " " Park	Mr. W. Thomas	5	1 0	430 A	28·26	187

DIVISION VI.—WEST MIDLAND COUNTIES—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.	Days on which of or more fell.
		Diameter	Height Above Ground	Height Above Sea Level	1885	
			ft. in.	feet.	inches.	
STAFFORD—(con.)						
D Patshull Gardens	Mr. Bayne	8	1 3	400	27·33	159
D Wolverhampton (Wrottesley) ...	Mr. E. Simpson	8	1 0	500	26·63	174
D Bloxwich (Sneyd Res.)	G. R. Jebb, Esq., C.E.	5	1 0	507 ∇	27·09	179
D Hammerwich (Cannock Chase Res)	„ „ „	5	1 0	475 ∇	26·50	179
Lichfield Museum	Mr. J. P. Roberts	5	2 0	220 ∇	30·55	193
D Weston Park [Shifnal]	Rt. Hon. Earl of Bradford	5	1 6	400	28·75	214
Brewood (Belvide Res.)	G. R. Jebb, Esq., C.E.	8	1 0	367 ∇	24·54	136
D Penkridge (Rodbaston)	H. Ward, Esq.	5	1 0	260 ?	28·21	123
Alrewas (The Cottage)	E. Sellick, Esq.	5	1 6	...	28·44	161
D Burton (Shobnall)	R. W. Abbotts, Esq.	5	6 0	156 ∇	24·81	163
D Uttoxeter (Leigh)	J. B. Piercy, Esq.	5	1 0	498 ∇	33·37	184
D† Cheadle (The Heath House)	J. C. Philips, Esq.	5	1 0	647 ∇	30·25	207
D† „ (Teau Vicarage) <i>new g.</i> ..	Rev. G. T. Ryves	5	1 0	470 ∇	32·01	215
D Longton (The Moir)	J. B. Piercy, Esq.	5	1 0	618 ∇	30·64	196
Stoke (Stanley Reservoir)	W. H. Stubbs, Esq., C.E.	5	3 1	550 ∇	27·36	..
Etruria	„ „ „	5	4 2	440	26·93	154
D Burslem ..	J. E. Worth, Esq., C.E.	8	0 8	555 ∇	30·11	209
Alstonfield Vicarage	Rev. W. H. Purchas ...	5	1 0	909 ∇	38·86	166
D Leek (Wall Grange)	J. B. Piercy, Esq.	8	1 0	458 ∇	31·88	201
D „ „ „	„ „ „	5	1 0	458 ∇	31·84	202
Knypersley [Congleton]	W. H. Stubbs, Esq., C.E.	5	14 0	500 ∇	32·70	180
Leek (Rudyard)	„ „ „	5	12 7	500 ∇	27·60	117
WORCESTER.						
Blockley	R. B. Belcher, Esq. ...	5	1 0	472	26·30	...
Northwick Park	Rt Hon Lord Northwick	8	1 6	450 ∇	29·27	...
Upton-on-Severn (Willow Bank)	J. S. Cowley, Esq.	5	1 0	...	27·27	158
D Little Malvern (The Farm)	E. J. Moody, Esq.	8	1 0	500 ∇	30·18	182
D Evesham (Lansdowne)	R. Burlingham, Esq.	5	5 6	124 ∇	25·25	162
D „ (Bank)	T. J. Slatter, Esq.	5	1 0	103 ∇	26·22	172
West Malvern	The late A. H. Hartland Esq	8	1 6	850 ∇	30·22	...
D Great Malvern (Hornvold Ter.) ..	H. Sandoe, Esq.	5	0 7	550 ∇	30·55	129
„ „ ..	J. E. Palmer, Esq.	5	1 0	361 ∇	31·59	...
„ „ (Madresfield) ..	Rev. G. S. Munn	5	1 4	124 ∇	28·37	150
„ „ (Court) ..	Mr. W. Crump	8	1 0	135 ∇	28·40	150
D Worcester (Diglis Lock)	H. J. Marten, Esq., C.E.	5	1 0	49 ∇	28·28	177
D „ (St. George's Square) ..	G. B. Wetherall, Esq. ..	5	1 6	56	27·01	192
D „ (Bevere Lock)	H. J. Marten, Esq., C.E.	5	1 1	52 ∇	27·88	190
D „ (Hawford Lodge)	Mr. G. Read	5	1 1	...	33·02	185
D Droitwich (Holt Lock)	H. J. Marten, Esq., C.E.	5	1 1	55 ∇	29·97	166
D Tenbury (Orleton)	T. H. Davis, Esq.	5	0 9	193 ∇	31·12	192
D Redditch (Prospect Hill)	H. Page, Esq., M.D.	5	1 0	420 ∇	29·89	205
Bromsgrove (Stoke Reformatory)	Mr. J. Salter	5	1 3	225 ∇	28·55	134
D „ (Tardebigge Res.) ..	W. B. Clegram, Esq. C.E.	5	3 0	433 ∇	29·12	177
D Stourport (Lincombe Lock)	H. J. Marten, Esq., C.E.	5	1 0	62 ∇	29·72	192
„ (Hartlebury)	J. Watson, Esq.	5	2 0	320	28·07	...
„ (Areley Court)	C. Harrison, Esq.	5	1 0	145 ∇	29·12	193
D Bromsgrove (Upper Bittal Res.) ..	W. B. Clegram, Esq. C.E.	5	3 0	518 ∇ ?	33·91	194

DIVISION VI.—WEST MIDLAND COUNTIES—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of	Days on which -01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level	Rain. 1885	
			ft. in.	feet.	inches.	
WORCESTER—(con.)						
Stourbridge (Pedmore)	E. B. Marten, Esq., C.E.	8	0 11	350 ∇	29·29	186
„ (Longlands)	„ „ „	8	1 0	260 ∇	29·35	179
WARWICK.						
∇ Shipston (Compton Wynyates)...	J. Sargent, Esq.....	5	2 6	...	27·14	157
Radway (Ivy Lodge).....	Rev. G. Miller	5	1 1	530 ∇	28·83	168
Farnborough Vicarage	Miss Prater	5	1 0	...	27·92	180
Kineton (Fenny Compton)	E. Knott, Esq.	5	4 0	430	25·75	...
Stratford-on-Avon (Avonside) ..	C. Lucy, Esq.....	8	0 8	123 ∇ ?	25·37	...
∇ Warwick (Barford Rect.)	Rev. C. Mills.....	8	0 11	200 ?	25·17	178
∇ Southam (Stockton)	Rev. W. Tuckwell.....	5	1 0	287 ∇	25·47	178
∇ Warwick (Priory Gardens)	Mr. R. Greenfield	5	4 2	240 ∇	26·60	155
Leamington (Upper Parade).....	J. Barnitt, Esq.....	5	0 8	195 ∇	25·11	164
∇ Henley-in-Arden (Barrells Park)	T. H. G. Newton, Esq.	5	1 0	300 ∇	31·25	195
∇ Leamington (Blackdown)	A. S. Field, Esq.	5	0 9	250 ∇	27·34	174
∇ Kenilworth (The Spring)	W. Evans, Esq.	5	1 0	312 ∇	27·20	184
∇ Rugby School.....	C. H. Hodges, Esq. ...	5	1 3	383 ∇	26·66	197
∇ Coventry (Ryton on Dunsmore) ..	C. Twamley, Esq. ...	5	1 2	260 ∇	26·46	173
∇ „ (Priory Row)	J. Gulson, Esq.	8	1 2	279 ∇	29·71	178
„ (Middlesboro' Terrace).	Miss Merry	5	1 0	345 ∇	28·23	174
∇ „ (Coundon)	Colonel Caldicott	5	1 0	350 ∇	28·22	160
∇ Willey Rectory [Lutterworth]..	B. P. M. Payler, Esq. .	8	1 0	350 ∇	27·72	175
∇ † Birmingham (Botanic Gardens) ..	Mr. Latham	5	5 2	505 ∇	28·34	189
∇ „ (The Crescent)	J. J. Gilbert, Esq.....	5	21 0	495 ∇	28·90	175
∇ „ (Winson Green) ...	H. G. Hill, Esq.	5	1 0	474 ∇	29·91	160
∇ Atherstone	Baldwin Latham Esq. C.E.	5	1 0	286 ∇	28·59	186

DIVISION VII.—NORTH MIDLAND COUNTIES.

LEICESTER.						
∇ Market Harboro' (The Hutch)...	R. Symington, Esq.	8	4 0	267 ∇	27·41	158
Ashby Magna	Rev. Canon Willes.	5	1 6	438 ∇	26·57	170
† Fleckney	J. B. Putt, Esq.	5	0 10	411 ∇	28·63	...
∇ Church Langton	G. H. Logan, Esq. ...	8	4 0	400 ∇	30·79	207
∇ † Kibworth Beauchamp	T. Macaulay, Esq.	5	2 6	355 ∇	28·38	182
∇ Hinckley (Mill Hill House)	Rev. A. L. Watherston	5	1 0	400 ?	27·61	149
Market Bosworth (Osbaston Hall)	Mr. J. Gregory .....	...	...	...	29·61	...
∇ † Leicester (Town Museum)	J. C. Smith, Esq.	5	1 0	238 ∇	28·14	185
∇ † Thornton Reservoir	F. Griffith, Esq., C.E.	10	2 8	370	27·53	157
Barkby	Rev. E. N. Pochin.	5	0 1	224 ∇	27·47	149
∇ Thureaston (Cropston)	F. Griffith, Esq., C.E.	8	1 0	...	29·32	177
∇ Bardon Hill House	J. B. Everard, Esq., C.E.	...	...	...	28·48	180
∇ Melton Mowbray (Dalby Hall)...	Mr. G. Jones	8	2 6	480 ∇	27·56	154
∇ Rotherby Hall	J. Hames, Esq.	5	1 0	250	28·55	187
Whitwick (Mt. St. Bernard Abbey)	F. Griffith, Esq., C.E.	...	...	632	29·06	...
Charley (Oaks Church) .....	„ „ „	...	...	468	30·28	...

DIVISION VII.—NORTH MIDLAND COUNTIES—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1885	Dayson which ·01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level		
			ft. in.	feet.	inches.	
LEICESTER—(con.)						
Black Brook (Spring Barrow) ...	F. Griffith, Esq., C.E. ...	...	...	387	29·49	...
"	"	...	...	336	28·23	...
d Melton Mowbray (Thorpe Arnold)	Rev. J. S. Swift	8	2 3	336 A	25·77	180
Loughborough (Nan Panton Res.)	A. W. Cross, Esq., C.E.	8	2 11	269 A	28·28	179
"	"	5	...	269	28·10	...
" (Cedar Cottage) ...	J. Giles, Esq.	5	0 9	327 T	30·18	...
d " (Victoria Street) ..	W. Berridge, Esq.	5	0 10	169 B	26·74	184
"	"	8	0 11	169 B	26·69	184
d Melton Mowbray (Coston Rect.)	Rev. A. M. Rendell ...	5	1 0	362 A	25·54	183
d Waltham-le-Wolds	Mr. E. Ball	5	1 6	532 A	26·26	182
d Harston [Grantham]	F. Beasley, Esq. ....	...	1 3	...	28·08	171
d† Belvoir Castle	W. Ingram, Esq.	8	1 0	237 T	26·31	196
RUTLAND.						
d Uppingham (West Deyne)	Rev. G. H. Mullins ...	8	1 6	485 A	27·54	183
d Ketton Hall [Stamford]	F. Coventry, Esq.	5	1 0	130 B	27·64	187
d Toilethorpe Hall [Stamford]	C. O. Eaton, Esq.	8	0 8	160 T	24·58	160
Burley-on-the-Hill	Mr. W. Temple	8	1 0	...	26·78	160
Ryhall	Rev. C. Potchett ...	5	1 0	...	24·98	139
Oakham (Greetham)	Rev. C. A. Holmes ...	5	0 8	377 A	25·82	156
d Market Overton	Miss H. E. G. Wingfield	8	0 11	...	28·68	210
LINCOLN.						
Stamford (Barn Hill Ho.)	Dr. Newman	5	1 0	116 T	24·33	...
" (Castle Cottage)	T. Booth, Esq.	5	1 0	...	26·25	...
d " (Northfields)	Mr. W. Hayes	5	1 0	166 A	26·62	153
d* Bourne (Wytham-on-the-Hill) ..	A. C. Johnson, Esq. ...	5	1 0	167 ?	22·94	117
Long Sutton (Tydd Gote)	Mr. J. Tilson	5	4 0	...	24·08	151
Spalding (Pode Hole)	Mr. A. Harrison	12	0 3	20 A	23·88	...
Grantham (Saltersford)	H. Preston, Esq.	5	0 7	188 A	26·88	164
" (Heydour Vicarage) ..	Rev. G. F. Deedes	5	1 10	...	26·59	136
d Boston (High Street)	W. H. Wheeler, Esq. C.E	5	6 6	24 A	23·42	151
d " (Grand Sluice)	J. E. Williams, Esq., C.E	8	6 0	22	23·31	194
" (Church Yard)	Rev. Meteor. Soc.	5	3 0	22	20·91	116
Leake (Lade Bank Engines)	J. E. Williams, Esq., C.E	...	...	...	25·13	142
d Stubton [Newark]	G. Nevile, Esq.	5	4 6	...	26·98	176
Sleaford (Bloxholm)	Mr. D. Lumsden	5	1 6	60	23·75	108
d Navenby	Rev. J. Hays ...	8	1 2	215 T	26·06	191
d Skegness	C. H. Tippet, Esq. ...	8	1 6	10 L	19·59	109
Horncastle (Miningsby)	W. H. Wheeler, Esq. C.E	5	0 6	135 A	25·90	117
Spilsby (Partney)	Rev. T. Owston	5	1 0	73	28·81	178
d Horncastle (Bucknall)	W. Carter, Esq.	5	1 6	100	25·19	125
" (Queen Street)	H. George, Esq., M.D..	5	1 0	100	28·09	...
d Lincoln (Branston)	A. S. Leslie Melville, Esq	...	...	...	28·28	143
d† " (Boultham)	Mr. F. Terrill	5	1 0	18 A	28·66	158
† " (St. Botolphs)	J. H. Teague, Esq.	5	1 3	25 A	27·79	...
d " (Doddington)	Rev. R. E. Cole	5	1 2	92 A	23·93	164
"	M. S. & L. R. Co.† ...	9	3 6	26	25·07	...

† Kept for the Canals Department of the Manchester, Sheffield, and Lincolnshire Railway Company.
Returns supplied by G. Taylor, Esq.

DIVISION VII.—NORTH MIDLAND COUNTIES—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.	Days on which "01 or more in.
		Diameter.	Height Above Ground.	Height Above Sea Level	1885	
			ft. in.	feet.	inches.	
LINCOLN—(con.)						
Lincoln (D'Isney Place)	A. H. Leslie Melville Esq.	4	1 0	215 L	26·57	123
D „ (Brayford Wharf)	Mr. J. W. Horton	5	5 8	28 A	25·83	171
„ (Tentercroft Street) ..	W. F. Norton, Esq. ...	8	1 3	22	24·46	...
„ (The Quarry)	R. Swan, Esq.	8	1 5	210	24·02	163
„ (Skellingthorpe Hall) ...	R. C. B. Coupland, Esq.	5	1 1	...	25·10	151
D Horncastle (Hemingby)	Rev. E. S. Bengough..	5	1 0	101?	27·95	182
D Alford (The Burial Ground).....	Mr. E. Hodgson.....	5	1 0	29 A	27·51	180
D „ (The Sycamores)	J. E. Mason, Esq.....	8	1 3	22	27·37	191
D „ (Sutton-by-the-Sea)	F. Lowry, Esq., C.E.	5	1 0	9 A	24·31	138
D „ (Mablethorpe)	A. Spurr, Esq.	5	1 0	10	23·89	167
Gate Burton	M. S. & L. R. Co.	9	3 6	96	24·29	...
† Louth (Gospelgate)	T. W. Wallis, Esq. ...	5	6 0	111 A	29·59	187
† „ (Westgate)	Dr. F. Fawcett	5	0 9	120 A	29·05	196
„ „ „	Rev. J. A. Barrow Clough	5	1 0	...	32·38	...
Market Rasen	M. S. & L. R. Co.	9	...	100	29·58	...
Gainsborough	„ „ „	9	...	76	20·14	...
Stockwith	„ „ „	9	3 6	21	24·54	...
Caistor	Rev. R. Thomas	5	0 9	283 A	26·29	151
Wroot Engine	A. L. Peace, Esq., C.E.	10	6 0	...	21·13	136
Brigg	M. S. & L. R. Co.	9	3 6	16	21·22	...
D „	A. Atkinson, Esq., C.E.	8	1 2	10 I	28·64	174
D Grimsby (Aylesby)	S. McAulay, Esq.	5	1 6	...	29·61	166
Riby	Mr. Freeman	5	3 0	...	32·14	178
Grimsby	M. S. & L. R. Co.	9	15 0	42	25·30	...
D Ulceby (Limber Grange)	T. Hopkins, Esq.	5	1 6	210 B	33·79	192
Barnetby	M. S. & L. R. Co.	9	3 6	51	26·24	...
D N. Level Engine [Thorne Donc'st'r]	A. L. Peace, Esq., C.E.	5	2 3	...	20·84	162
Crowle (Keadby)	M. S. & L. R. Co.	9	...	10	20·20	...
Appleby	Rev. J. E. Cross.....	5	0 9	60 L	24·40	157
D Ulceby (Killingholme)	Rev. J. Byron.....	5	1 4	60 A	29·27	200
Ferriby Sluice	Rev. J. E. Cross.....	5	0 9	10	24·76	...
New Holland	M. S. & L. R. Co.	9	3 6	18	24·11	...
NOTTS.						
Normanton on Soar [Loughboro']	T. W. Rowland, Esq....	5	0 0	118	26·50	...
Kingston Hall [Loughborough]..	Mr. J. W. Bayne	5	2 0	...	24·89	...
D Thrumpton Hall	Mr. Geddes.....	5	0 7	111 A	24·62	152
Cropwell Bishop (Cropwell Grove)	H. Smith, jun., Esq....	5	1 1	160 I	23·77	140
D Nottingham (Beeston Fields) ...	G. Fellows, Esq.	5	0 9	206 A	26·46	180
D „ (The Park)	M. O. Tarbotton, Esq., CE	8	1 0	162 A	26·66	171
D „ (Cavendish Crescent N)	J. D. Walker, Esq.	5	1 2	234 A	24·04	173
„ (Waterworks Off.) ...	M. O. Tarbotton, Esq. CE	8	48 0	172 A	23·60	156
D „ (Stoke Bardolph Sew Frm)	Mr. J. Avis.....	8	6 7	...	24·59	123
„ (Strelley Church) M	T. L. K. Edge, Esq. ...	5	62 0	444 I	20·95	...
D „ („ Hall)	„ „ „	8	1 0	396 A	26·96	188
„ („ „) ... M	„ „ „	5	1 0	396 A	27·27	...
D „ (Mapperley Hill) ...	E. Powell, Esq.	8	1 0	400	24·57	144
D „ (Gedling)	Rt. Hon. Lord Forester	5	2 6	137 I	25·56	178
D „ (Woodthorpe Grange) ..	H. Ashwell, Esq.	8	1 3	270 ?	26·95	178

DIVISION VII.—NORTH MIDLAND COUNTIES—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.	Days on which 61 or more fell.
		Diameter	Height above Ground.	Height above Sea Level	1885	
			ft. in.	feet.	inches.	
NOTTS—(con.)						
D East Bridgford	Dr. W. W. Morris ...	4	1 6	...	24·71	167
Eastwood Colliery	Mr. W. Weston.....	5	38 0	283 T	22·62	172
D "	"	5	1 0	245 T	27·78	179
Greasley (Moorgreen)	S. "Taylor," Esq.....	5	4 0	387 T	27·12	176
D Hucknall Torkard (Forge Mills)	J. D. Walker, Esq.....	5	1 0	200 ?	25·72	166
D Newark (East Stoke).....	Miss Stanton	5	1 3	...	25·78	164
D Annesley Park	Mr. A. Young	8	2 0	560	27·77	145
Southwell (Oxton).....	H. Sherbrooke, Esq. ...	5	0 9	182	27·19	191
D Newark (Kirkgate)	Mr. A. Read	5	0 6	50	23·04	163
D Mansfield (Market Place).....	Mr. W. Jackson	5	1 0	360 T	30·17	191
D Ollerton (Thoresby Gardens) ...	Mr. A. Henderson	8	4 0	175	27·44	164
D Tuxford (Grammar School).....	J. N. Dufty Esq.	5	1 0	220 T	25·72	167
Worksop	M. S. & L. R. Co.	9	3 6	127	25·56	...
D " (Osberton)	Mr. S. A. Woods ...	5	3 10	...	31·21	201
Retford	M. S. & L. R. Co.	9	3 6	52	23·83	...
D Worksop (Hodsock Priory)	H. Mellish, Esq.	8	1 0	56 T	24·70	181
" (" ")	"	5	1 0	56 T	23·61	...
D The Gardens [Bawtry Hall] ...	L. T. Baines, Esq.....	5	1 0	31 T	22·21	169
D Hesley Hall [Tickhill]	B. I. Whitaker, Esq....	8	1 0	61 T	21·39	172
DERBY.						
D Stapenhill [Burton]	R. W. Abbotts, Esq....	5	4 0	170	25·21	182
D Bretby Park ["]	Mr. G. Brunt	5	4 6	405 T	29·67	177
Winshall ["]	J. Matthews, Esq.	5	1 0	272 T	24·21	150
D Melbourne	Miss Tasker	5	0 5	...	29·12	146
Derby (Findern)	Rev. B. W. Spilsbury..	5	0 9	192 B	25·35	...
D " (Elvaston)	H. Chambers, jun. Esq	5	1 0	...	26·19	192
D Mickleover Manor	Mr. J. Campbell	5	2 0	200	27·55	125
D Derby (Christ Church Vic.)	Rev. W. H. Askwith...	5	1 0	265 T	26·46	130
" (Spondon)	J. T. Barber, Esq.....	5	0 7	272 T	26·97	152
" (Duffield)	Mr. W. Bland	5	1 0	250 T	28·48	173
D Belper (Northfield).....	J. Hunter, Junr. Esq. C.E	8	0 8	225	31·52	179
D Wirksworth (Holloway)	R. Wildgoose, Esq. ...	5	1 0	450 T	37·03	191
† Matlock (Willersley Gardens) ...	Mr. Barlas	6	1 3	440 T	38·00	...
† " Bath	Mrs. Chadwick	5	1 6	500 T	36·83	...
Stretton (Lindway Res.)	R. G. Coke, Esq., C.E.	5	4 3	447 T	21·45	141
D Stuffynwood Hall [Mansfield]...	J. Paget, Esq.	5	1 3	389 T	27·69	185
Chesterfield (Hardwick Hall) ...	Mr. Wilson	8	1 6	594 T	29·53	186
D " (Grassmoor Colliery)	E. Bromley, Esq.	5	19 10	370	21·73	179
D Chatsworth Gardens	O. Thomas, Esq.	8	5 6	425	32·51	204
D Chesterfield (Brampt'n S. Thomas)	Rev. J. M. Mello	5	3 0	314 T	26·80	135
D " (Gas Works)	C. E. Jones, Esq.	5	1 0	279	27·33	178
"	M. S. & L. R. Co.	9	3 6	248	27·04	...
D " (Linacre Reservoir)	C. E. Jones, Esq.	8	3 6	490 T	28·87	169
" (Tapton House).....	C. Markham, Esq....	8	1 3	...	27·64	153
" (Brimington Hall)	R. G. Coke, Esq., C.E.	5	1 4	408 T	28·90	198
D Buxton (Devonshire Hospital)...	A. Thresh, Esq.....	5	1 0	986 T	48·92	201
† Stony Middleton	Rev. U. Smith	5	4 0	692 B	33·52	158

DIVISION VII.—NORTH MIDLAND COUNTIES—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of	Days on which ·01 or more fell.	
		Diameter	Height	Height	1885		
			Above Ground	Above Sea Level			
			ft.	in.	feet.	inches.	
DERBY—(con.)							
†Comb's Moss	M. S. & L. R. Co.	9	3	6	1669 T	37·25	...
† „ Reservoir	„ „ „	9	3	6	710 T	36·65	...
†Chapel-en-le-Frith	„ „ „	9	3	6	965 T	38·81	...
†Killamarsh (Norwood)	„ „ „	9	3	6	238 T	26·93	...
†Glossop (Spire Hollin)	F. Hawke, Esq.	10	0	10	612 T	38·96	...
†Woodhead Station	M. S. & L. R. Co.	9	3	6	878 T	49·31	...

DIVISION VIII.—NORTH WESTERN COUNTIES.

CHESHIRE.

Chester (Pulford Hall)	R. Massie, Esq.	5	3 0	60 T	24·01	188
D Congleton (Buglawton Vic.)	Rev. W. Besant	8	5 0	347 T	29·07	163
Bosley Reservoir	M. S. & L. R. Co.	9	3 6	590 T	28·98	...
„ Minns	„ „ „	9	3 6	1210 T	33·10	...
D Chester (Rowton Grange)	T. R. Fleming, Esq. ...	5	1 0	164 B	27·55	182
D „ (Christleton Hall)	Mr. T. Weaver	5	1 2	142 T	26·40	176
D „ (Waterworks)	J. Dugdale, Esq.	5	0 10	85 T	26·47	188
† „ (Lead Works)	A. O. Walker, Esq. ...	5	1 0	65 T	25·41	180
D „ („ „ Field)	„ „ „	5	1 2	67 T	25·53	191
D† „ (Newton Nurseries)	J. Dickson & Sons	8	0 8	62 T	27·73	205
Middlewich (Bostock Hall)	Col. France Hayhurst..	5	2 0	157 T	28·13	...
D Siddington (Thornycroft Hall)	Mr. J. Harrison	5	3 0	377	28·69	196
D Macclesfield (The Park)	Mr. J. Dale	5	1 0	501 T	32·33	190
D Chelford (Astle Hall)	G. Dixon, Esq.	5	1 0	250 T	28·27	190
D Northwich (Highfield)	L. B. Wells, Esq., C.E.	8	3 4	118 T	30·48	191
„ (Winnington)	H. Neumann, Esq.	8	1 3	120 T	30·50	192
„ „ „ „ „	Messrs Brunner Mond & Co	5	3 10	90	28·88	...
*Neston (Oakhill)	M. Reginald Bushell, Esq.	5	1 0	97 T	24·92	...
D* „ (Hinderton)	„ „ „	5	1 0	215 T	26·27	197
* „ „ „ „ „	M. „ „ „ „	8	1 0	215 T	26·44	...
D Frodsham (Foxhill)	J. Reynolds, Esq.	5	0 10	230 T	30·00	185
D „ (Dunsdale)	J. Simpson, Esq.	5	1 1	206	30·33	198
Knutsford (Heath Side)	W. Tyrer, Esq.	5	1 0	210	30·82	198
Bollington (Spond's Hill)	M. S. & L. R. Co.	9	3 6	1279 T	35·87	...
†Whaley	„ „ „	9	3 6	602 T	41·39	...
D Disley	Miss Withington	5	1 0	620 T	37·19	208
D Stockport (Cheadle Hulme)	R. A. Grundy, Esq. ...	5	1 0	196 T	27·08	186
D Runcorn (Weston Point)	L. B. Wells, Esq., C.E.	4	2 4	18	36·32	164
D Hill Cliffe [Warrington]	J. Marson, Esq.	5	1 0	159 T	30·38	205
Lymm (Agden Hall)	Mr. J. Hewitt	5	1 0	190	29·36	...
Bowdon (The Firs)	R. Swindells, Esq., C.E.	5	0 8	215 T	30·18	...
D Thelwall (Highfields)	T. G. Rylands Esq. ...	5	1 0	118 T	28·73	200
„ „ „ „ „	M. „ „ „ „	5	1 0	118 T	28·79	...
D „ „ „ „ „	L. G. Rylands, Esq. ...	5	1 0	110 B	29·88	192
D „ „ (Millington House)	L. W. Reynolds, Esq. .	5	1 0	90	30·63	204
D Lymm (Statham Lodge)	P. Stubs, Esq.	5	1 0	42 T	29·63	203
„ „ „ „ „	M. „ „ „ „	5	1 0	42 T	30·00	...

DIVISION VIII.—NORTH WESTERN COUNTIES—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1885	Days on which ·01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level		
			ft. in.	feet.	inches.	
CHESHIRE—(con.)						
D Altrincham (Norman's Place) ...	A. Griffith, Esq.	5	1 0	150 T	33·56	154
" (Barrington House)	J. Newton, Esq., C.E..	8	3 0	105 T	31·22	...
† Birkenhead (Bidstone Obs.)	J. Hartnup, Esq.	8	0 6	182 T	29·53	196
Northenden (Wythenshawe)	T. E. Tatton, Esq. ...	5	1 0	114 T	30·77	146
Marple Top Lock	M. S. & L. R. Co.	9	3 6	543 T	34·23	..
" Aqueduct	J. " " "	9	3 6	321 T	29·76	...
Sale (Brooklands)	J. F. Jordan, Esq.	5	5 6	90	36·38	...
Ashton-on-Mersey (Brunsw'k cot)	E. Wells, Esq.	5	1 0	84 L	29·84	...
Godley Reservoir	J. F. Bateman, Esq. FRS.	...	...	500	29·98	...
Newton	M. S. & L. R. Co.	9	3 6	396 T	27·26	...
Mottram (Hill End)	" " "	9	3 6	680 T	40·85	...
" (Matley's Field)	" " "	9	3 6	399 T	33·82	...
Arnfield Reservoir	J. F. Bateman, Esq. FRS.	...	...	550	36·81	...
† Rhodes Wood Reservoir	" " "	12	1 0	520	40·85	...
† Torrside Reservoir	" " "	12	1 6	680	42·66	...
Staleybridge (Swineshaw)	" " "	8	3 0	884 T	41·11	...
† Woodhead Reservoir	" " "	12	0 10	660	51·33	...
LANCASHIRE.						
D Garston (Grassendale Park)	Miss E. C. Abraham ...	5	1 0	35 T	29·71	212
D Aigburth (Kelton)	J. Sing, Esq.	5	1 0	135 T	30·48	196
Woolton (Roseleigh)	A. Tate, Esq.	12	4 6	170 B	34·75	...
D Warrington (Arpley)	T. Longdin, Esq.	10	10 3	33 T	30·86	200
" (Cemetery)	" " "	10	1 0	32 T	31·75	...
Liverpool (Grove Park)	J. R. Darsie, Esq.	3	6 0	160	31·21	176
D " (St. James's Mount) ...	Rev. W. Banister	5	1 1	150 T	32·24	178
D Walton (Breeze Hill)	W. Andersson, jun, Esq	5	1 11	119 T	32·53	199
" " "	" " "	8	1 2	119 B	32·63	199
D Manchester (Withington)	J. King, jun., Esq. ...	5	1 0	110 T	30·45	178
D " " "	" " "	5	1 0	110 T	30·85	177
D " " "	" " "	8	1 0	110 T	30·19	177
D " (Stretford)	H. Royle, Esq., C.E. ...	5	1 0	86 T	30·04	191
Denton Reservoir	J. F. Bateman, Esq. FRS.	...	...	324 T	28·01	...
Gorton .....	" " " .....	...	...	263 T	27·79	...
D Manchester (Plymouth Grove) ...	J. F. Roberts, Esq. ...	5	4 2	150 T	31·79	196
D " (Ardwick)	J. Casartelli, Esq.	9	3 0	140 T	31·61	181
D " (Embsden Street) ...	J. Hart, Esq.	5	6 6	112 T	32·05	173
† " (Piccadilly)	M. S. & L. R. Co.	9	40 0	194 T	30·37	...
" (Fairfield)	" " "	9	6 0	312 T	32·53	...
Eccles (Worsley Hall)	Mr. W. B. Upjohn ...	8	10 0	80	31·70	169
Blundellsands (Park Corner) ...	T. M. Reade, Esq. C.E.	5	1 0	35 T	31·06	214
D Manchester (Newton Heath)	J. Warren, Esq.	5	1 0	242 T	34·89	213
Ashton (Waterhouses)	M. S. & L. R. Co.	9	3 6	345 T	32·33	...
" (Knott Hill) .....	" " " .....	...	...	...	32·10	...
* Maghull	I. Roberts, Esq.	5	1 0	68 T	30·97	180
Prestwich Asylum	The Meteor. Council ...	8	1 0	295	36·78	202
" Reservoir	J. F. Bateman, Esq. FRS.	...	...	347 T	35·41	...
Oldham (Gas Works)	" " "	5	4 0	600 T	34·41	204

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1885	Day on which fall or more fell.
		Diameter	Height Above Ground	Height Above Sea Level		
			ft. in.	feet.	inches.	
LANCASHIRE—(con.)						
Oldham (Brushes Clough)	J.F.Bateman, Esq. FRS.	5	4 0	930 T	46·34	201
" " ") <i>New g.</i>	" " "	...	...	955	40·12	200
D Wigan Waterworks	W. Bolton, Esq.	8	1 6	225 T	34·29	199
Bolton-le-Moors (The Folds) ...	H. H. Watson, Esq. ...	10	3 6	286 T	42·28	...
D " (Hampden St.)	J. Rigby, Esq.	5	4 6	350	47·30	206
" (Heaton)	R.H.Swindlehurst, Esq.	6	1 3	500	38·60	207
D " (")	J. S. Holdsworth, Esq.	10	3 6	497 T	41·20	203
D " (Hurst Bank) ...	J. Watkins, Esq.	5	3 1	442 T	41·97	214
D " (New Road, Halliwell)	W. Tyson, Esq.	5	1 6	470 B	46·22	211
" (Smithill's Hall)	R. H. Ainsworth, Esq..	8	1 2	515 T	44·99	192
" (Belmont Road)	Rev. T. Mackereth ...	5	1 10	500 T	47·86	217
Bury (Gin Hall)	T. Rigby, Esq.	8	1 0	475	42·18	159
Rochdale (Castleton Vic.)	Rev. J. Chadwick Bates	8	1 0	475 T	33·44	...
† Milnrow (Piethorne Kitcliff) ...	J.F.Bateman, Esq. FRS	5	4 0	767 T	27·65	209
" (" Coldgreave)	" " "	5	4 2	894 T	37·84	209
Rochdale (Park Observatory) ...	Dr. Henry	8	0 8	472	43·55	194
D " (Drake Street)	T. H. Hayle, Esq. ...	5	3 7	473 T	36·32	200
D Ormskirk (Rufford)	J. Porter, Esq.	5	0 8	38 T	28·59	219
Bolton (Belmont)	R.H.Swindlehurst, Esq.	6	0 9	800	56·80	216
Rochdale (Nayden Dane)	J. Diggle, Esq., C.E....	5	1 6	900 T	39·72	...
Southport (Hesketh Park)	J. Baxendell, Esq.	5	2 8	23 T	31·07	181
Entwistle	R.H.Swindlehurst, Esq.	7	1 0	700	50·30	223
Littleborough (Windy Bank) ...	C. R. Dykes, Esq.	10	1 6	600	32·60	...
Blackstone Edge	" " "	10	1 9	1225	40·30	...
" " (Canal Summit)	" " "	10	1 11	700	38·80	...
" " (Chelbourn) ...	" " "	10	1 3	800	44·30	...
" " (Lenches)	" " "	10	1 9	800	40·00	...
D Chorley (Whittle-le-Woods) ...	Theodore J. Hare, Esq.	5	2 6	265 T	32·70	187
Haslingden (Holden Wood)	T. Rigby, Esq.	8	1 0	670	46·21	160
" (Calf Hey)	" " "	8	1 0	800	49·56	159
Chorley (Withnell Hall)	J. Shackleton, Esq. ...	5	0 6	545	36·07	...
Over Darwen (Sunnyhurst Hey).	T. Duxbury, Esq.	8	2 0	915 T	37·48	183
D " " (St. James's Vic.) ..	Rev. W. H. Blamire...	5	1 0	564 T	44·43	197
" " (Hoddlesden Res.) ..	J.B.McCallum Esq., C.E	8	4 0	680	48·35	199
" " (Daisy Green)	" " "	8	1 0	969 T	42·86	167
" " (Pickup Bank) ...	" " "	8	1 0	720 T	44·72	167
D† The Hall [Todmorden]	H. C. Taylor, Esq. M.D	5	0 10	420 T	49·57	201
Blackburn (Guide Reservoir) ...	J.B.McCallum Esq., C.E	8	1 0	650	32·74	184
D Lytham (Woodville Terrace) ...	S. Stott, Esq.	8	2 1	...	30·48	237
D " (Clifton Square)	Dr. Fisher	8	0 5	27	31·18	195
Blackburn (Pleasington)	J.B.McCallum Esq., C.E	8	2 6	232 T	28·98	...
" (Witton)	" " "	8	2 6	315 T	34·57	185
† " (Store Yard)	" " "	8	30 0	373 T	29·59	182
" (Water Works Office)	" " "	8	60 0	436 T	24·30	170
" (Pumping Station) ...	" " "	8	6 0	610 T	36·41	187
Accrington (Warmden Reservoir)	R. Crossley, Esq.	8	1 9	650 T	38·70	136
D " (Washington House)..	E. Knowles, Esq.	5	30 0	530 T	35·51	198
" (Milnshaw Grounds)..	Mr. Hargreaves.....	5	1 6	464 T	35·12	184

DIVISION VIII.—NORTH WESTERN COUNTIES—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.	Days on which ·01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level	1885	
			ft. in.	feet.	inches.	
LANCASHIRE—(con.)						
d Preston (Corporation Offices) ...	H. Reah, Esq.	8	16 0	123	32·89	185
† Rawtenstall (Clough Bridge Res.)	T. Rigby, Esq.	8	1 0	900 π	43·01	215
Burnley Waterworks	† Causeway Side	8	2 0	1116	41·87	...
	† Sheddin	8	2 0	960	41·89	...
	† Cant Clough, S. Side	8	2 0	900	42·21	205
	† „ „ N. Side	8	2 0	900	39·72	205
	† Rams Clough Head	8	2 0	1260	39·20	...
d Huncoat (Burnley Road Res.) ...	C. Harrison, Esq.	9	1 6	620 π	39·89	192
Clayton-le-Moors (Oakenshaw) ..	J. H. Calvert, Esq. ...	5	9 6	264	35·55	136
† Burnley (Yorkshire Street) ...	W. Williamson, Esq. ...	8	30 0	420 π	35·81	205
† „ (Swinden, Upper)	„ „ „	8	12 0	820 π	41·43	210
† „ „ „ Lower	„ „ „	8	2 0	745 π	44·60	211
† „ (Extwistle Moor)	„ „ „	8	2 0	1310 \uparrow	48·12	...
d „ (Gawthorpe Hall) ...	Sir U.K. Shuttleworth Bt	8	1 3	316 \uparrow	30·48	145
d Preston (Haighton)	J. J. Myres, Esq., C.E.	5	1 2	255 \uparrow	35·08	185
Alston	H. Reah, Esq.	8	1 2	320 π	36·96	...
Blackpool (South Shore)	G. Sharples, Esq.	10	1 8	29 \uparrow	29·22	...
d „ (Arnold House)	T. Ward, Esq.	5	1 0	32 π	29·45	186
Kirkham (Weeton)	J. Bradley, Esq.	10	1 0	95 \uparrow	33·68	...
Whalley (Sabden)	J. H. Calvert, Esq. ...	5	2 6	500	37·13	129
d Ecclestone (Elswick Lodge)	S. King, Esq.	10	1 4	55 \uparrow	32·21	190
„ „ „	„ „ „	5	1 0	55 \uparrow	32·53	...
d Stonyhurst College	Rev. S. J. Perry, F.R.S.	11	1 0	376 π	41·06	192
„ „ „	„ „ „	11	2 0	377 π	39·80	199
„ „ „	M	11	1 0	376 π	40·50	...
Preston W. Works.	(Knowle Green)	8	1 2	400 \uparrow	36·31	...
	Loud-scales	8	1 2	400 \uparrow	36·72	...
	Spade Mill	8	1 2	400 \uparrow	36·66	...
	Jeffrey Hill	8	1 2	900 \uparrow	42·80	...
	St. Michael's-on-Wyre	5	1 0	26 π	34·15	...
d „ „ „	„ „ „	5	1 0	26 π	34·26	189
d Beaton Fell (Barnsfold)	J. J. Myres, Esq., C.E.	5	1 6	506 \uparrow	36·86	185
„ „ „	M	5	1 6	506 \uparrow	36·87	...
d Garstang (Calder Mount)	C. Wilson, Esq.	5	10 0	120 \uparrow	31·37	191
Clitheroe (Downham Hall)	R. Assheton, Esq.	10	1 6	464 π	32·15	...
d Garstang (Vale House)	J. Jackson, Jun., Esq. .	6	4 3	455 π	32·68	188
„ (Barnacre Reservoir)	J. Bradley, Esq.	10	1 0	617 π	40·78	...
„ (Grizedale)	„ „ „	10	1 0	519 \uparrow	37·85	...
d Wyresdale (Abbeystead)	A. Creer, Esq., C.E. ...	8	1 0	366 \uparrow	42·36	168
„ (Old Gauge Basin)	„ „ „	8	1 0	963 \uparrow	36·75	...
„ (Wardstone)	„ „ „	8	1 0	1440	49·65	...
Quernmore (Brow Top)	„ „ „	8	1 0	552 \uparrow	37·05	...
d Lancaster (Southfield)	W. Roper, Esq.	12	3 6	114 π	34·08	180
„ (Escowbeck, Caton)	A. Greg, Esq.	12	2 0	150 \uparrow	34·25	121
Hest Bank	T. Ransome, Esq.	5	2 0	58 \uparrow	32·27	181
d Wray	Rev. C. L. Reynolds ...	5	1 1	165 \uparrow	44·11	196
d Melling (Hornby Castle)	W. H. Foster, Esq. ...	8	1 8	100 \uparrow	32·51	123
Barrow-in-Furness	W. Fergusson, Esq. ...	11	1 6	36 π	34·59	170

DIVISION VIII.—NORTH WESTERN COUNTIES—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.	Days on which ·01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level	1885	
LANCASHIRE—(con.)						
D Barrow-in-Furn'ss (Cavendish Pk)	W. S. Whitworth, Esq.	8	1 0	60 N	32·67	185
Arkholme (Storr's Hall)	F. F. Pearson, Esq. ...	5	1 0	220 T	37·92	...
Ulverston (Urswick)	Rev. R. B. Billinge ...	5	2 6	...	40·86	...
Cartmel (Flookburgh)	T. R. Croasdale, Esq. ...	5	2 7	70 B	37·07	122
† „ (Holker)	Mr. W. Fox	8	4 8	155 N	38·63	175
Grange (Nutwood)	Rev. E. Massie	5	2 6	100 B	37·12	201
D Ulverston (Swarthdale)	Dr. E. Lister	5	0 10	110 T	43·31	164
D „ (Poaka Beck)	Mr. W. Fergusson	11	1 6	512 N	48·99	199
D Cartmel (Pit Farm)	Mr. W. R. Nash	5	1 0	122 T	42·73	194
„ (Broughton Hall)	Col. Ainsworth	5	2 8	210 T	45·45	188
Ulverston (Colton)	Rev. A. Christopherson	5	1 0	226 N	55·09	172
D Blawith	Rev. J. Ashburner	5	0 10	...	56·38	175
D Broughton (Woodland Rectory)	Rev. E. C. Shawfield ...	5	1 4	100 T	56·93	179
Coniston (Torver Rectory)	Rev. T. Ellwood	5	0 6	400 T	65·71	...
† Monk Coniston Park	M. V. Marshall, Esq.	10	4 11	150 N	71·70	...
D „ „ „	„ „ „	5	1 0	305	84·66	171

DIVISION IX.—YORKSHIRE.

WEST RIDING.

† Sheffield (Brincliffe Rise)	A. W. Chadburn, Esq. ..	5	1 0	500 T	34·20	190
† „ („ Edge)	M. S. & L. R. Co.	9	3 6	336 T	36·67	...
† „ (Redmires)	J. Gunson, Esq.	10	5 0	1110 T	43·75	210
„ „ „	„ „ „	8	4 0	1100 T	43·22	...
D „ (Tylecote, Ranmoor) ...	J. Dixon, Esq.	10	3 6	610 N	40·75	180
D† „ (Broomhall Park)	D. Doncaster, Esq.	10	2 0	330 N	30·76	178
„ (Rivelin)	J. Gunson, Esq.	10	4 0	564 N	36·91	188
„ „ „	„ „ „	8	4 0	564 N	36·98	...
† „ (Crookes)	„ „ „	10	2 0	629 N	30·99	188
† „ „ „	„ „ „	8	2 0	629 N	30·82	...
D „ (Weston Park)	E. Howarth, Esq.	8	1 0	430 N	31·03	184
D† Rotherham (Ulley Reservoir) ...	Mr. L. Berry	5	1 0	184 N	22·37	155
† Sheffield (Victoria Station)	M. S. & L. R. Co.	9	3 6	188 T	30·09	...
† „ (Tinsley Locks)	„ „ „	9	...	143 T	23·51	...
Tickhill (Sandbeck Park)	Mr. G. Summers	8	1 0	150 T	23·91	174
† Rotherham (Moorgate Grove) ...	R. Chrimes, Esq.	5	1 0	262 N	26·01	154
„ (Thrybergh)	B. S. Brundell, Esq., C.E.	8	1 0	184 N	24·11	148
D Tickhill	G. G. Phillips, Esq. ...	8	1 0	61 N	23·38	181
D Sheffield (Chapelton)	Mr. D. Bell	8	5 0	582 L	27·39	185
Doncaster (Firsby)	B. S. Brundell, Esq., C.E.	8	1 3	189 N	27·04	145
D Bolsterstone (Waldershaigh) ...	C. M. Wilson, Esq.	8	3 1	950 T	35·42	195
Wortley	M. S. & L. R. Co. ....	...	...	548	28·81	...
Elsecar	„ „ „	9	...	175 T	24·00	...
D Wath-upon-Deerne (Chapel St.)	Dr. Burman	8	1 0	185 N	22·77	179
D „ (West Melton)	W. Jackson, Esq.	6	0 9	172 T	22·18	150
D „ „	J. N. Baxter, Esq.	5	1 0	100 N	23·62	182

DIVISION IX.—YORKSHIRE—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.	Days on which ·01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level	1885	
			ft. in.	feet.	inches.	
WEST RIDING—(con.)						
Worsborough	M. S. & L. R. Co.	9	...	225 T	25-09	...
D Stainborough(Wentworth Castle)	W. Fisher, Esq.....	8	2 6	520 T	29-37	178
Doncaster	M. S. & L. R. Co.	9	...	35 T	19-91	...
D „ (Magdalens)	Mr. J. Howorth	5	4 6	46 T	20-78	153
†Dunford Bridge Station	M. S. & L. R. Co.	9	3 6	954 T	50-23	...
D† „ „ (Reservoir).....	Mr. G. Whitfield	12	2 0	1100 T	48-53	230
†Penistone (Carlcotes).....	M. S. & L. R. Co.	9	3 6	1075 T	39-18	...
† „ „ „	„ „ „	9	3 6	717 T	31-80	...
„ „ (Hazlehead)	„ „ „	9	...	868 T	48-41	...
D „ „ (Ingbirchworth Res.)..	J. H. Taylor, Esq.C.E.	8	1 3	850 A	39-76	201
Holmbridge (Batley Waterworks)	J.F.Bateman,Esq.FR.S.	...	...	917	62-20	...
D Barnsley (Church Street)	Dr. Sadler	5	5 2	350 A	24-73	188
„	J. H. Taylor, Esq. C.E.	8	15 0	350 A	23-70	172
„	M. S. & L. R. Co.	9	...	175 T	22-78	...
Saddleworth Station	E. B. Smith, Esq., C.E	9	4 6	610 T	39-41	...
Strinesdale [Oldham]	J.F.Bateman, Esq. FRS	5	4 0	815 T	34-52	212
†Meltham (Harden Moss)	J. Stanway, Esq.	8	1 2	1200 T	43-69	...
Standedge (Red Brook).....	E. B. Smith, Esq., C.E.	9	1 6	1100 A	45-23	...
Denshaw (New Year's Bridge)..	J.F.Bateman, Esq. FRS	5	4 0	1012 T	42-08	207
„ „ (Ready Con Dean).....	„ „ „ .....	...	...	1414	37-07	207
D Meltham (Harewood Lodge)....	C. L. Brook, Esq.	8	4 8	514 L	37-12	208
† „ „ Grange	J. Stanway, Esq.	8	1 2	850 T	38-37	...
Marsden (Deer Hill) .....	„ „ „ .....	...	...	1149 T	40-86	...
Doncaster (Hatfield)	Mr. T. Askren	5	5 4	...	18-97	145
„ „ (Kirk Bramwith).....	B.S.Brundell, Esq. C.E.	5	1 0	17 A	21-57	159
D „ „ (Burghwallis Rec.) ..	Rev. F. W. Peel.....	5	1 0	80 T	22-55	197
„ „ „ „ „ „ „ „ M	„ „ „	5	1 0	80 T	22-00	...
D Slaithwaite (Blackmoorfoot)....	J. Stanway, Esq.	8	1 0	800 T	37-90	209
D Honley (Northgate House)	Miss E. Brooke	5	1 0	350 T	35-86	215
D Wakefield (Walton Hall).....	E. Simpson, Esq.	5	0 6	150	22-67	161
Huddersfield (BankField, Golcar)	J. E. Ramsden, Esq....	5	1 0	400 T	37-63	202
D† „ „ (Dalton)	J. W. Robson, Esq. ...	8	1 0	350 A	26-97	182
Longwood (Bilberry Edge)	J. Stanway, Esq.	8	1 2	1100 T	34-80	...
D Mirfield (Cote Wall)	E. B. W. Balme, Esq..	8	0 9	200	24-61	174
Ackworth School	H. Lester, Esq.	5	1 6	135 T	21-67	161
D†Wakefield Prison	Dr. H. Clarke.....	8	1 0	96 A	22-86	187
„ „ (Alverthorpe Hall) ..	H. Clarkson, Esq.	5	1 0	150 T	23-43	171
D Rastrick	A. Clay, Esq.	5	1 3	410 T	26-86	173
Pontefract (Fern Hill)	A. T. Barker, Esq. ...	5	2 0	120	21-27	...
D Wakefield (Stanley Vicarage) ..	Rev. R. Burrell	5	1 0	100 T	19-73	174
D „ „ (Field Head)	R. Porter, Esq.	8	1 0	150 T	19-88	160
D Goole	W.E.H.GrayburneEsq.	5	1 0	18 T	21-48	172
Halifax (Bents, Norland).....	J. S. Rawson, Esq. ...	5	0 8	800 T	36-40	...
D „ „ (Bermerside Observatory)	J. Gledhill, Esq.	8	0 6	500	34-43	202
„ „ (Thorpe)	J. S. Rawson, Esq. ...	8	0 8	345 T	42-65	...
„ „ „ „ „ „ „	„ „ „	5	0 8	345 T	42-49	220
† „ „ (Albert).....	J.A.Paskin, Esq., C.E.	5	1 0	795 T	36-60	...
† „ „ (Gibbet).....	„ „ „	5	6 0	568 T	32-62	...

DIVISION IX.—YORKSHIRE—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1885	Days on which 01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level		
WEST RIDING—(con.)						
+Halifax (Ramsden Wood).....	J. A. Paskin, Esq., C.E.	8	1 2	816 T	39·19	...
Leeds (Methley Park)	J. Richardson, Esq. C.E.	5	0 9	98	22·67	149
„ (Leventhorpe Hall).....	F. J. Leather, Esq.	10	4 0	94 T	19·02	...
Halifax (Castle Carr)	J. A. Paskin, Esq., C.E.	...	...	1060 T	40·73	...
+ „ (Midgley Moor)	„ „ „	7	0 6	1350 T	44·80	...
+ „ (Warley Moor)	„ „ „	7	0 6	1425 T	46·26	...
+ „ (Ogden)	„ „ „	8	1 3	990 T	41·12	...
„ (Ovenden) .....	„ „ „	...	...	1375	44·29	...
„ (Widdop) .....	„ „ „	...	...	1050	49·05	...
+ „ (Walshaw Dean).....	„ „ „	8	0 3	1380 T	44·19	...
D South Milford Rectory	Rev. F. J. Young	5	1 4	60 T	21·97	175
Leeds (Wortley Res.)	E. Filliter, Esq., C.E....	8	0 9	307 T	26·19	174
Bradford (Queensbury).....	R. J. Foster, Esq.	8	2 2	1050 T	34·12	145
„ (Brayshaw Reservoir) ..	A. R. Binnie, Esq., C.E.	5	1 0	982 T	31·15	184
„ (The Exchange).....	J. McLandsborough, Esq	8	65 6	395 T	25·70	193
„ (Farcliffe)	E. Milnes, Esq.	5	1 0	575 T	30·58	176
„ (Thornton Moor Res.) M	A. R. Binnie, Esq., C.E. ..	5	1 0	1176 T	25·52	...
„ (Stubden) <i>old gauge</i> ...	„ „ „	8	1 0	1075 T	46·62	222
„ („)	„ „ „	5	1 0	1071 T	46·53	222
„ (Brown Royd Res.) ...	„ „ „	5	1 0	385 T	25·82	166
„ (Nan's Scar)	M „ „ „	5	1 0	1101 T	45·45	...
„ (Stairs)	M „ „ „	5	1 0	1401 T	47·73	...
„ (Leeming Res.)	M „ „ „	5	1 0	850 T	36·37	...
„ (Doe Park) <i>old gauge</i> ..	„ „ „	8	1 0	810 T	40·43	211
„ („ „)	„ „ „	5	1 0	811 T	38·46	211
„ (Leeshaw Res.)	„ „ „	5	1 0	875 T	41·03	...
„ (Chellow Dean)	„ „ „	5	1 0	645 T	32·36	181
„ (Hewenden Reservoir) ..	„ „ „	5	1 0	701 T	32·90	198
„ („ „) <i>old g.</i> ..	„ „ „	5	1 0	700 T	36·45	198
D+Leeds (Holbeck)	J. Marshall, Esq.	10	32 0	127 T	21·02	182
D „ („)	„ „ „	5	1 8	95 T	21·95	182
„ („ W. Works Depot) ..	E. Filliter, Esq., C.E....	8	0 9	93 T	22·09	167
„ (The Museum)	W. Eagle Clark, Esq....	...	47 0	137	21·68	177
„ (Woodhouse Moor)	E. Filliter, Esq., C.E....	8	0 9	307 T	23·20	175
D „ („ Cliff)	R. Reynolds, Esq.	5	1 0	330	24·92	191
D „ (Elmete Hall, Roundhay).	J. H. Kitson, Esq.	5	1 3	400 T	26·20	194
„ (Weetwood Reservoir) ...	E. Filliter, Esq., C.E....	8	0 9	328 T	23·98	178
D „ („ Hall)	S. A. Marshall, Esq.	5	0 7	400 T	26·42	191
Shipley (Moor Head).....	G. Knowles, Esq.	8	10 0	500	23·79	...
D Leeds (Allerton Hill)	T. Fenwick, Esq., C.E.	5	0 7	418 T	25·14	...
D „ (Oliver Hill, Horsforth)...	C. France, Esq.	3	0 9	250 T	26·97	209
D „ (Moortown)	G. Paul, Esq.	5	1 0	500 T	27·89	185
Shipley (Esholt Vic.).....	Rev. J. Myddleton Evans	8	1 2	150	26·14	191
Leeds (Eccup South).....	E. Filliter, Esq., C.E....	8	0 9	395 T	26·08	186
+Bingley (Sunnydale).....	A. R. Binnie, Esq., C.E.	5	1 0	975 T	31·24	194
Harewood (Arthington)	E. Filliter, Esq., C.E....	8	0 9	139 T	25·11	177
Skipton (Gill Grange, Silsden) ...	M A. R. Binnie, Esq., C.E.	5	1 0	883 T	28·78	...
+Ilkley (Cherry Bank)	H. Richardson, Esq.	8	1 3	620	31·71	...

DIVISION IX.—YORKSHIRE—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1885	Days on which ·01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level		
			ft. in.	feet.	inches.	
WEST RIDING—(con.)						
Skipton (Silsden Reservoir)	A. R. Binnie, Esq., C.E.	5	1 0	560 π	26·56	159
π Thornton-in-Craven	Miss Wilson	5	5 4	456 π	30·74	184
Slaidburn (Hareden Brook)	H. Reah, Esq.,	8	1 2	540	61·66	...
„ (Langden Brook)	„ „ „	8	1 2	556	63·37	...
„ (Whiteholme)	W. K. Wilkinson, Esq.	5	1 3	475 π	43·90	143
Skipton (Cringles Reservoir) ...	A. R. Binnie, Esq., C.E.	5	1 0	760 π	27·52	159
„ (Chelker Reservoir) ... M	„ „ „	5	1 0	730 π	28·01	...
„ (Craven Herald Office) ...	E. Townsend, Esq.	8	0 8	360	29·25	179
Slaidburn (Dunsop Houses)	J. B. McCallum Esq., C.E.	8	1 0	450 π	57·17	177
„ (Middle Knoll)	„ „ „	8	2 6	1298 π	47·50	...
„ (Brennand)	„ „ „	8	1 0	820 π	59·05	183
„ (Whitendale)	„ „ „	8	1 0	830 π	57·25	175
„ (Cabin Hill) ..	„ „ „	8	3 1	1559 π	50·70	...
„ (Baxton Fell)	„ „ „	8	2 6	1540 π	41·10	...
York (Phil. Soc. Gardens)	The Meteor. Council ...	8	1 9	53 π	22·46	...
„ („ „ „)	„ „ „	8	1 9	53 π	22·49	187
π „ (Manor House)	Mr. G. H. Holmes.	8	0 6	46	22·67	171
π „ (Cherry Hill)	H. Richardson, Esq. ...	5	1 6	60 π	22·31	195
π Wetherby (Ribston)	Mr. Jones	5	1 2	130 π	25·87	115
π Harrogate (West End Park) ...	Mr. J. H. Wilson	5	...	...	30·73	217
Skipton (Barden Res.) <i>old g.</i> ...	A. R. Binnie, Esq., C.E.	8	1 2	746 π	33·77	180
„ („ „)	„ „ „	5	1 0	746 π	36·52	180
Otterburn-in-Craven	W. Gomersall, Esq. ...	5	1 0	510 π	32·22	164
Skipton (Upper Res., Barden) ...	A. R. Binnie, Esq., C.E.	5	1 0	1250 π	29·37	172
π Settle (Ashfield Gardens)	Mr. T. Green, Junr. ...	5	2 6	483 π	37·21	186
Pateley Bdg. (Grimwith Res) <i>old g.</i>	A. R. Binnie, Esq., C.E.	8	1 0	890 π	42·30	224
„ „ { „ „ }	„ „ „	5	1 0	893 π	41·90	224
„ „ { „ „ }	„ „ „	5	1 0	1201 π	28·73	...
π „ „ { „ „ }	„ „ „	5	1 0	410 π	37·50	193
Boroughbridge (Aldbrough) ...	Rev. R. W. Marriott. ...	5	2 2	80 π	24·97	...
π Malham Tarn	Mr. Coulthard	5	1 0	1296 π	47·89	229
Settle (Clapham)	Rev. M. T. Farrer.	8	5 7	565 π	31·83	165
π Ingleton (Halsteads)	R. Chapman, Esq.	9	2 0	414 π	38·32	183
π Arncliffe	Ven. Archdeacon Boyd	8	2 9	734 π	52·80	210
„ (Halton Gill)	Mr. S. Clarke.	5	5 0	1030	47·22	...
π Ripon (High Bank, Mickley) ...	Miss Harrison	5	1 0	225 π	29·46	168
Oughtershaw School	C. H. L. Woodd, Esq..	8	1 4	1200 π	53·38	174
π † Sedbergh (Brig Flatts)	J. Handley, Esq.	5	1 0	300 π	48·38	183
π „ (Long Lane)	Thelste J. Dockeray, Esq.	5	4 4	420 π	48·30	188
† „ (Thorns Hall)	Miss Sedgwick	5	1 0	400 π	47·28	194
EAST RIDING.						
Patrington (Spurn Head)	The Meteor. Council ...	8	1 0	27	20·57	...
π „	W. B. Pugh, Esq.	5	3 0	46 π	26·68	162
Hull (Nelholme, Ferriby)	W. R. King, Esq.	5	4 0	125	25·35	...
π † „ (Beverley Road)	H. Smith, Esq.	8	4 6	12 π	26·44	189
π „ (Derringham)	W. Lawton, Esq.	5	2 2	10 π	24·34	185
π „ (People's Park)	Mr. E. Peak	5	0 6	6	25·58	181

DIVISION IX.—YORKSHIRE—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1885	Days on which 401 or more fell.
		Diameter	Height Above Ground	Height Above Sea level		
			ft. in.	feet.	inches.	
EAST RIDING—(con.)						
Brough (Brantinghamthorpe) ...	Mr. R. C. Kingston	5	2 0	200 †	29·81	...
Market Weighton (Houghton)...	Canon J. Wells	5	1 0	...	27·45	112
Beverley (Alexandra Terrace)...	T. Dyson, Esq.	12	8 0	62 †	25·18	161
Market Weighton (Dalton Hall)	Mr. J. Allsop	8	1 4	150	30·05	193
Holme-on-the-Wolds.....	Mrs. Harland	5	4 0	154 †	27·76	184
Middleton-on-the-Wolds	Rev. H. D. Blanchard..	5	1 0	150 †	27·32	179
Pocklington (Warter)	J. Coxon, Esq.	5	1 10	230 †	29·97	193
Catton Rectory [York]	Rev. H. L. Puxley ...	4	0 8	50	24·81	...
Driffild (Beverley Road).....	Rev. J. T. Harwood ...	8	8 0	68 †	27·08	198
Wetwang	Rev. E. M. Cole	5	1 0	235 †	29·44	167
Thixendale.....	Rev. W. H. Fox	10	0 9	425 †	33·75	205
Lowthorpe (The Elms)	H. Onslow Piercy, Esq.	5	1 0	63 †	30·13	171
Bridlington Quay	Mr. J. Draffin.....	5	1 6	40 †	21·18	155
Hunmanby (Wold Newton)	Rev. T. S. Ackland ...	5	1 6	194	33·12	217
NORTH RIDING.						
† Malton	H. Hurtley, Esq.	10	1 0	75 †	24·89	...
Melmerby (Baldersby)	W. Gregson, Esq.	5	1 0	101 †	23·71	142
Thirsk (Sowerby)	C. M. Swarbreck, Esq..	5	1 0	105 †	25·57	205
„ („)	A. C. Bamlett, Esq. ...	5	1 0	118	27·05	138
„ .....	„ „ „ „ .....	...	...	...	23·32	131
Masham (Burton House)	T. Carter, Esq.	6	1 0	269 †	29·52	199
Helmsley.....	R. Bruce Low, Esq., M.D.	5	1 3	185 †	32·72	190
Bedale (Thorpe Perrow)	Mr. W. Culverwell ...	5	1 6	170	23·99	165
Aysgarth (Nell Bank, Walden)...	Rev. F. W. Stow	3	1 0	1075 †	47·39	...
Hawes Junction.....	The Meteor. Council ..	8	1 0	1135	58·68	...
Aysgarth Vicarage.....	Rev. F. W. Stow	12	2 0	645 †	33·29	...
Leyburn (Wensley)	G. W. Wray, Esq.....	7	1 0	660 †	31·14	...
„ (Bolton Hall)	Mr. E. Hall.....	8	0 8	420	26·25	109
Scarborough (Osgodby).....	E. Filliter, Esq., C.E..	8	0 9	159 †	24·66	148
„ (Westborough).....	A. Rowntree, Esq.....	8	1 0	130	25·05	194
Hambleton Hills (High Paradise)	A. C. Bamlett, Esq. ...	5	1 0	1050	28·45	122
Hawes (Hardrow Vicarage)	Rev. R. Pinck.....	5	1 0	790 †	40·50	210
„ (Shaw Paddock, Lunds)...	„ „	5	1 0	1100	59·81	...
*Northallerton (The Lodge)	J. Hodgson, Esq.	5	1 3	133 †	22·71	...
Catterick (Tunstall)	J. Marshall, Esq.	5	1 0	275	20·01	...
Swaledale (Summer Lodge)	Mr. L. Broderick	5	...	1041 †	49·55	...
Fylingdales Moor (Harwdale Mill)	E. Filliter, Esq., C.E..	8	0 9	275 †	30·21	145
Richmond (The Grove)	G. Roper, Esq.	5	1 3	...	29·85	...
Northallerton (Rounton Grange).	The Royal Meteor. Soc.	8	1 0	250	24·67	...
Ingleby Manor	The Hon. H. Sidney ...	5	0 11	440 †	33·87	172
„ Greenhow Vicarage.....	Rev. J. Hawell	5	1 0	448 †	33·54	207
East Layton [Darlington]	Mrs. Maynard-Proud...	5	1 0	575 †	25·71	130
Richmond (Forcett Park)	J. Michell, Esq.	5	1 0	360 †	26·87	178
Whitby (Guisborough Road) ...	M. Simpson, Esq.	5	2 0	184 †	24·99	167
Saltburn (Port Mulgrave)	J. Hodgson, Esq.	5	4 6	350 †	21·55	177
Guisborough (Hutton Hall)	Sir J. W. Pease, Bt., M.P.	5	1 3	400 †	32·49	211

DIVISION IX.—YORKSHIRE—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1885	Days on which "01 or more fell.
		Diameter	Height Above Ground.	Height Above Sea level		
			ft. in.	feet.	inches.	
NORTH RIDING—(con.)						
d Guisborough (Lockwood Beck Res)	W. P. Anson, Esq., C.E.	8	1 0	632 ∇	35.42	200
Middlesboro' (Southfield Villas).	W. Fallows, Esq.	5	1 0	21 ∇	20.32	121
Saltburn (Skelton Reservoir)	W. P. Anson, Esq., C.E.	8	1 0	325 ∇	26.47	181
† Mickleton (Lime Kiln Pasture) M	G. J. Symons, Esq. F.R.S	8	1 0	1175 ∇	25.30	...
" (" " ") M	" " " " " " " " " " " "	8	1 0	1175 ∇	26.90	...
Redcar (High Cliffe, " Coatham)..	Rev. J. E. Leefe	5	1 4	...	19.08	...

DIVISION X—NORTHERN COUNTIES.

DURHAM.

Darlington (Dinsdale Rectory)...	Rev. J. W. Smith	5	2 0	54 ∇	23.75	140
d† " (South End)	Mr. N. Black ..	8	0 10	140	22.55	181
d† " (Cleveland Parade)..	S. Hare, Esq.	5	1 0	160 ∇	22.24	186
d " (Brinkburn)	Mr. H. Waud	8	1 6	165 ∇	22.11	110
d Barnard Castle (Whorlton)	Miss Dodgson	5	0 11	424 ∇	24.33	135
d† Staindrop (Raby Castle)	Mr. J. Tullett.....	8	0 8	460 ∇	23.76	139
d Hartlepool (Heugh Lighthouse)..	W. Belk, Esq., C.E. ...	5	0 6	34 ∇	25.55	200
d " (Hurworth Burn) ...	T. Fenwick, Esq., C.E.	5	0 7	360	26.29	112
d " (Hart Reservoir).....	" " " " " " " " " " " "	8	0 9	164	22.03	114
d† Wolsingham	Mr. A. Mitchell	5	1 0	464 ∇	30.40	189
Thornley Vicarage.....	Rev. W. Mayor	5	1 0	475 ∇	28.29	150
Tow Law (The Manse)	H. P. Slade, Esq.	4	5 3	1020 ∇	29.40	...
Durham	The Meteor. Council ...	...	...	...	25.61	181
d " (Ushaw College)	Rev. J. Corbishley.....	5	0 10	600 ∇	27.32	173
Weardale W.W. (Waskerley 6)	R. Askwith, Esq.	8	4 2	1229 ∇	30.08	...
" " (" " 3)	" " " " " " " " " " " "	8	4 6	1433 ∇	28.66	...
" " (" " 4)	" " " " " " " " " " " "	8	4 7	1321 ∇	31.45	...
" " (" " 5)	" " " " " " " " " " " "	8	4 2	1244 ∇	31.28	...
" " (" " 2)	" " " " " " " " " " " "	8	4 5	1367 ∇	28.30	...
" " (" " 1)	" " " " " " " " " " " "	8	4 4	1317 ∇	27.55	...
d Seaham Harbour	G. H. Aird, Esq.	8	1 9	60 ∇	26.16	186
" Vicarage	Rev. A. Bethune	5	0 6	80 ∇	27.11	109
" Hall	Mr. R. Draper	5	1 0	100 ∇	29.26	...
Houghton-le-Spring (Myre Hall)	D. Balfour, Esq., C.E.	5	1 0	261 ∇	27.09	160
d Shotley Bridge	Mr. J. Coulson	5	0 6	345 ∇	33.48	157
d Chester-le-Street (Birtley)	R. C. Clephan, Esq. ...	5	0 9	205 ∇	27.05	196
Sunderland (W. Hendon House).	T. W. Backhouse, Esq.	5	1 0	132 ∇	25.96	196
" (" " " ")	" " " " " " " " " " " "	5	1 0	132 ∇	26.42	...
d " (Fever Hospital) ...	Dr. A. E. Harris	8	0 8	109 ∇	27.01	165
d South Shields (Borough Hospital)	J. R. Boyce, Esq.	5	1 0	90 ∇	26.34	179

NORTHUMBERLAND.

† Allenheads	Mr. J. Charlton	8	0 4	1353 ∇	29.99	...
d Haltwhistle (Shaft Hill)	Mr. R. Hetherington...	5	0 8	626 ∇	27.32	152
d " (Unthank Hall) ...	Rev. Dixon Brown.....	5	0 9	380 ∇	26.14	186
d Haydon Bridge (Ridley)	Rev. G. Reed	5	2 8	340 ∇	21.55	157

DIVISION X.—NORTHERN COUNTIES—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.	Days on which 101 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level	1885	
			ft. in.	feet.	inches.	
NORTHUMBERLAND—(con.)						
D Newcastle (Clifton Road).....	R. Foster, Esq.	8	1 6	314 A	23·86	162
" " (" ")	" " " " " "	5	9 0	314	24·87	...
D " (Osborne Road)	T. G. Hurst, Esq.	5	0 9	170 T	23·91	157
" (Philos. Society)	W. Lyall, Esq.	8	1 5	105 T	24·57	...
" (Portland Road)	Mr. T. Bone	4	9 6	...	23·97	112
" (Gladstone Terrace) ..	W. Smurthwaite, Esq..	2	6 0	156 T	24·26	...
D " (Town Moor)	Mr. W. Neill	5	0 6	201 A	25·29	198
" (Wellburn, Jesmond) ..	W. H. Holmes, Esq....	5	1 0	161 T	25·78	160
D Haydon Bridge	T. J. Bewick, Esq., C. E.	8	1 0	291 A	22·35	180
North Shields (Wallsend).....	R. R. Dees, Esq.	10	0 6	100 A	23·17	...
" (Post Office)	The Meteor. Council ...	8	1 4	100	21·74	...
D† " (Rosella Place) ...	R. Spence, Esq.	8	1 0	124 A	26·07	164
" (Low Lights)	J. R. Procter, Esq. ...	8	3 4	22 A	25·35	...
D " (Tynemouth)	P. J. Messent, Esq., C. E.	5	2 8	65 A	22·86	189
" (Clementhorpe) ...	J. R. Procter, Esq. ...	5	1 0	150 A	25·96	163
" (Billy Mill Res.) ..	H. Clarke, Esq.	5	0 6	197 A	21·33	...
D " (Monkseaton)	T. Green, Esq.	5	4 0	132 T	25·53	135
Bingfield House	J. Coppin, Esq.	5	1 0	445 T	23·23	156
Newcastle and Gateshead W. Works { Whittle Dean	G. Smith, Esq.	10	...	...	22·99	...
{ Swinburn (Woodford).....	" " " " " "	10	0 6	500 A	24·99	...
{ North Tyne (Green Crag) ...	" " " " " "	10	0 6	800 A	23·40	...
{ " " Valley	" " " " " "	10	0 6	300	22·33	...
{ Hallington	" " " " " "	10	0 6	469 A	25·17	...
{ " (Fawcett)	" " " " " "	10	0 6	563 A	20·43	...
{ Gunnerton Burn (Camphill) ..	" " " " " "	10	0 6	676 A	22·11	...
Cramlington	The Roy. Meteor. Soc..	5	1 1	256	23·46	178
D Morpeth (Meldon Park)	Mr. J. Finlay	5	1 0	...	27·91	170
D " (Bothalhaugh Garden) ..	Hon. & Rev. W. C. Ellis	5	0 10	35 ?	25·76	207
Rothbury (Brenckburn Priory) ..	C. H. Cadogan, Esq. ...	8	1 0	200 T	28·12	130
D Felton	T. J. Murday, Esq. ...	5	1 6	240 ?	26·30	183
"	" " " " " "	5	1 6	240 ?	26·38	...
D Rothbury (Whitton Tower)	Rev. Dr. Ainger	5	1 0	410 T	28·27	181
" (Cragside)	Sir W. G. Armstrong, CB	8	1 0	400 A	31·72	149
Alwinton (Harbottle Castle) ...	Mr. R. Elliott	5	1 0	500	29·04	161
" (Biddleston)	Mr. P. Dodds	5	1 0	820 T	31·44	193
Alnwick Castle	The Meteor. Council ...	...	...	...	27·35	169
D Howick Hall	Rt. Hon. Earl Grey, K. G.	8	0 10	121 A	23·35	153
Iderton (Lilburn Tower)	E. J. Collingwood, Esq.	10	6 0	300 T	23·96	...
Cheviot (Broadstruther)	M. G. P. Hughes, Esq. ...	8	4 0	1692 A	33·13	...
Bamburgh	Mr. W. C. Good	5	1 0	75 L	22·55	169
D Pawston [Coldstream]	B. P. Selby, Esq.	8	1 0	328 T	25·82	192
*Wooler (Milfield)	The late G. A. Grey, Esq.	5	0 8	200 A	20·18	...
Belford (Middleton Hall)	F. J. Leather, Esq. ...	10	3 0	240 A	25·46	...
CUMBERLAND.						
Ravenglass (The Grove)	J. Ross, Esq.	5	2 6	80 A	39·29	111
Braystones	J. D. Watson, Esq. ...	10	3 6	36 T	33·55	...
Seawfell Pike	M. Mr. E. Wilson	4	0 6	3200 T	81·69	...

DIVISION X.—NORTHERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.	Days on which 101 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level	1885	
			ft. in.	feet.	inches.	
CUMBERLAND —(con.)						
Wastdale Head	M. Mr. E. Wilson	4	0 6	204 T	88.02	...
Styehead Tarn	M. " " "	4	0 6	1472 T	129.40	...
†The Stye	M. " " "	4	0 6	1077 T	197.92	...
Gable Hawes	M. " " "	8	...	1077 T	80.51	...
St. Bees (Abbot's Court)	A. Hodgetts, Esq.	5	1 1	20 L	36.08	177
†Seathwaite	M. Mr. Dixon	4	0 6	422 T	145.31	...
D† "	" " "	5	1 0	423 T	144.01	205
† "	The Roy. Meteor. Society	5	1 0	422 T	141.25	205
*† "	M. John Marshall, Esq. ...	5	1 0	420 T	138.77	...
Ullscarf	M. G. H. Hill, Esq., C.E..	7	1 0	2100 T	116.10	...
D Whitehaven (The Floss, Cleator)	D. Ainsworth, Esq. M.P.	5	1 11	208 T	48.35	169
D† Wythburn Vicarage	Rev. Basil R. Lawson..	5	1 0	574 T	103.80	151
†Helvellyn (Birkside)	M. G. H. Hill, Esq., C.E..	7	1 0	1900 T	77.00	...
†Wythburn	M. " " "	7	1 0	580 T	87.40	...
†Rosthwaite (Castle Lodge) ...	M. G. J. Symons, Esq., FRS.	8	1 0	305 T	108.75	...
†Watendlath	M. " " "	8	1 0	867 T	80.75	...
Armboth	G. H. Hill, Esq., C.E..	7	1 0	550 T	79.20	...
" Fells (The Pewitts) ...	" " "	7	1 0	1650 T	85.40	...
Helvellyn (Whiteside)	" " "	7	1 0	2100 T	70.00	...
†Whitehaven (Irish Street)	Dr. P. Anson	5	1 1	21 T	42.68	134
D Arlecdon (Kirklandhow)	J. B. Wilson, Esq., C.E.	5	1 0	500 T	53.54	186
D† Keswick (Barrow House)	Miss E. G. Langton ...	8	0 6	282 T	71.97	208
Loweswater (Waterend)	Mrs. Jackson	5	1 0	432 T	54.83	195
†Ullswater (Hallsteads)	A. Marshall, Esq.	10	4 0	490 T	48.00	...
D† Keswick (Deer Close)	John Marshall, Esq. ...	7	1 9	300 T	57.89	197
D† " (Derwent Island) ...old	" " "	5	0 7	280 T	50.49	197
D " (" ") ...new	" " "	5	0 6	290	53.63	199
D† " (Post Office)	J. F. Crosthwaite, Esq.	8	6 4	270 T	61.51	186
D† " (" ")	" " "	5	1 0	265	59.54	186
D† " (Shu-le-crow)	Miss Mitchell	8	2 6	296 T	56.44	190
Whitehaven (Gilgarron Hall) ...	Mr. D. Galloway	5	4 9	470 T	50.28	179
D " (Distington)	Baldwin Latham Esq CE	5	1 0	...	42.11	149
D Cockermouth (Whinfell Hall) ...	W. Robinson, Esq. ...	5	2 0	265 T	53.09	212
D " (Brandlingill)	Capt. F. R. Sewell ...	5	1 0	320 T	55.94	223
†Threlkeld Rectory	Rev. J. Brunskill	5	4 0	488 T	38.94	...
† " (Settra)	" " "	5	1 0	840 T	50.00	...
†Bassenthwaite (Mirehouse)	H. A. Spedding, Esq...	5	0 6	300 T	42.87	197
Brigham (Broughton Cross)	L. Wilson, Esq.	5	1 6	147 T	40.01	...
D† Cockermouth (Derwent House) ..	Mrs. Dodgson	5	...	...	41.37	188
D† " (Higham)	Miss Hoskins	5	1 0	478 T	41.94	191
D " (Broughton Grange)	G. S. Wilson, Esq. ...	5	1 3	209 T	39.20	199
D Penrith (Skirsgill Park)	Capt. Gandy .....	...	...	...	24.99	146
" (Culgaith Vicarage) ...	Rev. G. W. Atkinson..	5	0 5	500 T	22.91	...
† " (Fell Lane, Fir Bank) ..	T. Lester, Esq.	5	1 0	575 T	26.08	158
D " (Edenhall Vicarage) ...	B. W. Lovejoy, Esq....	5	1 4	310 T	23.77	201
D " (" The Luham)	G. Varty Smith, Esq...	5	1 1	270 T	22.69	187
D† " (Newton Reigny)	T. G. Benn, Esq.	8	1 0	580 T	31.51	206
† " (" ")	M. " " "	8	1 0	580 T	31.62	...

DIVISION X.—NORTHERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1885	Days on which ·01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level		
			ft in.	feet.	inches.	
CUMBERLAND—(con.)						
D† Blencowe School.....	T. Fawcett, Esq.	8	0 9	601 B	34·70	196
Maryport (Netherhall)	H. P. Senhouse, Esq. ...	8	0 6	27 A	38·44	163
D Hesket Newmarket	Mr. J. Wilson ..	5	1 0	600 T	37·64	165
Aspatria (Brayton Hall)	Mr. J. Hammond	8	1 6	220	28·84	...
D „ (Brookfield)	M. Lidbetter, Esq.	5	0 9	124 A	30·57	199
D† Alston (Love Lady Shield).....	T. W. Dickinson, Esq. ..	5	1 0	1145 A	42·26	225
Carlisle (Wreay Vicarage)	Rev. T. Lees	5	2 0	310 T	25·35	211
D† „ (Cemetery).....	I. Cartmell, Esq.	8	3 0	114 A	24·63	149
D „ (Rose Hill)	C. Lonsdale, Esq.	8	1 0	102 A	24·93	175
† „ (Scaleby Hall)	R. A. Allison, Esq., M.P.	5	1 0	112 A	27·87	178
Kirkandrews-on-Esk Rectory ...	Rev. F. Taylor	5	0 6	100 A	31·05	...
WESTMORELAND.						
D Arnside	J. P. Drewett, Esq. ...	5	0 6	20	43·58	155
Kirkby Lonsdale	Mr. W. Harrison	5	1 2	209	36·35	...
„ „ (Biggins House).....	Miss Tomlinson	12	3 6	400 T	40·38	...
D Kendal (Kent Terrace)	R. J. Nelson, Esq.	5	1 6	146 T	45·83	178
D „ (Underfell)	F. Wilson, Esq.	8	3 7	300 B	44·06	161
D „ { „ }	„ „	8	1 0	300 B	48·86	162
D „ { „ }	„ „	8	1 0	300 B	47·26	...
D „ (Hawesmead)	G. Braithwaite, jun. Esq.	8	0 6	175 A	47·52	196
D Bowness (Fallbarrow)	Rev. A. Rawson	8	1 0	135	60·67	194
D Ambleside (Brathay Vicarage)...	Rev. H. S. Callender...	5	1 0	150	72·44	188
D Elterwater (Woodlands)	E. Tucker, junr., Esq. ..	5	0 9	244 A	86·39	188
„ (Lingmoor)	M. „ „	8	1 0	1485 B	97·00	...
D† Ambleside (Nook Cottage)	Mr. E. Hird	5	1 0	227 A	75·71	213
† „ (Lesketh Howe)	F. M. T. Jones, Esq. ...	5	2 6	175 T	81·37	196
D† Grasmere (High Close)	E. B. W. Balme, Esq. ...	8	0 9	553	77·67	195
D Ravenstonedale (Brownber)	J. Fothergill, Esq.	5	3 0	826 T	37·04	179
Orton Vicarage	Rev. E. Holme	5	3 6	770 T	54·62	179
D† Kirkby Stephen	T. Mason, Esq.	5	1 0	574 T	34·21	153
† Shap (Sleddale)	Mr. W. Hoggarth	5	1 0	1560 T	81·45	...
† „ (Swindale)	„ „	5	1 0	1610 T	94·50	...
† Haweswater (Mardale Green) M	G. J. Symons, Esq., FRS	5	1 0	780 T	103·50	...
† „ { „ } M	„ „ „	8	1 0	780 T	94·50	...
† Shap (Tailbert Beck)	Mr. W. Hoggarth	5	1 0	900 T	72·65	...
D† „ (Copy Hill)	„ „ „	5	1 0	852 A	57·23	198
D Patterdale Hall	Mr. A. Milne	7	1 3	490 T	87·72	161
† „ (Greenside Mine).....	Mr. T. Taylor	7	1 6	1000 T	97·10	...
† Crosby Ravensworth (Reagill)...	Mr. Wilkinson	8	0 6	890 T	38·89	136
D† Appleby	Dr. Armstrong	5	1 0	442 A	25·28	175
Ullswater (Swarth Fell)	G. J. Symons, Esq. F.R.S.	8	1 0	1000 T	48·50	...
„ (Sharrow Bay)	A. Parkin, Esq.	5	0 7	500 T	41·22	...
Lowther Castle [Penrith]	Mr. F. Clarke	8	3 6	750 T	30·50	...
D Brougham Hall [Penrith]	Mr. A. Lodge	5	5 5	470	28·06	191
D Milburn	Miss Robinson	5	1 0	644 T	25·34	187

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

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.	Days on which .01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level	1885	
			ft. in.	feet.	inches.	
MONMOUTH.						
D Marshfield (Llwynarthan)	F. G. Evans, Esq.	5	1 0	72 B	39·82	196
D Newport (Gold Tops).....	T. Dyne Steel, Esq., C.E.	8	1 0	100 A	42·93	198
D Chepstow (Shirenewton Hall) ...	E. J. Lowe, Esq., F.R.S.	8	0 6	530 T	44·95	204
D Llanfrechfa Grange	F. J. Mitchell, Esq. ...	5	4 0	326 A	42·04	163
Tredunnoch	Rev. C. T. Salusbury...	5	2 3	170 A	38·05	183
D Chepstow (The Mount).....	H. A. Smith, Esq.	5	1 0	150	37·00	165
D „ (Piercefield Park).....	H. Clay, Esq.	5	1 6	300 P	36·78	188
Pontypool (Llanthewy Vach Rec.)	Rev. J. E. J. Machen...	5	2 3	200 T	40·97	168
Blaenavon (Gas Works)	C. White, Esq.	5	0 9	980 T	59·92	170
D Tredegar (Bedwellty House) ...	J. Colquhoun, Esq. ...	8	1 0	972 A	73·38	218
D „ (The Willows)	G. A. Brown, Esq.	8	1 0	1024 T	61·66	205
D Ebbw Vale (The Firs)	R. S. Jordan, Esq.	5	1 0	1060 A	65·45	215
D Abergavenny (Larchfield)	Dr. Glendinning	5	1 0	240 B	45·00	182
„ (Dyne House)	S. H. Steel, Esq.	5	1 2	210	44·53	204
D Llantilio Court	Sir H. M. Jackson, Bt.	5	0 11	207 A	38·13	148
D Monmouth (Pentwyn)	Rev. J. T. Harding ...	5	1 0	191 B	31·37	156
GLAMORGAN.						
* Cowbridge (The Ham)	G. W. Nicholl, Esq. ...	8	1 3	96 T	35·80	149
Cardiff (Cogan Pill, Landough)...	J. A. B. Williams, Esq. C.E.	5	1 0	122 A	38·82	176
„ (New Cemetery)	Mr. T. Haydyn	4	1 0	95	46·19	210
D „ Castle.....	Mr. A. Pettigrew	5	1 0	38 A	40·17	180
„ (Park Place)	W. Adams, Esq., C.E..	5	1 0	43 A	41·02	206
Cowbridge (Ash Hall)	D. Owen, Esq.	8	1 0	315 A	46·91	208
D Cardiff (Ely)	J. A. B. Williams, Esq. C.E.	8	1 0	53 A	42·79	185
„ (Lisvane)	„ „ „ „ „ „ „ „	5	1 0	136 A	43·42	183
D Swansea (Sketty)	T. T. Wood, Esq.	5	1 0	280	49·58	205
D „ (South Dock Lock).....	R. Capper, Esq.	12	14 9	40	41·48	187
Mountain Ash Waterworks	F. Russell, Esq.	5	2 0	...	70·94	...
D Neath	E. C. Pole, Esq.	5	1 0	204 A	53·46	195
„ (Morriston)	E. Rice Morgan, Esq. ...	5	1 0	89	48·43	182
„ (Fairy Land)	E. Ll. Green, Esq. ...	5	1 9	170 B	51·21	202
D† „ (Glyncorwg)	T. F. Brown, Esq.	5	4 6	717	93·62	201
Treherbert	Sir W. T. Lewis, C.E. ...	5	1 0	670	92·64	206
Castell Lluchwr (Penllergare)...	J. T. D. Llewellyn, Esq.	5	4 2	240	46·91	178
Aberdare (Mardy)	Sir W. T. Lewis, C.E. ...	5	2 2	431 A	61·76	197
D† „ (Abernant).....	Evan Jones, Esq. ...	5	5 3	430	56·73	186
D Felindre (Lliw Reservoir).....	R. H. Wyrill, Esq., C.E.	8	1 6	426 T	59·36	183
D Merthyr Tydvil (Gwainvarren)...	C. E. Simons, Esq.	5	1 2	836	64·62	212
D Ystalyfera	Dr. D. Thomas	8	1 2	250 L	71·93	186
D „ (Tan-yr-allt)	D. H. Lewis, Esq.	8	1 6	300 L	69·35	185
CARMARTHEN.						
Llanelly (Old Market Place).....	G. Watkeys, Esq.	5	10 0	35	43·19	185
„ (Water Works)	„ „ „ „ „ „ „ „	13	5 0	255 A	39·53	191
Tegfynydd [Narberth]	H. S. Morgan, Esq. ...	5	1 0	158 A	49·36	124
D† Carmarthen (Joint Co. Asylum)...	Dr. Header	8	1 0	189 A	49·18	212
Llandilo (Golden Grove)	Mr. J. Hill	5	0 6	...	54·91	168

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.	Days on which ·01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level	1885	
			ft. in.	feet.	inches.	
CARMARTHEN—(con.)						
Llandilo (Dynevov Castle)	Rt. Hon. Lord Dynevor	8	1 0	236 T	51·86	217
d Llandovery	J. Watkins, Esq.	5	1 0	217 T	46·18	218
PEMBROKE.						
Pembroke (Stackpole Court).....	Rt.Hon.Earl of Cawdor	5	1 8	60 T	43·17	187
" (St. Ann's Head).....	The Meteor. Council ...	8	0 8	150	34·53	...
d Haverfordwest (Pieton Castle)..	Mr. J. Dumble	5	1 0	100	47·69	190
d Narberth Rectory	Rev. W. Wilson	8	1 4	...	50·08	195
d*Haverfordwest (High Street) ...	E. P. Phillips, Esq. ...	5	1 0	95 T	50·27	162
Lower Solva	Mr. H. W. Evans	5	1 6	...	38·10	128
d St. David's	Dr. W. P. Propert	5	1 0	216	38·96	195
d Fishguard (Castle Hill).....	W. D. Wathen, Esq....	5	0 10	200 B	45·21	186
d Llechryd (Castle Malgwyn) ...	Mr. H. Howard	5	1 0	...	42·10	211
CARDIGAN.						
d Aberayron (Dolaeron)	T. H. Maddy, Esq. ...	5	1 11	50	32·24	188
d†Aberystwith (Gogerddan).....	Sir Pryse Pryse, Bt. ...	5	1 0	80 B	43·41	185
d " (Cwmsymlog)	Capt. Garland	5	2 6	800	50·64	180
BRECKNOCK.						
d†Nanthir Reservoir [Aberdare]... [M]	T. L. Edwards, Esq. ...	5	1 0	860 A	60·82	220
† " " " " " "	" " " " " "	5	1 0	860 A	61·27	...
†Cardiff WW(CwmTaffFawrNo5)	JABWilliams,Esq.C.E.	5	1 0	1150 T	75·09	...
† " " (" " " No.1)	" " " " " "	5	1 0	2350 T	79·09	...
† " " (" " " No.6)	" " " " " "	5	1 0	1310 T	84·19	...
Crickhowel (Gwernvale)	Mrs. Lloyd	5	1 0	373	41·64	192
Brecknock (Cantrefl Rect.)	Rev. J. J. Evans	5	0 8	550 ?	52·91	150
d " " " " " "	J. Kirk, Esq.	5	2 0	437 A	45·45	177
d Treacastle (Llywel Vic.).....	Rev. T. Jones	5	1 0	750 T	52·21	198
d Brecknock (Llandeafalog-fach)..	Rev. W. Williams.....	5	1 1	637	44·36	230
Hay (Gweryfed Park).....	T. Wood, Esq.	4	1 2	350 T	30·29	161
Builth (Llanwrtyd Wells)	Miss Jones	5	1 0	800	63·92	...
" (Vicarage)	Rev. A. J. Coore	8	2 0	550 T	37·34	...
d " (Abergwesin Vic.).....	Rev. J. Jones	5	1 0	1003 L	67·67	234
d Newbridge (Llysdimam)	Mrs. Lister Venables..	5	1 0	600 B	37·31	195
RADNOR.						
d Llanstephan	Mr. J. Winfield	5	1 0	394	35·78	...
d Llandrindod Wells (Brynarlais).	Dr. W. B. Davies	5	1 0	700 B	36·15	206
New Radnor (Downton)	Col. Pearson	5	1 0	712	41·73	221
" " (Ednol)	" "	5	1 0	950	43·72	218
Llandeigley (Gwern-i-Arglwydd)	" "	5	1 0	1000	39·68	182
Pen-y-bont.....	" "	5	3 6	750	34·50	192
d Rhayader (Nantgwiltt).....	R. L. Lloyd, Esq.	5	1 0	767 B	62·82	191
MONTGOMERY.						
Llangurig (Esgair Clochfan) ...	G. J. Symons, Esq., FRS	5	1 2	1330	64·50	...
+ " (Ystrad-olwyn-fawr) ...	M Mr. J. Jones	8	1 0	950	50·60	...

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.	Days on which ·01 or more fell.	
		Diameter	Height Above Ground		Height Above Sea Level		1885
			ft.	in.	feet.	inches.	
MONTGOMERY—(con.)							
D Llanidloes (Broomcliffe)	E. Powell, Esq.	5	1	0	650 T	47·63	234
D Newtown (Dolfor)	W. B. Pugh, Esq.	5	0	3	1027 T	40·20	215
D Churchstoke (Mellington Hall) ..	P. Wright, Esq.	5	1	6	540 A	33·80	187
" "							

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1885	Days on which ·01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level		
			ft. in.	feet.	inches.	
CARNARVON.						
Pwllheli (Bodfaen)	Major Mathew	5	5 0	80	44·10	175
*Llanystumdwy (Talarvor)	" "	5	3 0	50	34·04	168
†*Port Madoc	" "	5	3 0	10	53·08	184
*Llangybi (Cefn)	" " "	5	1 1	200	47·05	160
Llandwrog (Glynllivan Park) ...	Hon. F. G. Wynn.....	5	1 0	80?	44·83	...
" (" Garden) ...	" "	5	1 0	160	51·91	...
" (" Fort)	" "	8	1 0	170	46·66	...
Pen-y-gwryd	Mr. H. Owen	8	1 0	880	111·50	177
Carnarvon (Belan Fort).....	Hon. F. G. Wynn.....	5	1 0	12	30·16	...
" (Cocksidia)	Major Mathew	5	1 0	120	37·24	182
Dinorwic Quarry	" " "	5	4 0	850	65·22	177
† Llanbedr-y-Cennin (Llyndulyn)	T. T. Marks, Esq., C.E.	8	1 6	1622 L	95·70	177
Llanfairfechan	R. Luck, Esq.	5	0 8	150 B	35·18	140
† Llandudno (Warwick House) ...	Dr. Nicol	8	0 8	99 A	22·83	153
ANGLESEA.						
Llangadwaladr (Bodorgan)	Mr. R. Cooper	8	3 6	...	36·14	203
Holyhead	The Meteor. Council ...	...	...	...	31·57	...
LlanerchymeddLlwydiarthEsgob	T. Prichard, Esq.	5	1 0	112 L	34·20	190
Bodewryd (Rhosybol)	Rev. D. Morgan.....	5	1 6	170	37·41	150
ISLE OF MAN.						
Calf of Man (Chicken's Rock) ...	Bd. of Northern Lights	...	...	...	22·80	112
Castletown (Langness) .....	" " " .....	...	...	...	19·10	...
"	A. W. Moore, Esq.....	5	0 9	30	29·41	185
St. Mark's	" " "	5	0 9	400	34·81	162
† Douglas (Derby Square)	P. Killey, Esq.	5	1 1	78	34·74	160
† " (Victoria Road)	H. Story, Esq.	8	1 0	120 L	38·91	177
" (Cronkbourne)	A. W. Moore, Esq. ...	8	0 10	138 A	40·35	177
" (Clypse, Onchan)	" "	8	1 0	439 T	40·04	...
† Ramsey	" "	5	0 9	30	42·08	173
† Andreas	Rev. F. Lamothe	5	0 6	72 T	28·95	144
Point of Ayre	Bd. of Northern Lights	...	...	...	23·39	148
ISLES OF SCILLY.						
St. Mary's	The Meteor. Council ...	8	1 6	77 L	32·63	...
† Tresco Abbey	T. A. D. Smith, Esq....	12	2 4	20	30·33	185
JERSEY.						
St. Aubins (Noirmont)	The Meteor. Council ...	8	1 0	270	29·90	...
† " School	The late J. E. Vibert, Esq	8	1 0	140 B	29·24	172
" "	" " "	8	18 4	155	24·79	..
GUERNSEY.						
† Guernsey (Buen Retiro)	A. Collenette, Esq. ...	5	1 0	270 L	34·57	217
" (" ")	" " "	5	1 0	270 L	34·91	...
† " (Villa Carey)	Dr. Carey	8	1 9	180	30·42	183

SCOTLAND.

DIVISION XII.—SOUTHERN COUNTIES.

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.	Days on which ·01 or more fell
		Diameter	Height Above Ground	Height Above Sea Level	1885	
			ft. in.	feet.	inches.	
WIGTON.						
Mull of Galloway	Bd. of Northern Lights	...	...	...	23·25	...
^D Garliestown (Galloway Ho.).....	Mr. J. Day.....	5	4 6	20 ?	36·15	170
^D Stoneykirk (Ardwell House).....	M. J. Stewart, Esq., M.P.	8	0 9	125	29·96	132
Corsewall	Bd. of Northern Lights	...	3 4	22 ?	32·35	121
KIRKCUDBRIGHT.						
Little Ross	Bd. of Northern Lights	...	3 3	130 ?	24·25	...
St. Mary's Isle	The late Earl of Selkirk	...	...	...	61·46	...
Auchencairn (Torr House)	W. Ovens, Esq.	5	0 8	30	50·64	...
Dalbeattie (Colvend Manse)	Rev. J. Fraser	5	1 6	120 †	38·58	...
Twynholm (Cally)	A. Buchan, Esq.	5	1 0	140	55·02	172
*Dalbeattie (Station Road).....	Mr. W. McBride	5	0 5	50 ?	48·51	103
^D Cargen [Dumfries]	P. Dudgeon, Esq.	5	0 4	80 †	40·93	161
New Galloway (Glenlee)	Mr. W. Melville.....	5	1 3	...	62·15	212
Irongray (Drum Park)	D. J. Kay, Esq.	3	0 6	230	58·90	...
DUMFRIES.						
^D Annan (Kinmount)	Mr. R. Elliot	8	3 0	140 †	37·95	165
^D Mouswald (Free Ch. Manse).....	Miss E. M. Brown.....	5	0 9	...	35·23	157
^D Dumfries (Crichton Inst.).....	Mr. Smith	8	0 6	153 †	38·54	160
Langholm (Westwater).....	Mr. W. Elliot.....	5	2 0	550 †	53·00	...
„ (Ewes School)	J. C. Little, Esq.	3	0 6	445 †	52·70	...
„ („ Burnfoot)	„ „ „	3	0 6	541 †	52·92	...
Durrisdeer (Drumlanrig Castle)	Mr. D. Thomson.....	3	0 6	191	39·30	...
Langholm (Tudhope)	J. C. Little, Esq.	3	0 6	1961 †	70·00	...
Moffat (Ericstane)	J. J. Welsh, Esq. ....	...	...	550	52·30	...
ROXBURGH.						
New Castleton (The Flatt)	J. Elliot, Esq.	3	0 9	350 †	43·20	...
„ „ (Kirndean)	Miss Elliot	3	0 9	400 †	45·90	...
Hawick (Wolfelee)	Sir W. Elliot, Bt., F.R.S.	5	0 6	601	35·50	...
„ (Bransholme)	W. E. Lockhart, Esq. .	5	0 2	451 †	30·07	...
„ (Kirkton)	Mr. J. Welsh	3	0 6	759 †	33·30	...
„ (Wilton Hill)	Mr. D. Elder	5	4 6	420 †	23·31	180
*Jedburgh (Sunnyside)	G. Hilson, Esq.	5	6 0	351 †	18·97	141
^D St. Boswell's (Elliston).....	The Hon. G. Dalrymple	5	1 0	356 B	23·86	170

DIVISION XII.—SOUTHERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.	Days on which ".01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level	1885	
ROXBURGH—(con.)			ft. in.	feet.	inches.	
Kelso (Springwood Park)	Mr. W. Chaplin.....	10	1 0	130 L	19.22	165
D Melrose (Asylum)	Dr. Grierson	5	0 6	480 T	23.65	214
D „ (Abbey Gate)	Mr. A. Dodds.....	5	0 6	280 T	28.18	222

DIVISION XIII.—SOUTH EASTERN COUNTIES.

SELKIRK.

Borthwickbrae [Hawick]	W. E. Lockhart, Esq....	8	0 2	800	35.70	...
Selkirk (Bowhill)	A. Buchan, Esq.....	9	11 0	597	26.66	162
„ (The Hangingshaw) ...	Miss Johnstone	5	0 3	670	32.37	208
Galashiels (Abbotsford Rd.).....	Dr. Somerville	5	0 6	416 T	28.98	214

PEEBLES.

Innerleithen (The Glen)	A. Buchan, Esq. ....	...	...	...	38.90	...
Glenrath (Manor)	Mr. S. Linton.....	5	1 2	764 A	38.64	...
Innerleithen (Runic Cross) ...	Mr. R. Mathison	5	1 0	474 A	30.63	...
„ (Leithen Lodge) ...	„ „ „	11	0 0	800 T	38.80	...
Eddlestone (Portmore Res.)	W. H. Cameron, Esq....	11	0 6	1000	30.03	160
D N. Esk Reservoir [Penicuik] ...	Mr. J. Garnock	11	0 6	1150 A	27.85	157

BERWICK.

D Coldstream (The Hirsell)	Mr. Cairns	3	0 7	75 A	20.18	161
D Marchmont House	Mr. P. Loney	5	1 0	500 T	30.99	220
Berwick (Paxton House)	A. Buchan, Esq. ....	...	...	...	23.85	...
Dunse (Clouds)	C. Watson, Esq.....	8	0 8	500 T	29.72	...
St. Abb's Head	Bd. of Northern Lights	...	...	...	18.60	136

HADDINGTON.

D Haddington (Asylum)	J. Mowat, Esq.	5	1 0	238 T	21.97	207
D East Linton	Mr. J. Storie	3	0 3	90 T	20.25	153
Prestonkirk (Smeaton)	A. Buchan, Esq.....	...	...	100	21.89	145
Drem (Craigielaw)	„ „	5	...	...	20.60	...

EDINBURGH.

Moorfoot Hills (Bowbale)	W. H. Cameron, Esq....	...	...	...	38.52	...
„ „ (Gladhouse Res.)	„ „ „	11	0 6	900	31.67	175
Pentland Hills (Crosswood)	„ „ „	11	0 6	950	33.70	...
Penicuik (Edgelaw Res.).....	„ „ „	11	0 6	654	27.17	149
Pentland Hills (Harper Rig).....	„ „ „	11	0 6	900	28.20	...
West Calder (Addiewell)	J. Fyfe, Esq. ....	...	...	...	29.46	...
Rosewell Asylum	A. Buchan, Esq.....	5	0 6	695	25.84	...
Pentland Hills (Swanston)	W. H. Cameron, Esq....	11	0 6	550	24.90	...
„ „ (Glencorse Res.)..	„ „ „	11	0 6	787	33.70	143
„ „ (Harlaw)	„ „ „	11	0 6	800	27.70	...

DIVISION XIII.—SOUTH EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1885	Days on which .01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level		
			ft. in.	feet.	inches.	
EDINBURGH—(con.)						
Pentland Hills(Clubbiudean Res.)	W. H. Cameron, Esq.	11	0 6	750	30·45	119
" " (Harbour Hill) ...	J. " Leslie," Esq., " C.E.	11	0 6	1112	29·65	...
Colinton (Fernelaw).....	J. Leslie, Esq., C.E.	11	0 6	500	24·30	...
Gilmerton Station	Mr. J. J. Bell	5	0 6	240	20·61	154
Liberton (Alnwick Hill Res.) ...	W. H. Cameron, Esq....	...	...	400	22·79	103
Edinburgh (Charlotte Square)...	J. Leslie, Esq., C.E.	11	0 6	230	17·95	...
" { " " } ...	A. " Buchan," Esq.	12	63 0	300	12·16	...
" {Cumin Place}	A. Buchan, Esq.....	5	1 0	162	21·48	177
" {Streatham Ho.} .....	" " " " " " " " " " " "	...	...	...	21·00	...
Leith	The Meteor. Council ...	8	1 8	22	16·73	...
" (Navigation School)	A. Buchan, Esq. ....	...	...	70	19·74	..
LINLITHGOW.						
Bathgate.....	J. Fyfe, Esq. ....	...	...	...	26·19	...
Uphall .....	" " " " " " " " " " " "	...	...	...	22·47	...
Linlithgow (Rockville).....	A. Buchan, Esq.....	5	0 5	260	24·48	...

DIVISION XIV.—SOUTH WESTERN COUNTIES.

LANARK.

Biggar (Wiston)	Mr. W. Core	3	0	6	860 T	38·70	...
„ (Cambus Wallace)	Captain Paul	6	0	6	748 A	24·76	190
Dalzell House	J G C Hamilton, Esq, MP	6	5	3	89 T	23·28	138
„ Hamilton Water Works	Mr. R. Watson	7	1	0	425 T	29·35	...
„ (Bothwell Castle)	Mr. A. Turnbull	10	18	0	146 T	22·57	144
† Cambuslang (Bushy Hill)	Dr. Muirhead	5	1	0	146 A	25·89	193
„ Coatbridge (Lochwood)	E. Gibb, Esq.	7	0	4	290 B	25·65	145
„ („) <i>Snowdon</i>	„ „ „	5	1	0	290 B	28·41	...
Airdrie (Hillend Reservoir)	Mr. W. Ritchie	6	4	6	620 A	30·66	...
Glasgow Observatory	Prof. Grant, F.R.S. ...	11	1	9	180	29·26	182
„	<i>Reg. General's Ret.</i> ...	...	...	...	54	27·11	132

AYR.

	Ballantrae (Glendrishaig)	P. Murdoch, Esq.	5	1	0	320	41·87	...
	Barrhill (Dochroyle)	Mr. J. Scott	6	0	9	550 T	51·56	...
D	Colmonell	R. Aitken, Esq.	6	0	6	100 T	42·90	198
	Girvan (Pinmore)	Hugh Hamilton, Esq... ..	5	1	0	187 T	45·52	192
	Loch Finlas	J. Wilson, Esq., C.E... ..	5	1	0	849 T	50·57	221
	Girvan (Turnberry)	Bd. of Northern Lights .....	...	...	...	...	23·38	140
	Ayr (Auchinlee)	J. Drennan, Esq.	6	4	0	36 T	28·30	...
D	Old Cumnock (Glaisnock House)	Mr. P. Braund	5	1	4	...	39·53	203
D	.....	Mr. J. Ballantine	5	1	0	380 T	37·09	194
	Kilmarnock (North Craig)	J. M. Gale, Esq., C.E..	12	0	6	310	31·76	...
	Ardrossan	The Meteor. Council ..	8	1	0	10	30·21	...
D	..... (Kirkhall)	H. F. Weir, Esq.	8	2	9	106 T	30·28	154
	Dalry (Blair Park)	J. Wilson, Esq., C.E... ..	4	0	2	710	58·25	...
D	..... (Carsehead)	A. B. Aitken, Esq.....	5	1	1	160 T	38·98	197

DIVISION XIV.—SOUTH WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.	Days on which .01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level	1885	
			ft. in.	feet.	inches.	
AYR—(con.)						
Paisley W. W. (Camphill).....	R. Sharp, Esq.	11	...	611	62·60	165
Shaws W. Works (Kelly Dam)...	J. Wilson, Esq., C.E....	6	1 0	640 ?	60·40	...
RENFREW.						
Lochwinnoch (Castle Semple) ...	Mr. W. Thorburn	7	30 0	240	38·93	181
Gorbals's Dist.	Ryat Lynn	8	0 5	310	40·90	...
	Waulk Glen	12	0 5	280	40·40	...
	Middleton	12	0 5	550	50·50	...
	Nither Cairn .....	...	...	700	52·40	...
Paisley W. Works	Stanely	12	1 0	190	38·00	...
	Back Thornleymuir	12	1 0	646	47·17	...
	Muirhead	12	1 0	482 ∇	52·95	...
	Springside	12	1 0	532 ∇	55·95	...
Glasgow (Queen's Park)	Mr. D. McLellan	8	0 9	144 ∇	28·70	174
Paisley (Ferguslie House)	Mr. Maclean	3	1 0	86 ∇	33·94	...
Shaws Water Works.	Green Water	6	1 0	788 ∇	62·80	...
	Garvocks	6	1 0	631 ∇	58·80	...
	Glenbrae	6	0 9	574 ∇	57·40	...
	Mansfield	5	1 0	573 ∇	65·89	224
	Compensation Reservoir	6	1 0	600	57·90	...
	Loch Thom	5	1 0	643 ∇	59·74	240
	Shielhill	6	0 9	962 ∇	58·00	...
	Darndaff Moor	6	1 0	840	60·80	...
	Spango Burn	6	0 9	757 ∇	56·80	...
	Hole Glen	5	1 0	603	60·21	204
	Prospect Hill	5	1 0	200	56·26	195
	Port Glasgow (Douglichill Res.)	5	1 3	549 ∇	48·94	168
" " (Auchendores Res)	" " "	5	1 3	321 ∇	44·73	168

DIVISION XV.—WEST MIDLAND COUNTIES.

DUMBARTON.

New Kilpatrick (Chesters)	J. Kennedy, Esq.	5	1 0	240 ∇	33·10	...
Dumbarton (Leven Shipyard) ...	Messrs. Denny, Bros...	5	1 0	9	41·76	190
Helensburgh (Lyleston)	Forrest Frew, Esq.....	6	0 4	120	41·05	...
" (Water Works)	Mr. T. Murray	6	0 3	296 ∇	47·15	191
Arrochar	Rev. J. Dewar	5	0 9	10	71·82	...

STIRLING.

Strathblane (Mugdock Reservoir)	J. M. Gale, Esq., C.E..	8	0 6	320	41·90	...
Falkirk (Kerse)	A. Brown, Esq.	8	1 0	...	22·00	...
Killearn (Old Ballikinrain) ...	Mr. J. Smith	5	0 6	265	51·65	183
Stirling (Polmaise Gardens)	Mr. W. W. Ritchie ...	6	1 0	12	29·25	...
Kippen	P. J. Muirhead, Esq....	5	1 6	255 ∇	39·37	109
Ben Lomond	J. M. Gale, Esq, C.E....	...	...	1800	85·60	...

DIVISION XV.—WEST MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES	Rain Gauge.			Depth of Rain.	Days on which ·01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level	1885	
			ft. in.	feet.	inches.	
BUTE.						
Arran (Pladda)	Bd. of Northern Lights ...	3	3	55 ?	37·28	150
Holy Island (Lamlash) .....	" " " " ...	...	...	...	44·80	116
Rothsay (Mount Stuart)	J. Kay, Esq.	3	2 6	100 ∇	45·50	..
" (Barone Cottage)	" "	5	1 0	116 ∇	43·96	191
ARGYLL—(MAINLAND.)						
Holy Loch (Rosmor)	W. R. W. Smith, Esq.	5	1 0	25 ?	75·35	210
Ardishaig	A. Buchan, Esq. ....	...	...	...	65·64	...
Loch Eck (Benmore).....	J. Duncan, Esq.	6	1 0	35	78·99	...
Lochgilphead (Kilmory) <i>Snowdon</i>	Sir J. Campbell Orde, Bt.	5	...	...	58·09	201
" (Poltalloch)	Mr. J. Russell	3	4 6	121	46·56	191
Inverary Castle	Mr. G. Taylor	6	0 6	28 \uparrow	71·60	...
Oban (Craigvarren)	G. W. Brennan, Esq., C.E.	5	1 0	143	54·22	203
" (Dunollie Castle)	A. Buchan, Esq.	5	1 2	55	63·35	...
Appin (Aird's)	R. Macfie, Esq.	5	0 11	41 ∇	48·55	...
Ballachulish	D. Campbell, Esq., M.D.	8	0 10	20	88·37	216
Strontian (Laudale)	A. Fletcher, Esq.	8	1 0	15 ∇	81·11	235
" " " "	" " " "	5	1 0	15 ∇	84·39	235
Loch Sunart (Glenborrodale) ..	J. J. Dalgleish, Esq.	5	0 2	60 \downarrow	73·51	207
Ardnamurchan	Bd. of Northern Lights ...	...	3 6	82 ?	41·81	159
" (Achateny).....	Mr. R. Coltart	5	0 2	61 ∇	65·97	238
Loch Eil (Corran)	Bd. of Northern Lights ...	...	0 4	14 ?	70·00	155
" " (Conaglen)	Dow. Countess of Morton ..	5	0 10	...	91·23	192
ARGYLL—(INSULAR.)						
Cantire, Mull of.....	Bd. of Northern Lights ...	...	...	279 ?	30·28	135
" (Campbeltown, Devaar) .....	" " " " .....	...	3 4	75 ?	37·51	138
" (Skipness Castle)	Mr. P. Maclean	6	1 6	20 \downarrow	44·70	...
" (Stonefield, Tarbert) ..	Colin G. Campbell, Esq ..	3	1 3	90	69·29	209
Islay (Ardbeg)	C. Hay, Esq.	5	4 0	10	38·83	189
" (Rhinn)	Bd. of Northern Lights ...	...	3 0	74 ?	31·58	156
" (Lochindaul).....	" " .....	...	...	...	43·96	153
" (McArthurshead).....	" " .....	...	...	...	49·85	126
" (Eallabus).....	J. S. R. Ballingall, Esq.	5	1 0	68 \uparrow	46·47	185
" (Gruinart School House)...	Mr. D. Mac Gilp	5	1 0	214 ∇	41·27	193
" (Rhuvaal)	Bd. of Northern Lights ...	...	...	...	39·51	119
Jura (Bay of Small Isles)	H. Evans, Esq. ....	...	...	...	60·90	...
" (Lowlandmansbay)	Bd. of Northern Lights ...	...	...	...	47·58	156
" (Fladda) .....	" " .....	...	...	...	52·91	134
Lismore (Mousedale) .....	" " .....	...	3 4	37 ?	43·42	163
Mull (Earraid) .....	" " .....	...	...	...	26·25	111
" (Quinish)	J. N. Forsyth, Esq. ...	5	0 9	35	57·37	218
" Sound of	Bd. of Northern Lights ...	3	0 11	12	47·20	136
Tyree (Hynish) .....	" " .....	...	...	...	46·40	191
Coll (Acha School).....	Mr. R. Macgregor	5	1 0	100 \uparrow	50·41	220
" (The Manse)	Rev. N. MacDougall... ..	5	1 6	100 \uparrow	42·76	164

DIVISION XVI.—EAST MIDLAND COUNTIES.

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain — 1885	Days on which ·01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level		
CLACKMANNAN.						
D Tillicoultry	J. Wilson, Esq.	5	0 6	65 T	34·44	174
„ (Tillicoultry House) ..	Col. A. Mitchell.....	5	0 1	...	37·05	...
D Dollar	Mr. A. Blackwood	9	1 0	178	38·42	187
KINROSS.						
Cleish Castle	A. Buchan, Esq. ....	...	...	...	37·48	...
Loch Leven Sluice	Mr. W. Clark.....	7	0 7	360 L	32·20	...
D Kinross (Turfhills).....	G. Henderson, Esq. ...	5	0 6	400 A	35·70	175
FIFE.						
D Dunfermline (Keavil)	L. Dalgleish, Esq.	5	0 2	150	18·94	163
D „ (Outh)	„ „ „	5	0 2	890	29·81	129
Isle of May	Bd. of Northern Lights .....	...	...	...	17·02	...
Pittenweem (The Priory).....	Rev. F. K. Lloyd .....	...	...	50	21·62	...
Kilconquhar (Balcarres)	Mr. E. Tate	5	0 6	300 T	31·46	187
Falkland (Lothrie Reservoir) ..	A. Buchan, Esq.	5	0 1	700	35·59	...
D Strathmiglo (Loden Urquhart) ..	J. Thom, Esq.	5	1 0	615 T	30·07	170
Cupar (District Asylum)	A. Buchan, Esq. ....	...	...	210	23·81	152
Kilmany (Mountquhanie House) ..	D. Gillespie, Esq.	3	1 3	240	23·10	...
Cupar (Birkhill).....	A. Buchan, Esq.	5	0 5	130	23·47	...
PERTH.						
D Culross (West Grange)	J. J. Dalgleish, Esq. ...	5	0 2	116 A	27·95	149
Menteith (Cardross)	H. D. Erskine, Esq. ...	...	1 6	...	39·90	...
Aberfoyle	J. M. Gale, Esq., C.E..	8	0 6	60	53·70	...
Dunblane (Kippendavie)	P. Stirling, Esq.....	...	...	360 ?	29·60	...
„ (Kippenross)	„ „ „	6	0 4	150 A	27·00	...
Loch Dhu	J. M. Gale, Esq., C.E..	8	0 6	325	79·70	...
Ledard .....	„ „ „ .....	...	...	1500	66·00	...
Loch Drunkie.....	„ „ „	8	0 6	420	62·30	...
„ Vennachar.....	„ „ „	8	0 6	275	56·60	...
D Lanrick Castle	Mr. J. Begg	3	1 0	...	38·30	121
Bridge of Turk	J. M. Gale, Esq., C.E..	8	0 6	270	69·60	...
Loch Katrine (Tunnel Hill Top) ..	„ „ „	8	0 6	830	64·50	...
Between Glen Finlas & Ben Ledi.	„ „ „	8	0 6	1800	50·00	...
Callander (Leny)	J. B. Hamilton, Esq... 3	0 4	340 T	55·70	...	
Glen Gyle	J. M. Gale, Esq., C.E..	...	...	380	84·10	...
Muthill (Orchil).....	A. Buchan, Esq. ....	...	...	...	46·20	...
D Auchterarder (Colquhalzie)	Mr. R. Morton	8	0 5	150	32·85	115
Balquhider (Stronvar).....	J. Dickson, Esq.	5	1 0	422 T	75·05	218
Crieff (Ochertyre).....	A. Buchan, Esq.	3	0 9	333	40·19	199
Perth (Rosebank) .....	„ „ „ .....	...	...	140	27·70	...
D Coupar Angus Station	Mr. J. Robertson	5	1 3	183 T	27·23	160
D Dunkeld (Inver Braan).....	Rev. J. M. B. Murdoch ..	...	1 0	500 ?	37·76	152
„ Station (H.R.S.).....	The Station Agent.....	5	...	...	38·19	...
Meigle (Arthurstone House).....	P. Carmichael, Esq. ...	5	2 3	187 A	27·57	...
„ „ „ (Garden) ...	„ „ „	5	2 3	196 A	28·49	...
Pitlochrie (Sunnybrae)	A. „ „ „ .....	...	...	...	35·52	...
D Dalnaspidal (H.R.S.)	The Station Agent.....	5	1 6	1414 T	57·13	245

DIVISION XVI.—EAST MIDLAND COUNTIES—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1885	Days on which 61 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level		
FORFAR.						
D Broughty Ferry (Douglas Ho.)...	Mr. K. Graham	5	5 6	60 ∇	21.90	152
D Dundee (Eastern Necropolis) ...	W. B. McKelvie, Esq..	3	0 4	199 \uparrow	23.10	129
Camperdown (Linen Works) ...	The Storekeeper.....	5	3 8	290	21.52	...
D†Craigton	J. Watson, Esq., C.E.	8	1 0	481	29.60	151
† "	M " " "	11	0 3	481	30.61	...
†Crombie Reservoir	M " " "	11	0 3	522 \uparrow	32.25	...
†Hill Head	M " " "	11	0 3	570 \uparrow	30.68	...
D Arbroath.....	A. Brown, Esq., LL.D.	8	2 0	60 \uparrow	23.17	140
D Kirriemuir (Lintrathen)	J. Watson, Esq., C.E.	8	1 0	700	34.25	167
" (")	M " " "	8	1 0	700	36.65	...
" (" Creich Hill)	" " " "	8	1 0	1500	35.45	...
Montroseness	Bd. of Northern Lights	...	...	...	16.98	...
Montrose (Sunnyside Asylum)...	A. Buchan, Esq.	5	0 5	200	20.45	...

DIVISION XVII.—NORTH EASTERN COUNTIES.

KINCARDINE.						
The Burn [Brechin]	Col. McInroy	4	0 6	250	30.30	...
Fettercairn	A. C. Cameron, Esq. ...	5	0 4	230 ∇	29.84	171
Girdleness	Bd. of Northern Lights	...	4 7	86	19.69	...
ABERDEEN.						
D† Braemar	J. Aitken, Esq.	8	0 9	1114 \uparrow	39.25	197
D† Aboyne (Glen Tana)	Sir W. C. Brooks Bt, M.P.	5	1 0	576	36.92	158
" Castle.....	Mr. G. H. Smythe.....	5	1 3	453 \uparrow	28.83	185
Drum oak (Drum Castle).....	Mr. R. Ewen	5	1 6	275 ∇	30.03	...
D Cromar (Logie Coldstone Manse).	Rev. G. Davidson	5	1 0	694 ∇	29.60	186
" (" Loanhead).	Mr. A. Farquharson ...	5	1 0	743 ∇	28.51	197
" (Tillypronie)	Mr. R. Littlejohn	5	1 0	1120 ∇	24.38	204
D Aberdeen (Merlebank)	J. Duncan, Esq.	5	0 6	76 ∇	27.58	216
† " (Rose Street)	Dr. A. Cruickshank ...	5	0 5	95 \uparrow	25.79	...
D " (Braemar Place)	Mr. J. McCormack ...	8	1 9	103	27.57	210
" (King's College)	The Meteor. Council ...	...	...	...	27.21	225
" (Gordon's Hospital)	A. Buchan, Esq.	8	1 6	66 \uparrow	28.43	216
D Midmar (Blackstock)	Mr. J. Barron.....	5	0 8	570 \uparrow	27.89	140
D " (Dun Echt Observatory)	Rt. Hon. Earl Crawford	8	0 11	461 ∇	26.68	169
Inverury (Manar Farm)	Mr. J. Walker	8	15 0	270 ∇	26.89	...
" (Manse)	Rev. J. Davidson, D.D.	9	0 0	220	35.25	...
Ellon (Kermuck)	Mr. T. Mair	11	0 6	300 \uparrow	32.36	...
Peterhead (Buchanness)	Bd. of Northern Lights	...	...	...	18.91	150
D New Deer (Artamford Cottage)..	J. Joiner, Esq.	5	1 0	551 ∇	35.41	245
D Old Deer.....	J. Walker, Esq.	5	2 0	135 ∇	30.76	226
" " Manse	Rev. J. Peter	4	0 6	146 ∇	27.69	...
Kinnairdhead	Bd. of Northern Lights.	...	...	...	22.60	...
BANFF.						
D Keith (H.R.S.)	The Station Agent.....	5	1 0	364 \uparrow	28.48	184

DIVISION XVII.—NORTH EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge			Depth of Rain.	Days on which 1 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level	1885	
			ft. in.	feet.	inches.	
BANFF—(con.)						
Banff (St. Leonard's).....	A. Ramsay, Esq.	5	1 0	115 T	25·62	186
D Boyndie (Whitehills)	Rev. W. Anderson ...	5	1 0	65 T	25·40	212
Cullen House	Mr. G. Berry	5	1 1	100	27·25	...
ELGIN OR MORAY.						
Grantown	Mr. W. Duncan	5	1 1	712 T	28·24	193
Craigellachie (Wester Elchies Sch)	Mr. J. Milne	8	1 0	560 T	29·70	178
D " " " Garden)	Mr. W. Jamieson	5	1 0	530 T	31·52	181
D Forres (H.R.S.)	The Station Agent.....	5	1 0	20	20·55	166
Gordon Castle.....	Mr. Webster	8	1 0	107 T	25·49	...
D Elgin (Highfield)	A. Cameron, Esq.	5	0 11	80 T	22·13	176
NAIRN.						
Nairn (Acharéidh).....	The late A. Clarke, Esq.	8	1 0	60 T	19·71	191
" (School Ho.)	The Meteor. Council ...	8	1 9	84	20·28	...

DIVISION XVIII.—NORTH WESTERN COUNTIES.

WEST ROSS.‡									
•	Loch Alsh (Inverinate House) ...	Mr. D. McDonald	5	3	0	150	63-57	116	
•	Strome Ferry (H.R.S.)	The Station Agent	5	1	0	40 T	66-07	235	
	Applecross Gardens	Mr. D. McCowan	5	0	9	70 A	47-80	...	
	Strathconan [Beaul]	Mr. D. McIver	5	1	0	450	51-22	...	
	Loch Vraon.....	J. D. Baldry, Esq., C.E.	8	0	7	750	78-64	...	
	Lochbroom (Loch Drome)	„ „ „	8	0	7	850	79-91	...	
	Braemore House.....	„ „ „	8	0	7	750	79-96	...	
	„ Lodge.....	„ „ „	8	0	7	100	60-68	...	
•	Lochbroom	Mr. M. Macleay	5	0	6	48	52-24	235	
	Isle of Lewis (Stornoway)	Bd. of Northern Lights	...	3	4	31 ?	33-54	175	
	„ („)	The Meteor. Council	8	1	0	24	50-49	...	
	„ (Butt of Lewis) ...	Bd. of Northern Lights	...	3	6	...	40-16	216	
EAST ROSS.‡									
	Achonachie Lodge [Beaul].....	W. C. Preston, Esq.	5	1	0	125 B	28-44	231	
•	Dingwall H.R.S.	The Station Agent	5	1	0	...	19-43	121	
	Cromarty	Bd. of Northern Lights	...	3	4	28 ?	15-17	...	
•	Alness (Ardross Castle).....	Mr. R. Massie	5	1	0	450 A	32-75	210	
	Fearn (Arboll)	Miss Hope-Douglas	5	1	2	65	20-78	...	
•	Edderton.....	W. E. Cattley, Esq.	5	3	0	120 B	25-60	216	
	Tarbetness	Bd. of Northern Lights	...	3	4	61 ?	25-14	104	
•	Tain (Springfield)	Mr. E. McLardy	5	3	5	80	19-13	153	

‡ Including Cromarty.

DIVISION XVIII.—NORTH WESTERN COUNTIES—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.	Days on which not or more fell.	
		Diameter	Height above Ground.		Height above Sea Level		1885
			ft.	in.	feet.	inches.	
WEST INVERNESS.							
d Fort William (Public School) ...	C. Livingstone, Esq. ...	5	1	0	36 $\frac{1}{2}$	82.06	238
Moidart (Roshven)	Prof. Blackburn	5	1	0	68 $\frac{1}{2}$	73.60	236
d Loch Shiel (Glenaladale)	Major Macdonald	5	1	2	50 $\frac{1}{2}$	111.95	260
Borrodale (Arisaig)	Mr. A. Grant	5	1	0	20	64.66	234
Glenquoich	A. Buchan, Esq.	8	2	0	660	111.05	...
Isle of Skye (Armadale Castle)...	Mr. Bruce	5	...	...	...	71.80	...
„ (Oronsay)	Bd. of Northern Lights ...	...	0	6	15 $\frac{1}{2}$	56.67	153
„ (Kyle Akin) .....	„ „ „ .....	...	0	2	3 $\frac{1}{2}$	64.93	152
„ (Dunvegan)	Mr. D. Macaskill	5	1	0	24	74.68	176
Rona	Bd. of Northern Lights ...	...	...	...	...	36.76	141
Barra (Barrahead).....	„ „ „ .....	...	3	0	640 $\frac{1}{2}$	25.62	105
d S. Uist (Ardkenneth)	Rev. D. MacColl	5	1	0	...	41.15	198
„ (Ushenish).....	Bd. of Northern Lights ...	...	0	4	157 $\frac{1}{2}$	71.35	166
d N. Uist (Loch Maddy)	Mr. G. McKay	5	1	0	...	48.01	172
Harris (Island Glass)	Bd. of Northern Lights ...	...	3	4	50 $\frac{1}{2}$	46.84	158
EAST INVERNESS.							
Invergarry House	Mrs. Ellice	5	1	0	...	63.31	...
d Fort Augustus (St. Benedicts)...	Rev. W. M. Wall	5	1	6	68 $\frac{1}{2}$	40.40	185
Aviemore (H.R.S.)	The Station Agent.....	5	1	0	710	25.52	...
Strath Errick (Farraline).....	Capt. Fraser	3	1	6	700	26.50	...
d Inverness (H.R.S.)	The Station Agent.....	5	1	8	...	19.46	148
† „ (Culloden House)....	D. Forbes, Esq.	6	4	0	104 $\frac{1}{2}$	20.79	...
d Cawdor [Nairn]	J. Joss, Esq.	5	1	0	260	25.52	200

DIVISION XIX.—NORTHERN COUNTIES.

SUTHERLAND.

Invershin	Mr. G. Young	5	4	0	20 T	32·54	...
D Golspie (H.R.S.)	The Station Agent	5	0	9	27	27·64	125
D „ (Dunrobin Castle)	Mr. D. Melville	5	1	0	14 N	28·20	151
„ („ „)	M „ „	3	0	3	13 N	28·70	...
Lairg	A. Buchan, Esq.	3	3	4	451	30·54	...
„ (H.R.S.)	The Station Agent	5	1	0	435	31·89	...
Assynt (Achumore)	J. Elliot, Esq.	3	0	9	200 T	65·50	...
Stourhead	Bd. of Northern Lights .....	...	..	...	...	33·20	139
Scourie	J. Simpson, Esq.	3	0	5	28	37·90	...
D Forsinard (H.R.S.)	The Station Agent	5	1	0	...	30·09	250
Cape Wrath	Bd. of Northern Lights	3	3	6	355 P	64·72	168

CAITHNESS.

Wick	The Meteor. Council ...	8	1	9	77	23-50	...
† „ (H.R.S.)	The Station Agent.....	5	1	0	...	22-83	113
† „ (Nosshead)	Bd. of Northern Lights	8	4	8	127 ?	18-36	101
† Watten (H.R.S.) ...	The Station Agent.....	5	0	9	75 1	24-37	222

DIVISION XIX.—NORTHERN COUNTIES—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.	Days on which ·01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level	1885	
			ft. in.	feet.			inches.
CAITHNESS—(con.)						
Thurso (Holburnhead)	Bd. of Northern Lights	3	0 8	60 ?	23·00	119
Dunnethead	„ „ „	...	3 0	...	26·16	137
Pentland Skerries	„ „ „	...	3 3	72 ?	20·00	176
ORKNEY.						
South Ronaldshay (Roeberry) ...	J. Gray, Esq.	5	1 2	101 7	26·75	229
Hoy (Cantickhead)	Bd. of Northern Lights	...	0 6	...	33·40	...
„ (Graemsay Sound, East=High)	„ „ „	...	3 4	27 ?	34·95	174
„ („ „ West=Low)	„ „ „	...	3 4	...	29·06	199
† Pomona (Tankerness Hall)	J. Johnston, Jr., Esq. ...	5	0 9	12 1	29·38	226
„ (Kirkwall)	Mr. J. W. Cursiter ...	3	0 6	30	33·19	244
Shapinsay (Balfour Castle)	Col. Balfour	4	0 6	50	30·60	...
Sanda (Start Point)	Bd. of Northern Lights	11	0 6	29 ?	22·71	...
North Ronaldshay	„ „ „	...	3 4	21 ?	28·69	131
SHETLAND.						
Sumburghead	Bd. of Northern Lights	...	...	...	24·41	130
„ (Dunrosness) ...	The Meteor. Council ...	8	1 0	84	33·52	...
Bressay Lighthouse	Bd. of Northern Lights	5	0 4	60	39·68	134
† Lerwick (Montfield)	J. M. Goudie, Esq.	5	1 0	60 ?	37·77	270

IRELAND.

DIVISION XX.—MUNSTER.

STATIONS.	AUTHORITIES.	Diameter	Rain Gauge.		Height above SeaLevel	Depth of Rain. 1885	Days on which not or more fell.
			Height above Ground.	feet.			
CORK.							
D Dunmanway (Coolkelure)	Col. Shuldham	5	1	6	500 T	70·42	225
Roche's Point.....	The Meteor. Council ...	8	1	9	32	40·02	...
D Cloyne (Rostellan Castle).....	J. Wise, Esq.	8	1	0	25	44·63	188
D Cork (Blackrock)	J. B. Binyon, Esq. ...	8	6	0	30 T	45·62	208
D „ (Sunday's Well Road).....	W. Miller, Esq.....	5	1	0	115 B	36·57	205
„ („ „ „)...M	H. „ „ „ „	3	1	0	115 B	37·48	...
D Glenville.....	H. Hudson, Esq., M.D.	8	2	0	514 T	47·48	207
D Fermoy (Gas Works).....	Mr. J. Grant	5	...	...	...	34·78	121
Ballyhooly (Wood Cottage) ...	R. H. Wake, Esq., M.D.	5	1	3	195	45·54	...
KERRY.							
Kenmare (Derreen)	Mr. W. Holbrow	5	1	0	74 T	68·95	193
D Dromore Castle	R. J. Mahony, Esq. ...	5	0	6	50 L	53·33	182
Kenmare (Inishfea)	„ „ „	5	0	4	150	59·52	...
Valencia (Telegraph Station) ...	The Meteor. Council ...	8	1	0	12	54·71	...
„ (Observatory).....	„ „ „ .....	...	2	0	11	56·67	249
Mangerton	VenArchdeacon Wynne	8	3	0	1770 B	88·10	...
D Killarney (Woodlawn)	„ „ „	5	1	1	91 T	52·69	221
„ (Gap of Dunloe) .....M	„ „ „	8	3	0	75	89·20	...
D Dingle.....	Rev. J. B. Anderson ...	5	1	0	10 L	54·79	248
D Tralee (Castlemorris).....	W. H. Deane, Esq., C.E.	5	1	0	25 L	34·28	237
WATERFORD.							
D Waterford (Brook Lodge).....	C. P. Bolton, Esq., C.E.	5	1	0	100 T	43·35	193'
„ (Gas Works)	Mr. Danskin	5	...	...	...	43·96	...
D Portlaw (Mayfield).....	J. Anderson, Esq.	5	4	0	70	46·17	199
D Glenam [Clonmel].....	Miss Grubb.....	8	1	4	80 T	42·55	210
TIPPERARY.							
D Tipperary (Henry Street).....	J. Dowling, Esq., M.D.	5	1	0	400 ?	37·56	190
Fethard (Mobarnane)	Dr. J. Donaldson .....	...	...	...	...	35·19	161
D Derrycastle [Killaloe] ...	Mr. T. Manly.....	5	1	6	580	43·27	213
D Nenagh (The Lodge)	Heber Koe, Esq.	5	1	0	100	32·30	193
D „ (Clashnevin).....	J. Mounsey, Esq.	5	1	2	300 T	35·36	199
D „ (Castle Lough).....	A. Parker, Esq.....	5	1	3	120 T	38·46	221
D Ballingarry (Hazelfort)	Mrs. Fraser.....	5	1	0	...	28·57	183
LIMERICK.							
D Newcastle West.....	Mr. J. D. Musgrave ...	5	3	0	219 T	32·15	175
Jane Ville [Tipperary].....	R. Harding, Esq.	5	1	0	534	44·75	...
D Limerick (Kilcornan)	Mr. G. Smyth	5	1	0	...	29·46	185

DIVISION XX.—MUNSTER—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.	Days on which ·01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level	1885	
			ft. in.	feet.	inches.	
CLARE.						
D Sixmilebridge (Kilkishen)	Rev. Canon Lloyd	5	4 4	113 7	33·34	207
D Ennis	J. Hill, Esq., C.E.....	10	3 2	21 1	40·37	198
D Miltown Malbay	M. Molohan, Esq.	5	1 0	400 7	38·73	236

DIVISION XXI.—LEINSTER.

WEXFORD.

D New Ross (Longraigue)	J. W. Deane, Esq.	5	1 0	210 T	41·84	197
D Enniscorthy (Ballyhyland)	J. Moffat, Esq.	5	1 0	365 T	42·52	203
Oulart (Wells)	C. M. Doyne, Esq.	5	1 0	...	39·60	172
Gorey (Courtown House)	RtHon Earl of Courtown	5	3 0	80 T	34·86	188

KILKENNY.

D Rosbercon Castle [New Ross] ...	A. E. Graves, Esq. ...	6	2 6	60	38·14	139
D Inistioge (Woodstock)	Lady Louisa Tighe ...	5	4 6	400 T	40·72	192
Stoneyford (Inisnag)	M The late Rev. J. Graves	5	1 4	220 T	28·60	...
Graigie (Brandondale)	Mrs. Burtchaell	5	2 0	90 T	37·94	...
Lavistown	D. A. Milward, Esq.	5	1 0	180 T	29·78	174
Kilkenny Castle	The Meteor. Council ...	8	32·10	188

WICKLOW.

D† Bray (Fassaroe) ...	R. M. Barrington, Esq.	10	5 0	250	43·17	202
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CARLOW.

D Carlow (Browne's Hill)	R. C. Browne, Jun., Esq.	5	1 0	291 T	30·52	202
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QUEEN'S COUNTY.

Abbey Leix (Blandsfort)	J. L. Bland, Esq.	8	4 3	532 T	33·83	197
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KING'S COUNTY.

D Parsonstown (Birr Castle)	RtHon Earl of Rosse FRS	8	0 11	170	30·29	188
D Portarlinton	Dr. Hanlon	5	1 2	240 L	25·02	207
D Rathangan (Clonbrin)	Mrs. W. Gresson	5	1 4	224 T	30·38	118

KILDARE.

D Straffan House	Mr. F. Bedford	5	2 0	240	29·43	172
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DUBLIN.

D Glensmoel Lodge	F. P. Dixon, Esq., C.E.	5	1 6	800 T	48·58	226
D „ (Rathmines W.W.)	„ „ „	5	1 6	581 T	39·23	211
D „ (Friarstown House)	„ „ „	5	1 6	607 T	39·27	216
D Dalkey (Bellevue Park)	H.M. Anketell Jones Esq	6	1 3	293	26·53	163
D† Dublin (Fitz William Square) ...	Dr. J. W. Moore	5	3 4	54 T	26·61	198
„ (Upper Leeson Street) ...	G. D. Powell, Esq., M.D.	5	0 6	49 T	27·27	168
„ (Phoenix Park)	Col. Sir C. Wilson, R.E.	8	1 0	162 T	23·51	231
D Glasnevin (Botanic Gardens) ...	F. W. Moore, Esq. ...	8	0 11	65 T	20·82	157

DIVISION XXII.—CONNAUGHT.

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DIVISION XXII.—CONNAUGHT—(continued.)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.	Days on which ·01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level	1885	
			ft. in.	feet.	inches.	
LEITRIM.						
D Carrick-on-Shannon	R. Bradshaw, Esq., M.D.	5	1 0	150 ?	28·60	182
D Ballinamore (Lawderdale)	J. O. Lawder, Esq. ...	5	1 0	275 †	36·61	227

DIVISION XXIII.—ULSTER.

CAVAN.						
D Belturbet (Red Hills)	Rev. E. B. W. Venables	5	0 9	208 †	29·77	191
FERMANAGH.						
Enniskillen (Florence Court) ...	Earl of Enniskillen FRS	8	1 9	250 †	50·54	222
„ (Lisbellaw)	R. Eadie, Esq.	5	1 0	200 ?	31·02	184
„ („)	M „ „ „	5	1 0	200 ?	32·86	...
Brookboro' (Colebrook Park) ...	The Meteor. Council ...	...	1 0	240	38·40	167
MONAGHAN.						
D Rockcorry	Mr. W. R. Loudon ...	5	1 0	290 †	29·48	186
ARMAGH.						
Flurrybridge	Rt. Hon. Lord Clermont	8	1 0	340 †	29·24	138
D Edward St. Station [Newry] ...	J. L. D. Meares, Esq. ...	5	1 0	22 †	28·41	122
D Armagh Observatory	Dr. Dreyer	8	1 0	205 †	25·63	211
D Lurgan (Belle Vue)	F. W. Bell, Esq.	5	0 4	200 †	26·19	195
DOWN.						
D Kilkeel	Rev. E. O'Brien Pratt	5	1 6	40	26·20	179
D Warrenpoint (Summer Hill)	Mr. B. M. Kernan	5	1 0	30 †	35·89	137
Newcastle (Fairleigh)	Rev. J. H. Seymour ...	5	1 2	12	45·24	166
D Rathfryland (Ballynagappoge) ...	J. Smyth, jun. Esq., C.E.	5	3 0	300	31·15	147
Castlewellan (Lough Island) ...	„ „ „ „	10	3 0	442 †	40·90	...
Banbridge (Katesbridge)	A. Mulligan, Esq.	5	1 0	230	22·85	...
D Seaforde	Col. Forde	8	0 5	180 †	33·32	206
D Banbridge (Corbet Reservoir) ...	J. Smyth, jun., Esq. C.E.	10	3 0	234 †	29·80	107
D† „ (Milltown)	„ „ „ „	8	0 8	200 †	26·65	199
D† Waringstown	Col. Waring, M.P. ...	8	0 8	191 †	26·77	188
D Sydenham (Alma House)	R. Reade, Esq.	5	1 0	60	35·74	191
Donaghadee	The Meteor. Council ...	8	1 6	30	28·07	...
ANTRIM.						
D Aghalee [Lurgan]	Lancelot Turtle, Esq. ...	5	1 0	105 †	26·31	172
D† Belfast (Queen's College)	Mr. W. Taylor	11	7 4	68 †	29·57	170
D „ (New Barnsley)	J. Firth, Esq.	5	1 0	200 †	37·06	205
D† „ (Antrim Road)	G. Thompson, Esq. ...	7	7 0	144 †	29·78	189
„ (Divis Mountain) ...side	L. M. Ewart, Esq.	8	1 0	1350 B	32·50	...
„ („ „) ...top	„ „ „ „	8	1 0	1567 †	25 00	...
„ (Glenbank)	„ „ „ „	5	1 0	360 B	37·07	...
† Antrim (The Manse)	Rev. J. H. Orr	5	1 0	150 †	25·28	171
Ballymena (Harryville)	A. Dawson, Esq.	5	1 0	150 †	34·12	248

DIVISION XXIII.—ULSTER—(continued).

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain. 1885	Days on which ·01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level		
			ft. in.	feet.	inches.	
ANTRIM—(con.)						
D Cushendall (Cushendun) ...	Rev. St. A. Brennan ...	5	1 0	25 T	36·76	218
D Bushmills	Mr. S. Doherty	5	1 0	33 T	31·14	208
„ (Dundarave)	Sir F. E. Macnaghten, Bt	5	1 3	162 T	31·92	207
LONDONDERRY.						
D Dungiven	J. M. Moore, Esq., M.D.	5	1 0	295	36·41	224
D Garvagh (Moneydig)	Miss Morrison	5	1 0	121	34·61	205
D Londonderry (Knockan)	Rev. H. F. Stevenson..	5	1 0	300	40·33	229
D „ (Clooney Terrace)	Mr. J. Conroy	5	1 0	94 T	31·77	230
D „ (Creggan Res.)	Mr. J. Hutchinson	8	1 0	320 T	33·01	239
D Limavady	C. D. H. Campbell, Esq.	5	4 0	81 T	26·74	227
D „ (Drenagh)	C. T. McCausland, Esq	5	1 0	80	29·04	226
Bellarena	Sir F. W. Heygate, Bt.	5	1 0	12 T	32·76	200
Coleraine	A. D. Williamson, Esq.	5	1 4	25 T	31·99	195
D „	C. D. H. Campbell, Esq.	5	1 0	166 T	29·30	265
D „	J. Kennedy, Esq.	5	4 0	52 T	30·52	198
TYRONE.						
Auchnacloy	Rev. T. G. Stokes	5	4 6	255	27·00	...
Moy (Derrygally)	W. McG. Bond, Esq....	5	6 0	60 ?	28·79	163
„ „	„ „ „ „	10	6 0	60 ?	26·57	...
D Stewartstown (The Square)	A. Johnston, Esq.	5	1 4	300 T	29·35	179
D Dungannon (Rockdale)	Col. Lowry	5	1 0	300 T	32·78	214
„ „ „ „	„ „ „ „	5	1 0	260 T	34·32	...
D Stewartstown (Ardtree Rectory)	Rev. W. E. Meade, D.D.	5	1 0	191 T	31·04	204
D Omagh (Edenfel)	Col. Buchanan	8	1 0	280 T	30·82	221
DONEGAL.						
Castlefinn (Finn Lodge)	Sir F. W. Heygate, Bt.	5	1 0	12	30·62	183
Raphoe (Convoy Ho.)	Col. Montgomery	5	1 0	110 T	42·48	250
D Ramelton (Killygarvan)	C. H. Cochrane, Esq...	5	0 10	11 L	36·32	227
D Buncrana (Rockfort)	T. Colquhoun, Esq. ...	5	1 0	40	33·18	226
D Moville	Mr. J. Lowry	8	1 6	78 L	36·16	241
D „ Rectory	Rev. S. R. Craig	5	1 0	110 B	40·33	249
Malin Head	The Meteor. Council ...	8	...	...	24·37	...

G. J. S.

RULES FOR OBSERVERS.

As it scarcely seems wise to add yearly to the weight and bulk of this volume by re-printing the rules, I think that it will be equally effectual if I state that a copy of *Arrangements for the Systematic Observation of Rainfall* will be sent gratis and post free to any address on a line being addressed to G. J. SYMONS, F.R.S., 62, Camden Square, N.W.