

*From the Author*

BRITISH RAINFALL.

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ON

THE DISTRIBUTION OF RAIN

OVER THE

BRITISH ISLES,

DURING THE YEARS

1860 AND 1861,

AS OBSERVED AT ABOUT 500 STATIONS IN GREAT BRITAIN  
AND IRELAND.

COMPILED BY

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# BRITISH RAINFALL.

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THE observations of rainfall in the British Isles not having hitherto been properly classified, the Author has undertaken their collection and arrangement, but finds the number of observations so large, and the care requisite to verify them so great, that no time can be fixed for *their* publication. As however he felt that *some* reliable information ought to be circulated as soon as possible, he prepared an abstract of the fall in 1860, and had it privately printed last year. This summary was in such request that he resolved to publish one annually in future, and for the convenience of those who could not obtain the previous table, to reprint the amounts for 1860, along with those for 1861, in this the first of the series.

Accuracy, in such a publication as the present, being of the first importance, it may be desirable to state that the rainfall has in almost every instance been forwarded in monthly, as well as annual depths, by the persons whose names are given as "Authorities;" and that where any discrepancy has been detected, it has been referred to them for explanation or correction. From these returns the tables have been compiled with such care that it is hoped they are almost, if not quite, accurate; the proofs have not only been read in the usual way, but also with the original MSS. of the observers.

Considerable hesitation has been felt respecting the classification of the Stations, mere East and West division being inadequate when the number of places is so great. The groups of Counties arranged for Registration purposes by the Registrars-General of England and Scotland, have been adopted as, on the whole, perhaps least open to objection; the stations in each county being in the order of their latitude from South to North. As there are no registration districts in Ireland, the arrangement in that country is entirely according to latitude.

The Writer has been frequently urged to give the number of rainy days, but such extraordinary differences of opinion exist as to what constitutes a rainy day, that he cannot consider it advisable until some uniformity is established.

The collection of old observations being still in progress, any information respecting rain registers, past or present, will be esteemed a favour.

A few words of a personal nature must close these remarks. It is obvious that these tables could not have been compiled without the cordial co-operation of the observers, their unceasing regularity in recording the observations, and their kindness in forwarding them to the Author. He thanks the contributors heartily for their aid, and trusts that these pages (the product of his leisure hours) will so far meet their approval that he may rely on their assistance in the future.

G. J. SYMONS.

CAMDEN ROAD VILLAS, N.W.  
February 15, 1862.



## ON THE RAINFALL OF THE YEARS 1860 AND 1861.

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In the following brief remarks, the mean of the ten years, 1850 to 1859, has been adopted as a standard of reference; the fall in those years being within about 5 per cent. of the average during the last half-century; and a large number of the existing stations being complete for that period than for any other.

The year 1860 was very wet, at the majority of stations about 25 per cent. above the mean. The excess was, however, unequally distributed, for in the North and North-West of Scotland it was scarcely 3 per cent., while on the East coast of England it was more than 40 per cent.

At Bishopwearmouth the mean is 16·91 inches; in 1852 (a very wet year) the fall was 22·39 in., and in 1860, 24·71 in.; at Patrington the corresponding values are 20·65 in., 24·43 in., and 28·58 in.; 1860 being as much above 1852, as 1852 was above the mean.

In 1861, England as a whole, was below the average, and Scotland above it. The English localities most noticeable for excess in 1860 were, to a certain extent, those most deficient in 1861, but the drought was greatest rather to the south of where the excess had been in the previous year; the maximum deficiency (34 per cent.) was at Empingham. From latitude 54° northwards, along the West Coast, the year was even wetter than 1860, being in places more than 40 per cent. above the mean. The fall at Seathwaite was greater than has been recorded since Dr. Miller started the observations sixteen years ago; the average is 126·98 in., the fall in 1861 was 182·58 in. It is worthy of note that the enormous quantity of 35·41 in. was measured in November; this being, like the annual total, hitherto unequalled. The fall in Scotland was above the average, owing to excessive autumnal rains. In that country as in the North-Western counties of England, both 1860 and 1861 have been wetter than usual.

Taking the two years together, the fall has been in Scotland about 13, in England 17, and for the Kingdom generally about 15 per cent. greater than the average of the previous ten years.



## DIVISION II.—SOUTH-EASTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Height of Rain Gauge.		Depth of Rain.	
		Above Ground.	Above Sea Level.	1860	1861
		ft. in.	feet.	inches.	inches.
SUSSEX—Aldwick, Bognor .	W. L. Woods, Esq. . . . .	0·0	..	29·40	21·20
Worthing . . . . .	Dr. Barker . . . . .	0·0	10	34·32	29·08
Thorney Island . . . . .	W. L. Woods, Esq. . . . .	0·6	..	33·14	24·12
Chichester Museum . . . . .	W. Hills, Esq. . . . .	0·6	20	37·44	25·15
Shopwyke, Chichester . . . . .	Rev. G. H. Woods . . . . .	1·3	72?	37·51	23·78
Glynde, Lewes . . . . .	C. L. Prince, Esq. . . . .	..	..	40·30	..
Hastings (Bleak House) . . . . .	J. Banks, Esq. . . . .	4·0	80	34·25	..
" (High Wickham) . . . . .	E. Field, Esq. . . . .	0·0	212	32·66	24·86
" (39 Tower) . . . . .	J. C. Savery, Esq. . . . .	0·0	0	33·45	..
St. Leonards, Marina . . . . .	"    "    "    "    "    "    "    "	0·0	10	30·77	29·29
Fairlight . . . . .	J. Rock, Jun., Esq. . . . .	0·9	498	29·54	29·15
Funtington, Chichester . . . . .	W. L. Woods, Esq. . . . .	..	..	35·50	22·28
Slindon . . . . .	Rev. M. A. Smelt . . . . .	1·0	190	44·06	28·18
Dale Park, Arundel . . . . .	W. L. Woods, Esq. . . . .	..	316	45·09	24·11
West Dean, Chichester . . . . .	H. Paxton, Esq. . . . .	0·6	250	48·94	30·79
Chilgrove, " . . . . .	W. L. Woods, Esq. . . . .	0·6	284?	43·50	28·67
Hurstpierpoint . . . . .	Rev. J. Gorham . . . . .	0·0	120	..	27·74
Uckfield . . . . .	C. L. Prince, Esq. . . . .	6·0	200	42·46	28·35
Buxted Park . . . . .	"    "    "    "    "    "    "    "	..	..	45·55	..
Maresfield (Rectory) . . . . .	"    "    "    "    "    "    "    "	1·0	250	40·70	30·25
" (Forest Lodge) . . . . .	"    "    "    "    "    "    "    "	1·0	300	39·02	27·56
Fair Oak, Rogate . . . . .	W. L. Woods, Esq. . . . .	0·6	..	44·58	28·57
Crawley . . . . .	E. S. Bigg, Esq. . . . .	5·0	300	47·63	34·25
HANTS—Ventnor (I. of Wight) . . . . .	Dr. Martin . . . . .	3·0	150	36·18	27·29
Ryde (I. of Wight) . . . . .	B. Barrow, Esq. . . . .	0·0	110	36·28	..
Osborne (I. of Wight) . . . . .	Mr. J. R. Mann . . . . .	0·10	172	37·24	25·89
Fareham . . . . .	H. Sharland, Esq. . . . .	0·0	26	42·00	30·60
" . . . . .	R. Porter, Jun., Esq. . . . .	1·0	8	..	29·16
Lyndhurst . . . . .	C. L. Prince, Esq. . . . .	..	..	32·86	..
Southampton (Ordnance Survey Office) . . . . .	Col. Sir H. James, R.E. . . . .	0·0	75	44·05	29·85
"    "    "    "    "    "    "    "	"    "    "    "    "    "    "    "	18·6	94	35·71	24·73
Southampton (Gas Works) . . . . .	Mr. J. Sharp . . . . .	10·0	20	29·56	21·49
Petersfield . . . . .	W. L. Woods, Esq. . . . .	..	..	53·07	34·42
"    "    "    "    "    "    "    "	Rev. M. A. Smelt . . . . .	0·0	200	48·64	33·71
New Alresford . . . . .	B. Fielder, Esq. . . . .	1·3	..	..	27·01
Itchen Abbas . . . . .	Rev. W. W. Spicer . . . . .	3·0	..	39·30	25·07
Selborne . . . . .	T. Bell, Esq. . . . .	4·0	400?	42·05	30·40
Abbotts-Ann, Andover . . . . .	Rev. F. H. White . . . . .	1·4	177	30·17	22·50
Aldershott . . . . .	J. Arnold, Esq. . . . .	3·0	325	33·42	22·54
BERKS—Sandhurst . . . . .	Sergeant Grose . . . . .	5·0	246	29·84	..
White Waltham, Maidenhead . . . . .	J. Silver, Esq. . . . .	1·0?	..	28·84	..
Moulsford, Wallingford . . . . .	Mr. J. B. Spearing . . . . .	7·0	200	..	20·76
Long Wittenham, Abingdon . . . . .	Rev. J. C. Clutterbuck . . . . .	1·0	170	30·69	22·37

## DIVISION III.—SOUTH MIDLAND COUNTIES.

STATIONS.	AUTHORITIES.	Height of Rain Gauge.		Depth of Rain.	
		Above Ground.	Above Sea Level.	1860	1861
HERTFORD—Watford . . . . .	R. Littleboy, Esq. . . . .	ft. in.	feet.	inches.	inches.
Fielder's-weir, Hoddesdon	N. Beardmore, Esq. . . . .	5·6	250 ?	35·00	20·19
Gorhambury . . . . .	Mr. Bogue . . . . .	2·0	82	..	21·98
Hemel-Hempstead . . . . .	J. Dickinson and Co. . . . .	2·9	..	34·08	22·13
Berkhampstead . . . . .	W. Squire, Esq. . . . .	3·0	250	34·22	21·20
Royston . . . . .	H. Wortham, Esq. . . . .	1·6	370	36·24	24·10
BUCKS—Hartwell House . . . . .	Mr. Horton . . . . .	0·7	267	29·56	19·81
Hartwell Rectory . . . . .	Rev. C. Lowndes . . . . .	1·0	250	31·45	19·43
OXON—Rose Hill, Oxford . . . . .	Rev. J. Slatter . . . . .	4·0	290	28·21	17·11
Oxford—Radcliffe Obser- vatory . . . . .	Rev. R. Main . . . . .	7·9	270	25·39	26·80
" " " " " " " "	T. "Beesley," Esq. " " "	0·0	208	31·01	23·40
Banbury . . . . .	J. Jarvis, Esq. . . . .	22·0	230	26·88	20·29
" " " " " " " "	W. Johnson, Esq. . . . .	7·4	350	31·92	22·34
" " " " " " " "		4·9	340	31·56	22·09
" " " " " " " "		4·0	..	..	21·34
NORTHAMPTON—Althorp House . . . . .	Northampton Mercury	3·0 ?	..	25·20	20·76
Wellingborough . . . . .	Mr. M. Sharman . . . . .	0·2	..	29·41	23·75
Oundle . . . . .	G. Ellick, Esq. . . . .	20·0	124	..	20·45
Marholm, Peterborough . . . . .	Rev. R. S. C. Blacker . . . . .	0·6 ?	..	33·09	25·22
BEDFORD—Aspley, Woburn . . . . .	Rev. G. W. Mahon . . . . .	0·6	460	31·23	23·29
Cardington . . . . .	Mr. J. B. McLaren . . . . .	..	..	25·08	19·02
Bedford . . . . .	Dr. Barker . . . . .	3·6	104	24·95	18·43
CAMBRIDGE—Ashdon, Linton	Rev. J. T. Walker . . . . .	..	..	29·08	18·54
Wisbeach (Observatory) . . . . .	Mr. A. Peckover . . . . .	0·6	8	..	21·26
" (North Brink) . . . . .	" " " " " " " "	0·8	11	30·86	22·19
" (Mid-level Sluice) . . . . .	" " " " " " " "	..	..	..	19·98

## DIVISION IV.—EASTERN COUNTIES.

ESSEX—Leyton . . . . .	Mr. Donald . . . . .	0·4	93	..	20·41
Epping . . . . .	H. Doubleday, Esq. . . . .	6·0	360	37·03	20·42
Dorward's Hall, Witham . . . . .	H. Dixon, Esq. . . . .	1·6	20	26·08	18·83
Frating, Colchester . . . . .	Rev. R. Duffield . . . . .	..	..	29·70	16·59
Dunmow . . . . .	H. E. Cockayne, Esq. . . . .	..	100 ?	28·93	17·17
Bocking, Braintree . . . . .	S. Tabor, Esq. . . . .	..	200 ?	31·42	19·81
SUFFOLK—Grundisburgh . . . . .	P. Harris, Esq. . . . .	4·1	..	..	17·46
Bury St. Edmund's . . . . .	E. Skepper, Esq. . . . .	2·0	..	31·62	19·50
Westley . . . . .	Mr. R. Burrell . . . . .	1·6	..	30·36	17·71
Barton . . . . .	E. Skepper, Esq. . . . .	1·0	..	..	20·70
Thwaite . . . . .	Mr. O. Whistlecraft . . . . .	3·6	150	36·60	23·62
Thurston Lodge . . . . .	Rev. W. Steggall . . . . .	2·0	..	29·43	17·46
Nether Hall, Thurston . . . . .	W. C. Bassett, Esq. . . . .	0·0	..	29·45	18·98
Culford . . . . .	Mr. P. Grieve . . . . .	1·3	..	..	19·51
NORFOLK—Diss . . . . .	Dr. Stewart . . . . .	0·6	115	..	19·75
Norwich . . . . .	W. Brooke, Esq. . . . .	0·0	30	34·47	24·80
Egmere, Fakenham . . . . .	R. Overman, Esq. . . . .	4·0	150 ?	31·38	24·82
Burnham . . . . .	H. E. Blyth, Esq. . . . .	4·6	102	34·65	24·78
Holkham . . . . .	S. Shellabear, Esq. . . . .	0·0	39	34·69	21·80
" " " " " " " "	" " " " " " " "	4·0	43	31·58	20·78

## DIVISION V.—SOUTH-WESTERN COUNTIES.

STATIONS.	AUTHORITIES.	Height of Rain Gauge.		Depth of Rain.	
		Above Ground.	Above Sea Level.	1860	1861
WILTS—Alderbury, Salisbury	W. L. Woods, Esq. . .	ft. in.	feet.	inches.	inches.
Baverstock	Archdeacon Honey . .	0·6	..	34·12	25·14
Longbridge	Deverill,	..	..	37·45	26·75
Warminster . . . .	Rev. J. Slatter . . . .	..	..	40·32	25·52
Chapmanslade	„ F. Singer, Esq. . . .	4·7	..	40·31	..
Marlborough . . . .	W. C. Merriman, Esq.	4·0	..	..	28·90
Castle House, Calne . .	Capt. M. F. Ward . .	0·11	321	..	23·81
„	„	28·0	348	..	22·26
DORSET—Portland . . .	J. T. Leather, Esq. . .	2·0	52	30·77	22·07
Encombe, Wareham . . .	O. W. Farrer, Esq. . .	1·0	150	42·65	32·49
Little Bridy . . . . .	H. S. Eaton, Esq. . . .	0·4	348	49·04	37·23
Bridport . . . . .	A. Stephens, Esq. . . .	0·11	95 ?	36·63	29·67
Netherbury . . . . .	Rev. C. B. Mount . . .	0·0	50 ?	42·37	36·04
Forde Abbey . . . . .	Capt. Miles . . . . .	0·6	..	..	32·91
DEVON—Kingsbridge . . .	Mrs. L. Harris . . . .	0·6	143	42·44	34·30
Ham, Plymouth . . . . .	Rev. C. T. C. Trelawny	3·0	94	55·58	39·23
Saltram Gardens . . . .	Mr. J. Snow . . . . .	0·3	96	57·58	41·69
Ridgeway, Plympton St.	„	„	„	„	„
Mary . . . . .	Miss B. T. Phillips . .	0·6 ?	116	62·39	42·98
Torrhill, Ivybridge . . .	J. Widdicomb, Esq. . .	0·4	260 ?	54·31	42·25
Goodamoor, Plympton St.	„	„	„	„	„
Mary . . . . .	H. H. Treby, Esq. . . .	0·2	580	72·02	53·66
Crapstone, Buckland	„	„	„	„	„
Monachorum . . . . .	E. Vivian, Esq. . . . .	..	500	65·85	..
Torquay . . . . .	Dr. Barham . . . . .	1·0	150	36·36	22·74
Highwick, Newton Bushel	„	1·6	300 ?	48·02	34·45
Dartmoor . . . . .	Dr. Roope . . . . .	40·0	1380	63·88	..
Teignmouth . . . . .	Dr. Lake . . . . .	1·1	60	..	22·20
„ (Westbrook)	Miss K. T. Clark . . . .	0·3	25	40·35	30·36
Tavistock Institution . .	W. Merrifield, Esq. . .	45·0	298	47·99	34·45
Edgecumbe, Milton Abbot	H. Clark, Esq. . . . .	0·8	..	48·72	39·49
Dawlish . . . . .	P. J. Margary, Esq. . .	0·8	62	40·88	29·97
Bovey Tracey . . . . .	J. Divett, Esq. . . . .	0·6	100	49·82	36·73
Exmouth . . . . .	E. Divett, Esq. . . . .	5·0	200 ?	38·37	28·04
Exeter (Albert Terrace) .	R. Dymond, Esq. . . .	0·0	160	..	27·96
„ „ „	W. Vicary, Esq. . . . .	0·0	140	..	28·02
„ „ „	„	20·0	160	..	23·84
„ (High Street) . . . .	W. H. Ellis, Esq. . . .	40·0	170	36·26	27·92
„ (Institution) . . . .	Mr. Parfitt . . . . .	13·7	155	36·08	25·80
„ (St. Thomas) . . . . .	W. Vicary, Esq. . . . .	3·0	50	42·17	28·33
Clyst Hydon . . . . .	Rev. J. Huyshe . . . .	0·6	200 ?	41·53	25·21
Broadhembury . . . . .	Rev. W. Heberden . . .	2·4	..	42·62	28·52
Tiverton . . . . .	W. H. Gamlen, Esq. . .	0·2	400 ?	55·41 ?	33·55
Huntsham Court . . . .	Miss A. Troyte . . . .	1·1	584	62·32	39·96
Castle Hill, South Molton	Mr. A. Saul . . . . .	3·0	160	57·46	41·19
Barnstaple . . . . .	T. Mackrell, Esq. . . .	0·6	31	50·14	37·15
CORNWALL—Helstone . . .	M. P. Moyle, Esq. . . .	5·0	110	42·96	37·62
Penzance . . . . .	W. H. Richards, Esq.	3·0	94	49·25	40·98
Tehidy Park, Redruth . .	Mr. H. Beddard . . . .	0·0	100	48·63	40·56

## DIVISION V.—SOUTH-WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Height of Rain Gauge.		Depth of Rain.	
		Above Ground.	Above Sea Level.	1860	1861
		ft. in.	feet.	inches.	inches.
CORNWALL—(continued).					
Truro . . . . .	Dr. Barham . . . . .	40·0	56	50·06	39·98
Bodmin . . . . .	Lieut. Liddell, R.N. . . . .	3·0	300	56·33	44·56
„ (Warleggan) . . . . .	Rev. D. Clements . . . . .	3·0	800	67·05	48·96
„ (Pencarrow) . . . . .	Mr. H. Jones . . . . .	4·0	230	51·61	45·32
Treharrock House, Wade-bridge . . . . .	F. B. Hambly, Esq. . . . .	3·0	200 ?	46·14	36·65
St. Petroc Minor, Padstow . . . . .	H. H. Treby, Esq. . . . .	0·2	96	47·40	44·69
Rosecarrock, Port Isaac . . . . .	Mark Guy, Esq. . . . .	3·0	180	44·33	38·63
Camelford . . . . .	Lieut. Liddell, R.N. . . . .	..	..	68·04	..
SOMERSET—Taunton . . . . .	Dr. Gillett . . . . .	1·3	50 ?	32·62	26·77
Long Sutton . . . . .	R. Palmer, Esq. . . . .	0·0	170 ?	31·92	25·81
Bridgewater . . . . .	Alfred Haviland, Esq. . . . .	6·6	45	29·53	..
Street . . . . .	J. Clark, Jun., Esq. . . . .	1·6	100	..	25·96
„	W. S. Clark, Esq. . . . .	5·0	100 ?	36·15	23·66
Frome (North Hill) . . . . .	Mr. J. Boycott . . . . .	0·3	..	38·90	27·17
„ (Mells) . . . . .	Mr. M. Raynes . . . . .	8·0	300	46·57	31·98
Sidcot, Axbridge . . . . .	H. Dymond, Esq. . . . .	4·7	250 ?	43·17	31·13
Bath . . . . .	C. S. Barter, Esq. . . . .	50·0	150	44·67	34·02

## DIVISION VI.—WEST MIDLAND COUNTIES.

GLOUCESTER—Bristol Institution . . . . .					
Clifton . . . . .	The Secretary . . . . .	56·0	98	42·96	29·59
„ . . . . .	W. C. Burder, Esq. . . . .	0·6	192	40·80	31·31
„ . . . . .	„ . . . . .	50·0	242	35·52	27·39
Cirencester . . . . .	T. C. Brown, Esq. . . . .	1·0	446	36·94	27·39
Gloucester (The Spa) . . . . .	A. Price, Esq. . . . .	3·6	50 ?	27·99	21·30
„ (Asylum) . . . . .	Dr. Williams . . . . .	1·0	100	28·01	21·83
„ (Twigworth) . . . . .	W. B. Clegram, Esq. . . . .	3·6 ?	50 ?	28·48	20·16
HEREFORD—Rocklands . . . . .	Hereford Times . . . . .	..	..	40·77	..
Leysters, Leominster . . . . .	W. L. Woods, Esq. . . . .	0·6	..	..	26·53
SHROPSHIRE—Cleobury Mortimer . . . . .					
Knowbury, Ludlow . . . . .	Mr. W. Hunter . . . . .	1·0	700	..	26·28
Haughton Hall, Shiffnal . . . . .	Rev. J. B. James . . . . .	0·6	1000 ?	37·87	27·92
Shrewsbury . . . . .	Rev. J. Brooke . . . . .	4·6	450	31·23	23·80
Whittington, Oswestry . . . . .	Marshall & Co. . . . .	4·4	192	20·80	16·60
Hengoed, „ . . . . .	Mrs. Lloyd . . . . .	5·0	..	37·90	27·25
„ . . . . .	Rev. A. R. Lloyd . . . . .	4·8	..	45·51	30·90
STAFFORD—Wrottesley, Wolverhampton . . . . .					
Wrottesley . . . . .	Mr. J. Hough . . . . .	0·5	532	31·37	24·79
„ . . . . .	„ . . . . .	0·9	532	30·49	24·70
„ . . . . .	„ . . . . .	21·6	553	25·68	21·29
Leek . . . . .	R. Farrow, Esq. . . . .	25·0	..	46·60	36·40
WORCESTER—Worcester . . . . .					
Orleton, Tenbury . . . . .	S. Marshall, Esq. . . . .	..	..	39·07	23·42
„ . . . . .	T. H. Davis, Esq. . . . .	0·9	200	36·89	29·81
WARWICK—Stoneleigh Abbey . . . . .					
Rugby . . . . .	Mr. T. Bowick . . . . .	0·8	..	31·24	22·64
„ . . . . .	F. Fuller, Esq. . . . .	..	..	27·54	20·82
Birmingham (Bloomsbury) . . . . .	D. Smith, Esq. . . . .	4·6	340	35·16	29·81
„ (Camp Hill) . . . . .	T. L. Plant, Esq. . . . .	9·0	416	35·66	29·31

## DIVISION VII.—NORTH MIDLAND COUNTIES.

STATIONS.	AUTHORITIES.	Height of Rain Gauge.		Depth of Rain.	
		Above Ground.	Above Sea Level.	1860	1861
		ft. in.	feet.	inches.	inches.
LEICESTER—Wigston . . . . .	T. Burgess, Esq. . . . .	0·0	..	31·47	23·20
Leicester . . . . .	Mr. J. Payne . . . . .	..	..	24·99	..
”	Mr. H. Billson . . . . .	1·3	..	..	17·62
Thornton Reservoir . . . . .	J. Bevins, Esq. . . . .	2·8	..	29·66	25·53
Rothley, Loughborough . . . . .	Rev. R. Burton . . . . .	0·4	210 ?	..	22·46
Belvoir Castle . . . . .	W. Ingram, Esq. . . . .	0·8	237	29·23	22·12
RUTLAND—Empingham . . . . .	Mr. W. Fancourt . . . . .	4·0	..	23·52	15·42
LINCOLN—Wytham - on - the- Hill . . . . .	General Johnson . . . . .	4·3	..	26·33	19·81
Grantham . . . . .	J. W. Jeans, Esq. . . . .	0·0	179	29·67	20·51
Boston . . . . .	W. Veall, Esq. . . . .	..	..	30·69	20·38
South Kyme, Sleaford . . . . .	Rev. H. S. Neucatre . . . . .	0·0	9	31·73	21·65
Coleby, Lincoln . . . . .	Rev. T. T. Penrose . . . . .	..	..	26·38	17·33
Lincoln . . . . .	M. S. & L. R. Co.* . . . . .	3·6	26	27·15	16·97
Gate Burton . . . . .	” ” ” . . . . .	3·6	96	..	21·24
Market Rasen . . . . .	” ” ” . . . . .	3·6	100	28·79	24·04
Gainsborough . . . . .	” ” ” . . . . .	3·6	76	29·31	19·55
” (Spring Gardens)	T. Dyson, Esq. . . . .	8·0	38	29·75	19·81
Stockwith . . . . .	M. S. & L. R. Co. : . . . . .	3·6	21	26·46	18·25
Brigg . . . . .	” ” ” . . . . .	3 6	16	29·27	22·48
Grimsby . . . . .	” ” ” . . . . .	15·0	42	22·29	18·26
Barnetby . . . . .	” ” ” . . . . .	3·6	51	27·04	21·15
New Holland . . . . .	” ” ” . . . . .	3·6	18	28·48	20·73
Notts—Highfield House . . . . .	E. J. Lowe, Esq. . . . .	0·0	162	35·88	22·33
Highfield House . . . . .	” ” ” . . . . .	25·0	187	28·71	20·01
Welbeck . . . . .	Mr. Tillery . . . . .	4·0	..	30·54	24·16
Worksop . . . . .	M. S. & L. R. Co. . . . .	3·6	127	30·61	20·41
Retford . . . . .	” ” ” . . . . .	3·6	52	28·13	19·73
” (East)	Doncaster Chronicle . . . . .	..	..	28·13	19·56
” (West)	Rev. C. D. Butterfield . . . . .	0·6	50	28·20	19·31
DERBY—Derby . . . . .	J. Davis, Esq. . . . .	5·0	179	32·77	22·01
Chatsworth . . . . .	Mr. A. Stewart . . . . .	6·0	404	..	31·32
Chesterfield . . . . .	M. S. & L. R. Co. . . . .	3·6	248	29·54	25·48
Norwood . . . . .	” ” ” . . . . .	3·6	238	27·66	24·15
Combs Moss . . . . .	” ” ” . . . . .	3·6	1669	53·00	38·33
” Reservoir . . . . .	” ” ” . . . . .	3·6	710	54·17	45·64
Chapel-en-le-Frith . . . . .	” ” ” . . . . .	3·6	965	44·99	37·19
Woodhead . . . . .	” ” ” . . . . .	3·6	939	66·35	49·64

## DIVISION VIII.—NORTH-WESTERN COUNTIES.

CHESHIRE—Bosley Minns . . . . .	M. S. & L. R. Co. . . . .	3·6	1210	36·21	28·65
Bosley Reservoir . . . . .	” ” ” . . . . .	3·6	590	34·03	27·76
Macclesfield . . . . .	W. Jeffery, Esq. . . . .	2·9	500	39·88	32·03
” . . . . .	M. S. & L. R. Co. . . . .	3·6	539	38·64	30·69
Kingsley, Frodsham . . . . .	Rev. R. Tyas . . . . .	0·0	208 ?	..	29·11
Spond's Hill, Bollington . . . . .	M. S. & L. R. Co. . . . .	3·6	1279	48·61	37·99

\* Gauges kept for the Canals Department of the Manchester, Sheffield, and Lincolnshire Railway Company.

## DIVISION VIII.—NORTH-WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Height of Rain Gauge.		Depth of Rain.	
		Above Ground.	Above Sea Level.	1860	1861
		ft. in.	feet.	inches.	inches.
<b>CHESHIRE—(continued).</b>					
Whaley . . . . .	M. S. & L. R. Co. . . . .	3·6	602	46·84	37·00
Thelwall, Northwich . . . .	J. Atkinson, Esq. . . . .	1·6	96	..	28·93
Marple (Aqueduct) . . . . .	M. S. & L. R. Co. . . . .	3·6	321	39·87	33·55
„ (Top Lock) . . . . .	„ „ „ . . . . .	3·6	543	29·28	31·40
Mottram (Hill End) . . . . .	„ „ „ . . . . .	3·6	680	..	34·40
„ (Matley's Field) . . . . .	„ „ „ . . . . .	3·6	399	38·93	33·16
Newton . . . . .	„ „ „ . . . . .	3·6	396	33·94	31·80
<b>LANCASHIRE—Liverpool Ob-</b>					
<b>servatory . . . . .</b>	<b>J. Hartnup, Esq. . . . .</b>	<b>30·0</b>	<b>52</b>	<b>24·53</b>	<b>23·15</b>
Liverpool (The Brook) . . . .	W. Lassell, Jun., Esq. . . . .	2·0	..	..	31·28
„ (Sandfield Park) . . . . .	W. Lassell, Esq. . . . .	3·0	..	35·40	..
Manchester (Old Trafford) . . .	G. V. Vernon, Esq. . . . .	3·0	106	36·14	29·74
„ (Sale) . . . . .	J. Curtis, Esq. . . . .	2·3	134	36·24	28·58
„ (Market St.) . . . . .	Mr. Casartelli . . . . .	3·0	..	35·95	29·33
„ (Piccadilly) . . . . .	M. S. & L. R. Co. . . . .	46·0	194	41·40	34·43
Fairfield . . . . .	„ „ „ . . . . .	6·0	312	42·10	35·76
Waterhouses, Oldham . . . . .	„ „ „ . . . . .	3·6	345	42·43	32·79
Bolton-le-Moors (The Folds)	H. H. Watson, Esq. . . . .	2·0	290	57·66	44·91
Bolton-le-Moors (Belmont)	H. Baylis, Esq. . . . .	0·0	800	59·80	55·70
„ „ (Heaton)	„ „ „ . . . . .	0·0	500	44·90	39·90
Standish, Wigan . . . . .	J. L. Hunter, Esq. . . . .	0·0	285	46·04	47·63
Bury . . . . .	W. Wanklyn, Esq. . . . .	7·0	400?	..	29·67
Preston (Howick) . . . . .	T. Norris, Esq. . . . .	0·6	72	39·76	36·59
„ (Fishwick) . . . . .	T. Oddie, Esq. . . . .	24·0	154	36·04	33·32
„ (House of Correction)	Mr. J. Hesketh . . . . .	1·1	140	37·86	35·90
„ („ „ „ „)	„ „ „ . . . . .	53·6	187	33·28	30·75
„ (Holme Slack) . . . . .	J. Newton, Esq. . . . .	1·6	143	..	38·48
South Shore, Blackpool . . . .	G. Sharples, Esq. . . . .	1·8	9	31·70	33·70
Stonyhurst Observatory . . . .	Rev. S. Perry . . . . .	0·0	381	50·60	49·00
Bleasdale, Garstang . . . . .	Mr. J. Hill . . . . .	4·6	600	..	55·05
Caton, Lancashire . . . . .	Rev. A. Christopherson . . . .	2·4	120	46·82	44·54
Hest Bank „ . . . . .	R. B. Peacock, Esq. . . . .	2·2	82	..	41·31
Holker, Cartmel . . . . .	S. Marshall, Esq. . . . .	4·0?	..	47·07	50·11
Cartmel . . . . .	„ „ „ . . . . .	..	..	..	47·23
Broughton . . . . .	British Met. Soc. Reports . . . .	..	..	49·70	..
Coniston . . . . .	J. G. Marshall, Esq. . . . .	4·0	150	89·50	102·20
Wray Castle, Windermere . . . .	Dr. Dawson . . . . .	4·6	220	69·45	80·91

## DIVISION IX.—YORKSHIRE.

W. RIDING—Sheffield Station	M. S. & L. R. Co. . . . .	3·6	188	27·58	25·55
Sheffield (The Edge) . . . . .	„ „ „ . . . . .	3·6	336	..	32·16
„ (Broomhall Park)	D. Doncaster, Jun., Esq. . . . .	0·4	337	37·19	29·68
Redmires . . . . .	„ „ „ . . . . .	3·0	1200?	44·28	37·94
Tickhill . . . . .	Dr. Dixon . . . . .	0·1	61	31·33	23·14
Dunford Bridge . . . . .	M. S. & L. R. Co. . . . .	3·6	954	62·79	47·88

## DIVISION IX.—YORKSHIRE—(continued).

STATIONS.	AUTHORITIES.	Height of Rain Gauge.		Depth of Rain.	
		Above Ground.	Above Sea Level.	1860	1861
		ft. in.	feet.	inches.	inches.
W. RIDING—(continued).					
Penistone . . . . .	M. S. & L. R. Co. . . . .	3·6	717	30·11	27·02
Carlcoates . . . . .	"    "    "    "    "    "	3·6	1075	..	43·62
Standedge . . . . .	Mr. Greenwood . . . . .	2·0	1150	56·75	49·75
Saddleworth . . . . .	"    "    "    "    "    "	5·0	640	46·99	32·38
Ackworth Villa . . . . .	W. D. Howard, Esq. . . . .	0·1	135	33·06	20·89
"    "    "    "    "    "	J. Ford, Esq. . . . .	..	..	..	18·26
Longwood, Huddersfield . . . . .	Mr. C. Hare . . . . .	24·0	..	34·74	30·42
Wakefield . . . . .	W. R. Milner, Esq. . . . .	4·0	115	33·48	22·30
Rastrick, Huddersfield . . . . .	S. Marshall, Esq. . . . .	..	..	33·37	..
Halifax (Well Head) . . . . .	J. Waterhouse, Esq. . . . .	1·0	540	34·33	30·79
"    (Hunter's Hill) . . . . .	G. W. Stevenson, Esq. . . . .	1·0	1250	42·30	32·70
"    (Warley Moor) . . . . .	"    "    "    "    "    "	1·0	1425	51·20	44·00
"    (Midgeley ,, ) . . . . .	"    "    "    "    "    "	1·0	1350	53·10	48·70
"    (Ovenden ,, ) . . . . .	"    "    "    "    "    "	1·0	1375	51·90	43·70
Horton Hall, Bradford . . . . .	Mr. G. Abbey . . . . .	0·8	496	38·47	34·05
Leeds (Holbeck) . . . . .	Marshall & Co. . . . .	40·0	135	28·60	23·30
"    (Philosophical Hall) . . . . .	H. Denny, Esq. . . . .	40·0	137	28·32	..
Red Hall, Whin Moor . . . . .	F. Stow, Esq. . . . .	5·0	455	35·85	24·45
Otley (Top of Chevin) . . . . .	Mr. Lawson, Jun. . . . .	4·7	764	..	26·01
"    (The Valley) . . . . .	A. H. Thorns, Esq. . . . .	0·7	206	..	27·29
Ben Rhydding . . . . .	J. Roberts, Esq. . . . .	2·6	500	34·30	22·45
High Harrogate . . . . .	J. Coupland, Esq. . . . .	0·6	420	..	28·51
Settle . . . . .	J. Tatham, Esq. . . . .	40·0	498	41·78	41·79
Clapham . . . . .	Mr. D. Elder . . . . .	5·0	550	41·64	42·03
Arncliffe . . . . .	Rev. W. Boyd . . . . .	2·6	750	54·93	59·94
E. RIDING—Patrington . . . . .	W. B. Pugh, Esq. . . . .	4·8	32?	28·58	18·62
Holme-on-Spalding Moor . . . . .	G. Dunn, Esq. . . . .	7·6	32	31·70	22·01
Wheldrake . . . . .	Rev. R. B. Cooke . . . . .	1·4	40?	30·30	20·54
Middleton, Beverley . . . . .	Mr. J. B. Lotherington . . . . .	1·6	..	36·78	26·42
York . . . . .	J. Ford, Esq. . . . .	0·5	50	30·37	20·27
Huggate, Pocklington . . . . .	Rev. T. Rankin . . . . .	0·6	650	32·13	32·19
N. RIDING—Malton . . . . .	H. Hurtle, Esq. . . . .	0·0	75?	34·46	24·47
Scarborough . . . . .	R. Champey, Esq. . . . .	9·0	91	24·00	17·97

## DIVISION X.—NORTHERN COUNTIES.

DURHAM—Darlington . . . . .	Mr. J. Richardson . . . . .	4·0	140	31·91	32·83
Stubb House, Winston. . . . .	T. Dodgson, Esq. . . . .	0·9	460	30·28	24·54
Washington . . . . .	J. Watson, Esq. . . . .	20·0	120	27·61	..
Durham . . . . .	A. Marth, Esq. . . . .	1·0	338	30·33	24·28
Bishopwearmouth . . . . .	Dr. Ogden . . . . .	30·0?	140	24·71	19·30
Sunderland . . . . .	Rev. G. Iliff . . . . .	1·6	130	29·39	..
Shotley Hall . . . . .	Mr. G. Routledge . . . . .	0·8	309	35·35	28·80
NORTHUMBERLAND — Allenheads . . . . .	T. J. Bewick, Esq. . . . .	0·5	1360	59·15	49·35
Allenheads . . . . .	"    "    "    "    "    "	6·9	1367	59·91	52·89

## DIVISION X.—NORTHERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Height of Rain Gauge.		Depth of Rain.	
		Above Ground.	Above Sea Level.	1860	1861
		ft. in.	feet.	inches.	inches.
<b>NORTHUMBERLAND (continued)</b>					
Newcastle-on-Tyne . . . . .	Lieutenant Sitwell, R.E.	42·0	187	27·28	18·78
"    (Park End) . . . . .	G. C. Atkinson, Esq. . .	0·3	300 ?	..	31·07
Bywell . . . . .	Mr. J. Dawson . . . . .	0·6	87	38·13	28·44
Wylam . . . . .	G. C. Atkinson, Esq. . .	0·4	96	31·38	23·54
N. Shields . . . . .	R. Spence, Esq. . . . .	1·0	124	32·19	24·74
Stamfordham . . . . .	Rev. J. F. Bigge . . . . .	1·1	380	35·26	26·22
Alnwick . . . . .	Mr. J. Scott . . . . .	0·6	400	36·60	29·97
Roddam . . . . .	W. Roddam, Esq. . . . .	0·6	..	..	26·27
Lilburn Tower . . . . .	E. J. Collingwood, Esq.	6·0	..	34·21	26·02
<b>CUMBERLAND — The Flosh,</b>					
Cleator . . . . .	T. Ainsworth, Esq. . . .	1·6	240	55·89	54·38
Seathwaite, Borrowdale .	H. C. Marshall, Esq. . . .	0·6	380 ?	142·20	182·58
Keswick . . . . .	Mr. Crosthwaite . . . . .	6·0	245	54·17	74·42
Whinfell Hall, Vale of Lorton . . . . .	S. Marshall, Esq. . . . .	..	..	..	68·94
Mirehouse, Bassenthwaite	F. S. Spedding, Esq. . . .	0·5	300	49·79	60·35
Silloth . . . . .	Rev. F. Redford . . . . .	6·0	16	37·81	42·47
Carlisle (Ordnance Survey Office) . . . . .	Capt. E. James, R.E. . . .	47·0	105	31·62	34·46
<b>WESTMORELAND — Kirkby-</b>					
Lonsdale . . . . .	S. Marshall, Esq. . . . .	..	..	41·60	..
Kendal . . . . .	..	4·6	149	57·00	60·70
Lesketh How, Ambleside	Dr. J. Davy . . . . .	3·0	110	79·97	98·03
The How, Troutbeck . . .	Admiral Wilson . . . . .	1·8	403	102·58	116·26
Lancregg, Grasmere . . . .	Sir J. Richardson . . . . .	4·6	..	104·87	123·22
Lowther Castle . . . . .	S. Marshall, Esq. . . . .	4·0 ?	..	45·33	..
Brougham Hall . . . . .	..	4·0 ?	..	36·68	..

## DIVISION XI.—MONMOUTHSHIRE, WALES, AND THE ISLES.

MONMOUTH—Chepstow . . . . .	J. G. Wood, Esq. . . . .	..	..	..	37·51
<b>GLAMORGAN—Ystalyfera,</b>					
Swansea . . . . .	J. P. Budd, Esq. . . . .	..	300	73·21	66·78
<b>PEMBROKE—Pembroke Dock</b>					
Haverfordwest . . . . .	E. Chevallier, Esq. . . . .	0·0	30	..	44·77
Haverfordwest . . . . .	E. P. Phillips, Esq. . . . .	2·0	60	56·99	51·80
<b>CARDIGAN—Lampeter</b>					
Lampeter . . . . .	Rev. J. Matthews . . . . .	5·0	425	55·30	43·98
<b>ANGLESEY—Llandyfrydog</b>					
Llandyfrydog . . . . .	H. Webster, Esq. . . . .	2·0	92	..	44·45
<b>CARNARVON—Llandudno</b>					
Llandudno . . . . .	Dr. Nicol . . . . .	0·4	20 ?	30·00	31·00
<b>FLINT—Hawarden</b>					
Hawarden . . . . .	Dr. Moffat . . . . .	0·0	260	27·80	21·82
<b>GUERNSEY</b>					
Guernsey . . . . .	Dr. Hoskins . . . . .	12·0	200	48·00	31·22
<b>SCILLY, St. Mary's</b>					
St. Mary's . . . . .	J. G. Moyle, Esq. . . . .	1·0	30	33·20	..
<b>ISLE OF MAN, Ballasalla</b>					
Ballasalla . . . . .	J. Burman, Esq. . . . .	0·2	100	37·17	..

## SCOTLAND.

## DIVISION XII.—SOUTHERN COUNTIES.

STATIONS.	AUTHORITIES.	Height of Rain Gauge.		Depth of Rain.		
		Above Ground.	Above Sea Level.	1860	1861	
		ft.	in.	feet.	inches.	inches.
WIGTOWN—South Cairn, Stranraer . . . . .	Mr. J. Kennedy . . . . .	0·4		210	42·30	48·03
KIRKCUDBRIGHT—Cargen . . . . .	P. Dudgeon, Esq. . . . .	0·3		80	44·27	44·25
DUMFRIES—Dumfries . . . . .	T. Hogg, Esq. . . . .	0·5		63	41·75	46·88
Drumlanrig . . . . .	Scottish Met. Soc. Re- ports . . . . .	..		186 ?	..	59·40
Wanlockhead . . . . .	Mr. J. Reid . . . . .	0·6		1400 ?	72·70	..
„ . . . . .	Mr. G. Dawson . . . . .	0·4		1330	65·31	81·19

## DIVISION XIII.—SOUTH-EASTERN COUNTIES.

SELKIRK—Bowhill . . . . .	Mr. J. Mathieson . . . . .	11·0		537	32·54	36·21
PEEBLES—Stobo Castle . . . . .	Mr. J. Anderson . . . . .	0·2		600	..	27·90
BERWICK—Milne Graden . . . . .	Scottish Met. Soc. Re- ports . . . . .	..		100 ?	31·80	29·40
Thirlestane . . . . .	„ „ „ „	..		558 ?	..	31·35
Mungo's Walls, Dunse . . . . .	Mr. J. Thomson . . . . .	0·4		267	29·87	28·37
HADDINGTON—Yester . . . . .	Scottish Met. Soc. Re- ports . . . . .	..		420 ?	34·40	33·40
Smeaton . . . . .	Mr. J. Black . . . . .	13·6		100	21·45	23·97
East Linton . . . . .	Mr. J. Storie . . . . .	0·3		90	26·61	27·19
Thurston, Dunbar . . . . .	Mr. R. Mossman . . . . .	3·0		320	34·10	25·80
EDINBURGH—Harlaw . . . . .	A. Ramsay, Esq. . . . .	0·6		770	38·10	40·30
North Esk Reservoir . . . . .	Mr. J. Garnock . . . . .	0·6		1150	39·06	40·27
Glencorse . . . . .	A. Ramsay, Esq. . . . .	0·6		680	29·70	38·10
Fernielaw . . . . .	J. Leslie, Esq. . . . .	..		..	32·75	..
Inveresk, Musselburgh . . . . .	Mr. McAuslane . . . . .	3·0		60	31·97	28·51
Edinburgh . . . . .	Adie and Sons . . . . .	7·0		200	..	24·88
„ (Ordnance Sur- vey Office) . . . . .	Mr. J. Horsburgh . . . . .	78·0		363	14·39	18·82

## DIVISION XIV.—SOUTH-WESTERN COUNTIES.

LANARK—Douglas Castle . . . . .	J. Johnstone, Esq. . . . .	0·0		780	..	61·09
Auchinraith . . . . .	R. Ker, Esq. . . . .	4·9		150	30·58 ?	34·94
Bothwell Castle . . . . .	Mr. A. Turnbull . . . . .	18·0		250	26·02	25·44
Baillieston . . . . .	Mr. P. Jarvie . . . . .	0·3		230	33·00	50·04
Hill-end House, Shotts . . . . .	Mr. D. Thomson . . . . .	7·0		620	30·49	39·95
Glasgow (Observatory) . . . . .	J. Wood, Esq. . . . .	0·0		200	35·76	51·11
„ (Ordnance Sur- vey Office) . . . . .	Major Bayly, R.E. . . . .	56·0		160	28·87	33·20

## DIVISION XIV.—SOUTH-WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Height of Rain Gauge.		Depth of Rain.		
		Above Ground.	Above Sea Level.	1860	1861	
		ft.	in.	feet.	inches.	inches.
<b>LANARK (continued).</b>						
Ryat Linn*	J. Burnet, Esq.	..		310	41·50	58·70
Waulk Glen*	" " "	..		280	39·45	55·30
Middleton*	" " "	..		550	44·72	66·08
Black Loch*	" " "	..		700	..	69·25
<b>AYR—Auchendrane House,</b>						
Ayr	E. Cathcart, Esq.	2·3		94	41·93	49·21
Largs	Dr. Campbell	0·6		30?	44·60	55·80
Brisbane Glen	J. Miller, Esq.	..		..	48·45	62·00
<b>RENFREW—Mearns</b>						
Kilbarchan	A. Mather, Esq.	1·2		350	43·40	46·70
Locherfield, Paisley	D. Rubie, Esq.	1·0		350	58·57	78·82
Ferguslie House, Paisley	Mr. A. Hardie	3·6		..	..	55·90
Greenock	Mr. T. Stewart	0·3		85	42·58	66·79
	J. Gardner, Esq.	0·6		64	59·25	69·14

## DIVISION XV.—WEST MIDLAND COUNTIES.

<b>STIRLING—Stirling</b>						
	Scottish Met. Soc. Reports	..		233?	34·57	..
Polmaise Gardens	— Murray, Esq.	0·2		8	42·60	46·60
<b>BUTE—Isle of Cumbrae</b>						
	J. Miller, Esq.	4·6		50	40·70	47·20
Rothesay	Sharp, Thompson, & Co.	10·0		40	48·20	56·40
<b>ARGYLL—Castle Toward</b>						
	Mr. D. Bell	4·0		80?	47·18	65·34
Hafton, Dunoon	Major Bayly, R.E.	4·0		40	61·83	82·14
Otter House	Dr. Rankin	0·6		130	47·76	63·84
Kilmory, Lochgilphead	Sir J. P. Orde, Bart.	4·6		100?	53·72	59·29
Callton Môr	Mr. J. Russell	4·6		65	45·85	55·83
Kilmartin	" " "	4·4		64	..	63·50
Inveraray Castle	Mr. J. Caie	0·0		30	66·40	78·60
Isle of Easdale	Mr. J. Whyte	0·6		25	47·90	55·50
Oban	Captain Bedford, R.N.	0·0		10	54·60	71·98
Torosay, Isle of Mull	J. Pettigrew, Esq.	1·0		18	70·60	101·80

## DIVISION XVI.—EAST MIDLAND COUNTIES.

<b>KINROSS—Loch Leven</b>						
	Mr. P. Farnie	..		..	36·10	37·30
<b>FIFE—Balfour</b>						
	Mr. J. Dewar	0·4		127	24·36	26·76
Nookton, Leven	W. Mc G. Miller, Esq.	0·6		80	30·65	30·42
Pittenweem	Mr. D. Tennant	3·0		75	27·36	28·45
<b>PERTH—Aberfoyle</b>						
	J. Burnet, Esq.	..		60	40·40	71·60
Ledard	" " "	..		1500	73·50	103·10
Kippenross, Dunblane	J. Stirling, Esq.	0·4		100	34·10	41·80
Deanston	J. Finlay, Esq.	0·0		120?	37·30	45·05
Loch Dhu	J. Burnet, Esq.	..		325	..	93·20
Benlomond	" " "	..		1800	83·50	99·90
Loch Drunkie	" " "	..		420	..	71·70
" Vennachar	" " "	..		275	..	72·70

\* The exact position of these gauges, which are kept in connection with the Glasgow Water Works (Gorbals District) not known at the time of going to press.

## DIVISION XVI.—EAST MIDLAND COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Height of Rain Gauge.		Depth of Rain.	
		Above Ground.	Above Sea Level.	1860	1861
		ft. in.	feet.	inches.	inches.
<b>PERTH—(continued).</b>					
Bridge of Turk . . . . .	J. Burnet, Esq. . . . .	..	270	59·80	74·40
Lanrick Castle . . . . .	A. Glover, Esq. . . . .	0·0	150?	45·10	53·30
Loch Katrine, Tunnel Hill Top . . . . .	J. Burnet, Esq. . . . .	..	830	..	89·20
Leny, Callander . . . . .	J. B. Hamilton, Esq. . . . .	0·4	335	..	72·40
Between Glen Finlas & Ben Ledi . . . . .	J. Burnet, Esq. . . . .	..	1800	53·80	70·40
Glen Gyle . . . . .	"Mr. R. Wylie" . . . . .	..	380	94·20	112·50
Auchterarder House . . . . .	Mr. R. Wylie . . . . .	0·0	150	28·70	32·98
Stronvar, Loch Earn Head . . . . .	D. Carnegie, Esq. . . . .	0·3	460	75·64	88·65
Colquhalzie House . . . . .	J. S. Hepburn, Esq. . . . .	0·5	60?	37·85	44·34
Trinity Gask . . . . .	Mr. R. Wylie . . . . .	0·1	135	33·55	38·20
Early Bank, Perth . . . . .	General Lindsay . . . . .	0·3	66	37·88	36·08
Scone Palace . . . . .	A. Buchan, Esq. . . . .	..	..	28·75	31·13
Tyndrum Mines . . . . .	Mr. D. McLaren . . . . .	0·3	792	72·70	133·20
Stanley . . . . .	Rev. W. Mather . . . . .	1·0	200	31·11	34·58
Belmont, Meigle . . . . .	W. Stewart, Esq. . . . .	0·6	300	32·50	32·10
Taymouth . . . . .	Scottish Met. Soc. Re- ports . . . . .	..	372?	..	40·70
<b>FORFAR—Dundee . . . . .</b>					
Barry . . . . .	Mr. Adamson . . . . .	0·0	60	34·71	28·71
Craigton . . . . .	Mr. J. Proctor . . . . .	0·3	35	28·85	27·87
Kettins . . . . .	Mr. Adamson . . . . .	0·0	440	37·57	34·93
Hill Head . . . . .	Mr. J. Gibb . . . . .	1·0	218	36·39	32·29
Seichen . . . . .	Mr. Adamson . . . . .	0·0	500	37·43	35·55
Arbroath . . . . .	" " . . . . .	0·0	550	38·80	36·88
Montrose . . . . .	A. Brown, Esq. . . . .	2·0	65	30·48	29·66
" (Museum) . . . . .	Mr. W. Leighton . . . . .	2·6	21	..	25·83
	Mr. J. Campbell . . . . .	0·3	8	26·32	24·03

## DIVISION XVII.—NORTH-EASTERN COUNTIES.

<b>KINCARDINE—The Burn . . . . .</b>					
Balnakettle, Fettercairn . . . . .	Col. McInroy . . . . .	0·6	210	41·50?	40·80
Bogmuir, " . . . . .	D. Scott, Esq. . . . .	0·3	450	42·81	44·58
Strachan by Banchory . . . . .	R. Vallentine, Esq. . . . .	0·3	200	37·40	35·60
Banchory by Aberdeen . . . . .	Mr. A. McConnachie . . . . .	1·6	200	38·16	31·43
<b>ABERDEEN—Braemar . . . . .</b>					
Aberdeen . . . . .	A. Thomson, Esq. . . . .	0·4	95	33·90	29·80
Castle Newe . . . . .	Dr. Cameron . . . . .	4·0	1110	33·36	34·80
	A. Cruickshank, Esq. . . . .	0·4	100	34·70	30·97
	Mr. A. Walker . . . . .	1·0	915	40·49	39·06
<b>ELGIN—Elgin . . . . .</b>					
	Scottish Met. Soc. Re- ports . . . . .	..	..	25·71	..

## DIVISION XVIII.—NORTH-WESTERN COUNTIES.

<b>Ross—Stornoway, Isle of Lewis . . . . .</b>					
Bernera, Isle of Lewis . . . . .	Sir J. Matheson, Bart. . . . .	0·3	70	42·80	58·07
<b>INVERNESS—Beaufort Castle . . . . .</b>					
Culloden House . . . . .	Mr. " J. Moir " " . . . . .	0·6	15	32·37	60·91
	Mr. J. Moir . . . . .	4·6	40	27·44	34·91
	A. Forbes, Esq. . . . .	3·0	104	21·51	31·41

## DIVISION XVIII.—NORTH-WESTERN COUNTIES—(continued).

STATIONS.	AUTHORITIES.	Height of Rain Gauge.		Depth of Rain.	
		Above Ground.	Above Sea Level.	1860	1861
		ft. in.	feet.	inches.	inches.
INVERNESS (continued).					
Portree, Isle of Skye . . .	J. Grant, Esq. . . .	0·1	60	87·99	139·04
Raasay House „ . . . .	Mr. T. Bunning . . .	4·0	80	57·60	86·40
Loch Maddy, North Uist.	Sir J. P. Orde, Bart. .	3·0	20?	42·65	60·40

## DIVISION XIX.—NORTHERN COUNTIES.

SUTHERLAND—Dunrobin					
Castle . . . . .	Mr. J. Mitchell . . .	0·4	6	29·40	27·45
Scourie . . . . .	J. Simpson, Esq. . .	0·2	20	38·30	50·85
Tongue House . . . . .	J. Crawford, Esq. . .	0·2	30?	42·10	..
ORKNEY—Balfour, Kirkwall	D. Balfour, Esq. . .	0·6	50	28·18	33·10
Sandwick . . . . .	Rev. C. Clouston . . .	2·0	78	37·96	41·18
SHETLAND—Bressay . . . .	Rev. Z. M. Hamilton .	0·9	20	36·80	41·15

## IRELAND.

## DIVISION XX.—IRELAND.

CORK—Cork Royal Institution	J. Humphreys, Esq. . .	50·0	80	31·91	38·28
KERRY—Valentia . . . . .	The Knight of Kerry .	1·0	50	..	72·40
WATERFORD—Waterford. . .	R. J. Greer, Esq. . . .	4·0	60	40·86	43·83
Portlaw . . . . .	A. Free, Esq. . . . .	20·0	50?	..	49·31
Rathculliheen . . . . .	„ „ „ . . . . .	1·6	135	37·56	38·79
LIMERICK—Limerick . . . .	Rev. C. Mayne . . . .	..	..	..	44·32
CLARE—Killaloe . . . . .	„ „ „ . . . . .	5·0	128	48·76	51·84
„ „ „ . . . . .	„ „ „ . . . . .	0·5	123	..	53·74
QUEEN'S Co.—Portarlinton	M. Hanlon, Esq. „ . .	9·0	245	34·84	36·70
WICKLOW—Fassaroe, Bray . .	E. Barrington, Esq. . .	3·0?	250?	57·52	51·00
GALWAY—Galway (Queen's College)	Professor Curtis . . .	6·0	25	..	58·62
DUBLIN—Black Rock. . . . .	T. Bewley, Esq. . . .	28·0	96	26·70	24·67
Dublin (Ordnance Survey Office)	Capt. Wilkinson, R.E.	6·6	166	..	27·49
„ (Glasnevin) . . . . .	D. Moore, Esq. . . . .	6·0	65	31·08	30·16
Monkstown . . . . .	W. H. Pim, Jun., Esq.	0·6	90	33·26	31·89
„ „ „ . . . . .	„ „ „ . . . . .	90·0	190	..	21·01
MAYO—Cong, Lough Corrib	G. H. D'Arcy, Esq. . .	20·0	60?	43·44	..
SLIGO—Markree Observatory	E. J. Cooper, Esq. . .	16·3	145	43·74	47·16
ARMAGH—Armagh Observatory	Rev. Dr. Robinson . .	36·0	247	..	43·20
DOWN—Belfast (Queen's Coll.)	J. Bell, Esq. . . . .	9·0	58	38·23	34·02
„ (Linen Hall) . . . . .	J. Stewart, Esq. . . .	4·0	12	39·84	37·41