

ABSTRACT
OF
METEOROLOGICAL OBSERVATIONS

MADE AT

GLENBURN, ROTHESAY.

(Latitude, $55^{\circ} 49' 50''$ N.; Longitude, $5^{\circ} 4' 5''$ W; Height above
Mean Sea Level, 76 feet),

FOR THE

YEAR ENDING 31st DECEMBER, 1909.

BAROMETER.			AIR TEMPERATURE.		
DAILY Mean of Readings at 9 a.m. and 9 p.m.	RANGE.		MEAN OF		ABSOLUTE MAXIMUM AND MINIMUM.
	Highest Reading during the Month.	Lowest Reading during the Month.	Maxima = A.	Minima = B.	
January	30.588	28.439	45.5	36.9	Maximum. 52° Day of the Month. 17th and 18th Minimum. 32° Day of the Month. 13th and 16th
February	30.570	29.272	45.3	36.6	52° 3rd 27th 29°
March	30.182	29.016	44.3	34.6	51° 12th, 19th and 22nd 25° 3rd and 5th
April	30.488	29.250	53.8	39.0	63° 8th 9th 32°
May	30.370	29.316	58.8	42.9	70° 8th 2nd, 15th and 16th 30°
June	30.405	29.220	62.6	47.0	71° 30th 13th 39°
July	30.258	29.242	62.6	50.1	68° 1st and 31st 25th 44°
August	30.334	29.570	63.6	50.5	71° 6th and 10th 43° 3rd and 5th
September	30.400	29.330	59.8	45.9	65° 10th and 17th 38° 2nd and 21st
October	30.314	28.905	54.1	42.8	63° 2nd 29° 30th
November	30.424	28.844	46.4	35.0	57° 3rd 23° 16th
December	30.592	28.558	43.0	34.3	54° 10th and 11th 24°

HYGROMETER.										WIND DIRECTIONS.									
MEAN AT 9 A.M. AND 9 P.M.					RAIN, and other forms of precipitation.					NUMBER OF OBSERVATIONS AT 9 A.M. AND 9 P.M.									
Underground Temperature 4 feet depth Mean of Daily Readings	Dry Bulb.	Depres- sion of Wet Bulb.	Vapour Pressure.		Humidity per cent.	Number of Days.	Total Fall.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm or Variable.			
			Inches of Mercury.																
January.....	40.84	2.0	.214		79.	26	5.05	4	1	0	1	10	6	23	6	6			
February.....	39.9	2.29	.201		82	12	2.51	4	2	10	1	14	4	8	7	6			
March.....	37.8	2.4	.182		81	14	2.45	12	2	34	3	2	1	0	2	6			
April.....	44.6	1.9	.252		86	19	5.69	1	1	9	4	18	3	13	4	7			
May.....	49.1	3.2	.274		78	20	3.18	6	0	12	3	7	7	12	5	10			
June.....	53.6	3.1	.328		79	13	3.16	8	3	19	0	1	1	6	9	13			
July.....	54.8	2.3	.364		85	21	5.38	9	0	2	0	2	4	26	13	6			
August.....	56.3	2.0	.395		87	8	3.45	6	2	6	0	1	0	26	12	9			
September.....	51.2	1.8	.331		87	4	2.54	3	1	22	0	2	0	10	9	13			
October.....	47.4	1.8	.284		88	23	7.07	5	2	7	0	16	4	13	4	11			
November.....	39.7	.6	.232		95	17	3.00	3	2	3	0	5	9	15	9	14			
December.....	37.6	.5	.215		95	8	6.17	7	1	20	0	5	3	12	4	10			
						215	49.77	68	17	144	12	83	42	169	84	111			

The mean Barometric reading for the year is 29.86, and is .03 inches below the average.

The mean temperature, which was 47.34 is $\frac{1}{2}^{\circ}$ below the average.

The total Rainfall, however, is 1 inch above the average, being 49.77, and a greater prevalence of westerly winds was noted. The relationship of wind to rain is graphically depicted by the accompanying beautiful stars.

A. J. H.

The wind and rain stars on the following pages were made with the assistance of Mr W. J. Millar and of Mr Macbeth from data supplied by Mr Penney's Meteorological Book.

They are designed to show in a graphic manner the amount of wind and rain which belong to each point of the compass in the different months of the year.

The length of each ray in the star denotes the amount of wind blowing from that quarter, $\frac{1}{8}$ inch=one observation, the observations having been taken twice daily.

The shading denotes the raininess of the wind, the average amount of rain falling with each wind being shown thus :—

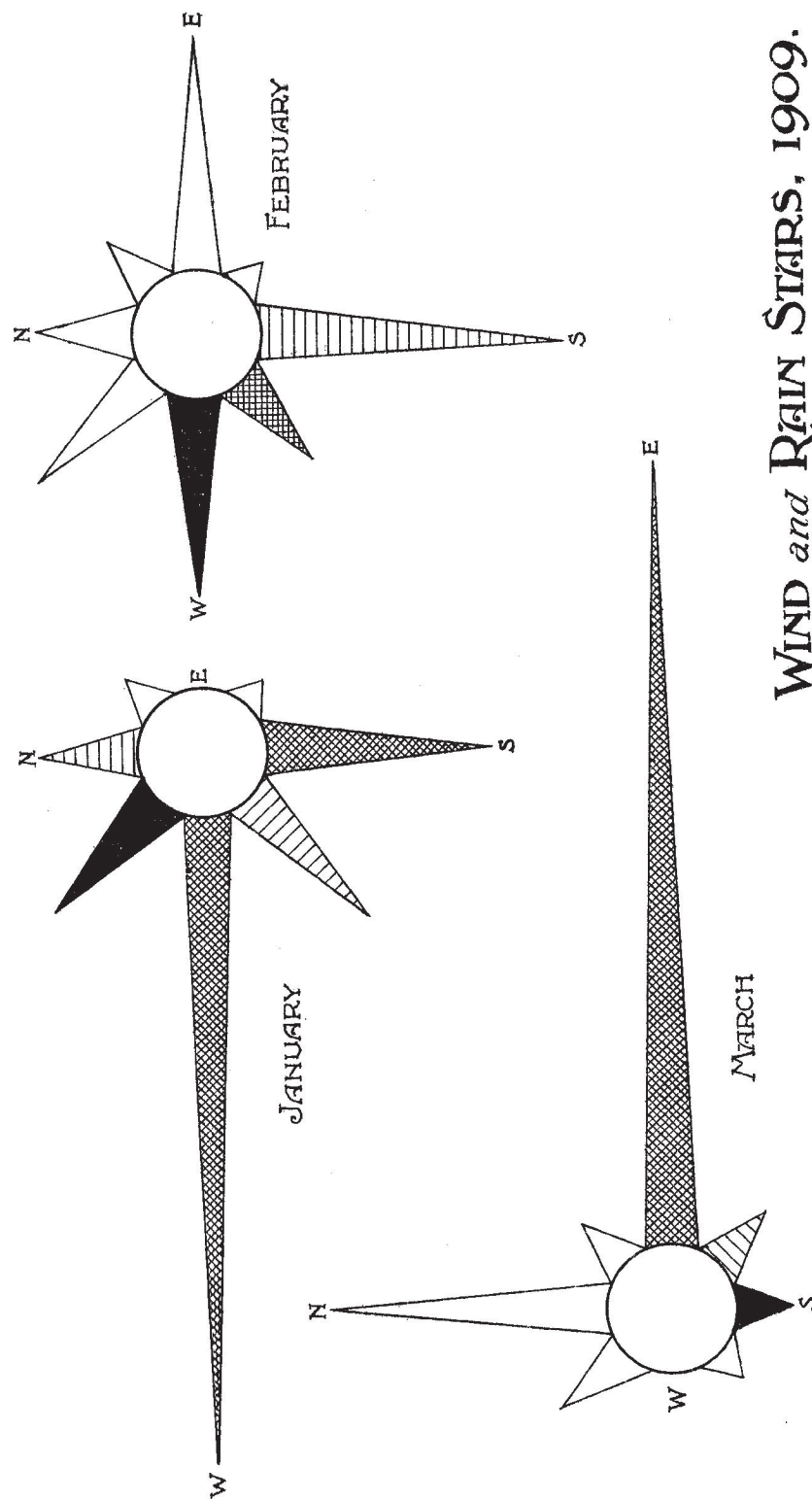
Under .06 in. per day—white.

Under .12 in. and over .06 in.—light shading.

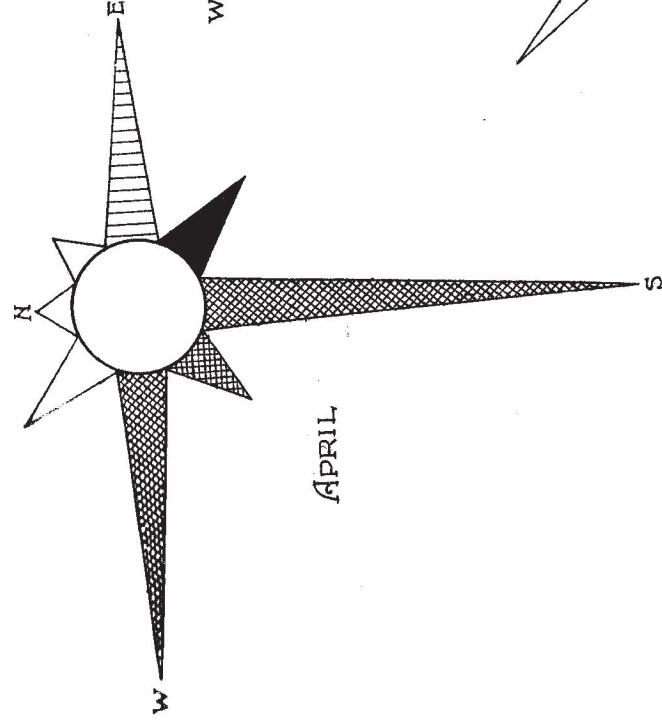
Under .25 in. and over .12 in.—dark shading.

Over .25 in.—black.

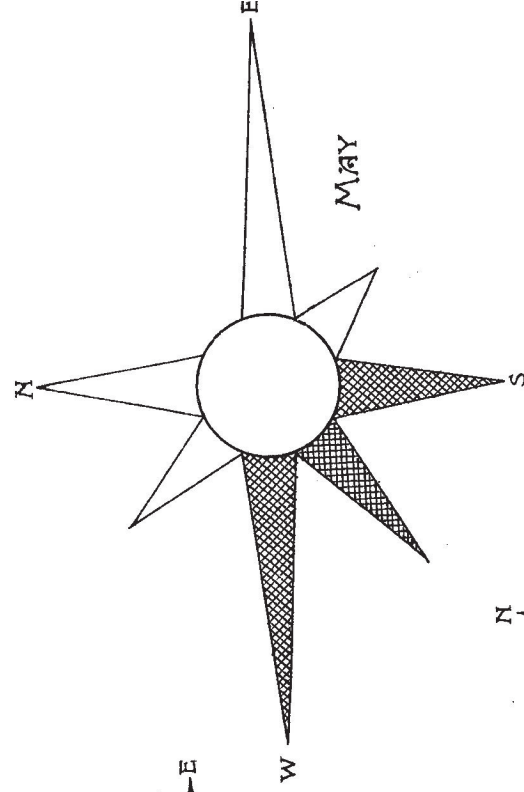
J. N. M.



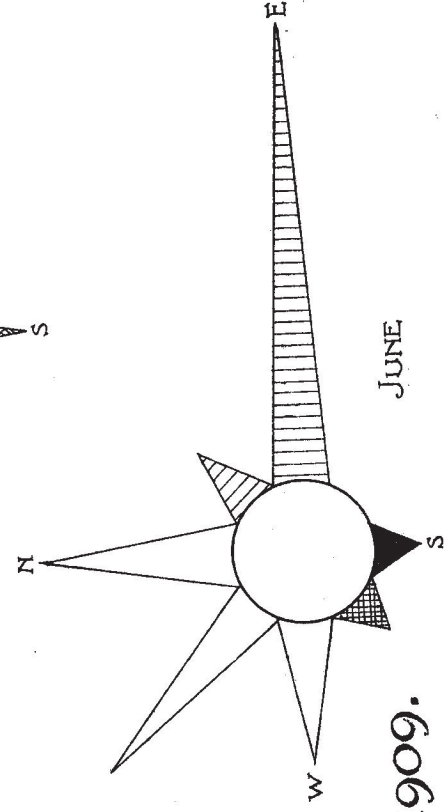
WIND and RAIN STARS, 1909.



APRIL

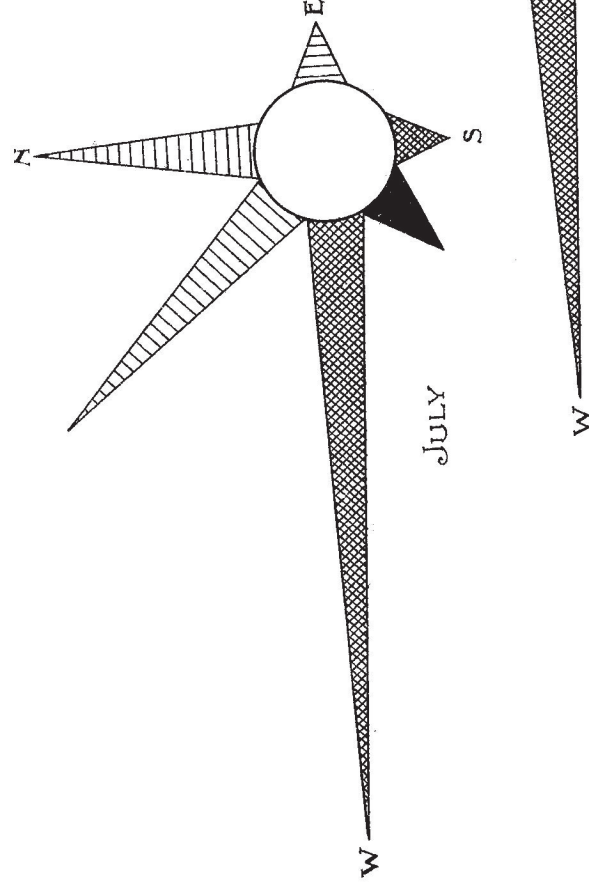


MAY

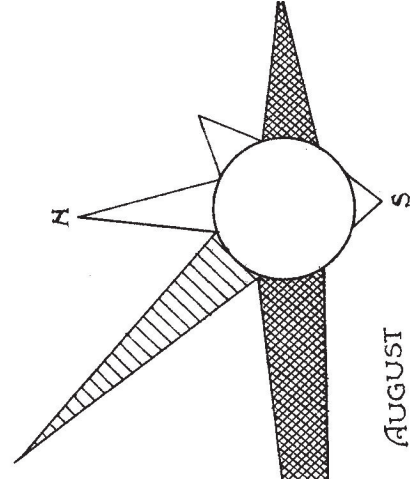


JUNE

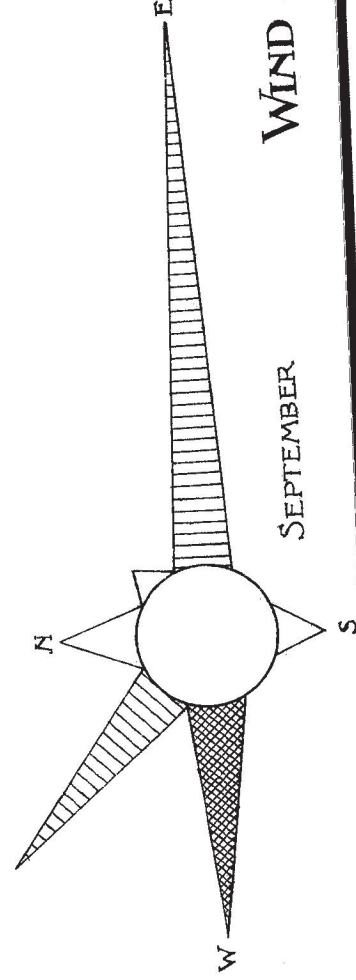
WIND and RAIN STARS, 1909.



JULY

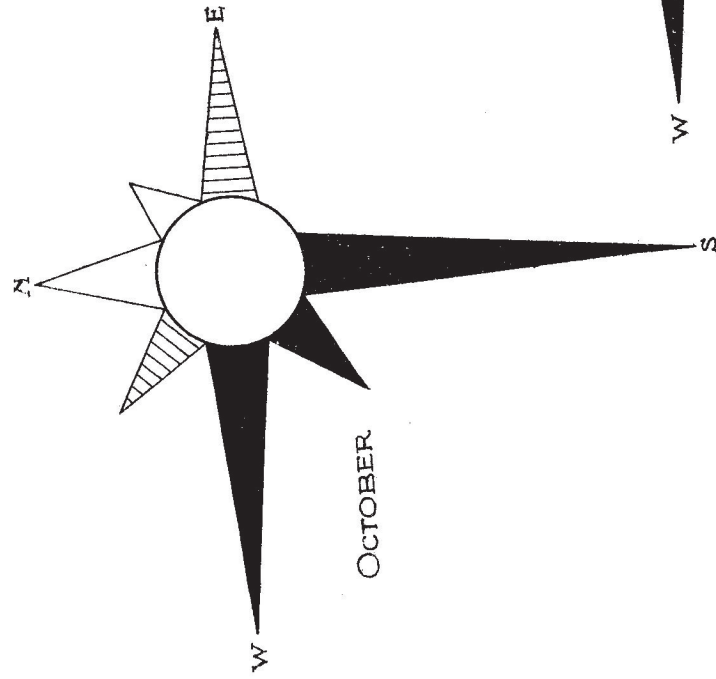


AUGUST

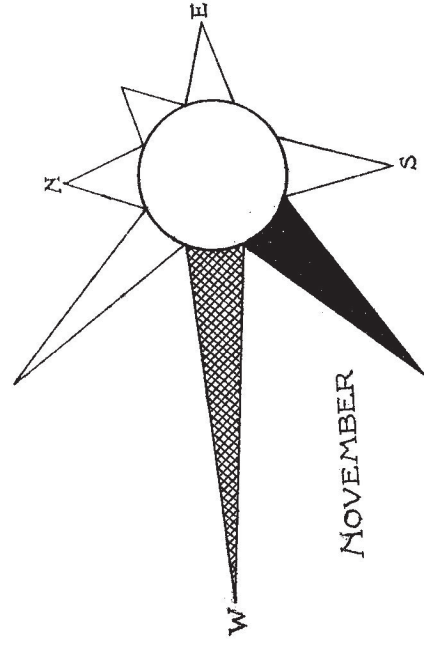


SEPTEMBER

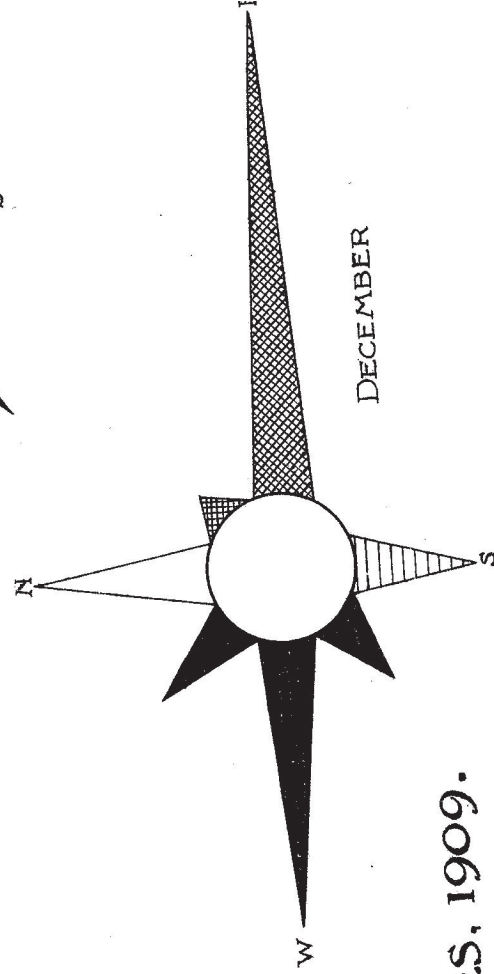
WIND and RAIN STARS, 1909



OCTOBER

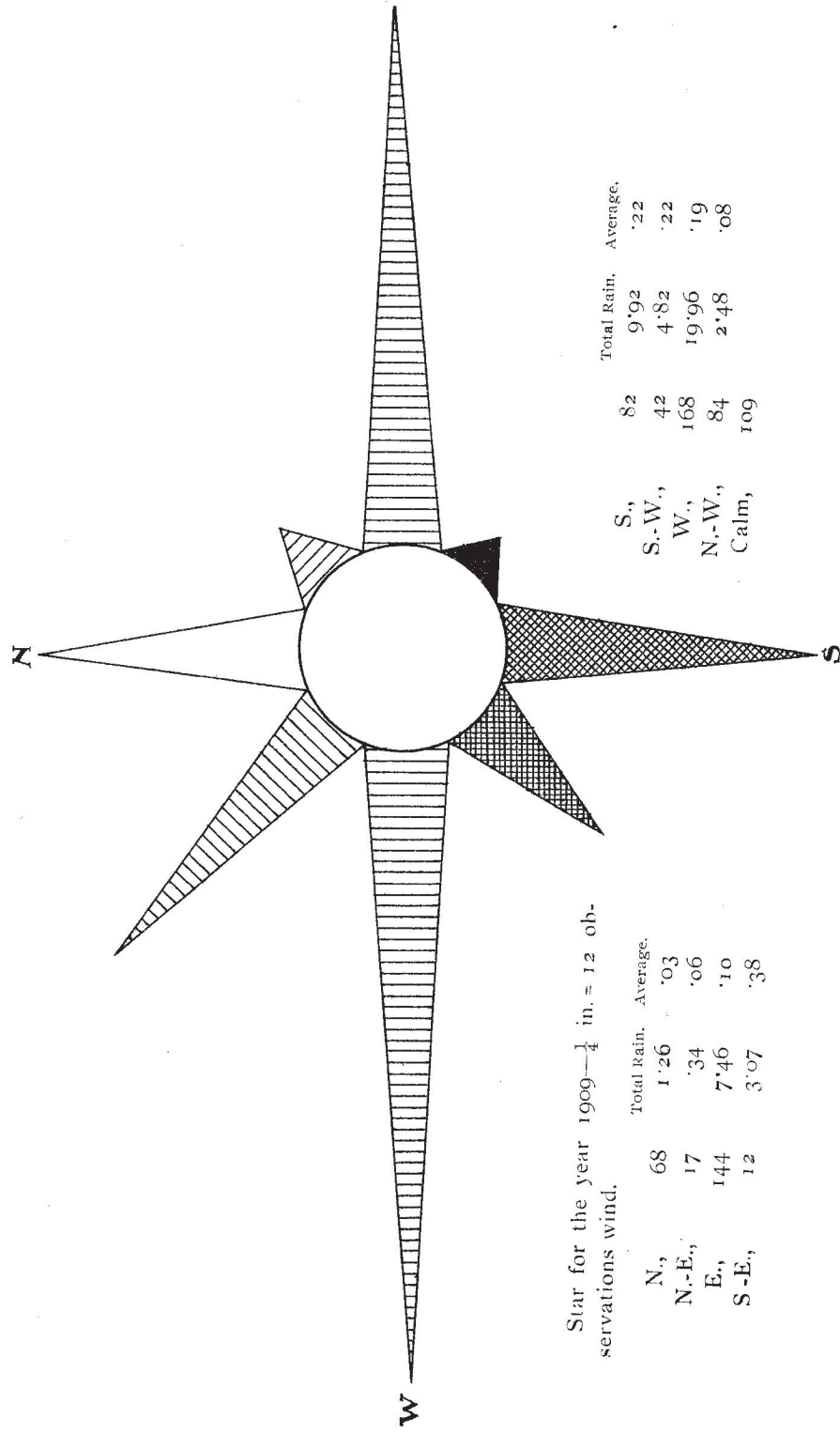


NOVEMBER



DECEMBER

WIND and RAIN STARS, 1909.



WIND and RAIN STAR for YEAR 1909.

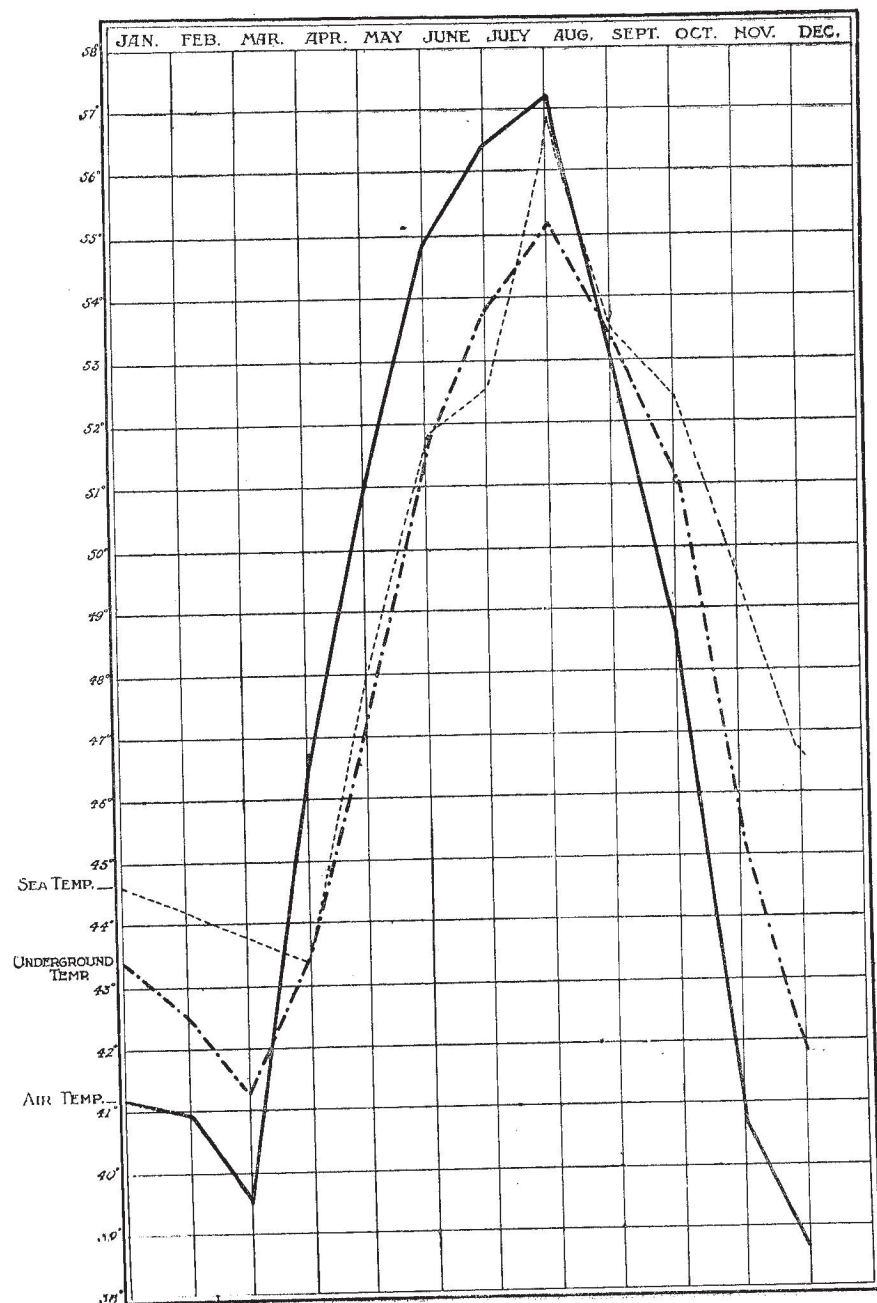
WEATHER NOTES.

By J. N. MARSHALL, M.D.

A graph has been prepared which shows in contrast the air and underground temperatures taken at Glenburn by Mr Penney, and the sea temperature taken at Millport by Mr Elmhirst, and extracted from the Annual Report of the Millport Marine Station. The temperatures marked on the lines indicate the *average* temperature of the month following the line. It is interesting to see the great disparity between the air and the sea temperatures in the winter months, a fact to which, no doubt, our mild climate is largely due.

The temperature taken 4 feet underground shows a pretty constant relation to the air temperature, the difference being also somewhat greater in the winter months,

Sir John Moore, of Dublin, has pointed out that when the underground temperature reaches 57° Fahr., epidemic diarrhoea has been noticed to be prevalent about a fortnight later.



PREHISTORY OF BUTE.

(Abstract of Lecture delivered on November 26th, 1909, by
PROFESSOR BRYCE, M.A., M.D., Glasgow University.)

Professor Bryce said that the subject of his address was what he termed the "Prehistory of Bute." By this he meant the record of the occupation of the Island by man prior to the existence of any written documents. This prehistorical period might be divided into two epochs, an earlier, the epoch of the monuments, and a later, which merged with the historical or better proto-historical period. By the term proto-historical he meant to convey the idea of an interval of time during which documentary evidence was, in the nature of things, extremely meagre, and our knowledge of the story of the Island was almost entirely based on archæological evidence.

The period of the monuments was fairly well known, as nearly all the sepulchral sites had been explored, but the later epoch was enveloped in darkness owing to the absence of any graves which could be attributed to it. It was a time of stress and struggle, during which a knowledge of the smelting of iron had spread northwards, and no doubt towards its close the Bute islanders saw the Roman galleys in the Firth of Clyde. The excavation of the Forts of Argyllshire gave us some faint knowledge of a period during which there was a gradual ascent from a culture largely of the Stone Age up to the age of Iron.

The builders of the monuments were an immigrant race, and they were not the earliest inhabitants. There was a still