

SCIENCE.

A CONTINUOUS registering thermometer for recording the temperature of the body has just been described by its inventor, M. Marey. It consists of a brass tube communicating with a Bourdon manometer, containing oil, and closed. Any change of temperature, by altering the internal pressure, makes the curved manometer tube curl more or less, and to it is fixed an index which registers the movements by inscribing them on a recording cylinder. The thermometric bulb may be at some distance from the in-

scribing apparatus, being connected by a flexible tube of annealed copper. Two such bulbs may be applied to different parts of the body, even to the interior. It is possible therefore to note the relation between the temperatures of the interior and exterior of the body. If we remember rightly, an analogous but more portable instrument was suggested some time ago by Mr. Donald Macalister, but we are not aware whether his instrument is yet before the public.

SUN SPOTS.

The following record of observations made by Mr. D. P. Todd, Assistant, has been forwarded by Prof. S. Newcomb, U. S. Navy, Superintendent Nautical Almanac Office, Washington, D. C.

DATE, JUNE, 1881.	NO. OF NEW		DISAPPEARED BY SOLAR ROTATION,		REAPPEARED BY SOLAR ROTATION,		TOTAL NUMBER VISIBLE,		REMARKS.
	Groups.	Spots.	Groups.	Spots.	Groups.	Spots.	Groups.	Spots.	
	7	2	20	—	1	2	3	9	
11, 7 a. m.	2	20	—	—	1	2	4	40†	
12, 9 a. m.	2	5	1	3	1	2	5	45†	
13, 9 a. m.	2	10	1	5	1	3	7	50†	
16, 7 a. m.	0	0	0	0	0	0	7	40†	
18, 7 a. m.	0	0	2	10	0	0	5	25†	
19, 9 p. m.	0	0	0	0	0	0	4	15	
21, 10 a. m.	0	0	0	0	0	0	3	10	
22, 10 a. m.	0	0	0	0	0	0	2	5	
23, 8 a. m.	2	5	0	0	2	5	4	10	
24, 5 p. m.	0	7	0	0	0	0	4	17	
26, 1 p. m.	1	2†	1	2	1	1	4	40†	
29, 8 a. m.	1	25†	0	0	1	10	5	65†	Many of the spots small.
30, 9 a. m.	0	0	0	0	0	0	3	66†	Many of the spots small.

† Approximated.

Faculae were seen at the time of every observation.

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METEOROLOGICAL REPORT FOR NEW YORK CITY FOR THE WEEK ENDING AUG. 20, 1881.
Latitude 40° 45' 58" N.; Longitude 73° 57' 58" W.; height of instruments above the ground, 53 feet; above the sea, 97 feet; by self-recording instruments.

BAROMETER.

THERMOMETERS.

AUGUST.	MEAN FOR THE DAY,			MAXIMUM,			MINIMUM,			MEAN,			MAXIMUM,			MINIMUM,			MAXIM'	
	Reduced to Freezing.	Reduced to Freezing.	Time.	Reduced to Freezing.	Time.	Dry Bulb.	Wet Bulb.	Reduced to Freezing.	Time.	Dry Bulb.	Wet Bulb.	Reduced to Freezing.	Time.	Dry Bulb.	Wet Bulb.	Reduced to Freezing.	Time.	In Sun.	Dry.	Wet.
Sunday, 14.	29.686	29.778	12 p. m.	29.566	o. a. m.	71.3	64.0	78	3 p. m.	71	64.0	66	12 p. m.	62	12 p. m.	140.				
Monday, 15.	29.692	29.656	12 p. m.	29.778	o. a. m.	70.6	63.6	76	3 p. m.	63	5 a. m.	60	5 a. m.	60	5 a. m.	140.				
Tuesday, 16.	30.031	30.069	10 p. m.	29.980	o. a. m.	66.3	60.7	71	2 p. m.	62	1 p. m.	59	12 p. m.	57	12 p. m.	134.				
Wednesday, 17.	30.031	30.064	9 a. m.	30.000	12 p. m.	60.3	58.0	67	4 p. m.	60	5 p. m.	59	5 a. m.	55	5 a. m.	115.				
Thursday, 18.	29.910	30.000	o. a. m.	29.890	12 p. m.	63.6	60.0	67	3 p. m.	62	10 p. m.	57	1 a. m.	57	1 a. m.	98.				
Friday, 19.	29.786	29.800	o. a. m.	29.718	12 p. m.	67.0	63.6	79	3 p. m.	63	3 p. m.	64	3 a. m.	64	3 a. m.	114.				
Saturday, 20.	29.651	29.718	o. a. m.	29.680	6 p. m.	73.7	67.0	81	4 p. m.	70	4 p. m.	66	4 a. m.	64	4 a. m.	144.				
Mean for the week.....																				
Maximum for the week at 9 a. m., August 17th.....				30.064	"															
Minimum " at o. a. m., August 17th.....				29.506	"															
Range.....				.468	"															

Mean for the week.....
Maximum for the week at 9 a. m., August 17th.....
Minimum " at o. a. m., August 17th.....
Range.....

Mean for the week.....
Maximum for the week at 4 p. m., 20th 81.....
Minimum " at 5 am, 17th 56.....
Range " " 25.....

WIND.

HYGROMETER.

CLOUDS.

RAIN AND SNOW.

AUGUST.	DIRECTION,			VELOCITY IN MILES, PER SEC.	FORCE IN LBS. PER SQ. FEET.	FORCE OF VAPOR,			RELATIVE HUMIDITY,			CLEAR, OVERCAST,			DEPTH OF RAIN AND SNOW IN INCHES,			OZONE,	
	Distance for the Day.	Max.	Time.			m	s	f	n	a	m	s	f	n	a	m	s	ozone	
Sunday, 14.	n. w.	n. n. w.	n. n. w.	213	4½	6.20 am.	.543	.492	.462	79	53	65	2 cir.	cu.	4 cir.	cu.	9 cu.	8	
Monday, 15.	n. n. e.	n. n. e.	n. n. e.	234	7	2.00 am.	.489	.532	.509	74	63	74	1 cir.	s.	7 cir.	cu.	4 cu.	4	
Tuesday, 16.	n. n. e.	n. e.	n. e.	151	2½	10.20 am.	.470	.462	.433	73	65	73	7 cir.	cu.	10	cu.	s.	7	
Wednesday, 17.	n. e.	s. e.	s. e.	145	5½	0.00 am.	.422	.450	.473	87	83	88	4 cir.	cu.	10	10	12 p. m.	7	
Thursday, 18.	n. n. e.	n. e.	n. e.	116	2	4.00 am.	.456	.470	.483	88	73	78	10	9 cu.	10	10	12 p. m.	1.00	
Friday, 19.	n.	n. n. w.	n. n. w.	83	¾	2.00 pm.	.516	.564	.556	83	80	84	9 cu.	10	10	1 a. m.	1.00	.01	
Saturday, 20.	n. e.	n. e.	n. n. w.	73	2½	11.10 am.	.556	.537	.568	84	54	72	8 cu.	3 cu.	7 cu.	12 m.	0.30	.01	

Distance traveled during the week..... miles.
Maximum force..... lbs.

Total amount of water for the week..... inches.
Duration of rain..... hours, 30 minutes.

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