semi-incandescent mass; that the belts, the great red spot and other dark markings, are composed of matter of lower temperature. The egg-shaped, polar white spots are openings in the semi-fluid crust. This hypothesis would account for the slow and gradual changes occurring on the surface, which does not seem reasonable on the simple atmospheric theory.

Over the liquid surface is an atmosphere in which is formed the equatorial white spots which are of the nature of cloud.

In conclusion the director expresses what we can well believe to be his sincere regrets at the loss of the valuable services of Mr. S. W. Burnham, who has accepted a position in the Washburne Observatory, at Madison, Wis. During the past year Mr. Burnham, as heretofore, had the use of the great equatorial for double-star observations, and reported the discovery since May, 1880, of about fifty new double-stars, all of which were measured at least three times. About one-half of the number are close double, not exceeding 1".5 in distance. Among the more prominent stars are 9 persei, 5 persei, κ pegasi, γ foracis and 60 arietis. He also made about 600 measures on previously-known double-stars.

DR. COPELAND and Mr. Dreyer have been compelled to change the title of *Urania*, as it appears that name was appropriated by some *astrological* serial. In future, then, *Urania*, the astronomical serial, will bear the title *Copernicus*.

IT is rumored that Prof. Huxley will be asked to allow his name to be entered for the Linacre professor of physiology vacant by the death of Prof. Rolleston.

COMET (*b*) 1881.

The following observations of the Great Comet of 1881, made at Australian Observatories, have been kindly furnished for publication by Professor Wm. Harkness, U. S. N., to whom they were communicated by Mr. Todd, Superintendent of the Adelaide Observatory.

DATE.	R. A.	Dec. South.	Station.	* Of Comparison.
	h. m.	° ′ ″		
May 22,	— —	35 30 —	Windsor	B. A. C. 1573
" 23,	— —	35 14 —	Melbourne	Lacaille 1685
" 25,	— —	34 13 30.	Sydney	
" 26,	6 17 5 0 16.62	33 40 44.9	Melbourne	
" 27,	18 10 5 1 3.07	32 31 2.	Windsor	Lacaille 1785
" 28,	8 0 5 1 25.	32 22 7.	Adelaide	Columbæ
" 28,	18 0 5 1 35.67	32 3 48.	Melbourne	B. A. C. 1564
" 29,	5 39 5 1 48.52	31 42 42.	"	" 1615
" 29,	7 20 5 1 51.7	31 39 39.	Adelaide	" 1564
" 30,	5 2 21.8	30 51 2.	"	" 1615
" 30,	7 33 5 2 26.12	30 50 49.	"	
" 31,	7 8 5 2 54.6	30 0 1.	"	
" 31,	18 23 5 3 12.38	29 34 14.	Melbourne	
June 1,	5 25 5 3 26.26	29 6 40.	"	
" 1,	6 48 5 3 32.8	29 2 58.	Adelaide	Washington 2173
" 3,	6 4 5 4 37.6	26 51 36.	Melbourne	
" 5,	6 10 — — —	24 5 —	Adelaide	
" 12,	6 0 5 11 38.4	8 11 39.	"	Rigel
" 12,	18 0 5 12 13.4	6 26 21.	"	τ. Orionis

	° ′ ″		h. m. s.	
Windsor---Lat.	33 36 29 S.,	Long.	10 3 21.8	E. of Greenwich.
Sydney ---- "	33 51 41 "	"	10 4 50.8	"
Melbourne - "	37 49 53 "	"	9 39 54.8	"
Adelaide--- "	34 55 34 "	"	9 14 21.3	"

WASHINGTON, Aug. 9, 1881. W. C. W.

METEOROLOGICAL REPORT FOR NEW YORK CITY FOR THE WEEK ENDING AUG. 6, 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.

JULY AND AUGUST.	BAROMETER. MEAN FOR THE DAY. Reduced to Freezing.	BAROMETER. MAXIMUM. Reduced to Freezing.	BAROMETER. MAXIMUM. Time.	BAROMETER. MINIMUM. Reduced to Freezing.	BAROMETER. MINIMUM. Time.	THERMOMETERS. MEAN. Dry Bulb.	THERMOMETERS. MEAN. Wet Bulb.	THERMOMETERS. MAXIMUM. Dry Bulb.	THERMOMETERS. MAXIMUM. Time.	THERMOMETERS. MAXIMUM. Wet Bulb.	THERMOMETERS. MAXIMUM. Time.	THERMOMETERS. MINIMUM. Dry Bulb.	THERMOMETERS. MINIMUM. Time.	THERMOMETERS. MINIMUM. Wet Bulb.	THERMOMETERS. MINIMUM. Time.	MAXI'M In Sun.
Sunday, 31	30.094	30.164	9 a. m.	30.044	9 p. m.	67.6	66.3	73	4 p. m.	69	12 p. m.	63	1 a. m.	63	1 a. m.	123.
Monday, 1	30.060	30.096	9 a. m.	30.036	9 p. m.	74.3	70.3	80	3 p. m.	73	3 p. m.	68	5 a. m.	67	5 a. m.	140.
Tuesday, 2	30.014	30.058	9 a. m.	29.966	6 p. m.	75.0	71.0	81	4 p. m.	74	5 p. m.	70	2 a. m.	69	2 a. m.	141.
Wednesday, 3	29.975	30.006	7 a. m.	29.942	4 p. m.	76.6	71.0	85	4 p. m.	75	7 p. m.	67	6 a. m.	67	6 a. m.	141.
Thursday, 4	29.970	29.996	9 a. m.	29.940	6 p. m.	81.7	74.0	91	4 p. m.	79	4 p. m.	70	5 a. m.	69	5 a. m.	142.
Friday, 5	29.930	29.976	9 a. m.	29.898	6 p. m.	82.3	75.6	91	3 p. m.	79	2 p. m.	75	5 a. m.	73	5 a. m.	141.
Saturday, 6	29.864	29.914	7 a. m.	29.804	7 p. m.	83.0	76.3	91	2 p. m.	80	2 p. m.	78	12 p. m.	73	12 p. m.	139.

			Dry.	Wet.
Mean for the week	29.986 inches.	Mean for the week	77.2 degrees	72.0 degrees.
Maximum for the week at 9 am., July 31st	30.164 "	Maximum for the week, at 2 pm. 6th	91. "	at 2 pm 6th, 80. "
Minimum " at 7 pm., Aug. 6th	29.804 "	Minimum " " 1 am. 31st	63. "	at 1 am 31st, 63. "
Range	.360 "	Range " "	28. "	17. "

JULY AND AUGUST.	WIND. DIRECTION. 7 a. m.	2 p. m.	9 p. m.	VELOCITY IN MILES. Distance for the Day.	FORCE IN LBS. PER SQR. FEET. Max.	Time.	HYGROMETER. FORCE OF VAPOR. 7 a. m.	2 p. m.	9 p. m.	RELATIVE HUMIDITY. 7 a. m.	2 p. m.	9 p. m.	CLOUDS. CLEAR, 0 OVERCAST, 10. 7 a. m.	2 p. m.	9 p. m.	RAIN AND SNOW. DEPTH OF RAIN AND SNOW IN INCHES. Time of Beginning.	Time of Ending.	Duration. h. m.	Amount of water	OZONE. 0 10
Sunday, 31	n. e.	e.	s. s. e.	132	1½	4.00 am	.596	.635	.658	100	90	90	10	9 cu.	10	1.30pm	4 pm.	2.30	.03	0
Monday, 1	w. s. w.	s.	s.	119	2	4.00 pm	.644	.717	.706	85	70	90	10	2cir.cu.s	3 cu.	-----	-----	-----	--	0
Tuesday, 2	s. s. e.	s.	s.	118	2½	3.30 pm	.706	.717	.693	90	70	85	10	3 cir. cu.	8 cu.	-----	-----	-----	--	0
Wednesday, 3	n. w.	n. n. e.	s. w.	61	¼	2.00 pm	.648	.663	.744	95	57	77	3 cir. cu.	1 cir.	0	-----	-----	-----	--	0
Thursday, 4	n. n.w.	n. w.	s. s. w.	57	¾	5.00 pm	.641	.765	.816	76	56	74	0	3 cir. cu.	0	-----	-----	-----	--	1
Friday, 5	w. n.w.	s. s. e.	s. w.	82	¾	3.40 pm	.757	.855	.787	82	62	74	2 cir.	0	0	9.15pm	10 am.	0.45	.07	0
Saturday, 6	s. s. w.	s. s. w.	s. w.	176	5¼	2.20 pm	.772	.874	.814	78	60	82	2 cir.cu.	1 c. s.	6 cu.	-----	-----	-----	--	3

Distance traveled during the week	745 miles.	Total amount of water for the week	.10 inch.
Maximum force	5¼ lbs.		

DANIEL DRAPER, Ph. D.

Director Meteorological Observatory of the Department of Public Parks, New York.