vomiting and remained unmolested during the rest of the journey. This fact appeared remarkable to me. The benefit had been immediate." If this observation can be confirmed by other similar cases, it would be very fortunate, for then the surgeons of the maritime and transatlantic companies would be able to relieve passengers who suffer seasickness.

THE SEPARATION OF WOOL AND SILK IN WOVEN GOODS.—A. Rémont.—The following method is sufficiently exact for commercial purposes: the sample is kept for a quarter of an hour in boiling water containing 5 per cent. of hydrochloric acid, and is then washed and dried. The threads of the warp are then separated, if possible, from those of the weft, and examined separately as follows: a thread is burnt. There is given off a smell like burning horn, and a thread heated with a fragment of caustic soda evolves ammonia. In this case some threads are plunged in basic zinc chloride at a boil. If they dissolve completely the threads are *silk*. If on adding hydrochloric acid there is a plentiful flocculent precipitation, the threads are silk mixed with wool or with vegetal fibres. If nothing dissolves in zinc chloride, the threads are plunged in a boiling solution of soda, not too concentrated. If they dissolve completely, *wool*. If partially, *wool* and *cotton*. If no odor of burnt horn is given off, the threads consist entirely of vegetal fibres. These results may be confirmed by means of the microscope. For the quantative examination, if the preliminary tests show silk, wool, and cotton, four swatches weighing each 4 grms. are cut; one is laid aside and the three others are boiled.—*Journal de Pharmacie et de Chimie.*

THE REDUCTION of COPPER SOLUTION BY GLUCOSE* appears first to have been utilized by Trömmer. Frommherz suggested the employment of a citrate to keep the cupric oxide in solution. Modifications of the ordinary alkaline tartrate solution have been devised by Barreswil, Poggiale, Rosenthal, Chevalier, Boussingault, Reveil, Fehling Strohl, Viollette, Magneshahens, Lowenthal, Joulie, Pos soz, etc. Loewe employed glycerin instead of a tartrate. Various treatments of the precipitated cuprous oxide have been proposed by the following chemists: Mohr dissolves the oxide in hydrochloric acid, and titrates with permanganate. Brunner dissolves in an acid solution of ferric chloride, and estimates the reduced iron by bichromate or permanganate. Champion and Pellet dissolve the precipitate in hydrochloric acid and chlorate of potassium, boil off free chlorine, and titrate the liquid with stannous chloride. Girard and Soxhlet reduce the cuprous oxide in hydrogen, and weigh the metallic copper. Muter dries the cuprous oxide at 100° C., and weighs it as Cu_2O. O'Sullivan and other operators ignite the precipitate strongly, and weigh as CuO. Ferdinand-Jean dissolves the cuprous oxide in hydrochloric acid, and weighs the metallic silver precipitated on adding ammoniacal silver nitrate. Maumené uses an excess of copper solution, filters, adds ammonia to the filtrate, and estimates the residual copper by titration with sodium sulphide, for which Perrot substitutes potassium cyanide. Lastly, Pavy adds ammonia to the alkaline cupric solution, and runs in the sugar solution till the hot liquid is decolorized.

* From an Advance-Shee of Allen's "Commercial Organic Analysis," vol. ii.

METEOROLOGICAL REPORT FOR NEW YORK CITY FOR THE WEEK ENDING DEC. 17, 1881.

Latitude 0° 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.

DECEMBER.	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, 11	30.432	30.476	12 p. m.	30.362	0 a. m.	27.0	25.7	31	4 p. m.	29	4 p. m.	20	7 a. m.	20	7 a. m.	93.
Monday, 12	30.292	30.476	0 a. m.	30.110	12 p. m.	38.0	36.0	45	6 p. m.	43	6 p. m.	29	6 a. m.	29	6 a. m.	74.
Tuesday, 13	30.021	30.110	0 a. m.	29.938	12 p. m.	51.3	47.6	59	12 p. m.	54	12 p. m.	41	5 a. m.	40	5 a. m.	95.
Wednesday, 14	29.806	29.938	0 a. m.	29.688	4 p. m.	56.3	52.7	67	4 a. m.	60	4 p m.	40	12 p. m.	40	12 p. m.	69.
Thursday, 15	30.177	30.322	12 p. m.	29.900	0 a. m.	30.3	29.6	40	0 p. m.	40	0 a. m.	26	12 p. m.	26	12 p. m.	60.
Friday, 16	30.427	30.492	11 a. m.	30.322	0 a. m.	24.0	23.0	29	11 p. m.	28	11 p. m.	18	7 a. m.	18	7 a. m.	92.
Saturday, 17	30.232	30.396	0 a. m.	30.176	12 p. m.	33.7	31.3	40	0 a. m.	36	4 p. m.	25	4 a. m.	25	4 a. m.	88.

			Dry.	Wet.
Mean for the week	30.198 inches.	Mean for the week	37.2 degrees	35.1 degrees.
Maximum for the week at 11 a. m., Dec. 16th	30.492 "	Maximum for the week, at 4 pm., 14th	67. "	at 4 pm 14th, 60. "
Minimum " at 4 p. m., Dec. 14th	29.688 "	Minimum " " 7 am., 16th	18. "	at 7 am 16th, 18. "
Range	.804 "	Range " "	49. "	42.

DECEMBER.	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.
Sunday, 11	n. w.	w.	s. w.	125	1½	4.30 pm	.108	.130	.137	100	78	79	0	4 cir. cu.	2 cir. cu.	-----	-----	-----	--	0
Monday, 12	e.	s.	s. w.	187	7	7.20 pm	.149	.177	.244	89	66	91	9 cu.	10	10	7 pm	10 pm	3.00	.03	0
Tuesday, 13	s. w.	w. s. w.	w. s. w.	274	6¾	3 50 pm	.244	.282	.336	91	67	70	10	4 cir. cu.	5 cu.	-----	-----	-----	--	0
Wednesday, 14	s. w.	s. w.	n. n. e.	303	6	10.50 am	.367	.420	.288	71	68	100	8 cu.	9 cu.	10	9 am	12 pm	15.00	.40	10
Thursday, 15	n. w.	n.	n. n. w.	238	4½	3.15 am	.181	.137	.153	100	79	100	10	8 cir. cu.	0	0 am	8.30 am	8.30	.40	9
Friday, 16	n. n. e.	n. n. e.	n. w.	128	2	2.20 am	.098	.106	.136	100	75	88	0	0	0	-----	-----	-----	--	0
Saturday, 17	w. s. w.	w. s. w.	w.	263	3¼	3.00 pm	.141	.144	.157	100	63	71	1 cir.	2 cir.	0	-----	-----	-----	--	0

Distance traveled during the week	1,518 miles.	Total amount of water for the week	.83 inch.
Maximum force	7 lbs.	Duration of rain	1 day, 2 hours, 30 minutes.

* Thursday, 15th, 1¼.

DANIEL DRAPER, Ph. D.

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