Blondlot, R. Sur l'absence d'action d'un champ magnétique sur une masse d'air qui est le siège d'un courant de déplacement. Pp. 848–850.

Raverot, Emile et Belly, Pierre. Loch manométrique différentiel. Pp. 811–813.

Ciel et Terre. Bruxelles. 22me année.

Bartlett, A. K. La lune sèche et la lune humide. Pp. 433–437.

Prinz, W. De l'influence des courants de convection sur les indications d'instruments très mobiles. Pp. 437–447.

—— Nouveau mode d'emploi du cerf-volant pour les recherches météorologiques. Pp. 455–456.

—— Coup de foudre intéressant. P. 456.

Sitzungsberichte der königlich preussischen Akademie der Wissenschaften. Berlin. No. 42. 1901.

Kohlrausch, Friedrich. Uber den Temperatureinfluss auf das elektrische Leitvermögen von Lösungen, insbesondere auf die Beweglichkeit der einzelnen Ionen im Wasser. Pp. 1026–1033.

Zeitschrift für Instrumentenkunde. Berlin. 21 Jahrgang.

Schloesser, W. Thermometrische Untersuchungen. Pp. 281–298.

Himmel und Erde. Berlin. 14 Jahrgang.

Suring, R. Die Ergebnisse der Berliner wissenschaftlichen Luftfahrten. Pp. 49–70.

Naturwissenschaftliche Rundschau. Braunschweig. 16 Jahrgang.

Wesendonk, K. v. Zur Erklärung des Phänomens der blauen Sonne. 573–574.

Zeitschrift für Gewässerkunde. Leipzig. 4 Band.

Gravelius, H. Die Hydrographie in den Vereinigten Staaten. Pp. 143–157.

Gravelius, H. Siedek's neue Geschwindigkeitsformel. Pp. 165–169.

Annalen der Physik. Leipzig. Vierte folge. Band 6.

Grunmach, Leo. Experimentelle Bestimmung der Oberflächenspannung flüssiger Luft. P. 559–564.

Revista de Ciencias. Habana. Año 1.

Muxo, Alejandro. Auroras Polares. Pp. 195–197.

Memorie della Società degli Spettroscopisti Italiani. Catania. Vol. 30.

—— Frequenza delle macchie solari nell' anno 1900 e confronto dell' andamento colla variazione magnetica. Pp. 213–215.

Meteorologische Zeitschrift. Wien. Band 18.

Toepler, M. Ueber die Richtung der elektrischen Strömung in Blitzen. Pp. 481–487.

Kostersitz, K. Zur Frage der Errichtung eines astrophysikalisch-meteorologischen Höhenobservatoriums im Semmeringgebiete. Pp. 487–497.

Ernst, J. W. Graphische Wetterbeschreibung. Pp. 497–504.

Draenert, F. M. Das Klima im Thale des Amazonas-Stromes. Pp. 504–515.

Mohn, H. Absolute Maximum-Temperaturen in Norwegen. Pp. 515–518.

Trabert, W. Die Extinktion des Lichtes in einem trüben Medium (Sehweite in Wolken). Pp. 518–524.

Rotch, [A.] L. and Hann, J. Ein neues Feld für die Erforschung der höheren Luftschicten mittelst Drachen. Pp. 524–526.

Kassner, C. Hagelthurmwolken. Pp. 526–528.

Mazelle, —. Ausserordentliche Regenintensität. Pp. 528–529.

Hann, J. J. R. Sutton über die Winde von Kimberley. Pp. 529–533.

Toepler, M. Fragen zur Erforschung der Kugelblitze. Pp. 533–534.

Fenyi, J. Ein Resultat der Gewitterregistrirung in Kalocsa. Pp. 534–536.

Fenyi, J. Zur Theorie des Gewitterregistrators. Pp. 536–537.

Engelen, —. Gewitter-Registrirapparat. Pp. 537–538.

—— Meteorologisches Observatorium auf den Azoren. P. 538.

Riggenbach-Burkhardt, A. Zum Klima von Ober-Mesopotamien. Pp. 538–539.

Woeikof, A. Der Juni 1901 in Südostrussland. Pp. 539–540.

Gerlich, K. Schlauchförmige Wolken. P. 540.

Pocchettino, —. Ergebnisse einiger Messungen der Elektricitätszerstreuung in freier Luft. Pp. 540–542.

—— Ueber die Störungen des normalen atmosphärischen Potentialgefälles durch Bodenerhebungen. Pp. 542–543.

—— Resultate der meteorologischen Beobachtungen in Guatemala im Jahre 1899. P. 543.

—— Ausserordentlicher Regenfall auf Lussin piccolo. P. 543.

Das Wetter. Berlin. 18 Jahrg.

Assmann, R. Der Aspirations-Meteorograph. Pp. 241–247.

Klengel, Friedrich. Ueber das Wetterschiessgebiet bei Windisch-Feistritz im südlichen Steiermark. Pp. 247–251.

Hennig, Richard. Extreme Witterungs-Erscheinungen. Pp. 251–256.

Boernstein, R. Vom zweiten Berliner Wetterkursus. Pp. 256–258.

—— Dunkle Blitze. Pp. 260–262.

—— Der Wetterdienst der Landwirthschaftsschule zu Weilburg im Sommer 1901. Pp. 262–264.

NOTES BY THE EDITOR.

RELATIVE FREQUENCY OF SUN SPOTS.

We publish herewith the complete table of the so-called relative sun-spot numbers as prepared originally by Professor Wolf, Director of the Observatory at Zurich, and revised by his successor, Prof. A. Wolfer. Professor Wolf chose the mean solar day as the unit of time, and noted day by day both the number of visible groups of spots and also the number of spots contained in each group. A combination of these two numbers gave him his relative numbers, expressing the sun-spot activity for that particular day. He considered that the formation of a new group of spots was more important than the appearance of a new spot in an already existing group, and was led to compute his relative numbers by the formula, $r = 10\,g + f$, where g is the number of groups visible on any day, and f the total number of spots, whether they were in the groups or isolated. That is to say, if there were eight spots so arranged as to constitute five groups the relative numbers for the day would be 58. The average of the relative numbers for each day gave the mean monthly numbers, and the average of the twelve months gave the mean annual numbers; and these are the numbers given in the accompanying tables.

A different method of computing sun-spot numbers was adopted by Schwabe, who was the original discoverer of the periodic frequency of sun spots. The computations of Wolf have extended back to the earliest observations, whereas Schwabe's discovery was based on his own observations, which began in the year 1826. Schwabe adopted a general period of ten years, but Wolf has shown that the period is exactly 11.111 years.

The relative numbers of Wolf do not always seem to give an exact expression of the sun-spot activity, since they take no account of the size of the spot, and some have proposed to introduce this feature into the calculation. But a careful comparison of Wolf's numbers with the record of spotted areas has shown that they are in general quite nearly proportional to each other. Of course, all that we want is the relative condition from month to month and year to year.

In order to make these numbers as reliable as possible, Wolf combined together the records of different observers, using very different instruments, and each of these records was first reduced by him to something like what would have been given by a normal observer—that is, himself—using a standard instrument, namely, his 4-foot Fraunhofer refractor, whose aperature was 3 inches, and magnifying power 64.

His series of satisfactory numbers based on actual observations begins with the year 1749. Observations were, of course, on record for earlier years, but not in sufficient numbers to justify introduction into this table. In fact, many gaps exist after 1749, and can only be filled in by graphic methods of interpolation. In his original table, Wolf distinguishes two degrees of reliability, namely, the heavy print, representing satisfactory and complete sets of observations, and the starred (*) figures, representing a rather small number of observations eked out by means of interpolations.

The figures that he publishes in italics are simply the maxima and minima, which are italicized in order to attract attention.

Fuller details relative to this subject may be found in the Handbook of Astronomy by Wolf; the article by A Wolfer in the Met. Zeit., 1892; the Bibliothéque universelle de Genéve, Archives des sciences physiques et naturelle, 1891, Vol. XXVI, No. 12, and especially in the annual publication known as the Astronomische Mittheilungen, which was begun by Dr. R. Wolf, and is now continued by A. Wolfer regularly in the Vierteljahrsschrift of the Scientific Society of Zurich.

Those who compare sun-spot numbers with meteorological phenomena should always bear in mind that the spots themselves are not likely to be the cause of changes on the earth, but are rather the result of some process in the sun that affects the earth directly.—*C. A.*

Relative frequencies of sun spots.

[From Klein's Jahrbuch der Astronomie u. Geophysik III. 1892-1900 and Wolfer's Astr. Mitt. 1901.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Mean.
1749	58.0	62.6	70.0	55.7	85 0	83.5	94.8	66.3	75.9	75.5	158.6	85.2	80.9
1750	73.3	75.9	89.2	88.3	90.0	100.0	85.4	103.0	91.2	65,7	63.3	75.4	83.4
1751	70.0	43.5	45.3	56.4	60.7	50.7	66.3	59.8	23.5	23.2	28.5	44.0	47.7
1752	35 0	50.0	71.0	59.3	59.7	39.6	78.4	29.3	27.1	46.6	37.6	40.0	47.8
1753	41.0	32.0	45.7	38.0	36.0	31.7	22.0	39.0	28.0	25.0	20.0	6.7	30 7
1754	0.0	3.0	1.7	13 7	20.7	26.7	18.8	12.3	8.2	24.1	13.2	4.2	12.2
1755	10.2	11.2	6.8	6.5	0.0	0.0	8.6	3.2	17.8	23.7	6.8	20.0	9.6
1756	12.5	7.1	5.4	9.4	12.5	12.9	3.6	6.4	11.8	14.3	17.0	9.4	10.2
1757	14.1	21.2	26.2	30.0	38.1	12.8	25.0	51.3	39.7	32.5	64.7	33.5	32.4
1758	37.6	52.0	49.0	72.3	46.4	45.0	44.0	38.7	62.5	37.7	43.0	43.0	47.6
1759	48.3	44.0	46.8	47.0	49.0	50.0	51.0	71.3	77.2	59.7	46.3	57.0	54.0
1760	67.3	59.5	74.7	58.3	72.0	48.3	66.0	75.6	61.3	50.6	59.7	61.0	62.9
1761	70.0	91.0	80.7	71.7	107.2	99.3	94.1	91.1	100.7	88.7	89.7	46.0	85.8
1762	43.8	72.8	45.7	60.2	39.9	77.1	33.8	67.7	68.5	69.3	77.8	77.2	61.1
1763	56.5	31.9	34.2	32.9	32.7	35.8	54.2	26.5	68.1	46.3	60.9	61.4	45.1
1764	59.7	59.7	40.2	34.4	44.3	30.0	30.0	30.0	28.2	28.0	26.0	25.7	36.3
1765	24.0	26.0	25.0	22.0	20.2	20.0	27.0	29.7	16.0	14.0	14 0	13.0	20.9
1766	12.0	11.0	36.6	6.0	26.8	3.0	3.3	4.0	4.3	5.0	5.7	19.2	11.4
1767	27.4	30.0	43.0	33.9	29.8	33.3	21.9	40.8	42.7	44.1	54.7	53.3	37.8
1768	53.5	66.1	46.3	42.7	77.7	77.4	52.6	66.8	74.8	77.8	90.6	111.8	69.8
1769	73.9	64.2	64.3	96.7	73.6	94 4	118.6	120.3	148.8	158.2	148.1	112.0	106.1
1770	104.0	142.5	80.0	51.0	70.1	83.3	109.8	126.3	104.4	103.6	132.2	102.3	100.8
1771	36.0	46.2	46.7	64.9	152.7	119.5	67.7	58.5	101.4	90.0	99.7	95.7	81.6
1772	100.9	90.8	31.1	92.2	38.0	57.0	77.3	56.2	50.5	78.6	61.3	64.0	66.5
1773	54.6	29.0	51.2	32.9	41.1	23.4	27.7	12.7	29.3	26.3	40.9	43.2	34.8
1774	46.8	65.4	55.7	43.8	51.3	28.5	17.5	6.6	7.9	14.0	17.7	12.2	30.6
1775	4.4	0.0	11.6	11.2	3.9	12.3	1.0	7.9	3.2	5.6	15.1	7.9	7.0
1776	21.7	11.6	6.3	21.8	11.2	19.0	1.6	24.2	16.0	30.0	35.0	40.0	19.8
1777	45.0	36.5	39.0	95.0	80.3	80.7	95.0	112.0	116.2	106.5	146.0	157.3	92.0
1778	177.3	109.3	134.0	245.0	238.9	171.6	153.0	140.0	171.7	156.3	150.3	105.0	154.4
1779	114.7	165.7	118.0	145.0	140.0	113.7	143.0	112.0	111.0	124.0	114.0	110.0	125.9
1780	70.0	98.0	98.0	95.0	107.2	88.0	86.0	86.0	93.7	77.0	60.0	58.7	84.8
1781	98.7	74.7	53.0	68.3	104.7	97.7	73.5	66.0	51.0	27.3	67.0	35.2	68.1
1782	54.0	37.5	37.0	41.0	54.3	38.0	37.0	44.0	34.0	23.2	31.5	30.0	38.5
1783	28.0	38.7	26.7	28.3	23.0	25.2	32.2	20.0	18.0	8.0	15.0	10.5	22.8
1784	13.0	8.0	11.0	10.0	6.0	9.0	6.0	10.0	10.0	8.0	17.0	14.0	10.2
1785	6.5	8.0	9 0	15.7	20.7	26.3	36 3	20.0	32.0	47.2	40.2	27.3	24.1
1786	37.2	47.6	47.7	85.4	92.3	59.0	83.0	89.7	111.5	113.3	116.0	112.7	82.9
1787	134.7	106.0	87.4	127.2	134.8	99.2	128.0	137.2	157.3	157.0	141.5	174.0	132.0
1788	138.0	129.2	143.3	108.5	113.0	154.2	141.5	136.0	141.0	142.0	94.7	129.5	130.9
1789	114.0	125.3	120.0	123.3	123.5	120.0	117.0	103 0	112.0	89.7	134.0	135.5	118.1
1790	103.0	127.5	96.3	94.0	93.0	91.0	69.3	87.0	77.3	84.3	83.0	74.0	89.9
1791	72.7	62.0	74.0	77.2	73.7	64.2	71.0	43.0	66.5	61.7	67 0	66.0	66.6
1792	58.0	64.0	63.0	75.7	62.0	61.0	45.8	60.0	59.0	59.0	57.0	56.0	60.0
1793	56.0	55.0	55.5	53.0	53.3	51.0	50.0	29.3	24.0	47.0	44.0	45.7	46.9
1794	45.0	44.0	38.0	28 4	55.7	41.5	41.0	40.0	11.1	28.5	67.4	51.4	41.0
1795	21.4	39.9	12.6	18.6	31.0	17.1	12.9	25.7	13.5	19.5	25.0	18.0	21.3
1796	22.0	23.8	15.7	31.7	21.0	6.7	26.9	1.5	18.4	11.0	8.4	5.1	16.0
1797	14.4	4.2	4.0	4.0	7.3	11.1	4.3	6.0	5.7	6.9	5.8	3.0	6.4
1798	2.0	4.0	12.4	1.1	0.0	0.0	0.0	3.0	2.4	1.5	12.5	9.9	4.1
1799	1.6	12.6	21.7	8.4	8.2	10.6	2.1	0.0	0.0	4.6	2.7	8.6	6.8
1800	6.9	9.3	13.9	10.2	5.0	23.7	21.0	19.5	11.5	12.3	10.5	40.1	15.3
1801	27.0	29.0	30.0	31.0	32.0	31.2	35.0	38.7	33.5	32.6	39.8	48.2	34.0
1802	47.8	47.0	40.8	50.0	53.0	55.0	57.0	58.0	65.2	56.5	65.5	64.0	55.0
1803	66.0	67.0	68.0	69.0	71.0	72.0	73.0	64 0	75.0	76.0	77.0	77.0	71.3
1804	7.0	75.0	77.0	77.0	77.0	76.0	74.0	72.0	71.0	71.2	67.0	63.0	73.1
1805	61.0	59.0	56.0	46.3	39.0	49.0	47.0	46.0	44.0	43.0	41.0	40.0	47.6
1806	39.0	29.6	28.0	34.0	26.4	25.6	31.0	29.0	28.0	27.0	25.0	24.0	28.9
1807	12.0	12.2	9.6	18.3	10.0	10.2	12.7	12.0	5.7	8.0	2.6	0.0	9.4
1808	0.0	4.5	0.0	12.3	8.6	12.0	6 7	8.0	11.7	4.7	11.3	12.3	7.7
1809	7.2	9.2	0.9	2.5	2.0	7.7	0.3	0.2	0.4	0.0	0.0	0.0	2.5
1810	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1811	0,0	0.0	0.0	0.0	0.0	0.0	6.6	0.0	2.4	6.1	0.8	1.1	1.4
1812	13.4	1.9	0.7	0.0	1.0	1.3	0.5	18.7	5.2	5.5	7.9	10.1	5.5
1813	0.0	10.3	1.9	16.6	5.5	10.7	15.7	8.4	18.2	30.5	16.7	19.6	12.8
1814	22.2	12.0	5.7	23.1	5.8	14.9	18.5	2.3	11.9	21.5	14.5	20.1	14.4
1815	19.2	32.2	26.2	31.6	9.8	55.9	35.3	47.2	31.5	33.5	37.2	65.0	35.4
1816	26.3	68.8	73.7	58.8	44.3	43.6	38.8	28.1	49.3	56.4	38.2	30.6	46.4
1817	36.5	55.2	107.0	25.9	19.2	39.9	47.4	45.4	35.8	25.2	36.5	23.9	41.5
1818	35.1	18.9	22.1	35.7	53.1	36.1	28.1	30.9	27.4	33.2	13.3	25.8	30.0
1819	34.4	20.7	3.7	20.2	18.4	35.7	33.9	25.8	14.9	27.6	25.1	30.6	24.2
1820	13.0	26.6	3.6	18.5	29.3	10.8	23.8	26.3	5.2	8 7	7.9	8.2	15.0
1821	21.5	2.4	5.7	6.0	1.2	1.8	2.5	4.8	4.4	18.3	4.4	0.0	6.1
1822	0.0	0.9	16.1	13.3	1.5	5.6	7.9	2.1	0.0	0.4	0.0	0.0	4.0
1823	0.0	0.0	0.6	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	20.4	1.8

Relative frequencies of sun spots—Continued.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Mean.
1824	21.6	10.8	0.0	20.0	2.8	0.0	0.0	1.4	20.5	25.2	0.0	0.8	8.0
1825	5.0	16.1	14.9	0.4	15.0	15.4	30.9	25.4	16.3	14.4	11.5	22.5	15.6
1826	17.7	18.2	38.2	23.7	32.4	37.1	52.5	39.6	18.9	51.0	38.3	64.5	36.0
1827	34.3	46.0	56.0	46.0	55.5	56.7	42.9	53.7	49.6	57.2	48.2	46.1	49.4
1828	52.8	64.4	65.0	61.1	89.1	98.0	54.3	76.4	50.4	34.7	57.0	46.9	62.5
1829	43.0	49.4	72.3	97.6	67.5	75.5	90.8	77.4	50.3	60.6	66.7	56.5	67.3
1830	49.9	70.9	84.6	107.1	66.3	65.1	43.9	50.7	62.1	84.4	81.2	82.1	70.7
1831	47.5	50.1	93.4	54.6	38.1	33.4	45.2	54.9	37.9	46.2	43.5	28.9	47.8
1832	30.9	55.5	55.1	26.9	41.3	26.7	13.9	8.9	8.2	21.1	14.3	27.5	27.5
1833	11.3	14.9	11.8	2.8	12.9	1.0	7.0	5.7	11.6	7.5	5.9	9.9	8.5
1834	4.9	18.1	3.9	1.4	8.8	7.8	8.7	4.0	11.5	21.8	30.5	34.5	13.2
1835	7.5	24.5	19.7	61.5	43.6	33.2	59.8	59.0	100.8	95.2	100.0	77.5	56.9
1836	88.6	107.6	98.1	142.9	111.4	124.7	116.7	107.8	95.1	137.4	130.9	206.2	121.8
1837	188.0	175.6	134.6	138.2	111.3	153.0	162.8	134.0	96.3	123.7	107.0	129.8	138.2
1838	144.9	84.8	140.8	126.6	137.6	94.5	108.2	78.8	73.6	90.8	77.4	79.8	103.1
1839	107.6	102.5	77.7	61.8	53.8	54.6	84.7	131.2	132.7	90.8	68.8	63.6	85.8
1840	81.2	87.7	55.5	65.9	69.2	48.5	60.7	57.8	74.0	49.8	54.3	53.7	63.2
1841	24.0	29.9	29.7	42.6	67.4	55.7	30.8	39.3	35.1	28.5	19.8	38.8	36.8
1842	20.4	22.1	21.7	26.9	24.9	20.5	12.6	26.5	18.5	38.1	40.5	17.6	24.2
1843	13.3	3.5	8.3	8.3	21.1	10.5	9.5	11.8	4.2	5.3	19.1	12.7	10.7
1844	9.4	14.7	13.6	20.8	12.0	3.7	21.2	23.9	6.9	21.5	10.7	21.6	15.0
1845	25.7	43.6	43.3	56.9	47.8	31.1	30.6	32.3	29.6	40.7	39.4	59.7	40.1
1846	38.7	51.0	63.9	69.2	59.0	65.1	46.5	54.8	107.1	55.9	60.4	65.5	61.5
1847	62.6	44.9	85.7	44.7	75.4	85.3	52.2	140.6	161.2	180.4	138.9	109.6	98.4
1848	159.1	111.8	108.9	107.1	102.2	123.8	139.2	132.5	100.3	132.4	114.6	159.9	124.3
1849	156.7	131.1	96.5	102.5	80.6	81.2	78.0	61.3	93.7	71.5	99.7	97.0	95.9
1850	78.0	89.4	82.6	44.1	61.6	70.0	39.1	61.6	86.2	71.0	54.8	60.0	66.5
1851	75.5	105.4	64.6	56.5	62.6	63.2	36.1	57.4	67.9	62.5	50.9	71.4	64.5
1852	68.4	67.5	61.2	65.4	54.9	46.9	42.0	37.9	37.5	67.3	54.3	45.4	54.2
1853	41.1	42.9	37.7	47.6	34.7	40.0	45.9	50.9	33.5	42.3	23.8	23.4	39.0
1854	15.4	20.0	20.7	26.4	24.0	21.1	18.7	15.5	22.4	12.7	28.2	21.4	20.6
1855	12 3	11.4	17.4	4.4	9.1	5.3	0.4	3.1	0.0	9.7	4.2	3.1	6.7
1856	0.5	4.9	0.4	6.5	0.0	5.0	4.6	5.9	4.4	4.5	7.7	7.2	4.3
1857	13.7	7.4	5 2	11.1	29.2	16 0	22.2	16.9	42.4	40.6	31.4	37.2	22.8
1858	39.0	34 9	57.5	38.3	41.4	44.5	56.7	55.3	80.1	91.2	51.9	66.9	54.8
1859	83.7	87.6	90.3	85.7	91.0	87.1	95.2	106.8	105.8	114.6	97.2	81.0	93.8
1860	81 5	88.0	98.7	71.4	107.1	108.6	116.7	100.3	92.2	90.1	97.9	95.6	95.7
1861	62.3	77.8	101.0	98.5	56.8	87.8	78.0	82.5	79.9	67.2	53.7	80.5	77.2
1862	63.1	64.5	43.6	53.7	64.4	84.0	73.4	62.5	96.6	42.0	50.6	40.9	59.1
1863	48.3	56.7	66.4	40.6	53.8	40.8	32.7	48.1	22.0	39.9	37.7	41.2	44.0
1864	57.7	47.1	66.3	35.8	40.6	57.8	54.7	54.8	28.5	33.9	57.6	28.6	46.9
1865	48.7	39.3	39 5	29.4	34.5	33 6	26.8	37.8	21.6	17.1	24.6	12.8	30.5
1866	31.6	38.4	24.6	17.6	12.9	16.5	9.3	12.7	7.3	14.1	9.0	1.5	16.3
1867	0.0	0.7	9.2	5.1	2.9	1.5	5.0	4.9	9.8	13.5	9.3	25.2	7.3
1868	15.6	15.8	26.5	36.6	26.7	31.1	28.6	34.4	43.8	61.7	59.1	67.6	37.3
1869	60.9	59.3	52.7	41.0	104.0	108.4	59.2	79.6	80.6	59.4	77.4	104.3	73.9
1870	77.3	114.9	159.4	160.0	176.0	135.6	132.4	153.8	136.0	146.4	147.5	130.0	139.1
1871	88.3	125 3	143.2	162.4	145.5	91.7	103.0	110.0	80 3	89.0	105.4	90.3	111.2
1872	79.5	120.1	88.4	102.1	107.6	109.9	105.2	92.9	114.6	103.5	112.0	83.9	101.7
1873	86.7	107.0	98.3	76.2	47.9	44.8	66.9	68.2	47.5	47.4	55 4	49.2	66.3
1874	60.8	64 2	46.4	32.0	44.6	38.2	67.8	61.3	28.0	34.3	28.9	29.3	44 6
1875	14 6	22 2	33.8	29.1	11.5	23.9	12.5	14.6	2 4	12.7	17.7	9.9	17.1
1876	14.3	15.0	31.2	2.3	5.1	1.6	15.2	8.8	9.9	14.3	9.9	8.2	11.3
1877	24.4	8.7	11.7	15.8	21.2	13.4	5.9	6.3	16.4	6.7	14.5	2.3	12.3
1878	3.3	6.0	7.8	0.1	5.8	6.4	0.1	0.0	5.3	1.1	4.1	0.5	3.4
1879	0.8	0.6	0.0	6.2	2.4	4.8	7.5	10.7	6.1	12.3	12.9	7.2	6.0
1880	24.0	27.5	19.5	19.3	23.5	34.1	21.9	48.1	66.0	43.0	30.7	29.6	32.3
1881	36.4	53.2	51.5	51.7	43.5	60.5	76.9	58.0	53.2	64.0	54.8	47.3	54.3
1882	45.0	69.3	67.5	95.8	64.1	45.2	45.4	40.4	57.7	59.2	84.4	41.8	59.6
1883	60.6	46.9	42.8	82.1	32.1	76.5	80.6	46.0	52.6	83.8	84.5	75.9	63.7
1884	91.5	86.9	86.8	76.1	66.5	51.2	53.1	55.8	61.9	47.8	36.6	47.2	63.5
1885	42.8	71.8	49.8	55.0	73.0	83.7	66.5	50.0	39.6	38.7	33.3	21.7	52.2
1886	29.9	25.9	57.3	43.7	30.7	27.1	30.3	16.9	21.4	8.6	0.3	12.4	25.4
1887	10.3	13.2	4.2	6.9	20.0	15.7	23.3	21.4	7.4	6.6	6.9	20.7	13.1
1888	12.7	7.1	7.8	5.1	7 0	7.1	3.1	2.8	8.8	2.1	10.7	6.7	6.8
1889	0 8	8.5	7 0	4.3	2.4	6.4	9.7	20.6	6.5	2.1	0.2	6.7	6.3
1890	5.3	0.6	5.1	1.6	4.8	1.3	11.6	8.5	17.2	11.2	9.6	7.8	7.1
1891	17.1	23.0	10.0	19.4	43.2	48.7	59.1	32.6	52.1	50.4	41.0	30.6	35.6
1892	72.4	72.4	52.5	69.6	79.2	76.6	77.9	102.6	62.2	74.8	67.1	77.8	73.8
1893	75.0	73.0	65.7	88.1	84.7	88.2	88.8	129.2	77.9	79.7	75.1	93.8	84.9
1894	83 2	84.6	52.3	81.6	101.2	98.9	106.0	70.3	65.9	75.5	53.6	60.0	78.0
1895	63.3	67.2	61.0	76.9	67.5	71.5	47.8	68.9	57.7	67.9	47.2	70.7	64.0
1896	29.0	57.4	52.0	43.8	27.7	49.0	45.0	27.2	61.3	28.4	38.0	42 6	41.8
1897	40.6	29.4	29.1	31.0	20.0	11.3	27.6	21.8	48.1	14.3	8.4	33.3	26.2
1898	30.2	36.4	38.3	14.5	25.8	22.3	9.0	31.4	34.8	34.4	30.0	12.6	26.7
1899	19.5	9.2	18.1	14.2	7.7	20.5	13.5	2.9	8.4	13.0	7.8	10.5	12.1
1900	9.4	13.6	8.6	16.0	15.2	12.1	8.3	4.3	8.3	12.9	4.5	0.3	9.5

HAILSTORM ON THE ST. LAWRENCE.

The following account of a hailstorm in northern New York is sent us by Mr. H. S. Chandler, of Crawford, N. J. It is of special interest because of the variety of forms and the great size of the stones. Fortunately storms of this character are rare in the United States:

At 2:30 p. m., August 8, 1901, I was sitting on my piazza on Florence Island, St. Lawrence River, opposite the village of Alexandria Bay, N. Y., and saw a storm gathering about 6 miles down the river. It came nearer, accompanied by thunder and lightning, and reached us about 3 o'clock. The temperature at that time was 72° and the wind about north.

First came a heavy fall of rain, which was followed by hail. The first stones to fall were formed as though icicles the size and shape