ordinary ascending currents of air such as commonly exist on summer days. It will be noticed that in both cases the objects started from a considerable elevation above sea level, where the currents had decided vertical velocity. It is probable that near the ground over a level country the air can have no great vertical motion, except in whirlwinds, so that phenomena of this kind are not observed. The kites flown at Blue Hill frequently give evidence of strong vertical uplift when they are at a considerable distance above the ground. On May 1, 1900, a kite weighing eleven pounds, carrying a meteorograph weighing three pounds, and 1000 feet of wire weighing about five pounds, was lifted to an angle of 90° above the horizon as measured by a theodolite, and remained in the vicinity of the zenith for nearly two minutes.

RECENT ADDITIONS TO THE WEATHER BUREAU LIBRARY.

C. FITZHUGH TALMAN, Acting Librarian.

The following titles have been selected from among the books recently received, as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies. Most of them can be loaned for a limited time to officials and employees who make application for them.

Bremen.
Deutsches meteorologisches Jahrbuch für 1904. Jahrg. XV. xii, 76 pp. f°. Bremen. 1905.

Comité international des poids et mesures.
Procès-verbaux des séances. Session de 1905. vi, 243 pp. 8°. Paris. 1905.

Hamburg. Deutsche Seewarte.
Wind, Strom, Luft- und Wassertemperatur des Mittelmeeres. (Beilage zu den "Annalen der Hydrographie." 1905.) 60 pp. 4°. Berlin. [1905.]

Holland. Koninklijk Nederlandsch Meteorologisch Instituut.
Onweders, optische verschijnselen, enz., in Nederland, 1903. 101 pp. 8°. Amsterdam. 19 5.

Natal. Government Astronomer.
Report of the Government Astronomer, 1904. 55 pp. f°. Pietermaritzburg. 1905.

Observatoire magnétique et météorologique de Zi-Ka-Wei.
Bulletin des observations. Année 1902. xii, 221 pp. f°. Chang-Hai. 1905.

Riabouchinsky, D.
Institut aérodynamique de Koutchino [Description of]. 8 pp. 8°. St. Petersburg. 1905.

Schubert, Johannes.
Der Wärmeaustausch im festen Erdboden, in Gewässern und in der Atmosphäre. 30 pp. 8°. Berlin. 1904.
Wald und Niederschlag in Westpreussen und Posen. 15 pp. 8°. Eberswalde. 1905.

South Australia. Government Astronomer, etc.
Meteorological observations made at the Adelaide Observatory and other places in South Australia and the Northern Territory during the year 189 . xvi, 91 pp. f°. Adelaide. 1902.
[Same for] 1900-1901. xx, 167 pp. f°. Adelaide. 1904.

Udden, Johan August.
On the cyclonic distribution of rainfall. 21 pp. 4°. Rock Island. 1905.

Walz, F. J.
Fake weather forecasts. (Reprinted from Popular Science Monthly, October, 1905.) Pp. 503-513.

Western Australia. Government Astronomer.
Meteorological observations made at the Perth Observatory and other places in Western Australia during the year 1902. 143 pp. f°. Perth. 1903.

Yearbook of scientific and learned societies of Great Britain and Ireland, 1904. vi, 300 pp. 8°. London. 1905.

RECENT PAPERS BEARING ON METEOROLOGY.

C. FITZHUGH TALMAN, Acting Librarian.

The subjoined titles have been selected from the contents of the periodicals and serials recently received in the Library of the Weather Bureau. The titles selected are of papers or other communications bearing on meteorology or cognate branches of science. This is not a complete index of the meteorological contents of all the journals from which it has been compiled; it shows only the articles that appear to the compiler likely to be of particular interest in connection with the work of the Weather Bureau. Unsigned articles are indicated by a ——

American Journal of Science. New Haven. 4th Series. Vol. 20.
Barus, Carl. On groups of efficient nuclei in dust-free air. Pp. 297-300.

Bulletin of the American Geographical Society. New York. Vol. 37.
Peary, R[obert] E[dwin]. Peary Arctic Club expedition, summer of 1905. Pp. 594-600.
W[ard], R[obert] DeC[ourcy]. Antarctic meteorology. [Note on paper by R. C. Mossman in Symons met. mag., June, 1905.] Pp. 613-614.
W[ard], R[obert] DeC[ourcy]. Chilean meteorology. Pp. 606-607.
W[ard], R[obert] DeC[ourcy]. Climate and weather of Turkestan. [*Review of* Explorations in Turkestan. By Pumpelly, W. M. Davis, and E. Huntington.] Pp. 608-609.
W[ard], R[obert] DeC[ourcy]. Flow of the Thames in relation to pressure and rainfall changes. [Note on paper by W. J. S. Lockyer in Nature, June 22, 1905.] P. 611.
W[ard], R[obert] DeC[ourcy]. Inversions of temperature on Ben Nevis. [Note on paper by A. Watt in Nature, v. 71, p. 583.] Pp. 611-612.
W[ard], R[obert] DeC[ourcy]. Meteorological results of the Nansen expedition. [*Review of* the Norwegian North Polar expedition, 1893-1896. Scientific results; vol. 6, Meteorology. By H. Mohn.] Pp. 629-632.
W[ard], R[obert] DeC[ourcy]. Meteorology of India, 1892-1902. P. 609.
W[ard], R[obert] DeC[ourcy]. Nile basin rains. [*Review of* Rains of the Nile basin in 1904. By H. G. Lyons.] Pp. 600-601.

Physical Review. Lancaster. Vol. 21.
Holborn, L., and Austin L. W. On the specific heat of gases at high temperatures. Pp. 209-228.

Scientific American. New York. Vol. 93.
—— Apparatus for observing and automatically registering thunderstorms. P. 278.
—— Dufaux flying machine. P. 316.
—— Long-distance balloon race from Liege. P. 278.
—— Prevention of hailstorms. A review of recent experiments. P. 322.

Terrestrial Magnetism and Atmospheric Electricity. Baltimore. Vol. 10.
Burbank, J. E. Specific electrical conductivity of the air at sea. P. 126-129.

Western Electrician. Chicago. Vol. 37.
—— Effect on atmospheric electricity of the eruption of Mount Pelée. P. 274.

Geographical Journal. London. Vol. 26.
Lyons, H. G. On the Nile flood and its variation. Pp. 395-421. Continued from P 272.

Science Abstracts. London. Vol. 8.
Ros[enhain], W. Direct-reading resistance thermometers. Composite thermo-couples. [Abstract from A. Campbell, Phys. soc. proc., v. 19, p. 555-565.] P. 571.

Archives des Sciences Physiques et Naturelles. Genève. 4 Période. Tome 20.
Bjerknes, V. Sur la formation des tourbillons dans un fluide sans frottement avec une application à l'analogie des phénomènes hydrodynamiques et électrostatiques. Pp. 268-284.
—— Observations météorologiques faites aux fortifications de Saint Maurice pendant les mois de mars, avril, et mai, 1905. Pp. 285-292.

Comptes Rendus de l'Académie des Sciences. Paris. Tome 141.
De la Vaulx, Henry and Jaubert, Joseph. Sur les observations météorologiques faites à Constantine pendant l'éclipse du 30 août, 1905. Pp. 512-513.
Deslandres, H. Note préliminaire sur l'observation de l'éclipse totale du soleil du 30 août 1905, à Burgos. Pp. 517-518.
Eginitis, D. Observation de l'éclipse solaire du 30 août à Athénes. Pp. 520-521.
Libert, Lucien. Sur le phénomène des ombres volantes. P. 513-514.
Meslin, Georges. Sur l'éclipse du 30 août 1905 et sur la polarisation de la couronne solaire. P. 493-496.
Moureau, Th. Trombe du 28 août 1905 à Saint-Maur et à Champigny (Seine). Pp 510-511.
Monaco, Albert, Prince de. Sur les lancements de ballons sondes et de ballons pilotes au-dessus des océans. Pp. 492-493.
Rayet, C. Éclipse totale du soleil du 30 août 1905. Pp. 490-491.
Salet. Observation de l'éclipse totale du 30 août 1905 faite à Robertville (Algérie). Pp. 528.

L'Aérophile. Paris. 13 année.
Nicolleau, A. Le Santos-Dumont XIV à Trouville. Pp. 200-201.
Goupil, A. Calculs sur l' aéroplane de M. Archdeacon. Pp, 207-209.
Masfrand, A. de. Aéronautes et l'éclipse du 30 août 1905. Pp. 202-206.