nothing, in respect to that increase and decrease which the said Ocean hath in the coasts of *Spaine* and *Flanders*. But this is yet a greater thing, that also the selfe same Ocean in the coasts of the said firme Land lying toward the South, in the Citie of *Panama*, and also in the coast of that Land which lyeth toward the East and West from that Citie, as in the Iland of *Pearles* or *Margarita*, which the *Indians* called *Tarrarequi*, and also in *Taboga* and *Otoque*, and in all other Ilands of the South Sea of *Sur*, the water riseth and falleth so much, that when it falleth, it goeth in manner out of sight, which thing I myselfe haue seene oftentimes. And here your Maiestie may note another thing, that from the North Sea to the South Sea, being of such difference the one from the other in rising and falling, yet is the Land that diuideth them not past eighteene or twentie leagues in breadth from Coast to Coast. So that both the said Seas, being all one Ocean, this strange effect is a thing worthy greatly to bee considered of all such as haue inclination and desire to know the secret workes of Nature, wherein the infinite power and wisedome of God is seene to be such as may allure all good Natures to reurence and loue so diuine a Maiestie.

RECENT PAPERS BEARING ON METEOROLOGY.

H. H. KIMBALL, 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 ——

Bulletin of the American Geographical Society. New York. Vol. 38. Feb., 1906.

Abbe, Cleveland. The present condition in our schools and colleges of climatology as a branch of geography and of meteorology as a branch of geophysics. Pp. 121-123.

Abbe, Cleveland. A modified polar projection adapted to studies in dynamic meteorology. Pp. 126-128.

Rotch, A. Lawrence. Proof of the existence of the upper anti-trade and the meteorological conditions at lesser heights in the northern Tropics. Pp. 128-130.

Brown, Robert Marshall. Notes on the Mississippi River flood of 1903 and on floods of other years. Pp. 131-134.

Nature. London. Vol. 73. Feb. 1, 1906.

B., T. G. Variation of glaciers. Pp. 320-321.

—— International Meteorological Conference at Innsbruck. Pp. 331-332.

Nature. London. Vol. 73. Feb. 8, 1906.

Report of the meeting of the Solar Commission at Innsbruck. Pp. 352-354.

Nature. London. Vol. 73. March 1, 1906.

Kingsmill, Thos. W. A 300-year climatic and solar cycle. Pp. 413-414.

Hildebrandsson, H. Hildebrand. Studies of clouds. Pp. 416-417.

Nature. London. Vol. 73. March 8, 1906.

Rotch, A. L[awrence] and Teisserenc de Bort, L[eon]. The vertical distribution of the meteorological elements above the Atlantic. Pp. 449-450.

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Richards, Theodore W., and Jackson, Frederick G. A new method of standardizing thermometers below 0° C. Pp. 451-454.

Quarterly Journal of the Royal Meteorological Society. London. Vol. 32. Jan., 1906.

Moore, John W. The rainstorm of August 24-26, 1905, in eastern Ireland. Pp. 1-10.

Newton, William B. The aquameter. Pp. 11-13.

—— Rainfall of China and Korea. [Extract from paper by T. Okada.] P. 28.

Sutton, J. R. Comparison between Glaisher's factors and Ferrel's psychrometer formula. Pp. 35-45.

Ball, John. A rapid method of finding the elastic force of aqueous vapor and the relative humidity from dry-bulb and wet-bulb thermometer readings. Pp. 47-52.

Meinardus, Wilhelm. Variations in the circulation of the North Atlantic and the phenomena connected therewith. [Translated by R. H. Scott.] Pp. 53-55.

Science. New York. New Series. Vol. 23. Feb. 16, 1906.

McKee, Ralph H. The primeval atmosphere. Pp. 271-274.

Science. New York. New Series. Vol. 23. March 9, 1906.

Tamura, S. Tetsu. Japanese meteorological service in Korea and China. Pp. 396-397.

Symons's Meteorological Magazine. London. Vol. 41. Feb., 1906.

W., A. The packing of meteorological instruments. Pp. 9-10.

Annuaire de la Société Météorologique de France. Paris. 54 année. Jan., 1906.

Teisserenc de Bort, L[eon]. Sur l'études des alizés et des contrealizés sur l'Atlantique Nord. Pp. 9-14.

Durand-Gréville, E. Les cartes d'isobars par millimètre et la prevision journalière du temps. Pp. 27-32.

Teisserenc de Bort, L[eon]. Le concours de prévision du temps de Septembre 1905. Pp. 32-35.

Ciel et Terre. Bruxelles. 26 année. 1 fév., 1906.

Hergesell, H[ugo]. L'état actual et l'avenir de la météorologie maritime. Pp. 567-575.

Ciel et Terre. Bruxelles. 26 année. 16 fév., 1906.

—— La couche d'air chaud des régions elevées de l'atmosphère, [Note.] Pp. 610-612.

—— Effets magnétiques de la foudre sur les roches volcaniques. [Note.] Pp. 615-616.

Revue Néphologique. Mons. Fév., 1906.

Bracke, A. Formation de ciel moutonne. Pp. 9-11.

B[racke], A. Le relief du sol et la pluie. Pp. 13-14.

Bracke, A. La direction des cirrus. Pp. 14-16.

Annalen der Hydrographie und Maritimen Meteorologie. Berlin. 34 Jahrgang. Heft 2, 1906.

Köppen, W. Die Drachenstation der Deutschen Seewarte. Pp. 49-62.

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Köppen, W. Die Drachenstation der Deutschen Seewarte. Pp. 97-110.

Heyne, —. Die Witterung zu Tsingtau im Juni, Juli, und August 1905, nebst einer Zusamenstellung für den Sommer 1905. Pp. 110-114.

Aus dem Archiv der Deutschen Seewarte. Hamburg. 28 Jahrgang. No. 2, 1905.

Knoche, Walter. Ueber die räumliche und zeitliche Verteilung des Wärmegehalts der unteren Luftschicht. Pp. 1-46.

Gaea. Leipzig. 42 Jahrgang. März 1906.

—— Die Bekämpfung des Nebels durch Elektrizität. Pp. 150-151.

—— Die Störungen der Luft und des Wassers. Pp. 153-159.

Illustrirte Aeronautische Mitteilungen. Strassburg. 10 Jahrgang. Feb., 1906.

Wegener, Kurt. Die meteorologischen Schwierigkeiten der Drachenaufstiege. Pp. 33-40.

—— Ein neuer Windmesser für direkte Ablesung. Pp. 85-87.

Meteorologische Zeitschrift. Braunschweig. Band 23. Feb., 1906.

Gockel, A[lbert]. Ueber den Ionengehalt der Atmosphäre. Pp. 53-67.

Klein, [Hermann Joseph]. Cirrus-Studien. Pp. 67-82.

Hann, J[ulius]. Der Pulsschlag der Atmosphäre. Pp. 82-86.

—— Ergebnisse meteorologischer Beobachtungen in Ost-Spitzbergen 1894-94. P. 87.

Polis, P[eter]. Ergebnisse der Luftdruckregistrierungen zu Aachen 1896 bis 1903. Pp. 87-92.

Zöllner, S. Graphische Darstellung der täglichen Bestrahlung der Erde durch die Sonne in verschiedenen Monaten und Breiten. Pp. 92-94.

Less, E[mil]. Thévenet: Recherches sur la prévision du temps en Algerie. Pp. 94-95.

Mitteilungen von Forschungsreisenden und Gelehrten aus den Deutschen Schutzgebieten. Berlin. 18 Band. 4 Heft 1905.

Uhlig, C. Regenmessungen aus Deutsch-Ostafrika. Pp. 352-359.

—— Resultate der meteorologischen Beobachtungen in Herbertshöhe. Pp. 360-367.

—— Resultate der Regenmessungen in Kaiser-Wilhelmsland, im Bismarck-Archipel, auf den Karolinen, Marianen, und Marshall-Inseln. Pp. 368-375.

Hemel en Dampkring. Amsterdam. 3 Jahrgang. Feb., 1906.

Nell, Chr. A. C. Uitkomsten der waarnemingen omtrent poolbanden, van 1874 tot 1894 hoofzakelijk te Groningen en te Oosterbeek (bij Arnhem) verricht door Civ. Ing. H. I. Groneman. Pp. 145-150.

Nell, Chr. A. C. De halo's. Pp. 157-162.

RECENT ADDITIONS TO THE WEATHER BUREAU LIBRARY.

H. H. KIMBALL, 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.

Associacion de Ingenieros y Arquitectos de Mexico. Anales. Tomo XII. 341 pp. 8°. Mexico. 1904.