SPECIAL PAPERS ON GENERAL METEOROLOGY.

RECENT ADDITIONS TO THE WEATHER BUREAU LIBRARY.

C. FITZHUGH TALMAN, Junior Professor in Charge of Library.

The following have been selected from among the titles of books recently received as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies. Anonymous publications are indicated by a ———.

[Aichiken meteorological observatory.]
[Hurricane of Sept. 23, 1912.] [In Japanese.] [Nagoya. 1912.] 45 p. illus. 8°.

Australia. Commonwealth bureau of meteorology.
Average rainfall map and isohyets of Western Australia Div. 1, sect. 4. [Melbourne. 1911.] Sheet 100 by 69 cm.

Batavia. Royal magnetical and meteorological observatory.
Observations made in 1909, v. 32. Batavia. 1912. xxx, 159 p. f°.

Brand, W.
Die Temperatur in der Ausguckstonne am Grossmast der "Danmark." Messungen mit dem Schwarzkugel thermometer. København. 1912. 565–592 p. 4°. (Danmark-Ekspeditionen til Grønlands Nørdostkyst 1906–1908, Bind 2, Nr. 7.)

Brounov, P.
Quelques données sur le Bureau météorologique du Comité scientifique du Ministère de l'agriculture. [St. Petersburg. 1912.] 7 p. 8°.
Quelques considérations sur l'organisation du Service météorologique dans les buts de l'agriculture. St.-Pétersbourg. 1912. 12 p. 8°.

Coronas, José.
The extraordinary drought in the Philippines, October, 1911, to May, 1912. Manila. 1912. 19 p. 4°. (Philippine Islands. Weather Bureau. [Publication.])

Hesse. Grshzgl. Hydrographisches Bureau.
Deutsches meteorologisches Jahrbuch für 1911, Hessen. Darmstadt. 1912. [17], 61 p. f°.

International commission on radiation.
Bericht über die erste Tagung der Strahlungskommission. Zürich-Selnau. 1912. 22 p. 4°.

Italy. Comitato talassografico italiano.
Risultati di lanci di palloni piloti eseguiti alla stazione aerologica di Vigna di Valle (giugno 1910–maggio 1911), per Cesare Fabris. Venezia. 1912. 46 p. 4°. (Memoria 8.)
Lanci contemporanei di palloni piloti dal 1 maggio al 6 luglio 1912, per cura della Direzione del Servizio aerologico italiano. Venezia. 1912. 2 pts. 4°. (Memoria 14.)

Klute, Fritz.
Die Schneereste des Schwarzwaldes im Frühsommer und die Beziehungen ihrer Lage zu den Stellen ehemaliger Vergletscherung. Freiburg. 1911. 56 p. maps. 8°. (Inaug.-diss.—Freiburg.)

Loisel, Julien.
Les orages. Application des ondes hertziennes à leur observation. Paris. [1912.] vii, 120 p. 8°.

Maire, Albert.
L'œuvre scientifique de Blaise Pascal. Bibliographie critique. Paris. 1912. xxviii, 184 p. 8°.

Mauritius. Royal Alfred observatory.
Annual report of the Director, 1911. Mauritius. 1912. 12 p. f°.
Results of the magnetical and meteorological observations, 1902, 1903, 1908. Mauritius. 1911. 3 v. f°.

Meinardus, W.
Skizze des Klimas von Münster [i. W.]. n. p. [1912.] 8 p. 4°. (*Reprint:* Festschrift z. 84. Versam. Deutscher Naturf. u. Ärzte, Münster i. W., 1912.)

Patoxt y Jubert, Rafel.
Pluviometria Catalana. Resultats de cinqueni 1906–1910. Sant Feliu de Guixols. 1912. 311 p. f°.

Schott, Gerhard.
Geographie des Atlantischen Ozeans. Hamburg. 1912. xii, 330 p. illus. 4°. [Chapter 5: Color, temperature, currents, etc.; chapter 6: Climate.]

Smith, J. Warren.
Rain. Columbus, Ohio. 1912. 16 p. 8°. (Ohio Agric. coll. Extension bull., Nov., 1912, v. 8, no. 3.)

Straits settlements.
Meteorological returns for the year 1911. Singapore. 1912. var. pag. f°.

Uruguay. Instituto meteorológico nacional.
Datos del Observatorio central Montevideo, años 1906 á 1910. 1a & 2a Partes. n. t. p. f°. [Mimeographed.]

Versammlung von Vertretern der Flugwissenschaft.
Verhandlungen, 3–5 Nov. 1911 zu Göttingen. München. 1912. 60 p. f°.

RECENT PAPERS BEARING ON METEOROLOGY.

C. FITZHUGH TALMAN, Junior Professor in Charge of Library.

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 and other communications bearing on meteorology and 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 ———.

Cairo scientific journal. Alexandria. v. 6. September–October, 1912.
Craig, J. J. Meteorological factors of mortality in Cairo and Alexandria. p. 246–250.

Engineering news. New York. v. 69. January 9, 1913.
Baird, S. P. Increased flow of springs just before rains. p. 3[illegible]

Geographical journal. London. v. 41. January, 1913.
——— The winds of Lake Tanganyika. p. 67–68.

Geographical society of Philadelphia. Bulletin. Philadelphia. v. 11. January, 1913.
Roorbach, G. B. The prevention of floods at Pittsburgh. p. 40–44.

Indian meteorological department. Memoirs. Calcutta. v. 21. pt. 3. 1912.
Walker, Gilbert T. Data of heavy rainfall over short periods in India. p. 1–110.

Korea. Government General of Korea. Scientific memoirs. Chemulpo v. 2. 1912.
——— Summary of the climatological data for 1909. p. 1–25.

Meteorological society of Japan. Journal. Tokyo. 31st year. November, 1912.
Fujiwhara, S. Periodic change of climatic elements relating to the oscillation of the earth's axis. (Preliminary report.) p. 1–4.

Nature. London. v. 90. January 9, 1913.
Shaw, W. N. Léon Philippe Teisserenc de Bort. p. 519–520. [Obituary.]

Royal society of South Africa. Transactions. Cape Town. v. 2. pt. 5. 1912.
Sutton, J. R. On some meterological conditions controlling nocturnal radiation. p. 381–391.
Rudge, W. A. Douglas. On the variation in the value of the atmospheric electrical potential with the altitude. p. 395–400.

Scientific American. New York. v. 108. January 18, 1913.
——— The atoll cloud. p. 69.
Scientific American supplement. New York. v. 75. January 16, 1913.
Talman, Charles Fitzhugh. Brontidi, mistpoeffers, or Barisal guns. p. 47–48.
Western society of engineers. Journal. Chicago. v. 17. December, 1912.
Smith, Albert. Wind pressure on buildings. p. 987–1009.
Académie des sciences. Comptes rendus. Paris. tome 155. 1912.
Gouré de Villemonté, G. Sur un cas de foudre globulaire. p. 1567–1568. (23 déc.)
Besson, Louis. Sur un élément périodique des variations du baromètre. p. 1630–1632. (30 déc.)
Astronomie. Paris. 27 année. Janvier 1913.
Durand-Gréville, E. Le vocabulaire météorologique. p. 24–28.
Ciel et terre. Bruxelles. 33 année. Octobre–novembre 1912.
L., E. L'éclair en zigzag. p. 357–359.
Cosmos. Paris. 61 année. 26 décembre 1912.
——— Les perturbations électriques de l'atmosphère et la télégraphie sans fil. p. 703.
Journal de physique. Paris. 5 série. tome 2. Novembre 1912.
Bosler, J. Sur les relations des perturbations magnétiques avec les courants telluriques et les éruptions solaires. p. 877–891.
Nature. Paris. 41 année. 11 janvier 1913.
Loisel, J. Les phénomènes optiques de l'atmosphère. p. 87–90. [Illustrated with photographs of rainbows, halos, etc.]
Radium. Paris. tome 9. Décembre 1912.
McClelland, J. A., & Nolan, J. J. Sur la charge électrique de la pluie. p. 421–426.
Revue générale d'optique et de mécanique de précision. Paris. No. 11. Novembre 1912.
Quentin, H. Les enregistreurs avertisseurs d'orages système Turpain. p. 207–211.
Société météorologique de France. Annuaire. Paris. 60 année. Août-septembre 1912.
Raymond, G. Sur l'action photo-électrique de la radiation solaire. p. 217–226.
Beiträge zur Physik der freien Atmosphäre. Leipzig. 5. Band. Heft 1. 1912.
Peppler, A. Studien über Zyklonen und Antizyklonen. p. 1–62.
Höllerer, J. Eine neue Methode zur raschen Auswertung von Pilotballon-Aufsteigen. p. 69–72.
Meteorologische Zeitschrift. Braunschweig. Band 29. Dezember 1912.
Maurer, J. Aus älteren und neueren Messungen der Sonnenstrahlung auf hochalpinen Stationen. p. 561–569.
Vujevič, P. Die Temperaturen verschiedenartiger Bodenoberflächen. p. 570–576.
Bjerknes, V[ilhelm Friman]. Millimeter oder Millibar? p. 576–78.
Köppen, W[ladimir]. Ein Wort über die Beschlüsse der Internationalen Kommission für wissenschaftliche Luftschiffahrt. p. 578–580.
Dorno, C. Über den Einfluss der gegenwärtigen atmosphärisch optischen Störung auf die Strahlungsintensitäten der Sonne und des Himmels, sowie auf die luftelektrischen Elemente. p. 580–584.
Schmauss, A[ugust]. Millimeter oder Millibar ? p. 585–586.
Trabert, Wilh[elm]. Millimeter oder Millibar ? p. 586–587.
Quervain, A. de. Merkwürdiger Himmelsanblick im Inneren Grönlands im Sommer 1912. p. 587.
——— Tätigkeitsbericht des magnetisch-meteorologischen Observatoriums zu Batavia 1911. p. 587–588.
Maurer, J. Die atmosphärische Trübung. p. 588.
Hann, J[ulius] v. Die niedrigste Jahrestemperatur der Erde. p. 590–592.
H[ann], J[ulius] v. Zum Klima von Bochara. p. 593.
——— Klima von Dornawatra und Temperatur von Czernowitz. p. 595–596.
Kesslitz, W. v. Uber die Messung der Lufttemperatur zur See. p. 599–602.
Petermanns Mitteilungen. Gotha. 58. Jahrgang. November 1912.
Naegler, Wilhelm. Die Erdbodentemperatur in ihren Beziehungen zur Entwicklung der Vegetation. p. 253–257.
Physikalische Zeitschrift. Leipzig. 13. Jahrgang. 15. Dezember 1912.
Kohlrausch, K. W. Fritz. Über die in der Atmosphäre suspendierten festen radioaktiven Zerfallsprodukte. p. 1193–1198.
Marten, W. Vergleichsmessungen mit Pyrheliometern. p. 1212–1216.
Kähler, K[arl]. Die Schwankungen des elektrischen Leitvermögens der Atmosphäre und des vertikalen Leitungsstroms in Potsdam. p. 1216–1221.
Knoche, Walter. Hoher Wert der induzierten Aktivität und der Leitfähigkeit in der Kordillere von Las Condes. p. 1221–1222.
Budig, W. Staubmessungen in freier Atmosphäre. p. 1224.

Naturforschender Verein. Verhandlungen. Brünn. 49. Band. 1910.
Mendel, Gregor. Die Windhose vom 13. Oktober 1870. p. 54–71.
Zeitschrift für Balneologie. Berlin. 5. Jahrgang. 15. Dezember 1912.
Guenther, Konrad. Vom Klima auf Ceylon. p. 546–551.
Navigazione aerea. Roma. anno 1. Dezember 1912.
Kahanowicz, Maria. I risultati ottenuti dal Rykatcheff nei sondaggi internazionali dell' atmosfera, eseguiti in Russia negli anni 1900–1909, messi in confronto con quelli di Wagner. p. 33–36.
Pontificia accademia Romana dei nuovi Lincei. Roma. v. 29. 1911.
Negro, Carlo. La meteorologia nel folk-lore. p. 115–161.
Galli, Ignazio. Gli effetti meccanici dei fulmini globulari. Memoria seconda. p. 251–317.

MONTHLY AND ANNUAL PRECIPITATION AT MAZATLAN, SINALOA, MEXICO, FOR THE YEARS 1909, 1910, 1911, AND 1912.

[Data furnished by W. E. Alger, United States consul.]

	1909	1910	1911	1912	Average.
January	T.	T.	T.	0.18	0.04
February	0.00	0.00	1.77	0.33	0.52
March	0.00	0.00	0.00	T.	T.
April	0.00	T.	T.	0.00	T.
May	0.00	0.00	T.	T.	T.
June	0.07	0.40	0.52	4.26	1.31
July	5.52	8.57	8.76	1.11	5.99
August	9.28	4.61	6.10	3.19	5.80
September	1.92	5.03	2.18	7.04	4.04
October	T.	4.04	3.91	0.62	2.14
November	0.00	0.00	1.37	0.00	0.34
December	2.89	1.69	0.56	0.26	1.35
Annual	19.68	24.34	25.17	16.98	21.53

NOTE.—On account of the meager character of the data regarding rainfall distribution over the Pacific coast districts of Mexico, the above table should be of interest. Attention is at once drawn to the heavy rainfall of the summer months, and the marked dryness of the winter and spring periods, conditions directly opposing those prevailing along the Pacific coast of the United States. P. C. D.

TWO CLIMATIC CROSS-SECTIONS OF THE UNITED STATES.[1]

By ROBERT DE C. WARD, Harvard University, Cambridge, Mass.

Introduction.—Between the tabulated data on a page of some climatological report, and actually experiencing the climate itself and observing its effects, there is a difference as great as that between reading a description of a glacier and seeing or climbing over the glacier. A traveler who is something more than a sightseer, and who is interested in climatological "field work," can see, even through a car window, types of meteorological conditions and their effects which will give him a vivid impression of the larger facts of climate and of their control over man. Such field work is not instrumental. It may be termed a series of "climatic snapshots." The impressions thus gained are inevitably superficial. But, taken together, they constitute a sort of moving picture as much more vivid than the tabulated data of climate as the real glacier is more vivid than the printed account. The writer had the privilege of taking part in the recent Transcontinental Excursion of the American Geographical Society. This trip gave an excellent opportunity to see two climatic cross-sections of the United States. As the journey was made rapidly, the climatic contrasts were sharply emphasized, and the "snapshots" were very clear and instructive. Some of the impressions thus gained are briefly described here in the hope that readers who may not have had the good fortune to take such a trip may perhaps, in some slight way, share in the meteorological advantages of the journey.[2]

[1] Notes taken during the Transcontinental Excursion of the American Geographical Society of New York, Aug. 22–Oct. 18, 1912.

[2] The party left New York Aug. 22, by special train, and traveled via Albany, Chicago, Madison, Duluth, Yellowstone National Park, Spokane, Seattle, San Francisco, Salt Lake City, Denver, Santa Fe, and the Grand Canyon to Phoenix, Ariz. From Phoenix the return journey was via Kansas City, Memphis, Birmingham, Chattanooga, Asheville, and Washington to New York.