

clouds are depicted over the sea. In the most prominent picture of the second gallery, "Cader Idris" (87), H. Hughes-Stanton includes clouds of the cumulus type which in their hard outlines and rather unnatural coloring, are very jarring when inspected from any of the nearer parts of the room, but if the picture is viewed from the greatest distance possible the effect becomes more attractive and the lights and shadows of the clouds blend into one another in a more harmonious whole. A very similar effect is produced in the smaller work by the same artist, "Welsh Hills near Barmouth" (602).

When looking at a wide stretch of country, whether it be an extensive plain as seen from the top of a range of hills, or the hills and valleys of a mountainous country viewed from some vantage point, the most attractive effects are often obtained on a day when the sky is covered with detached clouds of the cumulus type, causing a bright contrast between the light and shade on the country below. A scene of this kind is depicted by Bertram Priestman in "The Walls of Langstrothdale" (114), but to the critical observer the whole is spoiled by the unreality of the clouds themselves, though the shadow effect on the ground is more successful. The only type of cloud which is almost uniformly well dealt with is where the "clouds" appear as mountain mists, and one concludes that artists must subject this type to much more study than the clouds in the sky above. Some of these mountain mist effects are notably good. "The Head of the Glen," by Peter Graham (439), and "Yarrow: 'The Vapors Linger Round the Heights,'" by Alfred Parsons (126), may be mentioned among others in this connection. In "Easedale Tarn, Westmorland" (207), J. H. Crossland has shown us clouds over a mountain top which are delightfully real.

Attempts to indicate showers passing over a landscape generally lead to a more successful portrayal of the dark falling rain in the shower than of the cumulonimbus cloud above. This appears to be a subject that might give far more realistic and attractive results than any shown in this year's exhibition. "The Gravel Pit," by Arthur Friedenson (583), seems to be the most successful of those exhibited. The high cloud at sunset in B. W. Leader's "Still Evening" (175) raises an interesting speculation as to the probability of the conditions shown being true to life. Bands of high cloud are brightly tinted pink in the rays of the setting sun, whereas other clouds in the same part of the sky, but at an apparently higher level, are illuminated, but without color. The writer does not remember a case of this kind coming under his observation, although it appears not to be impossible. The interesting and quite common case where the high clouds are illuminated with a pink glow, while the lower ones have already passed into the shadow of the earth, does not seem to have attracted the artist's imagination. Very interesting information as to the relative heights of different cloud layers may sometimes be obtained in these circumstances.

Observers often, in dealing with Nature herself, have difficulty in deciding to which of the artificial types of the international classification a cloud belongs, so infinite are the varieties which occur, but all meteorological observers who visit the academy will undoubtedly give a sigh of relief that they are not expected to classify the strange shapes which appear in the sky in "Evening" (233), to mention one case only, though it does not stand alone. In "Wind from the South" (383) the artist presumably set out to portray falling snow; but surely with a title so meteorological he might have given more careful

attention to the meteorological elements in his picture. Finally, all who hold that gunfire has an influence on rainfall should undoubtedly visit the academy for confirmation of their views. If the clouds over the battlefields of France really take the forms shown in some of the pictures (notably "Dawn," 333), few will have the hardihood to maintain that the rainfall or even the entire climatic conditions of the neighborhood may not be seriously affected.

Grove Karl Gilbert, 1843—1918.

Dr. Grove Karl Gilbert, one of the charter members of the Washington Academy of Sciences, died at Jackson, Mich., on May 1, 1918, within a few days of his 75th birthday (May 6, 1843). He had been associated with the scientific life of Washington for 47 years, having been geologist of the Wheeler and Powell surveys in 1871 and 1874, and one of the original staff of the present United States Geological Survey at its establishment in 1879. Dr. Gilbert was a member of the Geological Society of Washington, of which he was president in 1895 and 1909; the Philosophical Society of Washington, of which he was president in 1892; the National Academy of Sciences; and many other American and foreign scientific organizations. His broad-minded interest in the problems of the earth kept him an active investigator throughout his life, and his published papers cover almost the entire range of modern geological science.—*Jour., Wash. Acad. Sci., June 4, 1918, p. 379.*

Dr. Gilbert was not directly occupied with meteorological problems as such, but one of his early papers bore directly on the problem of the deflection of winds on a rotating earth; while his classic monographic study of the shorelines of the Pleistocene lake named after Bonneville could not but lead him to a study of the prevailing winds of a prehistoric geological epoch. Again, his studies on changes in levels of the Great Lakes revealed a tilting that must be taken account of in any study of very long period oscillations in the lake levels due to precipitation (see this REVIEW, April, 1898, p. 164)¹.—Editor.

Yudzi Wada, 1859—1918.

Dr. Y. Wada, director of the Korean meteorological service established in 1904 by Japan after the Russo-Japanese War, died after a brief illness on January 5, 1918. Dr. Wada was born September 29, 1859, in Nihonmacu; early learned the French language; graduated from the Imperial University of Tokyo with the title Rigaksi in 1879, having specially devoted himself to physics. On graduating he entered the Geographical Office—then including the work of the present Central Meteorological Observatory—where he was occupied with geodesy, astronomy, and meteorology. In 1882 he began his activity as a weather forecaster for the Japanese hurricane service then under E. Knipping; later he continued this work alone as chief of the forecasting service. In 1890–1892 he visited the Parisian universities and observatories for purposes of study; and on the Japanese occupation of Korea and southern Manchuria in 1904 he

¹ See also his paper "The water level of Great Salt Lake," this REVIEW, January, 1901, 29: 23–24, for a discussion and interpretation of lake-level fluctuations.

was put in charge of the establishment of Japanese meteorological stations there. Some account of the Japanese service in Korea is given by his own hand in this REVIEW, September, 1905, pages 397-399, accompanied by a portrait. He was one of the founders of the Meteorological Society of Japan.

Wada received the degree of Rigakhaksi from the Imperial University of Tokyo in 1913. His official military rank was that of brigadier general, and his decorations included those of Order of the Rising Sun, Fourth Class; of The Sacred Treasure, Third Class; and of Hakke, Second Class.¹

HALLEY LECTURE OF 1918 AT OXFORD.

The annual Halley lecture was delivered on May 28 by Sir Napier Shaw, director of the Meteorological Office. The subject was "The First Chapter in the Story of the Winds." The lecture, illustrated by lantern slides, dealt with Halley as the first framer of a physical explanation of trade winds and monsoons. His views still in part hold good, but the phenomena are more complicated than Halley thought. Contrary to what was once surmised, observation has shown that the horizontal circulation of the air is explicable, the vertical circulation being too complex for exact determination at present, though progress may be hoped for in this direction.—*Nature, London, May 30, 1918.*

NOTES.

The Royal Society of Edinburgh has awarded its Keith prize to Mr. R. C. Mossman for his work on the meteorology of the Antarctic regions, which originated in the series of observations made by him during the voyage of the *Scotia* in 1902-1904, and has continued to the present time.—*Nature, May 9, 1918, p. 189.*

Nature announces the death, on March 22, 1918, of Mr. Donald Salter, from wounds received in action. Mr. Salter joined the staff of the British Rainfall Organization at 18 years of age, in 1908, and was the responsible

cartographer for the numerous rainfall maps since published by it.—*Nature, May 9, 1918, p. 190.*

The Cambridge Scientific Instrument Co., Cambridge, England, is publishing, free on receipt of 6d. in stamps, a very useful spiral chart comparing and interconverting Fahrenheit and centigrade thermometric scales throughout an unusually long range of temperature, by 2° intervals.—*Nature, May 9, 1918, p. 192.*

Dr. Griffith Taylor, who received the Thomson Foundation medal from the Royal Geographical Society of Queensland last year, has been awarded the David Syme research prize (medal and £100) for 1918 by the University of Melbourne, his thesis being the correlation of Australian physiography, meteorology, and climatology with special reference to the control of its settlement and industrial development.

The David Syme prize is awarded annually by the University of Melbourne for the best Australian research on any subject, and the contestants must have resided in Australia for the preceding five years. Dr. Taylor has also been appointed instructor in Australian meteorology and geography in that university, and his lectures are to be, probably, the first course of the sort in any of the Australian colleges and universities.—*Personal correspondence and "The Age," Melbourne, May 2, 1918.*

Nature (London) of May 30, 1918, reports that the lords commissioners of His Majesty's treasury have approved the proposal of the meteorological committee that, in view of the variety and importance of the scientific problems on which the meteorological office is required to advise the fighting forces, Sir Napier Shaw shall, for the period of the war, become scientific adviser to his Majesty's Government in meteorology, and be relieved of the administrative duties of the meteorological office, but retain the chairmanship of the meteorological committee. Lieut. Col. H. G. Lyons has been appointed acting director of the meteorological office for the same period.

" * * * The value in war of correct forecasts is obvious, but there are many other ways in which an intimate knowledge of meteorology may be of use, and no more suitable man [than Sir Napier] could have been found for the new post."

¹ Based, in part, upon notice with portrait in Journal of the Meteorological Society of Japan, February, 1918, 37th year.