epoch in physiology. In 1848 appeared the first volume of that book, 'Untersuchungen ueber thierische Elektricität.' In 1849 followed the first part, and in 1860 the second part, of the second volume. It was not simply a communication of new striking facts and new methods; it was an exhaustive statement of the creation and completion of a new science, presented in a brilliant style and in a language unusually clear and full of life and force. His later contributions to the physics of nerve and muscle appeared mostly in the reports of the Berlin Academy of Sciences, or in the Archiv für Physiologie, of which du Bois-Reymond was the editor. Among the fundamental facts which were added by du Bois-Reymond to physiology we have to mention, in first place, the establishment and development of the laws of the muscle current, the discovery of the nerve current, the discovery of the so-called negative variations in muscle and in nerve, the discovery of the electrotonus, etc., etc. Du Bois-Reymond has devised and invented numerous important scientific apparatus, many of which are to be found in all well-equipped physiological laboratories; for instance, the induction coil, the electric key, the non-polarizable electrodes, etc., etc. Du Bois-Reymond's name will live forever in the science of physiology.

Aside from his special scientific work, we should not omit to mention the public speeches (Reden) delivered by du Bois-Reymond on many special occasions. In those speeches, as a rule, an important subject was treated in a classical style. They were models of clearness and brilliancy, and nearly every one of his speeches has been an event in its time, and many of them have been translated into all civilized languages. We need only to mention here the following: 'Darwin *versus* Galiani,' 'Die Lebenskraft,' 'Ueber die Grenzen des Naturerkennens,' with his *ignorabimus*, and 'Die Sieben Welträthsel.' He was as forcible a speaker as a writer. And both his pen and his speech have been employed only for a fearless propagation of high ideals and in defence of the rational principles underlying modern sciences.

His last work was one of love. Shortly before he died he finished reading the proofs of his carefully prepared memorial of his friend Helmholtz.

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CURRENT NOTES ON METEOROLOGY.

THE PLAGUE AND CLIMATIC CONDITIONS.

THE present outbreak of the plague in India suggests certain considerations with reference to the possible connection of its occurrence with climatic conditions. While it used to be thought that the plague could not occur in the Torrid Zone, it is now known, in view of outbreaks of the disease within the tropics in Arabia and India, that this rule does not hold rigidly. In Egypt the autumn seems to be the season in which the plague appears, and June the month in which it dies out. In Europe, outside of Turkey, the plague season has been summer and autumn. In India no direct connection with the seasons could be detected in the epidemics of 1815–21, the first outbreak concerning which we have trustworthy information, and of 1836–38. From all the data at hand, the general conclusion is that a moderately high temperature favors the development and extension of the plague, but extremes of heat and cold are unfavorable to its breaking out. Exceptions to this rule are many. For instance, in the epidemic at Smyrna in 1735 the heat was so excessive during the plague that many of the people who left the town for neighboring villages died of sunstroke on the way, while in Roumelia, in 1737–38, the plague continued in many places in which the temperature fell at times to 3° Fahr. Regarding the effect of atmospheric mois-

ture there is also some doubt. Some authorities hold that a high degree of humidity is necessary for the epidemic extension of the plague, while others maintain the opposite view. Certainly the occurrence of many outbreaks at high altitudes in Kurdistan, Arabia, China and India makes it clear that a moist atmosphere is not always an essential in the spread of the epidemic. The present outbreak in India, coming at a time when medical men in that country and all over the world are thoroughly alive to the importance of studying the climatic relations of the disease, will undoubtedly result in giving us much additional information in this connection. The occurrence of this outbreak in India at a time of famine recalls the fact that the plague 1815–21 broke out in the island of Cutch in a district where there had been a famine a short time before.

CHINOOK WINDS IN THE NORTHWEST.

THE conditions under which chinook winds occur in the Northwestern States is well illustrated on the Portland, Ore., weather map for December 3d, last. At 5 a. m., Pacific time, on that day an area of low pressure was central over the ocean northwest of Washington, extending over British Columbia and northern Washington, while an anticyclone was central near Salt Lake City. This distribution of pressure naturally resulted in a flow of air from the south and southwest over the States of Washington, Oregon, Idaho and Montana. The temperatures were from 46° to 50° west of the Cascade mountains, and from 24° to 32° east of them. The effect of the mountain ranges in causing an adiabatic warming of the descending air is well shown in the course of the isotherms of 40° and 50°, which run north and south parallel with the mountains in Washington and Oregon, and in the direction of the 30° isotherm, which turns eastward across northern Idaho, running south of Helena, Mont., where the wind was south and came across the Rockies, and then turning northward east of Havre. Our chinook winds are similar to the well-known foehn winds of Switzerland. In both cases they appear as warm and dry winds, blowing down from mountain ranges, and when they occur in winter have the habit of rapidly evaporating the snow which may be on the ground at the time. In Switzerland this habit has gained for the foehn the characteristic name of *Schneefresser*. In the United States the snow-eating quality of the chinook is well known, and is an extremely important factor in clearing away the snow blockades on railroads and in removing the snow from the stock ranges.

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CURRENT NOTES ON ANTHROPOLOGY.

ETHNOLOGIC MEDICINE.

THE principles of the general development of the arts applied to medicine is the subject of an article by Dr. J. H. McCormick in the *American Antiquarian* for August last. He points out that in many tribes, geographically remote, at the same stage of culture, similar ideas and methods in reference to the practice of medicine and the power of drugs prevailed. Magical formulas were adopted for the cure of disease, and mysterious and eccentric remedies were in vogue, all quite analogous in like stages of culture everywhere. The conjurations of the ancient Egyptians, *mutatis mutandis*, would pass for those of the Cherokees or Nahuas.

The author draws the just inference that those who assert that such similarities are evidences of historic unity, and that they should be explained by some ancient community of culture, do not correctly apprehend modern psychology. This teaches, as its basic principle, that like conditions lead