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

to similar trains of thought and those to analogous results.

SACRED SECRET SOCIETIES.

IN *L'Anthropologie* for October there are accounts of two sacred secret societies which illustrate the curious aberrations of religious doctrines, unrestrained by reason.

The society of 'Leopards' exists in Sierra Leone. Their god is represented by a manioc root, stuffed with various holy objects. They are cannibalistic, and the price of initiation is to induce some member of the applicant's family to wander into the midst of the assembly, there to be slain and eaten. The reward is to receive this fetish, which will bring good luck.

The other society, already mentioned by some writers, is that of the Aioi, of Tahiti and some other Polynesian islands. It is composed of both men and women, some belonging to the highest castes. It is devoted to the genesiac cult in its most abnormal forms, and one of its laws is that the members must scrupulously avoid the reproduction of their kind.

The incredibly obscene groups in pottery and metal excavated from the tombs of the Yuncas in Peru can probably be explained by the existence among them of some such religious society.

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NOTES ON INORGANIC CHEMISTRY.

SEVERAL years ago Professor Dunnington, of the University of Virginia, showed that the element titanium was much more widely distributed in nature than had been supposed. Indeed, not only all rock masses, but even all soils, examined by him were found to contain considerable quantities. More recently Professor Charles E. Wait, of the University of Tennessee, has had occasion to analyze the ashes of various vegetable substances for titanium and finds it to be an invariable constituent. The ash of oak contains 0.31 per cent., of apple wood 0.11 per cent., and of cotton-seed meal 0.02 per cent. In coals titanium was found present to the extent of from nearly one per cent. in bituminous coals to over two and a-half per cent. in Pennsylvania anthracite. Titanium thus appears to be one of the most widely distributed elements and it is not improbable that analyses will show that it is also found in animals.

IN the last *Nature* Professor Spencer Pickering comes to the support of Professor Armstrong in his attack upon the theory of electrolytic dissociation of salts in solution. In the course of his article he says: "For a theory to be acceptable it should, at the very least, be reasonably probable, and should not violate any fundamental and well established facts; it should stand the test of any apparently crucial experiments * * * and, I think we may add, it should give some explanation, not simply of the behavior of matter in the condition in question, but also of why matter ever assumes such a condition. The theories of osmotic pressure and ionic dissociation, I believe, have not done this."

THE opening of the Davy-Faraday Research Laboratory in London should mark an epoch in chemical science in Great Britain. This laboratory has been established by Dr. Ludwig Mond at a cost of half a million dollars. $170,000 has been expended in the building and its equipment, while $330,000 remains as an endowment fund. The laboratory is furnished with the most modern instruments and appliances for researches in pure and physical chemistry. In opening the laboratory Dr. Mond said he had named it the Davy-Faraday Research Laboratory, in perpetual memory of those two great pioneers of science who carried out their world-famed and epoch-making researches almost on