quite old. His novel proposition is that, given a better environment, the most inferior race may become superior to all others. "That which we are to-day, others may be to-morrow." He also claims that a race long resident in a given *Milieu* becomes best suited to it, and, granted equal facilities, is sure to surpass all other races there. He quotes the native population of Mexico in illustration. Conquered by Cortes, beaten into the dust by brutal European rule, it has seized the arms of its conquerors, and now is rising in its might above its ancient invaders. "Is it an illusion," he asks, "that reveals to us in the physiognomy of the Yankee the hard, bony face of the Red Skin?"

PRINCIPLES OF THE STUDY OF MYTHOLOGY.

IN a recent number of the monthly journal *Nord und Sud*, Dr. Thomas Achelis has a suggestive article on the relations of mythology to ethnography. He advocates and illustrates the principle now constantly gaining ground among advanced anthropologists, that if we learn accurately the daily life of primitive peoples, understand the impressions they receive from their environment and the mental impulses they gain from language and the interchange of ideas, then psychology is prepared to explain their religious perceptions according to definite and fixed principles. Similarities or identities between remote tribes will no more call for the theory of unity of source than the mere similarity of the sound of words would justify the etymologist in adopting the same theory for its explanation.

In all of his writings Dr. Achelis has pursued this same line of thought, and, although this has not recommended him to those of his reviewers who adhere to a more antiquated philosophy, there can be no question but his is the 'party of the future.'

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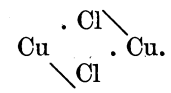
NOTES ON INORGANIC CHEMISTRY.

THE seventh article of the series by Alfred Werner in the *Zeitschrift für anorganische Chemie*, on the constitution of inorganic compounds, describes molecular weight determinations of a large number of salts in organic solvents, such as piperidin, pyridin, methyl sulfid, etc. In the case of many salts regarding which there has been considerable doubt, the results were in accord with the monomolecular formula, as $AlCl_3$, $FeCl_3$, $FeCl_2$; also $CoCl_2$, $CoBr_2$. Tin (stannous) and lead salts were also found to be monomolecular. Cuprous salts were in general normal (CuCl, CuI, etc.), but showed considerable tendency to polymerize by doubling. Cuprous cyanid appeared only in dimolecular form, $Cu_2(CN)_2$. The silver halogen salts showed a strong tendency to polymerization, the iodid having a molecular weight corresponding to $(AgI)_2$, while the chlorid (and bromid) were between $(AgCl)_2$ and $(AgCl)_3$. Silver nitrate, however, had the normal formula $AgNO_3$. Professor Werner is of the opinion that in the polymerized molecule the metal atoms are not united together, but that the union is between metal and non-metal, as



It would seem possible, however, that the union might subsist through the medium of the non-metallic atoms, which would account for the greater tendency to polymerization on the part of the cyanids.

BORIC acid has a quite extended use as a food preservative, but the data as to its effect on health are very meagre. R. A. Cripps, in the *Analyst* for July, recounts a series of experiments on the action of boric acid on the digestive ferments. His results are the following: With malt-extract in presence of 0.01% to 1% boric acid, starch was dissolved completely in 12 minutes, not

completely in 10 minutes. With saliva, starch was dissolved in the presence of 1% or less boric acid in from 8.5 to 11.5 minutes; with no boric acid 11.5 minutes was required. With pepsin, the digestion of egg albumen was not retarded in the presence of 1% boric acid. With zymin, milk albumen with 1% boric acid was completely peptonized in $2\frac{1}{2}$ hours. With Blumenthal's chymosin, a far larger amount of boric acid than was necessary for preservation of food did not affect the fermenting action unfavorably. While boric acid thus does not retard digestion, its physiological action still remains to be finally settled.

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SCIENTIFIC NOTES AND NEWS.

THE 'ENCHANTED MESA' OF NEW MEXICO.

A SURVEY has just been made of the 'Enchanted Mesa,' or Mesa Encantada, of New Mexico, by a party sent out by the Bureau of American Ethnology.

This mesa was brought into prominence several years ago through the work of Bandelier, who ascertained that the neighboring Acoma Indians have a tradition that their ancestors formerly occupied the summit, but abandoned it, together with a part of the tribe, in consequence of the destruction of the pathway leading up one of its precipitous sides; the catastrophe, which was doubtless due to a cloudburst, being ascribed to supernatural agency. The same tradition was subsequently obtained by C. F. Lummis, a well-known student of the Southwestern Indians, and also (with some confirmatory evidence) by F. W. Hodge, of the ethnologic bureau. The traditional catastrophe was so magnified by repetition and so enveloped in mystery that the Indians, and after them the white settlers, had come to regard the mesa as inaccessible.

Two years ago Mr. Hodge, then studying the Acoma Indians, planned to visit the summit in order to seek for traces of the alleged occupancy in prehistoric times; but he was deterred by regard for the sentiments of the Indians, who held the eminence sacred. During the present season, Professor William Libbey, of Princeton University, after elaborate preparations, ascended the mesa, without finding (so far as the accounts published in the newspapers indicate) evidence of occupancy. Reports of this failure duly reached the neighboring Indians; they were annoyed by the suggested impeachment of their tradition, and were thereby the more easily induced to permit the ethnologic party to visit their holy place. So, on September 3d, Mr. Hodge, accompanied by Major George H. Pradt, of Laguna, New Mexico, a U. S. Deputy Surveyor; Mr. A. C. Vroman, a photographer of Pasadena, California; Mr. H. C. Hayt, of Chicago, and two Laguna Indians, proceeded from the Indian pueblo of Acoma to the foot of the mesa, three miles distant, where they were joined by three Acoma Indians. After measuring the eminence by triangulation (the mean of two determinations is 431 feet above the plain on the west), the party at once ascended along the ancient route, and encamped on the summit for the night. During the afternoon and the next day Mr. Hodge examined the ground critically, while Major Pradt made a survey of the mesa, and Mr. Vroman secured a number of photographs. Several potsherds, two stone axes (broken), a fragment of a shell bracelet and a stone arrowpoint were the chief evidences of former occupancy found on the narrow storm-swept crest; but abundant potsherds, etc., were found in the talus swept down from the summit. All vestiges of the ancient trail ascending the talus, and continued thence to the summit by hand and foot holes in the solid rock, have been obliterated; but some traces of the holes remain. This verification of an Indian tradition notable for inherent evidence of accuracy is peculiarly gratifying to students of anthropology.

Except for the easily-removed opposition of the Acoma Indians, no difficulty was found in ascending the mesa, save for a space of a few feet at the top of the cleft; this was easily crossed on a light extension ladder carried to meet emergencies, and might have been passed with the aid of a geologic hammer to cut a few hand-holes in the steepest part of the rock.

W J M