

mann, on 'The Acquirement of Motor Habits' reported some experiments in which the author measured the degree of perfection attained in rapid naming of one hundred color squares arranged in regular order, by the time required to read the whole series. Results were presented for the rapidity of reading at different stages of practice and after different intervals of discontinuance of practice.

The second paper, by C. H. Judd, was on the subject 'Studies in Vocal Expression.' This paper reported measurements of changes in pitch during the articulation of single words. The pitch was determined by means of enlarged records of diaphragm vibrations which were compared with the tracing made from a standard tuning fork. Twenty records were reported. In general the accented syllable was higher in pitch than the unaccented syllables, though this was not true in such words as 'abhorrent' and 'abnormal.' The final syllable in the twenty records showed a very general tendency to fall off in pitch. The amount of change in such words as 'educing' and 'illusion' will appear from some cases of the former. The three syllables were as follows: case I., 161, 244, 171 (the end of the syllable being at 131); case II., 157, 255, 185 (end of syllable 125); case III., 172, 248, 166 (end of syllable 123). Other records did not show such marked changes. One for the word 'abasement' is as follows: 103, 150, 140.

CHARLES H. JUDD,
Secretary.

THE NEW YORK SECTION OF THE AMERICAN CHEMICAL SOCIETY.

THE June meeting of the New York Section of the American Chemical Society was held on the 8th inst., at the Chemists' Club.

The retiring chairman, Dr. Chas. F. McKenna, invited the president of the Society, Dr. William McMurtrie, to preside. An address was made by Dr. McKenna on the 'Advancement in the Study of the Properties of the Metals,' and on the 'Present and Future of the New York Section of the American Chemical Society.'

The election of officers for the ensuing year resulted as follows:

Chairman, Dr. C. A. Doremus.

Secretary and Treasurer, Durand Woodman.

Executive Committee, C. F. McKenna, M. T. Bogert, P. C. McIlhiney.

The following papers were then read:

'Comparison of Iodine and Bromine Figures of Various Fatty Oils,' by H. T. Vulté and Lily Logan.

'The Chemistry of Materials used in Perfumery and kindred Arts,' by T. C. Stearns.

'Rapid Method for Separation of Cadmium, Bismuth, etc., from Zinc and Manganese,' by George C. Stone.

'On the Oxidation of Platinum,' by Dr. R. C. Hall.

A motion was made and seconded that a fund should be raised for a prize for the best paper read before the Society during each season. This was in pursuance of a suggestion made by the chairman in his address.

Notice was given of the general meeting of the American Chemical Society, to be held in the latter part of the month, after which the Section adjourned.

DURAND WOODMAN,
Secretary.

DISCUSSION AND CORRESPONDENCE.

PREHISTORIC REMAINS IN JAPAN.

TO THE EDITOR OF SCIENCE: While in Okayama, Japan, in the early part of this month I was conducted by Rev. J. H. Pettee to the hills about two miles east of the city to see some prehistoric stone structures which he had noticed in his rambles. The first one to which we came was situated about 500 feet above the valley (which was nearly at sea level) near the summit of a steep declivity overlooking an extensive country. This was built of stones laid up in regular courses, some of them very large. One stone was $5\text{x}5\text{x}4\frac{1}{2}$ feet. Large flat stones served for the roof. The entrance was twenty-one feet long, six feet wide and about twelve feet high. This opened into a room twelve feet long, of which the north side was flush with one of the walls of the entrance, making the entire length of this wall thirty-three feet. The room is twelve feet square, and about the same height.

The whole was covered with a mound of earth, upon which trees of considerable size were growing. This one had been cleaned out

and put to some modern use. But the eight others which we visited, were in most cases partly or wholly filled with débris which had slowly accumulated in them. In size they differed greatly from one another, several of them were so small that they could not have served for habitations. When they occurred on the side hill they were covered with earth removed from the immediate vicinity. In the roofs of two of them we measured stones which were 9x7x3 and 10x5x4 feet respectively. In all, Mr. Pettee had found twenty of these structures in the immediate vicinity. It is hoped that more careful exploration will be made of those which are filled with débris. The present inhabitants have no knowledge of their origin, and they are entirely out of analogy with any structures of recent times.

In a communication made to the Japanese Asiatic Society of London, a few years ago (the date of which I do not remember) the writer spoke of having noted about four hundred such structures in different parts of the Empire, all substantially alike, but with minor modifications in shape, only a small portion of them having the wall of the entrance and the room flush on one side, like the one here observed. The few ornaments found in them were unlike anything of present Japanese manufacture.

At Yokohama, also, I was taken by Rev. Henry Loomis to see various rooms artificially excavated in the soft rock of the region which were evidently of ancient origin, as evinced by the character of the tool marks upon them. But more interesting still were two shell heaps, about one hundred and fifty feet above the bay, in which not only had most of the shells been artificially opened to procure the food, but there were numerous pieces of pottery of antique character. The situation of these was much the same as of those described by Professor Morse near Tokio.

The universality of such indications of a primitive culture preceding that of existing civilizations in Japanese as well as in Europe and America is certainly interesting and significant. Much further light is still in store from their systematic study.

G. FREDERICK WRIGHT.

NAGASAKI, JAPAN, April 23, 1900.

SEALS IN THE AMAZON DRAINAGE.

ON September 20, 1899, William J. Gerhard, a field entomologist, observed several seals in a stream among the headwaters of the Madera river, in Bolivia. The exact locality was a small tributary of the Rio Secure, whose waters find their way into the Madera by way of the Mamore river. From the position assumed by the seals, as described by Mr. Gerhard, it is evident they were members of the Otariidæ, and most probably either *Otaria jubata* or *Arctocephalus australis*.

This is, I believe, the first notice of any seal from the Amazon system.

JAMES A. G. REHN.

ACADEMY OF NATURAL SCIENCES,
PHILADELPHIA.

THE INTERNATIONAL CONGRESSES OF METEOROLOGY AND AERONAUTICS AT PARIS.

TO THE EDITOR OF SCIENCE: As some of your readers may be planning to attend the International Congresses of Meteorology and Aeronautics this summer, at Paris, it seems proper for the official delegate of the United States to call attention to an error in the dates announced in SCIENCE of June 1st. These congresses will not meet during July but during September, the Meteorological Congress being held between the tenth and the sixteenth of that month and the Aeronautical Congress, fixed for nearly the same time on account of the allied interests, having its sessions from the fifteenth to the twentieth of September.

The mistake, which was made also by your English contemporary, *Nature*, probably arose from the fact that when the list of the various congresses was issued several months since, the dates of the two congresses in question had not been determined; nevertheless the blanks left in the date column were assumed to mean that each of these congresses coincided with the one immediately preceding it in alphabetical order.

A. LAWRENCE ROTCH.

BLUE HILL METEOROLOGICAL OBSERVATORY.

June 7, 1900.

THE NAME OF THE COCHINEAL.

I HAVE elsewhere (*Proc. Acad. Nat. Sci., Phila.*, 1899, p. 261) shown that the *Coccus cacti*,