that not a feather of the upper surfaces of the woodcock and grouse had been artificially colored referred only to the feathers along the median dorsal region.

The skin of a cottontail rabbit was exhibited, showing a most perfect gradation from the black hairs of the middle of the back and over the shoulders to the white of the belly.

This communication, in connection with that given at Cambridge a year ago, completes Mr. Thayer's admirable demonstration of his theory of the great underlying principle of protective coloration in animals.

On Wednesday evening, November 10th, an illustrated lecture entitled 'A Naturalist's Expedition to East Africa,' was given in the large lecture hall of the Museum by Mr. D. G. Elliot before an audience of some 1,500 persons.

Mr. Wm. Dutcher, Chairman of the 'Committee on Protection of North American Birds,' read a most interesting report on the work done during the past year. This report will be published in abstract in *The Auk*, and printed in full as a separate pamphlet.

Mr. Frank M. Chapman gave an exhibition of lantern slides of birds in nature, from material contributed by himself and other members of the Union. This was followed by Professor A. S. Bickmore with colored lantern slides showing recent advances in methods of visual instruction.

Dr. Coues remarked upon certain *Laridæ* which were before him, and Dr. Jonathan Dwight, Jr., showed a specimen of a new species of bird for North America (*Puffinus assimilis*).

An informal talk on the Gyrfalcons was given by Mr. Chapman, who exhibited specimens from Greenland and Labrador. Remarks followed by Dr. W. E. Hughes, who accompanied the first Peary expedition to north Greenland.

Following is a list of the papers read at the sessions, in addition to those already mentioned:

Protective Adaptations of Insects from an Ornithological Point of View: SYLVESTER D. JUDD.

Summer Birds of the West Virginia Spruce Belt: WILLIAM C. RIVES.

Is Uniformity in Local Lists Possible? JONATHAN DWIGHT, JR.

Ten Days among the Birds of Northern New Hampshire: JOHN N. CLARK.

Some Notes on Liberian Birds: HARRY C. OBERHOLSER.

Remarks on a New Theory of the Origin of Bird Migration: J. A. ALLEN.

Experiences of an Ornithologist in Mexico: FRANK M. CHAPMAN.

The Great Roosts on Gabberet Island, Opposite North St. Louis: O. WIDMANN.

The Terns of Gull Island, N. Y.: J. HARRIS REED.

The Petrels of Southern California: A. W. ANTHONY.

The Terns of Muskeget Island, Mass.: GEORGE H. MACKAY.

The Northern Raven Breeding in New England: H. K. JOB.

The Summer Birds of the Catskill Mountains, with remarks upon the Faunæ of the Region: EDWIN I. HAINES.

Breeding Habits of the Common Robin in Eastern Massachusetts: REGINALD WEBER HOWE, JR.

The next meeting of the Union will be held in Washington, D. C., commencing November 14, 1898. JNO. H. SAGE,

Secretary.

CURRENT NOTES ON ANTHROPOLOGY.

THE ABORIGINAL ART OF ECUADOR.

THE well known Alpine explorer, Mr. Edward Whymper, during his expedition to the Andes made a considerable ethnographical collection in and near Ecuador, a description of which, with illustrations, is given by Mr. O. M. Dalton in the *Journal* of the Anthropological Institute for August.

The most interesting results refer to the forms of axes and similar stone implements. There are numerous types in Ecuador, many seemingly indigenous, while almost all the Colombian forms 'can easily be traced to a foreign source.' There are frequent instances of resemblance between

types common to the Antilles and Ecuador, and these resemblances are most abundant in the islands most accessible to the South American continent. It is also noted that one quite peculiar form of stone axe, with a depression at the butt and rounded lateral arms, which seems to have reached its perfected development in Ecuador, has been discovered also, both in stone and copper, in tombs of the IVth and XIIth dynasties of Egypt; another illustration of the parallelism of artistic development. The pottery of Ecuador, as shown in the collection, is closely assimilated to that of Chiriqui and other parts of Central America.

THE BERBERS OF MOROCCO.

THE most accurate description of this people since that of Quedlinberg is given by Mr. W. B. Harris in the *Journal* of the Anthropological Institute for August. He notes their complexion as nearly always fair, while many are red-haired, red-bearded, and with blue eyes. The Susis, however, south of the Atlas, and claiming to be of unadulterated Berber blood, are copper-colored, with high cheek bones and narrow dark eyes. This would seem to bear out Dr. Collignon's theory of a dark and light Berber type. The Riffians are distinguished by a 'scalp-lock,' which they allow to grow thick and long. It is plaited or twisted, and wound around the head. Mr. Harris does not explain its significance. In the central Atlas they still call themselves 'Berber' (plural Berebber), but the meaning of the term was not obtained.

They apparently have no knowledge of the old Hamitic or modern Tuareg alphabet, and he asserts that no writing in their tongue exists, though it is occasionally written in Arabic characters. Many tracts of the Riff country of the north have never been visited by Europeans, and the Sultan of Morocco exerts a merely nominal control over it.

D. G. BRINTON.
UNIVERSITY OF PENNSYLVANIA.

NOTES ON INORGANIC CHEMISTRY.

A CONTRIBUTION to the much discussed subject of the use of alum in foods is given in the last *Journal* of the American Chemical Society, by Professor C. F. Mabery and L. Goldsmith. The authors describe a series of tests as to the influence of varying quantities of alum on the peptic digestion of blood fibrin. In every case the digestive action was retarded by alum, even when present in very small quantity. In order to test the action under actual conditions, two loaves of bread were prepared, one with alum baking powder and the other with a cream-of-tartar-soda powder. Here, again, the peptic digestion was retarded in the case of the bread containing alum. Similar experiments carried out with salicylic acid, boric acid and with formalin showed that while there was with these antiseptics some retardation of the peptic digestion it was slight in comparison with that when alum was used.

THE cause of the rusting of iron which is covered with a protective layer of paint is usually attributed to minute cracks in the paint, occasioned by the unequal expansion of the iron and paint. Edmund Simon gives in *Dingler's Polytechnisches Journal* the results of a study of the conditions of this rusting, and concludes that paint stands changes in temperature, but is always hygroscopic, and when swollen by moisture is pervious both for water and gases. The best way to prevent such rusting is to use three or four coats of a paint, which adheres as closely as possible to the iron, and which contains the largest possible quantity of oil.

IN the *Zeitschrift für physikalische Chemie* John Gibson contends that in all cases the chemical action of light is such that the new products have a higher conductivity than the original. This is true in the case of selenium, sulfur, phosphorous and mercuric sulfid, in the combination of hy-