

grow very rapidly, as is proved by the fact that streak cultures showed well marked growth four hours after inoculation. Detailed descriptions of the organisms and of many more experiments will be given in our full paper on this subject to appear in a forthcoming number of the *Technology Quarterly*.

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#### AMERICAN ORNITHOLOGISTS' UNION.

THE Fifteenth Congress of the American Ornithologists' Union convened in New York City, Monday evening, November 8th. The public sessions, lasting three days, were held in the library of the American Museum of Natural History.

William Brewster, of Cambridge, Mass., was re-elected President; Dr. C. Hart Merriam and Robert Ridgway, of Washington, D. C., Vice Presidents; John H. Sage, of Portland, Conn., Secretary; William Dutcher, of New York City, Treasurer; Charles F. Batchelder, Frank M. Chapman, Chas. B. Cory, Ruthven Deane, Drs. Jonathan Dwight, Jr., A. K. Fisher and L. Stejneger, members of the Council. By a provision of the by-laws, the ex-Presidents of the Union, Dr. J. A. Allen, Dr. Elliott Coues, and Mr. D. G. Elliot, are *ex officio* members of the Council.

One active and eighty-eight associate members were elected. As a direct result of the Audubon Society movement, creating a popular interest in the study of birds, more women than usual were elected to associate membership.

An address in commemoration of Major Charles Emil Bendire, U. S. A., a distinguished member of the Union who died during the past year, was prepared by Dr. J. C. Merrill, U. S. A., and presented by Mr. Elliot. Major Bendire was a well-

known oologist, and will always be remembered by his invaluable 'Life Histories of North American Birds.'

Dr. Coues exhibited the portfolio carried by John James Audubon in Europe and America, and also the original MS. of the first volume of his 'Ornithological Biography.' Some original bird-drawings by John Woodhouse Audubon were also shown.

Mr. Abbott H. Thayer, the eminent portrait painter, gave an out-of-door demonstration of the underlying principle of protective coloration, in continuation of his remarks on the subject at the previous meeting. Mr. Thayer showed a pair of decoys with the belly part cut off, so that in lying on the cut-off side they represented crouching birds or mammals. He then repeated upon them the coloring which he had exhibited at Cambridge upon entire decoys (decoys poised a few inches above the ground). This, he said, was to more clearly illustrate what he stated in his first paper on protective coloration, namely, that the normal gradation of sky's lighting is effaced *by the color gradation of the animal at every point*, the median dorsal line having the darkest markings, so that the gradation toward the white of the belly *begins close to this dorsal line*. Mr. Thayer placed the two decoys side by side on a plank, and covered one of them uniformly with the same dry earth which he spread about it on the plank, so that all of its visible surface and that of the plank on which it lay were absolutely of one tint—monochrome; yet it was conspicuously visible at a long distance, because of its normal gradation of shading from the sky's light, although there was no under-side visible to show a culmination of shadow. The other decoy he painted in imitation of a hare's or snipe's gradation and so successfully that it became totally invisible at a distance of four or five yards. He explained that the statement in his first paper

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 Gabbaret 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