

ing it exceedingly difficult to skin the specimen. Care must also be taken to avoid using more than is absolutely necessary in the throat, as the thinness of the gullet allows the formaldehyde to act directly upon the skin of the neck, which is apt to become so stiff and dry as to cause it to tear in the effort to skin the bird over the head. A few drops only will suffice for the preservation of this part of the bird, except in the case of a large crop full of decomposing food. When properly treated with this solution, and properly cooled off in the first instance, birds will keep a week even in warm weather in sufficiently good condition to make a fair skin.

The saturated solution of formaldehyde is 40%, but it evaporates easily and is usually about 36%. As it is greatly adulterated, sometimes being nothing but pyroligneous or acetic acid mixed with impure methyl alcohol, and even when comparatively pure is much reduced in strength by unscrupulous dealers, it is much wiser to procure the article from an absolutely trustworthy source than to buy indiscriminately.

As a convenient insecticide and preventive of mildew formaldehyde fills a long felt want. When a burner for making the gas (formic aldehyde) is not within reach some of the solution can be poured into dishes and placed in the cases of specimens. It performs its work in a few hours. An occasional fumigation of a collection will prevent all danger from insects and also from mould in an ordinarily dry atmosphere. The gas evaporates like ammonia from the aqueous solution, penetrating every crevice and interstice, and destroys all insect life as well as fungoid growths. It is a wise plan to subject all specimens received in exchange or by purchase to a thorough disinfection, which is easily done in this manner.

Two and a half years' use of formaldehyde has so demonstrated its effectiveness and convenience in the preparation of specimens that all ornithological collectors should become acquainted with its properties. It will be found of the greatest assistance in the field and in the laboratory.

JOSEPH MAILLIARD.

San Geronimo, Cal.

NOTES AND NEWS.

PROF. ALPHONSE MILNE-EDWARDS, an Honorary Member of the American Ornithologists' Union, died in Paris April 21, 1900, at the age of sixty-four years. Prof. Milne-Edwards was of English descent; his grandfather, Bryan Edwards, M. P., was a West Indian planter, who settled at Bruges, France. His father was the well-known eminent zoölogist of Paris, who died in 1885. The son, Alphonse, was associated many years with his father in zoölogical work.

Alphonse Milne-Edwards was born in Paris in 1835; he took his medical degree in 1859, and in 1865 became a professor in the School of Pharmacy. In 1876 he was made, as assistant to his father, Professor of Zoölogy at the Jardin des Plantes, and in 1891 was appointed Director of the Paris Museum d' Histoire Naturelle and of the Menagerie in the Jardin des Plantes, which positions he filled at the time of his death. He was long recognized as a leading authority in mammalogy and ornithology, and also achieved success in other lines of zoölogical research, in connection especially with deep-sea work. In 1881, assisted by a party of savants, he began, under the patronage of the French Government, a survey of the Gulf of Gascony, and later in the 'Travailleur,' and later still in the 'Talisman,' extended his work to the Canaries, the Cape Verde Islands, and the Azores. In recognition of the importance of these researches he was awarded the gold medal of the Royal Geographical Society.

His ornithological work is recorded in a long list of papers and memoirs, beginning as early as 1866, but his most notable contributions are his great work entitled 'Recherches Anatomiques et Paléontologiques pour servir à l'Histoire des Oiseaux Fossiles de la France,' published in parts, 1867-1872, consisting of four large quarto volumes, two of text and two of plates; and his 'Recherches sur la Faune ornithologique étiente des Îles Mascareignes et de Madagascar,' 1866-1874. The first of these works made known for the first time the former existence in France of such tropical types as *Trogon*, the Secretary Bird, Parrots of the genus *Psittacus*, *Leptosomus*, and *Callocalia*. In many respects this was a remarkable work, and a most highly important contribution to ornithology. His material was limited generally to the 'long bones,' or the bones of the limbs, and the proper determination of these led to an exhaustive study of the comparative osteology and myology of living birds, the results of which are incorporated in his work. His important researches on mammals, particularly of Madagascar and Central Asia, including the discovery of new and strange forms, do not call for special mention in the present connection.

EDGAR LEOPOLD LAYARD, a Corresponding Member of the American Ornithologists' Union, died at Budleigh Salterton, Devon, England, on January 1, 1900, in his 76th year. We take the following notice of this well-known ornithologist from the April number of 'The Ibis' (p. 404): "Edgar Leopold Layard, C. M. G., . . . was elected an Honorary Member of the B. O. U. in 1860, and was therefore one of our oldest as well as one of our most valued correspondents. He was born at Florence on July 23rd, 1824, and entered the Civil Service of Ceylon when twenty-two years of age; but after nine years his health gave way, and in 1855 he accepted the invitation of the late Sir George Grey to a post in the Civil Service at Cape Town. There he founded the South African Museum, and became its first curator; after which he accompanied Sir G. Grey on a special mission to New Zealand, and subsequently became judge and

commissioner under the Slave Trade Treaties at the Cape. Transferred to the Consular Service, he was for some years at Pará, at the mouth of the Amazons; next he was sent to Fiji, where he arranged the cession, and was decorated in 1875; he then resumed Consular Service at Noumea, New Caledonia, and ultimately retired after forty-seven years of hard work. Layard was not a producer of books, and his chief work in this line was 'The Birds of South Africa,' published in 1867, of which a new and revised edition, with the collaboration of Dr. Bowdler Sharpe, made its appearance between 1875-84. It is rather by his many and varied contributions from 1854 almost to the time of his much regretted death that he will be remembered; and a column of closely-printed type in the General Subject Index to 'The Ibis' testifies to his energy in our special subject. Besides these, his bright and pleasant letters to 'The Field,' under his own name or the pseudonym of 'Bos Caffer,' will be familiar to most of our readers; and his genial personality will be greatly missed and regretted by all who have had the pleasure of his acquaintance."

PERCY S. SELOUS, an Associate Member of the American Ornithologists' Union, died at his home in Greenville, Mich., on April 7, 1900. His death was due to the bite of a pet Florida moccasin. Mr. Selous was a great traveller and an enthusiastic naturalist, especially interested in birds and reptiles. He was a member of the Michigan Ornithological Club, and an occasional contributor to various natural history journals, including 'The Auk.'

ALL PERSONS interested in fish and game protection and the protection of our birds, will be glad to learn that a course of lectures, together with field observations and demonstrations on this important subject now constitutes a regular part of the instruction in Cornell University. The course is offered to the junior and senior classes in the New York State College of Forestry, which was established two years ago as one of the colleges in Cornell University, with Dr. B. E. Fernow as Director.

The course is given by Dr. B. W. Evermann, ichthyologist of the U. S. Fish Commission, and consists of lectures, laboratory demonstrations and field observations on the life-histories of the important species of fresh-water food and game fishes, their artificial propagation and their protection; the relation of the forest to the streams and lakes and their inhabitants; the relation of the various forestry, logging, milling, mining and irrigation operations to the streams and lakes and to their inhabitants; and the value of the mammals and birds of the forest and how to protect them.

THE DEUTSCHEN ORNITHOLOGISCHEN GESELLSCHAFT will hold its annual meeting at Leipzig, Oct. 5-9, 1900. This is the fiftieth anniversary of the founding of the Society. In the celebration of this anniversary the American Ornithologists' Union is cordially invited to take part. The

program of the meeting indicates that it will be an important and very interesting congress, both scientifically and socially, and any members of the A. O. U. who may be able to attend will not only be cordially welcomed but will without doubt find it a very enjoyable occasion.

THE OUTLOOK for Bird Protection in North America has greatly improved during the last two or three years, which is no doubt due largely to the efforts of the Audubon Societies and the A. O. U. Committee on Bird Protection. A strong impression has been made upon public opinion and popular sentiment, now both strongly in favor of every reasonable measure for saving the birds. This popular sentiment is due to the educational efforts of the friends of the birds, who have been able to impress upon the public the importance of birds to agriculture, as well as their æsthetic interest.

The press has greatly aided the work, not only through the favorable attitude of the daily newspapers, far and wide, but especially through the agricultural journals, which are filled with articles showing that the wanton destruction of birds is working great injury to agricultural interests. The fashion journals have in many instances taken a strong stand against the destruction of birds for millinery purposes, and urge women to abandon the use of birds and birds' plumage for decorative purposes. One of the most pleasing evidences of the working of the leaven of reform in this field is the marked change of attitude on the part of that influential and excellent 'home journal,' 'Harper's Bazar,' which not so very long since was criticized in this magazine for its perverse attitude on the subject of aigrettes. In late numbers of this journal we have noted with pleasure its appeals to women in behalf of bird preservation, and especially its appeal to its women readers to help pass the Lacey bill, then long pending in Congress.

It is especially worthy of note that the two bills mentioned in the last issue of 'The Auk' (April, 1900, p. 200), the Lacey bill in Congress and the Hallock bill in the Legislature of New York, have both become laws, they forming the most important and advanced examples of legislation for the protection of birds thus far enacted. The strongest possible effort was made on the part of bird protectors to secure their enactment, and that they received on their final passage an overwhelming vote in their favor greatly strengthens hope for the future.

The widespread discussion in the public press of bird protection incident to the consideration of the two bills above cited, and especially of the Hoar bill, reintroduced into the Senate at the last session of Congress, but which failed of passage, has not only been the means of arousing public sentiment favorable to the cause, but has greatly alarmed the milliners respecting the effect of such legislation upon their business interest. Recognizing that the drift of public sentiment was thoroughly against the use of birds for millinery purposes, they have made overtures, through official action by the Millinery Merchants Protective Association to the Audubon Societies and the A. O. U. Committee on Bird Protection, pledg-

ing themselves "not to kill or buy any more North American birds from hunters or such people who make it a business to destroy North American birds," nor to sell North American birds or their plumage after their present stock has been disposed of, or in any case after January 1, 1902, in case the Audubon Societies and the American Ornithologists' Union will agree not to interfere with their use of the "plumage or skins of barnyard fowl, edible birds or game birds killed in their season," and of "the birds and plumage of foreign countries not of the species of North American birds. Furthermore, it shall be our solemn duty not to assist any dealer or person to dispose of any of their North American birds, if same have been killed after this date [April 21, 1900]. . . . In return for this pledge, we expect the Audubon Society and the Ornithological Union to pledge themselves to do all in their power to prevent laws being enacted in Congress, or in any of the States which shall interfere with the manufacture or selling of plumage or skins from barnyard fowl, edible birds and game birds killed in their season, and all birds which are not North American birds." This pledge is signed by a large number of the leading dealers in such supplies in New York and other cities.

This appeal is certainly entitled to respectful consideration, since, on the one hand, it guarantees on the part of a powerful association of dealers, that the killing of North American birds for millinery use shall at once cease, and that all traffic in them for such use shall also cease after a certain date, within which specified period the present stock is to be disposed of. There is of course no valid objection to the use of the plumage of barnyard fowls and of game birds killed in season for food; but doubtless many will see grave objection to the continued use of foreign birds. On the other hand, the ineffectual attempt already made to pass the Hoar bill, which is intended especially to prevent the importation of foreign birds for millinery purposes, and the belief on the part of those in position to know best about its [future prospects that it cannot be enacted, renders the friends of this measure practically powerless, whatever action the Audubon Societies and the Ornithologists' Union might see fit to take in the matter. Of course no immediate concerted action can be taken by these organizations but it is a subject that may well be considered at a meeting of representatives of the Audubon Societies recently suggested in 'Bird Lore' (June 1900, p. 94) to be held in connection with the meeting of the A. O. U. in Cambridge next November.

ERRATA.—Through an unfortunate oversight in printing Plate V, illustrating Dr. Dwight's paper in the April number of 'The Auk,' the titles of the two figures were transposed. The title of the present Fig. 1 of Plate V should read Fig. 2. Neosoptile from *Colinus virginianus* ($\times 20$); and the title of Fig. 2, same plate, should read Fig. 1. Neosoptile from *Lagopus lagopus* ($\times 20$).

For Plate I on pages 153, 156, 157 and 161 read Plate IV.

Page 173, line 19, for *Picoides americanus* read *Picoides arcticus*.