

notoriety is Dr. J. W. Langdon of Cincinnati, and his 'address' originated in the following manner : Some time since, the Cincinnati society of natural history appointed a committee of three of its ornithological members "to investigate and report on the destruction of native birds." This committee duly made its report, in the form of a series of papers, prepared by the different members of the committee, in which were summarized most of the facts and statements given in the *Science* supplement on bird-protection, with, in addition, much original matter of like character. This report was followed by a paper by Dr. Langdon, in which he ridiculed the idea that there had been any perceptible decrease of song-birds in consequence of their destruction for millinery purposes, or from any human influence whatever, while he furthermore claimed that it would be impossible for man to destroy enough small birds to make their absence appreciable. His conclusions were based, ostensibly at least, on an estimate of the bird population of America, and an assumed rate of natural increase,—both mere guesses, and the latter and his conclusions therefrom palpably absurd. Like some of our astute congressmen, he took the precaution to 'revise' his paper before it was printed, removing many of its grossest absurdities ; leaving, however, enough to disgust intelligent ornithologists throughout the country, yet presenting so plausible an aspect as to be misleading to the general reader, unable to detect the false premises, misstatements, and misrepresentations of which it is mainly composed. The better part of the paper was later given to the readers of a New York daily newspaper ; and its main points are summarized in a recent number of *Science* (viii. No. 178), and therefore need not be dwelt upon here.

To answer Dr. Langdon's paper in detail is not the purpose of this article. While it would be easy to refute its many absurd conclusions, and expose its misrepresentations, it would take much space to do so. For ornithologists no refutation is necessary ; and it would not be entitled to serious consideration were it not so perniciously misleading to those who know little of the subject. It has, however, been already ably answered by the Cincinnati committee, at a meeting of the Cincinnati society of natural history held June 16, at which the consideration of Dr. Langdon's paper was made the special subject of the evening.

As a sufficient answer in the present connection, I subjoin the final report of the committee of the Cincinnati society on the destruction of native birds, adopted by the society at its meeting held July 6, premising merely that it was adopted

with only one dissenting vote, and that Dr. Langdon's.

Your committee report as follows in the matter submitted to them, and state that they have fully investigated the subject of the destruction of our native birds, and several papers have been prepared and read at three meetings of the society. They find :—

First, That native birds of many species have greatly decreased in numbers over large areas of the country. This is particularly true of those water and game birds about which it is comparatively easy to obtain statistics.

Second, That the chief cause of such decrease, in addition to climatic changes, natural enemies, clearing up the country, etc., are,—

(a) The direct destruction of birds for their skins and feathers for decorative and millinery uses ;

(b) The trapping of birds for cage purposes ;

(c) The destruction of eggs and nests by men and boys ;

(d) And the introduction of the European sparrows, which occupy the nesting-places of many native species.

Three of these causes are preventable, and the evils resulting can be greatly lessened :

First, If no birds be used for decoration.

Second, If none of the song-birds and insectivorous species be used for food.

Third, If the laws protecting certain species be backed by a much stronger public opinion, and more rigidly enforced.

Fourth, If thoughtless men and boys could be shown the great economic value of birds, and taught the desirability of protecting them and their eggs.

Your committee find that a wide-spread discussion of the bird question shows more interest in our feathered friends than they had hoped for ; and they trust that Cuvier clubs, Audubon societies, and other clubs of like aims, will continue to flourish on all sides until public sentiment is entirely opposed to the destruction of our native birds.

R. H. WARDER
CHAS. DURY
WM. HUBBELL FISHER } Committee.

J. A. ALLEN.

GEOGRAPHICAL NOTES.

Yucatan.—The indefatigable Charnay, who has just closed another season of exploration in Yucatan, reports that he had been engaged only about six months. His object was to get moulds of the bas-reliefs on the walls of the ancient ruins. These sculptures proved to be much rarer than is generally supposed. Arrived at Izamal, he excavated the north side of the pyramid, which he hoped to find entire, but it proved to have been destroyed so that only about eight square metres of carving remained, which were not the less interesting on that account. However, in uncovering the base of the pyramid ancient mural paintings were revealed. A sort of chronic insurrection between the Indians of Maya stock and the Spanish-Americans has been going on for many years, and will probably end only with the extermination of one or the other party. In thirty years it is said 300,000 people have fallen victims to this conflict. A visit to Koba was prevented by a new incursion of the Mayas, and in taking a new direction Charnay came upon an old town, quite unknown,

called Ek Balam, or the city of the black tiger. He was obliged to get away very soon, but now that the place is known it can be revisited. On an island about eight leagues north of Campeche he found a Maya burial ground which has never been investigated by a man of science. He lived here about fifteen days, the Indians gradually abandoning the camp for fear of the dead men's retaliation, owing to the death of one of their number. He then returned to Ek Balam, where he remained eighteen days. He is now busy on his report, which will be ready in a few months.

Greenland.—The information derived from the Danish newspapers in regard to Lieutenant Ryder's expedition to Greenland is enlarged and corrected on the authority of that officer. The party should have left Copenhagen on May 9, and did not expect to return before the autumn of 1887. The commission, besides Messrs. Ryder and Bloch, will comprise the geologist Ussing. The object of the exploration to be made is the little-known coast between Melville Bay and Upernivik, which has never been scientifically surveyed. It is hoped that suitable charts can be prepared when the commission has finished its researches, which will include soundings as well as geographical and geological surveys.

A newly discovered lake on the Spanish frontier.—Schrader has for some years been engaged upon surveys among the higher Pyrenees, and recently presented the third leaf of his proposed six-leaved chart of the central Pyrenees to the Paris geographical society. On this occasion he called attention to several points of interest. This third leaf represents the Aran valley on the north slope, but which being Spanish territory has not been included in the map of the French general staff. Part of it has been represented as draining into the Mediterranean, while it really is tributary to the Garonne. In the second place, Schrader's triangulations, made with difficulty amid the fogs and wind-storms of the higher peaks, showed a gap unfilled between two chains of peaks which, approached from opposite sides, he had supposed to form a single range. The explorations of Dr. Jaubernat of the Alpine club, of Toulouse, a zealous botanist and photographer, showed that this gap was filled by a lake, the largest on the whole northern slope of the Pyrenees. No one else had ever seen it. So it appears that it is only since the summer of 1883, when Jaubernat took his photographs, that any one has known of the existence of the largest lake on the Spanish frontier. M. Schrader adds that on the south and south-east of the Aran valley, several ranges are to be found, nearly ten thousand feet in height, which as yet have no

place on any geographical map. It would seem that explorers may still find congenial work, even in Europe.

LONDON LETTER.

It is probably known to many readers of *Science* that a trial has lately taken place in London, the result of which, if not reversed by appeal, will seriously affect the future of electric lighting in this country, so far as incandescence lamps are concerned. Nobody but Messrs. Edison and Swan may now use the carbonaceous 'filament.' The use of such filaments is decided to be an infringement of the patent granted to Mr. T. A. Edison (Nov. 10, 1879; No. 4576), for the use of a 'light-giving body of carbon wire or sheets.' It has just been pointed out by Mr. Mattieu Williams, who himself assisted in the experiments more than forty years ago, that the real inventor of the process for obtaining light by the incandescence of a strip or wire of carbon was a young American, Mr. Starr, whose patent for it (taken out by Mr. King) was enrolled on May 4, 1846. At the end of a barometer-tube a bulb was blown, into which a platinum wire was fused, and to one end of this a stick of gas-retort carbon was fastened, the other wire being carried through the mercury,—the whole tube being 33 inches long. Mr. Starr tried platinum, and platino-iridium alloys, in wires and sheets, carbonized threads, cane, etc., before he hit upon gas-retort carbon. The lamp was repeatedly exhibited in action, at the town hall, and the Midland institute in Birmingham, by Mr. Williams. The carbon stick was 0.1 inch in diameter and 0.5 inch long; and the platinum wire had the same sectional area as the rod. The light was eminently and brilliantly successful; but funds were exhausted, and none concerned in it were adepts in getting up companies. Moreover, Mr. Starr was engaged in improving the magneto-electric machine then in use for electroplating, etc., by Messrs. Elkington of Birmingham; hence the matter was not followed up.

A very ingenious primary battery has just been brought into public notice by Messrs. Woodhouse & Rawson, the invention of M. René Upward. An outer cell, sealed at the top, holds fragments of carbon, slightly moistened with water; an inner porous cell contains zinc immersed in water. Chlorine gas is passed through the outer cells, each of which is of course provided with an inlet and outlet pipe, and a vacuum of about 0.5 inch water is maintained in the whole series of outer cells. The electromotive force per cell is 2.4 volts. The battery is entirely free from 'local action' and 'polarization,' and has been specially designed for small electric-light installations. For