

THE IMPORTATION OF BIRDS' PLUMAGE.

TO the *Fortnightly Review* for March Miss I. Gardiner contributes, under the title, "The Fight for the Birds," a timely article apropos of Mr. Hobhouse's Plumage Bill now down for second reading. She gives a history of the rise and progress of the contest against the slaughter and extermination of so many of the most useful and ornate birds of the world for the plumassier trade, which has never been more in evidence than in the past season or two, during which women have "so gaily worn the brand of Cain in the street." Miss Gardiner quotes statistics from brokers' catalogues, mainly of 1911, 1912, 1913, which show that, besides others, 132,000 "ospreys" were killed, 8700 birds of paradise, 22,000 crowned pigeons, 24,000 humming-birds, 23,000 terns, 162,000 kingfishers, 1200 emeus, and 4500 condors. It is significant that, as the author remarks, "reports on the quantities now sold are no longer published in the *Public Ledger* since the House of Lords inquiry."

The outcry against this wholesale slaughter is not confined to the lovers of nature and the humanitarians as such, but is loud from the agriculturists of the Himalayas, of Madras, and other parts of India, of Georgia, Florida, and Carolina, and of Egypt, whose crops are devastated by reason of the scarcity of the birds that heretofore destroyed the insect pests now ruining them. Strong official support has been given by the Zoological Society to Mr. Hobhouse's Bill, and also by the British Ornithologists' Union, although the trade journals claim both societies, as well as quote the names of numerous distinguished scientific men, many of whose names were authorised under the impression that they were supporting the principle of the Bill—as in favour, not of the Bill, but as supporters of the Committee for the Economic Preservation of Birds. Unfortunately, the Zoological Society has been made to appear to the general public to support the Economic Committee—to which it is absolutely hostile—through the secretary of the society having accepted, in his private capacity, the chairmanship of the committee. The corresponding Economic Committee in Paris, as recorded recently in *NATURE* (January 29, p. 617), was entirely defeated on its very strenuous attempts to check the growing force of opinion in France in favour of the protection of birds, fostered by the Acclimatisation Society.

Miss Gardiner's article should be widely studied by all who desire to know the rights and wrongs of the plumage traffic. In a letter "On the Need for Protection of Rare Birds," in the *Times* for March 3, the Hon. Charles Rothschild says he is impelled to write "as there is a danger of the [Plumage (Prohibition)] Bill being defeated through the efforts of those opposed to the measure, who have formed themselves into . . . the Committee for the Economic Preservation of Birds." His observations fully corroborate what Miss Gardiner has stated about the objects of this committee in the *Fortnightly Review*. "One thing is certain," as Mr. Rothschild remarks, "that many of the most beautiful birds have never been in greater need of protection than at the present time. In the *Times* of March 6 Mr. C. F. Downham, replying to Mr. Rothschild, trails once more the red-herring of the "dead" egret feathers across the question. It has been abundantly proved that the plumes offered as "dead" were wrongly so described to quieten public opinion; and if, indeed, any "dead" feathers now come to the market, they are brought with the same object, and for the reason that the supply from slaughtered birds has decreased below the demand, not "because the area of protection is increasing," but because the heronries themselves have been so

depopulated. It is amusing to read Mr. Downham's statement that "the nuptial plumes of the egret are borne by the birds long after the nesting time, and that the birds carry their feathers for seven or eight months of the year."

In the March issue of *Pearson's Magazine* Mr. Hesketh-Pritchard describes the almost incredible cruelties perpetrated by the professional plume-hunters, the sworn testimony of one of whom he quotes, which is directly contradictory of the plume-traders' reiterated declarations that the "egrets" are moulted feathers. The *Spectator* of March 7 has also a powerful article on the need for the Plumage Bill, from which the following sentences are extracted:—" . . . the activities of the [economic] committee appear at present to be centred hardly so much on the protection of birds which are being harassed, as upon definite opposition to the Bill which prohibits the importation of their plumage. . . . The plumage of all birds is at its brightest in the breeding season, and it is at this season, therefore, that the bird is killed. No 'economic preservation' will alter that fact. The plain issue, in short, is . . . whether traffic in feathers which admittedly involves cruelty and which leads inevitably towards the extinction of species shall be permitted at all. So far as Great Britain is concerned, we hope that a Plumage Act will be the answer."

A public meeting will be held at Caxton Hall, on Thursday, March 19, at 5.30, under the patronage of the Royal Society for the Protection of Birds, the Zoological Society, the Avicultural Society, the British Ornithologists' Union, the Society for the Promotion of Nature Reserves, the Society for the Preservation of the Wild Fauna of the Empire, and other bodies, in support of the Plumage Bill. When the Bill is passed it will be illegal to import the feathers or skins except for scientific purposes, for which purpose a licence will be obtainable from the Board of Trade. It is confidently believed that such legislation will have far-reaching effects towards the preservation of rare and beautiful wild birds. The trade in ostrich feathers is specially exempted from the provisions of the Bill. Tickets (free) for the meeting may be obtained through the secretaries of the patron societies, or from the hon sec., Plumage Meeting, 34 Denison House, Westminster.

THE VITAMINES OF FOOD.¹

FLEURENT, in his "Le pain de Froment," shows that the grain of wheat consists, by weight, of the protective coat (15.6 per cent.), the embryo or germ of millers (1.4 per cent.), and the white flour (83 per cent.). The coat includes, in addition to the pericarp and testa, the aleurone layer of the endosperm, the remainder of which forms white flour. The bran of the miller, as removed by the metallic roller, includes the aleurone layer, which is not only a starchless layer, rich in fats, but contains the newly discovered bodies to which C. Funk has given the name of vitamines, and of which the first detailed authoritative account has appeared this year ("Die Vitamine," von Casimir Funk, J. F. Bergman, Wiesbaden, 1914).

A discussion of their chemical nature would be out of place now, and must be left to organic chemists. It may be mentioned, however, that they do not contain phosphorus, they are not fatty bodies, and are distinct from lipoids. They are nitrogenous and of highly complex structure (e.g. the formula of one is $C_{26}H_{20}O_8N_4$); they are indispensable for

¹ Summary of a lecture entitled a "Grain of Wheat," delivered in the National Museum, Dublin, on February 24, '14 by Prof. T. Johnson.