

LETTERS TO THE EDITOR.

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The Plumage Bill.

I HAVE read with much interest Sir Harry Johnston's article in NATURE of December 11 (p. 428) on the Plumage Bill proposed to be introduced next session into Parliament. I agree in the main with him that the Bill does not give as much satisfaction as was hoped for to "root and branch reformers," for it exempts from supervision personal clothing worn or imported by individuals entering this country from abroad. Consequently a woman resolved to have headdresses and robes of forbidden plumage has only to purchase such abroad and stick it into her apparel or her hat and she passes our Customs houses unchallenged.

This weakness in the Bill can surely be eliminated by making the wearing of wild birds' feathers in England by British subjects as illegal as the importation of the feathers. If no feathers can be introduced, it is obvious that anyone wearing them is act and part in their introduction, and the contraband is therefore subject to seizure. In any case, the Customs officers may examine any luggage suspect of concealing contraband plumes, and confiscate the feathers in the hat or dress of any subject when a law to the effect comes into force, just as they can now with any other species of contraband. It seems an absurdity to disallow the import of feathers, and yet allow them to be flaunted openly in the street. Of course, foreign visitors wearing feathers in England could not be legitimately interfered with; but it would be illegal for them to sell or dispose of the same in this country. Yet it would matter little if the wearing of plumes by British subjects were illegal. I think the American law, by which feathers worn by foreign visitors to the States, in whose country the custom is legitimate, are seized, is indefensible. It is all right when applied to its own subjects; but to foreigners it is nothing short of legalised assault and insult. How would a Maori chief, with the huia feathers distinctive of his rank in his hair, be dealt with?

Such a case as the Nipal trade could, as Sir Harry Johnston indicates, be easily blocked either at the frontier or at the Calcutta Customs House, and regulated in the same manner as the trade in opium or arms is.

As a British ornithologist, I hope Sir Harry will allow me to take exception, if I do not misunderstand him, to his charge of lukewarmness against our union in respect to this Bill. The union may contain a few opponents of the measure—they are chiefly egg-harriers—but the attitude of the great majority of its members most certainly is not that "so long as museum shelves are stuffed with specimens birds may be in the landscape or not." Only a few of the members have private collections or are museum conservators. At the last largely attended meeting of the club, a few days ago, approbation was universally extended to one of our members for having, by the expenditure of much time and with infinite patience, tried to identify by aid of his binocular a rare visitor to a certain part of England, instead of "collecting" it, which he could easily have done, and so spared himself, at the expense of a charming addition to the fortunate locality.

Is Sir Harry not rather inconsequent in asking

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why should there be any more killing of birds and beasts, and relegating their life-study to the camera, while reminding his fellow-ornithologists "that it is not only the skin of the bird for classification that is needed, but still more the bones, the muscles, and the viscera and the living creature itself"? I fear he cannot get these omelettes without breaking the eggs! A long series of skins is, moreover, now considered necessary for the real study of species. I may associate Sir Harry with myself as men who have collected largely, in affirming that the real scientific collector and lover of birds, who is also an exterminator of species, is a very rare person. Anyhow, over-destruction of animals for scientific purposes can be easily regulated by licence. Neither plume-hunters nor wardens can replace the scientific collector in obtaining materials for investigation.

The real object desired by the Royal Society for the Protection of Birds is the prevention of the great cruelty for which the plumage trade is responsible, of the extermination, and of the reduction towards that point of the beautiful and beneficent fauna of the world. America by her draconic law has the credit of beginning the war against extermination on effective principles. The evil must be scotched, both at the source and at the terminus of the trade. If England and her possessions prohibit the export, import, and wearing of plumes, assisted by Germany and Austria (and I understand they desire to cooperate with this country in the matter), the fashion for wearing feathers would die out notwithstanding the open market of Paris and Antwerp, and with it this nefarious trade. Where a species becomes so numerous as to cause loss to the agriculturist, it would be easy enough to give special licence for its destruction *without leave to export the skins*, for then there would be no inducement to kill more than might be necessary to "abate the nuisance." Against "discriminating reasonably" and allowing others so procured to be exported there could be no objection, if it were possible; but the Customs officers would then require to be trained ornithologists. The difficulty of determining a scheduled species is extremely difficult, and has been the cause principally of the failure of our Counties Bird Protection Bill.

All "root-and-branch reformers" in this matter are more than grateful to Sir Harry Johnston for his constant advocacy of a Bill that shall be effective to preserve the beautiful and useful animals of the world in face of the opposition of a "barbarous industry."

HENRY O. FORBES.

Redcliffe, Beaconsfield, December 14.

Intra-atomic Charge and the Structure of the Atom.

I AM very grateful to Mr. Soddy (NATURE, December 4, p. 399) that in accepting in principle the hypothesis that the intra-atomic charge of an element is determined by its place in the periodic table, he directed attention to the possible uncertainty of the absolute values of intra-atomic charge and of the number of intra-atomic electrons. Surely the absolute values depend on the number of rare-earth elements; but if to the twelve elements of this series, the international table contains between cerium and tantalum, the new elements (at least four) discovered by Auer von Welsbach in thulium (*Monatshefte für Chemie* 32, Mai, S. 373), further keltium, discovered by Urbain (*Comptes rendus d. l'Acad. des Sciences*, 152, 141-3), and an unknown one for the open place between praseodymium and samarium be added, this long period, too, becomes regular. Moreover, if only twelve instead of eighteen elements existed here, the ratio of the large-angle scattering per atom divided by M^2 is no longer constant, the values for copper,