fruit. They were seen in Corymbiferæ, Cynarocephaleæ, and Cichoriaceæ. In Pulicaria dysenterica, single oblong crystals with angular pointed ends; in Senecio Jacobæa and S. aquaticus, short acicular crystals; in Arctium intermedium and two other species, cubical crystals $\frac{1}{3000}$ inch diameter; in Centaurea nigra, single and double crystals shaped like those of Pulicaria; in Carduus lanceolatus, C. palustris, and C. acaulis, some acicular forms and a greater number like those of Pulicaria and Centaurea; in Hypochæris radicata, Apargia autumnalis, and Crepis virens, minute square or cubical crystals.

DIOSCOREACE E.— Tamus communis, Raphides plentiful in the stem and leaves, and still more so in the perianth and stamens.

ORCHIDACE.—The only species examined were Orchis Morio, O. mascula, O. maculata, and Habenaria chlorantha, in every one of which raphides were abundant in all parts of the plant.

IRIDACE A. - Iris Pseud-acorus. Long, prismatic, slender, and

blunt crystals, generally occurring singly, in the leaves.

LILIACE E.—Endymion nutans. Raphides abundant in all parts of this plant, from the perianth to the bulb; though not found at all in Allium ursinum.

TYPHACE E.—Sparganium ramosum and S. simplex. Raphides abundant in the perianth, fruit, stem, and leaves, though not found at all in Typha latifolia and T. angustifolia.

ARACEÆ.—Arum maculatum. Raphides throughout the plant. Lemnaceæ.—Raphides (as described in Ann. Nat. Hist. for May 1861) in all our plants, most abundant in Lemna trisulca and L. minor, and comparatively scanty in L. polyrrhiza and L. gibba. In L. minor the raphides (phosphate of lime) are plentifully associated with starch-granules—thus indicating the valuable fertilizing and nutritious properties of this most common, abject, and despised weed.

III.—On the proposed Change in Name of Gracula pectoralis.

By Alfred R. Wallace.

To the Editors of the Annals and Magazine of Natural History.

GENTLEMEN,

May I be permitted to make a few remarks on Mr. G. R. Gray's proposal (in the 'Annals' for December 1862, p. 472) to change the name of my *Gracula pectoralis*, described and figured in the 'Proceedings of the Zoological Society' for June last, into *Gracula Anais*, that name having been given by Lesson to a bird which Mr. Gray believes to be the same species.

I am far from denying, or even doubting, that Lesson's bird

was in part the same as mine; but I wish to inquire if the name given to any part of a bird, or to a manufactured bird in which more is false than genuine (and the description of which must therefore be quite unrecognizable), can claim priority over that

given to the first specimens obtained of the perfect bird.

Mr. G. R. Gray believes that the wings and feet of Lesson's bird were "restorations;" I believe that the head and tail were also "restorations,"—and for this reason: Lesson describes the whole head as "noir-velours," in contradistinction to the back and belly, which he terms "noir-bronzées." In my bird there is no such distinction; the head is the same metallic blue-and-greenish-black as the other parts. Bonaparte, in the 'Comptes Rendus,' also says, "capite nigro-holosericeo," but the other parts "nigro-æneis," showing that it was no mistake of Lesson's

description.

Now for the tail. One of the most characteristic features of my bird is its white under tail-coverts, which are tinged with yellow only at the base, where the vent for a small extent is also yellow. Now, both Lesson and Bonaparte describe this patch of orange on the vent, but neither say a word about the white under tail-coverts, which are very ample and cover the tail to within an inch of its extremity. If, now, we conclude that the wings were false, from the conspicuous white band across them not being mentioned by either author, the absence of any mention of the equally conspicuous white under tail-coverts must also lead us to conclude that the tail had been replaced by that of some other bird; and every one who has seen much of the native New-Guinea skins must know that the tails are very liable to come off.

It seems probable, therefore, that Lesson's specimen was made up of the trunk of my bird, with the head, wings, tail, and legs of one or more other birds; and the name given to this ingenious work of art (the description of which is of course inapplicable to any natural object) must, it is said, be retained according to the law of priority, and that given for the first time to the perfect bird be quoted as a synonym. Now, I contend that this is not a case for the application of the law of priority, and would inevitably lead to further confusion; for an inquirer possessing the bird is sent back to Lesson for a description of the species, and finding a palpable disagreement, unhesitatingly describes his specimen as new; and we must always be liable to such mistakes if descriptions acknowledged to be not merely insufficient, but false, are allowed to be quoted as the authority for specific names.

Turning now to Mr. Cassin's description, we find that his specimen is fairly stated to have been a mutilated one—the legs

and wings wanting, and the head much injured; yet his description is recognizable if we allow for the absence of the wings. His name, however, is very faulty, as black is the colour of fully two-thirds of the perfect bird, the yellow appearing only as a band round the body and a patch on the rump and vent: luteocinctus would therefore have been appropriate; nigrocinctus is a complete misnomer; and, in fact, it was that very name which prevented me from inquiring further about the bird, which I had long seen included in Dr. Sclater's list of New-Guinea birds.

The question, then, is, Shall a name, given to a mutilated skin, and which is erroneous and inapplicable as regards the perfect bird, be perpetuated by the law of priority? Many naturalists are now of opinion that where a description is palpably incorrect or insufficient to distinguish a species among its allies, or when a name is plainly inapplicable to the species to which it has been applied, such names and descriptions should be passed over as altogether void; for it is evidently more to the interest of our science that the inquirer should be at once referred to a good description, which will settle his doubts, than to an imperfect or incorrect one, which must only increase his difficulties. A general conflagration of every work describing species, published more than fifty years back, would be an un-

mixed blessing to zoology.

In this case we have, first, a name and description of a made-up specimen, of which probably one-fifth part only is genuine, and, secondly, a specimen confessedly mutilated in its most important parts, and the name given to which is inapplicable to the entire bird; and in both cases the absence of the legs and wings has led to the species being placed in a wrong genus. I now leave ornithologists to decide, in the interest of science, by what name this bird shall be called; and I would further beg to suggest, as a useful and necessary supplement to the law of priority, that it be decreed that where the first description of a species is absolutely insufficient to determine the same, and a new name has, owing to such insufficiency, been given to the species, with a good and sufficient description attached, such new name shall be for ever retained, notwithstanding at any future time the former name may be proved to have been applied to the same species.

I remain, Gentlemen,

Your most obedient Servant, ALFRED R. WALLACE.