

pair of serrate spines. 1 *p.* One of the serrate spines, highly magnified.

*Fig. 2.* *Stimpsonia chelifera*, Spence Bate. 2 *a.* Portion of upper antenna, showing secondary flagellum. 2 *b.* Mandible. 2 *c.* Maxilla. 2 *d.* Maxilliped. 2 *e.* Second gnathopod.

*Fig. 3.* Tail-piece of *Stimpsonia chelifera* (another specimen), seen from above. 3 *a.* One of the first gnathopods. 3 *b.* One of the second gnathopods. 3 *c.* The other of the second gnathopods.

#### IV.—*On the Young of Pityriasis gymnocephala.*

By Dr. F. BRÜGGEMANN.

THE sexes of this remarkable Bornean bird are known to differ in the colour of their plumage, the female showing some red spots on the abdomen. A *young* female, sent by Dr. George Fischer from Moeara Teweh, interior of S.E. Borneo, shows several peculiarities, which I think worth drawing attention to. Comparing it with the adult male, a specimen of which was also procured in the same locality by Dr. Fischer, the signs of its immaturity are found in the smaller terminal hook of the upper mandible, in the absence of horny tips to the feathers of the hind neck, in the lower stage of development of the rigid feathers on the fore neck, in the pale horn-colour of the feet and nails (the adult having the former yellowish and the latter blackish), and in the sooty-black (not deep-glossy-black) plumage. The narrow velvety edgings of the black feathers are also less pronounced; and the red colour in the plumage is a shade lighter than in the adult, rather scarlet than crimson.

All this is, of course, nothing curious; but the following characters were scarcely to be expected:—The crown of the head is entirely *bare*, without any trace of the papillæ with which it is crowdedly covered in the adult; of the large tuft of rigid brownish grey feathers in the auricular region there is no indication, the feathers on this spot being of *normal* structure and *red*, like the rest of the head-feathers; breast, belly, and flanks are scarlet-red, somewhat mixed, in an irregular way, with black, the basal part of the feathers, or the whole feather, excepting a broad border, being generally blackish; it may be observed that the red edgings, which are much decomposed, are gradually worn off. The red colour decreases in extent on the abdomen, where it is confined to the tips of the feathers. There are also traces of red edgings on the scapularies and wing-coverts. The thigh-feathers (which are of a uniform red in the adult) are black, mixed only in the upper part of the thigh with some red ones.

Thus the young bird exhibits a far greater amount of vivid red colour than the adult, and, besides, a different mode of distribution: it has the under surface of the body for the greater part *red* and the thighs *black*, whereas in the mature bird the under surface is *black* and the thighs *red*. This is, at all events, a noteworthy fact; yet it is not quite exceptional among birds.

In the young of *Tanygnathus luzonensis* the head is *green* like the greater part of the plumage, and the rump is light *blue*; in the adult the upper part of the head is light *blue* and the rump *green* (Brüggemann, Abh. Ver. Brem. v. p. 38).

The immature *Lorius histrio* has the whole crown of the head *blue* and the fore back *crimson*; the old bird has the head almost entirely *crimson* and the back *blue* (Brügg. *l. c.* p. 41).

In *Nectarinia flavostriata* the wings and tail of the young bird (the general plumage of which is olive-coloured) are *red*; those of the adult are blackish brown, and the remainder of its plumage is *red* (Brügg. *l. c.* p. 74).

To add an example of a common indigenous bird, we find that in the young bird of the spotted woodpecker (*Picus major*) the crown of the head is *crimson*, and the upper surface of the body partly marked with white, where the adult is of a uniform black.

These extraordinary instances of the young birds showing *ornamental* colours in parts of the body which are plain-coloured in the adults can only be explained by the suggestion that the immature plumage gives a recapitulation of the colours possessed by the ancestors of the species. Thus the young *Picus major* shows a stronger resemblance to the other European species (*P. leuconotus*, *P. Lilfordii*, *P. medius*) than the adult does; or, in other words, it has kept more strictly the colours of the common parent of the group.

I am of opinion that many more instances of such conservative *ornamental* plumages in the young birds can be found if they are searched for.

V.—*Characters of new Genera and of some undescribed Species of Phytophagous Beetles.* By JOSEPH S. BALY, F.L.S.

[Continued from ser. 4. vol. xx. p. 386.]

Fam. **Chrysomelidæ.**

*Chrysomela Jacobyi.*

*C. oblongo-ovata*, convexa, nigra, nitida, capite thoraceque minute