Ternate attaining a black chin, and in Tonga we see a most complex change, the throat in the male being all black, the rest of the under parts being yellow, the place of the black pectoral band being yellow; in the female the throat is white, a rusty-tinged pectoral band being followed by yellow underneath. In *P. astrolabei*, from the Solomon Islands, the male is practically as in *temporalis*, but the throat coloration is *bright yellow*, not white. On another of the Solomon group, a further melanistic change occurs; the birds called *P. melanota* have the black of the head extending over the whole of the upper parts, and the pectoral band broadened, and black patches appearing on the sides of the body. In the former the female shows a tendency to evolve into a yellowish underneath hird, which has come about in the latter, which has also evolved in a reddish direction on the head, wings, and pectoral band. On the Fiji Islands there is a form which has lost the black pectoral band while producing a yellow throat, and is now uniform yellow below, and, in addition, has evolved two yellow forehead spots. I would just like to note that another form, called *P. fulviventris*, while retaining the general colour-pattern, with a white throat, has produced a deep fulvous abdomen, &c., coloration.

This review may not be so easy to follow as it is when the birds are laid out for examination, but the existence of a definite colour-pattern in this group independent of colour is manifest by the existence side by side of *P. temporalis* and *rufiventris*. How the colours change in a complementary manner has been explained in the preceding cases, when we see the yellow predominating, the black predominating, and the fulvous new colour driving out the yellow. We have not the changes in existence as far as is yet known showing the alteration from *temporalis* to *rufiventris*.

It must be obvious now that there is a difference between coloration and colour-pattern as laid down by Dr. Lowe in section 1. The constancy of persistence of colour-pattern (Dr. Lowe's section 3) has been well demonstrated. The correlation of colour-pattern to sex (Dr. Lowe's section 5) must be recognized throughout the preceding remarks on *Pachycephala*, and the student will have noted how the colour-pattern is even evolved in the female in the case of *P. littayei*. The usage of super-genera must await the examination of suites of material, as here, apparently, we have a super-generic group of birds, which includes several generic groups which have not yet been determined.

An American Opinion Concerning Genera.—The following passage, taken from *The Auk* (the official publication of the American Ornithologists' Union), July, 1915, shows American thought concerning the difficult question of genera:—

"The question of the limits of genera bids fair to be the most serious problem in zoological nomenclature. In the recent 'List of British Birds' there are 171 species and 151 generic groups

which are to be found also in the A.O.U Check-list. The two committees working under the International Code have, after making allowance for several admitted errors or arbitrary violations of rules, arrived at the same names for all but four of the species, while the latest British list differs from that of Dr. Hartert aud his associates in only three specific cases. When three independent committees approach so close to uniformity it would seem that the International Code had solved the problems of nomenclatural discrepancy.

"In the case of the 151 genera, however, we find 49 cases where the names employed are different. After making allowance as above, we find that only 7 of this number are due to questions of nomenclature—*i.e.*, to the still unsettled point as to how much difference in spelling constitutes a different word, and to the recognition of certain works in systematic nomenclature.

"The other 42 cases are due to difference of opinion as to the limitation of genera. One committee, for instance, considers tbat the Mallard, Blue-winged and Green-winged Teal each represents a distinct genus, and consequently calls them *Anas brachyrhynchos*, *Querquedula discors*, and *Nettion carolinense*. Another considers that they all belong to one genus, and quotes them as *Anas brachyrhynchos*, *Anas discors*, and *Anas carolinensis*. The third regards the Teal as congeneric, but considers that the Mallard represents a distinct genus, and we have *Anas brachyrhynchos*, *Querquedula discors*, and *Querquedula carolinensis*. It will be noticed that there is here just as much confusion and difference of opinion as could possibly be occasioned by the law of priority, the 'first species' rule of type fixation, or any of the other principles of nomenclature against which such protests have been directed; and yet this is due purely to a question of ornithology with which the rules of nomenclature and the 'name jugglers' have notbing whatever to do.

"Now, if the name of a bird is to be used as a medium to exploit personal opinions as to the phylogeny and relationship of species we had better devise some other means of tagging a species so that someone else will know what we are talking about.

"If, on the other hand, the name of the bird is to constitute such a 'tag,' then we should by some international and arbitrary agreement decide these disputed cases, so that we may have the same uniformity *ornithologically* that we seem to have at last attained *nomenclaturally*.

"The great majority of ornithologists are pretty well agreed upon the great majority of genera, and there will not be so very many to be settled arbitrarily, but such arbitrary action, if we are to have a permanent and universal system of names, seems to be inevitable. Those who wish to make further subdivisions may still use the suppressed names as sub-genera in any discussion or systematic monograph.

"Another phase of the same question is the increasing tendency to recognize finer and finer generic divisions, a matter which has

been discussed by the writer (*Jour. Acad. Nat. Sci. Phila.*, xv., p. 313) and by the British Ornithologists' Club at a recent meeting (Bull. B.O.C., No. 204, p. 68 *et seq.*) In some groups we have already reached the stage where a large number of genera contain but a single species each. The generic name has thus become of exactly the same significance as the specific name, and is superfluous. The ultimate outcome of this sort of thing will be a nomenclature wherein each species will have a name but no clue whatever to its relationship will be found in this name.

"Linnæus's idea was that the 63 genera under which he arranged all the birds known to him represented 63 types of bird structure, and when the generic name was mentioned the general character of the bird was immediately known, while the specific name indicated a form of that type of bird.

"Of course, we cannot go back to Linnæus, or anywhere near to him, but we *must*, if a name is to be maintained *as a name*, check the further subdivision of genera. Moreover, why is the discovery of a slight structural difference of such paramount importance that we should overturn our names to advertise it? Is it not just as important to emphasize relationship as divergence? Indeed, we are suffering at the present time in systematic ornithology for the need of some way to indicate relationship. We shall soon be forced to erect a lot of sub-families to indicate relationships formerly denoted by generic names which have now been degraded until they are perilously close to species.

"It should be borne in mind that a genus is not a definite thing in the sense that a species is; it is simply a group for convenience—sometimes it is sharply defined, more often it is not. This fact is well shown in the virtual agreement of the committees referred to above as to the number of species before them and their wide differences of opinion as to the number of genera.

"It is difficult to provide a means for bringing about the desired uniformity in the limits and number of generic groups, but the necessity for such action should be strongly emphasized and widely proclaimed."

Observations on the Nankeen Night-Heron (Nycticorax caledonicus).

By S. A. Hanscombe, Seaham (N.S.W.)

In the swampy regions of the Port Stephens district (N.S.W.), extending from West Maitland and Newcastle north as far as Bulladellah, many Nankeen Night-Herons (*Nycticorax caledonicus*) are to be found. I have for three years lived in this remarkable district, the home of numerous water-fowl. Unfortunately, many gunners—I cannot in all cases say sportsmen—annually visit a number of the isolated swamps and ruthlessly shoot birds—not game birds, but anything with feathers. Night-Herons, at times,