with cakes of a brittle mucilage which, like that of the esculent swallow, swells and softens in water; in flame it crackles, swells, does not readily burn, and emits a strong animal odour: it differs only in being yellowish-brown, in not having so many large air-bubbles, in being more plainly laminated, and in having even a striated appearance, caused by innumerable elliptical excessively minute points, which I believe to be drawn-out minute air-bubbles.

Most authors believe that the nest of the esculent swallow is formed of either a Fucus or of the roe of a fish; others, I believe, have suspected that it is formed of a secretion from the salivary glands of the bird. The latter view I cannot doubt, from the preceding observations, is the correct one. The inland habits of the Swifts and the manner in which the substance behaves in flame almost disposes of the supposition of Fucus. Nor can I believe, after having examined the dried roe of fishes, that we should find no trace of cellular matter in the nests, had they been thus formed. How could our Swifts, the habits of which are so well known, obtain roe without being detected? Mr. Macgillivray has shown that the salivary crypts of the Swifts are largely developed, and he believes that the substance with which the materials of its nest are fitted together, is secreted by their glands. I cannot doubt that this is the origin of the similar and more copious substance in the nest of the North American Swift, and in those of the *Collocalia esculenta*. We can thus understand its vesicular and laminated structure, and the curious reticulated structure of the Philippian Island species. The only change required in the instinct of these several birds is that less and less foreign materials should be used. Hence I conclude that the Chinese make soup of dried saliva.*

In looking for a perfect series in the less common forms of birds' nests, we should never forget that all existing birds must be almost infinitely few compared with those which have existed since footprints were impressed on the beach of the New Red Sandstone formation of North America.

If it be admitted that the nest of each bird, wherever placed and however constructed, be good for that species

* [It is almost needless to observe that we must remember the date at which this was written; but it may be remarked that as early as 1817 it was pointed out by Home (*Phil. Trans.*, p. 332) that the proventriculus of Collocalia is a peculiar glandular structure probably suited to secrete the substance of which the nest consists.—G. J. R.]