

*An Account of an Appendix to the small Intestines of Birds.* By James Macartney, Esq. F.R.S. Read March 21, 1811. [*Phil. Trans.* 1811, p. 257.]

Although almost every author who has written upon the incubation of the egg has observed the direct communication between the yolk-bag and the small intestines of the chick, and although some of them have observed that this duct remains in the form of a small cæcum during life, it appears to have escaped the notice of any one, that in some species of birds this part is of considerable size, and possesses a structure peculiar to itself.

It was in the snipe that Mr. Macartney first observed its magnitude to exceed that of the cæca of the great intestines; and he has since found that in the woodcock and curlew it is proportionally large. In the black coot also, it is long, but slender, like the rest of the intestines in that bird.

In the swan and goose it does not bear the same proportion as in the preceding, though somewhat larger than in the generality of birds.

This cæcum consists always of two tunics, corresponding to the peritoneal and villous coats of the intestinal canal in general, but without any appearance of intervening muscle. Its interior surface is composed of small cells, like the assemblage of mucous follicles, found in various parts of the alimentary canal. The matter contained in this appendix has never been found the same, as in the adjoining intestines, but it has been always filled with a mucous fluid, which it seems to secrete.

This appendix, in most birds, retains evidence of its origin; for the remnant of the yolk-bag is commonly found adhering to its extremity, and still communicates freely with it, especially in the Accipitres, and in the passerine tribe. In the nightingale Mr. Macartney observes, the duct is scarcely visible; but the yolk-bag remains during life as a sac, the size of a large pea, communicating with the intestine.

The preceding facts, says the author, are curious instances of an organ of foetal life retained in the full-grown bird, for the exercise of a particular function.

*An Account of a vegetable Wax from Brazil.* By William Thomas Brande, Esq. F.R.S. Read May 9, 1811. [*Phil. Trans.* 1811, p. 261.]

The substance here examined by Mr. Brande, had been sent to Lord Grenville from Rio de Janeiro, and by him given to Sir Joseph Banks, in the hope that when its properties were investigated, it might be found to answer the purposes of bees' wax, and become a valuable article of commerce between Brazil and this country.

It is said to be the produce of a tree of slow growth, called by the natives Carnauba, and growing in the most northerly part of the