

the skull is more globular: all the bones of the face are much shortened, and the front of the skull and descending nasal bones are almost perpendicular: the maxillo-jugal arch and premaxillary bones form an almost straight line; the space between the prominent edges of the eye-orbits is depressed. In the Barb the premaxillary bones are much shortened, and their anterior portion is thicker than in the rock-pigeon, as is the lower part of the nasal bone. In two Nuns the ascending branches of the premaxillaries, near their tips, were somewhat attenuated, and in these birds, as well as in some others, for instance in the Spot, the occipital crest over the foramen was considerably more prominent than in the rock-pigeon.

In the lower jaw, the articular surface is proportionably smaller in many breeds than in the rock-pigeon; and the vertical diameter,

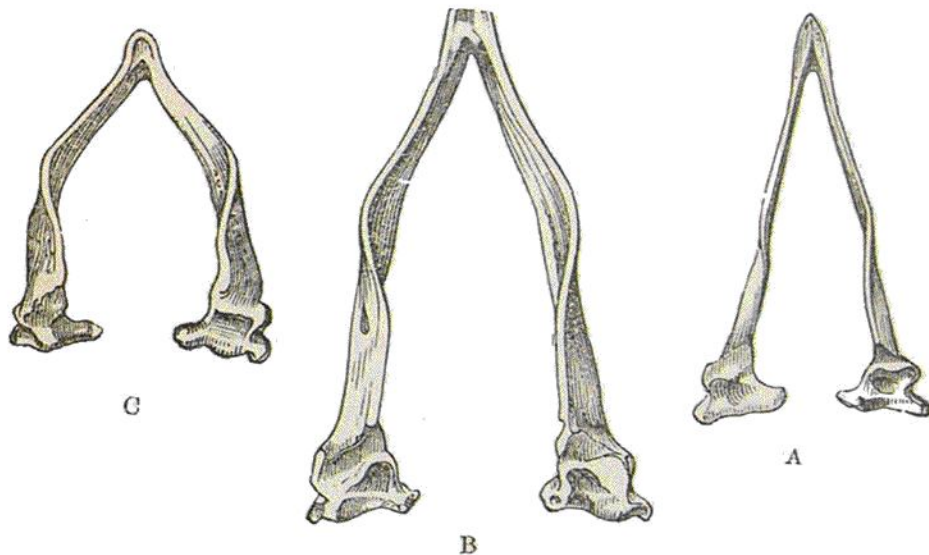


Fig. 25.—Lower jaws, seen from above, of natural size. A. Rock-pigeon. B. Runt. C. Barb.

more especially of the outer part of the articular surface, is considerably shorter. May not this be accounted for by the lessened use of the jaws, owing to nutritious food having been given during a long period to all highly improved pigeons? In Runts, Carriers, and Barbs (and in a lesser degree in several breeds), the whole side of the jaw near the articular end is bent inwards in a highly remarkable manner; and the superior margin of the ramus, beyond the middle, is reflexed in an equally remarkable manner, as may be seen in the accompanying figures, in comparison with the jaw of the rock-pigeon. This reflection of the upper margin of the lower jaw is plainly connected with the singularly wide gape of the mouth, as has been described in Runts, Carriers, and Barbs. The reflection is well shown in fig. 26 of the head of a Runt seen from above; here a wide open space may be observed on each side, between the edges of the lower jaw and of the premaxillary bones.