

differing in general appearance and form of beak from the common Tumbler. Mr. Brent states that these birds generally begin to tumble "almost as soon as they can well fly; at three months old they tumble well, but still fly strong; at five or six months they tumble excessively; and in the second year they mostly give up flying, on account of their tumbling so much and so close to the ground. Some fly round with the flock, throwing a clean summersault every few yards, till they are obliged to settle from giddiness and exhaustion. These are called Air Tumblers, and they commonly throw from twenty to thirty summersaults in a minute, each clear and clean. I have one red cock that I have on two or three occasions timed by my watch, and counted forty summersaults in the minute. Others tumble differently. At first they throw a single summersault, then it is double, till it becomes a continuous roll, which puts an end to flying, for if they fly a few yards over they go, and roll till they reach the ground. Thus I had one kill herself, and another broke his leg. Many of them turn over only a few inches from the ground, and will tumble two or three times in flying across their loft. These are called House-tumblers, from tumbling in the house. The act of tumbling seems to be one over which they have no control, an involuntary movement which they seem to try to prevent. I have seen a bird sometimes in his struggles fly a yard or two straight upwards, the impulse forcing him backwards while he struggles to go forwards. If suddenly startled, or in a strange place, they seem less able to fly than if quiet in their accustomed loft." These House-tumblers differ from the Lotan or Ground Tumbler of India, in not requiring to be shaken in order to begin tumbling. The breed has probably been formed merely by selecting the best common Tumblers, though it is possible that they may have been crossed at some former period with Lotans.

Sub-race IV. Short-faced Tumblers.—These are marvellous birds, and are the glory and pride of many fanciers. In their extremely short, sharp, and conical beaks, with the skin over the nostrils but little developed, they almost depart from the type of the Columbidae. Their heads are nearly globular and upright in front, so that some fanciers say¹⁸ "the head should resemble a cherry with a barley-corn stuck in it." These are the smallest kind of pigeons. Mr. Esquilant possessed a blue Baldhead, two years old, which when alive weighed, before feeding-time, only 6 oz. 5 drs.; two others, each weighed 7 oz. We have seen that a wild rock-pigeon weighed 14 oz. 2 drs., and a Runt 34 oz. 4 drs. Short-faced Tumblers have a remarkably erect carriage, with prominent breasts, drooping wings, and very small feet. The length of the beak from the tip to the feathered base was in one good bird only $\frac{1}{4}$ of an inch; in a wild rock-pigeon it was exactly double this length. As these Tumblers have shorter bodies than the wild rock-pigeon, they ought of course

¹⁸ J. M. Eaton's 'Treatise on Pigeons,' 1852, p. 9.