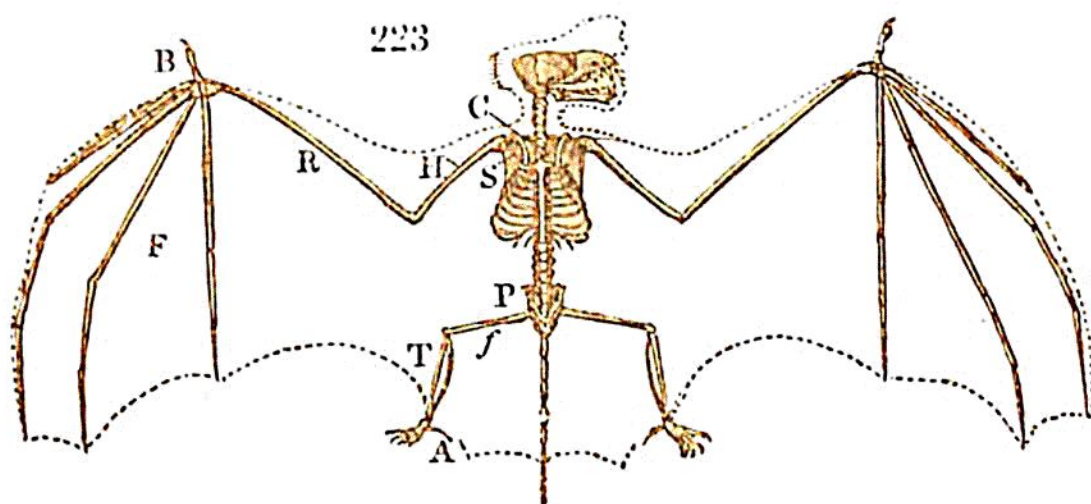


flying squirrel, and also by some other species of the same genus. They are seen on a still larger scale in the *Lemur volans*, or *Galcopithecus*. The resistance which these broad expansions of skin oppose to the air, when the limbs are spread out, enables the animal to descend in perfect safety through that medium from very considerable heights; but these appendages to the body are mere parachutes, not wings, and none of the animals which possess them can, by their means, and with the utmost efforts which their muscles are capable of exerting, ever rise from the ground, or even suspend themselves for a moment in the air.

The only quadruped that can properly be said to be endowed with the power of flying is the *Bat*. In this animal the portions of the skeleton (F, Fig. 223) which correspond



to the phalanges of the fingers are extended to an enormous length, and the pectoral muscles, which move the anterior extremities, are of extraordinary size and power. In the larger species, each wing is at least two feet in length. The fine membrane, which is spread between these lengthened fingers, has its origin in the sides of the neck, and reaches all along the body to the extremities of the hinder legs, which it encloses in its folds. Thus, not only is the surface, by which it acts upon the air, sufficiently extensive, but the muscular power, by which its motions are effected, is adequate to give it those quick and sudden impulses which are requisite for flying; and thus, although its structure is totally different from that of birds, it yet performs fully the