

and of down on the body. The vanes and shafts of the feathers can be seen by the naked eye. Fourteen long quill feathers diverge on each side of the metacarpal and phalangeal bones, and decrease in length from six inches to one inch. The wings have a general resemblance to those of gallinaceous birds. The tarso-metatarsal, or drumstick, exhibits at its distal end a trifid articular surface supporting three toes, as in birds. The furculum, pelvis, and bones of the tail are in their natural position. The tail consists of twenty vertebræ, each of which supports a pair of plumes. The length of the tail with its feathers is eleven and a half inches, and its breadth three and a half. It is obtusely truncated at the end. In all living birds the tail-feathers are arranged in fan-shaped order and attached to a coccygean bone, consisting of several vertebræ united together, whereas in the embryo state these same vertebræ are distinct. The greatest number is seen in the ostrich, which has eighteen caudal vertebræ in the foetal state, which are reduced to nine in the adult bird, many of them having been anchylosed together. Professor Owen therefore considers the tail of the Archæopteryx as exemplifying the persistency of what is now an embryonic character. The tail, he remarks, is essentially a variable organ; there are long-tailed bats and short-tailed bats, long-tailed rodents and short-tailed rodents, long-tailed pterodactyls and short-tailed pterodactyls.

The Archæopteryx differs from all known birds, not only in the structure of its tail, but in having two, if not three digits in the hand; but there is no trace of the fifth digit of the winged reptile.

The conditions under which the skeleton occurs are such, says Professor Owen, as to remind us of the carcass of a gull which had been a prey to some Carnivore, which had removed all the soft parts, and perhaps the head, nothing being left but the bony legs and the indigestible quill-