

### **Aristotle 'De Historia Animalium' Bk 1:15 (494a)**

Of the limbs, one set, forming a pair, is 'arms'. To the arm belong the 'shoulder', 'upper-arm', 'elbow', 'forearm', and 'hand'. To the hand belong the 'palm', and the five 'fingers'. The part of the finger that bends is termed 'knuckle', the part that is inflexible is termed the 'phalanx'. The big finger or thumb is single-jointed, the other fingers are double-jointed. The bending both of the arm and of the finger takes place from without inwards in all cases; and the arm bends at the elbow. The inner part of the hand is termed the 'palm', and is fleshy and divided by joints or lines: in the case of long-lived people by one or two extending right across, in the case of the short-lived by two, not so extending. The joint between hand and arm is termed the 'wrist'. The outside or back of the hand is sinewy, and has no specific designation.

### **Aristotle 'Problemata' Bks 10 & 34**

#### **Book 10 (896a-896b)**

But we must next consider length of life in relation to other conditions. Why then are men long-lived who have a cut right across their hands? Is it because animals whose limbs are badly articulated are shortest-lived, aquatic animals for example? And if those which are badly articulated are short-lived, clearly those that are well articulated must be the opposite. Now the latter are those in which even those parts are best articulated which are by nature badly articulated; the inside of the hand is the least well articulated part of the body.

Why is it that man alone squints, or at any rate does so more than any other animal? Is it because he alone, or more than other animals, is liable to epilepsy in infancy, when distortion of the vision also always begins? Why is man more affected by smoke than other animals? It is because he is most prone to shed tears, and shedding tears is one of the effects of smoke?

#### **Book 34 (964a-964b)**

Why is it that men are very long-lived who have a cut right across the hand? Is it because those animals which are badly articulated are shortlived and weak? As an instance of weakness we may take young animals, and of shortness of life the aquatic creatures. Clearly then those who are well articulated must be the opposite, namely, those in whom even those parts are best articulated which are by nature badly articulated. Now the inside of the hand is the least well articulated part of the body.

Why it is that, in deep breathing, when we draw in the breath the stomach contracts, but when we expire it fills out? Is it because in breathing the stomach is compressed downwards by the flanks and then appears to expand again, like bellows?