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## **ANATOMY AND ITS INFLUENCE**

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An animal is made up of four parts; (1) The Head and Neck, (2) The Forehand, (3) The Body, (4) The Quarters.

(1) Head and Neck. Though there are four parts, each part depends on the others and a good neck demands good shoulders, and the carriage of the head depends on the carriage of the neck. The neck of a Terrier should not suggest the neck of a bull or old fashioned prizefighter, nor should it be of a swan-like elegance, but it should have enough length for the carriage of head and neck to possess grace and ease.

(2) The Forehand comprises shoulders, humerus and forelegs and a good forehand is one with a long flat sloping shoulder; a humerus, well bent and fairly long; sound forelegs, with parallel placed elbows, firm knees and pasterns, feet well knit, with good pads and strong toes.

(3) The Body comprises ribs and loin. As length of body is of common mention, the cause of length should be studied. Variation of length may be due to a difference in length of the rib formation or of the loin. A dog with ribs too short and loin over long may still seem to be a short-bodied dog, but, in fact, it is wrong in both. Therefore it is the ribs and loin that matter, and not the body as a whole. It might be argued that the loin is part of the quarters and not of the body, and, certain it is, that the muscular covering of the loin plays a large part in the functioning of the quarters.

(4) The Quarters comprise pelvis, thighs and hind legs. Here, as in the forehand, the angle of one bone to another, the relative lengths of bones and their muscular coverings, govern the power of the dog to move, whether walking, galloping, jumping, or climbing.

### **THE HEAD**

The occiput is the topmost point of the skull.

The stop is the break in profile of the head between skull and muzzle. A well-defined stop signifies that the cavities for the eyes are so placed that the eyes seem partially sunk under the skull. Therefore the stop has considerable influence on expression.

The muzzle is the forepart of the head: the angle of the muzzle to the skull also has great influence on expression.

The nose is the termination of the muzzle.

### **THE FOREHAND**

The shoulder is formed by a broad flat bone, which nearly meets its fellow, on the opposite side at the withers, and from that point extends outwards from the spine, connecting it with the humerus. They must lie flat to give a clean shoulder, and if they extend outwards too much the chest will be too wide and the shoulder heavy. The bones should lie in an acutely forward direction from the withers, and this is called a sloping. Shoulder.

The humerus is the bone between the shoulder blade and the forearm of the leg. It should be of good relative length to the shoulder, and it should lie at an acute angle to the vertical line of the foreleg. If this is so, and the shoulder is long and sloping, the shoulder and humerus meeting makes another acute angle, and the point where they meet is a considerable distance in front of the foreleg. Great importance lies in length of humerus and in the respective angles. Looking at the drawing, it will at once be apparent that if the humerus were placed more in line with the foreleg and there was less bend between the humerus and the shoulder, the dog at the withers would be very much further from the ground, and the dog would have a straight stiff forehand. It is the bend at the top of the forearm, and the two acutely placed bones like the arms of a shock absorber on a motor car, that give a short-legged dog its activity.

The brisket is the outward and visible sign of the inward grace of correct relative lengths and angles of humerus and shoulder. A dog with little brisket must be wrong in its forehand.

The elbow is at the union of the humerus and forearm. If the elbow is "out", the muscles and sinews are misplaced, and the dog's power is reduced in its application to movement.

The forearm is the main part of the leg.

The knee is at the joint between forearm and pastern.

### **THE BODY**

The ribs are attached to the spine and enclose the lungs and protect the vital organs. To give room for the lungs to expand, the ribs should spring well out on each side of the spine--"well sprung ribs"; as they curve round they should flatten into a deep keel--"heartroom". The ribs should be carried well back, making a quick upward curve into the loin. It is sometimes said of a animal that it has a rib too many. This means that that back ribs have not enough depth and the dog looks long in its barrel. Flat ribs signify poor lungs, and round shallow ribs suggest poor space for vital organs and general want of stamina.

The loin is the part between the ribs and pelvis, its only bone foundation is the spine, and it depends for its strength and the unity of the forehand and quarters entirely on the muscles and sinews. Important organs lie below the loin. When mention is made of a short back, in nine cases out of ten, reference is meant to the loin. The important feature in a loin is its strength. A loin that is too long is apt to be weak-- it need not be so, but it is more probable than in a short loin, but whatever the relative length of loin of two dogs,

the one with the stronger loin is superior to the one with the weaker loin. It is not length that matters, but strength. It must be remembered, too, that the muscles in the loin serve a purpose in the hind movement, and too short a loin may completely ruin hind movement. Beware of the phrase, short back, it is misleading and usually misapplied.

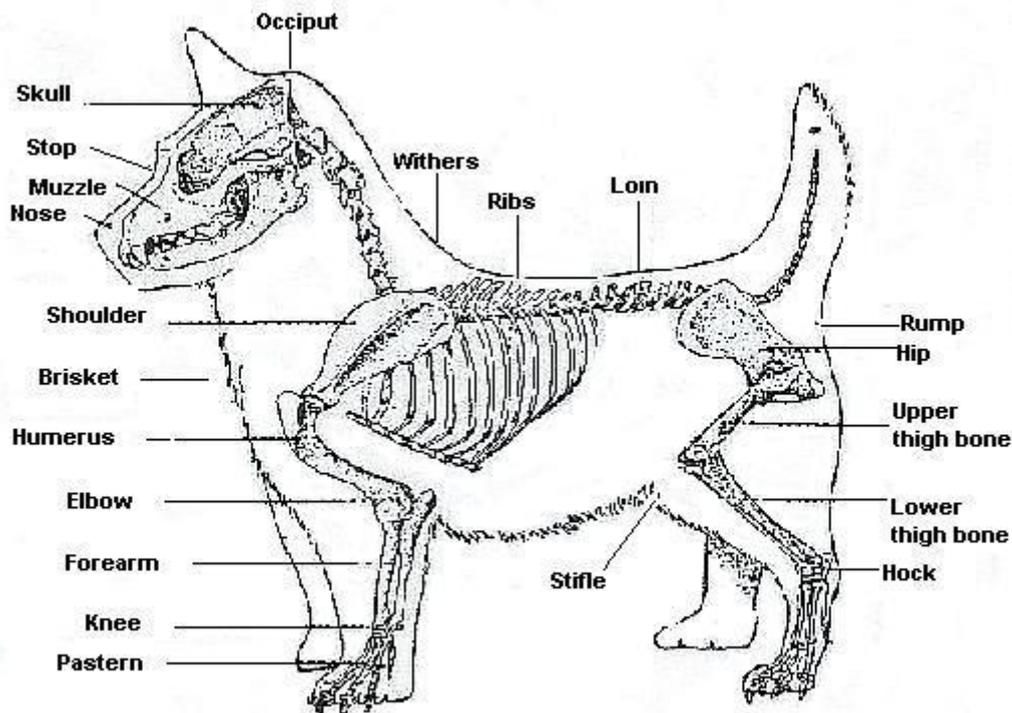
### THE QUARTERS

The pelvis is the bone linking the hindquarters to the spine. Not once in 10,000 criticisms of a dog is mention ever made of the pelvis. No critic of a dog seems aware of its existence, yet no one looking at the drawing can fail to notice that on its length and on the angle at which it is placed must depend the functioning of the quarters. Shoulders are in everyone's mouths, but never pelvis, yet the one varies from dog to dog just as much as the other. Almost every specimen of one breed of terrier has defective hindquarters because the pelvis is placed too vertically, yet no one ever mentions it. What are all our wise men, all the authorities, about? Blind teachers of the blind.

The upper thigh is the union between pelvis and lower thigh. It carries the main muscle in the hindquarters. As compared with the pelvis it should slope forwards and, with the lower thigh sloping backwards again, the muscles propelling a dog have large expanding and contracting length without necessitating height from the ground. The power in a dog's hindquarters depends on the quality of muscle on the thighs and their ability to expand and contract.

The stifle indicates the joint between upper and lower thigh.

The hock is the union of the lower thigh and the hind leg. It is a sign of weakness if the hock is placed either too much under the body or outside it. The two hocks as the dog moves should move in parallel planes, if the hocks turn in towards each other they are termed cow hocked. A slight tendency to cow hocks has comparatively little influence on power to move, but hocks turned outwards from each other usually produce weak hindquarters.



Skeleton of Cairn with outline of contour of body