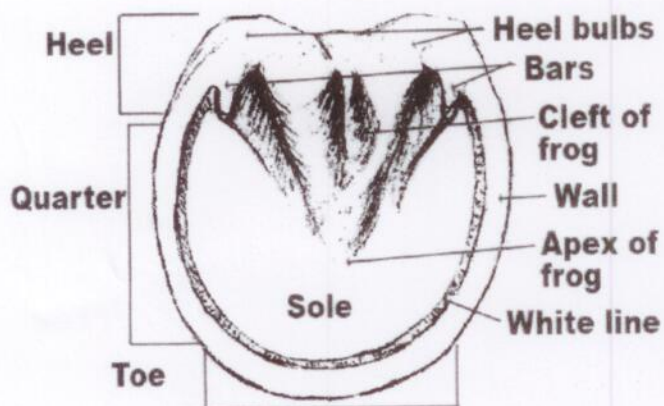


Parts of the Hoof

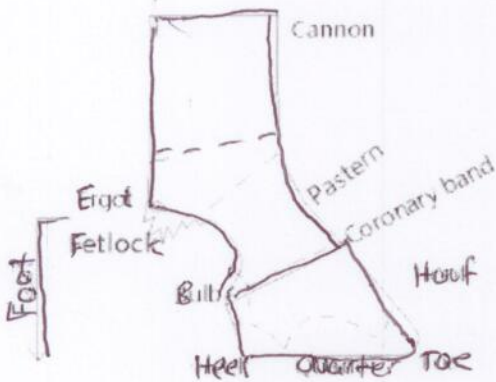
Lameness in horses occurs far more often in the foot than in any other part of the limbs. This is not surprising considering the amount of strain put upon the feet of domesticated horses required to carry a rider, particularly at fast speeds or over jumps. There is an old saying, "no hoof, no horse!" (You can probably figure out what this expression means) But in other words: it is important to take good care of your horse's feet so that he/she can be happy, healthy and perform to the best of his or her ability. It is important to know the parts of the hoof and to understand their functions.



The external, insensitive part of the hoof consists of **the wall** (the outer protective layer of the foot), **the sole** (a plate of hard horn just under an inch thick, and **the frog** (a wedge-shaped mass of soft elastic horn).

- The wall grows continuously and must be trimmed approximately every 6 weeks (thanks Farrier Jeff!)
 - The function of the sole is to give protection to the sensitive inner structures of the hoof and to help support weight.
 - The frog performs similar functions as the sole, but it also provides grip and acts as a shock absorber.
 - The bars are the termination(end) of the hoof wall on either side of the frog. The bars are that portion of the wall that curves forward at the heel.
- *The wall, frog, and bars are the weight-bearing structures of the hoof

The horse's lower leg and hoof on the **outside**:

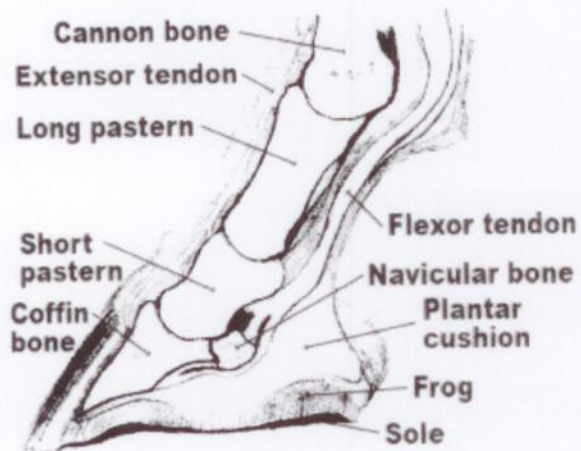


Toe, Quarters, Heel – The three areas of the hoof wall, which is divided roughly in thirds, front to back. The toe is the front third, the quarters are the middle sections on either side, and the heel is the back third.

Coronet/ Coronary Band – The point at which the hair and skin of your horse's leg meet the hoof wall. New layers of hoof wall are produced from the area just below the coronet.

The White Line can be seen in the first diagram. It is the line of demarcation between the insensitive outer hoof wall and the inner portion of the hoof containing nerves and blood vessels (see diagram on page 3). The white line is of great importance to the farrier because it indicates the position of the sensitive structures of the foot and the thickness of the wall, thus helping determine where nails can be driven into the wall to hold shoes in place without intruding on the sensitive areas.

The horse's lower leg and hoof on the **inside**:



Coffin Bone – Also known as the Third Phalanx. It is the lowermost bone in your horse's foot, and is connected to a leg muscles by a tendon. Cartilages extend backward and upward from the Coffin Bone. Correct orientation of the Coffin Bone by proper trimming of the hoof wall is crucial to hoof health and to prevent lameness.

Navicular Bone – A small bone located slightly behind and above the Coffin Bone that is supported by a small, fluid-filled sac called the Navicular Bursa. Incorrect orientation of the navicular bone and those above it, which can be caused by improper trimming and shaping of the hoof wall, can cause Navicular Bone Disease, resulting in lameness.

Short Pastern – The bone located directly above and connected to the Coffin Bone.

Long Pastern – The bone located directly above and connected to the Short Pastern.