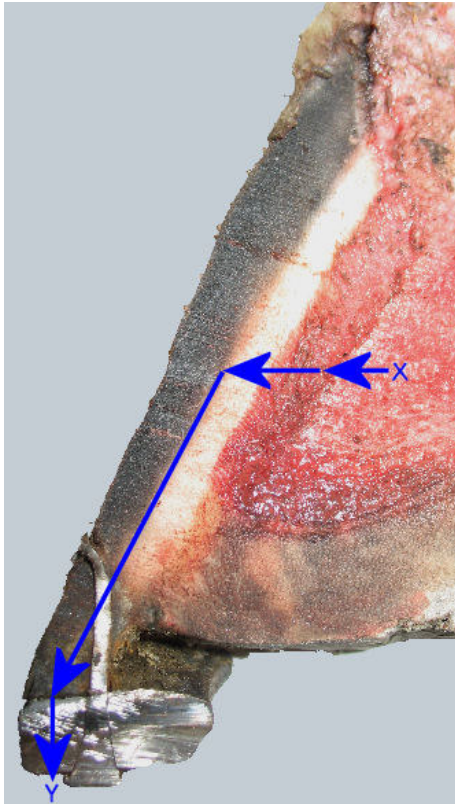


To those who still believe that the hoof wall alone is supposed to carry the weight of the horse.

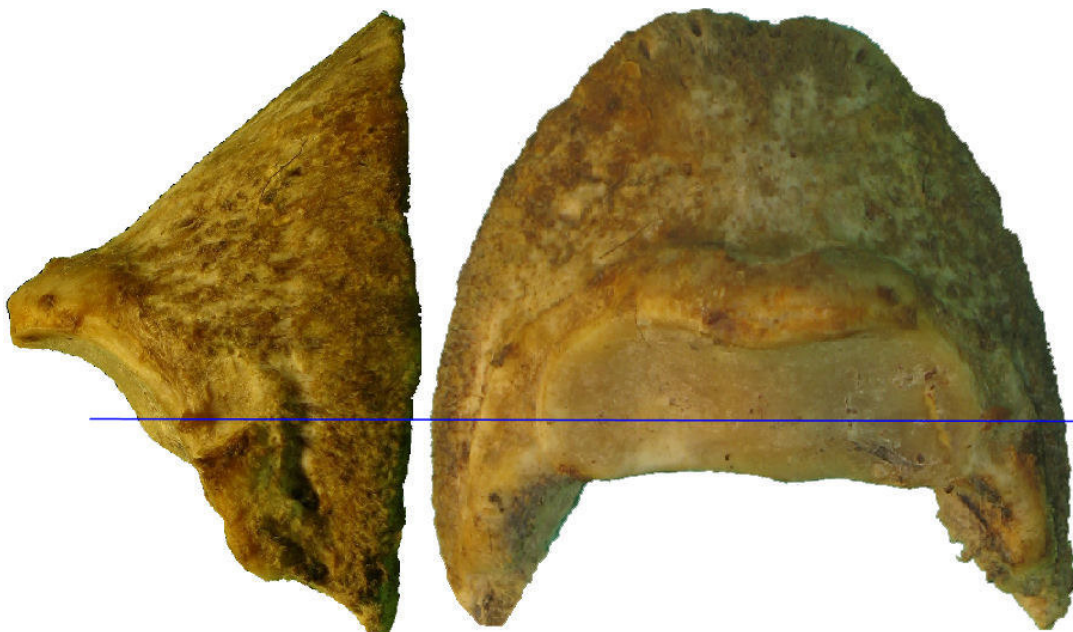
When the shoe is the only thing that touches the ground the weight from the coffin bone (the horse) would have to go from the coffin bone (X) through the blood filled tissue to the lamella and the hoof wall and down



through the shoe to the ground (Y). The blood filled tissue between the coffin bone and the lamella is so full of blood it almost only consists of blood vessels which means that the weight of the horse would be hanging in the blood vessels if the coffin bone was hanging from the hoof wall.

The pictures below shows us that almost all of the contact surface between the coffin bone (P3) and the hoof wall is placed in front of the hoof joint and point where the weight comes down from P2 to P3 (the blue line).

If the frog has natural (i.e. very good) ground contact the frog and the digital cushion (which fills the complete rear



part of the hoof and even in between the arms of P3) will carry a significant part of the horses weight but that does not affect this reasoning about how the weight carried by P3 is transferred to the ground.

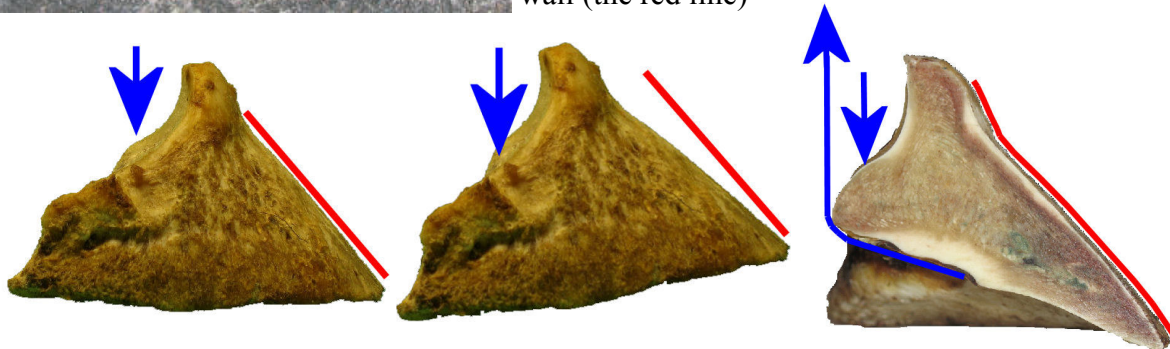


The coffin bone covers only a small part of the frog (as seen on the left picture) and that part can not carry a large load



without the risk of bruising the frog. The rear part of the frog (which is supposed to stick outside the hoof wall) is made to be the landing zone and to carry a substantial load. This part is placed behind and between the arms of the coffin bone.

The laws of physics tells us that because the connection between the coffin bone and the hoof wall (the red line)



mostly is in front of the pressure point (the blue arrow pointing downwards) the coffin bone, if hanging from the hoof wall, would break loose and tilt backwards if the connection started to degenerate (which it does when the horse founders). This of course never happens in real life. The Deep Digital Flexor Tendon (DDFT, the blue line pointing upwards on the last picture on this page) is not capable of preventing this since it is relaxed when the horse is resting. There is only tension in the DDFT when the horse is pushing away (and the muscle at the top end of the DDFT contracts). If, however, the hoof that left the top shoe print on the first picture in this article got over loaded the first thing that would break loose completely is the lamella between the hoof wall and the coffin bone. You can see that and even how it is supposed to work on video at my clinics.

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