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The Evolution of Horse Shoeing

Some of the earliest forms of shoeing have been traced back to Roman times; these were known as Hippo-sandals. Depending upon how available metal was in each part of the empire had a direct impact on the design of the shoe. The entire foot was covered, meaning total foot support. Another reason for this could also have been protection from caltrops, which would be thrown out by the infantry to stop Calvary. Caltrops are made of iron and no matter how they land always have a spike pointing upwards, were fast to deploy and would inflict a lot of damage to the horse if it was unfortunate enough to stand on one. It is worth noting that some of the sandals designs actually let the horse trim its own toe as the horse walked forwards! Just a bit of leather to tie the sandal on and away you go, pretty advanced for 2000 years ago.



As time ticks on in England the emergence of the Wavy-web shoe appears Circa.1100, (Norman/Saxon time period). Minimal metal on just the outer rim, why so little iron? Expensive, iron was also being used as currency. So only the wealthy could afford such an expensive item, few exist today, this is thought to be due to the fact that old shoes were melted down and made into new shoes. This design of shoe only allowed weight bearing on the horny wall, was cheaper and quicker to make, and became the first rim shoe.



When metal starts to become cheaper, so the shoes start to become wider giving more sole coverage, and so by

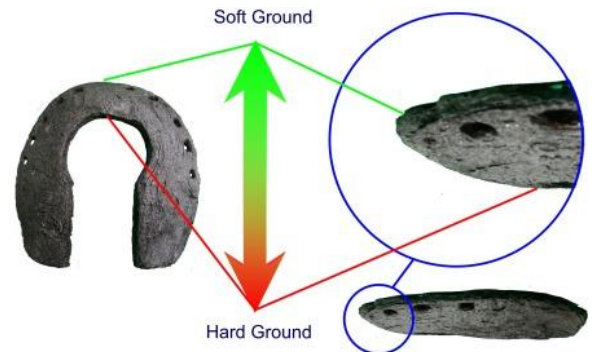
cira. 1300 the wavy-web shoe disappears and what later became known as the Dove shoe starts to be used. This was wider with a rolled toe, yet the nail holes still resemble a rim shoe (meaning they are not too close to the edge) and a calkin (up turned heel) on one heel.

During this time period the Guildhall shoe was being used circa.1250-1450, the style might have been brought to England when horses were imported from Europe for the crusades. If you look at the Guildhall shoe you can see the nail holes have been set further to the edge, and therefore less weight bearing on the wall more on the sole.

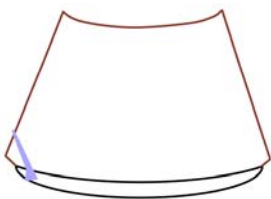


The next dramatic change comes in the 1650's when the Keyhole shoe appeared, and was the first true sole shoe. Why? Well it has certain features that mean it can be fitted only one way.

First it was a self finding point of break over. It was dished so that on hard ground the break over was further back, and on soft ground the shoe would sink down moving the break over forwards. This was not a problem with the break over going forwards because there was no leverage on the soft ground.



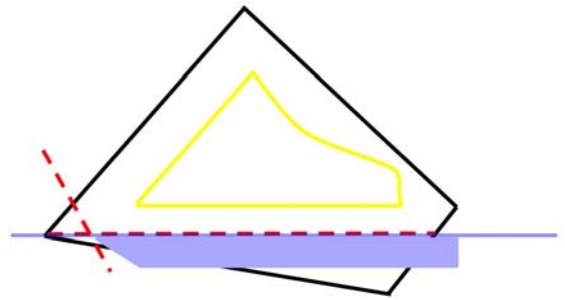
Second, the nail holes are right on the edge of the shoe, if you placed the shoe on the edge of the hoof and nailed on, the nails would split the hoof. So they placed the shoe on the edge of the sole and pitched your nails accordingly. As a result the shoe would be under the sole thus supporting the pedal bone thru which most of the weight passes, hence a sole shoe.



Third, dirt impactation, the wider the shoe the more dirt presses up supporting the pedal bone.



Fourth, such a wide shoe how do you alter it? You don't, if all the pedal bones in horses hardly change in shape and the sole grows directly down from the pedal bone all the soles are just one shape!



Fifth, because the point of break over was further back the doorman (Farrier) could lower the heels to get frog pressure eliminating thrush and getting the frog to work correctly.

So in times gone by, the shoe would be made by a Blacksmith with the aid of a Striker (guy with a sledge hammer) and a Fireman (a guy controlling the forge) then finally handed the shoe to what was then called a Doorman. The Doorman's job was to prepare the hoof and to nail on the shoe, why called a Doorman? Probably because he sat in the entrance of the forge waiting for the shoes to be made.

By the 1700-1815s an even wider shoe is being used, the Tongue shoe. The nail holes are the same as the Keyhole shoe set to the edge; dished so it has a self finding point of break over; but even more sole coverage meaning more dirt impaction thus pedal bone support. Do we find front and hind sole shoes? NO Why?, well considering that the pedal bone only changes 3% from front to hind a sole shoe fits front and hind!!



So at this point in history the entire sole is covered, maximum metal is used to support the hoof.

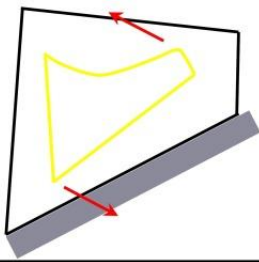
Suddenly the shoe changes again, reverting back to a Wavy-web shoe, the modern day rim shoe. Metal becomes expensive and man power is at a premium so only the outer horny wall is covered. It doesn't matter how wide a rim shoe is, because for the fact it was only designed to weight bear on the hoof wall, it wouldn't matter even if it was 10



times the width it still is a rim shoe.

As the Industrial Revolution stepped in, you simply can't mass produce sole shoes, but you can mass produce rim shoes, so the financial pressures set the trend. What happened to the Doorman? Well he doesn't need the other three guys to make the shoes, because with rim shoes one person can make a set in 20 minutes and use less metal, thus shoeing starts to become more affordable for the everyday person.

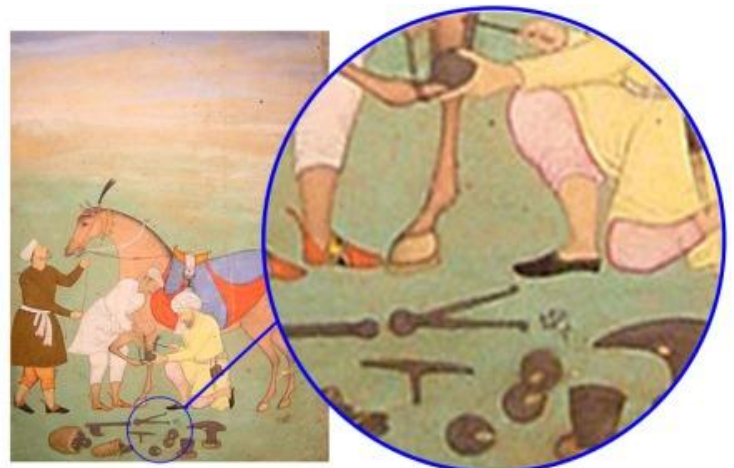
What is the result of this change to rim shoes? Horses don't get the pedal bone support with the rim shoe and soles start to go thin. Bruised soles become a problem, so much so, that an act of Parliament orders that the local Parishes improve the roads by laying sand down. Soon after this the invention of Tar-Mac is discovered and begins to cover roads. The toe won't dig in to Tar-Mac, so leverage occurs and horses start to land heel first creating lame horses.



To counter this surgical shoes (or corrective shoes) start to appear, never before had they been used. By raising the heels or placing more metal at the back of the shoe (which most corrective shoes do) it gave relief for a short time, but the outcome in the end was a horse unable

to work. So the Worshipful Company of Farriers, set up in 1356 created the Registered Shoeing Smith exam in the late 1800s. This was done because it was thought that people were incorrectly rim shoeing and if it was regulated and taught properly there would be fewer problems, sole shoeing was not included in the training. In the last century, rim shoeing has seen an increase in surgical rim shoes; they all work from the same principals, weight bearing on the outer horny wall.

The spread of rim shoes around the globe, travelled with the growth of the British Empire, so where ever England went so did the rim shoe. In other parts of the world untouched by the Commonwealth, a totally different shoeing method was used, and still is today, the sole shoe. If you look at sole shoeing from the point of view of a Rim shoer, it looks untidy and vastly different, but in essence



it supports the bone column, where as a rim shoe makes the horse bear weight only on the horny wall, sadly with dire consequence for the horse.

Present day (1997) Cytek arrives, many are dismissive with out even knowing anything about the system. But if you compare sole shoes, past and present:-

To days 21st Century Sole shoe [Cytek](#)

