

Who Invented Horseshoeing?

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There has been much speculation over the years as to when and where the practice of shoeing horses with nailed-on iron shoes was invented. Books that deal with the subject have been written by: Gesner (1551); Panciroli (1599); Beckmann (1780); Clark (1831 & 1835); Mégnin (1665); Fleming (1869); Caviglia (1880); Nicard (1890); Daul (1893); Meyer (1941); and others. Many people assume that shoeing is as old as horses and iron. References to ancient Roman shoes are in numerous 19th century works. There is evidence of horse domestication as far back as 4000 BC (McMiken 1990). The Bible identifies Tubal-Cain as the first blacksmith, around 3500 BC. It is possible, then, that horseshoeing dates back to 3500 BC. Possible, but not likely.

J. P. Mégnin (1865), as quoted by Fleming (1869), says: "We place the invention of horseshoeing about the fifth or sixth century before our era (i.e. around 500 BC) – that is, at the period when Druidism was most flourishing.... The Druids taught the structure of the horse's foot by the numerous sacrifices they made of this animal, accustomed to the manipulation of metals, and their intelligence continually cultivated by study, were marvelously disposed to be the inventors of shoeing by nails."

Indeed, the Druids (much like our present day `bikers' – fond of wearing leather, iron, and tattoos) would certainly have been able to shoe their horses, but there is no firm evidence that they did. This lack of evidence is not surprising. Druids were famous for their secrecy, and iron was rare and valuable enough to be used for money in some cultures (the ancient Celts, for one) – so it was not all Druids, but only their priests who did any ironwork. Until this century, iron was never discarded – instead it was constantly re-used. In Virginia in the 1600's when settlers moved, they would frequently burn down their old house, just to salvage the iron nails! It was such a problem that in 1645 the Virginia Legislature passed a law to prevent it. (Smith 1966)

In the 1800's worn out horseshoes were used to make horseshoe nails, and worn out horseshoe nails were then welded together to make musket barrels. With that kind of recycling effort it seems unlikely that any samples of ancient horseshoes would still exist (unless re-worked into another object). Despite the fact that iron was rare and valuable and very easily re-used, archaeologists have discovered a few specimens of shoes which they think date back to a century or two BC.

I'm not certain how they determine the age of horseshoes. Fleming (1869) seems to indicate that much of it is done simply according to the depth at which they are found -- the deeper, the older. Oftentimes old shoes were found 6 feet or more beneath a city as excavations were being done for sewer pipes. Some shoes seem suspiciously new – Fleming notes one dated about 80 BC that contained titanium. Other shoes seem suspiciously vaporous – Fleming quotes Chifflet's discovery of one horseshoe in a 5th century (AD) tomb: 'an iron shoe... was so eaten away by rust, that while I was trying to cleanse the nail holes... the rotten iron broke in pieces...'

The tombs of royalty frequently contained several of their finest horses, money, jewelry, and other valuable possessions, and so would seem to be an ideal place to find examples of old horseshoes, but Bracy Clark (1831) notes that other tombs of the early Middle Ages do not contain horseshoes (even though they contain horses, and iron bits). Yet the suspicions that horses were shod in the early Middle Ages increase.

Isaac Cavanagh (1881) asserts that the first iron horseshoes were made in 481, – though I don't think he was around to see it, and he doesn't say who told him. The story of Wayland Smith, the invisible blacksmith who replaces lost shoes seems to date to this period. Around 556 AD the title of *Mariskalk* (marshal, or *maréchal* as horseshoers have been called ever since in France) was first used (Fleming 1869, p.370). Through the Middle Ages the marshal was frequently ranked above all others but the king. What was so special that they needed a new position and title? Did they invent something special? St. Eloy, the patron saint of farriers and blacksmiths, lived at this time (588 - 660) – though one can hardly believe the story of his removing a horse's leg, shoeing the foot, and then re-attaching the leg without a scar. The Koran (610 AD) mentions “war-horses... which strike fire, by dashing their hoofs against the stones....” That sure sounds like iron horseshoes – but is it? Hmm.

In the 8th century, the likelihood that horseshoeing has been invented increases even more. Armorers were kept extremely busy with all manner of offensive and defensive ironwork -- from crude battering rams to fiendishly delicate chain mail. There are folklore tales of Charlemagne having shod his own horse, and having broken a horseshoe in two with his bare hands. About 790 the Catalan forge was developed. It increased by 7-fold the rate at which iron which could be produced from ore (Smith, 1966). But it is not until 910 that we find the first written record of iron horseshoes (Leo VI 910) – what else could he have meant by “crescent figured irons and their nails” while listing equipment to be carried by his cavalry (Clark 1831)?

Finally, by the Crusades, there can be absolutely no doubt – horseshoeing is widely popular all across Europe. Guibert de Nogent (as quoted by Severin 1989), speaking of the Crusades wrote: “Truly astonishing things were to be seen, things which could not but provoke laughter: poor people shoeing their oxen as though they were horses....” While horses may have been shod earlier, the Crusades finally made shoeing important, and immensely popular. Iron had become cheaper and more plentiful. The crusaders favored the big Flemish horses – which had weak, flat feet from being raised on the damp lowlands. Armorers could make anything from iron, and were putting it all over the knights and horses bodies. Shoes not only protected the horses' weak feet, but gave the knights a psychological advantage over those they were attacking. Would you rather be run over by a barefoot horse, or one with iron shoes? Would you rather be kicked barefoot, or with an iron shoe? What a sight to see an armored horse and rider charge you with sparks flying from their feet!

Although shoeing horses with nailed-on iron shoes may have been a very ancient invention, it did not become popular until about the time of the Crusades (1096 - 1270). What seems most plausible is that shoeing was invented by numerous armorers in different places at about the same time, and then kept as a military secret for a very short time – until the practice was apparently widespread. Strong suggestion that shoes were not invented before 480 comes from *Artis veterinariae* by Vegetius Renatus in that year. Blaine (1802) notes: “Vegetius... though he accurately enumerates everything connected with an army forge makes no mention of any apparatus for shoeing horses, nor any artificers for that purpose.” Anyone who wishes to claim that horseshoeing was invented long before the late Middle Ages will need to explain why royal tombs did not contain horseshoes, and why there would be no written mention of such a momentous invention for so many hundreds of years. Just how long could such a clearly visible 'secret' be kept?

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