

If we domesticate him, and bring his feet to bear upon stones and other hard, rough surfaces, we must devise a means of protection. For this protection we trust to the knowledge and skill of a man commonly known as a blacksmith. Now, a horse's foot is a very complicated affair, and unless our blacksmith is a good one in every respect, so far as shoeing is concerned, we not only do our horses an injustice, but likewise ourselves in trusting them to his hands. A horse has feeling in his foot, and upon this feeling depends his usefulness. Injure his foot, and the greater share of his services to man and himself are gone. A horse-shoer should have a goodly knowledge of the anatomy of his subject's foot. With a great number of our otherwise good smiths, this knowledge seems to be wanting. When the farmer gets his animal shod, he should not seek to find the man who will do his work the cheapest, but he should patronize the one who knows the most about his business and does his work the best.

I know of very few rules applicable to the paring and shaping of a horse's foot previous to its receiving the shoe. The smith's rules must be empirical. Feet differ very essentially in their requirements. One thing should always be borne in mind, and that is to put more work upon the shoe than upon the foot. The foot is given, and the shoe required. Very little paring of the hoof is necessary the first time a horse is put on shoes. Shoers frequently make a mistake by cutting away too much from the portions of the foot requiring little or none to be removed. It is well enough, in fact advisable, to take off those portions which have become useless, and which interfere with the proper fitting of the shoe, but to cut down the frog and open out the heels the way some smiths do, are practices entirely objectionable. The frog is the seat of vitality and elasticity, and deadens the jar of each step. It should be kept free from undue accumulations, and given a chance to retain a healthful action, but it never should be cut away, thus causing it to become dry and hard and unable to perform its proper functions. It is meet to guard against the formation of corns, by keeping the interstices between the outer walls and the bars well opened, but to cut away the bars is not at all to be confirmed. Neither is the practice, which some smiths have, of burning the shoe to the foot to be imitated. It is *not* necessary in order to secure a perfect fit.

The heated shoe may be touched lightly against the hoof, when the knife should come to the rescue.

The kind of shoe to be used will, of course, depend upon the purpose and season for which it is intended. They always should be strong enough and thick enough to preclude any liability of danger by bending or breaking. It is better to have them break than to have them bend or twist. Should either accident occur, it should at once be righted. The shoes ought to be of equal width and thickness throughout their length, and they should be so attached that the weight of the horse, so far as practicable, may be equally distributed over their respective superior surfaces. They should be compressed at the heels, and at no place should they protrude beyond the surface of the crust. The reasons are obvious.

The toe of each shoe should be provided on its upper surface edge with a clip to aid in holding it more firmly, and on its lower surface with a projection to enable the horse to maintain its hold upon the ground. This projection, or toe as it is called, should be kept sharp during winter, but at the same time it should be as short or low as possible, to avoid straining the horse's foot or leg. The calkins should be dispensed with except during slippery weather. I would not do away with them altogether, but would modify them very much.

The nailing on is one of the most important operations of shoeing, and should be done with care. Because the hoof is destitute of feeling, many blacksmiths seem to think that it is of little consequence how they pare and punch. The rule should be to use as few nails as will suffice to keep the shoe firm in its place. None but the best of nails should be used. Seven for a hind foot, and five for a fore foot, twenty-four in all, is the proper number for an ordinary shoe. The holes in a horse's hoof never grow together. Each year they are forced down by the addition of new cells from above, until they finally disappear at the bottom. Hence the fewer holes a hoof contains the stronger and healthier it is. It requires from three to seven years for these nail holes to disappear; hence, after the third or fourth shoeing, the hoof constantly contains from fifteen to thirty-five or more, which, of course, interfere very materially with its strength and tenacity. The nails should be securely clinched after they have been well driven. They should be pointed