

alteration is made by a few blows on the cold iron, or, if heating be necessary, the shoe is made cold again before it is applied, and care is taken that it remains perfectly level and true. The farrier then prepares the hoof by cutting or rasping away the surface of that portion of the crust on which the iron will rest, leaving the centre of the sole and the frog and bars untouched. Having given what he judges to be a true level to this marginal seating for the shoe, the shoe is applied cold, and the hoof is rasped again and again until horn and iron come into perfect contact in every part. As a guide to the use of the rasp, the surface of the shoe is ruddled, so that any portions of horn not touched by it remain uncoloured. The adjustment being correct, the shoe is nailed on in the ordinary way and the process is complete.

When the shoes are put on for the first time it will often happen that the frog, dwarfed and deformed by previous ill-treatment, does not reach the ground at once, and for some hours, or even for a day or two, the horse may experience the same kind of inconvenience that would be felt by a man who was taken out of very high-heeled boots, to which he was accustomed, and made to walk on level soles. But a very short time restores the muscles of the legs to their natural equilibrium and relieves the latter discomfort, while, after a few shoeings, the frog reaches the ground fairly and fully, forming an elastic wedge which gives the horse a conscious and safe foothold upon every surface. The sole also grows somewhat within the circle of the shoe and forms a shoulder by which the firmness and security of the latter are greatly increased, so that fewer and smaller nails are required. At first, too, it is necessary to have a considerable thickness of iron, in order to supply the place of the horn usually removed by the excessive cutting of the ordinary farrier; but when the hoof has grown to its natural proportions, smaller and lighter shoes will be sufficient.

Mr. Goodenough's system has only very lately been introduced into this country, and the arrangements for its general application are not yet complete. It has been in use for two months upon 200 horses belonging to the London General Omnibus Company, and employed in drawing those Chelsea Omnibuses that stand at the Chelsea end of their journey. It has quite recently been tried upon a few horses in the Royal stables. It has been in use in America for about seven years, and comes recommended by a singular concurrence of testimony from large and small employers of horse labour, from omnibus and railway companies, from cavalry officers, from surgeons, human and veterinary. The surer foothold is said so much to diminish labour that horses are kept in condition on an appreciably smaller quantity of food; and diseases of parts from the knee or hock downwards are said almost to have disappeared.