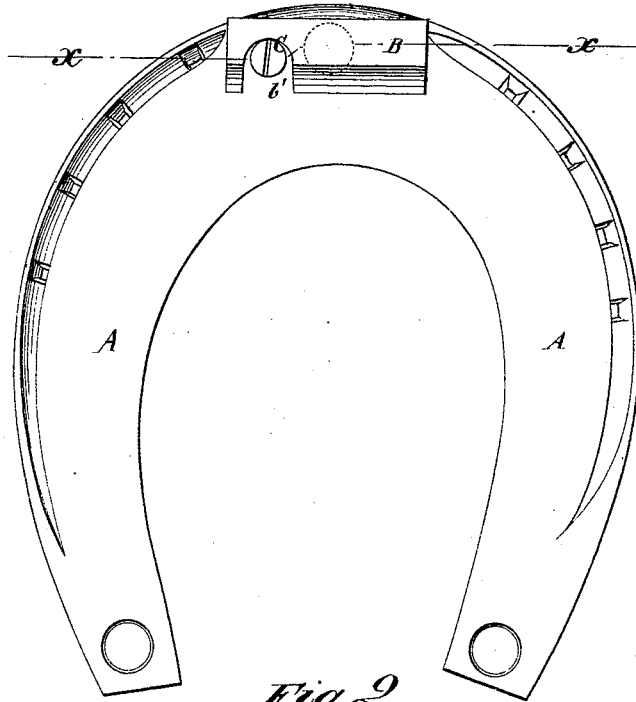


V. THUST.  
HORSESHOES.

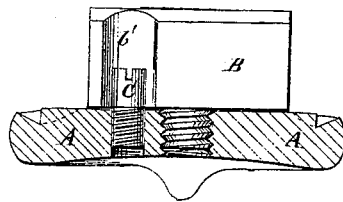
No. 183,230.

Patented Oct. 10, 1876.

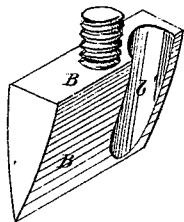
*Fig. 1*



*Fig. 2*



*Fig. 3*



WITNESSES:

*A. W. Almqvist*  
*Hedqvist*

INVENTOR:

*V. Thust*

BY

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

VICTOR THUST, OF SCRANTON, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO JOHN H. FELLOWS, OF SAME PLACE.

## IMPROVEMENT IN HORSESHOES.

Specification forming part of Letters Patent No. **183,230**, dated October 10, 1876; application filed March 13, 1875.

*To all whom it may concern:*

Be it known that I, VICTOR THUST, of Scranton, in the county of Luzerne and State of Pennsylvania, have invented a new and useful Improvement in Fastening Screw-Calks in Horseshoes, of which the following is a specification:

Figure 1 is a face view of a horseshoe illustrating my invention. Fig. 2 is a detail cross-section of the same, taken through the line *xx*, Fig. 1. Fig. 3 is a detail perspective view of a winter-calk.

Similar letters of reference indicate corresponding parts.

The invention will first be fully described, and then pointed out in the claim.

A represents a horseshoe, in the toe and heels of which are formed screw-holes to receive the screw-shanks of the calks. B represents a calk, which is made with a screw-shank to screw into the screw-hole of the shoe A. In the inner side of the calk B is formed a recess, *b'*, to receive a screw, C, which is screwed into a screw-hole formed in the body of the shoe A, in such a position that the said hole and the recess *b'* in the calk B may be in line with each other when the said calk is screwed into the desired position. With this construction the screw C locks the calk B, so that it cannot turn to become loose, and the recess *b'* in the calk B protects the screw C, so that it cannot be injured or worked loose.

By placing the screw C at the rear of instead of in front of the toe-calk B, it is relieved from a large share of the blows and wear which fall to the lot of nails or other fastenings when placed in front, for the impact of the shoe upon the ground, especially in fast travel, or on rough or cobble-paved roadways, is with a forward motion, tending soon to wear away or strain so small a thing as a nail-head or screw-head; but by placing it behind the toe-calk it is saved from all blows and concussions arising from these causes, and still more when partially buried in a recess or groove, *b'*. Again, when placed in front the shoe is rendered less durable at the part where it is most liable to rapid wear—namely, at its extreme forward curve—and for

the reason that the hole to receive such nail or screw must be made between the extreme forward edge of the shoe and the toe-calk, thus leaving a very narrow or thin part of the metal at that part, and likely soon to wear away, and at best to weaken the shoe materially, even when it is new. By my invention I need no screw-hole forward of the toe-calk, and that portion may therefore be left, if desired, entirely solid. These are important practical advantages due to my peculiar construction, and to the mode of application of the toe-calk to the shoe-plate. Again, it will be observed that in securing my toe-calk to the shoe, or removing it therefrom when it is on the hoof, nothing is needed but a common screw-driver or any device which will do the same duty, because it is not held to place by any nail driven into the hoof, so that one toe-calk can be substituted for another, a new one for an old one, or a summer-calk for a winter-calk, by an inexperienced person or farm-boy, without the aid of a farrier, and without any possible risk of injury to the horse by driving or withdrawing nails injudiciously. Moreover, my toe-calk, when secured to the shoe, is as firm as if welded to it, while horse-nails will readily loosen, and a toe-calk held by a loose nail becomes at once worthless; and if a toe-calk comes off in icy weather it leaves the horse in a precarious condition, especially if a blacksmith be needed to replace it and none be near or accessible. Nor do I need to form the shoe-plate in any peculiar or unusual manner, as to any extra thickness or breadth, or with any projections or flanges in order to apply to it my toe-calk in the manner described.

The screw C I make preferably with a long cylindrical head, thus facilitating its introduction and removal within the groove of the toe-calk, and also affording a strong postal brace or support for the calk.

I am aware that toe-calks have been made in two parts, having their adjacent ends beveled or inclined, and abutting against each other, one calk having a left-hand screw-thread on its shank, and the other a right-hand screw-thread, one part locking the other, and a horse-nail driven into the hoof to lock both,

such nail passing through the shoe-plate near its edge and in front of the toe-calks. I am also aware that toe-calks have been formed with a dovetail, and adapted to be slid laterally into a dovetailed recess cut in the face of the shoe at a part made thicker for that purpose, and that a heel-calk thus made and applied has been made with a groove in its inner side, but not in its rear face, and the heels of the shoe made with projections or flanges on their inner sides, adapted specially for such heel-calks. These, therefore, I do not claim; but

What I do claim, and desire to secure by Letters Patent, is—

The combination of a horseshoe, A, toe-calk B, having a vertical groove in its rear face, and a screw-threaded shank, the screw C and its screw-threaded hole in the shoe located at the rear of the toe-calk, and away from the edge of the shoe, all as and for the purposes set forth.

VICTOR THUST.

Witnesses:

JNO. H. FELLOWS,  
GEO. W. HETZEL.