No. 780,274. PATENTED JAN. 17, 1905.

C. F. M. FISH.

HORSESHOE.

APPLICATION FILED MAR. 17, 1902.

Fig. 1.

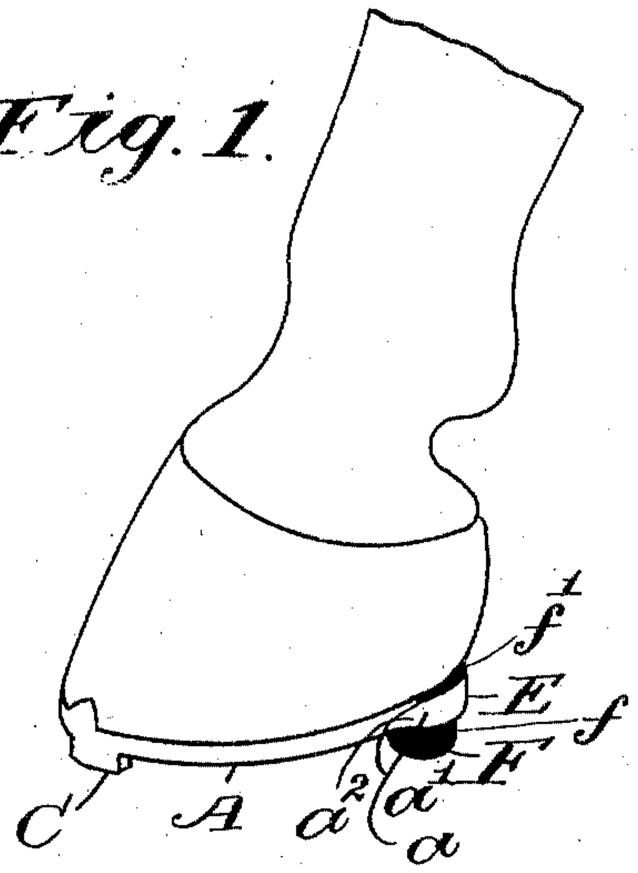


Fig. 2.

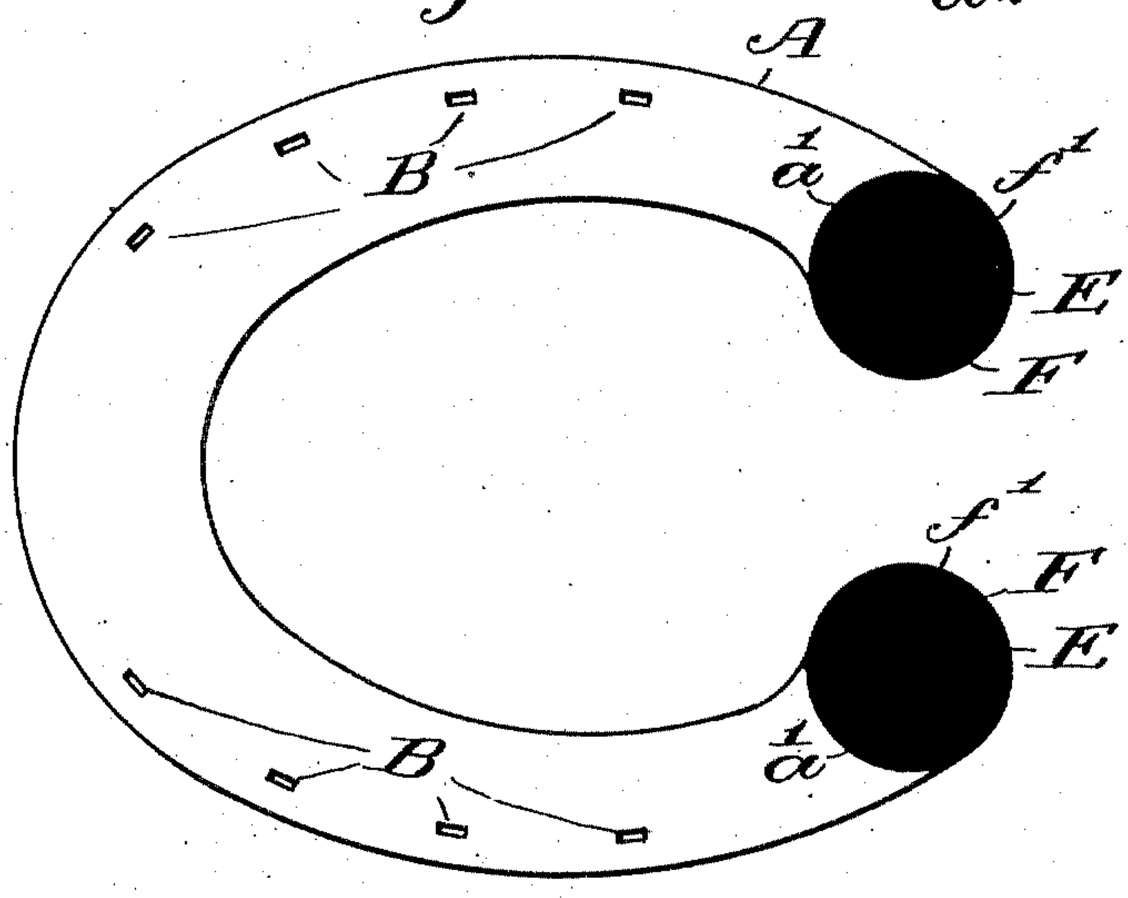


Fig. 3.

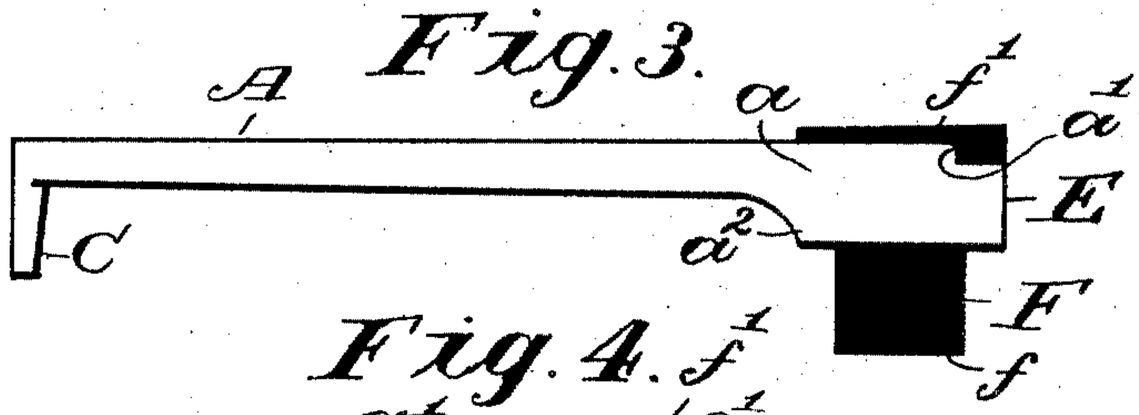


Fig. 4.

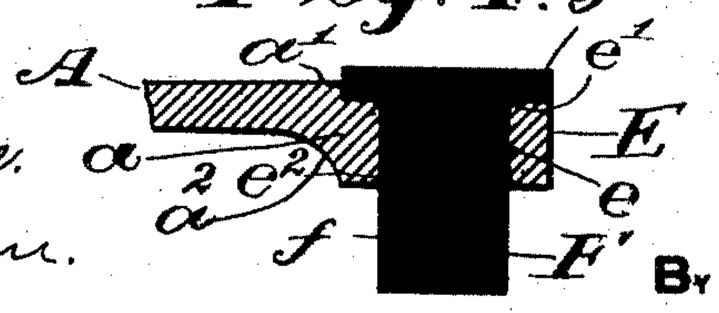


Fig. 5.

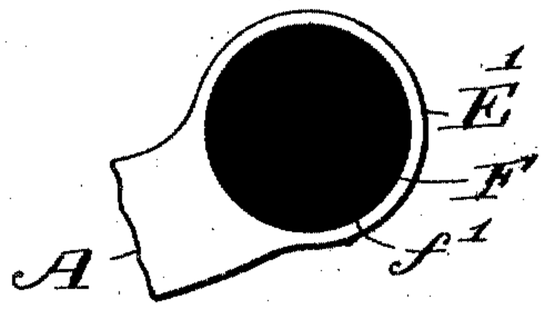
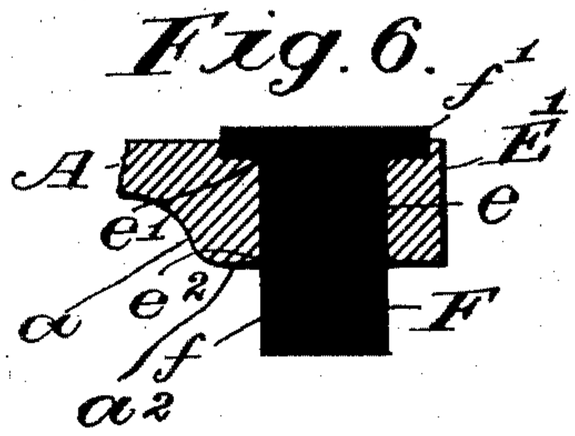


Fig. 6.



WITNESSES.

Kirkley Hyde.

Anna T. Halloran.

INVENTOR

Charles F. M. Fish,

By Albert M. Moore

His ATTORNEY.

PHOTO-LITHOGRAPHED BY SACKETT & WILHELMS LITHO. & PTG. CO. NEW YORK.

No. 780,274. Patented January 17, 1905.

UNITED STATES PATENT OFFICE.

CHARLES F. M. FISH, OF CHELMSFORD, MASSACHUSETTS.

HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 780,274, dated January 17, 1905.

Application filed March 17, 1902. Serial No. 98,516.

To all whom it may concern:

Be it known that I, CHARLES F. M. FISH, a citizen of the United States, residing in Chelmsford, in the county of Middlesex and Commonwealth of Massachusetts, have invented a certain new and useful Improvement in Horseshoes, of which the following is a specification.

The object of this invention is to give an elastic support to the heel of a horse and to elevate the heel relatively to the toe to relieve the strain of the tendons of the leg and at the back of the foot caused frequently by paring away too much of the hoof at the heel by careless or ignorant shoers. Unless the shoe is so made and applied that the pressure comes equally on the heel and toe when the horse stands on a level surface the horse is not properly shod. When the heel is not long enough relatively to the toe, there is a constant strain on the tendons caused by the turning up of the toe when the horse is standing and when the horse strikes the ground in traveling.

This invention furnishes a ready means of adjusting the height of the heel relatively to the toe and also of cushioning the heel without heating the foot and does not prevent a rigid attachment of the shoe to the hoof and a hoof-contact of the shoe substantially throughout its length.

I raise and support the heel by rubber or similar elastic plugs inserted in holes in the heels of the shoe and projecting from the bottom thereof to the proper distance. These plugs are secured in said holes by enlarged heads, the heels of the shoe being offset downward to receive said heads and to permit the top of the shoe to be in close contact with the bottom of the hoof in the usual manner of applying ordinary shoes.

The elastic plugs may be removed from the shoe and others substituted for them without taking off the shoe. By thus changing one plug where the foot is crooked or where the foot is out of level from unequal paring of opposite sides of the hoof the foot may be leveled up.

The plugs to a great extent prevent slipping in winter, even after the toe-calk has become dulled, and thus diminish the number of sharpenings necessary.

In the accompanying drawings, Figure 1 is an oblique view of a horse's foot with my improved shoe attached thereto; Fig. 2, a top plan of the shoe detached; Fig. 3, a side elevation of the same; Fig. 4, a central vertical longitudinal section of the heel portion of the same; Figs. 5 and 6, respectively, a plan and a longitudinal vertical section of a heel portion, showing a modification of my shoe.

The plate or body A of the shoe is of the usual form and construction (except at the heel, as hereinafter described) and is provided with the usual crease (not shown) on the under side and with nail-holes B, through which nails are driven in the usual manner into the hoof. The shoe is also provided with a toe-calk C of any usual form, which may be sharp or otherwise, as required. The heel portions of the shoe are provided with circular enlargements E E, having holes e concentric therewith and circular in horizontal section to receive the elastic plugs F F. The holes e have rounded edges e' e^2 at the top and bottom to avoid cutting the plugs F F, and said holes are preferably slightly larger at the top than at the bottom to allow the upper portions of said plugs to expand under the weight of the horse.

The plugs F F have each a cylindrical or downwardly-tapering body f and an enlarged disk-like head f', which rests in a depressed or downwardly-offset portion a of the top of the plate A, the head f' extending to the edge of the circular enlargement and fitting the arc-shaped shoulder a', where said enlargement meets the body of said plate, the plate being thickened or reinforced at a^2 on the under side below said shoulder a'.

When a shoe is to be applied to the hoof, the plugs F are first inserted in the holes in the heel portions, their heads f' projecting slightly above the top of the shoe, as shown in Figs. 3 and 4. The shoe is then applied to the foot and is secured closely to the bottom of the hoof and in contact therewith all the

way from heel to toe on both sides, compressing said head between the top of the shoe and the bottom of the hoof.

Without removing the shoe from the hoof the old worn plugs may be removed and new plugs inserted by pushing them through tapering or conical tubes, as corks are forced into bottles—that is, a plug is forced head foremost through a tapering tube, the small end of which enters the lower end of the hole *e* in the shoe, so that the head of the plug after passing through the shoe expands and fills the space or depression *a* designed therefor.

The plugs should be made long enough to allow the shoer by trimming off their lower ends to level the shoe as may be desired and according to circumstances. The metal of the shoe may entirely surround the plug, as shown in Figs. 5 and 6, and be in contact with the hoof from the toe to the heel.

I claim as my invention—

1. A horseshoe having a metallic body provided with a solid hoof-contact throughout its length and having its heel portion laterally enlarged inwardly and provided with depressions having holes, and elastic plugs arranged in said holes and projecting below said body, said plugs being adapted to be placed in said holes when the shoe is attached to the hoof and to be removed from said shoe without removing said shoe from said hoof, said plugs having enlarged heads adapted to retain said plugs in said shoe and to be compressed to pass upward through said holes.

2. A horseshoe having a metallic body provided with a solid hoof-contact throughout its length and having its heel portions laterally enlarged inwardly and provided with circular depressions having circular holes, and elastic plugs circular in horizontal section arranged in said holes and projecting below said body, said plugs being adapted to be placed in said holes when the shoe is attached to the hoof and to be removed from said shoe without removing said shoe from the hoof.

In testimony whereof I have affixed my signature in presence of two witnesses.

CHARLES F. M. FISH.

Witnesses:
ALBERT M. MOORE,
JOHN F. RILEY.