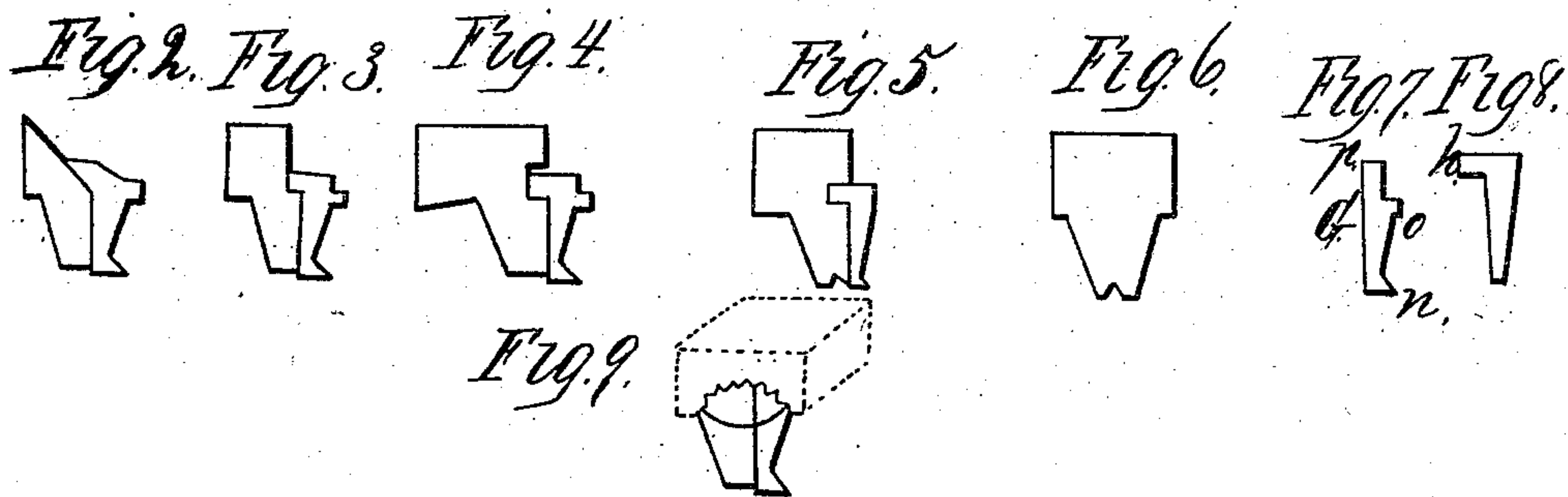
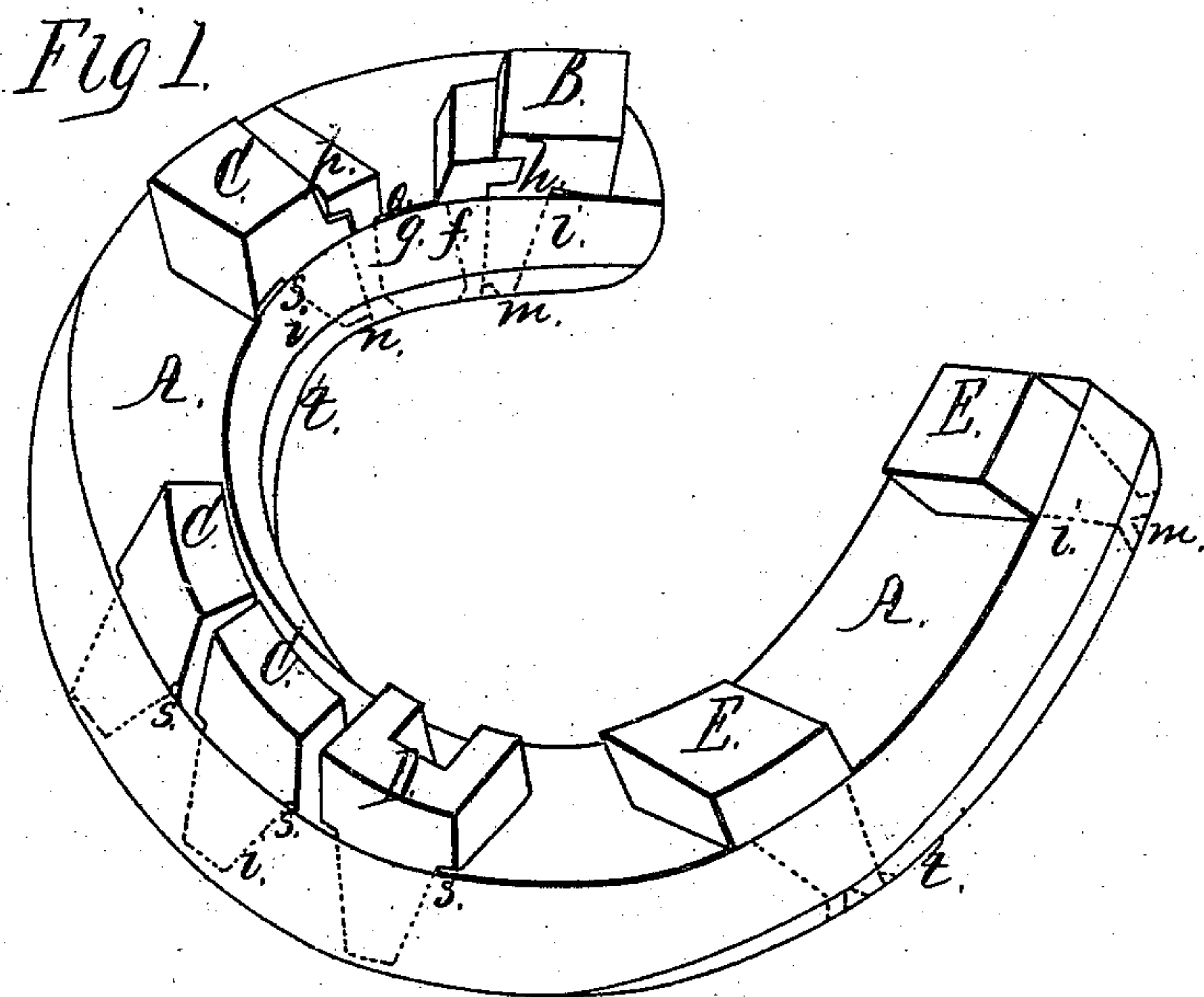


J. J. Mervess.

Horseshoe.

N^o 84,958.

Patented Dec. 15, 1868.



Witnesses;
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United States Patent Office.

J. J. MERVESP, OF NEW YORK, N. Y.

Letters Patent No. 84,958, dated December 15, 1868.

IMPROVEMENT IN HORSE-SHOES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, J. J. MERVESP, of the city, county, and State of New York, have invented a new and useful Improvement in Horse-Shoes; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of my improved horse-shoe, illustrating my improved method of attaching the calks.

Figure 2 is a sectional view of a sharp calk, illustrating my improved method of attaching the same.

Figure 3 is a sectional view of a level or ordinary calk, with the fastening attached.

Figure 4 is a sectional view of a modification of the same.

Figure 5 is a sectional view of a modification of the same.

Figure 6 is a modification of the calk shown in fig. 5, whereby the wedge *f* is dispensed with, and the calk riveted in the tapering hole in the shoe, as shown at *E*, fig. 1.

Figure 7 is a sectional view of the part *g* of the calk *C*, as shown in fig. 1.

Figure 8 is a sectional view of the part *f*, of the calk *B*.

Similar letters of reference indicate like parts.

The object of this invention is to provide novel means for attaching calks to horse-shoes, whereby the cost of shoeing horses is greatly reduced any part of the year, but more especially in frosty weather.

In order that others skilled in the art to which my invention appertains, may be able to use the same, I will proceed to describe the manner of carrying it into effect.

In the accompanying drawing, *A* represents a horse-shoe, the form of which may be identical with that in common use, *B*, *C C C*, *D*, and *E E*, representing the different forms of the calks, sectional views of which are shown in figs. 2, 3, 4, 5, and 6.

Sectional views of the wedges or parts, *f* and *g*, are shown in figs. 7 and 8.

These wedges are used to fasten the calks in the shoe *A*.

The wedge, as seen at *f*, has its upper end bent in the form of a crank, as seen at *h*, fig. 1, and in fig. 7 this crank fits into a recess or groove in the calk *B*.

In order to attach this calk to a horse-shoe, it is only necessary to press the crank *h* of the wedge *f* into the recess in the body of the calk *B*, and then put them both in the tapering socket *i* of the shoe *A*, after which the end of the wedge *f* is riveted.

A centre-punch hole is now placed in the centre of the shank of the calk, as shown at *m*.

In order to detach this calk, I have a drill or bit, which has a spur on one corner of its face, (which enters the depression or hole shown at *m*), and a cutting projection on the other corner, which cuts off the burr

or rivet raised on the end of the wedge *f*, after which the calk is pinched out and a new one inserted.

A sectional view of this calk is shown in fig. 5.

The heel-calks, shown at *E E*, are inserted in the same manner as the calk shown at *B*. The only difference is, that in the calk *E*, I dispense with the wedge used to fasten the calk *B*, and fasten this calk by driving it in the tapering socket *i* of the shoe *A*, and then riveting the end of its tapering shank.

A centre-punch hole is now placed in it, as seen at *m*.

This calk is removed from the shoe by a drill, or bit and brace, the same as used in removing the calk *B*.

In order to attach these calks *B* and *E*, or remove them, the shoe must be off the horse's hoof.

The calks, as shown at *C C C* and *D*, are all fastened by the wedge *g*, a sectional view of which is shown in fig. 7.

The body of these calks may be made of any desirable form, but for general wear I prefer the form shown at *D*, fig. 1, though not restricting myself to that particular form.

In order to attach these calks, the wedge-shaped part, shown in fig. 7, is first placed in the tapering socket *i* of the shoe *A*, the part *n* fitting into a recess or counter-sink in the under side of the shoe, and the part *e* resting on the surface of the shoe. Then the calk is driven into the same tapering socket, when the part *p* of the wedge *g* is bent over the calk, as shown at *C*, fig. 1, a sectional view of which is shown at figs. 2 and 3.

In order to remove these calks, the part *p* of the wedge *g* is cut off with a chisel, when a wedge is inserted between the shoulders of the calks and the surface of the shoe, as seen at *s s s s*, fig. 1.

It will be seen that these calks, *C C C* and *D*, are secured in the shoe by the part *n* of the wedge, shown in fig. 7, resting in the counter-sink or recess in the under side of the shoe, and the part *p* being bent over the calk, as shown at *p* and *n*, fig. 1.

The under side of this shoe is plated or lined with steel, as shown at *t t*, fig. 1. This keeps the shoe from wearing on the under side, for, by welding this steel on the inside part of the shoe, and tempering it, the shoe can be made to last for years, as it will not be worn on the inside, as shoes made entirely of iron are, or even of steel, for a steel shoe cannot be tempered, or if it is, it will surely break when in use.

These calks can be cheaply made, and are easily attached or detached, and when ribbed or grooved, as shown in Figure 9, and the shank made tapering, they make a very secure fastening.

Having thus described my invention,

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

1. A horse-shoe, with or without a steel lining, in combination with a detachable calk, the shank of which is tapering and ribbed, in combination with the wedge, as shown at *g*, fig. 1.

2. Securing calks to horse-shoes by means of the part *n* of the wedge *g*, engaging with a recess in the under side of the shoe, and the part *p* bent over the calk, substantially as described.

3. Securing calks to horse-shoes by means of the crank *h* of the wedge *f* entering a groove or recess in the body of the calk *B*, and the rivet or burr raised on its lower end, substantially as described.

4. Securing calks to horse-shoes, by riveting the end of the tapering shank of the calk *B*, as seen at *m*, substantially in the manner and for the purpose herein specified.

J. J. MERVESP.

Witnesses:

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