

(No Model.)

O. McQUILLEN.
CALKED HORSESHOE.

No. 502,985.

Patented Aug. 8, 1893.

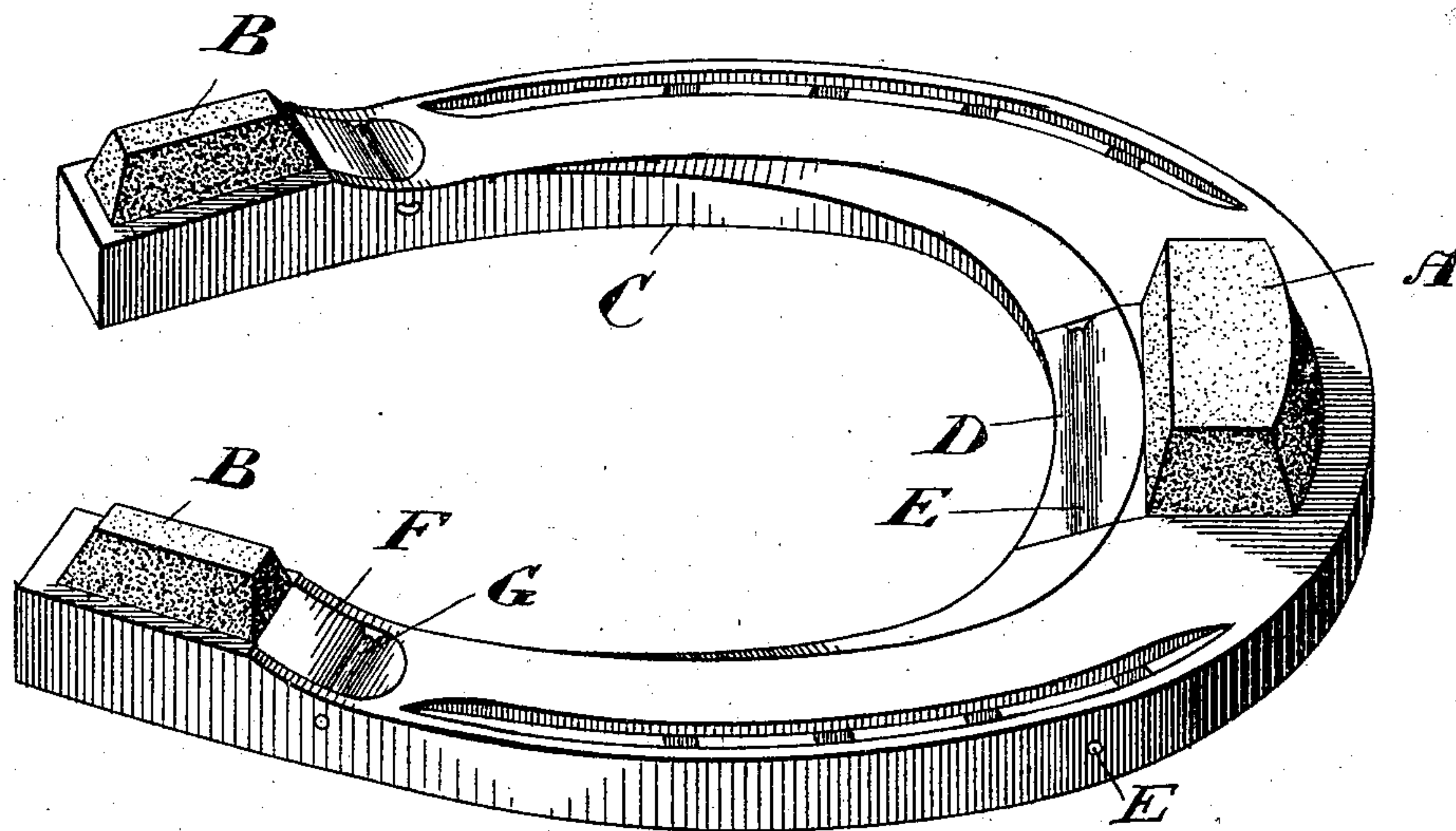


Fig. 1

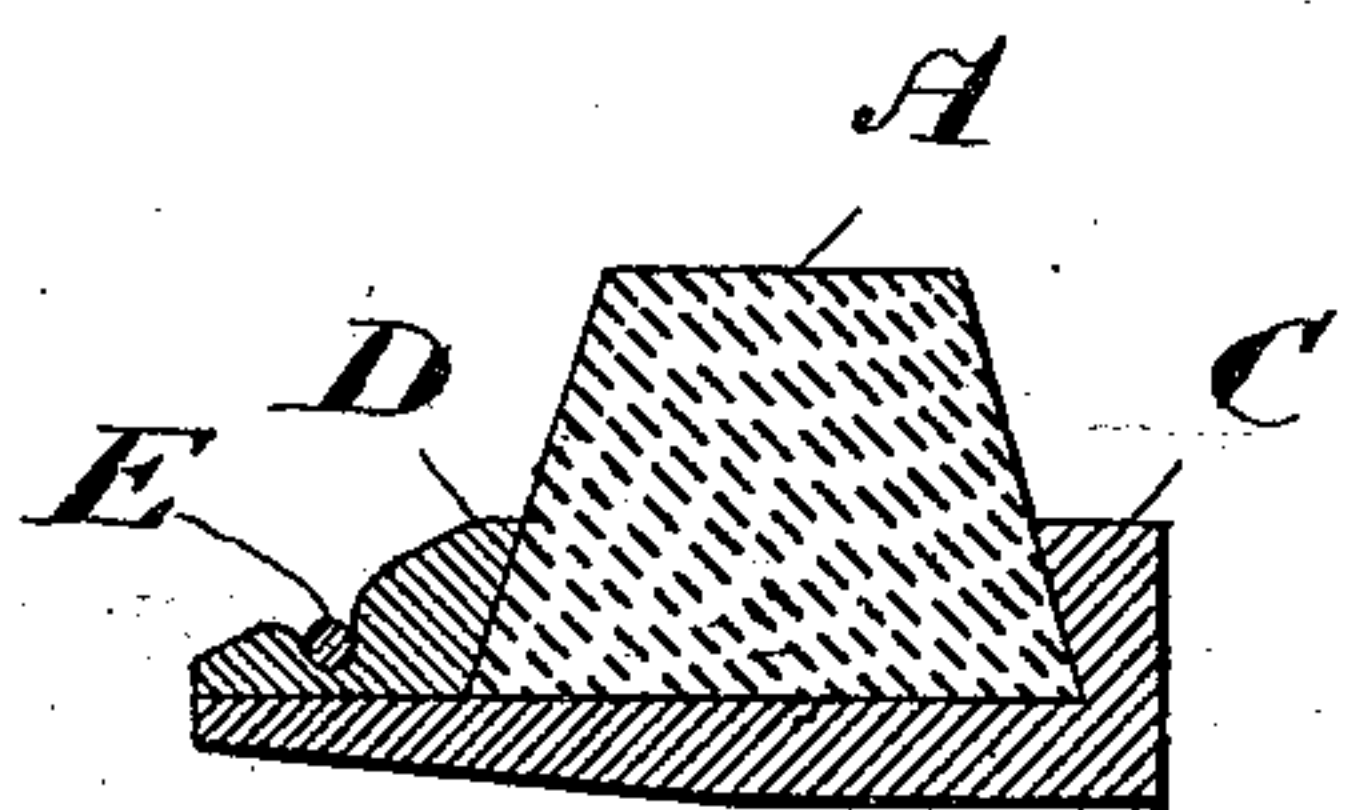


Fig. 2

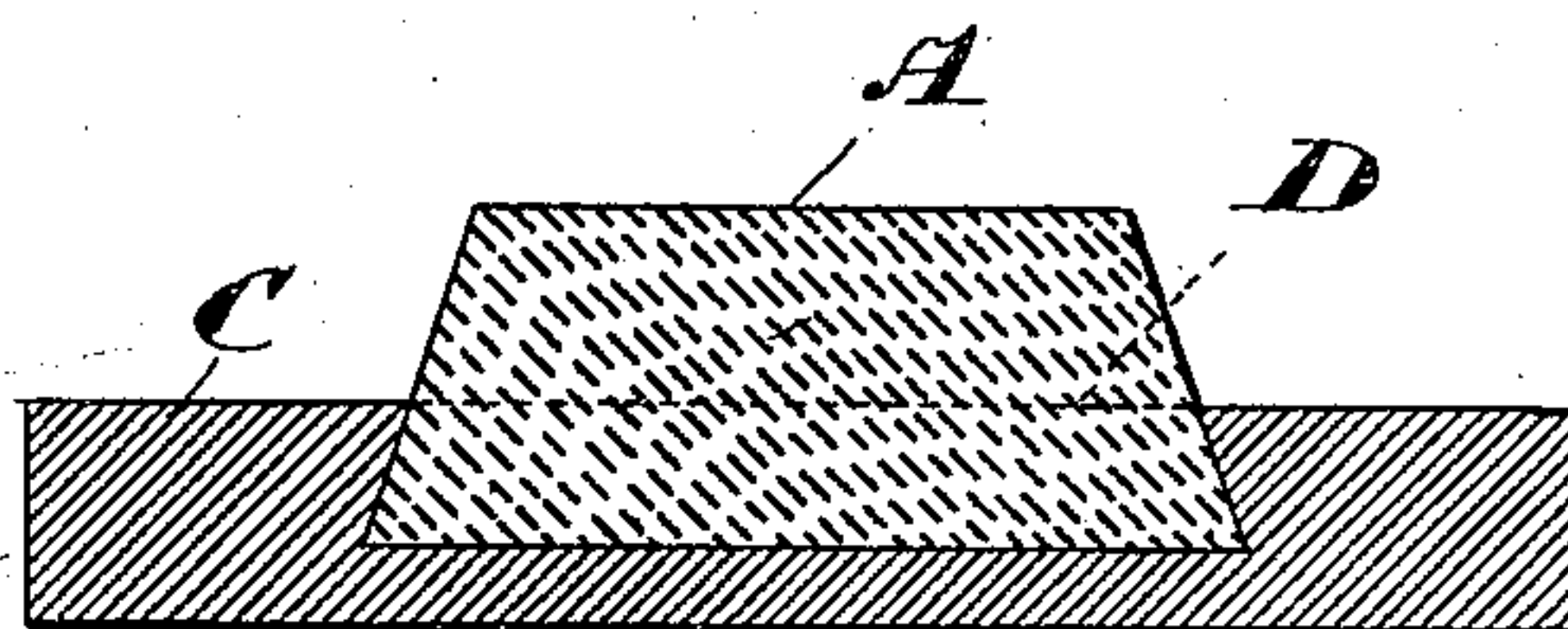


Fig. 3

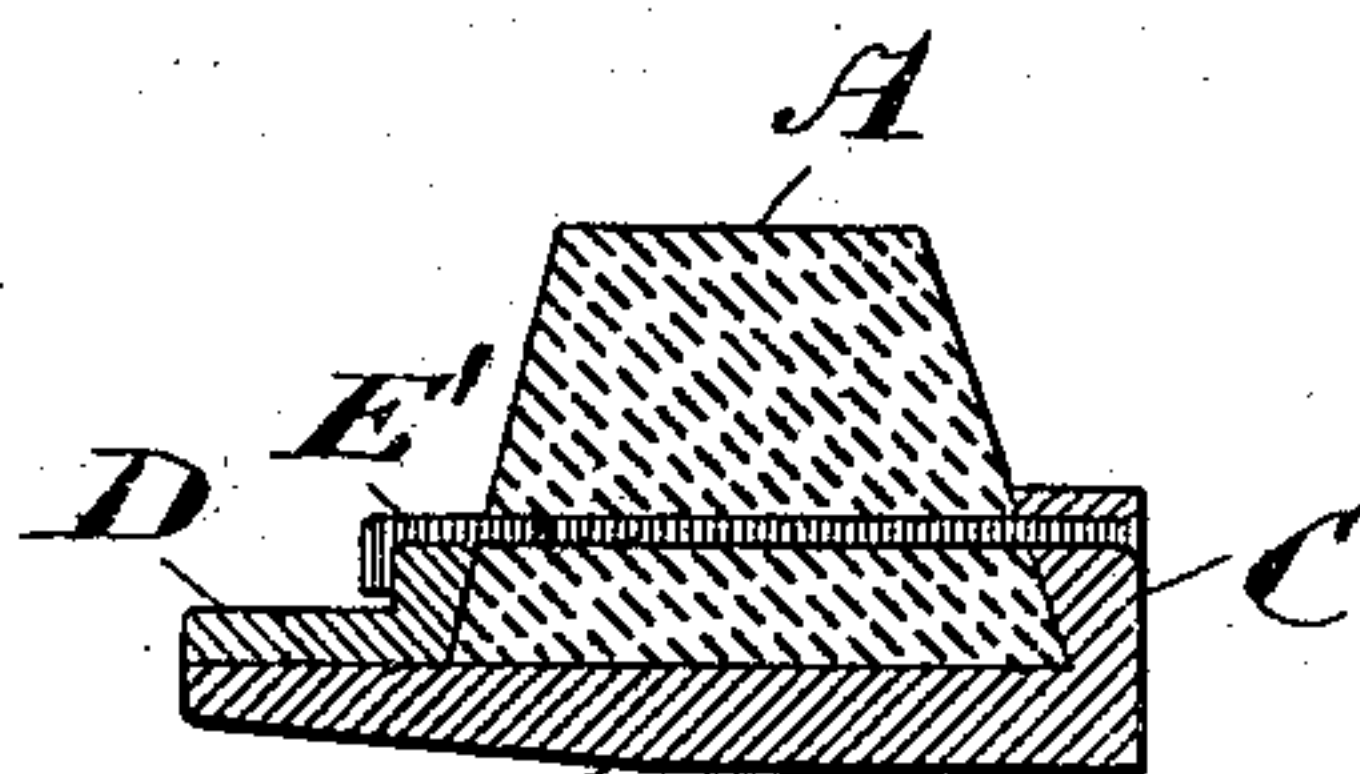


Fig. 4

Witnesses

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UNITED STATES PATENT OFFICE.

OWEN McQUILLEN, OF TORONTO, CANADA, ASSIGNOR OF ONE-HALF TO
WILLIAM ALEXANDER VERNER, OF SAME PLACE.

CALKED HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 502,985, dated August 8, 1893.

Application filed January 9, 1893. Serial No. 457,754. (No model.)

To all whom it may concern:

Be it known that I, OWEN McQUILLEN, of the city of Toronto, in the county of York and Province of Ontario, Canada, have invented a certain new and Improved Horse-shoe, of which the following is a specification.

The object of the invention is to design a horse-shoe in which the calks may be readily renewed when desired, and it consists in the peculiar construction, arrangement and combinations of parts hereinafter more particularly described and then definitely claimed.

Figure 1 is a perspective bottom view of my improved shoe. Fig. 2 is a cross section through the toe calk. Fig. 3 is a longitudinal section through the toe calk. Fig. 4 is an alternative method of fastening the metal block.

A is the toe calk, and B, are the heel calks. A dove-tailed recess is made in the shoe blank C, into which the toe calk A, is fitted. In order that the said toe calk may be prevented from falling out of its dove-tailed recess, I place behind the calk A, a metal block D, which is dove-tailed to fit into the recess it is intended for.

A pin E, is fitted into a hole made through the shoe-blank C, behind the metal block D. This pin may be riveted at each end so as to prevent it falling out, but when the calks are made of rubber or similar elastic material, the weight of the horse standing on the calk causes it to expand so as to press out the metal block D, against the pin E, which pressure I find sufficient to prevent the longitudinal movement of the pin.

The calks B, are slipped into dove-tailed recesses made in each heel, and in front of each calk B, I place a metal block F, and hold it in position by a pin G. These pins E may be riveted; but when the calks are made of rubber or other elastic material, I place the calk into its recess and force the block D against it, and then slip the pin into place; by so constructing it, the pin needs no riveting as the elastic qualities of the rubber forces the block

against the pin and thus holds it in place. It is obvious that this cannot be done unless rubber or some elastic material is used.

When the roads are made of asphalt or similar hard smooth material, the rubber calks will be found of great advantage as it will enable the horse to travel on the road without fear of slipping.

In Fig. 4, instead of the pin E, passing sideways through the shoe, I show a spring pin E', pierced through the front of the shoe and the calk and over the block D, so that by springing up the spring-pin E', the block may be removed. There are of course other plans of securing the calk in its dove-tailed recess, and therefore, I do not, as I have before said, wish to confine myself to the exact means shown.

I am aware that it is not new to use calks made of rubber, and I do not claim this broadly; but what I do claim as new is a calk made of spring material forced into place so as to hold itself in position by pressure against the block and pin.

What I claim as my invention is—

1. As a new article of manufacture, a horse-shoe blank having dovetailed recesses therein, blocks adapted to fit in part said recesses, pins against which the blocks abut, and calks made of spring material and forced into said recesses and adapted to hold themselves in said recesses by their pressure against the blocks and pins, substantially as described.

2. As a new article of manufacture, a horse-shoe blank having a dovetail recess therein, a calk provided with dovetail sides and fitted in said recess, a block with a dovetail side fitted in said recess and against one side of the calk, and a pin riveted in the shoe and holding the block against the calk, substantially as described.

Toronto, December 16, 1892.

OWEN McQUILLEN.

In presence of—

A. M. NEFF,
J. EDW. MAYBEE.