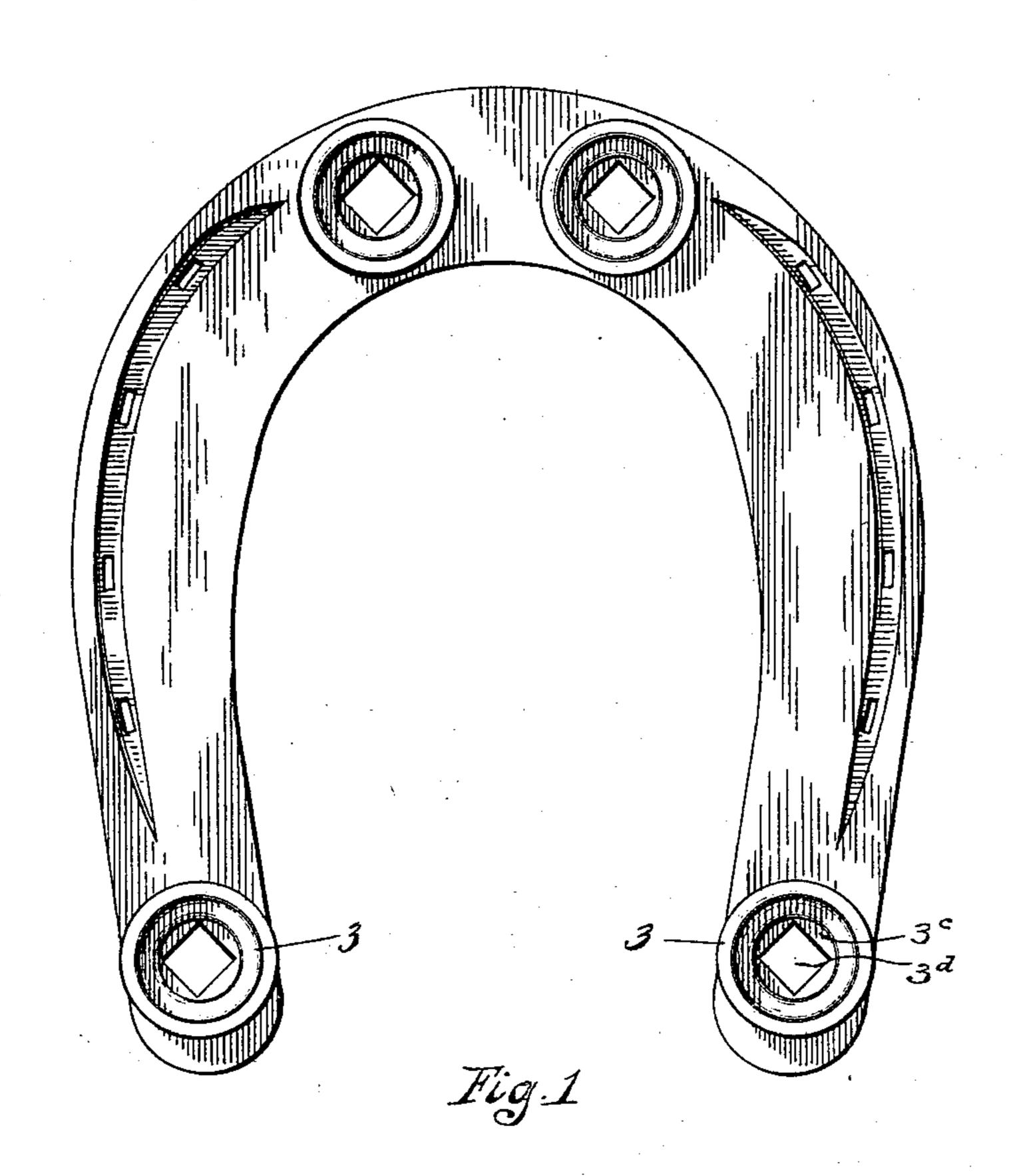
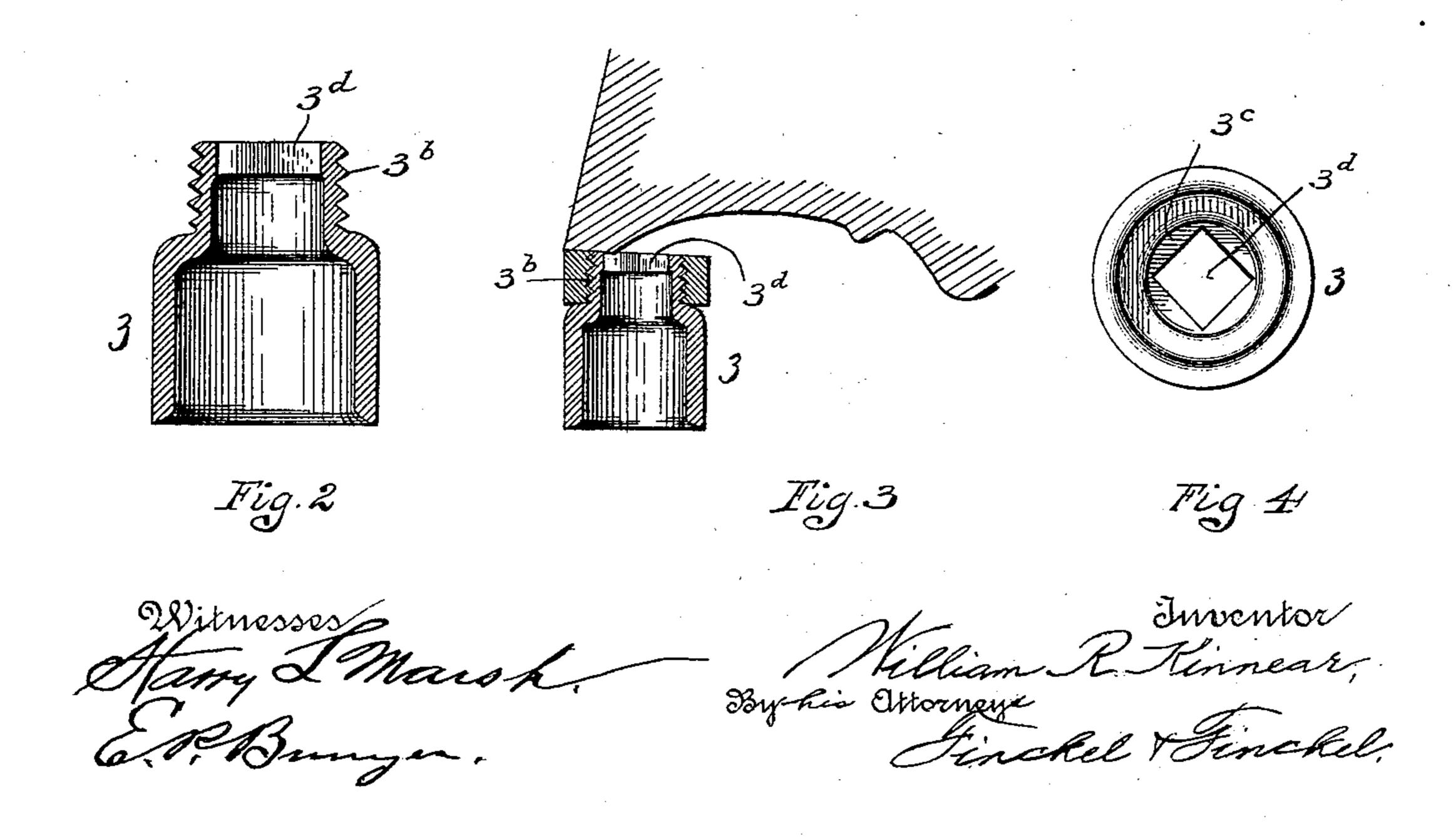
W. R. KINNEAR. HORSESHOE CALK.

. (Application filed Dec. 2, 1898.)

(No Model.)





United States Patent Office.

WILLIAM R. KINNEAR, OF COLUMBUS, OHIO.

HORSESHOE-CALK.

SPECIFICATION forming part of Letters Patent No. 631,961, dated August 29, 1899.

Application filed December 2, 1898. Serial No. 698,047. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM R. KINNEAR, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Horseshoe-Calks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of my invention is to make an improvement upon the calk shown in Letters Patent of the United States granted to me March 1, 1898, No. 599,712.

In practice the said calk is pressed out of steel, and it has been found difficult, although not altogether impracticable, to nicely dieshape the wrench-socket. In my present improvement I extend the wrench-socket clear through the upper end of the calk, or that part which enters the shoe, and for this purpose employ a suitably-shaped punch to cut a clear hole.

In the accompanying drawings, illustrating an embodiment of my invention, Figure 1 is a plan view of a shoe provided with the calks. Fig. 2 is a sectional view of a calk, on a larger scale, removed from the shoe. Fig. 3 is a central vertical sectional view of a calk, showing its position with respect to the hoof; and Fig. 4 is a plan view of the under side or tread of the calk.

Generally the calk (designated on the views

as 3) is of hollow cylindrical form and is externally threaded at its upper end, as shown 35 at 3b, where it enters and engages the shoe. In the operation of die-shaping the calk as at present practiced a web or wall 3° is formed across the upper end of the calk, and through this is punched a hole 3d of polygonal or non- 40 circular form to receive a correspondinglyshaped wrench. The advantage of this form and location of the wrench-socket is that it is as far removed as possible from injurious contact with things on the pavement and that 45 in this form of calk the wrench-hole may be formed with cleaner and straighter sides. Further, it may be more readily cleared of obstructions, because if things lodged therein cannot be picked out from below they may be 50 forced out between the hoof and the shoe.

What I claim, and desire to secure by Let-

ters Patent, is—

A tubular calk open and free from end to end, threaded at one end to engage a shoe, 55 and provided in its threaded end with a non-circular opening adapted to receive a wrench, whereby the calk may be turned into and out of the shoe and the calk kept clear of obstructions, substantially as set forth.

In testimony whereof I have hereunto set my hand this 22d day of November, 1898.
WILLIAM R. KINNEAR.

Witnesses:

GEO. W. ALFRED, GEO. M. FINCKEL.