No. 763,069.

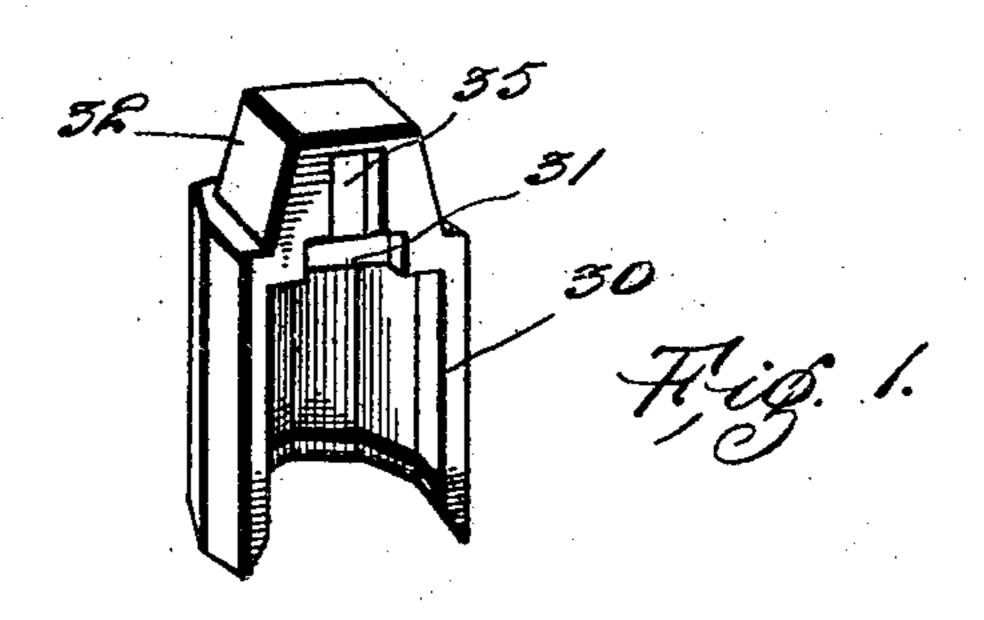
PATENTED JUNE 21, 1904.

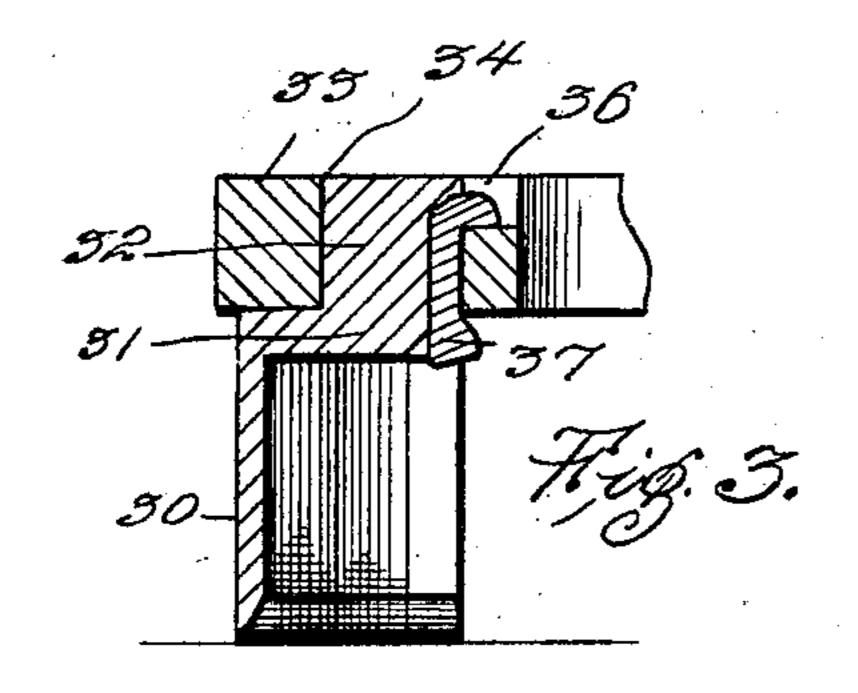
B. McKENZIE.

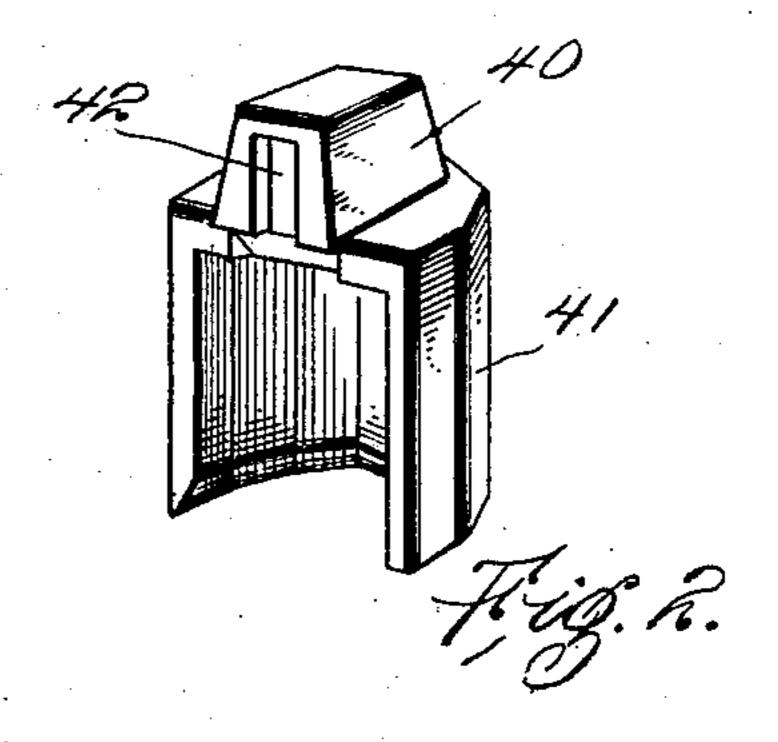
HORSESHOE CALK.

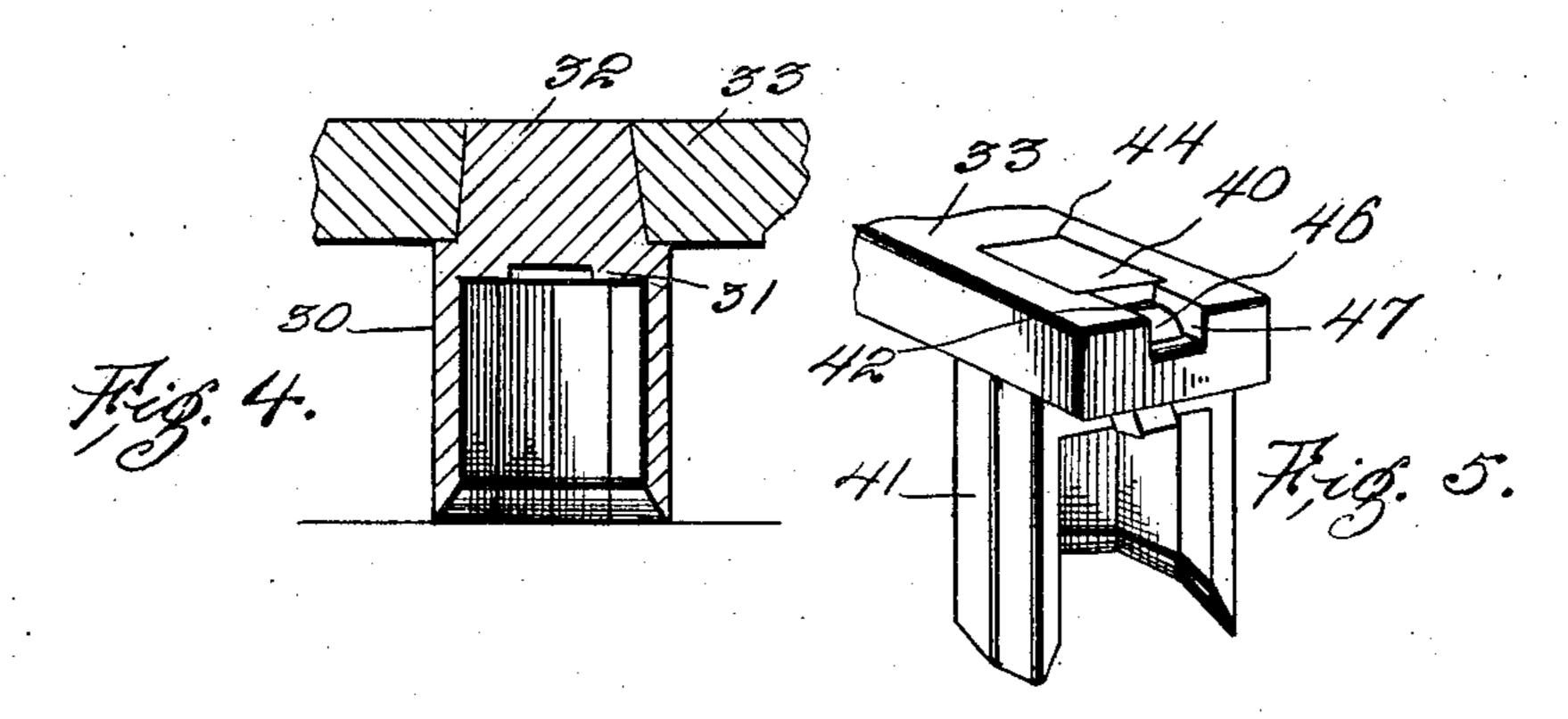
APPLICATION FILED JUNE 10, 1903.

NO MODEL.









Witnesses Offichingson Eventual Burt McKenzie Bandleer Gandle Attorneys

United States Patent Office.

BURT McKENZIE, OF DETROIT, MICHIGAN, ASSIGNOR OF ONE-HALF TO G. J. SASS, OF DETROIT, MICHIGAN.

HORSESHOE-CALK.

SPECIFICATION forming part of Letters Patent No. 763,069, dated June 21, 1904.

Application filed June 10, 1903. Serial No. 160,852. (No model.)

To all whom it may concern:

Be it known that I, Burt McKenzie, a citizen of the United States, residing at Detroit, in the county of Wayne, State of Michigan, bave 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.

This invention relates to horseshoe-calks, and more particularly to the class of removable calks; and it has for its object to provide a construction which will permit of attachment and detachment of the calks and which will hold the calk securely in place, so that liability to loss of the calks or loosening will be reduced to a minimum.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a perspective view showing a calk embodying the present invention. Fig. 2 is a perspective view showing a modified form of calk which is used at the heel of the horseshoe. Fig. 3 is a vertical section taken transversely of the front of the horseshoe and including the front calk and the locking-key. Fig. 4 is a section at right angles to Fig. 3. Fig. 5 is a perspective view showing the modified form engaged with the horseshoe.

Referring now to the drawings, there is shown a calk, including a body portion 30 in 35 the form of the half of a polygon, cut in a plane passing longitudinally therethrough centrally of opposite sides. The body portion is hollow and has a web 31, which closes the upper end thereof, the lower end and rear side being open. The inner lower edge of the body is beveled.

Rising from the upper face of the web 31 is a stem 32 in the construction shown in Fig. 1 and which stem is flush with the rear face 45 of the body 30, while the front face of the stem is parallel with the rear face and is set slightly rearwardly from the front angle of

the body. The side faces of the stem converge toward the upper flat end of the stem, so that the stem is wedge shape.

The calk shown in Figs. 1 and 3 of the drawings is designed for the toe of a horse-shoe, the shoe being shown at 33, and the shoe has an opening 34 formed vertically through its toe portion to receive the stem of 55 the calk, the front and rear walls of the opening being parallel, while the side walls converge upwardly to correspond with the convergent sides of the stem and calk, the dimensions of the opening and the stem of the 60 calk being such that the stem of the calk will wedge tightly into the opening before the web of the body portion touches the bottom of the shoe.

In the rear face of the stem of the calk is 65 formed a vertical slot 35, which extends from a point just below the upper face of the stem through the lower face of the web 31, and in the top of the horseshoe at the rear side of the opening 34 is formed a transverse slot 36, 70 which communicates with the opening 34 and is of such depth that when the calk is engaged with the shoe the upper end of the slot 35 will lie above the bottom of the slot 36, so that a key 37 may be forced upwardly through the 75 slot 35 and when it strikes the upper end of said slot will be deflected into the slot 36, the upper end of the slot 35 being slanted at an obtuse angle to the rear wall of the shoe above the adjacent transverse face of the shoe to 80 facilitate this deflecting. The deflected end of the wedge is forced against the bottom of the slot 36 and prevents withdrawal of the stem of the calk from the opening 34. The metal surrounding the lower end of the slot 85 35 may be cut away to accommodate the head of the wedge.

In Fig. 2 of the drawings the major transverse dimension of the stem 40 is from front to rear of the body 41 of the calk, the stem 90 projecting slightly beyond the rear face of the body and having therein a slot 42, which extends from a point adjacent to the upper end of the stem downwardly through the stem

and through the rear face of the web of the calk. The calk shown in Fig. 2 is designed for a heel-calk, and in the heel of the shoe at each side is an opening 44, which receives the stem of the calk, the rear and front faces of the stem and the opening being vertical, while the side faces are converged upwardly, so that the stem may be wedged into the shoe. The calk is held in place by means of a wedge 46, which is driven through the slot 42 into the slot 47 in the upper face of the shoe.

It will be understood that in practice modifications of the specific construction shown may be made and that any suitable materials and proportions may be used for the various parts without departing from the spirit of the

invention.

What is claimed is—

1. The combination with a horseshoe having an opening therethrough and a key-seat in the inner face of the horseshoe, communicating with the said opening, of a calk having a stem engaged in the opening of the shoe, said stem having a slot in its rear face reaching from a point below its upper end through its lower end, and having its upper wall slanted,

said slot communicating with the key-seat,

and a key engaged with the slot and the key-seat.

2. The combination with a horseshoe hav- 30 ing an opening therethrough, of a calk having a stem engaged in the opening, said stem having a slot in a longitudinal face thereof, terminating short of one end of the stem and having at such end a wall lying at an obtuse 35 angle to the rear wall of the slot, and a key passed through the slot against said end wall and clenched upon the face of the shoe adjacent to said end wall.

3. The combination with a horseshoe hav- 40 ing an opening therethrough, of a calk having a stem engaged in said opening, said stem having a longitudinal slot, one end wall of the slot lying at an obtuse angle to the rear wall of the slot and above the adjacent transverse 45 face of the shoe, to direct a key over said transverse face of the shoe, when driven from the opposite end thereof.

In testimony whereof I affix my signature in

presence of two witnesses.

BURT McKENZIE.

Witnesses:

GEORGE J. SASS, ELIZABETH B. McKinstry.