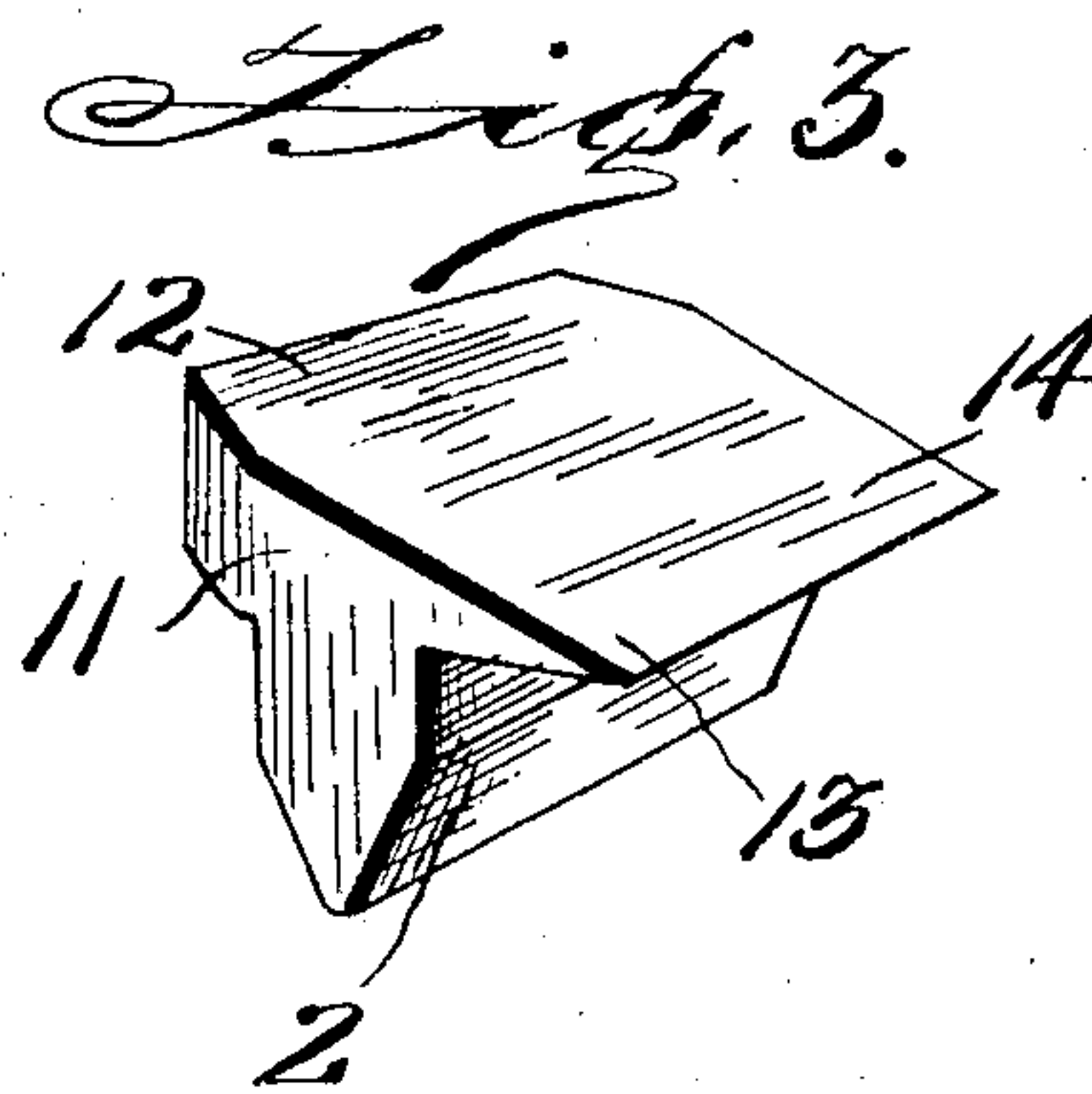
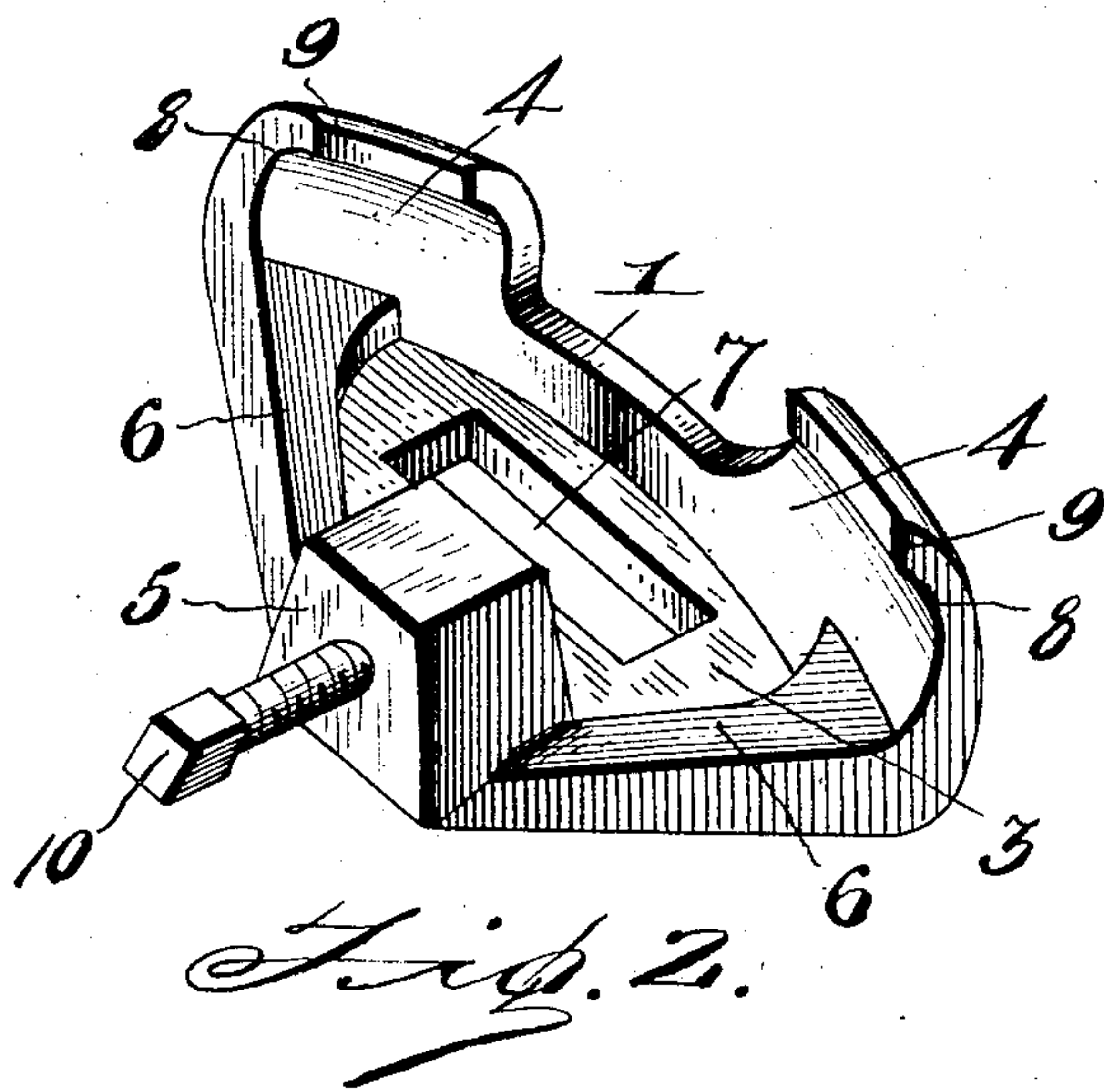
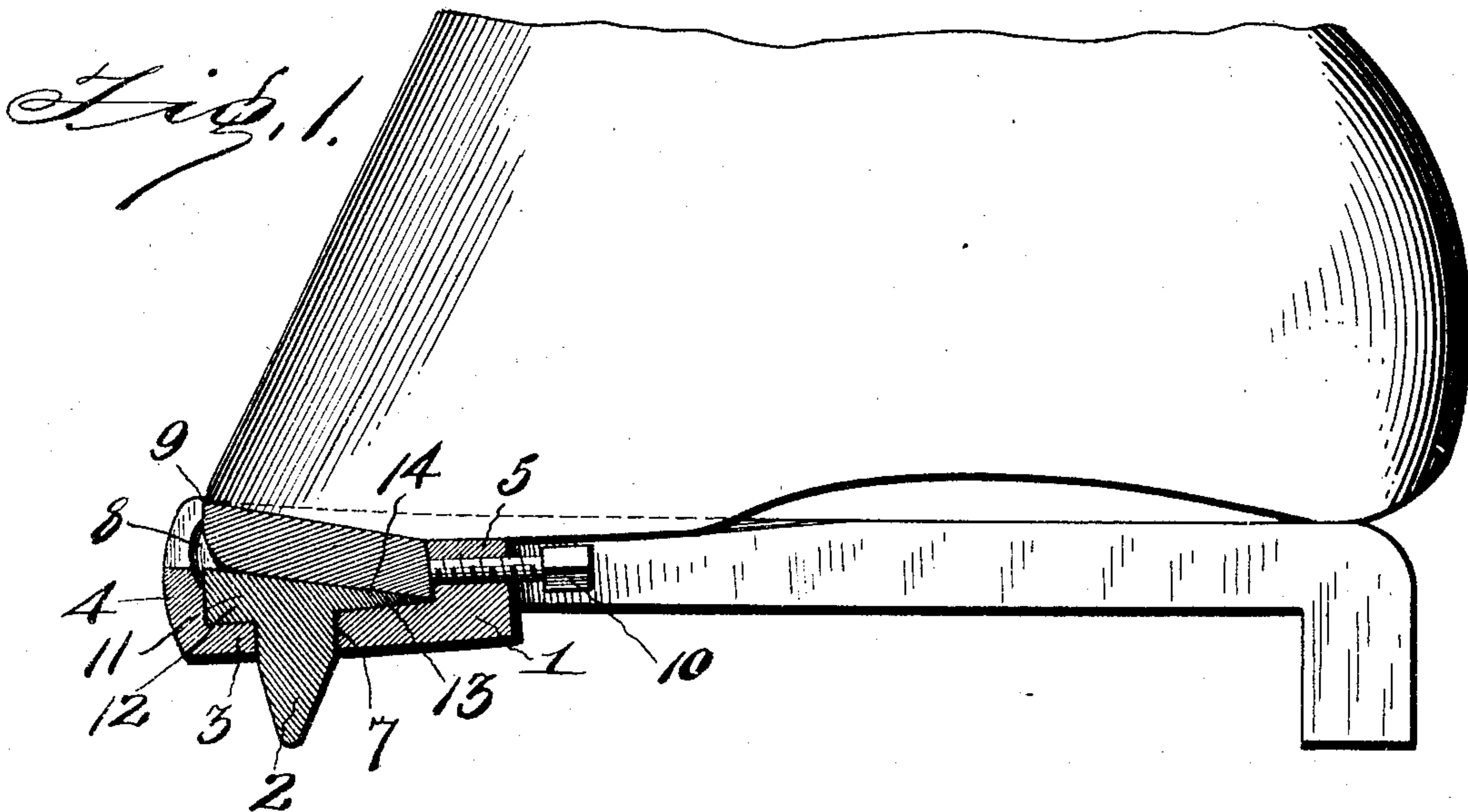


No. 779,597.

PATENTED JAN. 10, 1905.

G. F. HAILMAN.
HORSESHOE CALK.

APPLICATION FILED JAN. 18, 1904.



Witnesses

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GEORGE F. HAILMAN, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR TO AMERICAN HORSE SHOE GRIP COMPANY, INCORPORATED, A CORPORATION OF THE DISTRICT OF COLUMBIA.

HORSESHOE-CALK.

SPECIFICATION forming part of Letters Patent No. 779,597, dated January 10, 1905.

Application filed January 18, 1904. Serial No. 189,580.

To all whom it may concern:

Be it known that I, GEORGE F. HAILMAN, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Horseshoe-Calks; and I do 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.

My invention is an improved horseshoe-calk adapted to be readily attached to and detached from a horseshoe; and it consists in the construction, combination, and arrangement of devices hereinafter described and claimed.

The object of my invention is to provide an improved device of this character which will enable a horse to be provided with sharp calks during cold weather to prevent him from slipping on the ice and which calks may be readily removed when the necessity for wearing them no longer exists and may be readily renewed when they become worn.

In the accompanying drawings, Figure 1 is a sectional view of a horseshoe-calk embodying my improvements, showing the same attached to a horseshoe. Fig. 2 is a detail perspective view of the clamp, and Fig. 3 is a similar view of the detachable calk.

My improved device consists of a clamp 1 and of a calk 2. The clamp is of suitable form to enable it to be fitted either to the toe of a horseshoe or to one of the heels thereof and comprises a bottom 3 of suitable shape and dimensions, an outer flange 4, which rises therefrom and is shaped to engage the outer side of the shoe, and a lug 5, which rises from the inner side of the bottom at the center thereof. As here shown, the bottom is of segmental form, having the inwardly-converging side edges 6. At a suitable distance from the outer flange 4 is an opening 7, which is of oblong rectangular form and of suitable dimensions. The inner side of the flange 4 is hollowed, as at 8, to provide an edge 9 to bite against the outer side of the horseshoe, and the lug 5 is here shown as provided with a

screw-threaded opening in which is a set-screw 10. The point of the set-screw is adapted to bear against the inclined inner side of the horseshoe and coacts with the flange 4 and its upper biting edge 9 to firmly secure the clamp to the shoe, as will be understood. The set-screw also enables the clamp to be readily detached from the shoe at will. The calk 2 is removable from the clamp, so that it may be readily sharpened or renewed when worn.

The calk is of a size and shape to adapt it to fit in the opening in the bottom of the clamp and to project below the bottom of the clamp and is formed with a head 11 on its upper side which projects beyond the outer side of the calk to form a flange 12 and beyond the inner side of the calk to form a flange 13, which flanges bear on the bottom of the clamp. The upper side of the calk 2 is inclined downwardly and inwardly, as at 14. The head of the calk is thereby made wedge shape transversely and the inclined side thereof is adapted to bear against the under side of the horseshoe, so that the calk is disposed in an inclined position and is maintained in such position by the pressure of the shoe on the head thereof. This also maintains the clamp in an inclined position, as clearly shown in Fig. 1 of the drawings, so that the clamp is firmly braced against the stress exerted thereon when the horse is in motion and is prevented from becoming casually detached from the shoe.

The head of the calk may be of any suitable thickness, and in practice I provide calks with heads of varying thickness, which may be interchangeably used with the clamp according to the thickness of the shoe to which the device is attached and the extent to which the shoe may be worn.

From the foregoing description, taken in connection with the accompanying drawings, the construction, operation, and advantages of my invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be

resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A device of the class described, comprising a clamp to engage the outer and inner sides of a horseshoe, and having a bottom provided with an opening, and a calk to fit in said opening, and having a transversely-wedge-shaped head bearing on the bottom of the clamp and against the bottom of the shoe, for the purpose set forth.

2. A device of the class described, comprising a clamp having a bottom provided with an opening, an outer flange hollowed on its inner side to provide a biting edge to engage the outer side of the shoe, a lug on its inner side, a securing device coacting with the lug to engage the inner side of the shoe and lock the clamp thereto, and a calk to fit in the opening of the clamped bottom and having a trans-

versely-wedge-shaped head to bear under the shoe and to bear upon the bottom of the clamp, substantially as described.

3. A device of the class described, comprising a clamp having a bottom provided with an opening, an outer flange hollowed on its inner side to provide a biting edge to engage the outer side of the shoe, a lug on its inner side, a set-screw coacting with the lug to engage the inner side of the shoe and lock the clamp thereto, and a calk to fit in the opening of the clamped bottom and having a transversely-wedge-shaped head to bear under the shoe and to bear upon the bottom of the clamp, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GEO. F. HAILMAN.

Witnesses:

J. C. WILSON,
JAMES STRAYER.