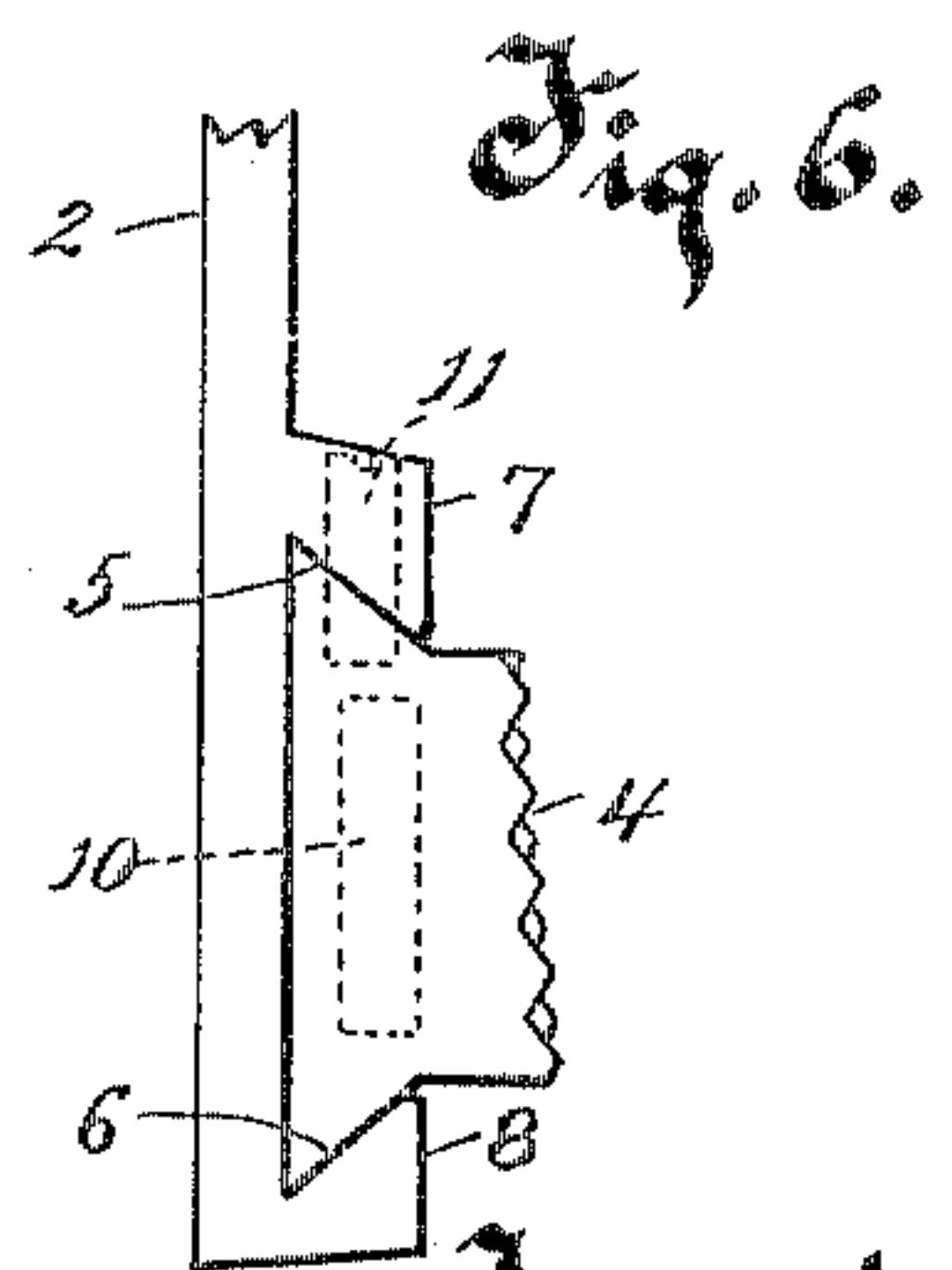
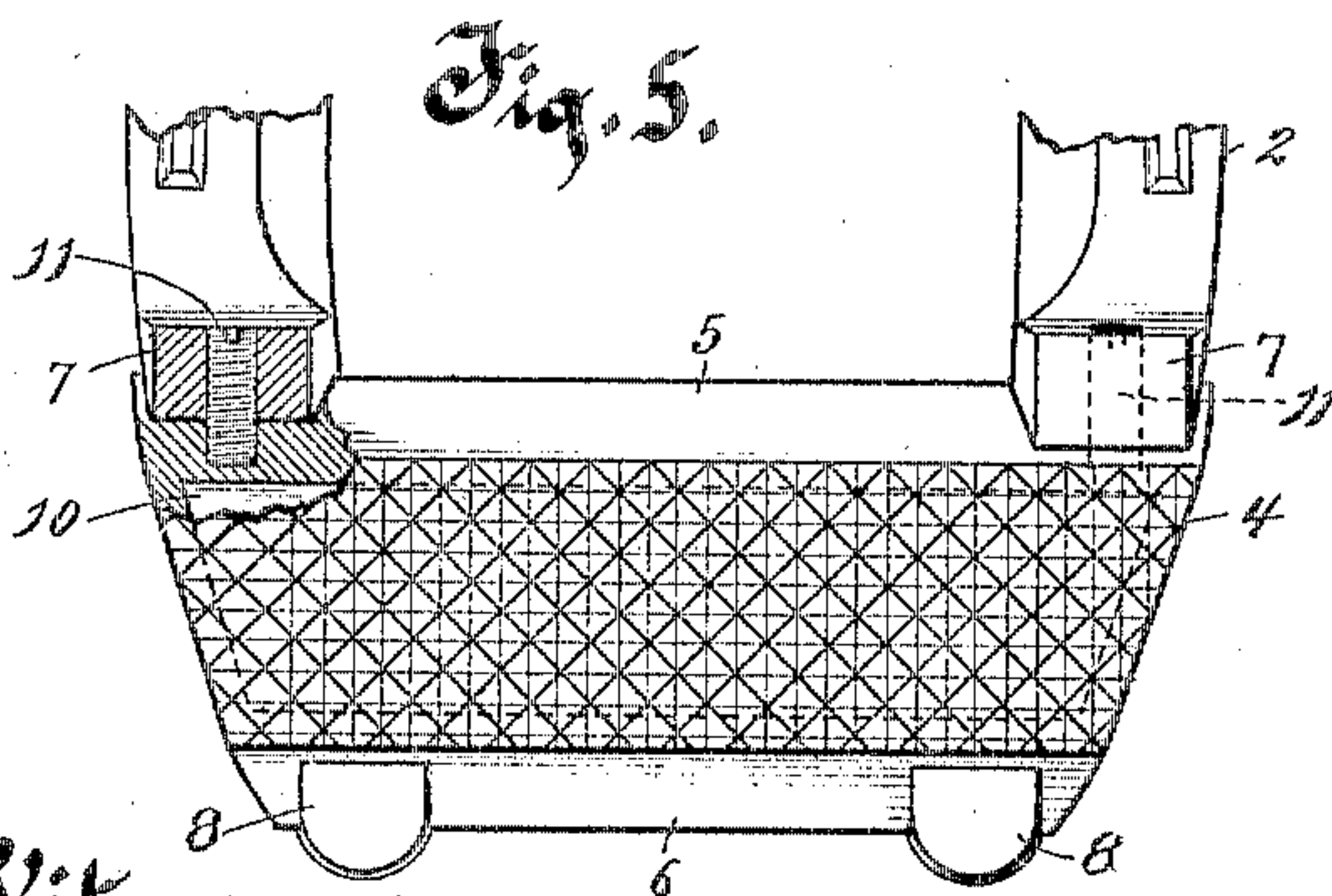
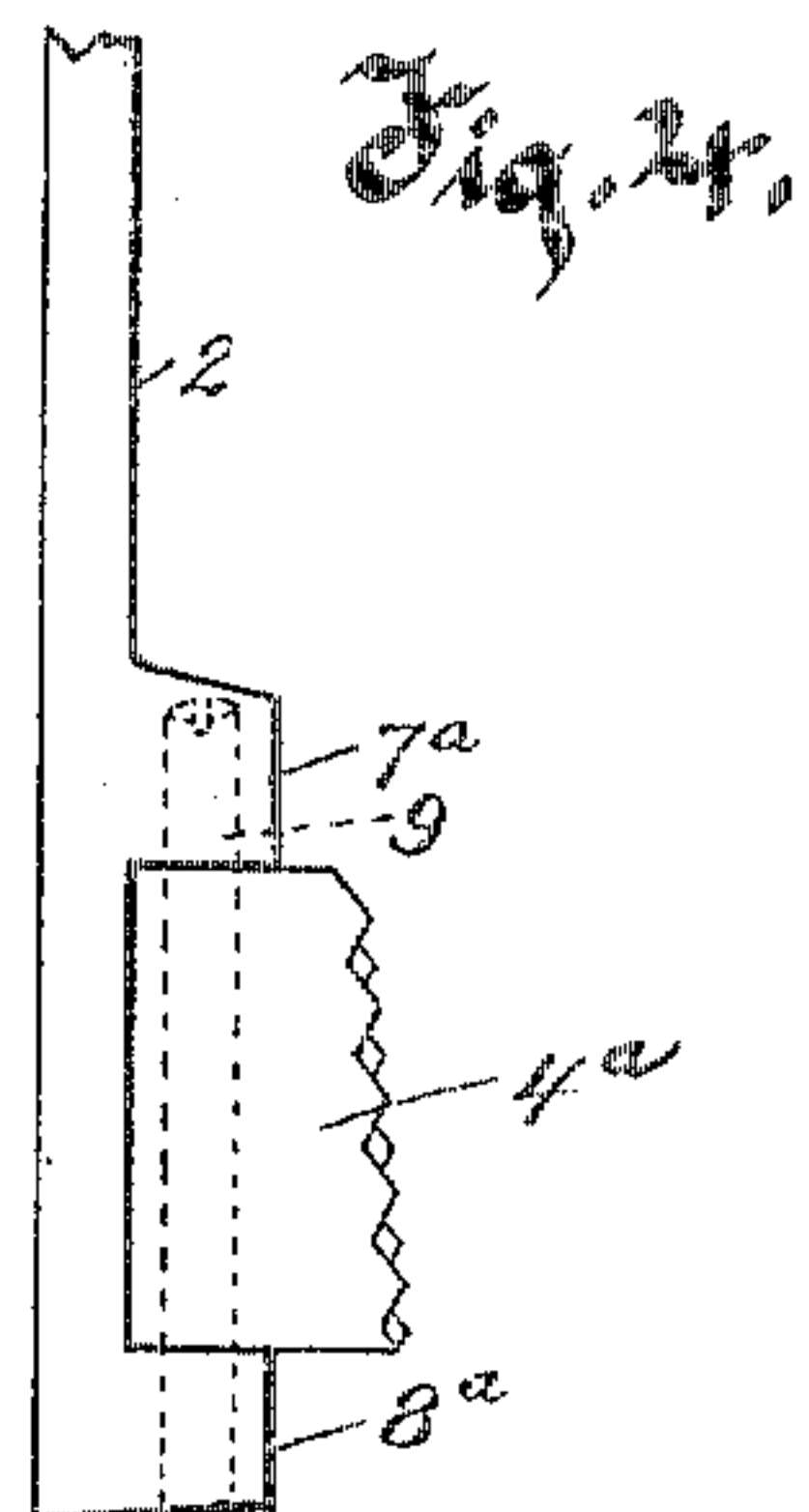
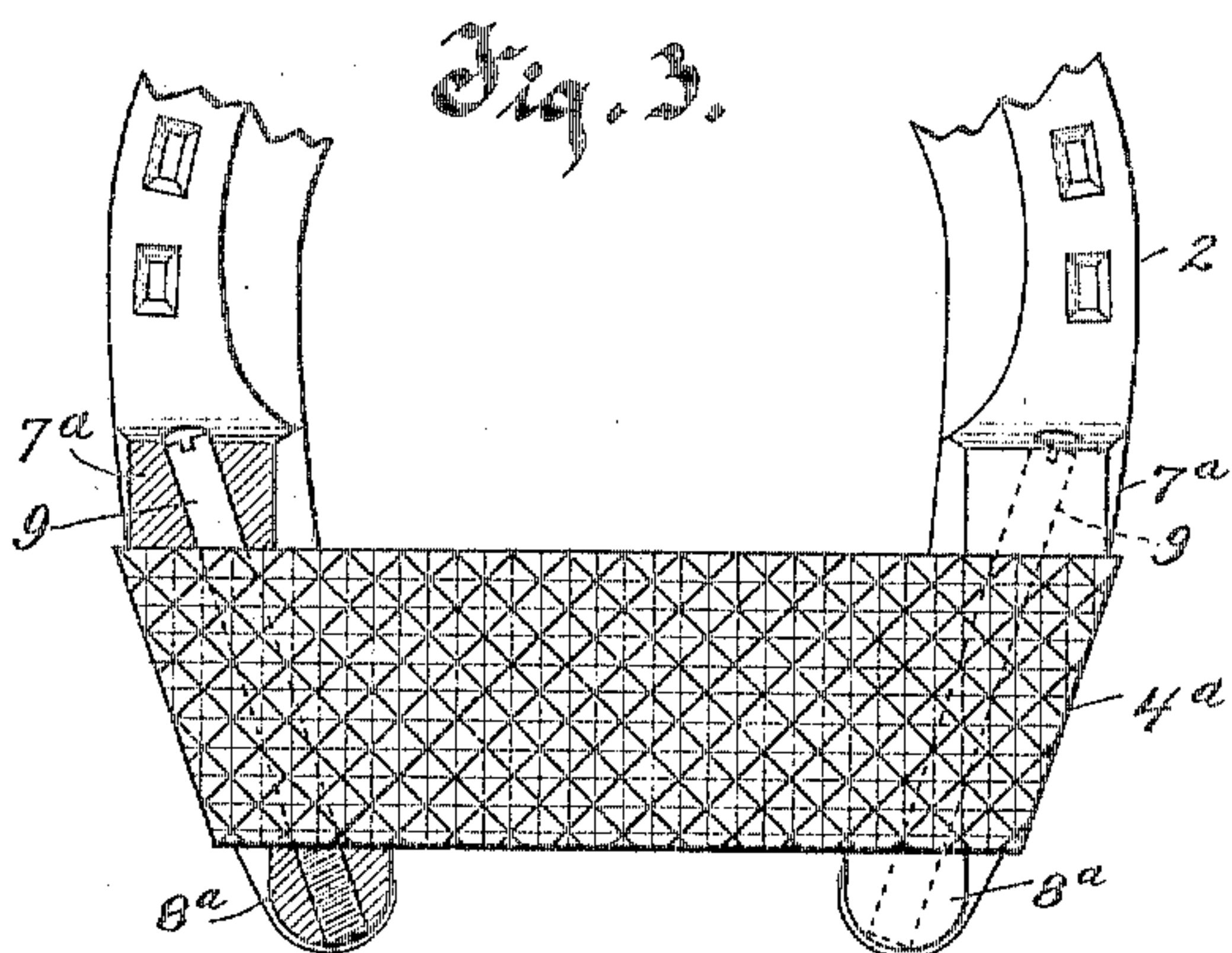
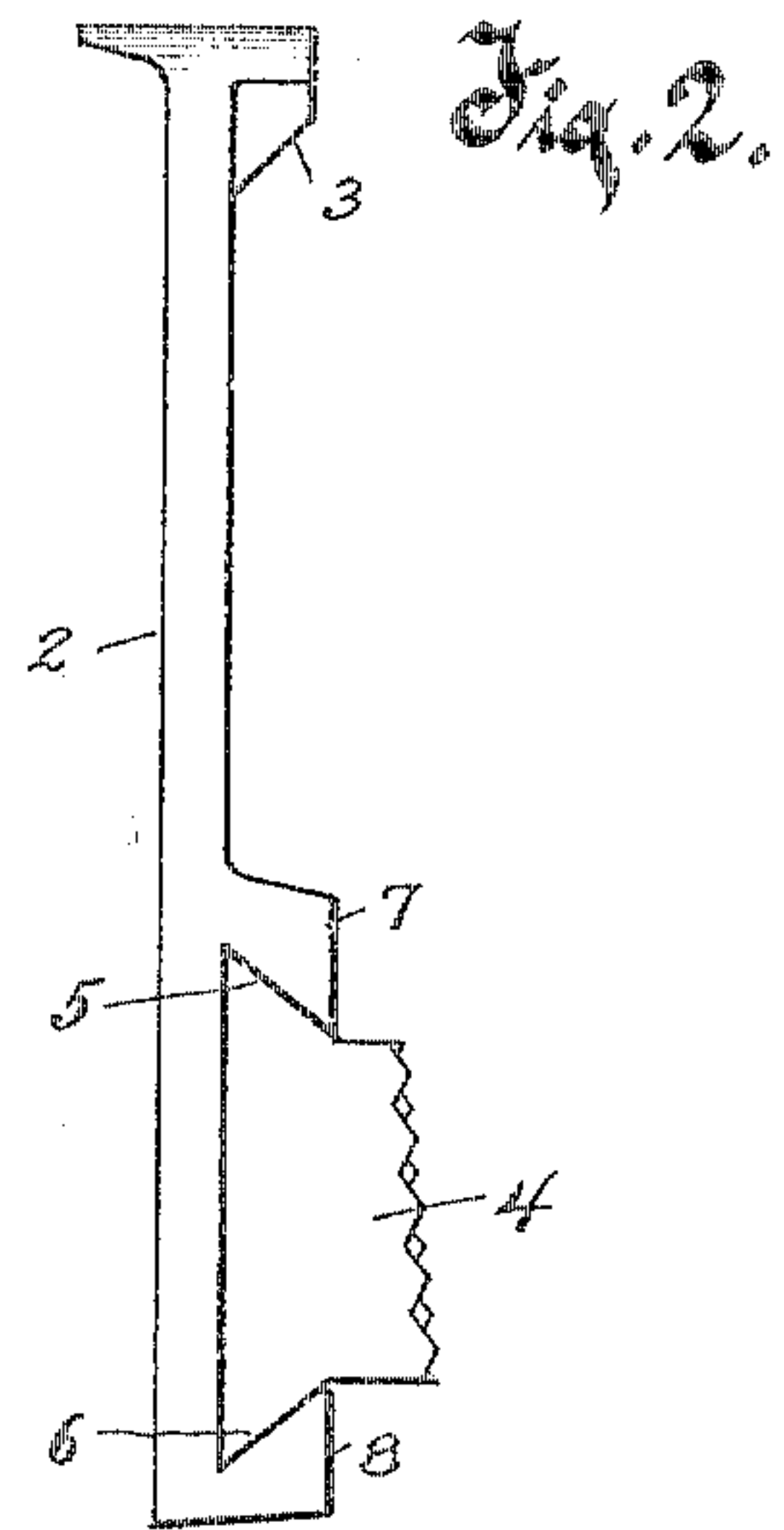
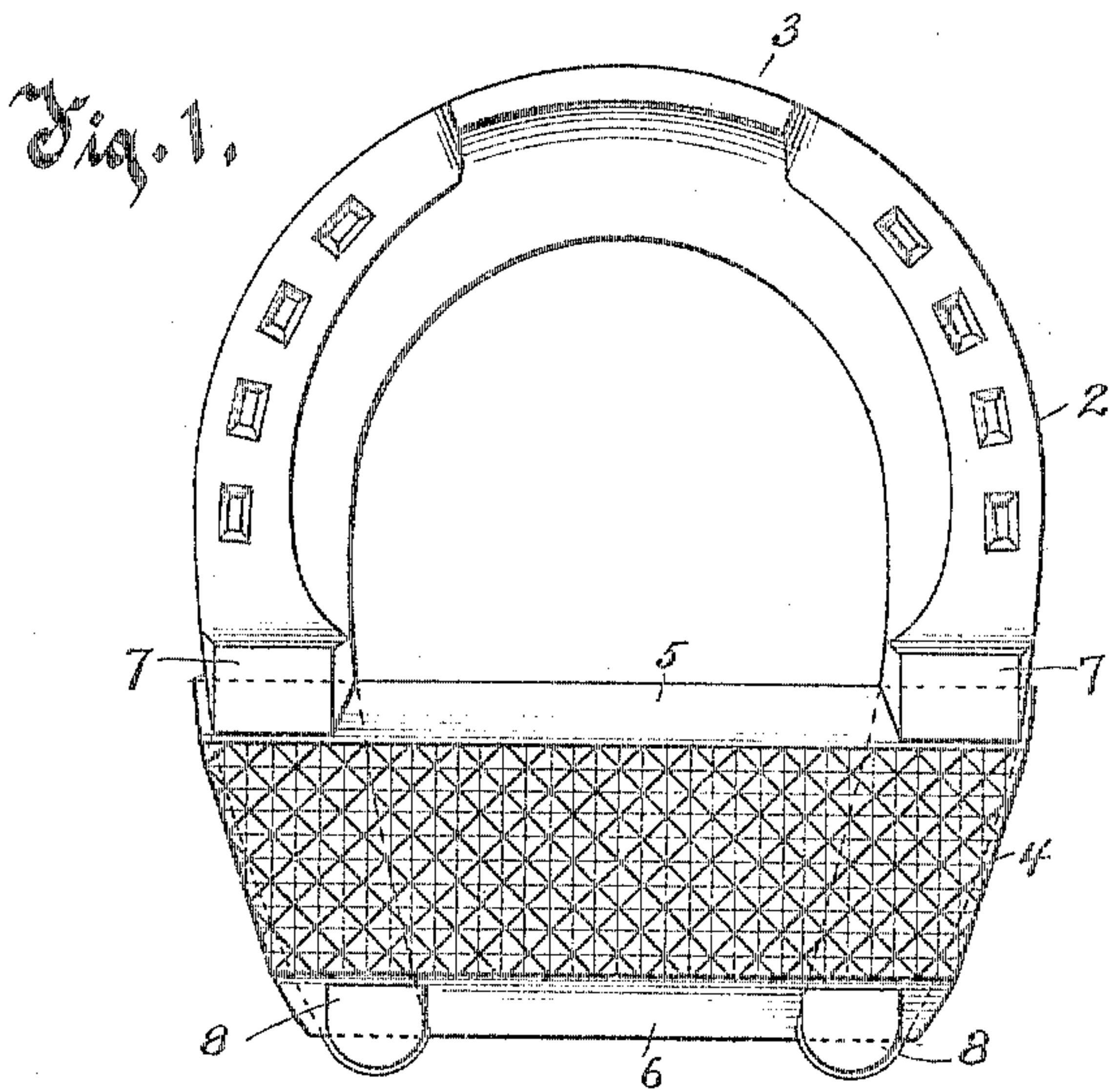


No. 794,004.

PATENTED JULY 4, 1905.

J. H. GAY.
HORSESHOE.

APPLICATION FILED AUG. 15, 1903.



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TO MICHAEL D. BYRNE AND FRANCIS E. MCGOVERN, OF MILWAUKEE,
WISCONSIN.

HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 794,004, dated July 4, 1905.

Application filed August 15, 1903. Serial No. 169,588.

To all whom it may concern:

Be it known that I, JAMES H. GAY, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and useful Improvement in Horseshoes, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

The horseshoe with the improvement therein herein shown and described is now known as the "J. H. G. horseshoe and pad."

The invention relates to improvements in the shoe in and by which a flexible pad is secured detachably to the shoe, so that when the pad has become worn the pad may be removed from the shoe without taking the shoe off the foot of the horse and replacing the pad by a new and unworn one.

Other novel features of the construction are incidental to the chief feature just stated and will be described herein.

The invention consists of the improved horseshoe, its parts, and combinations of parts, as herein described and claimed, or the equivalents thereof.

In the drawings, Figure 1 shows the under and outer side of my improved shoe. Fig. 2 is an edge view of the same shoe. Fig. 3 is an under and outer view of a fragment of my improved shoe, the means for securing the flexible pad to the shoe being in a different form from that shown in Fig. 1, the parts being in section to exhibit interior construction. Fig. 4 is a side edge view of the construction shown in Fig. 3. Fig. 5 is an under and outer view of a fragment of my improved shoe, the construction of the pad and the means for securing it in the shoe being in a different form from that shown in Figs. 1 and 3, parts being broken away and shown in cross-section for illustrating interior construction. Fig. 6 is a side edge view of the construction shown in Fig. 5.

In the drawings, 2 is a horseshoe made of metal, usually steel, and provided with a toe-calk 3 of the usual form. At the heel of the shoe I provide a flexible pad 4, which is advisably made of hard rubber, but may be of fiber or any other material or composition of

matter having the requisite flexibility, toughness, and durability. The chief purpose of my invention is to so secure this pad to the horseshoe that it may be detached and removed therefrom when desired and can be replaced by a new pad, if necessary. I advisably construct this pad of hard rubber and in elongated form with parallel edges which are beveled outwardly toward the front and rear, as shown at 5 and 6. On the horseshoe I provide complementary heel-calks 7 and 8, one set of these calks on each side of the shoe. These sets of calks are opposite each other on the two sides or heel members of the shoe, and they are so undercut in their adjacent opposite and facing surfaces as to form a dovetailed padway in the two calks on and transversely of each heel member of the shoe, the two sets of calks and the padways therein being in alinement across the shoe, forming a padway across the shoe, into which the pad may be thrust from either side of the shoe, the pad being of such width and so formed as to fit and be slidable endwise into the padway thus formed therefor. The medial portion of the pad is considerably thicker than the height of the calks 7 and 8, so that this medial portion projects beyond the outer surface of these calks and when the shoe is on the horse furnishes a yielding bearing for the support of the horse at the heel of the foot. Also because of the yielding quality of the pad the weight of the horse on it causes it to be compressed and the base or upper portion of the pad to be expanded between and against the calks, thus holding the pad more securely in place when the weight of the horse is on the pad and at the time when there is the greatest strain on the pad that might otherwise push the pad laterally out of place.

In the form of construction shown in Figs. 3 and 4 the calks 7^a and 8^a are made with flat parallel complementary and opposing walls, and the pad 4^a is also made with flat parallel edge walls, the pad being of such width that it fits snugly into the space between the calks 7^a and 8^a, and the pad is secured in place by a pin or screw 9 through each set of calks and the intermediate part of the pad. This secur-

ing device is preferably in the form of a headless screw.

In the form of construction shown in Figs. 5 and 6 a steel stiffening-bar 10 substantially as long as the pad is employed, which is introduced into the pad while being constructed and is advisably entirely surrounded, so as to be protected from the elements, by the material of which the pad is chiefly constructed. This bar in the pad may be desirable in some cases where an extra-stiff pad is required. In Figs. 5 and 6 I also show a set-screw 11, advisably of the headless kind, that may be employed to turn through the calks against the pad to hold it firmly in place in the shoe. Such additional means of securing or, rather, tightening the pad when inserted between dovetailed calks may be needed, especially after some use of the pad and it shall have worn away against the calks or have become permanently narrowed by such wearing away or use.

What I claim as my invention is—

1. A horseshoe, comprising a metal shoe having integral calks projecting from the outer surface thereof in complementary sets on each heel member of the shoe, the calks of each set being undercut in their adjacent and opposite faces forming dovetailed padways transversely of and entirely across each heel member and a padway in line across the shoe, and a pad of yielding material having beveled side edges extending across the heel of the shoe and fitting and held by the beveled edges in the dovetailed padways in the sets of heel-calks.

2. A horseshoe, comprising a metal shoe having integral calks projecting from the outer surface thereof in complementary sets on each heel member of the shoe, the calks of each set being undercut in their adjacent opposite faces forming dovetailed padways transversely of and entirely across each heel member and a padway in line and of equal width across the shoe, and a pad of yielding material and greater thickness than the depth of the padways in the calks having parallel beveled side edges extending across the heel of the shoe and fitting and held by the beveled edges in the dovetailed padways in the sets of heel-calks.

3. In combination, a metal horseshoe having two complementary calks on each side of

the shoe near the heel, an elongated pad of yielding material provided with a metal stiffening-bar extending substantially the entire length of the pad but inclosed by the yielding material, and means for securing the pad detachably between the complementary calks.

4. In combination, a metal horseshoe, two rigid complementary undercut calks in a set on each side of the shoe near the heel, the sets of calks being in alinement with each other, an elongated pad of flexible material having outwardly-beveled edges fitting and slidable into place between said complementary calks and transversely of the heel members of the shoe, and a set screw or screws turning in the calk or calks and bearing against the pad adapted additionally to hold the pad in place detachably.

5. A horseshoe comprising a metallic shoe having integral projections extending from the outer surface thereof in complementary sets on each heel member of the shoe, the projections of each set being undercut in their adjacent and opposite faces forming recesses transversely of and substantially across each heel member for receiving a pad, and a pad of yielding material having beveled side edges extending across the heel of the shoe and fitting and held by the beveled edges of the recesses in the sets of heel projections.

6. A horseshoe comprising a metallic shoe having integral projections extending from the outer surface thereof in complementary sets on each heel member of the shoe, the projections of each set being undercut in their adjacent and opposite faces forming recesses transversely of and substantially across each heel member for receiving a pad, and a pad of yielding material of greater thickness than the depth of the recesses in the projections having beveled side edges extending substantially across the heel of the shoe and fitting and held by the beveled edges in the recesses in the sets of heel projections.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES H. GAY.

Witnesses:

R. W. WYSE,

C. T. BENEDICT.