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B. L. WEAVER & C. W. REINOEHL.
HEEL BLOCK FOR RAILROAD FROGS AND THE LIKE.

APPLICATION FILED JULY 26, 1907.

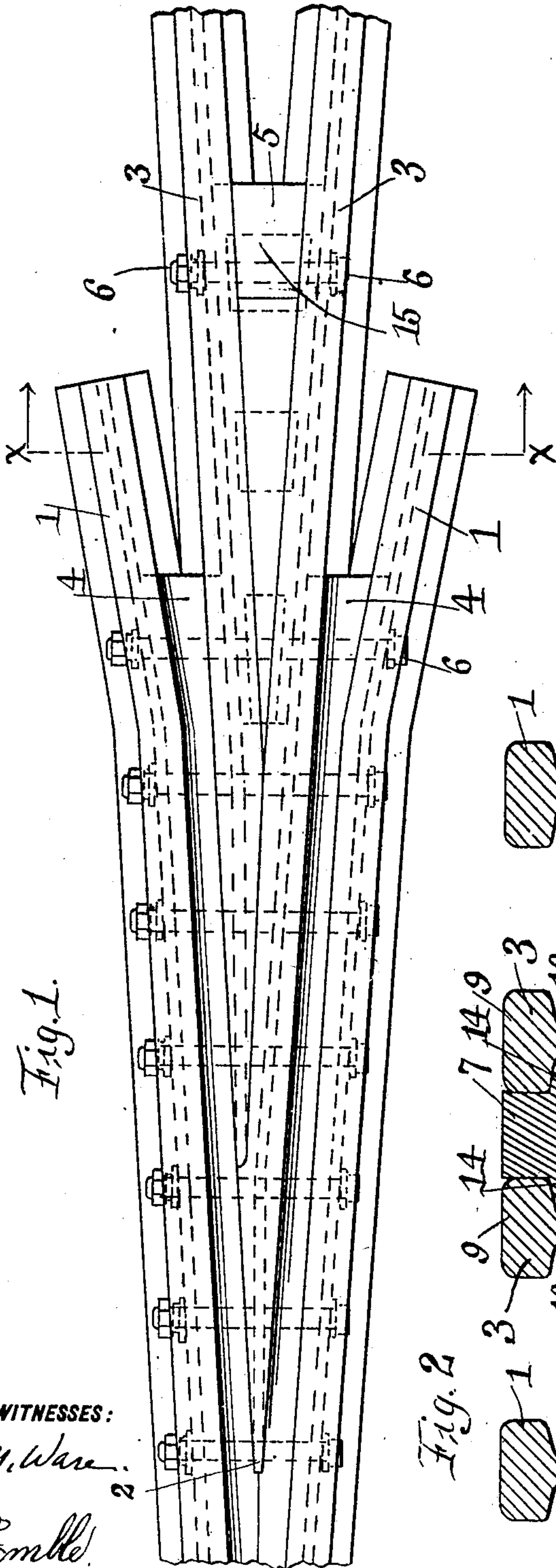
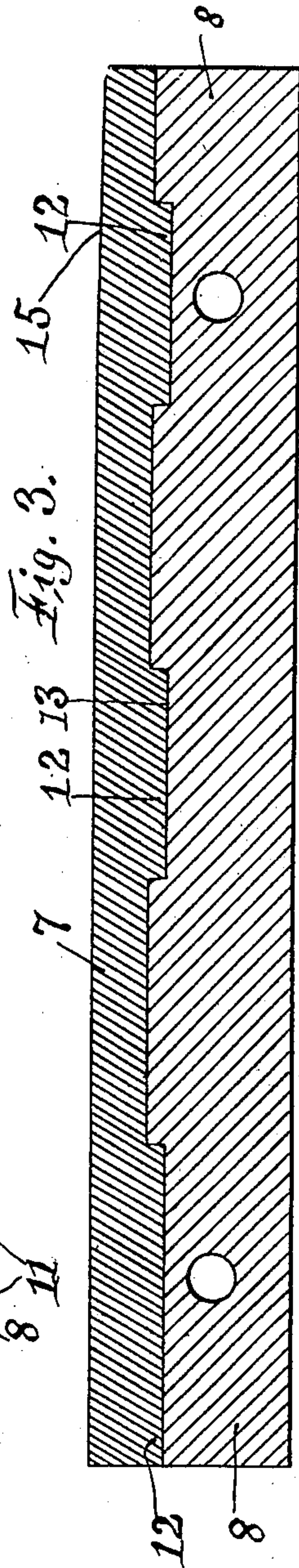
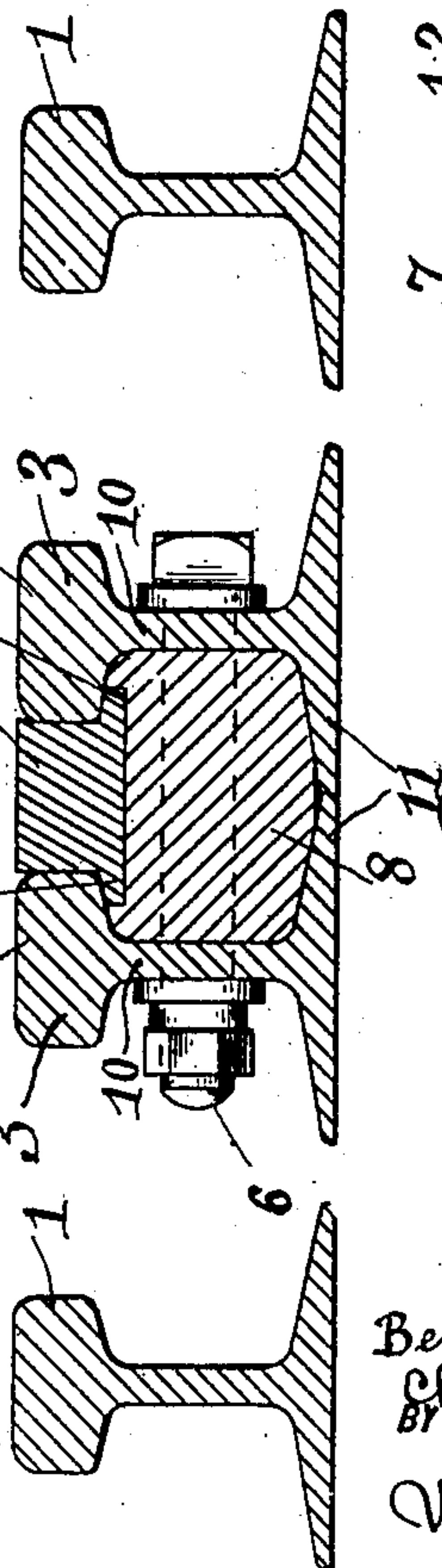


Fig. 1.

WITNESSES:

Ella M. Ware
J. H. Gamble

Fig. 2



INVENTORS:
Bent L. Weaver and
Charles W. Reinoehl
By
Walter C. Pusey
ATTORNEY.

UNITED STATES PATENT OFFICE.

BENT L. WEAVER AND CHARLES W. REINOEHL, OF STEELTON, PENNSYLVANIA.

HEEL-BLOCK FOR RAILROAD-FROGS AND THE LIKE.

No. 881,982.

Specification of Letters Patent. Patented March 17, 1908.

Application filed July 26, 1907. Serial No. 385,678.

To all whom it may concern:

Be it known that we, BENT L. WEAVER and CHARLES W. REINOEHL, citizens of the United States, and residents of Steelton, Dauphin county, State of Pennsylvania, have invented certain new and useful Improvements in Heel - Blocks for Railroad-Frogs and the Like, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, of which—

Figure 1 is a plan view of a portion of a railroad frog or crossing, showing our invention applied thereto. Fig. 2 is an enlarged section as on the line $x-x$ Fig. 1. Fig. 3 is an enlarged medial vertical section through the heel block shown in Figs. 1 and 2.

This invention relates to improvements in heel blocks for railroad frogs and the like.

The object of the invention is to provide a heel block comprising a hard metal upper wear portion and a lower portion of cast iron or the like, which two portions may be detached from each other and either or both readily renewed.

To this end the invention consists in the novel features of construction hereinafter particularly pointed out.

1 indicates the wing rails; 2, the point of the frog; 3, the track-rails converging toward the point, and 4 the usual intervening filling piece between said point-forming and wing rails.

Inserted between the rails, 3, is the heel block, 5, embodying my invention; being held in place between the rails by the bolts, 6. Said heel block, 5, comprises upper and lower portions, 7 and 8 respectively, the upper portion, 7, being formed preferably of relatively hard steel, and constituting the wearing surface of the heel block. The lower portion, 8, which I would usually make of ordinary cast iron, is fitted beneath the heads, 9, of the track-rails, 3, and against the webs, 10, thereof; the under surface of said filling piece resting, either wholly or in part, upon the inwardly extending foot flanges, 11, of the said rails; all in the usual manner.

The upper hard steel casting, 7, of the heel block, is provided, on its under surface, with downwardly extending pads or projections, 12, (in this instance three in number) which extend into corresponding pockets, 13, in the cast iron filling piece, 8. These pads, 12, are provided with flanges, 14, that extend beyond the side of the body portion, a suit-

able distance beneath the heads of the rails, 3, to whose under surface they are fitted.

By making the flanges, 14, of the pads, 12, to extend beneath the heads of the rails, the upper portion, 7, of the block is prevented from vertical displacement; and longitudinal movement of the upper portion, in either direction, is prevented by the engagement of the ends of the pads 12 with the end walls of the pockets, 13. The outer, wide end of the heel block, 5, is beveled downwardly, as at 15, Figs. 1 and 3, to form a pick-up for the false flanges of guttered wheels; and the lower cast iron portion, 8, is provided with holes through which pass the bolts securing the heel block in place between the rails.

We remark that in manufacturing our improved heel block, we would usually cast the portions 7 and 8 separately, and afterward assemble them. It will be observed that by our construction either or both of the portions 7 or 8 may be renewed, independently of the other portion. Also, that, while the size of the hard metal portion 7 is substantially reduced to a minimum, yet the same is held rigidly in place against any tendency to either vertical or longitudinal movement. We further remark that we do not wish to be understood as limiting ourselves to the precise form illustrated in the drawings, as the same may be varied, (as, for instance, the number and location of the pads, 12,) without departing from the principle of our invention.

Having thus described our invention, we claim as new and desire to secure by Letters Patent:—

1. A heel block for railroad frogs and the like, comprising an upper hard metal portion and a lower portion, said portions being detachably secured together.

2. A heel block for railroad frogs and the like, comprising an upper hard metal portion and a lower portion, said upper portion being provided with a pad fitted to a pocket in said lower portion.

3. A heel block for railroad frogs and the like, comprising an upper hard metal portion and a lower portion, said upper portion being provided with a series of pads fitted to a series of pockets in said lower portion.

4. A heel block for railroad frogs, and the like, comprising an upper hard metal portion and a lower portion, said upper portion being of a width equal to that between the point-forming rails of the frog, and provided with

outwardly extending flanges adapted to fit beneath the heads of said rails.

5. A heel block for railroad frogs and the like, comprising an upper hard metal portion and a lower portion, said upper portion being provided with a pad fitted to a pocket in said lower portion, and said upper portion being of a width equal to that between the point-forming rails of the frog, said pad being provided with outwardly extending flanges adapted to fit beneath the heads of said rails.

6. The combination, with the convergent point-forming rails, of a heel block fitted therebetween, said heel block comprising a filling piece engaging the foot-flanges, webs and under sides of the heads of said rails, to-

gether with the hard metal wear piece filling the space between the heads of said rails, said wear piece having the downwardly projecting pads extending into corresponding pockets in said filling piece, and having the side flanges engaging the under surfaces of the heads of said rails, substantially as set forth.

In testimony whereof, we have hereunto affixed our signatures.

BENT L. WEAVER.
CHARLES W. REINOEHL.

Witnesses:

B. A. HANKIN,
WM. R. MILLER.