M. C. GARDNER.

Car Bumper.

No. 20,057. Patented Apr. 27. 1858.

Fig. 2

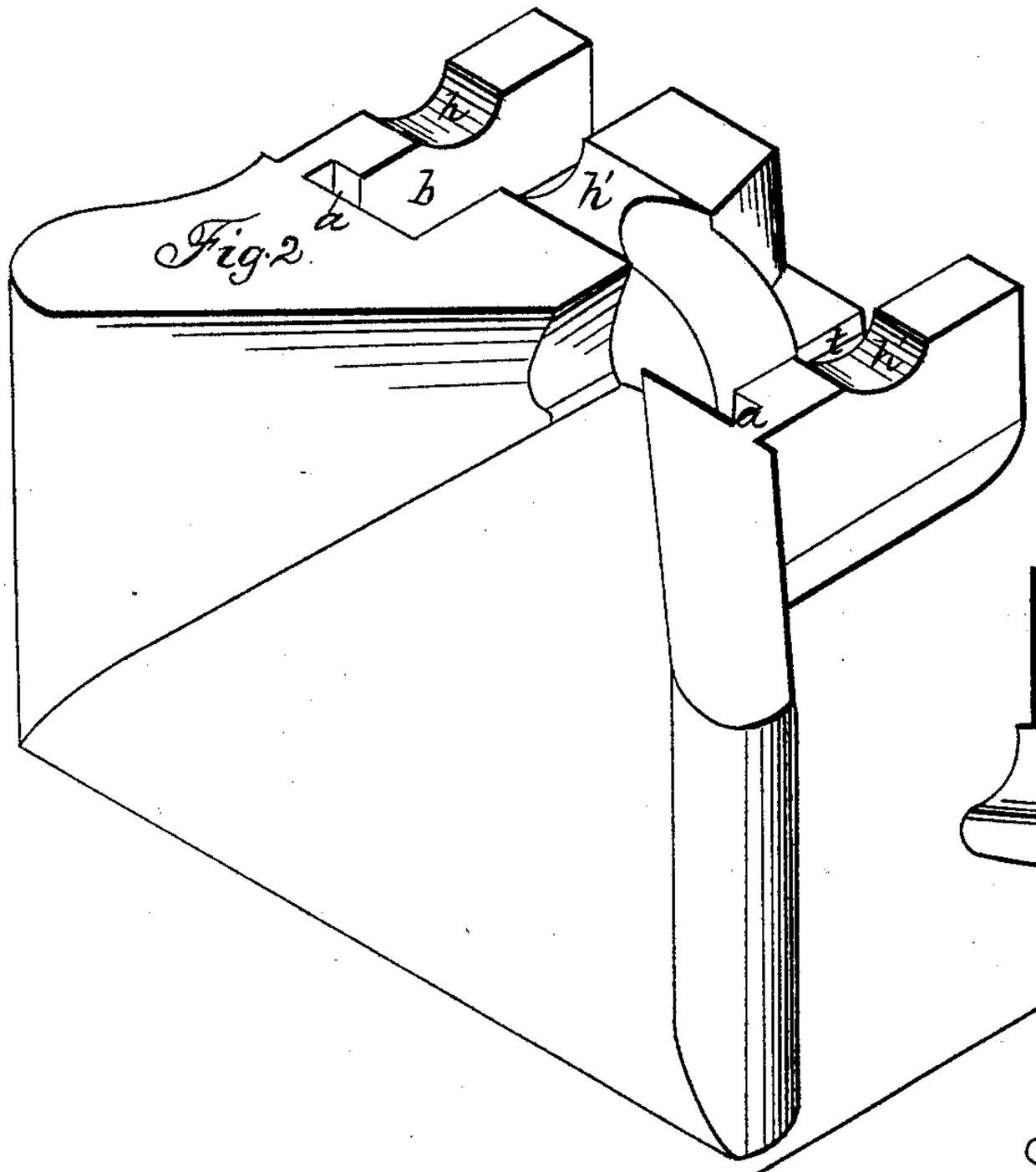


Fig. 3

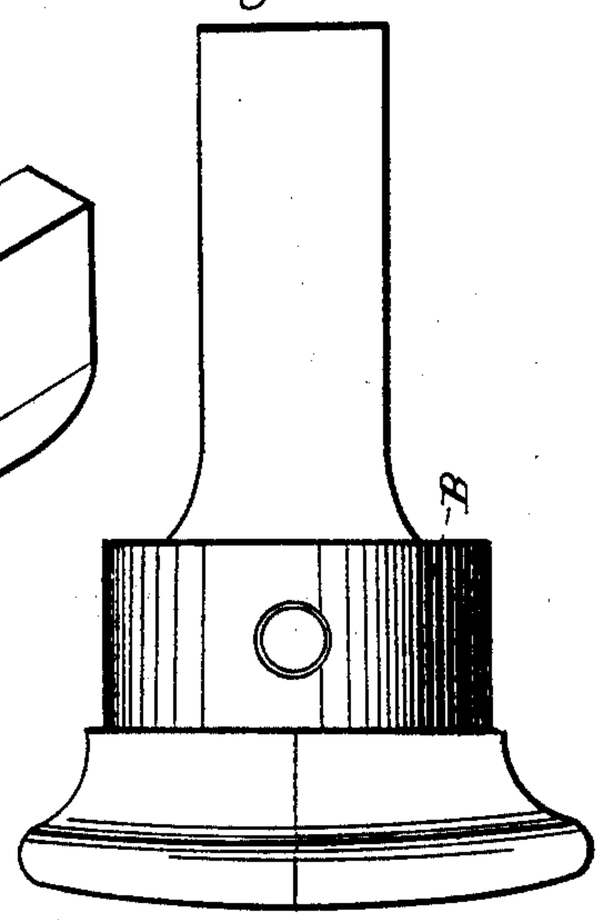
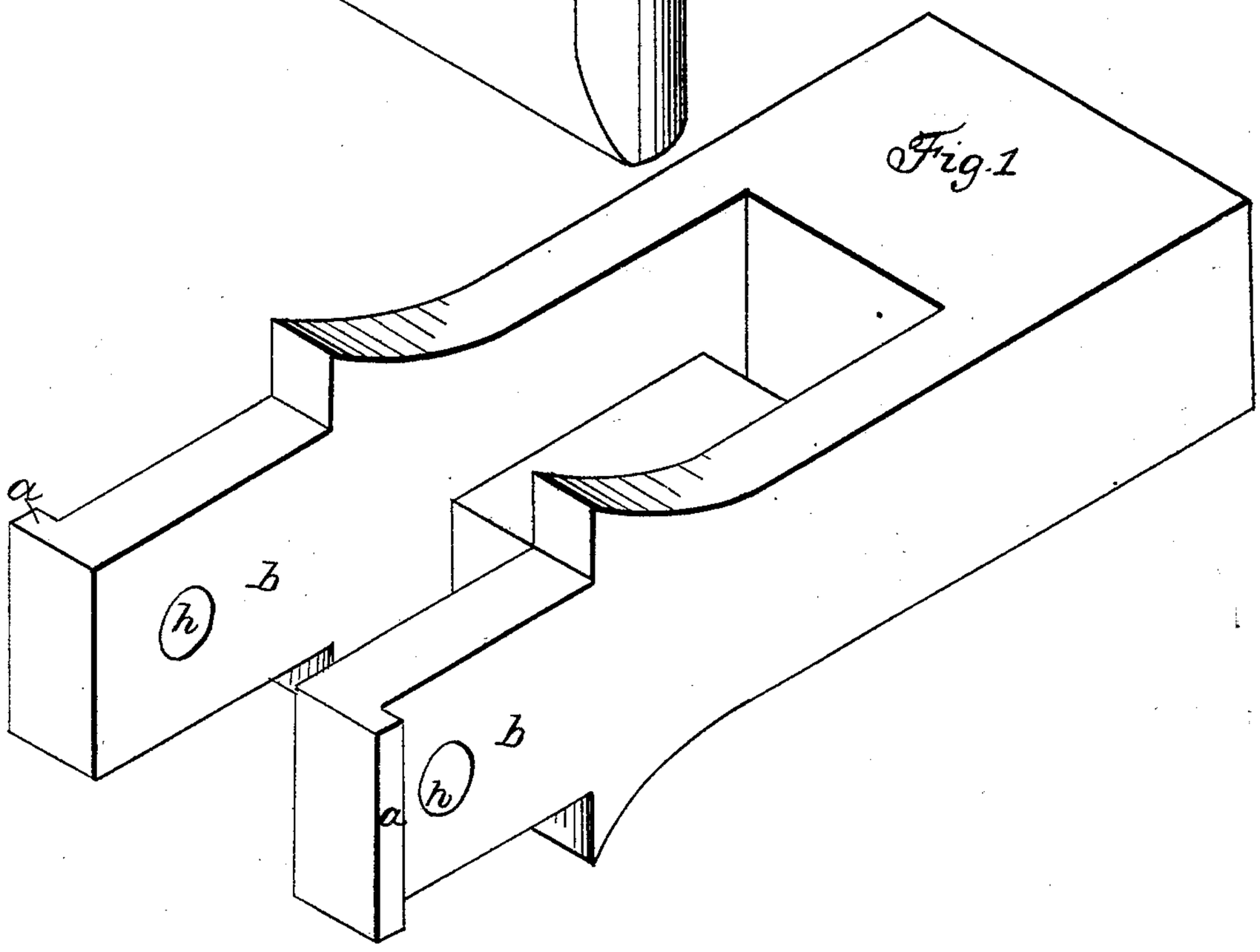


Fig. 1



UNITED STATES PATENT OFFICE.

M. C. GARDNER, OF ROCHESTER, NEW YORK.

BUFFER-HEAD FOR RAILROAD-COUPLINGS.

Specification of Letters Patent No. 20,057, dated April 27, 1858.

To all whom it may concern:

Be it known that I, M. C. GARDNER, of the city of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in the Formation of Buffer-Heads of Railroad-Cars; and I hereby declare the following to be a full and accurate description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, the same letters referring to like parts in all the drawings.

In said drawings Figure 1 is a perspective view of the wrought iron draft bar. Fig. 2 is a perspective view of one of the two cast iron blocks which form the bufferhead. Fig. 3 is a plan of the bufferhead and draft bars when together.

The nature of this invention consists in a certain construction or adaptation the two cast iron blocks seen in Fig. 2 to the wrought iron draft bar Fig. 1 so that they may form a suitable and efficient bufferhead when united thereto. It will be at once perceived that the block, Fig. 2, has a corresponding cavity for the projections on the wrought iron bar Fig. 2; the wings *a a*, Fig. 1, fitting into the cavities *a a*, Fig. 2, and the bars *b*, Fig. 1, fitting into the grooves *b*, Fig. 2. The bar *b* Fig. 1 fits into the block Fig. 2, up to its center and the holes *h h* in the wrought bar find corresponding holes formed by the grooves *h' h' h'*. After the two blocks have been slipped on to the wrought iron bar they are firmly united to it and to each other by means of a wrought iron band B Fig. 3 which is shrunk on after the parts are in place. It will thus be seen that all the force of the draft will come on the wrought iron bar Fig. 1, none coming on any part which is formed of cast iron and at the same time while the complicated parts of the bufferhead are formed of cast iron, and firmly united to the wrought bar, the casting is formed separately and thus that brittleness arising from chilling when the bufferhead is cast on is avoided. The trouble and expense of sending the wrought bars to the foundry and molding the heads to them is also avoided and as in almost all cases the heads are the first to give out, the difficulty of replacing them which occurs when they are cast on to the bars is almost wholly avoided.

What I claim as my invention and desire to secure by Letters Patent is—

The peculiar shape of the wrought iron bar and cast iron blocks above described, whereby the whole may be easily and firmly united by means of the band B, Fig. 3.

M. C. GARDNER.

Witnesses:

JOHN PLIM,

JAMES WOOD.