GEORGE I. KINZEL.

Improvement in Machines for Straightening Railway Rails.

No. 125,055. Patented March 26, 1872.

Fig 1

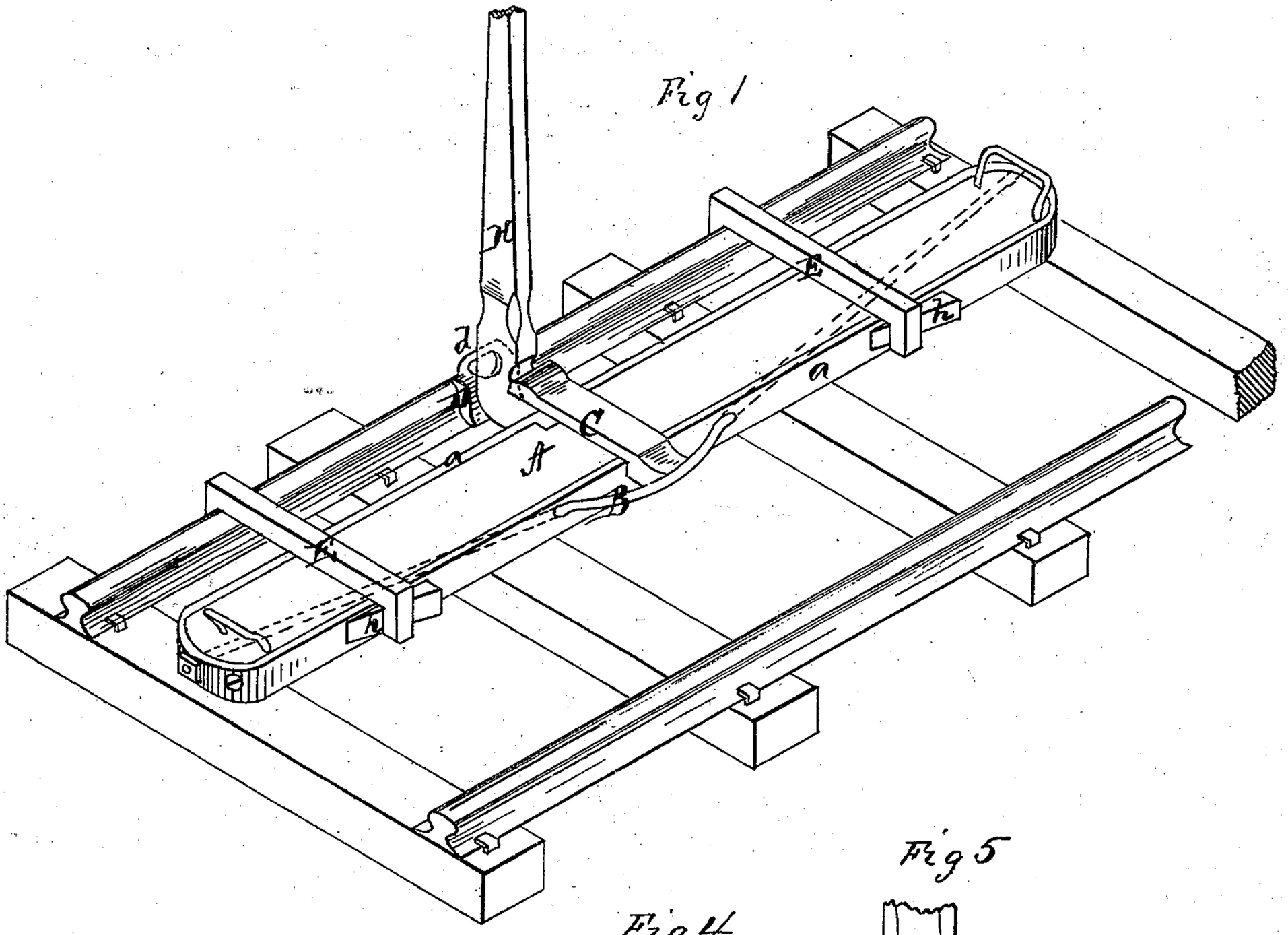


Fig 3

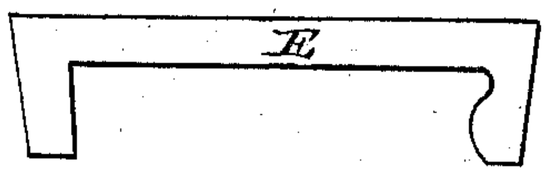


Fig 4

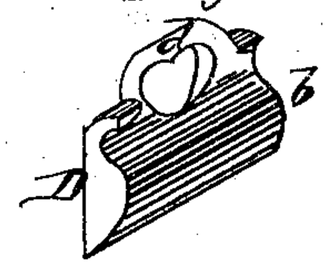


Fig 5

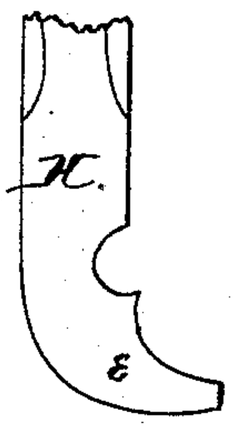
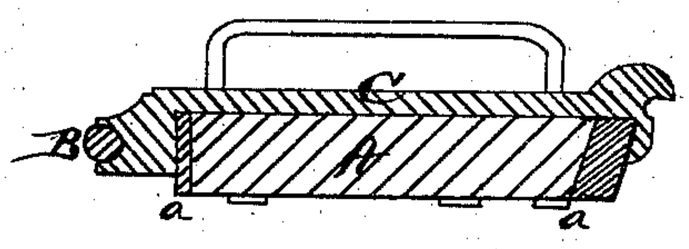


Fig 2



Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE I. KINZEL, OF KNOXVILLE, TENNESSEE.

IMPROVEMENT IN MACHINES FOR STRAIGHTENING RAILWAY RAILS.

Specification forming part of Letters Patent No. 125,055, dated March 26, 1872.

To all whom it may concern:

Be it known that I, G. I. KINZEL, of Knoxville, in the county of Knox and in the State of Tennessee, have invented certain new and useful Improvements in Railroad-Iron Straightener; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a "device for straightening railroad rails" without having to draw the spikes or take up the rails, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a plan view, showing my device in position for work to straighten the rails; and Figs. 2, 3, 4, and 5, are enlarged detached views of certain parts of my device.

A represents a beam or plank of any suitable dimensions bound around the edges with a metal bar or band, *a*. Through this plank, or bearing, as it may most properly be called, passes a truss-rod, B, in the manner shown in Fig. 1, the ends being secured by nuts at the ends of the bearing, while the curved center of the rod projects outside of the bearing and bears against the rear end of a bearing, C, placed across the truss-bearing A. The bearing C is constructed as shown in Fig. 2, and firmly secured by rivets or bolts to the truss-bearing. D represents the rail-bearing, constructed as shown in Fig. 4, with a swell or bulge, *b*, to fit the side of the rail, and also with a handle, *d*, at its upper edge. E E are clamps, and *h h* are wedges, with which to hold the truss-bearing A to the rail, to be operated upon as shown in Fig. 1. H represents the lever, provided with an eccentric or cam, *e*, as shown in Fig. 5. The truss-bearing A and rail-bearing D being placed in position the lever H is inserted in a perpendicular position between said rail-bearing and the bearing C, and the lever is then brought down across the truss-bearing, which bends the rail in the desired manner.

By this device the rail may be straightened without taking the rail up or even drawing the spikes.

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

1. The truss-bearing A, truss-rod B, and bearing C, constructed, arranged, and combined substantially as and for the purposes herein set forth.

2. The rail-bearing D, constructed as described, with swell or bulge *b* and handle *d*, substantially as and for the purposes herein set forth.

3. The combination of the truss-bearing A, truss-rod B, bearing C, rail-bearing D, clamps E E, with wedges *h h* and the eccentric lever H, all constructed and arranged to be used substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 27th day of January, 1872.

GEO. I. KINZEL.

Witnesses:

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M. J. PARROTT, Jr.