R. H. BRIGGS & J. H. DOUGHERTY.

Machine for Making Freight-Car Truck-Sides.

No. 202,984. Patented April 30, 1878.

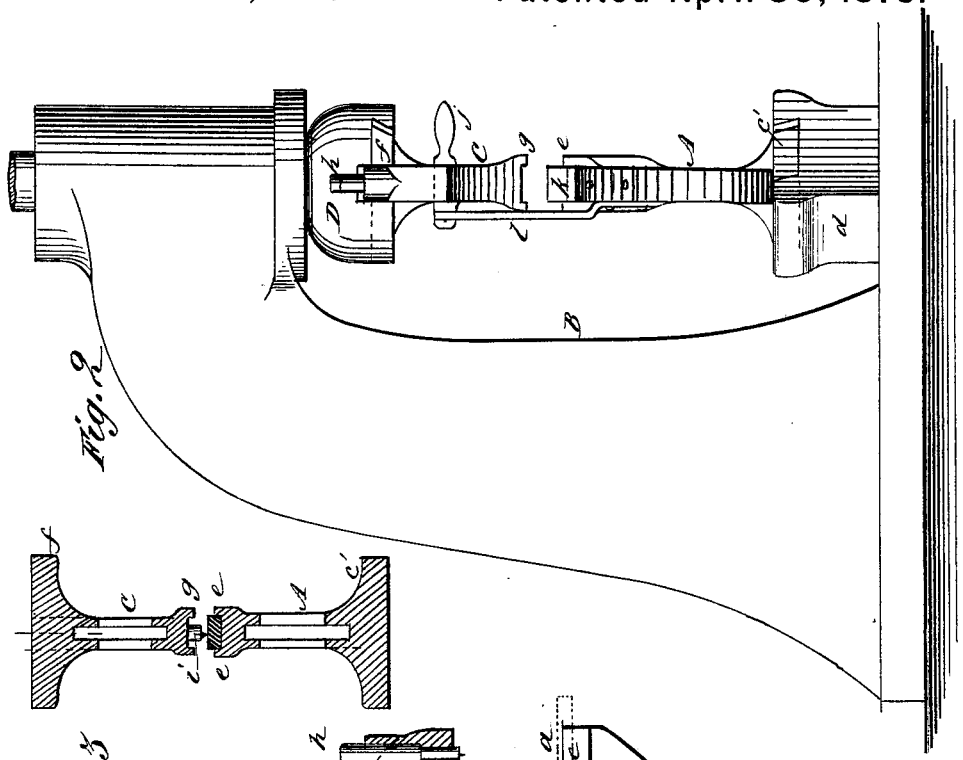

Fig. 2

Fig. 3

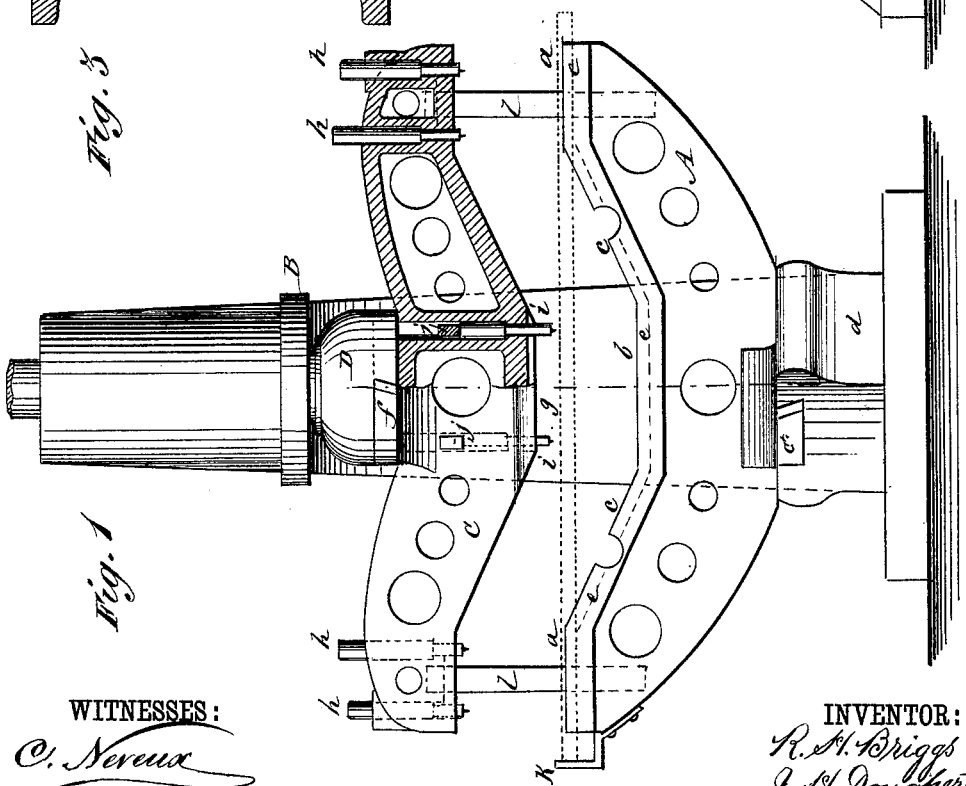

Fig. 1

WITNESSES:

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UNITED STATES PATENT OFFICE.

RICHARD H. BRIGGS AND JAMES H. DOUGHERTY, OF WHISTLER, ALA.

IMPROVEMENT IN MACHINES FOR MAKING FREIGHT-CAR TRUCK-SIDES.

Specification forming part of Letters Patent No. **202,984**, dated April 30, 1878; application filed February 25, 1878.

To all whom it may concern:

Be it known that we, RICHARD HENRY BRIGGS and JAMES HENRY DOUGHERTY, of Whistler, in the county of Mobile and State of Alabama, have invented a new and Improved Former for Making Freight-Car Truck-Sides, of which the following is a specification:

Figure 1 is a front elevation, partly in section, of our improved former. Fig. 2 is a side elevation. Fig. 3 is a vertical transverse section.

Our invention relates to an attachment to be applied to the anvil and piston of a steam-hammer for forming truck-sides for freight-cars.

The invention will first be described in connection with the drawing, and then pointed out in the claim.

Referring to the drawing, A is a casting, whose upper edge is shaped to conform to one of the side pieces of a car-truck, having three surfaces, *a a* and *b*, parallel to the same plane, and having the surfaces *c c* inclined downward from the surfaces *a* to the surface *b*. Upon the lower edge of the casting A there is a dovetail lug, *c'*, that is fitted to the dovetail slot in the anvil-block *d* of the steam-hammer B.

The upper edge of the casting A is provided at each side with an upwardly-projecting lip or flange, *e*, for guiding the edges of the bar to be formed.

A casting, C, whose lower edge conforms to the upper edge of the casting A, is provided with a dovetail projection, *f*, that is received in a dovetailed slot in the hammer-head D. The lower portion of the casting C is provided with downwardly-projecting flanges *g*, which prevent the bar being bent from moving laterally. In the casting C there are two vertical guide-holes at each end for receiving the center-punches *h*. Near to and at equal distances from the middle of the casting there are vertical guide-holes for receiving the center-punches *i*. The guide-holes are traversed above the center-punches with mortises for receiving wedges *j*.

A gage, *k*, is attached to one end of the casting A, to assist in placing the bar to be bent properly on the said casting. Guide-bars *l* are secured to the back of the casting, for guiding the upper die or casting C.

The operation of the former is as follows: The bar to be bent, after being properly heated, is placed upon the lower form A. The upper form C is then forced down upon it, and immediately raised. The wedges *j* are inserted, and the upper form is again brought down upon the bar, to make the center-marks for the transom-bolt holes, and while the form is still down the punches *h h* are each struck with a heavy hand-hammer, making the center-marks for the journal-box bolts.

By means of this improved former, the side bars may be rapidly bent, and at the same time marked for drilling.

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

The combination, with punches and actuating-wedges, substantially as described, of the casting A, having surfaces *a b c*, flanges *e*, and lug *c'*, hammer B, having anvil-block *d*, and slotted head D, and the casting C, having flanges *g*, as and for the purposes specified.

RICHARD HENRY BRIGGS.
JAMES HENRY DOUGHERTY.

Witnesses:
E. HAUG,
DENNIS RYAN.