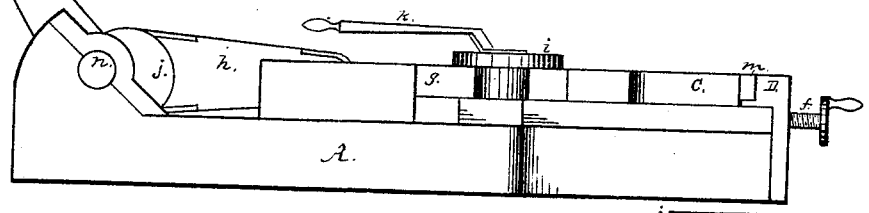
J. T. WILSON.

MACHINES FOR BENDING TRUCK-IRONS FOR RAILWAY CARS.

No. 195,737. Patented Oct. 2, 1877.

Fig. 1.



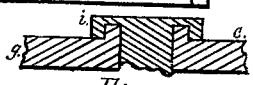


Fig. 5.

Fig. 2

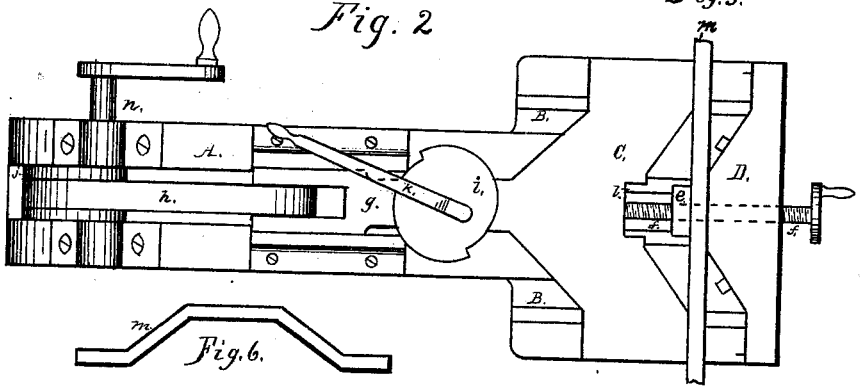
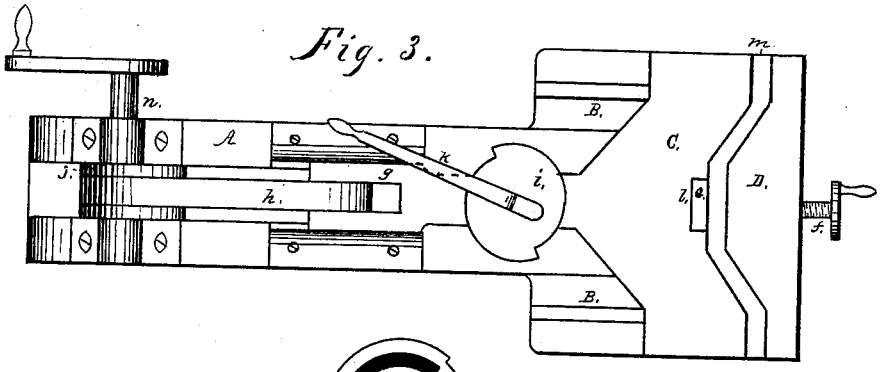


Fig. 6.

Fig. 3.



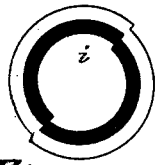


Fig. 4.

Witnesses

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IMPROVEMENT IN MACHINES FOR BENDING TRUCK-IRONS FOR RAILWAY-CARS.

Specification forming part of Letters Patent No. **195,737**, dated October 2, 1877; application filed March 29, 1877.

To all whom it may concern:

Be it known that I, JOHN T. WILSON, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Machines for Bending Truck-Iron for Railway-Cars; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the combination of bending-dies with operating mechanism, so constructed and arranged with relation to the moving die that iron of different thicknesses may be bent to the desired form in the same pair of dies.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawings, which form part of my specification, Figure 1 is a side elevation of the bending-machine. Fig. 2 is a top view of the same, representing the relative position of the several parts prior to the bending of the truck-iron *m*. Fig. 3 represents the several parts of the machine when the truck-iron is bent to the desired form. Fig. 4 is an inverted view of the pivoted eccentric for varying the travel of the bending-die C. Fig. 5 is a vertical section of the eccentric, showing the relation it bears to the sliding head and die C. Fig. 6 is an edge view of a truck-iron for railway-cars.

In the accompanying drawings, A represents the frame of the machine, in which are made grooves B for guides placed on the under side of the bending-die C to prevent lateral motion of the die. The die C is connected to a pivoted eccentric, *i*, to which is also connected a sliding head, *g*, which method of connection is clearly represented in Fig. 5. The sliding head *g* is connected to a pitman or connecting-rod, *h*, which is connected to a cam, *j*, on the driving-axis *n*. The fixed die or form D is provided with a screw, *f*, and clamping-nut *e*, which nut is fitted to a recess, *l*, in the moving die C. By this arrangement of the screw *f* and nut *e*, the iron to be bent can be firmly clamped and held in position to the die D.

By having the moving die C connected to the pivoted eccentric *i* its travel can be adjusted to the different thicknesses of iron used in the manufacture of truck-iron.

The operation of my improvement is as follows: The iron, being properly heated, is placed between the dies C and D, as represented at *m* in Fig. 2. The screw *f* is then operated so that the nut *e* firmly clamps the iron *m* to the die D. The revolving of the axis *n* operates the cam *j*, which operates the pitman *h*, which operates the sliding head *g*, eccentric *i*, and die C, throwing them all into the position represented in Fig. 3. The lever *k* is used for the purpose of operating the eccentric *i* in adjusting the die C.

Having thus described my improvement, what I claim as of my invention is—

1. In a machine for bending truck-irons for railway-cars, the combination of the bending-dies C D with the clamping-screw *f* and nut *e*, substantially as herein described.

2. In a machine for bending truck-irons for railway-cars, the combination of the dies C D, screw *f*, and nut *e* with the eccentric *i*, sliding head *g*, and pitman *h*, substantially as herein described, and for the purpose set forth.

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Witnesses:

JAMES J. JOHNSTON,

WESLEY JOHNSTON.