

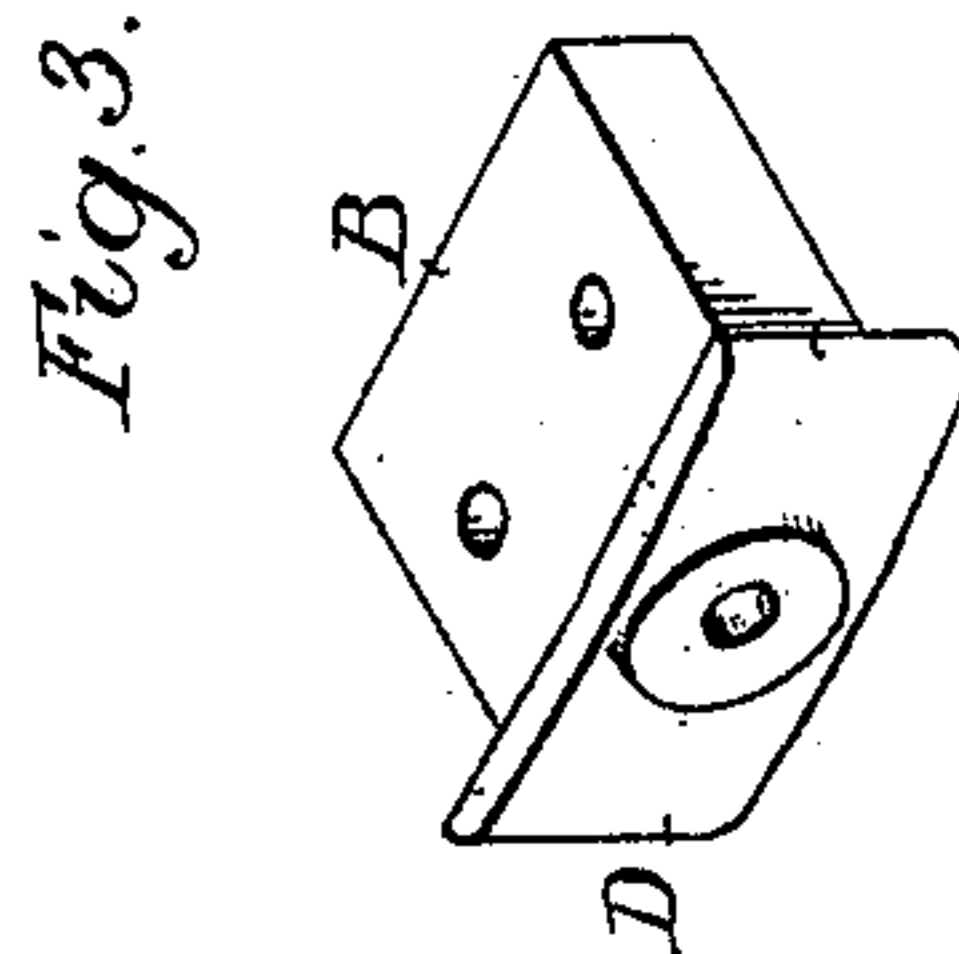
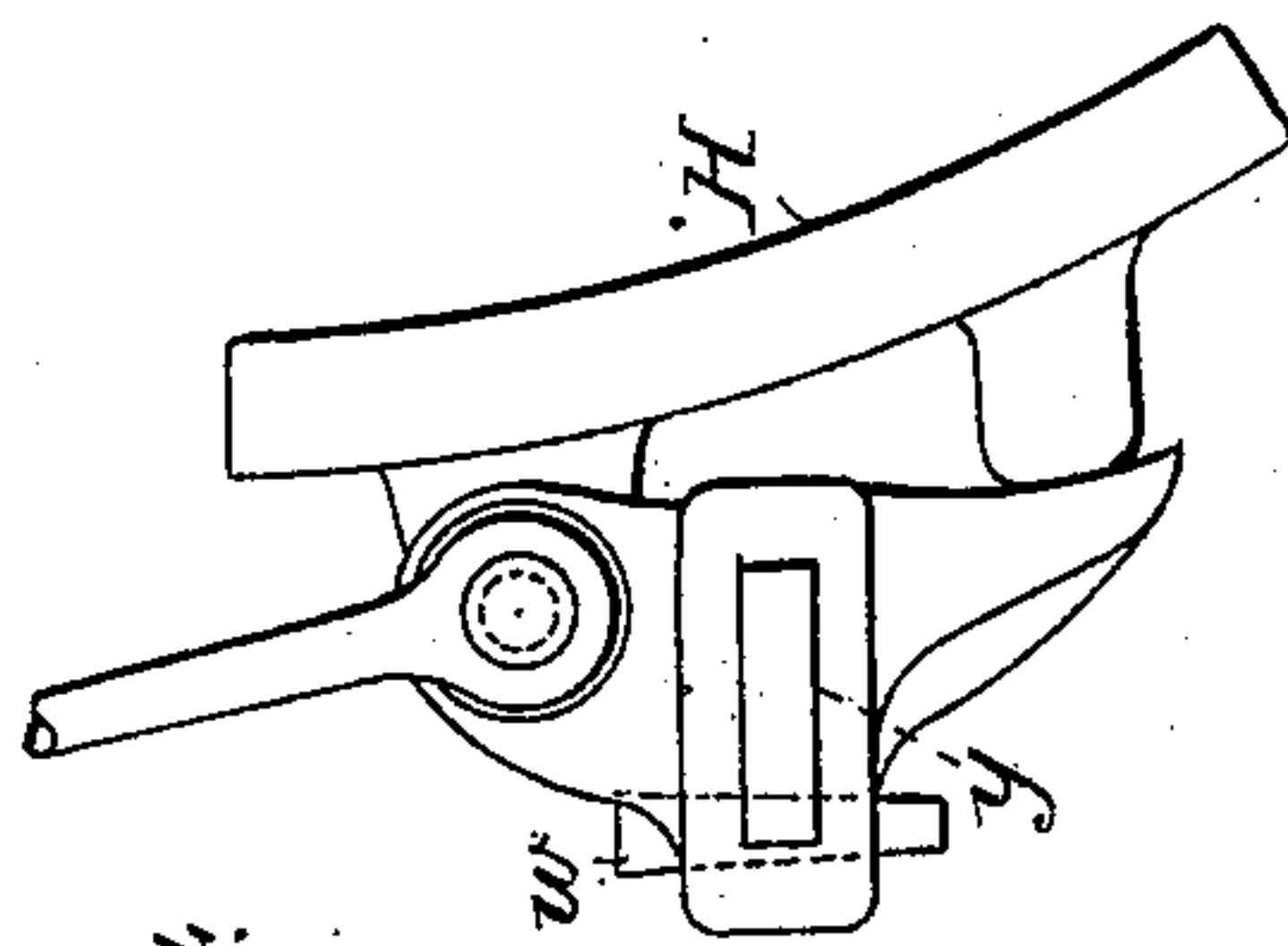
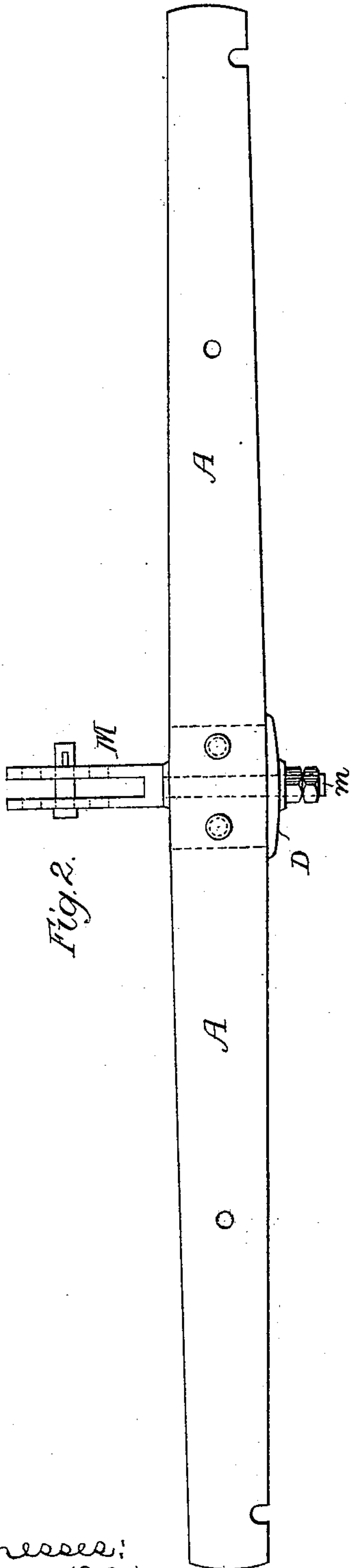
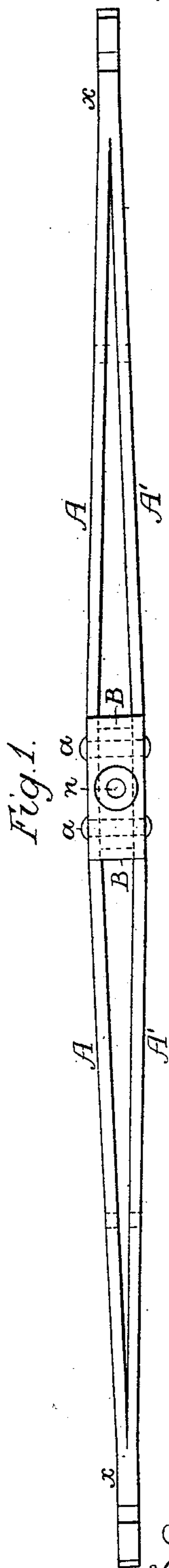
(No Model.)

W. WOODCOCK.

BRAKE BEAM FOR RAILWAY CARS.

No. 270,871.

Patented Jan. 16, 1883.



Witnesses:
Hamilton D. Turner
Harry Drury

Inventor:
William Woodcock
by his attys
Horn and Jones

UNITED STATES PATENT OFFICE.

WILLIAM WOODCOCK, OF ELIZABETH, NEW JERSEY.

BRAKE-BEAM FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 270,871, dated January 16, 1883.

Application filed November 6, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM WOODCOCK, a citizen of the United States, and a resident of Elizabeth, Union county, New Jersey, have invented an Improvement in Metallic Brake-Beams for Railroad-Cars, of which the following is a specification.

My invention relates to an improvement in metallic brake-beams for railroad-cars, locomotives, and tenders; and it consists of the combination of two bars of wrought-iron placed flatwise, one above the other, separated in the middle, and welded at and near their opposite ends, with a central filling-piece, by which the said bars are separated in the middle and made to converge to the said welded ends, as described hereinafter, the objects of my invention being economy in construction, strength, and comparative lightness.

In the accompanying drawings, Figure 1 is an edge view of my improved brake-beam; Fig. 2, a plan view; Fig. 3, a perspective view of the filling-block; and Fig. 4, an end view, showing one of the brake-shoes.

The improved brake-beam consists of two strips, A A, of flat bar iron or steel, and a central filling-block, B, of cast-iron fitted between and secured by bolts or rivets *a* to the said bars, which are welded together at and near their opposite ends, *x x*. The bars thus separated in the middle by the filling-piece and converging toward the opposite ends, where they are welded together, constitute a strong but comparatively light self-contained beam. Another advantage of the beam is the facility which the filling-block affords for so connecting the usual brake-lever to the brake-beam that there will be a direct central pull on the former, for it will be observed that the filling-block has a central horizontal opening, *n*, through which

passes the stem *m* of the forked bar M, which carries the pin of the brake-lever, the stem being threaded to receive suitable nuts.

The brake-shoe H forms no part of my invention, but has been introduced for the purpose of illustrating one way of securing one of the welded ends *x* of the beam to the shoe by passing it through an elongated slot, *y*, in the same and securing it by a taper key, *w*. It is immaterial to my invention, however, how the ends of the beam are secured to the shoe.

The bars A A are made on a slight taper from the middle to the opposite ends, but they may be made of uniform width throughout.

I am aware that a metal brake-beam has been composed of two bars with their flat sides arranged vertically, and with intervening packings of wood, and that a brake-beam has been made of metal bars and rods arranged in the manner of a truss-frame; but these plans differ from my invention, in which the wrought-iron bars are placed flatwise, one above the other, so as to be in the best position for resisting the strain to which they are subjected.

I claim as my invention—

A metal brake-beam in which two wrought-iron bars, A A, placed flatwise, one above the other, and welded together at and near their opposite ends, are combined with and secured to a central filling-block, B, by which the bars are separated in the middle, said bars converging toward the opposite welded ends, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WM. WOODCOCK.

Witnesses:

EDWARD J. BYRNES,
WM. HULSKEMPER.