

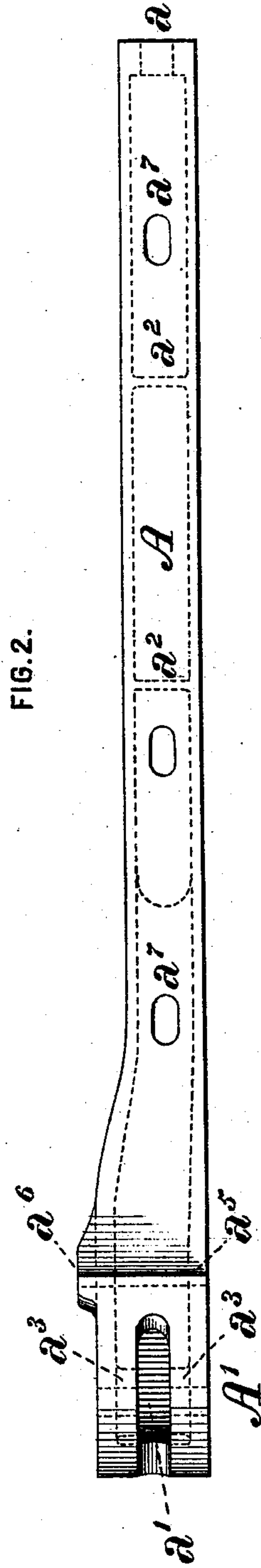
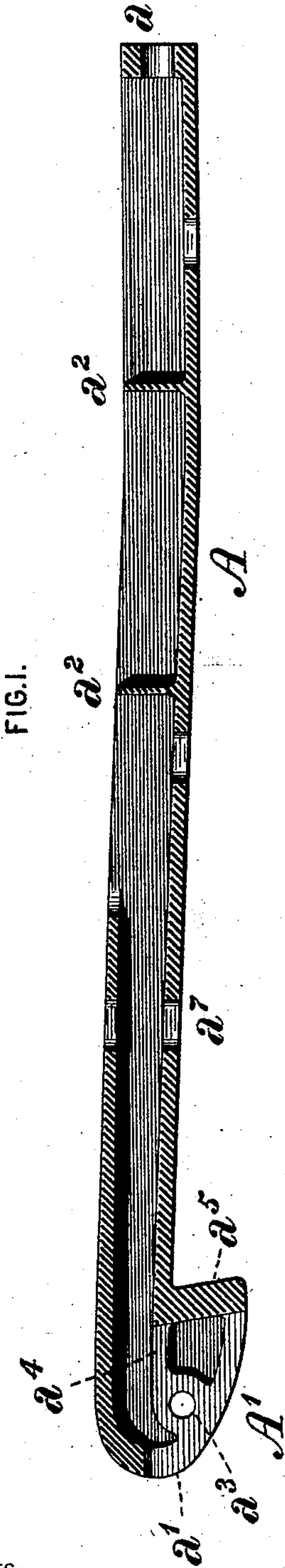
(No Model.)

W. H. DICKSON.

Draw Bar for Railway Cars.

No. 237,832.

Patented Feb. 15, 1881.



WITNESSES:

Geo. B. Collier.  
Geo. T. Kelly.

INVENTOR

Wm H. Dickson,  
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# UNITED STATES PATENT OFFICE.

WILLIAM H. DICKSON, OF PHILADELPHIA, ASSIGNOR TO EUREKA CAST  
STEEL COMPANY, OF CHESTER, PENNSYLVANIA.

## DRAW-BAR FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 237,832, dated February 15, 1881.

Application filed January 10, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. DICKSON, of the city and county of Philadelphia, in the State of Pennsylvania, have invented a certain new and useful Improvement in Draw-Bar Coupling-Hooks for Railway-Cars, of which improvement the following is a specification.

My invention relates to coupling devices of the class known as the "Miller coupling," in which the draw-bars of the adjacent cars are connected by interlocking hooked heads in lieu of the ordinary link and pins; and its object is to provide a draw-bar of such character embodying the qualities of strength, comparative lightness, and economy of construction.

To this end my improvement consists in a hook-ended, hollow, or skeleton-frame draw-bar formed of cast-steel and cast in a single piece, as hereinafter more fully set forth.

As heretofore employed, so far as my knowledge and information extend, draw-bars of the above class have been sectional or built structures, formed of wood and metal, or of cast and wrought metal members, united by bolts or rivets, and present the objectionable feature of involving undue weight to provide the strength-requisite for their duty, as well as being expensive in construction. These objections are obviated by my improvement, which presents, in an equal degree, the necessary facilities for application, attachment, and service.

In the accompanying drawings, Figure 1 is a longitudinal central section through one of my improved draw-bar coupling-hooks, and Fig. 2 a side view in elevation of the same.

To carry out my invention I form in a steel casting and of a single piece a draw-bar having a hollow or skeleton-frame shank or body, A, with a boss or socket,  $a$ , upon one of its ends, to admit the stem of a draw-spring, and a coupling hook or head, A', upon the other, the major portion of the shank or body of the bar being preferably of an  $\square$ -section stiffened by transverse ribs  $a^2$ . A slot or recess,  $a'$ , is formed in the head A', at and adjacent to which the bar is of greater depth than for the remainder of its length, and an eye or boss,  $a^3$ , is formed on the upper and lower webs of the head for the reception of a coupling-pin, said eyes being braced by ribs  $a^4$ , extending to the jaw or abutting face  $a^5$  of the coupling-hook, which has a rim or flange,  $a^6$ , extending around its angle at one side to provide a larger amount of engaging-surface. The shank of the bar is of rectangular section at its junction with the head, and for a short distance adjacent thereto, and is lightened by openings  $a^7$  in its sides, as well as by the absence of a web upon one of them for the balance of its length.

Disclaiming, broadly, a hook-ended draw-bar,

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

A draw-bar having a hollow or skeleton-frame shank and a hooked end or coupling-head, said bar being formed of a steel casting and in a single piece, substantially as set forth.

WILLIAM H. DICKSON.

Witnesses:

J. SNOWDEN BELL,  
GEORGE T. KELLY.