

(No Model.)

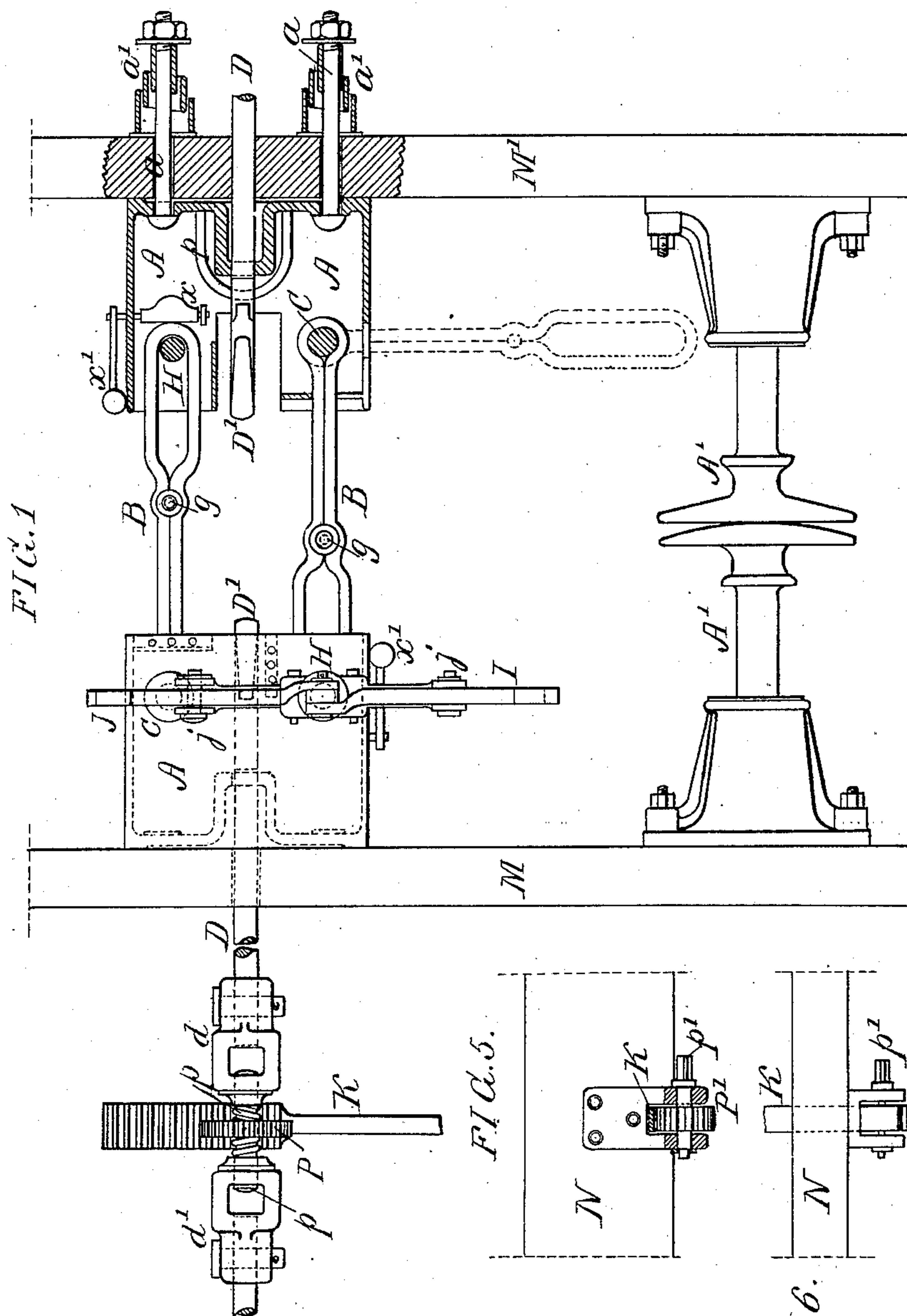
2 Sheets—Sheet 1.

F. GILBERT.

CAR COUPLING.

No. 285,253.

Patented Sept. 18, 1883.



WITNESSES:  
Harry Orury  
Harry L. Ashenfelter.

INVENTOR:  
Frederic Gilbert  
by his Atty.  
Howson & Sons

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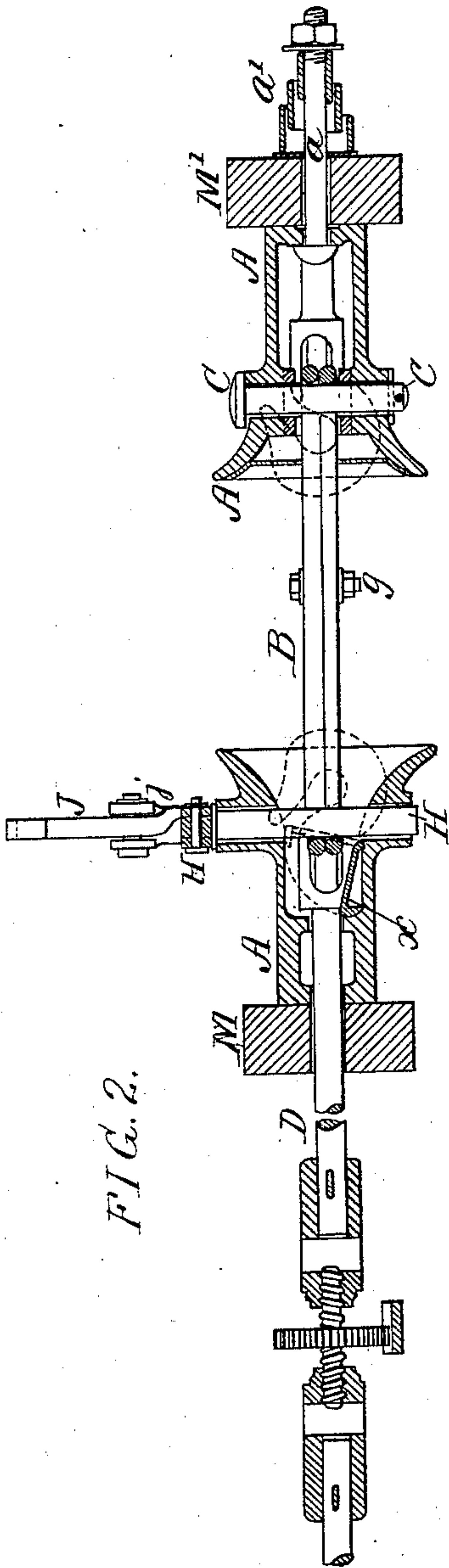


FIG. 2.

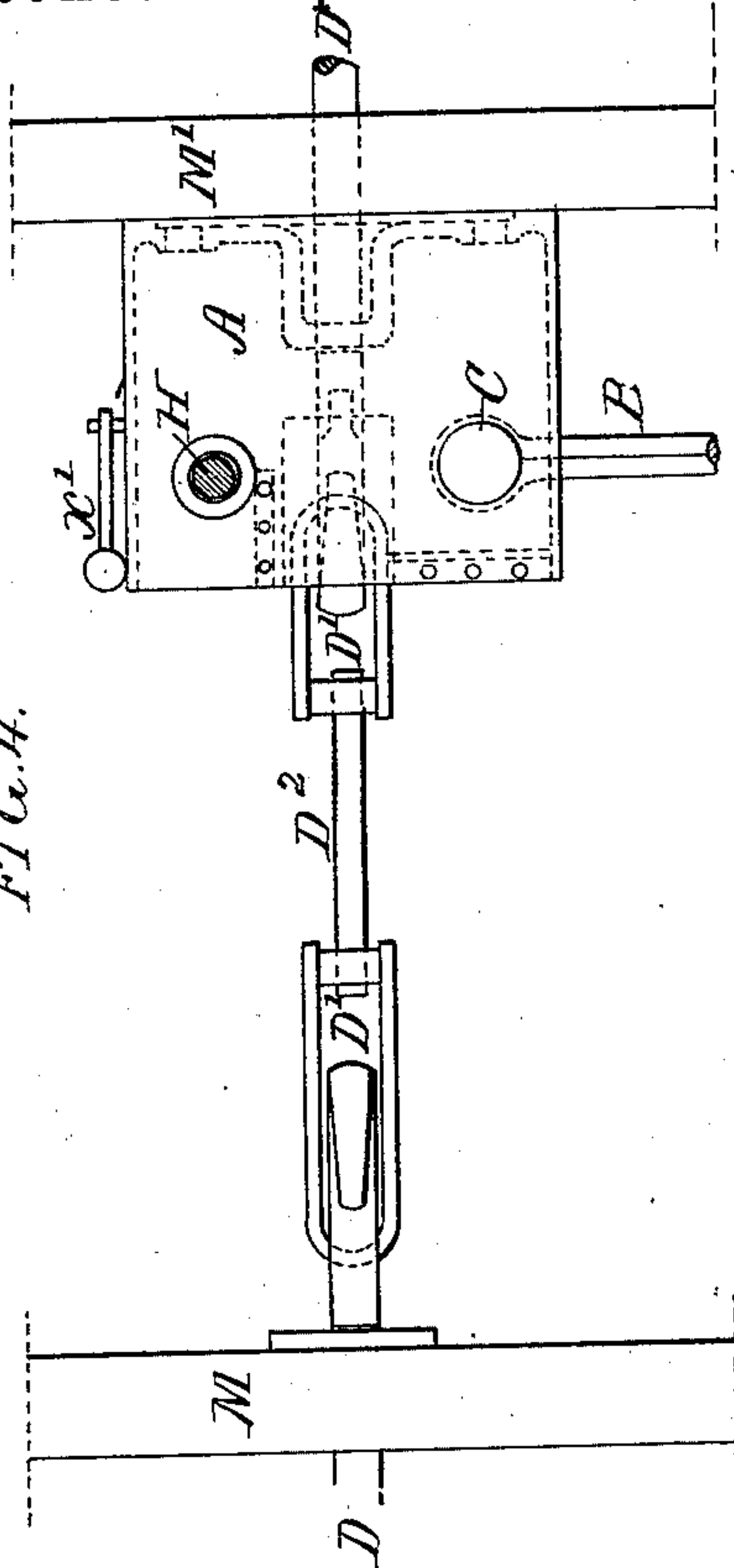


FIG. 4.

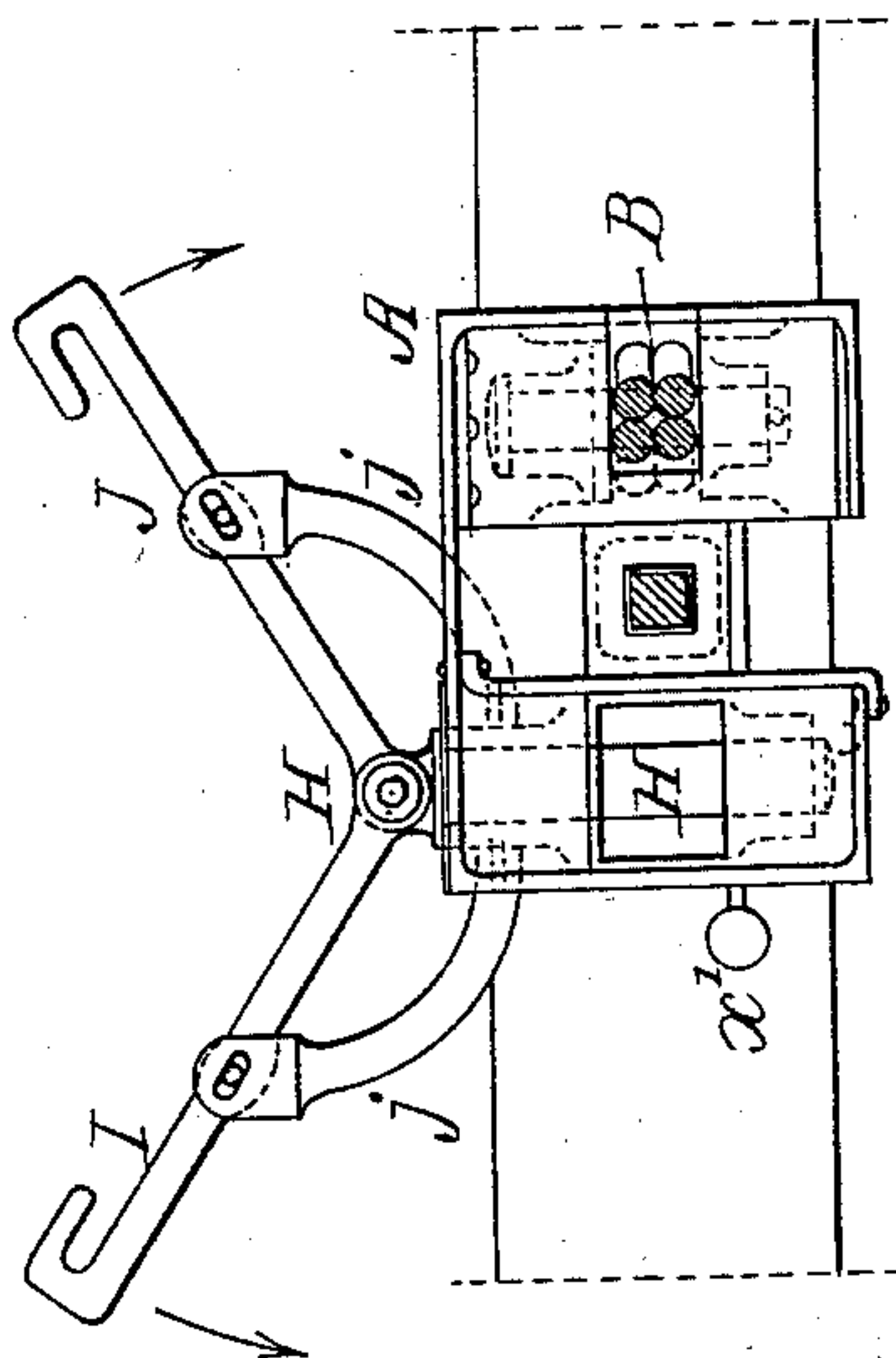


FIG. 3.

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# UNITED STATES PATENT OFFICE.

FREDERIC GILBERT, OF PARIS, FRANCE, ASSIGNOR TO SOCIÉTÉ ANONYME  
DES APPAREILS AUTOMATIQUES POUR ACCROCHER ET DÉCROCHER LES  
WAGONS DE CHEMINS DE FER, OF SAME PLACE.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 285,252, dated September 18, 1883.

Application filed November 13, 1882. (No model.) Patented in France October 24, 1881, No. 145,487; in Belgium November 12, 1881; in England January 16, 1882, No. 218; in Italy March 31, 1882; in Austria May 2, 1882, No. 10,985, and in Spain August 1, 1882, No. 2,840.

*To all whom it may concern:*

Be it known that I, FREDERIC GILBERT, a citizen of the Republic of France, and a resident of Paris, France, have invented certain  
5 Improvements in Car-Couplings, of which the following is a specification.

My invention consists of certain improvements in the construction of couplings for railroad-cars, my invention having more particular reference to improvements in the automatic coupling devices for the coupling and uncoupling of the cars without requiring the trainmen to enter between the cars, as more fully described hereinafter.

15 In the accompanying drawings, Figure 1 is a plan view, partly in section, of my improved car-coupling. Fig. 2 is a vertical section of the same through the two draw-heads on coupled cars. Fig. 3 is an end view of one of  
20 the draw-heads. Fig. 4 is a plan view, partly in section, illustrating my improved draw-head coupled to an ordinary draw-bar, and Figs. 5 and 6 detached sectional views of the tightening devices.

25 M M' are the transverse end beams of two adjoining cars, carrying the usual bumpers, A' A', (only one on each car being shown in Fig. 1,) and the central draw-bars, D D, provided with the hooked ends D' D', by which the cars  
30 may be coupled by means of the ordinary coupling device, D<sup>2</sup>, Fig. 4. In connection with the draw-bar D, I apply a double draw-head, A, which is preferably secured to the transverse beam of the car by bolts a a and spiral  
35 springs a' a'. Each coupling-link B consists of two wrought-iron loops pivoted to each other by a central pin, g, and formed at one end into an elongated slot for the reception of the vertical coupling-pin H on one of the double  
40 draw-heads, and at the other end with a round opening for the reception of a pin, C, which secures it permanently to the other draw-head. Each double draw-head is provided with coupling and securing pins C and H on opposite  
45 sides of the draw-hook D', and the side of the

draw-head adjacent to the pin C is slotted, Figs. 1, 3, and 4, so that when the link B is not in use it may be swung round at right angles to a position out of the way, as indicated by dotted lines in Fig. 1 and full lines in Fig. 4. 50 Each coupling-pin H is carried by a pair of jointed levers, I J, mounted with a pin-and-slot connection on a pair of arms, j, carried by the draw-head. Each of these levers is preferably formed with a hooked end, whereby  
55 it may be operated by hand or an instrument to raise the coupling-pin H to uncouple the cars. In connection with each pin H, I mount within the draw-head a pivoted plate, x, having on the outside a weighted handle, x', so  
60 that when the said plate x is turned up to the position indicated by dotted lines in Fig. 2 it will keep the coupling-pin H in a raised position ready for coupling, and the projecting  
65 link B in the draw-head of an approaching car will strike the plate and allow the pin H to drop and couple the cars. The draw-bar D may be connected with the draw-head simply by forming a shoulder on the bar to bear on the draw-head; or a stirrup, h, in the latter, 70  
Fig. 1, may be passed through a slot in the bar. For the purpose of tightening up the ordinary coupling, I may apply to the draw-bar D the device shown at the left-hand side of Fig. 1. The bar is made in two parts, with  
75 the adjoining ends carrying screw buckles or nuts d d', into which screws the right and left handed screw-bolt p, having fixed to it a pinion, P. Into this pinion gear the teeth on a horizontal transverse rack-bar, K, the opposite end of which has teeth gearing into a pinion, P', on the side beam, N, of the car. By  
80 applying a hand-lever to the squared end of the axis p' of this pinion P' at the side of the car, the rack K may be caused to move in or out, and, by turning the pinion P, lengthen or shorten the draw-bar, Fig. 1, and consequently  
85 tighten or slacken the coupling D<sup>2</sup>, Fig. 4.

I claim as my invention—

1. The coupling-link consisting of a pair of 90

wrought-iron loops swiveled to each other, and each loop having openings at opposite ends for the coupling-pins, substantially as described.

- 5 2. The combination of a draw-bar, D, having a hooked end, D', with a double draw-head, through which the hooked end of the bar passes, and which has at one side a coupling-pin and at the other a pivoted link, sub-  
10 stantially as set forth.

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

FREDERIC GILBERT.

Witnesses:

JOSEPH DELAGE,

ROBT. M. HOOPER.