

(No Model.)

G. N. MOATS.  
CAR COUPLING.

No. 395,988.

Patented Jan. 8, 1889.

Fig. 1.

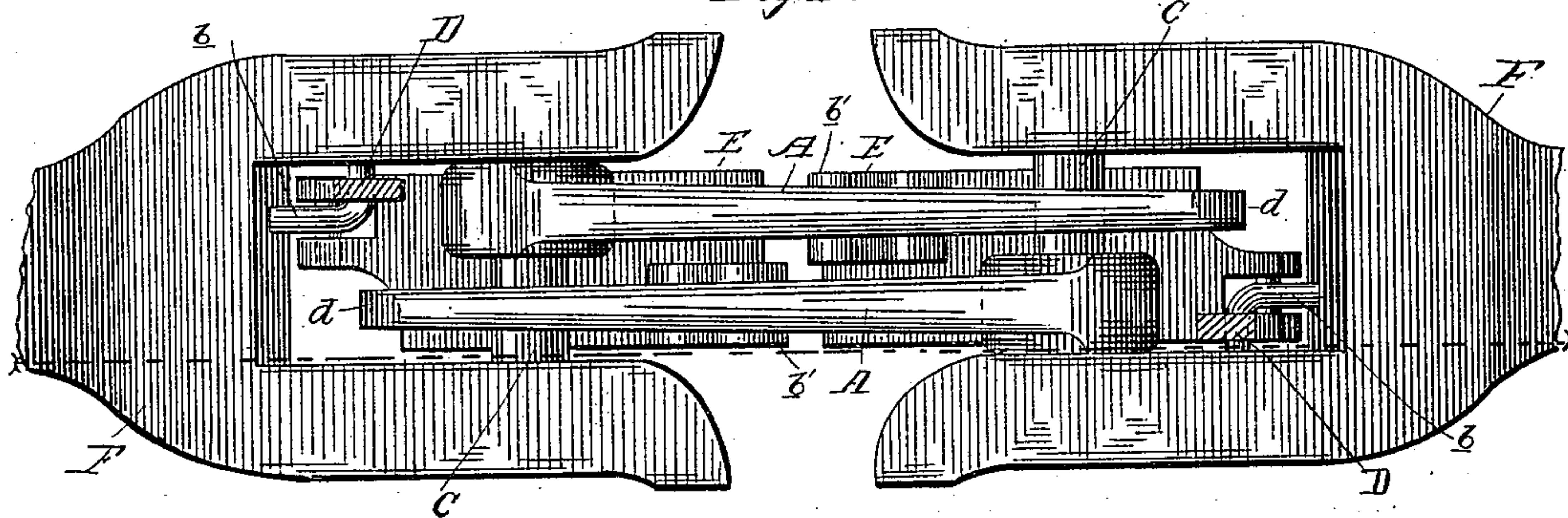


Fig. 2.

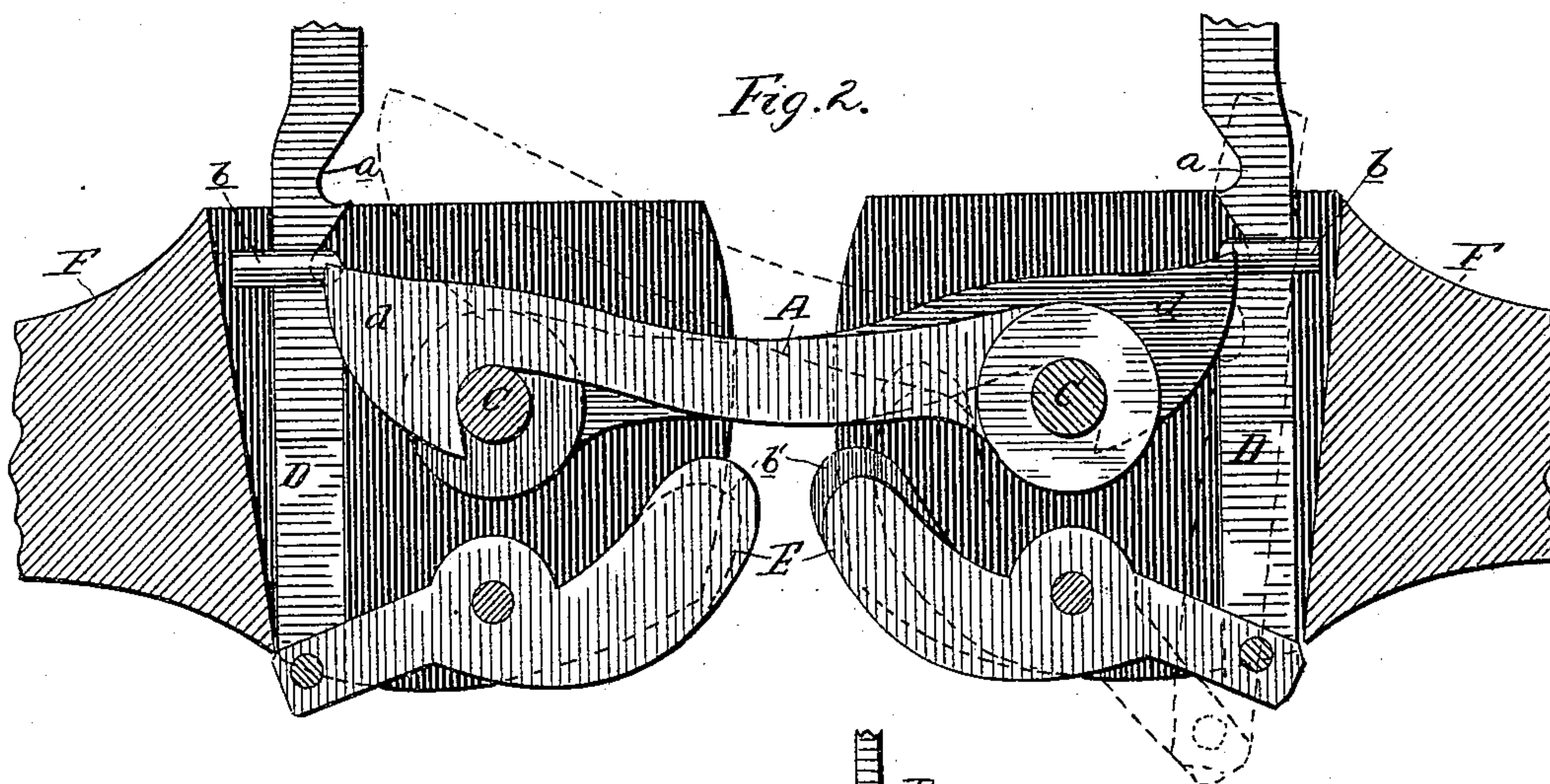
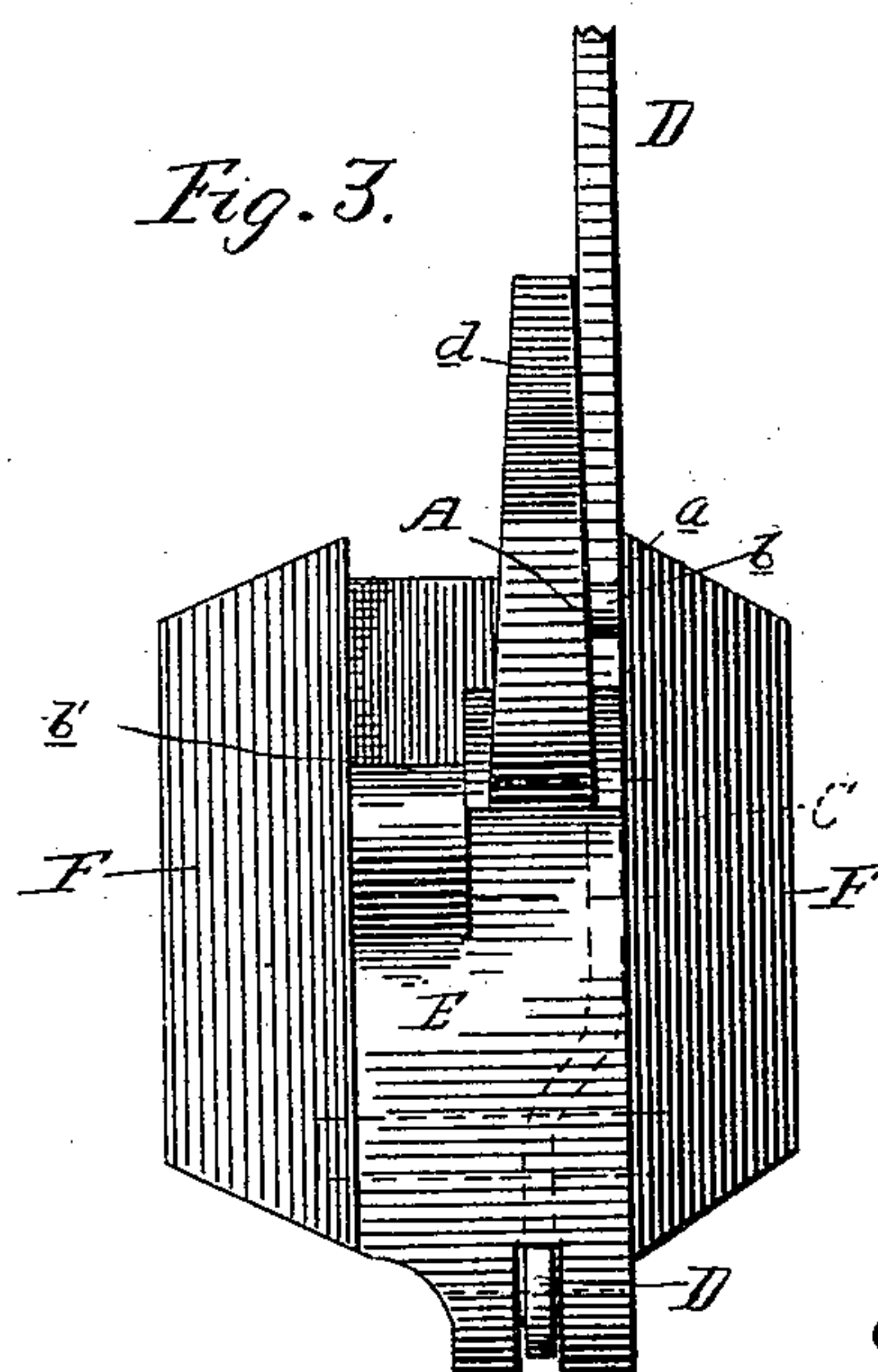


Fig. 3.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

GEORGE N. MOATS, OF IRONTON, OHIO.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 395,988, dated January 8, 1889.

Application filed May 7, 1888. Serial No. 273,129. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE N. MOATS, a citizen of the United States, residing at Iron-  
ton, in the county of Lawrence and State of  
5 Ohio, have invented certain new and useful  
Improvements in Car-Couplers; and I do de-  
clare the following to be a full, clear, and ex-  
act description of the invention, such as will  
enable others skilled in the art to which it  
10 appertains to make and use the same, refer-  
ence being had to the accompanying draw-  
ings, and to the letters and figures of reference  
marked thereon, which form a part of this  
specification.

15 My invention relates to car-couplers; and  
the object thereof is to provide an effective  
device that shall be entirely free from danger  
to the operator, and one that can be easily  
operated by the foot and applicable alike to  
20 passenger or platform cars and box-cars.

In carrying my invention into effect I em-  
ploy an automatic device (which can also be  
operated by hand or foot) consisting of a hook  
or latch pivoted in each coupling-head on both  
25 ends of the car, and also uncoupling by means  
of a vertical lever connected at its lower end  
to a horizontally-pivoted curved bar, the free  
end of which is weighted, being so constructed  
that it comes in contact with the hook or latch  
30 and raises it when the vertical lever is de-  
pressed. This uncoupling is always effected  
from the platform or roof of the car, thus ob-  
viating the danger to life which always exists  
when the coupling or uncoupling is effected  
35 by a brakeman while standing between the  
cars.

In the drawings, Figure 1 is a top plan view.  
Fig. 2 is a vertical longitudinal section taken  
in the plane indicated by dotted line *x x* on  
40 Fig. 1. Fig. 3 is an end view of one of the  
coupling-heads.

A represents the coupling hook or latch, piv-  
oted loosely at the rear ends upon the shaft  
C, which is fixed in the walls of the coupling-  
45 head. The hook ends of each coupling-latch  
are beveled on their under sides in such a  
manner that when they come in contact with  
the shafts C they will ride up and over the  
same and couple onto the shafts, each coup-  
50 ling-hook engaging the shaft upon which the  
opposite coupling-hook is pivoted.

D is a vertical depressing-lever pivotally  
connected at its lower end to a horizontal cen-  
trally-pivoted curved and weighted striking  
bar or lever, E. The lever has on its front 55  
edge two or more curved notches, *a*, so con-  
structed as to catch upon a keeper, *b*, pro-  
vided on the inside of the jaws of the coup-  
ling-head, which holds the vertical lever in  
place, and through it and the pivoted weighted 60  
bar E the coupling-hook A or latch is held at  
a convenient elevation to ride above the shaft  
C, or still higher, if necessary.

The weighted pivoted lever E has a super-  
posed piece, *b'*, which prevents the hook from 65  
becoming displaced sidewise and acts as a  
guide, and so directs each coupling-hook that  
it will ride up over the superposed piece con-  
structed on the upwardly-curved portion of  
the pivoted striker on the opposite coupling- 70  
head, so that when the cars are coupled the  
coupling-hooks lie side by side and both hooks  
will engage the shafts C, and thus the coup-  
ling will have double strength over the coup-  
ling by a single bar.

If the horizontal lever E be entirely disen-  
gaged from the keeper *b*, the outwardly-piv-  
oted end of the curved horizontally-pivoted  
striker will be thrown upward by the weighted  
forward end of the same until it comes in con- 80  
tact with the shaft C, and the coupling-hook  
A will not be depressed too far to ride up onto  
the opposite curved bar E and over the guide  
*b'*, and thus engage the shaft and couple au-  
tomatically. The coupling of cars is thus al- 85  
ways effected automatically.

The coupling-head and draw-bar F are in-  
tegral, and may be cast in one piece or in two  
pieces divided vertically their length and riv-  
eted together. The latter method enables me 90  
to adjust the shaft, keeper, &c., with greater  
ease. On the top of each vertical lever I con-  
struct any convenient foothold or treadle.  
The coupling-bar has a downward curve mid-  
way its distance, so that it is more readily 95  
acted on by the striker or horizontal lever  
which effects its elevation.

Having thus described my coupler, what I  
claim as new, and desire to secure by Letters  
Patent of the United States, is—

1. The within-described automatic car-coup- 100  
ler, comprising a gravitating coupling-hook,

the shaft C between the jaws of the coupling-head on which said hook articulates, a vertical depressing-lever notched as described, the keeper for this lever, and a gravitating striking bar or lever provided with a superposed piece, *b'*, and pivoted to the said depressing-lever, all substantially as set forth.

2. The combination, with coupling-head, of a curved gravitating coupling-hook, a transverse shaft, C, to which this hook is pivoted, a loaded striking bar or lever, E, provided

with a superposed piece, *b'*, for the purpose described, a notched depressing-lever pivoted to the tail of said striking-bar, and a keeper, *b*, all constructed and adapted to operate substantially as herein set forth. 15

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE N. MOATS.

Witnesses:

JOHN MCMAHON,  
JOHN BOYLE.