

(No Model.)

J. N. MARTIN & W. H. HARRIS.

CAR COUPLING.

No. 398,523.

Patented Feb. 26, 1889.

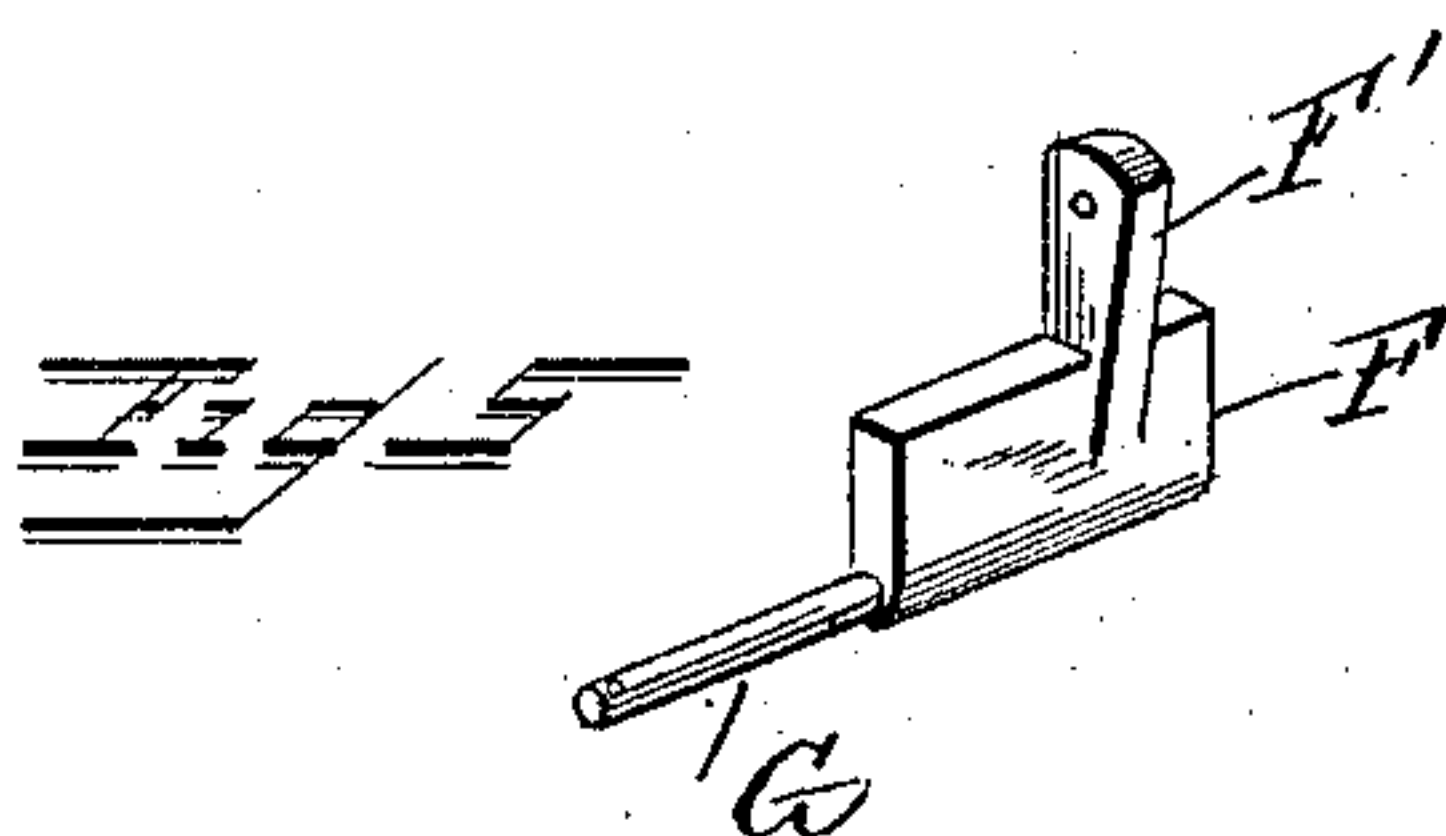
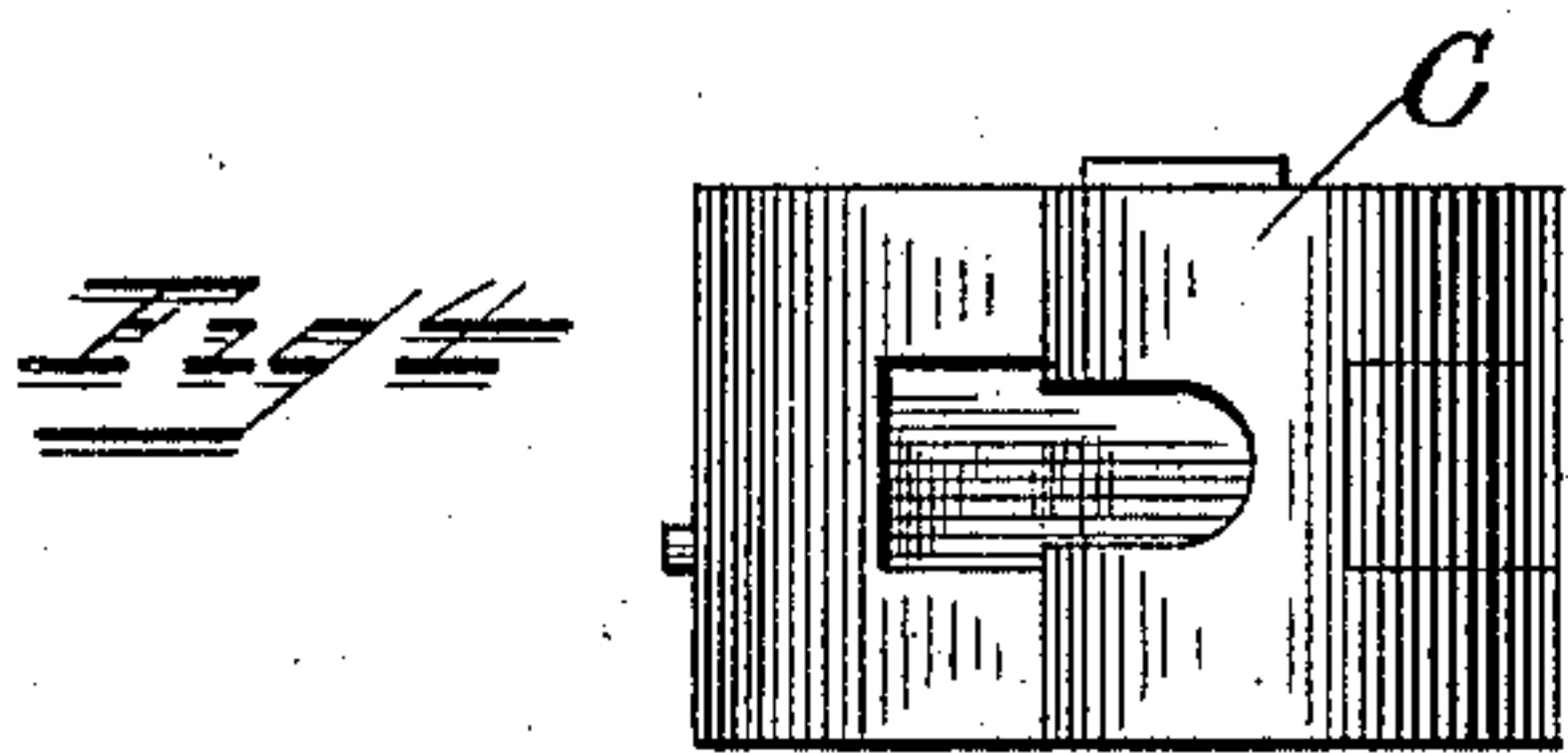
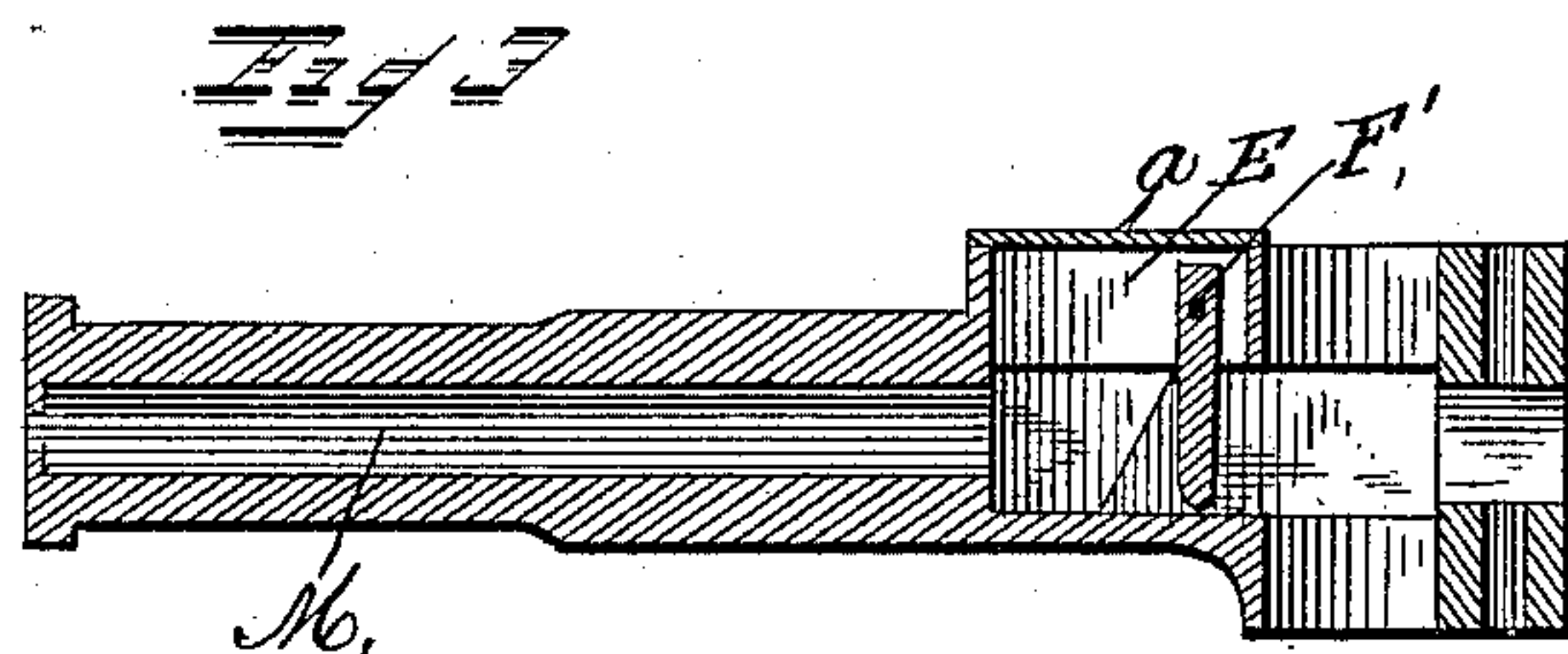
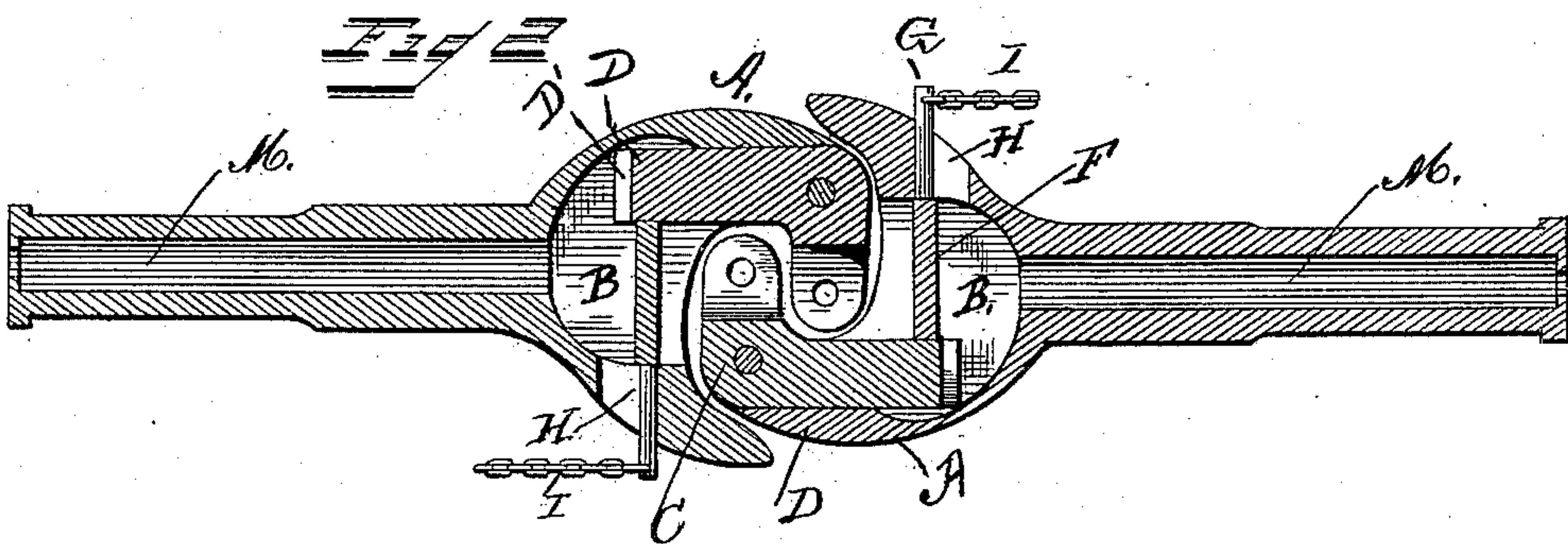
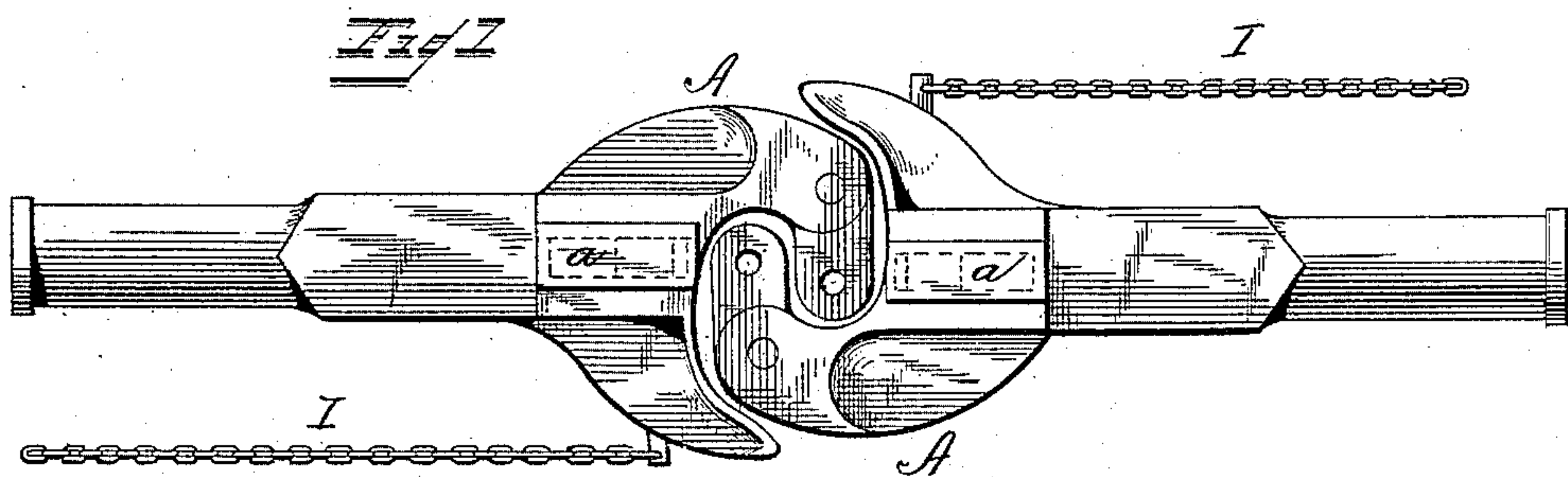
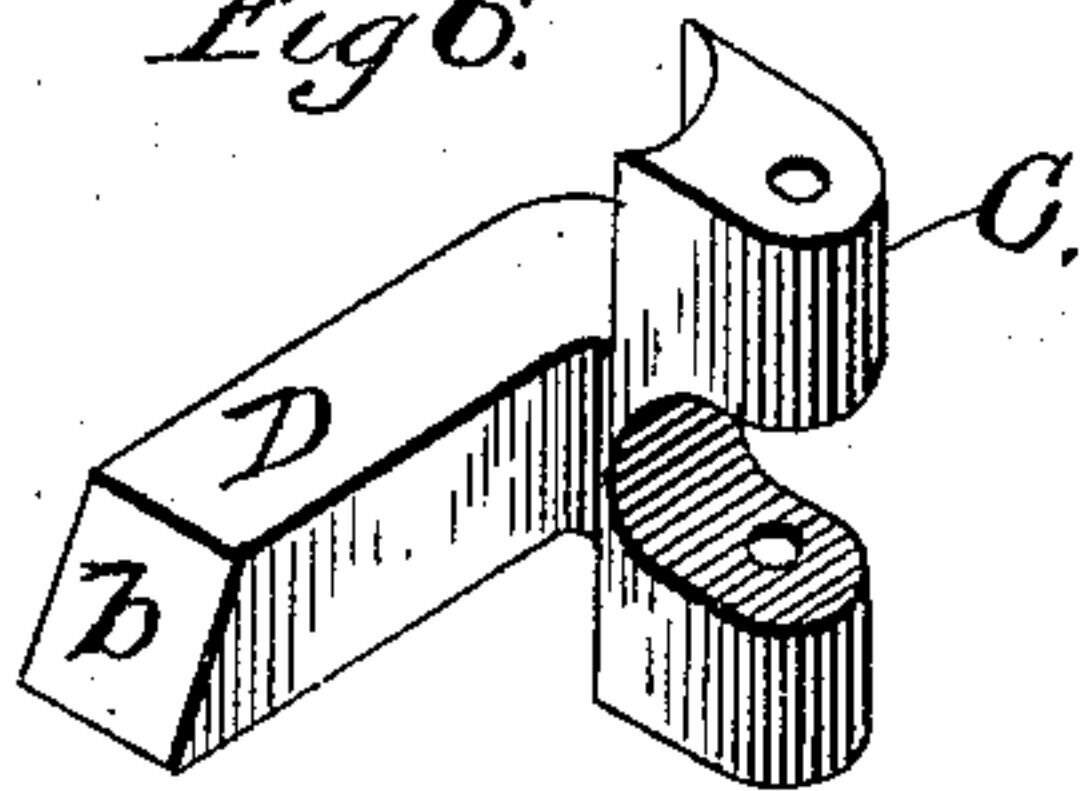


Fig 6



WITNESSES,

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UNITED STATES PATENT OFFICE.

JAMES N. MARTIN AND WILLIAM HAMILTON HARRIS, OF NEWBERRY,
SOUTH CAROLINA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 398,523, dated February 26, 1889.

Application filed December 10, 1888. Serial No. 293,079. (No model.)

To all whom it may concern:

Be it known that we, JAMES N. MARTIN and WILLIAM HAMILTON HARRIS, citizens of the United States, residing at Newberry, in the county of Newberry and State of South Carolina, have invented certain new and useful Improvements in Car-Couplings; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

Our invention has relation to car-couplings, and is designed as an improvement on Letters Patent granted to us October 25, 1887, and numbered 372,037; and the invention consists in the novel construction and arrangement of parts, as will be hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view of our improved car-coupling coupled together. Fig. 2 is a horizontal section of the same. Fig. 3 is a longitudinal vertical section of one of the couplers. Fig. 4 is a front view of the same. Fig. 5 is a detached view of the latch of the draw-head with an arm for operating the same, and Fig. 6 is a detail view of one of the jaws of the draw-head with the dog attached thereto.

Referring to the drawings, the letter A indicates the draw-heads of the couplers, which are recessed, as shown at B, the recesses opening toward the front, as indicated in Fig. 2. The said draw-heads are approximately of a crescent shape, and one end of the crescent is bifurcated, as shown, for the reception of a jaw, C, having a dog or pawl, D, provided at one end with a beveled portion, *b*, for the purpose more fully hereinafter explained. The said jaw C is pivoted between the members of the bifurcated end of the draw-head, and said draw-head is also provided in its upper portion with a recess, E, and a latch, F. The latter has an extension, F', on its top surface, which is pivoted in said recess E, whereby the latch will swing in the draw-head. An arm, G, is secured to one side of the latch and

extends through an aperture, H, at one side of the draw-head, to which is attached a chain, I, its free end being adapted to be connected to a lever on the platform of the car, by means of which the latch may be operated to uncouple the coupler; or we may dispense with the chain and lever and operate the latch by means of the arm G. The beveled portion of the dog D is adapted to ride over the latch F, so as to engage the recess D', formed between said latch and draw-head, when in the position shown in Fig. 2 of the drawings, and hold the coupling devices in a coupled position; or the latch can be drawn back so as to release the dogs and permit the couplers to separate when it is desired to uncouple two connected cars. This operation of uncoupling is effected by drawing on the chain of either coupler by means of a lever on the platform of the car, or by drawing backward on the arm G, as above mentioned.

To facilitate the automatic action of the coupling mechanism when the parts of the two opposite couplers are brought together, the rear ends of the dogs are beveled, as before mentioned, so as to gradually force the latches F and then fall to one side of the dogs.

The operation of our invention will be readily understood in connection with the above description, and is as follows: The parts being properly set for coupling, when the draw-heads come together the dogs are forced back automatically, pushing back the latches, after which said latches swing forward by means of their pivotal connections, so as to overset the dogs and lock the same in the recess D', as shown in Fig. 2, whereby the jaws are in position to hold the parts of the two couplers together. The uncoupling of the couplers will be readily understood from the foregoing description.

A spring draw-bar may be inserted in the openings M of each extension of the draw-heads, so that the inner end of the bars will come in contact with the rear portions of the latches F, so as to keep them in position when the couplers are locked together; or we may dispense with the spring draw-bars, as the latches themselves will be proper security for keeping the couplers locked together.

The recesses E, in which the latches are pivoted, may be provided with covers *a*, hinged to the top portions of the draw-heads, whereby dust, cinders, or other foreign substances may be prevented from passing into the said recess.

Having described our invention, what we claim, and desire to secure by Letters Patent, is—

- 10 1. An automatic car-coupling having its draw-head provided with a recess, E, a latch, F, having an extension, F', on its upper surface pivoted in said recess, so that the latch will be pendulous in the draw-head, a recess, 15 D', between the latch and inner wall of the draw-head, and the dog D, having a beveled end, *b*, adapted to elevate the latch and engage the said recess D', substantially as specified.
- 20 2. The combination, with the draw-head and its pivoted jaw and dog, of the pendulous latch having an arm extending through an

opening in one side of the draw-head, and a recess between said latch and draw-head adapted to receive and hold the dog, and said 25 arm adapted to release the dog, substantially as specified.

3. In a car-coupling, the combination, with a draw-head and its pivoted jaw, having a dog, D, with a beveled end, *b*, of the pendu- 30 lous latch pivoted in the top portion of the draw-head, and having an arm extending through an opening in one side of the draw-head, and a chain connected to said arm, the opposite end of the chain adapted to be con- 35 nected to a lever on the platform of a car, substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

JAMES N. MARTIN.

WILLIAM HAMILTON HARRIS.

Witnesses:

T. B. EDWARDS,
W. G. MAYES.