

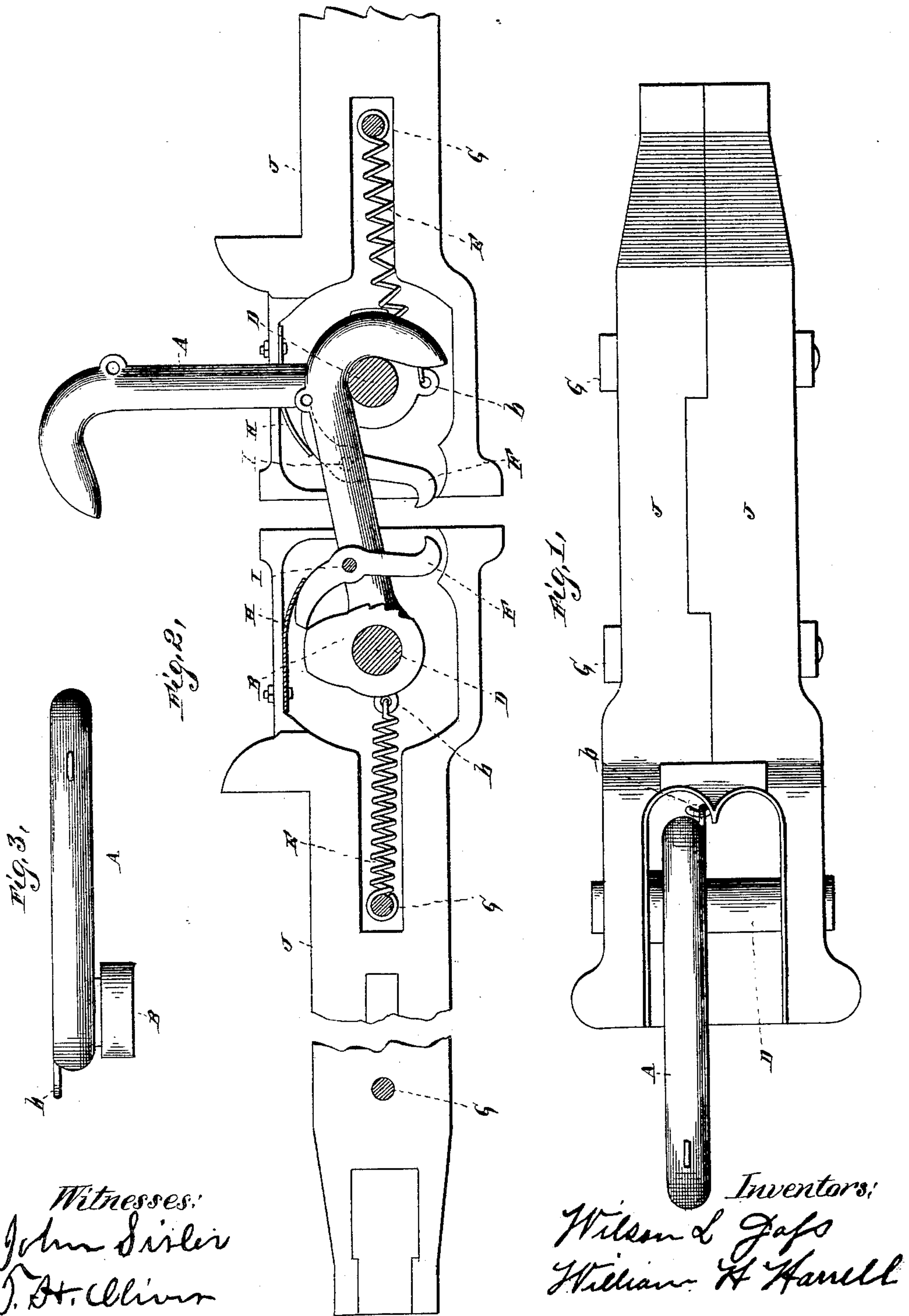
(No Model.)

3 Sheets—Sheet 1.

W. L. GOSS & W. H. HARRELL.
CAR COUPLING.

No. 460,936.

Patented Oct. 6, 1891.



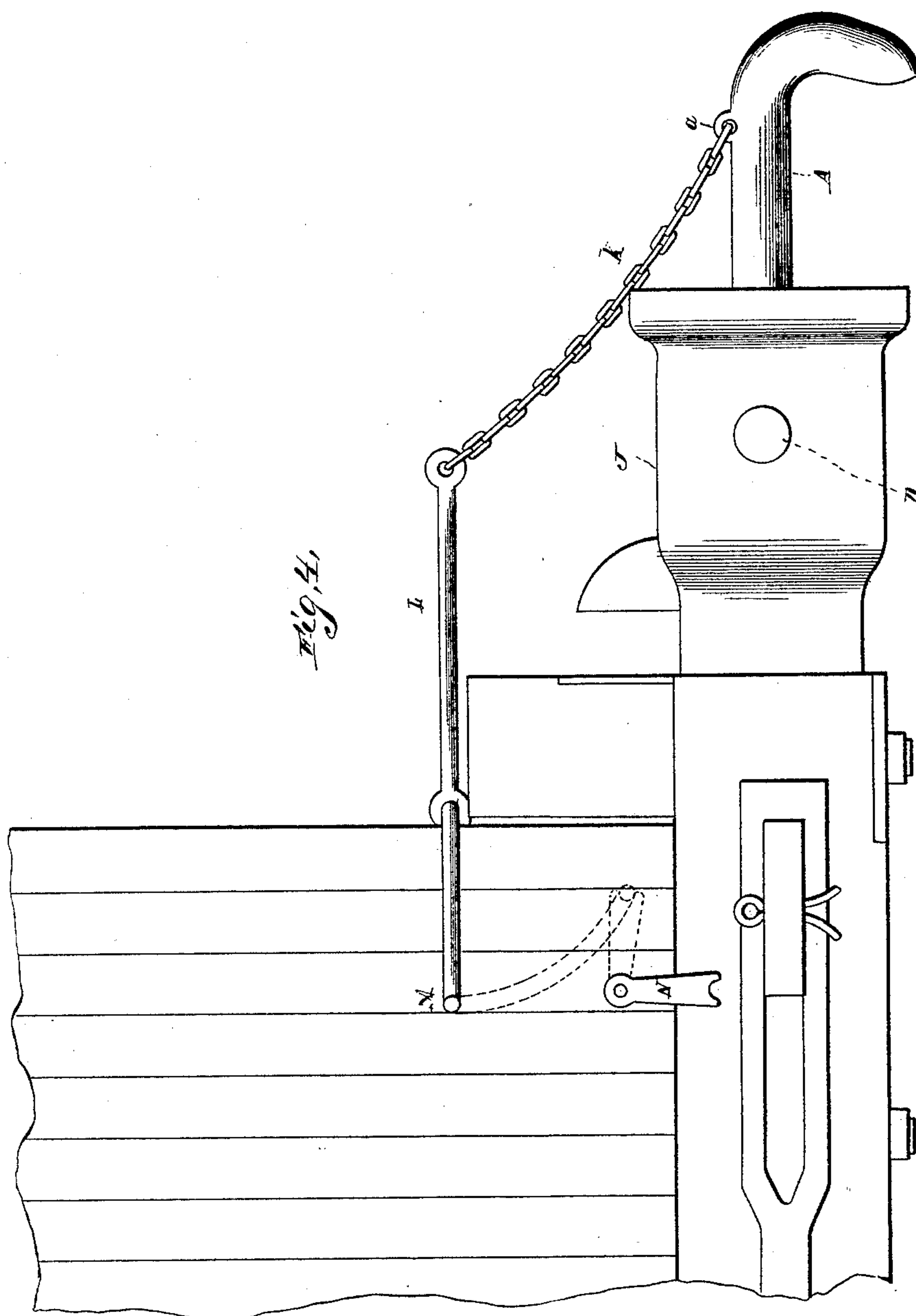
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Witnesses:
John Sisler
J. H. Oliver

Inventors:
William L. Goss
William H. Harrell

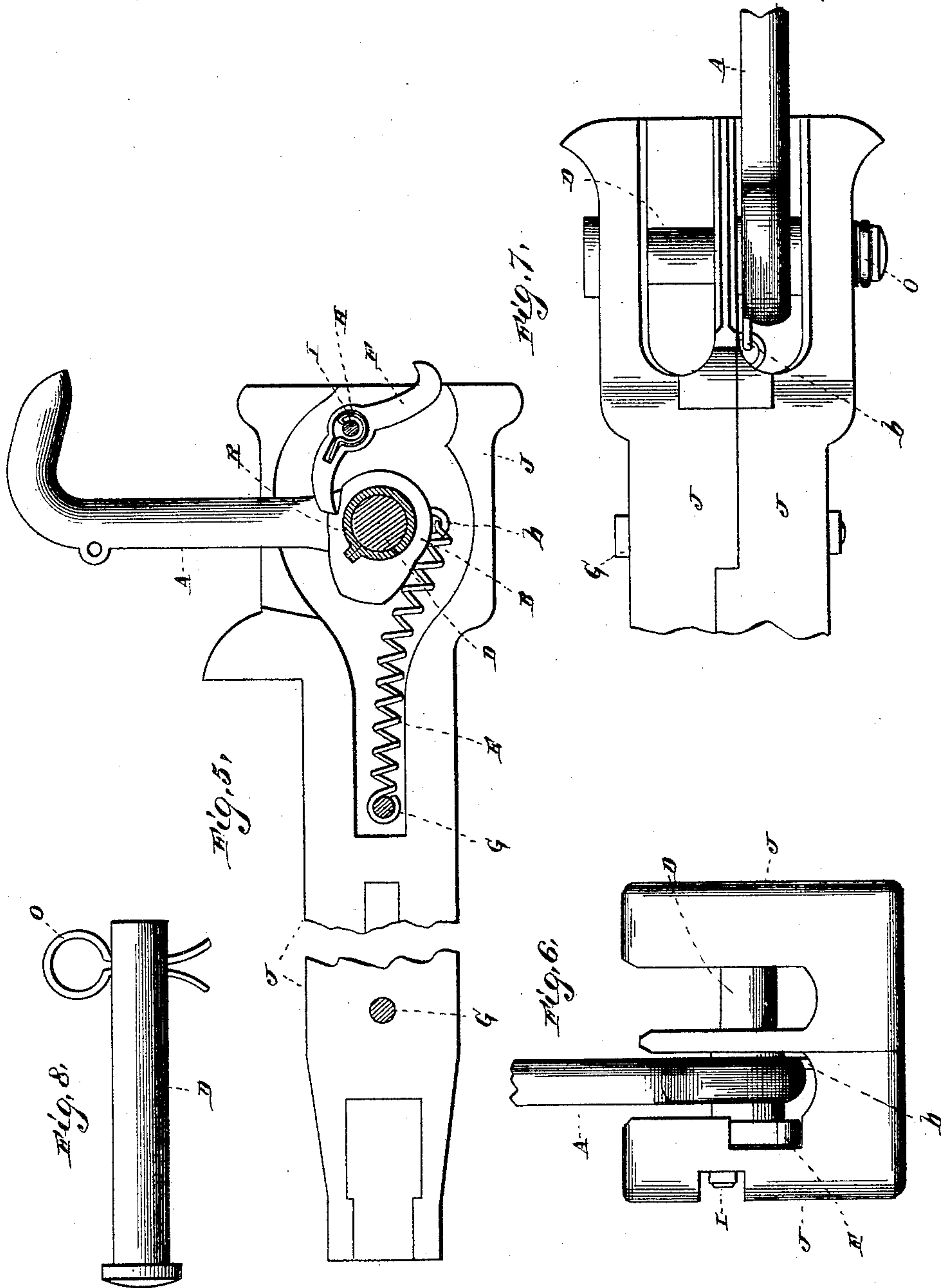
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UNITED STATES PATENT OFFICE.

WILSON LUMPKIN GOSS AND WILLIAM HARMAN HARRELL, OF DALLAS,
TEXAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 460,936, dated October 6, 1891.

Application filed October 28, 1890. Serial No. 369,635. (No model.)

To all whom it may concern:

Be it known that we, WILSON LUMPKIN GOSS and WILLIAM HARMAN HARRELL, citizens of the United States, residing at Dallas, in the county of Dallas, State of Texas, have invented an Automatic Car-Coupling, of which the following is a specification.

Our invention relates to an improvement in car-couplings for all kind of railroad-cars; and the objects of our improvement are, first, to provide an automatic car-coupling that is simple in construction, strong and durable, easily adjusted and repaired, and effectual in its action; second, to provide a coupling that can be operated when coupling cars without the operator going between the cars. We attain these objects by the mechanism illustrated in the drawings accompanying this specification, in which—

Figure 1 represents a top view of the coupling complete. Fig. 2 represents a vertical sectional view of two couplings as they come together in coupling cars, the left section being locked and the right section set ready to lock. Fig. 3 represents a top view of hook A and ratchet B. Fig. 4 represents a section of box-car with coupling attached and lever for unlocking coupling. Fig. 5 represents a vertical section of coupling, and represents more fully the operation of the coupling. Fig. 6 represents a front or face view of coupling with hook A broken off. Fig. 7 represents a top view of the coupling with hook A broken off. Fig. 8 represents shaft or pin D and key O substantially.

Similar letters refer to similar parts throughout the several views.

The coupling consists of cast-iron heads J J, securely bolted together with bolts G G, which is fully set forth in Figs. 1 and 7. Hook A and ratchet B are cast or forged solid from cast-steel, and hook A and ratchet B have eyes through them just alike with key-slot, and fit over collar R, which is made with key-flange on outside, all of which is fully set forth in Fig. 5. Hook A and wheel B are placed on collar R, and are then placed in position in head, and pin D is put in position, passing through collar R, and is secured in place with key O. Pin D and key O are made from steel, and are fully set forth in Fig. 8. Coil-

spring E and spring H are made of steel-spring wire, and are substantially set forth in Fig. 5. Spring E is looped around bolt G, and is made fast to hook A through eye b. (See Fig. 5) Ratchet-dog F is made, as shown in Fig. 5, from steel, and is secured in position by bolt I, and is reamed or hollowed out on one side, and spring H is placed in the hollowed side of dog F, and is held in place by end of spring passing through bolt I, as shown in Fig. 5.

When the parts are all in position, by raising hook A, as in Fig. 5, ratchet-wheel B is turned so that dog F is thrown into notch on wheel B by spring H, and thus held. The lower end of dog F is thrown to the front, so that when the heads come together in coupling cars dog F is pushed back and hook A is pulled down by spring E, and hook A catches over pin D in the other coupling, (see Fig. 2, left view,) thus coupling the cars together, and when coupled there are two hooks in every connection, thus giving all the strength required, and the shape of ratchet-wheel B is such that when the coupling is locked the lower end of dog F is drawn back into the head and secured from harm by heads bumping together when cars are in motion; and when desired to uncouple cars hook A is raised by a simple lever device, as shown in Fig. 4, or by short crank part on end of pin D.

The advantages we claim for our coupling are as follows: It is simple and durable, every part is made separate, and should any part be broken it can be replaced in a moment with duplicate—to wit, by taking out pin D, hook A, ratchet-wheel B, and collar R, all separated—and each can be replaced with duplicate in a moment's time, and by taking out bolt I dog F and spring H can either or both be replaced at will; secondly, the coupling will work just as well where adjacent cars are of different heights, the hook from one hooking down and the other hooking up, so that the strength is preserved; third, the operator need never go between the cars to couple them.

We are aware of the fact that there are many patents already granted on car-couplings, and we do not claim any patent on the shape or form of the heads, as represented,

nor the manner in which they are bolted together or attached to the cars, as the lever device for unlocking coupling.

What we do claim as our invention, and desire to secure by Letters Patent, is—

The combination, in a car-coupling, of hook A, ratchet-wheel B, pin D, coil-spring E, ratch-

et-dog F, spring H, and key O, substantially as described.

WILSON LUMPKIN GOSS.

WILLIAM HARMAN HARRELL.

Witnesses:

E. P. LOGAN,

J. N. HAMMACK.