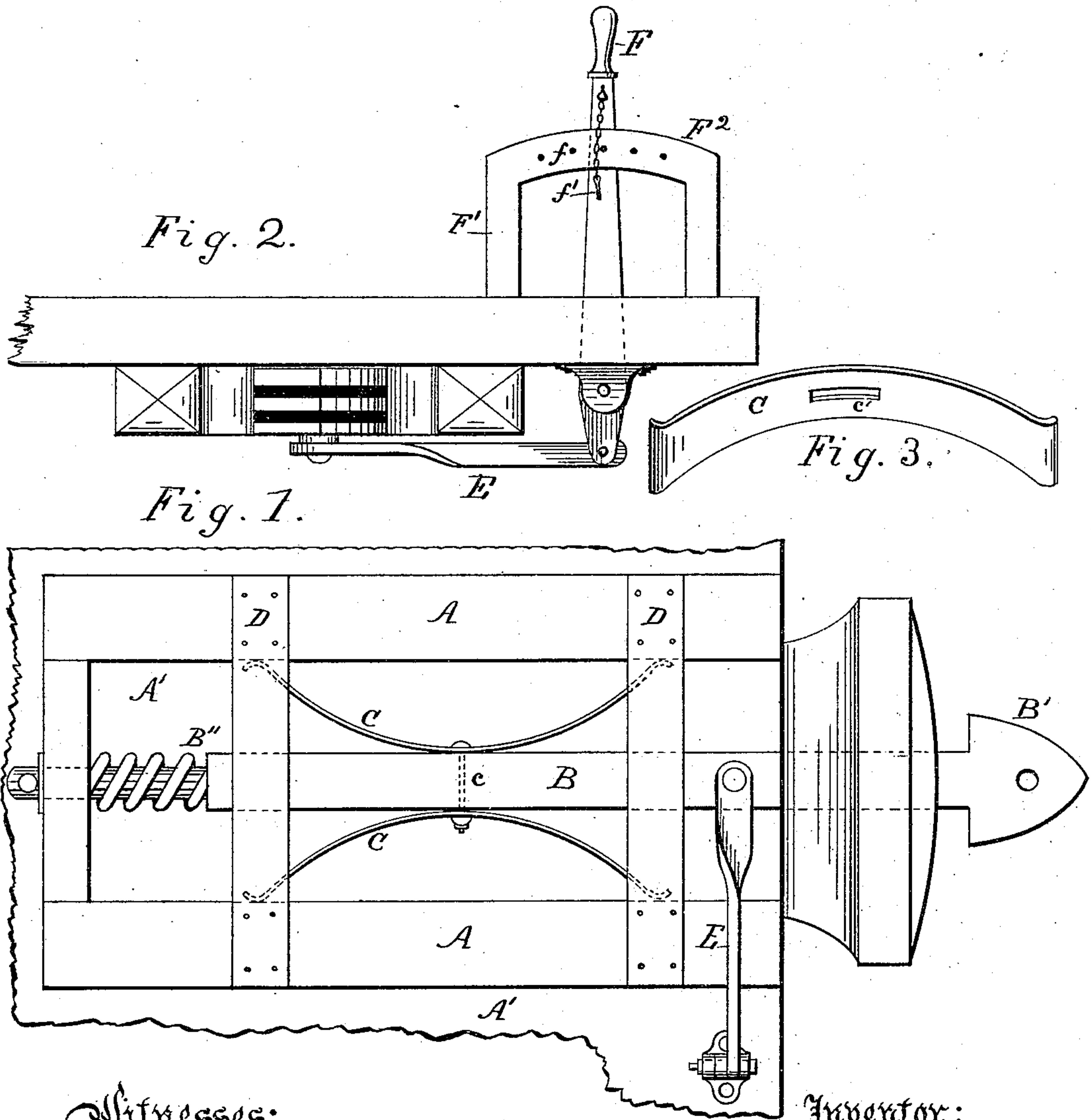


(No Model.)

J. S. THOMPSON.
CAR COUPLING.

No. 250,767.

Patented Dec. 13, 1881.



Witnesses:
Thos. Houghton.
J. S. Gray

Inventor:
John S. Thompson
Per Ireland and Singleton
Atty.

UNITED STATES PATENT OFFICE.

JOHN S. THOMPSON, OF ATLANTA, GEORGIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 250,767, dated December 13, 1881.

Application filed April 2, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOHN S. THOMPSON, a citizen of Atlanta, residing at Atlanta, in the county of Fulton and State of Georgia, have
5 invented certain new and useful Improvements in Railroad-Car Couplings; and I do hereby 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
10 appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

15 This invention relates to improvements in that class of car-couplings known as "automatic;" and it consists in the employment of an arrow-shaped draw-bar in each end of the car, which engages with the draw-head in the
20 opposite car, the bars being kept in place by a double spring and regulated by a hand-lever, all of which will be hereinafter more fully described, and set forth in the claims.

25 Figure 1 is a bottom view of the arrangement of the draw-head and springs. Fig. 2 is an end view. Fig. 3 is a side view of a spring.

30 A A is the wooden frame beneath the floor of the car, and which supports the draw-head B. This draw-head is formed with a double-beveled arrow-head, B'. The other end, B'', is rounded for a coil-spring in the usual manner. This draw-bar with the arrow-head is not new.

Attached to the draw-bar B on each side is a spring, C C, attached to it by means of a
35 bolt, c, which passes through a slot, c', in each spring, and through the draw-bar B. This slot (shown in Fig. 3) gives a free motion to the middle of the spring when the draw-head is moved to one side. The ends of the springs
40 C C are not confined, but press upon the sides of the frame A A, and are kept in position by a strap, D D, at each end.

E is a connecting-rod, attached by a pivot to the draw-head B.

F is a lever pivoted under the floor of the car, and at its lower end pivoted to the connecting-rod E.

F' is a frame-work supported on the end of the car, having in its top rail, F'', a series of holes, f, and a pin, f', whereby the lever F
50 may be secured in any desired position, as seen in Fig. 2.

When two cars come together the two arrow-heads B' will, by the beveled surfaces, pass each other and interlock by reason of the
55 springs C C. The lever F is then forced over to that side of the frame F' which will keep the arrows in contact. The action of the springs C C tends to keep these draw-heads in contact. If by any sudden lurch of either car they might
60 yield so far as to permit the arrow-heads to unlock, by the use of the lever F this cannot take place so long as they are secured by the pin in the proper hole in frame F'.

I claim—

65 1. The draw-bar of a railway-car coupling, having attached to it on each side a semi-elliptic spring, secured at its middle by a bolt through an elongated hole, substantially as and for the purpose described.

70 2. The combination of the double arrow-head draw-bar, the springs C C, constructed and secured as described, and the frame of a railway-car, substantially as and for the purpose set forth.

75 3. The combination of the draw-bar B, the springs C C, connecting-rod E, hand-lever F, stop-rail F'', supplied with a series of holes and pin, all substantially as and for the purpose described.

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

JNO. S. THOMPSON.

Witnesses:

R. O. HOLTZMAN,
WM. R. SINGLETON.