G. W. MORRIS.

Railway-Car Brakes.

No. 138,678. Patented May 6, 1873.

Fig. 1.

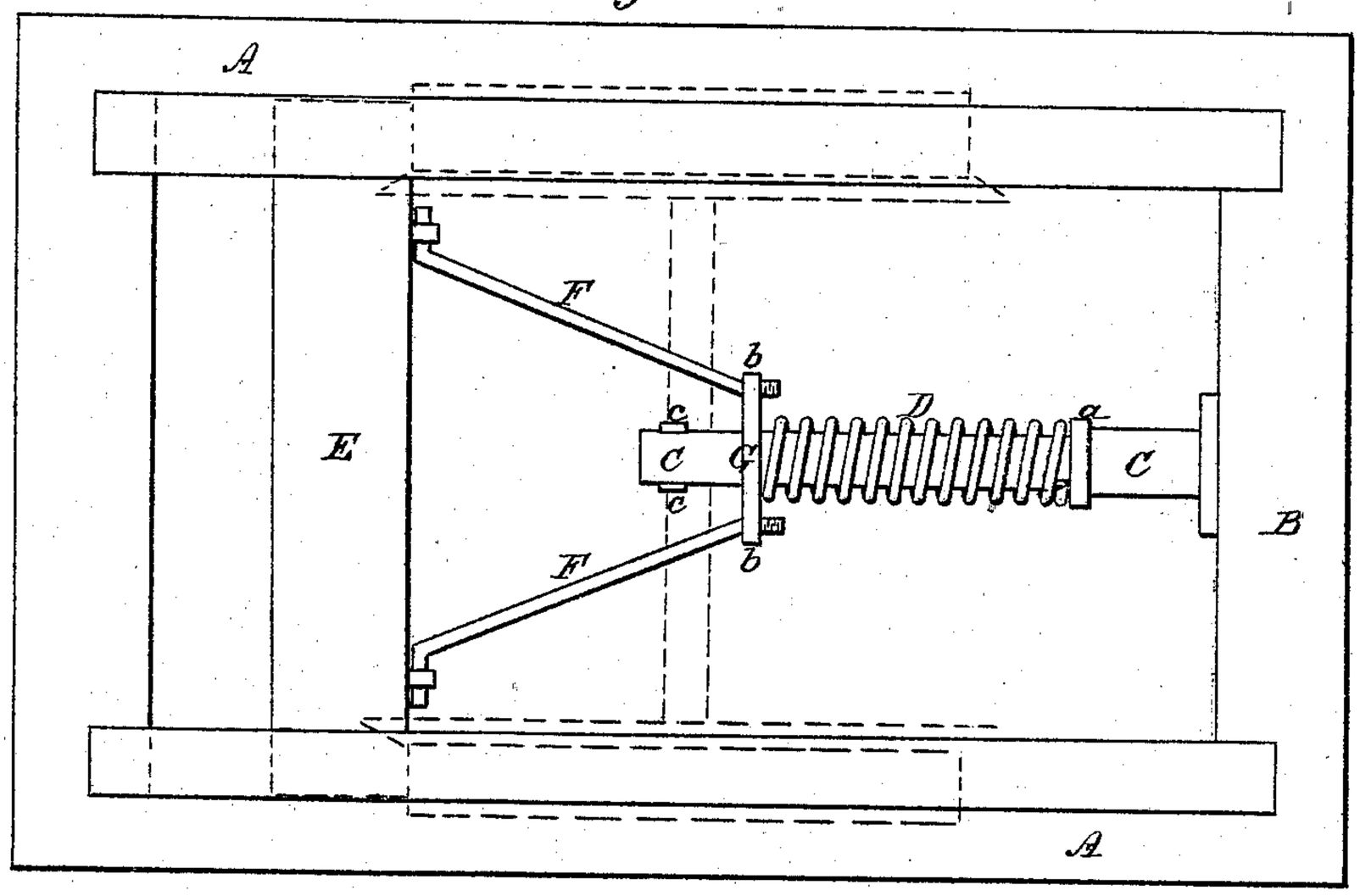

Fig. 2.

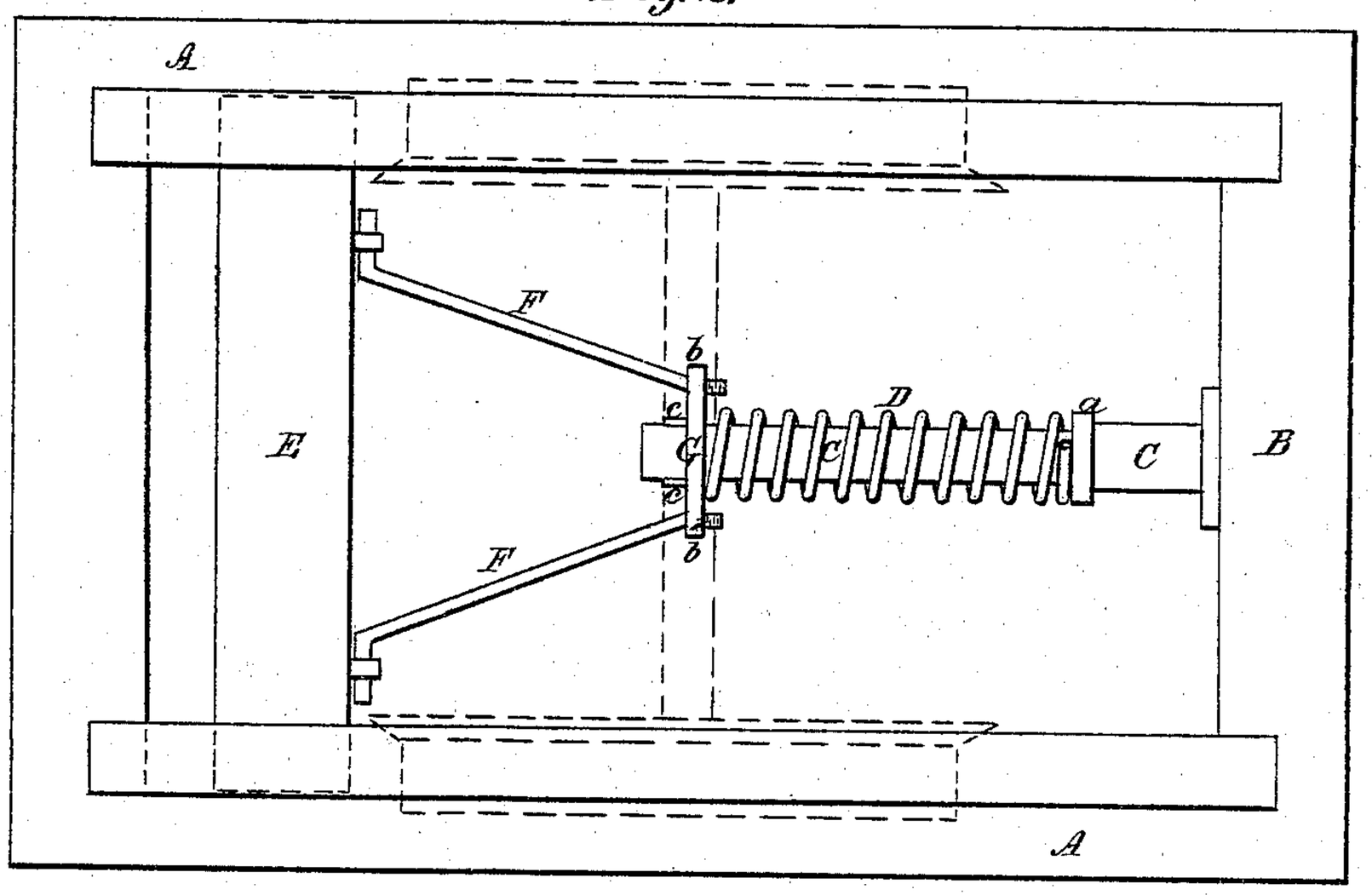

Fig. 3.

Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE W. MORRIS, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN RAILWAY-CAR BRAKES.

Specification forming part of Letters Patent No. **138,678**, dated May 6, 1873; application filed January 24, 1873.

To all whom it may concern:

Be it known that I, GEORGE W. MORRIS, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a certain new and useful Improvement in Car-Brake Releases for Railway Cars, of which the following is a specification:

My invention relates to devices for releasing the brake-bar from the wheels of the truck; and the invention which forms the subject-matter of this patent consists in the arrangement and combination with the brake-bar of connecting-rods, hinged thereto near its ends and converging to a socket press-piece, which embraces a central guide-rod on a cross-bar of the truck in a manner to act against and compress a coiled spring when the brake is on, and to utilize the compression of the spring to effect the instant release of the brake from the wheels when it is off, the said centrally-acting spring releasing both ends of the brake alike by its connection with and bearing upon the guide-socket piece, which has a free sliding and partial swiveling movement upon the central guide-rod, as will be hereinafter more fully described.

In the accompanying drawing, Figure 1 represents a plan or top view of a railway-car truck embracing my improved car-brake release, and showing the sliding brake-bar in position when the brake is applied; and Fig. 2 represents a similar view, showing the brake-bar as released; and Fig. 3 represents a view of the locking press-plate for the brake-spring.

The example shown merely represents the frame-work of the truck; but it is readily understood that the sliding brake-bar can be operated to bring its rubbers to the wheels by any of the devices now in use for the purpose.

To the truck or frame A I firmly secure, near one end, a cross-brace bar, B, from the middle of which a strong horizontal iron rod, C, projects a suitable distance. This rod C is embraced by a spiral spring, D, which bears against a sufficient shoulder, *a*, upon the rod.

The sliding brake-bar E, which carries the rubbers, is operated by any proper device from the carriage-platform. Two arms, F F, fastened to the bar E by eye-bolts, project and meet upon opposite sides of the sliding guide-socket press-piece G, and are screwed into ears *b* of said press-piece, so as to have a yielding connection therewith, and consequently permit of a partially-swiveling movement of the piece G upon its rod, and thus avoid the shocks and strains incident to a rigid fastening. This press-piece G embraces the rod C like a sleeve, and slides thereon, pressing against the spiral spring D when the brake is on, and moving back with the brake-bar when the latter is off, being prevented from sliding off said rod by ribs or straps *c* thereon.

When the brake-bar is brought against the wheels its arms force the piece G against the spring D and compress it; and when it is desired to release the wheels from the pressure of the rubbers, the brakeman simply releases the pawl from the cogs upon the platform of the carriage, when the force of the spring automatically releases the brakes. The press-piece G is provided with openings *e* to allow it to be passed over the stops *c*, and then turned at right angles so that the stops lock the press-piece G upon its rod, and prevent the separation of the two.

I am aware that brake-bars for railway-car wheels have been released from contact with the wheels by springs in various ways, and I do not therefore claim, broadly, a spring brake-bar release.

Having described my invention, I claim—

1. A sliding brake-bar, provided with arms and a sliding socket press-piece, in combination with a central guide-rod and a spiral releasing-spring arranged thereon, to operate as described.

2. In a car-brake release, the sliding connection of the socket press-piece with the spring guide-rod, and having also a partial swiveling movement upon its connections, as and for the purpose described.

3. The sliding press-piece G locked upon its carrying-bar C by the grooves *e* and the stops *c*, as described.

In testimony whereof I have hereunto set my hand.

GEO. W. MORRIS.

Witnesses:

G. M. MCMASTER,

JNO. W. CULMER.