

T. B. STOUT.
CAR COUPLING.

No. 11,498.

Patented Aug. 8, 1854.

Fig. 1

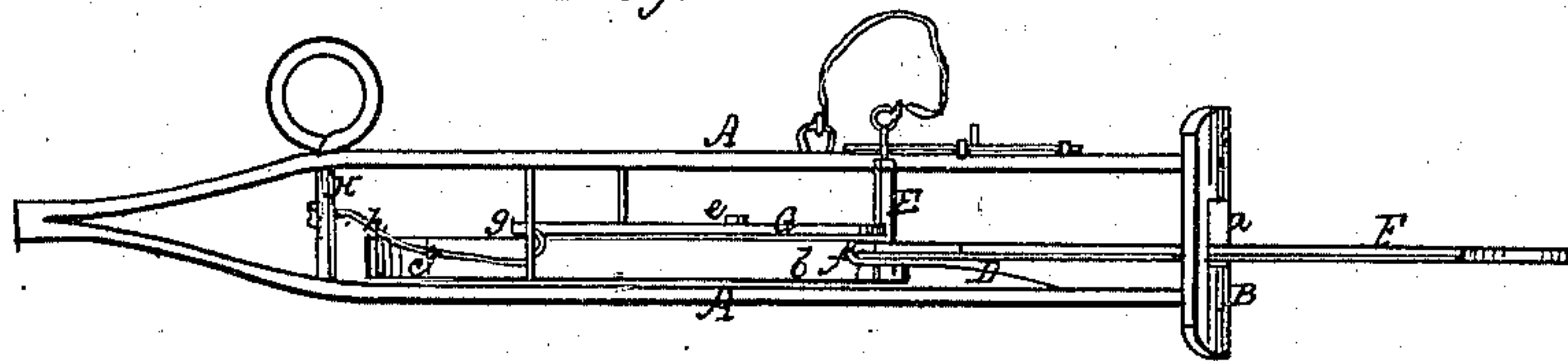


Fig. 2

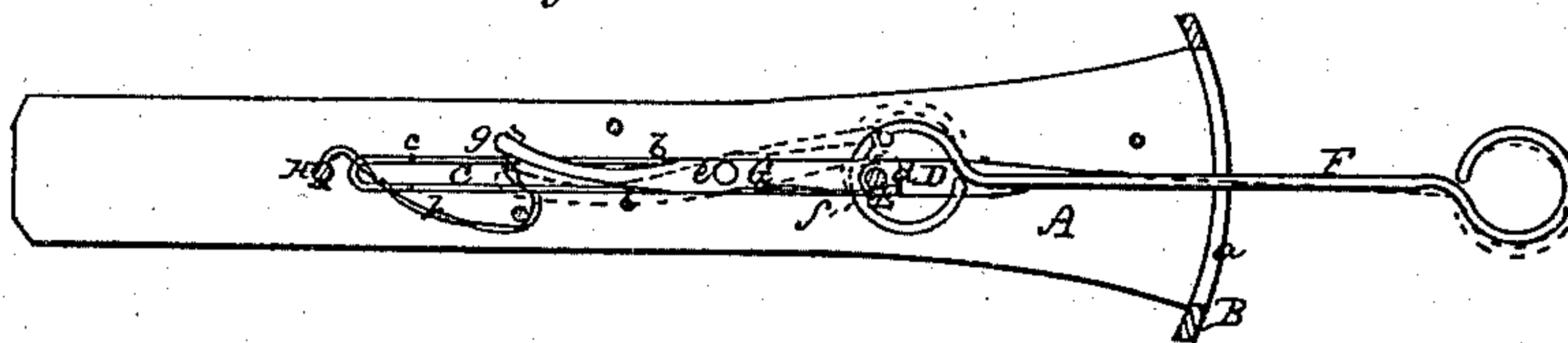
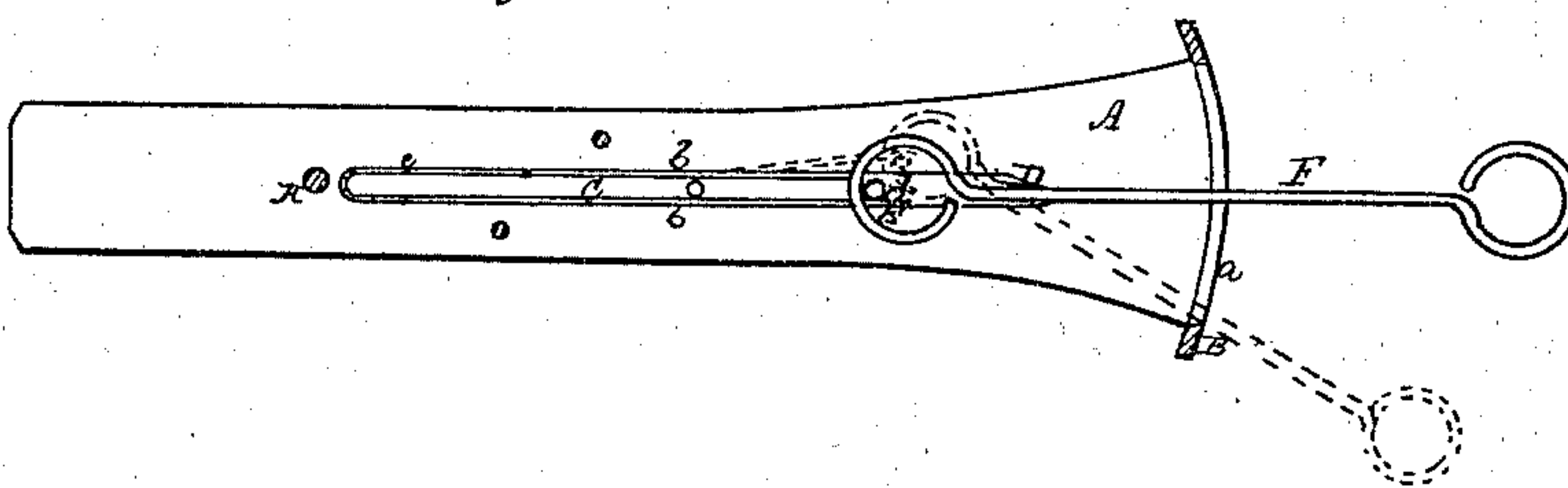


Fig. 3



UNITED STATES PATENT OFFICE.

THOMAS B. STOUT, OF KEYPORT, NEW JERSEY.

CAR-COUPLING.

Specification of Letters Patent No. 11,498, dated August 8, 1854.

To all whom it may concern:

Be it known that I, THOMAS B. STOUT, of Keyport, in the county of Monmouth and State of New Jersey, have invented a new and Improved Car-Coupling; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a side view of my improved car coupling. Fig. 2, is a top view of the same, the top plate of the buffer rod being removed. Fig. 3, is a top view of the spring, link and bolt. The lever shown in Fig. 2, is omitted in this view.

Similar letters of reference indicate corresponding parts in the several figures.

This invention of mine is applicable to railroad cars as now constructed, and I make use of the ordinary link, and buffer, using also the common bolt with the addition of a loose ring, forming a hinge for the side play of the bolt to swing on when detaching; and my arrangement does not interfere in the least with the attachment of the horse shaft used in moving the cars at the depot.

I am well aware that a patent was granted W. D. Chesnut Feby. 20, 1844, in which he claims the use of a spring in connection with a peculiarly formed bar, viz., a three sided recess therein clasp ing a fixed bolt or pin secured in the buffer, which disengages itself when the cars are thrown at a considerable angle from each other, by the spring giving way: but this is liable to detachment by the wear of the corner of the eye permitting the bolt or pin to press off the holding spring.

The nature of my improvement consists, first, in a device, consisting of a stop affixed to the floor of the buffer, for holding a swung coupling bolt in connection with a forked lever and springs, by which the ordinary link or coupler is secured on the bolt when in place yet allowing the displacement of the lower end of the swung bolt, when the cars being thrown off the track and at an angle thereto, bring the middle of the link in contact with either side of the buffer jaws, and thus allow of self detaching. In addition to this detaching in the event of accident I by a second device or improvement consisting of a windlass operating the forked lever embracing the coupling bolt, am enabled to disconnect at the will of the

attendant on the cars while in motion, either of the cars upon the track, simply by his turning the windlass by a crank or otherwise rising above the platform of the car, and thus with certainty and safety effect the liberation of the car or cars from the train while in motion. This is an important consideration in the practical application of my improvement and it has not hitherto been attained. By this arrangement, the coupling will disconnect itself if one car is thrown at a certain angle with the other, and consequently, if one car is thrown from the track, it cannot drag the others with it; and a brakeman can also disconnect the cars when in motion, if required.

To enable others skilled in the art to fully understand and apply my invention, I will proceed to describe it.

A, A, represent the plates at the end of the buffer rod, connected at their outer ends by a curved head, B, having a slot, (a), in it. These plates are constructed precisely similar to those in general use, and require no particular description.

On the upper surface of the lower plate, there are two springs, (b), (b), secured to the sides of a ledge, C, see Figs. 2 and 3, by a pin or bolt, shown at (c), in all the drawings. The ends of these springs extend a short distance beyond the end of the ledge, C, and a stump or stop, D, is at the ends of the springs, and a small recess, (d), see Figs. 2, and 3, is formed by the end of the stump, the ends of the springs, and the end of the ledge. In this recess the lower end of a bolt, E, which passes through a link, F, fits. The upper part of the bolt is sustained in proper position by the top plate, A, the bolt passing through an aperture in the top plate. The link, F, passes through the slot, (a), in the head, B, as shown in all the drawings.

G, Figs. 1, and 2, is a lever secured to the upper surface of the ledge C, by a pivot, (e), see Figs. 1, and 2. One end, (f), of this lever is notched, and fits around the bolt, E. The opposite end, G, has a cord, (h), attached to it, which winds around an upright, H, just back of the ledge, C.

Operation: The bolt, E, is passed through the link, and the lower end of the bolt fitted in the recess, (d), the opposite end of the link being secured to the adjoining car in like manner. The connection between two cars is thus formed. When the

cars are moving in a direct line, the pressure of the bolts will be upon the ends of the stumps, or stops, D; but if one car is canted, or thrown from the track, the center of the link, F, will bear against one side of the slot, (a), and the end of the link will bear or pass laterally upon the bolt, and force out one of the springs, (b), and the bolt will be out of the recess, (d), and the link free of the bolt, see red dotted lines in Fig. 2, and solid red lines in Fig. 3. The coupling may also be disconnected at will, by the brakeman, by turning the upright, H; this will cause the end, (f), of the lever, G, to act upon the bolt, E, and force out one of the springs, as shown in Fig. 2. Thus the cars may also be disconnected at any time when in motion, and many accidents prevented in cases of cars being disabled or breaking down.

Having described the nature of my im-

provement over that of W. D. Chesnut's, patented Feby. 20, 1844, what I claim as my invention and desire to secure by Letters Patent is—

1. The arrangement of the stop D, springs b, b, coupling bolt E in connection with the ordinary link F as described, for the purpose of admitting of self detachment of the cars, by the end of the bolt E being thrown as set forth.

2. I also claim said stop D, springs b, b, bolt E, link F in combination with the forked lever G operated by the windlass H, in the manner as described, for the purpose of detaching in safety a car or cars at the will of an attendant while the train is in motion.

THOS. B. STOUT.

Witnesses:

S. H. WALES,
JNO. W. HAMILTON.