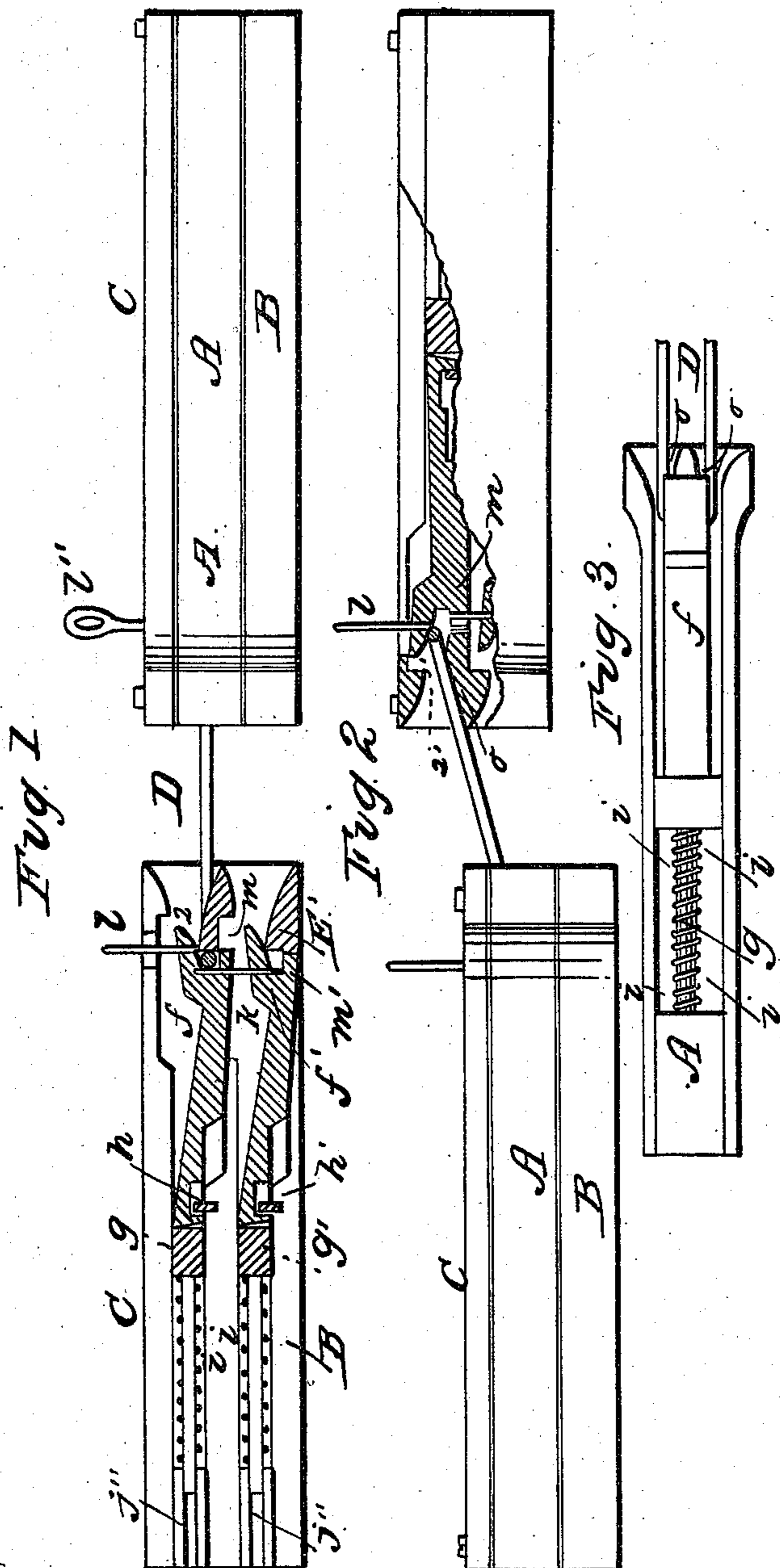


F. COFFRIN.
Car Coupling.

No. 83,464.

Patented Oct. 27, 1868.



Witnesses
Henry Beard
J. F. Cobby

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FRANKLIN COFFRIN, OF CLAREMONT, NEW HAMPSHIRE.

Letters Patent No. 83,464, dated October 27, 1868.

IMPROVED CAR-COUPLING.

The Schedule referred to in these Letters Patent and making part of the same.

To whom it may concern:

Be it known that I, FRANKLIN COFFRIN, of Claremont, Sullivan county, State of New Hampshire, have invented new and useful Improvements in Car-Couplings; and I do hereby declare the following to be a full and exact description of the same, reference being had to the drawings that accompany, and form a part of these specifications, in which—

Figure 1 is a longitudinal vertical bisection of the draught or connecting-bars coupled together.

Figure 2, same view, showing one bar much above the other, and the coupling-link being released.

Figure 3, plan view, transparent, showing arrangement of interior parts.

Letter A, central portion of the connecting or draught-bar.

B, the lower portion, and containing interior parts duplicate to those in A.

C, cap upon the top of and protecting the small parts in A.

D, connecting-link uniting the two bars A.

e e', hooks, the one in the mouth or throat of A, the other in that of B.

f f', spring-bars or keepers, situated one above the other—one in A, one in B.

g g', two spindles, the enlarged ends of which bear against the ends of the keepers *f f'*.

h h', pins, which rise into slots in the under side of *f f'*, and keep them from being carried too far forward by the springs *i i'*.

i i', spiral springs on the spindles *g g'*, and, being compressed when put in place, their force will act on the upper edge of the inner end of the keepers *f f'*, thereby throwing the outer bevelled ends, *z z*, upon the hooks *e e'*, and thus prevent the link D from being detached.

j j', holes in A and B for one end of the spindles *g g'*, as shown in fig. 1.

k, a short link connecting *f* and *f'*, so that *f'* shall be raised whenever *f* is.

l, a staple by which any one wishing to unshackle the cars can raise both *f* and *f'*.

O O, convex lips of the mouth of the draw-bars.

m m', projections on the under side of *f* and *f'*, which, rising with *f* and *f'* when any one lifts *l*, releases the link D, and the cars are disconnected.

The object of my invention is to provide a shackle for railroad-cars that will connect of themselves when brought together, and shall securely keep united under ordinary circumstances, but be so constructed that when one or more cars run off the track, they shall disconnect automatically, or any car that runs off shall disengage itself from those remaining on the track.

By examining the drawings in figs. 1 and 2, it will be seen that when one car is raised vertically much above the one with which it is connected, the link D, bearing upon the outer portion of the lip in the mouth of the bar A B C, raises the keeper *f*, and the link D is at once free.

What I claim as of my invention is—

The levers or keepers *f*, the pins *h*, the spindles *g*, the springs *i*, the staple *l*, the hooks *e*, and link D, all arranged and combined substantially as and to operate for the purposes specified and set forth.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

FRANKLIN COFFRIN.

Witnesses:

IRA COLBY, Jr.,

O. B. WAY.