

H. R. HOWE.
Car Coupling.

No. 80,486.

Patented July 28, 1868.

Fig. 2

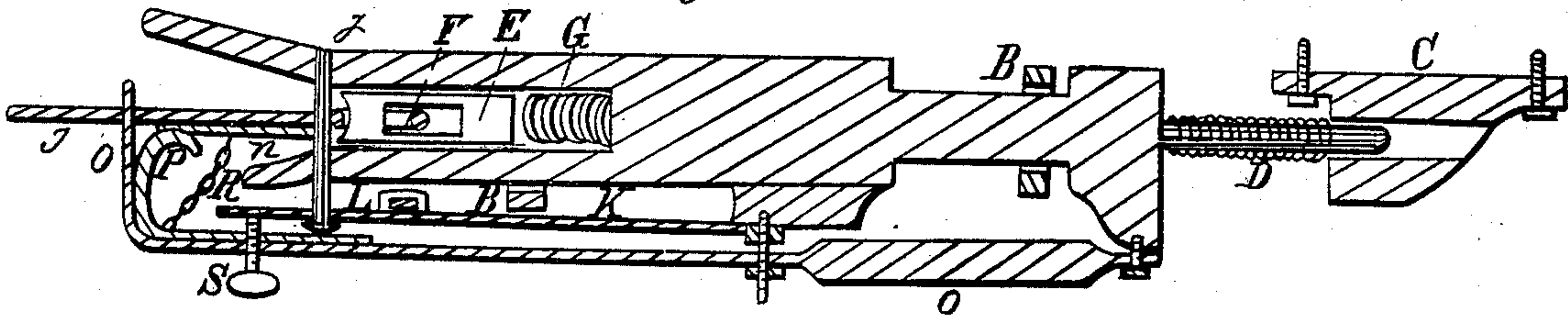
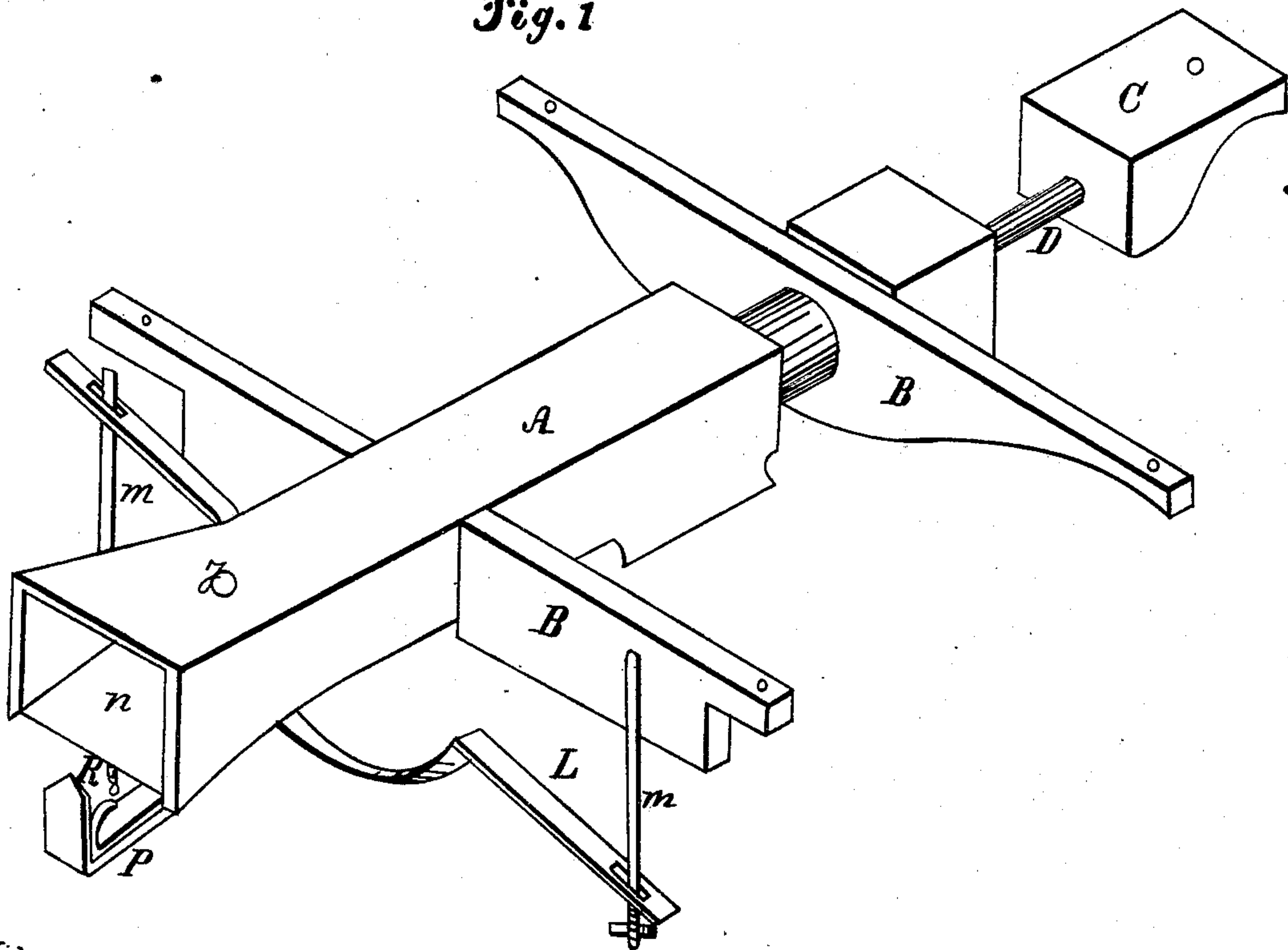


Fig. 1



Witnesses
Samuel Harper
[Signature]

Inventor
Henry R. Howe

United States Patent Office.

HENRY R. HOWE, OF HARTWICK, NEW YORK.

Letters Patent No. 80,486, dated July 28, 1868.

IMPROVED CAR-COUPLING.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, HENRY R. HOWE, of the town of Hartwick, in the county of Otsego, and State of New York, have invented a new Self-Acting Car-Coupling; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view,

Figure 2 a longitudinal view through the centre, showing both the internal and external arrangements of the several parts which compose this invention.

Same letters refer to corresponding parts in each of the figures.

The nature and design of this invention are to construct a car-coupling that will couple whenever the cars are run together, without the necessity of any person going between them to put in the link and pin, and thus save time and prevent accidents.

A is the buffer, and is constructed hollow and flaring at the front end, so that the link will be certain to strike inside the mouth as the cars are brought together, and be conducted to the centre, where it strikes a block, which it causes to retreat, thus coupling the cars.

B B are the cross-beams, by which the buffer A is secured to the cars.

C is a block on the car to support the end of rod D on the rear end of the buffer.

E is a block, which is constructed to operate in a suitable hollow cavity inside the buffer A, and has a slot cut therein, through which a pin passes to keep it in the desired position, and allow it to operate the required distance.

G is a coiled spring in the cavity of the buffer, behind block E, to operate it.

I is the link by which the cars are connected.

J is the pin which passes through the link, connecting it to the car.

K is a spring-plate, one end of which is connected to the head of the pin J, the opposite end being connected to the buffer A.

L is a lever, of any suitable shape, which is connected to the spring-plate K, extending across under the platform the entire width of the car, in order that it may be used from either side.

M M are small rods, secured to the car, passing through slots in the lever L, to keep it in the required position.

N is a tongue, in the mouth of the buffer, to hold the link in the right position to be attached to the other car, and it is attached by hinges.

O is a spring-bar, under the buffer, which assists in holding up the pin J, the end of said spring being turned up through the link I, to prevent lateral deflection when said link is attached to only one car. This spring is constructed to operate perpendicularly or horizontally in order to allow the link to turn sufficiently to accommodate itself to any curve or unevenness of the track.

P is a bar connected to spring O, the end of which is turned up under the tongue N, which it holds in the required position.

R is a small chain, connected to the tongue N and bar P, to depress said tongue by means of the lever L.

S is a set-screw, by which the height of the tongue is adjusted, which may be made to operate against either the spring-bar K or the buffer A.

T is the pin through the block E, on which it operates.

To use my invention, the lever L should be depressed, which, drawing out the pin J, and freeing the link I, uncouples the cars, and when lever L is lowered sufficiently to enable the spring G to force out the block E, it will prevent the pin J from passing into its place, while the chain R draws down the tongue, leaving the mouth of the buffer A open, so that when the link of the car to be attached comes inside it will be guided to the centre, and its end striking against the block E forces it back, and the springs O and K force the pin through

the link and securely attach it to the car. The block E allows the link sufficient play in order that the buffers may meet.

This coupling can be constructed with only one spring, but I prefer two.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the buffer A, spring-bars O and K, bent bar P, chain R, tongue N, block E, pin T, spring G, link I, pin J, set-screw S, and lever L, when constructed and arranged substantially as described, as and for the purpose specified.

Witnesses:

SAMUEL HARPER,
HIRAM TUTTLE.

HENRY R. HOWE.