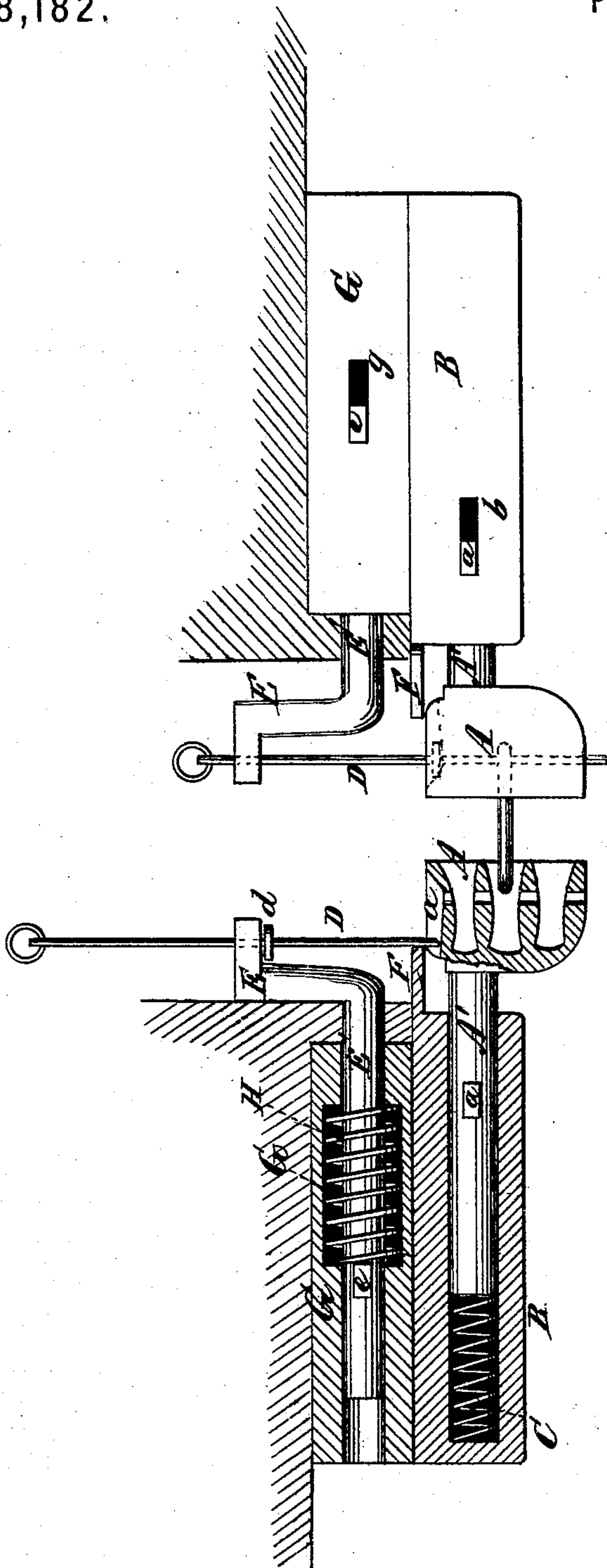


W. P. SIDDENS.

Improvement in Car-Couplings.

No. 128,182.

Patented June 18, 1872.



Witnesses.

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UNITED STATES PATENT OFFICE.

WILLIAM P. SIDDENS, OF DANVILLE, ILLINOIS, ASSIGNOR TO HIMSELF
AND ROBERT CRAIG.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 128,182, dated June 18, 1872.

Specification describing certain Improvements in Car-Couplings, invented by WILLIAM P. SIDDENS, residing at Danville, in the county of Vermilion and State of Illinois.

My improvement, which relates to automatic car-couplings, consists, first, in the employment of an elongated coupling-pin, in combination with the buffer-head and a bracket overhanging the latter, the coupling-pin passing through the bracket and being provided with a collar in such a manner as to come in contact with the under side of the bracket the moment the pin, on withdrawing it from the buffer-head, has been elevated above the bottom of a groove in the top of the latter, in which groove the pin is sustained in an elevated position; the bracket, in connection with the collar, preventing the vertical displacement of the pin; second, in the employment, in combination with the grooved buffer-head and elongated collared coupling-pin, of a sliding bracket, which is actuated, by a spring, in such a manner that, on raising the coupling pin, the bracket will draw it into the rear end of the groove in the buffer-head.

The drawing represents a sectional elevation of my improved car-coupling.

The buffer-head A is provided, in the example illustrated, with a deep mouth, divided horizontally into several chambers, for the reception of the link, which can thus be sustained at different elevations to couple together cars of varying height. The stem A' of the buffer-head is arranged in a box, B, and bears against a spiral spring, C, which is inserted in the cavity in the box behind the stem A', in the manner clearly shown, pushing the buffer-head outward. A cross-head, a', on the stem A', playing in slots b in the box B, controls the endwise movement of the buffer-head in either direction. The top of the buffer-head is constructed with a longitudinal gutter or groove, a, extending rearward from the pin-holes, and so shaped as to guide the pin into such pin-holes. The coupling-pin D has a length more than double that of the height of the buffer-head, and is constructed with a collar, d, its length between the collar and its foot end being just sufficient to let it pass entirely through the buffer-head. Above the collar d the coupling-pin passes through a

bracket, E, which projects from the end of the car-body and overhangs the buffer-head. The elevation of the bracket above the buffer-head must be such that, on withdrawing the coupling-pin from the buffer-head to release the link, the collar d on the pin shall come in contact with the under side of the bracket the moment the foot of the pin has been raised above the bottom of the groove a. The pin may then be pushed back into the groove, but cannot be displaced vertically. A tongue, F, projects from the car-body just above the buffer-head, overhanging the latter when projecting just a little. As the elevated coupling-pin is drawn back into the groove a it comes in contact with this fixed tongue, which holds it from moving with the buffer-head on the collision of two cars, which pushes the buffer-heads back far enough to bring the pin-holes in line with the pin, allowing the latter to drop through the buffer-head and engage the links of the adjacent car just entered. The bracket may be rigidly secured to the car; in which case it must be provided with an elongated hole, to allow the coupling-pin to move the required distance horizontally. But I prefer to use a bracket capable of sliding endwise, such as shown in the drawing. It is there provided with a stem, E', arranged in the cavity of a box, G, and controlled in its movements by a cross-head, e, playing in elongated slots g in the box. At G' the cavity in the box is enlarged to accommodate the spiral spring H, which encircles the stem of the bracket, bearing with one end against the cross-head e on its stem, so as to draw the bracket up against the car-body when the pin is elevated. Thus arranged the bracket will draw the pin back into the rear end of the groove a in the top of the buffer-head in an automatic manner, so that the pin may be drawn up from the top of a car, and rested on top of the buffer-head without further assistance from the operator.

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

1. The combination of the buffer-head, bracket overhanging it, and an elongated coupling-pin having a collar, d, between the bracket and buffer-head, substantially as and for the purpose set forth.

2. The combination of the yielding buffer-head having a groove, *a*, in the top, overhanging bracket, collared bolt D *d*, and fixed tongue F, substantially as and for the purpose set forth.

3. The combination of the yielding buffer-head A *a*, sliding bracket E H, elongated collared coupling-pin D *d*, and fixed tongue F, substantially as and for the purpose set forth.

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

WILLIAM P. SIDDENS.

Witnesses:

JACOB H. PITZER,
CHRISTOPHER C. SIDDENS.