

W. G. BELL.
Car Coupling.

No. 84,933.

Patented Dec. 15, 1868.

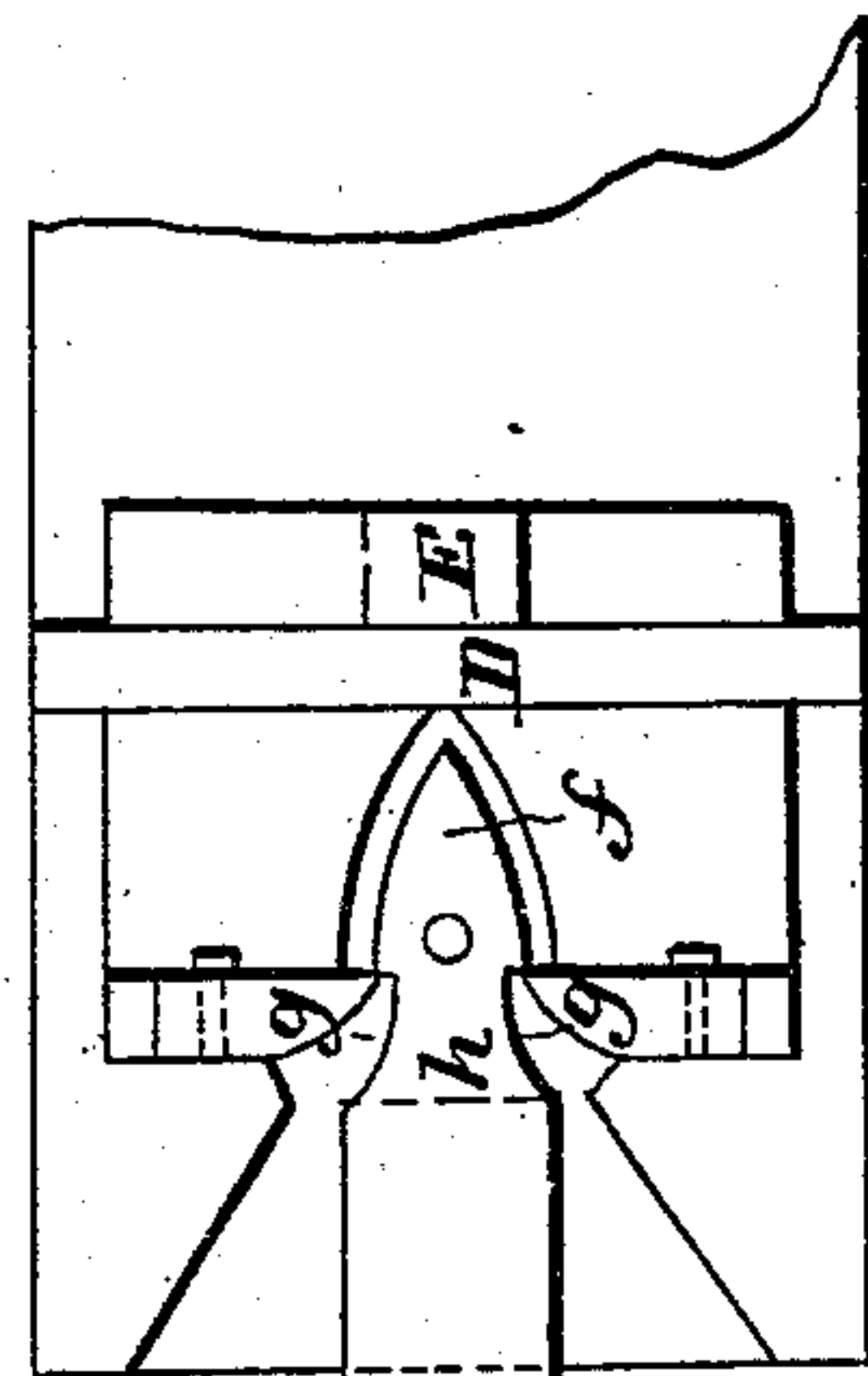
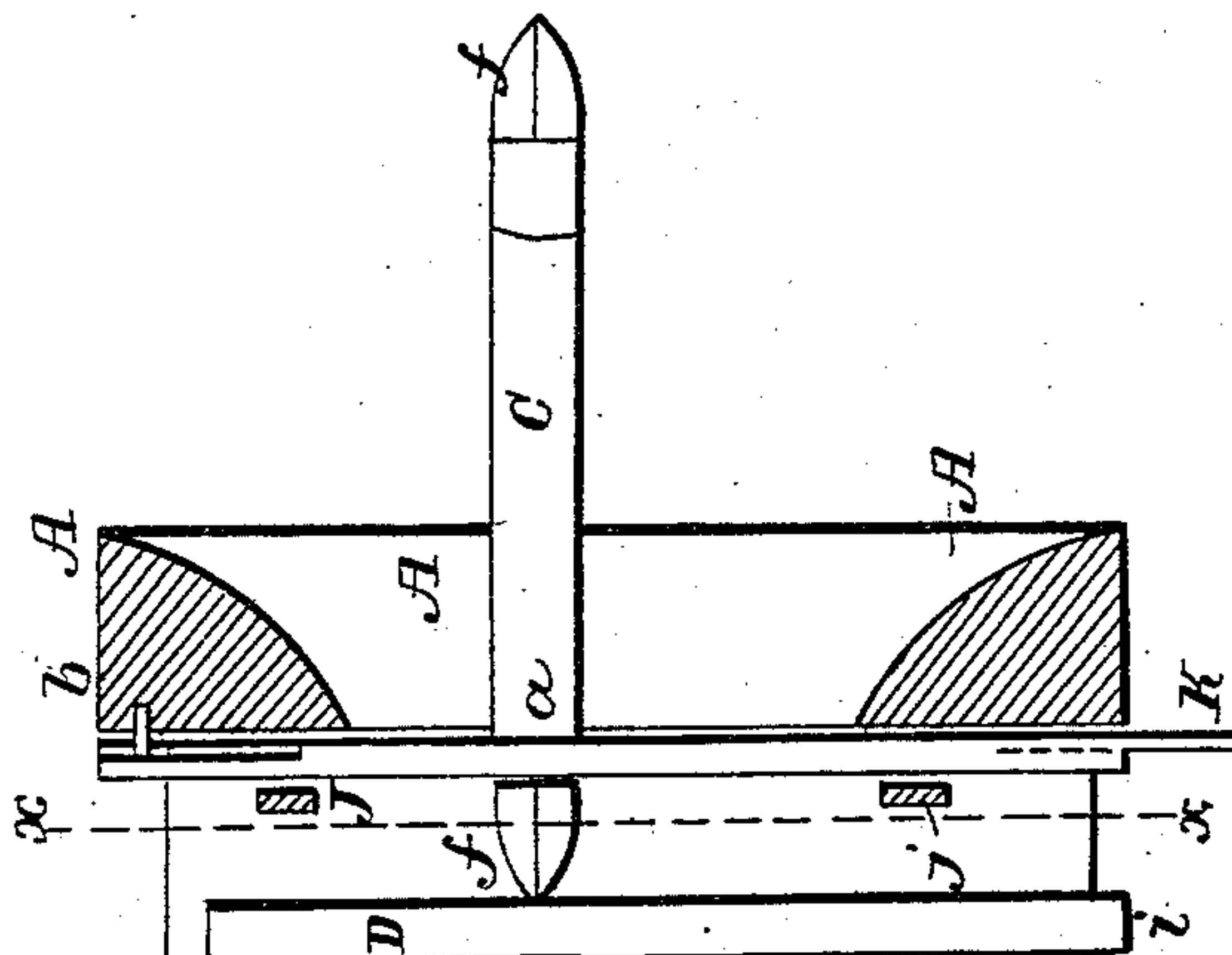
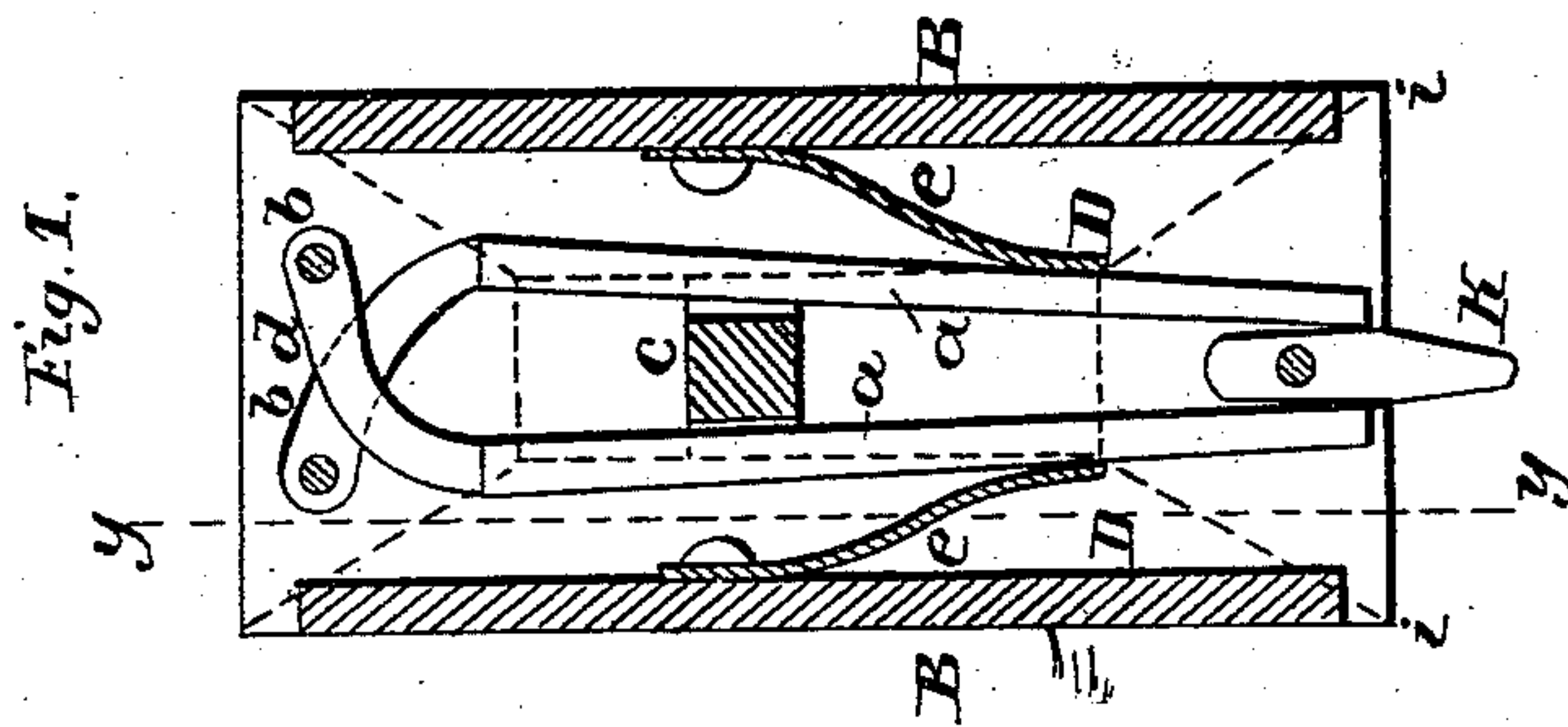


Fig. 2.

Fig. 3.

Fig. 4.

Witnesses:
M. Gardner?
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United States Patent Office.

W. G. BELL, OF PITTSBURG, PENNSYLVANIA.

Letters Patent No. 84,933, dated December 15, 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, W. G. BELL, of Pittsburg, in the county of Allegheny, and State of Pennsylvania, have invented a new and useful Improvement in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

Figure 1 is a cross-section of my invention, through the line *x x*, fig. 2.

Figure 2 is a longitudinal section, through the line *y y*, fig. 1.

Figure 3 is a detail view of the coupling-box and rod.

Figure 4 is a transverse section of the coupling-rod.

Similar letters of reference indicate corresponding parts.

A A A is the tapering aperture of the coupling-head B, which is made oblong, the longest way being from top to bottom, (so as to adapt it to cars of different heights,) arranged immediately behind which are the lateral catch-plates, *a a*, which are pivoted or hung to the part B, at the top, and bent and arranged to cross each other at *d*, so that if the springs *e e*, which are intended to press them together so as to hold firmly the head of the coupling-rod C, should at any time break, the tendency will be to fall together and still hold the rod.

K is a lever-button, pivoted between the lower ends of the catch-plates *a a*, and serves to separate them when the cars are to be uncoupled. By turning this button to the right or left, which may be done by means of a rod, extending to the outside of the car, the catch-plates *a a* are spread so as to liberate the head, *f*, of rod C.

The coupling-rod C is formed with pointed head, *f f*, and hole, N, in each end, to receive the coupling-pin when working in connection with the common link-coupling, the rod retaining its width immediately beyond the neck *h h*, and by coming against the sides of the mouth-piece, B, the rod is kept from adhering to the sides of the catch-plates *a a* when they are opened for uncoupling. There is also a slight bevel on the in-

ner upright edge of the mouth-piece B, to prevent the rod from catching, as shown in fig. 4.

The head, *f*, of the rod C is bevelled, as shown in Figure 5, so that if any car should turn over enough to correspond with that bevel, the car would be released, thus preventing it from carrying others with it. The coupling-rod, being held by the pair of plates in one head, is thus presented to the aperture of the other when the cars to be coupled are brought together.

The tapered head, *f f*, spreads the plates *a a* when it encounters them, which plates again close upon the shank *h*, behind the head, thus catching against the shoulders, *g g*, of the head, and completing the coupling.

D is a buffer-plate, suspended in the cavity of the head B, in the rear of the plates *a a*, by means of the projections *i i*, and sustained against the encounter of the coupling-rod C by the spring E, affixed to the back of the said buffer-plate, as shown. It is intended to soften the concussion of the cars, and also to assist in keeping the rod horizontal, ready to enter the opposing coupling-head.

These coupling-heads, being attached to the car in the ordinary way, and with the ordinary gum spring behind them, will receive the body of the concussion, allowing the plate D to receive and soften the blow at the point of the coupling-rod C, and not the entire shock of the cars.

Having thus described my invention,

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

1. The bevelled vertical jaws *a a*, constructed and arranged as described, with reference to the mouth-piece A, with or without the springs *e e*, and the coupling-rod C, as herein set forth, for the purpose specified.

2. The vertical bar D and spring E, in combination with the vertical jaws *a a*, coupling C, and mouth-piece A, as herein described, for the purpose specified.

The above specification of my invention signed by me, this 12th day of June, 1868.

Witnesses:

J. T. ARMSTRONG,
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W. G. BELL.