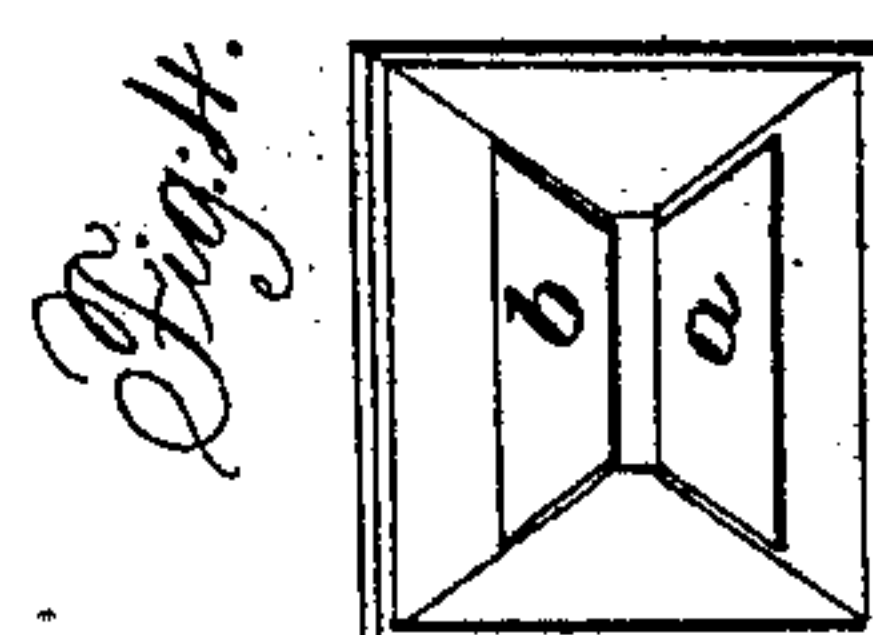
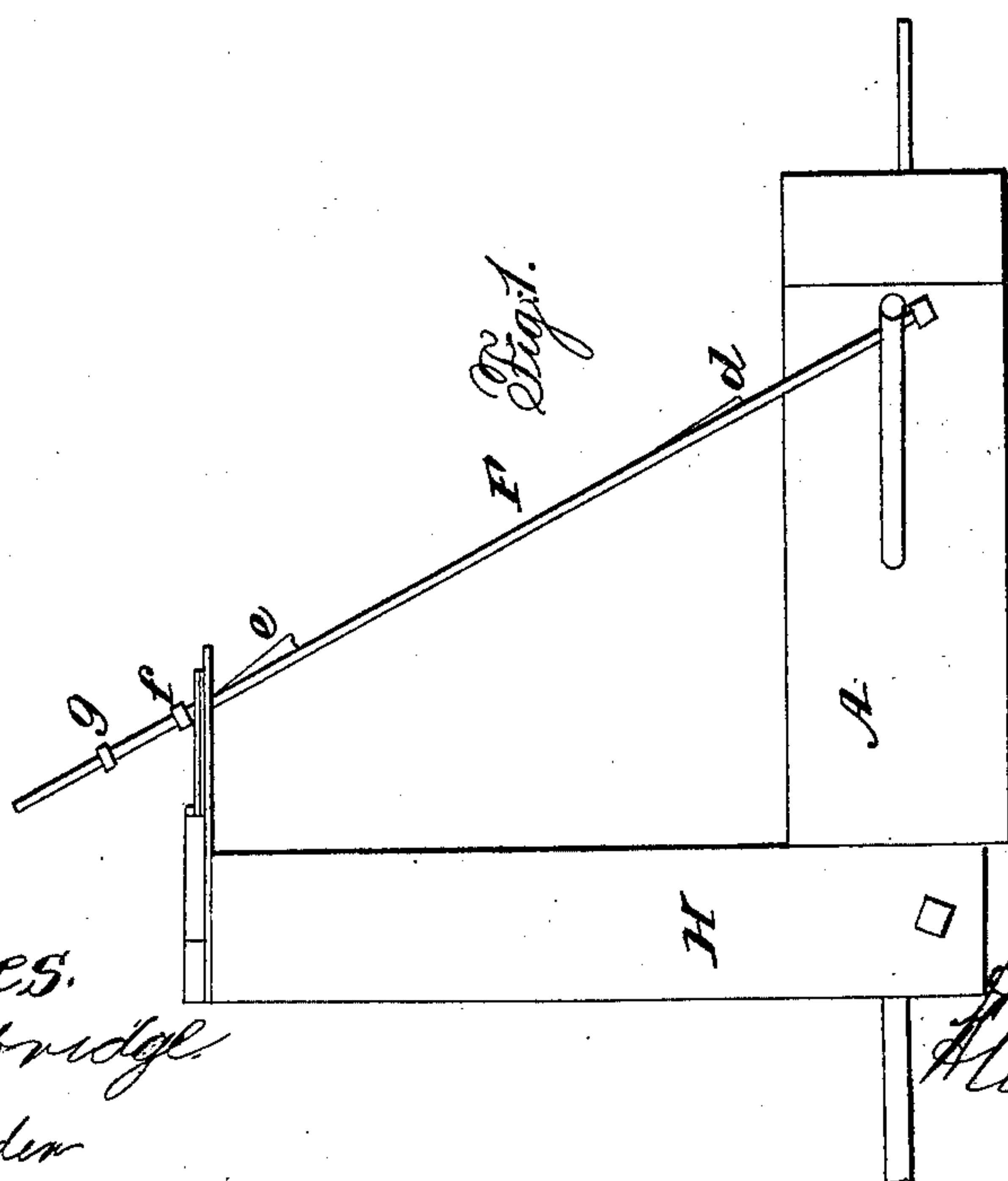
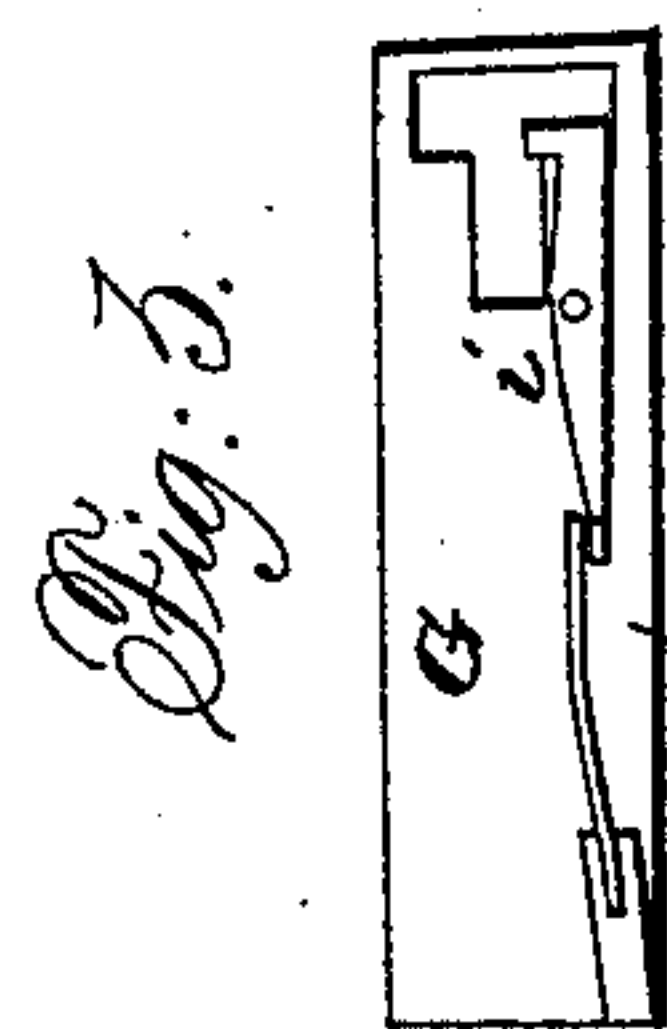
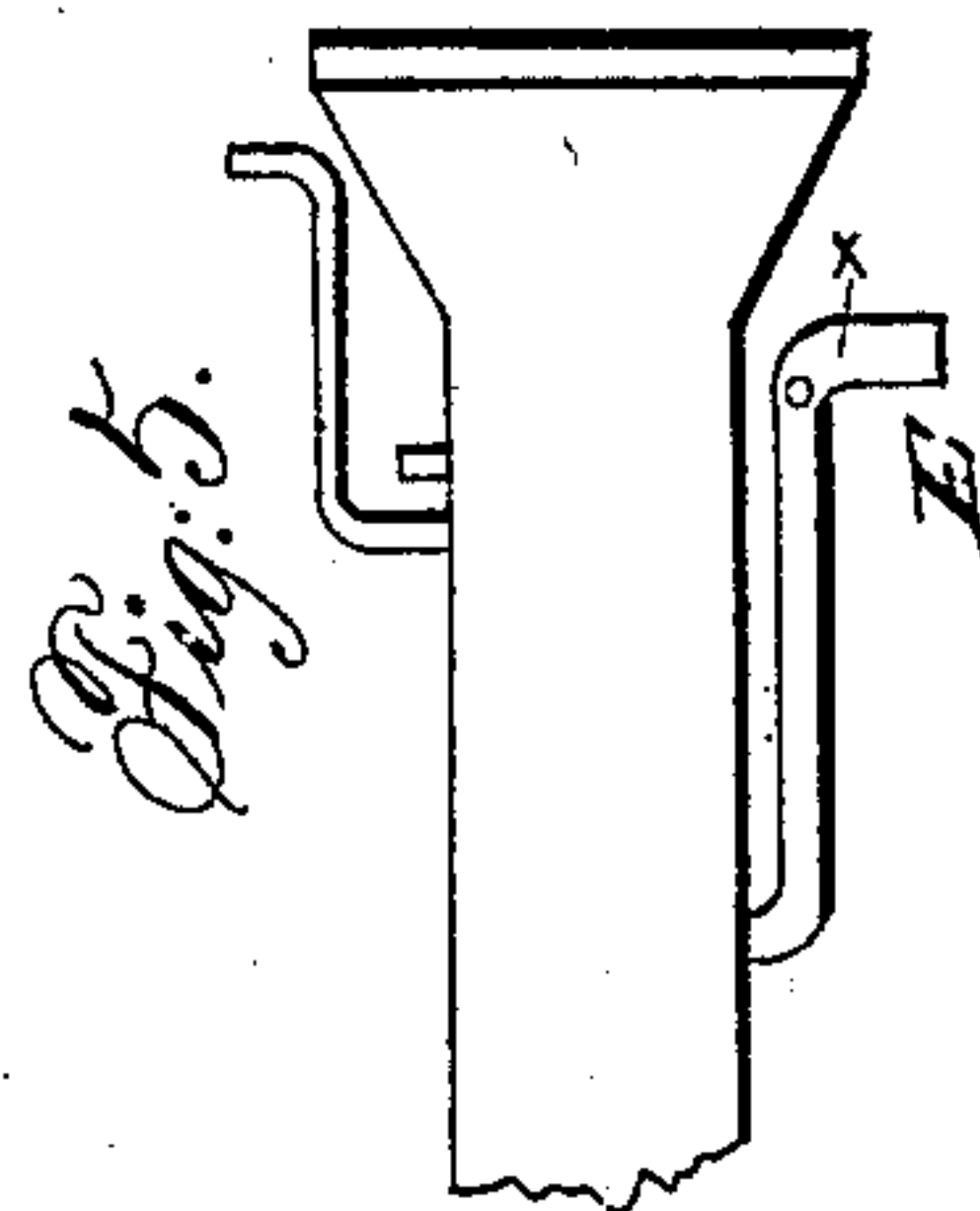
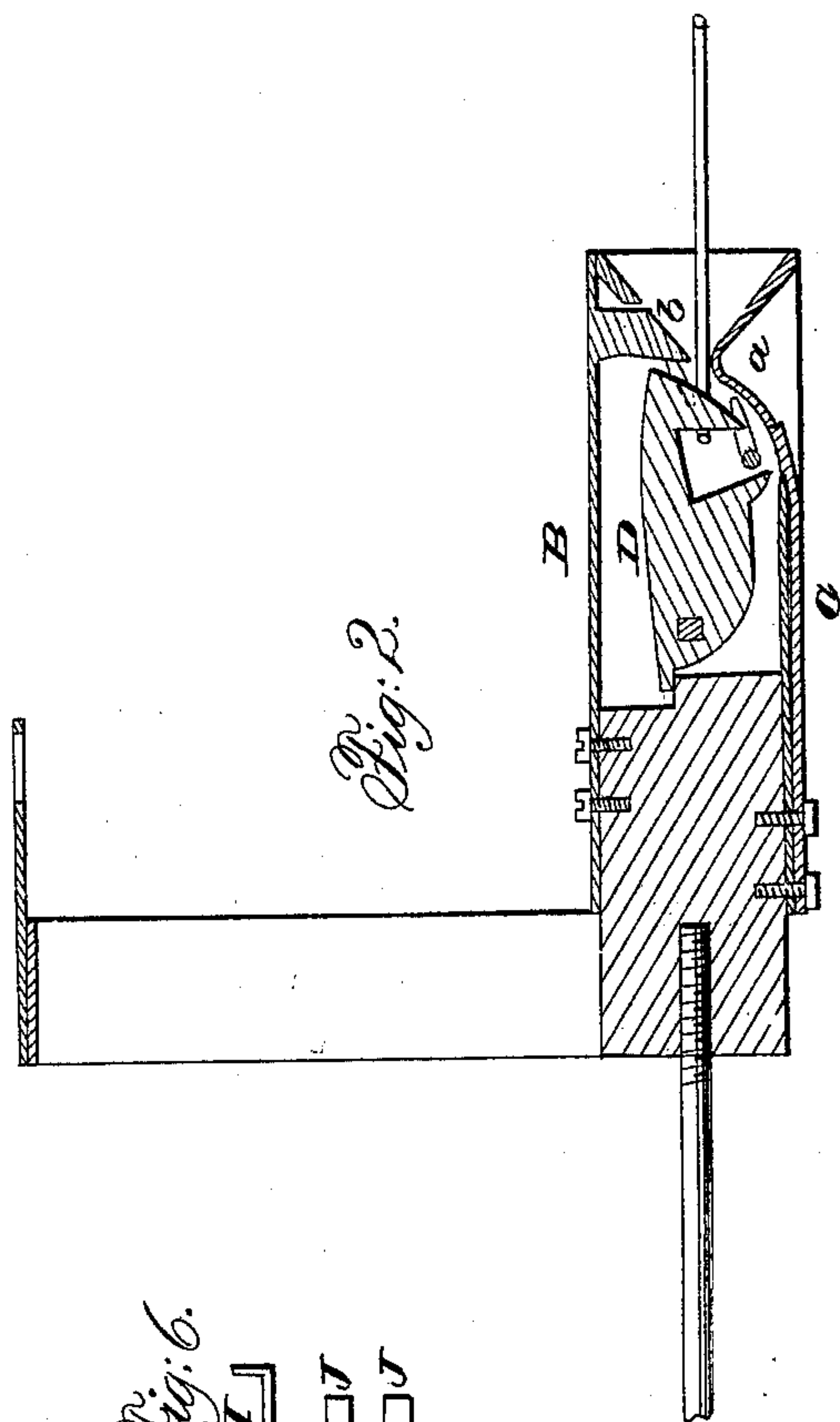


A. HARTMAN.

Car Coupling.

No. 57,504.

Patented Aug. 28, 1866.



Witnesses.
V D Stockbridge
D H Alexander

Inventor
Andrew Hartman
Alexander Mason
Attys

UNITED STATES PATENT OFFICE.

ANDREW HARTMAN, OF CANTON, OHIO.

IMPROVED CAR-COUPLING.

Specification forming part of Letters Patent No. 57,504, dated August 28, 1866.

To all whom it may concern:

Be it known that I, ANDREW HARTMAN, of Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Car-Couplers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

In the annexed drawings, making part of this specification, A represents a bumper, which consists of a metallic box with two permanent sides, with springs for its top and bottom, the top spring being marked B and the bottom one C. The bottom spring consists of two plates, as seen in the figure. The bumper is provided with a square mouth, the sides of which mouth recede, as shown.

The outer ends of the springs B and C are so constructed as to form, when the coupler is not being operated, a continuation of the receding sides of the bumper-mouth, as shown in Figures 2 and 4.

D represents the coupling-hook, which is constructed somewhat in the shape shown, being a metallic bar with an opening cut in it, or a slot, which receives the end of the link. This hook has connected to it a crank-rod, E, which operates it, raising or lowering it to catch or loose the link. This crank-rod has a hole through it at *x*, through which the end of a rod, F, passes. The other end of the rod F passes up either to the platform of the car or to the top, and serves to operate the crank-rod, and consequently the hook D.

The rod F has several stops upon it, as seen at *d e f g*. The upper end of rod F passes through a T-shaped opening in a plate, G, which said plate is secured upon the top of the uprights H. These uprights are either erected upon the rear of the bumper or upon the platform; or, if the rod is to pass up to the top of the car, the plate can be secured upon the top of the car. The rod F is caught in

the plate G by means of a small lever, *i*, which is operated by a spring, *m*.

By means of the stops on the rod F the hook D can be fastened down or up at the will of the operator.

Passing through the bumper near its forward end is a small crank-shaft, I, which has upon it two prongs, J J, which said prongs bear upon the under spring, C, to press it down when the crank is turned partially around. The forward point of the hook, which catches the link, drops between the prongs J J and catches upon the shaft I, thus, when the link is once caught, effectually preventing its escape.

The forward ends of the springs B and C, forming a portion of the top and bottom of the receding mouth, readily allow the link when it strikes in the mouth to pass back to the hook D.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The arrangement of the hook D, the crank-rod E, the rod F, with its stops, and the plate G, constructed and used as and for the purpose specified.

2. The arrangement with the bumper A of the springs B and C, with their ends forming portions of bottom and top of the receding mouth, as and for the purpose specified.

3. The arrangement of the crank-shaft I, provided with prongs J J, with the spring C and hook D, the several parts being constructed substantially as and for the purpose specified.

As evidence that I claim the foregoing I have hereunto set my hand in the presence of two witnesses.

ANDREW HARTMAN.

Witnesses:

A. HURFORD,
GEO. W. RAFF.