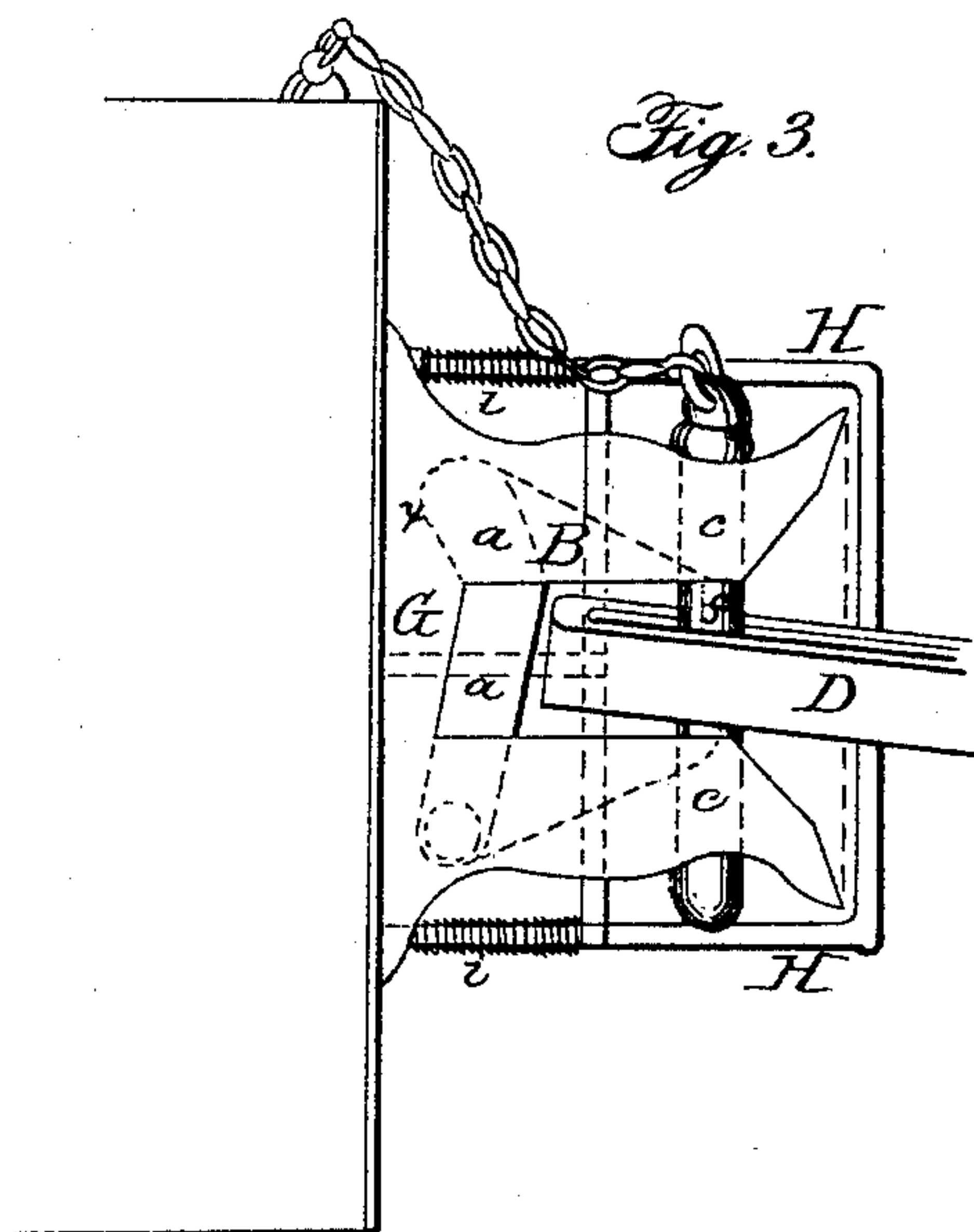
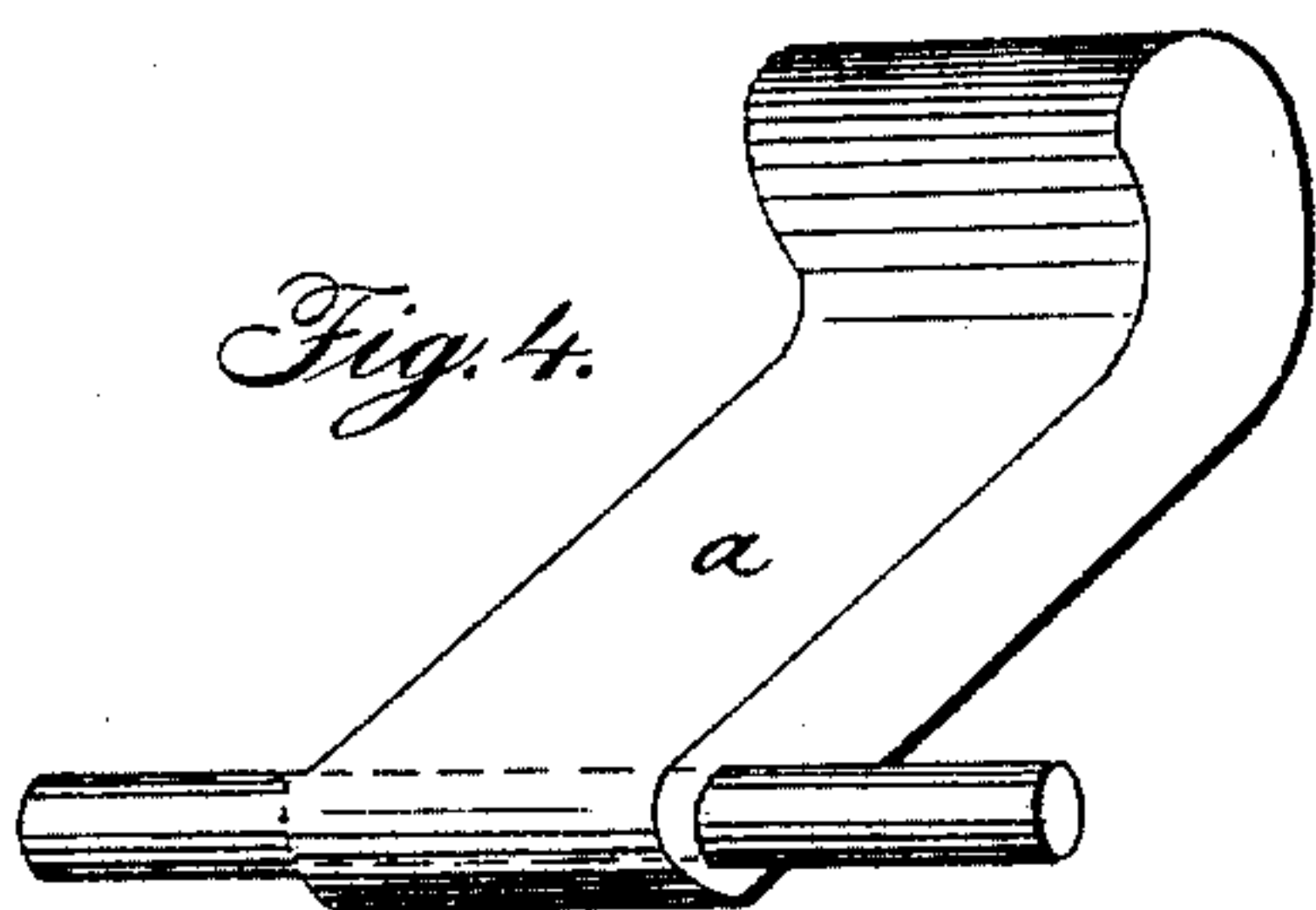
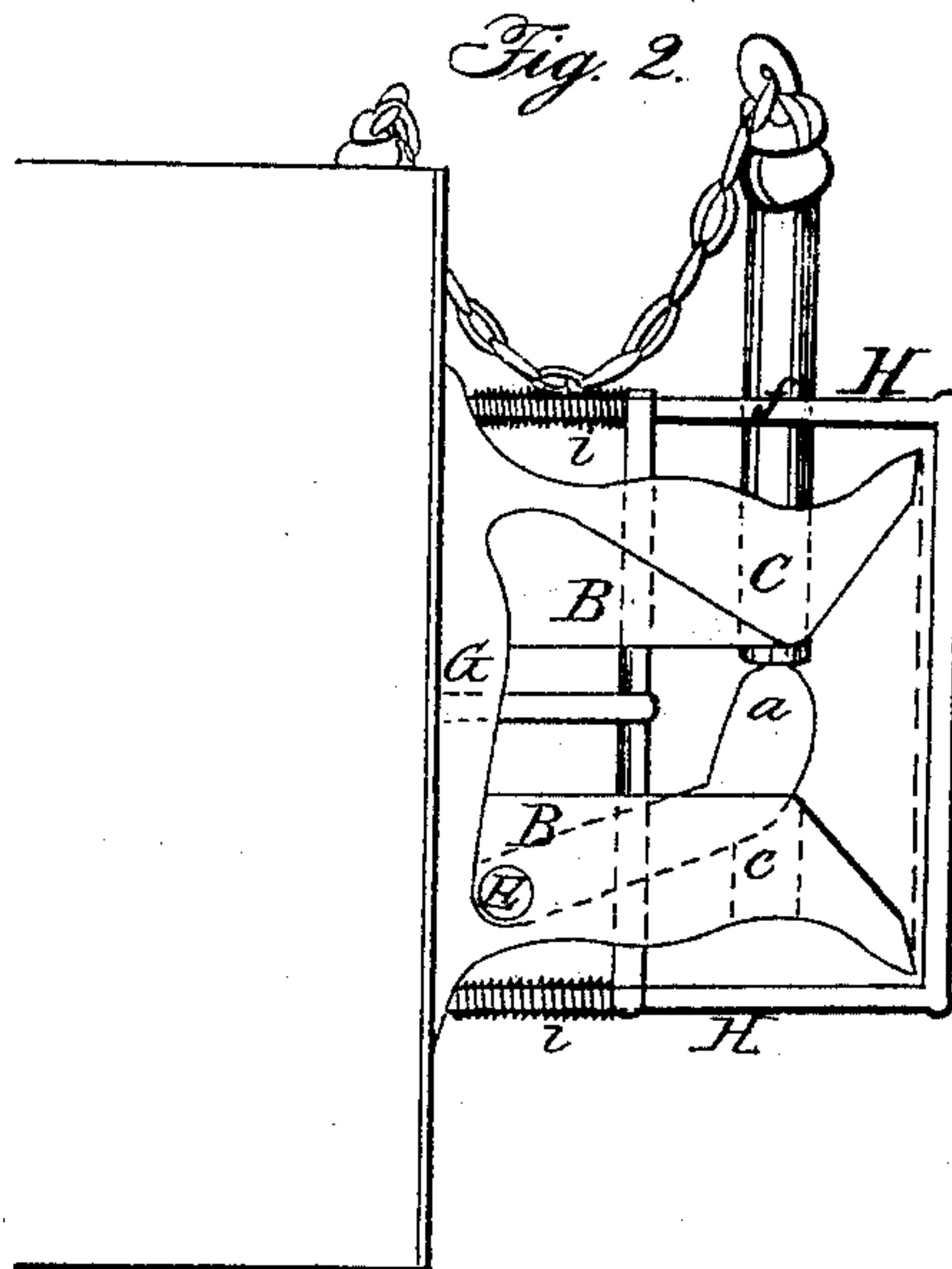
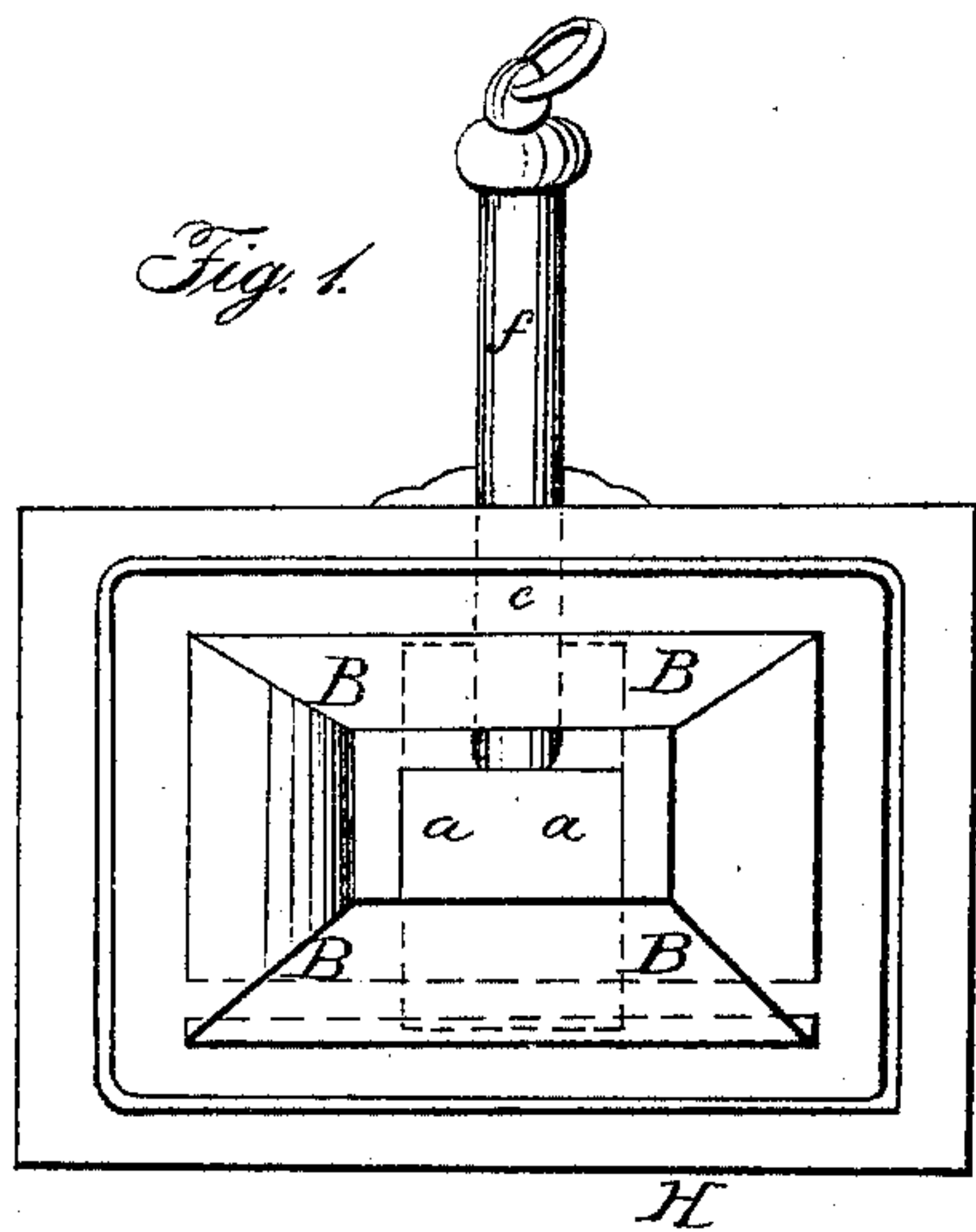


J. J. VAUGHAN.

Car Coupling.

No. 28,444.

Patented May 22, 1860.



Witnesses:

S. R. Shivers
J. H. Alexander

Inventor:

Joseph J. Vaughan

UNITED STATES PATENT OFFICE.

JOSEPH J. VAUGHAN, OF ALEXANDRIA, VIRGINIA, ASSIGNOR TO HIMSELF AND S. R. SHINN.

CAR-COUPLER.

Specification of Letters Patent No. 28,444, dated May 22, 1860.

To all whom it may concern:

Be it known that I, JOSEPH J. VAUGHAN, of Alexandria, in the county of Alexandria and State of Virginia, have invented certain new and useful Improvements in Railroad-Car Couplers; and I do hereby declare the following to be 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 which—

Figure (1) is a plan view; Figs. (2) and (3) sectional views, showing different positions of the tumbler; Fig. (4) a perspective of the tumbler and bolt.

The nature of my invention consists in the combination and arrangement of the box and tumbler as constructed—with the skeleton bumper for the purpose hereinafter mentioned.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

(G) represents the box—the exterior of which may be constructed in the usual form. On the inside bottom of this box is an inclined recess, which inclines from the mouth and becomes deeper as it recedes. Within this recess is placed the tumbler (*a*), which is pivoted or hinged at its lower end by means of bolt (E). The precise construction of the tumbler (*a*) is shown in Fig. (4). It will be particularly observed that the back of the box is also provided with a recess, for the reception of the tumbler when thrown up by the link. This recess must correspond in shape with that part of the tumbler with which it comes in contact, in order that the tumbler may be well supported and present a firm surface to the link, as fully shown in Fig. 3.

(*c*) represents the pin hole—which must

be immediately over the center of the rounded end of the tumbler—as seen in Fig. 2.

(*f*) is the pin, which rests upon the end of the tumbler, when the cars are about being coupled.

(H) represents a skeleton bumper—which extends a little over the mouth of the box, in order that it may first receive the shock of the collision and destroy it to a great extent by means of the springs (*i i i i*), which are placed behind, and support it, as shown in Figs. 2 and 3.

The operation of my machine is as follows: The tumbler (*a*) being in its proper position as shown in Fig. 2 and the pin resting upon it the link (D) strikes the tumbler, which flies up, and the pin drops through the link, thus coupling the cars, as seen in Fig. 3.

The great advantage which I derive from constructing the back of the box—to correspond in shape—with that of the tumbler—is, that a firmer surface is thus presented to the link, and by this means furnishing the most reliable coupling that is known and obviating the objection which is so successfully urged against the ball coupling, and others of a like nature.

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

The arrangement of the skeleton bumper (H) which surrounds the box, with the box, and with the tumbler for the purpose of relieving the tumbler from sudden and violent concussions substantially as herein specified.

JOSEPH J. VAUGHAN.

Witnesses:

T. H. ALEXANDER,
S. R. SHINN.