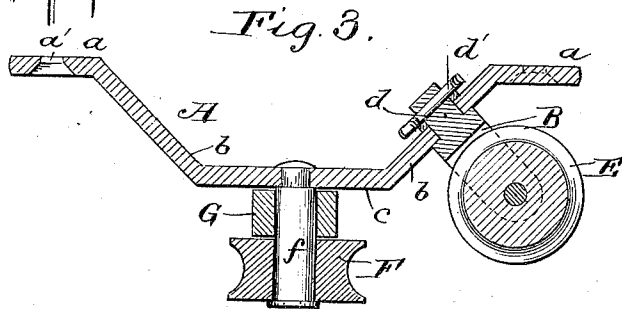
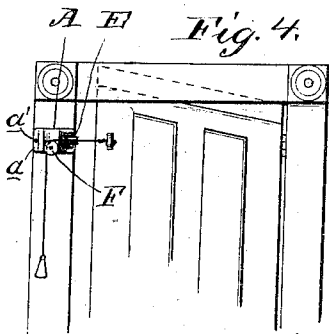
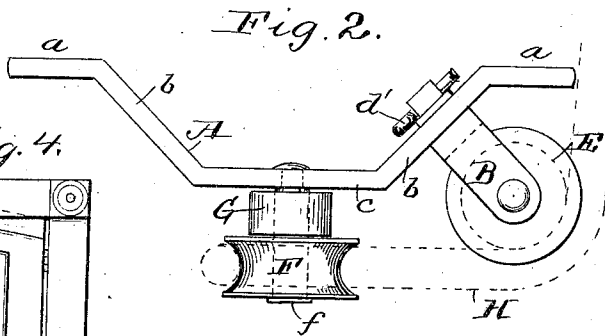
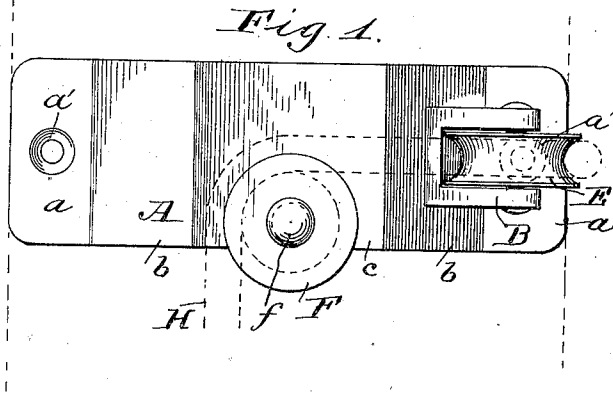


(No Model.)

C. BREED.
DOOR CLOSER.

No. 604,716.

Patented May 31, 1898.



Witnesses,
R. S. Gentry
Chas. W. Parker

Inventor,
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By Milo B. Livingston
attys

UNITED STATES PATENT OFFICE.

CHANCY BREED, OF FARWELL, MICHIGAN.

DOOR-CLOSER.

SPECIFICATION forming part of Letters Patent No. 604,716, dated May 31, 1898.

Application filed October 8, 1897. Serial No. 654,556. (No model.)

To all whom it may concern:

Be it known that I, CHANCY BREED, a citizen of the United States, residing at Farwell, in the county of Clare and State of Michigan, have
5 invented certain new and useful Improvements in Door and Gate Pulleys; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which
10 it appertains to make and use the same.

This invention relates to an improvement in door and gate pulleys; and it consists in the construction and arrangement of parts hereinafter described, and definitely pointed out in
15 the claim.

The special object of the invention is to provide a device which can be positively and firmly secured to a door or gate post and carry
20 angularly-arranged pulleys over which the weighted cord passes. Heretofore it has been suggested to mount the angle-pulleys on a single base or frame, which has a single point or connection with the supporting-post. Such a construction has been found objectionable,
25 and my invention is designed to overcome such objections.

In the accompanying drawings, wherein like letters of reference indicate corresponding parts, Figure 1 is an elevation showing the
30 support in dotted lines. Fig. 2 is an edge view of the device, and Fig. 3 is a section taken longitudinally through the device. Fig. 4 is a view showing the invention as attached to a door and door-frame.

A designates a base or carrying plate which is formed with the flat end portions *a*, the inclined portions *b*, and the central flat connecting portion *c*. The end portions are perforated, as at *a'*. On the inclined portion *b* at
40 one end is mounted a yoke B, having a stem *d* passing through an opening in the inclined portion and projecting inwardly beyond the same, at which point a removable key *d'* is passed through an opening through the ends,
45 so that the yoke can be readily attached to and detached from the frame. Between the

arms of the yoke is mounted the grooved pulley E, the same being carried on a suitable spindle. This pulley is arranged parallel or
50 in line with the frame, and is what I shall term the "horizontal" pulley.

F designates the vertically-disposed pulley, mounted on a shouldered spindle *f*, the shouldered end of which passes through an
55 opening in the lower edge of the central portion of the base-plate A, the end being swaged or riveted over to form a secure fastening. Interposed between the pulley F and the plate A is a small roller or washer G, loosely mounted
60 to move freely and serve the dual purpose of an antifriction-roller for the pulley and also as an emergency roller for the cord or chain.

The cord H is attached to the gate or door, passes around the horizontal pulley, over the
65 vertical pulley, and carries a weight on its lower end, as is usual.

In applying the device the horizontal pulley is removed, disclosing the securing-opening at that end. The plate is then secured to the
70 support by suitable screws passing through the opening *a'*. The horizontal pulley is then reapplied, the cord properly adjusted, and the device is in working condition.

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

A door and gate pulley device consisting of a substantially U-shaped plate having inclined portions and a flat connecting portion, a pulley removably secured to one of the
80 inclined portions, a vertically-disposed pulley, a spindle secured to the flat portion of the plate and on which the vertical pulley is mounted, and a roller-washer, loosely supported on the spindle between the plate and the pulley, substantially as described.
85

In testimony whereof I affix my signature in presence of two witnesses.

CHANCY BREED.

Witnesses:

D. R. WAIT,
E. B. EVANS.