

(No Model.)

Z. WOODWORTH.
BARREL COVER.

No. 429,671.

Patented June 10, 1890.

Fig. 1.

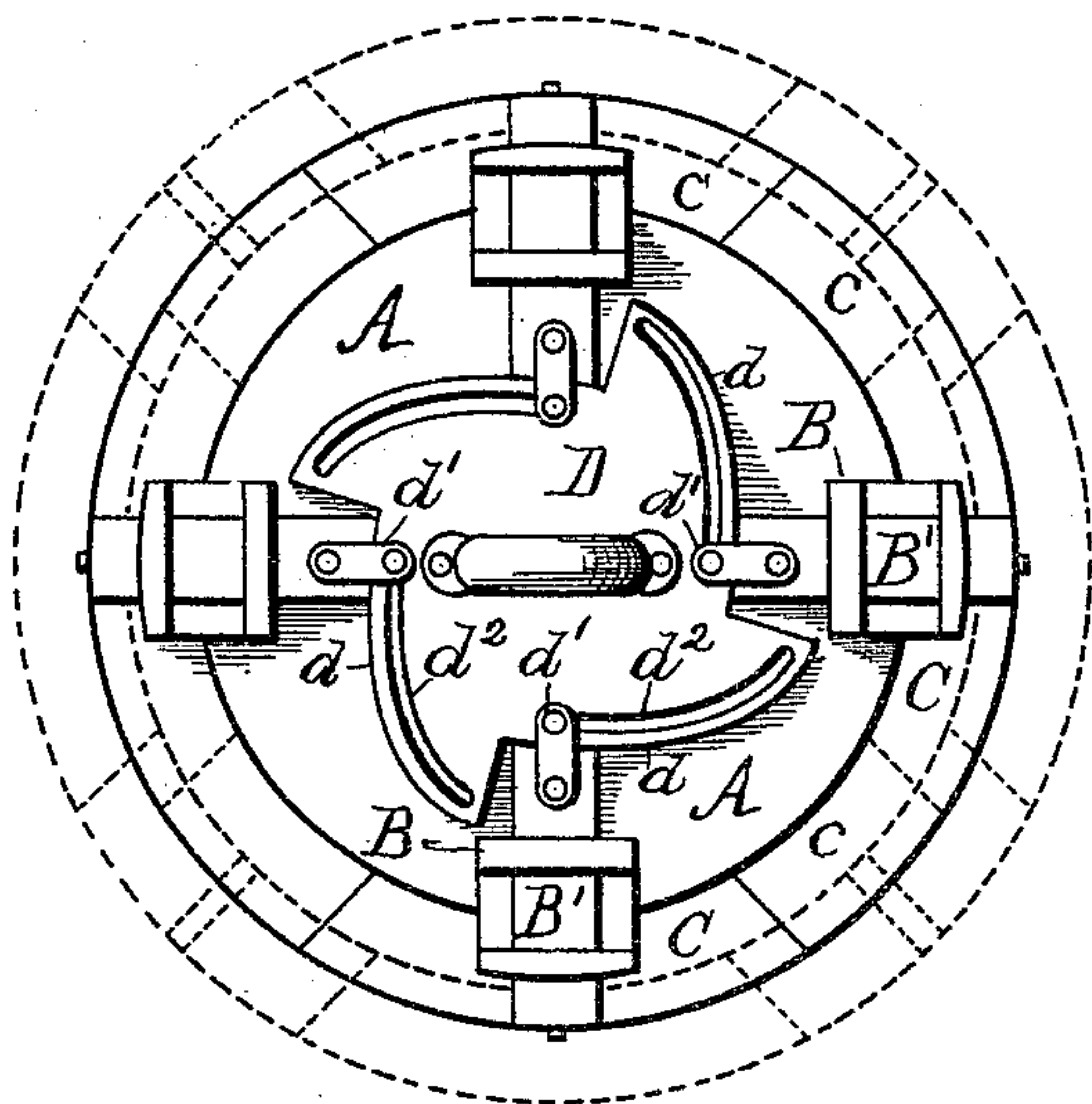
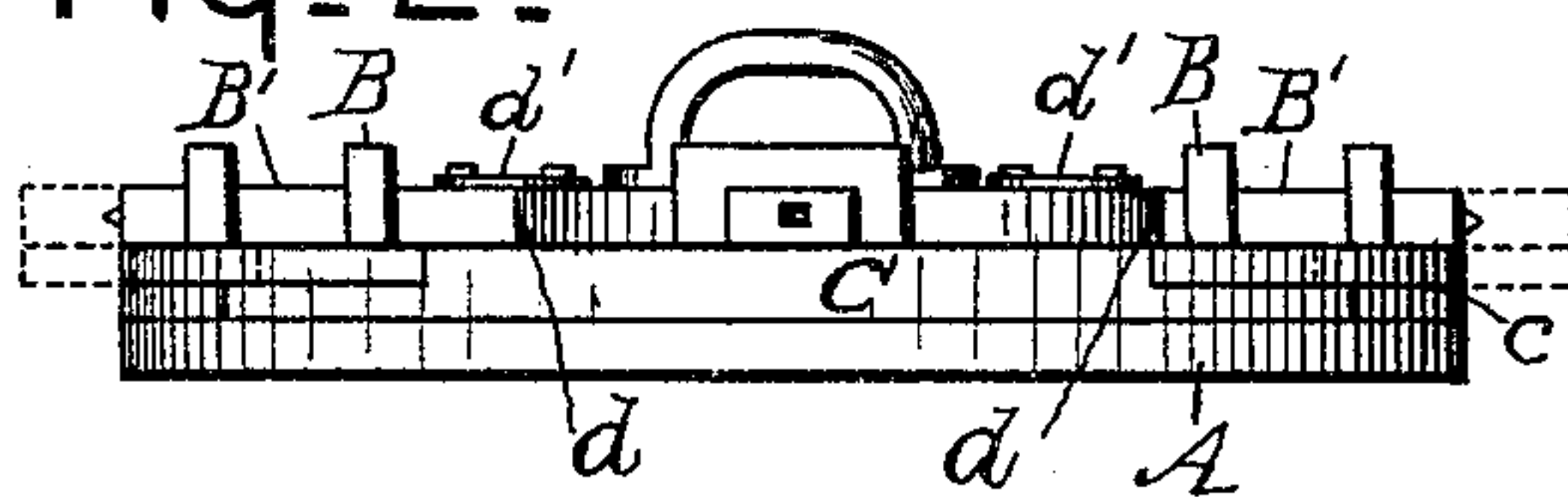


Fig. 2.



WITNESSES

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ZACHARY WOODWORTH, OF NANKIN, MICHIGAN.

BARREL-COVER.

SPECIFICATION forming part of Letters Patent No. 429,671, dated June 10, 1890.

Application filed February 17, 1890. Serial No. 340,738. (No model.)

To all whom it may concern:

Be it known that I, ZACHARY WOODWORTH, a citizen of the United States, residing at Nankin, county of Wayne, State of Michigan, have
5 invented a certain new and useful Improvement in Barrels; and I 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 it pertains to make and
10 use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to certain improvements on the devices described in my application for Letters Patent filed August 22, 1889, Serial No. 321,619, and more particularly to the interior diaphragm or follower therein described.

It has been found that the follower described
20 in said application, while it answered for pork and other meat barrels, was not applicable for pickle-barrels or barrels in which other small vegetables are kept, since when the follower was inserted and supported by the
25 blocks about the middle of the barrel the space between the edge of the follower and the sides of the barrel permitted the smaller articles—such as vegetables—to escape above the follower.

30 My present invention aims to produce a follower which, when inserted in the barrel and supported horizontally at the point of the barrel's greatest diameter, will still be practically an imperforate diaphragm from side
35 to side of the barrel. This I accomplish by a combination of devices and appliances hereinafter described and claimed.

In the drawings, Figure 1 is a plan view of my follower. Fig. 2 is a side elevation of the
40 same.

In carrying out my invention, A represents the main portion of my follower. Held to this main portion by the frames B are the blocks B', which slide in and out upon said
45 main portion. Rigidly attached to the outer ends of these blocks are the segmental-shaped pieces or strips C. They may be engaged in any suitable manner to the blocks, and when the four pieces are in position they form a
50 circular band overlapping the edge of the main portion. By forcing the blocks toward

or from the center of the main portion the segmental pieces are thrown in or out, thus enlarging and reducing the diameter of the diaphragm. The segmental pieces C are made
55 to lap each other, as at c, so that when they are moved outwardly they still form a complete ring around the edge of the main portion, as illustrated by the dotted lines in Fig. 1.

It is desirable to simultaneously move the
60 segmental sections radially, and it is also desirable that when extended or moved outward their full limit to bear against the barrel the segmental sections or pieces C shall offer no orifices, perforations, or spaces through which
65 it would be possible for particles of vegetables or small pickles or other articles to pass upward. To accomplish these purposes the segmental sections not only overlap at all their end portions, but are so constructed and
70 combined with their adjusting mechanism that no vertical slots are employed in the sections for the passage of guide-pins on the main body A of the follower. The sections, therefore, are each provided on the upper
75 side with an attached slide-bar B', which moves or slides in one of the guide-frames B, fixed on the main body of the follower. These slide-bars all extend radially, and as they are attached to the sections C and each moves
80 rectilinearly in a guide-frame B it follows that by simultaneously sliding the bars the sections are also moved radially in unison and in rectilinear or right lines in contradistinction to swinging on pivots.

To simultaneously move the slide-bars they are engaged with a cam-plate D, adapted to oscillate in a horizontal plane on the main body A, and provided with a rigid grip or
90 handle E for operating the same. The cam-plate is provided with cam-edges d, bearing against the inner ends of the slide-bars, and the latter are connected by links d' with curved grooves d² in the cam-plate, whereby each slide-bar is positively moved in both di-
95 rections.

What I claim is—

1. An internal diaphragm or follower for a barrel, consisting of the main body, the expandible ring composed of a series of radially-
100 movable segmental sections having overlapping ends, a series of radially-sliding bars

attached to the sections, and an oscillating cam-plate for simultaneously moving the bars and the sections in right lines, substantially as described.

- 5 2. An internal diaphragm or follower for a barrel, consisting of a main body having guide-frames, an expansible ring composed of radially-movable segmental sections having overlapping ends, and provided with slide-
10 bars moving in the guide-frames, and an oscillatory cam-plate engaging the slide-bars and serving to move the same in right lines, substantially as described.

3. An internal diaphragm or follower for a

barrel, consisting of a main body having 15 guide-frames, an expansible ring composed of radially-movable segmental sections having overlapping ends, and provided with slide-bars moving in the guide-frames, an oscillatory cam-plate having cam-edges and curved 20 grooves and links connecting the slide-bars with the grooves, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

ZACHARY WOODWORTH.

Witnesses:

M. A. REEVE,
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