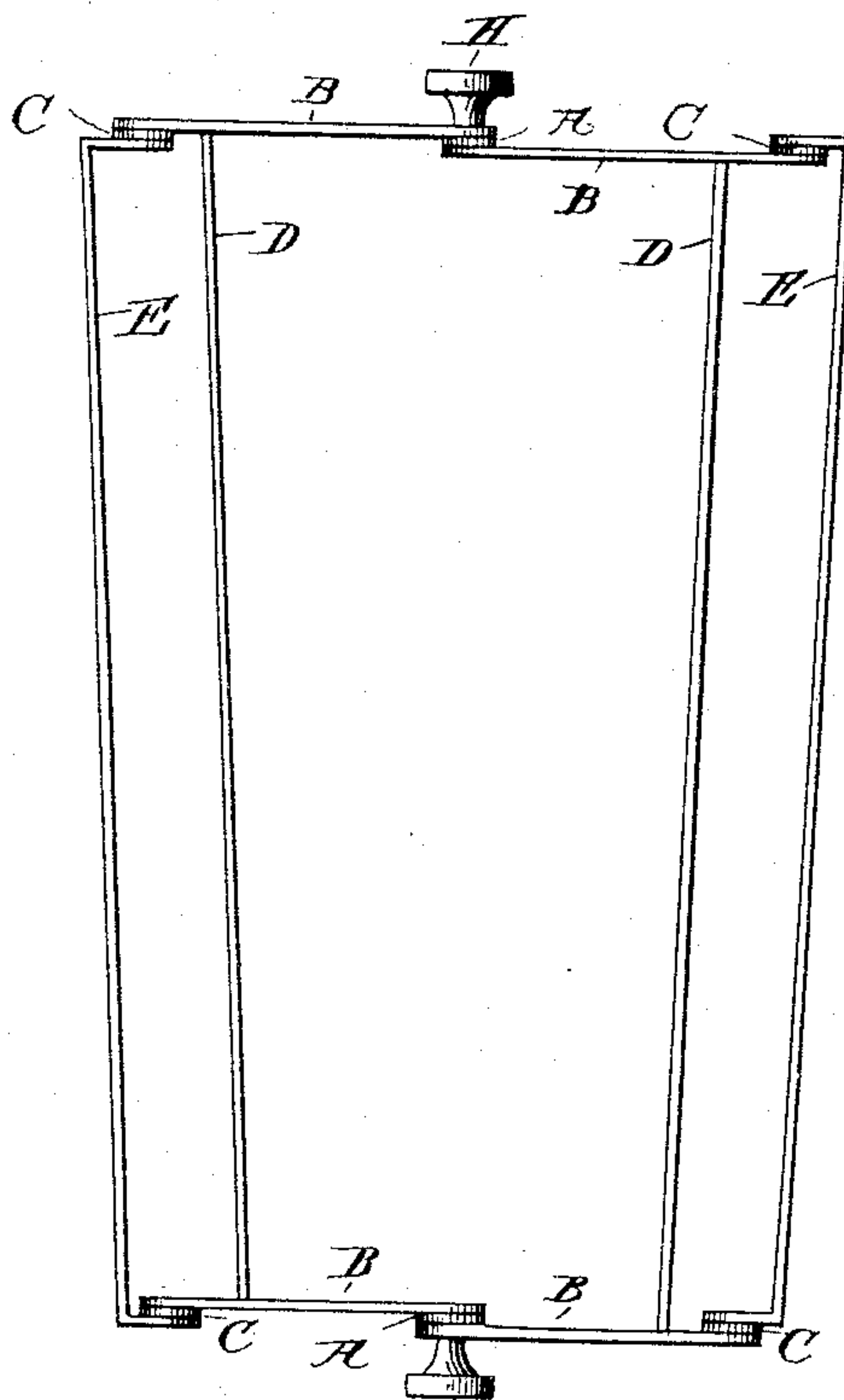
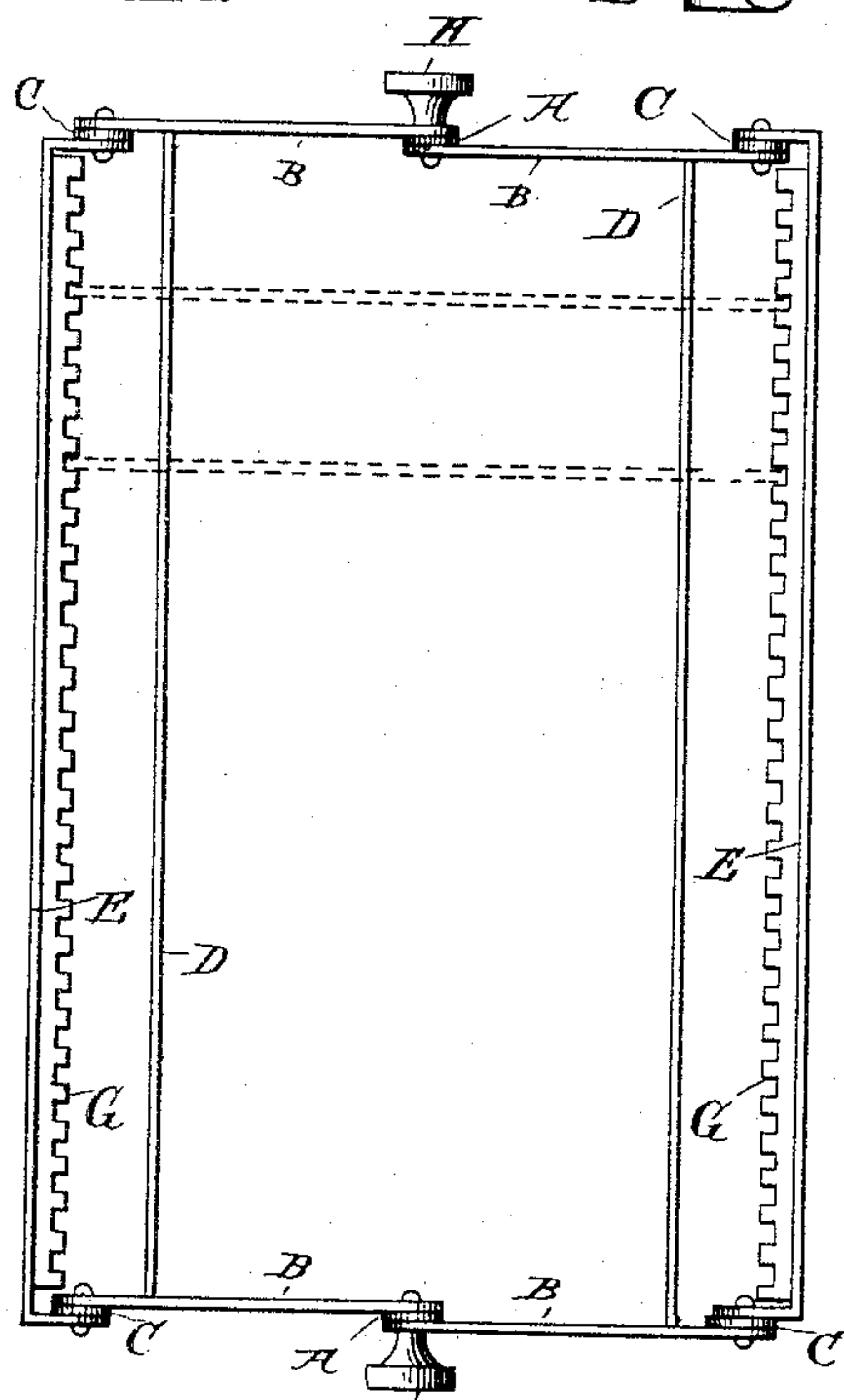
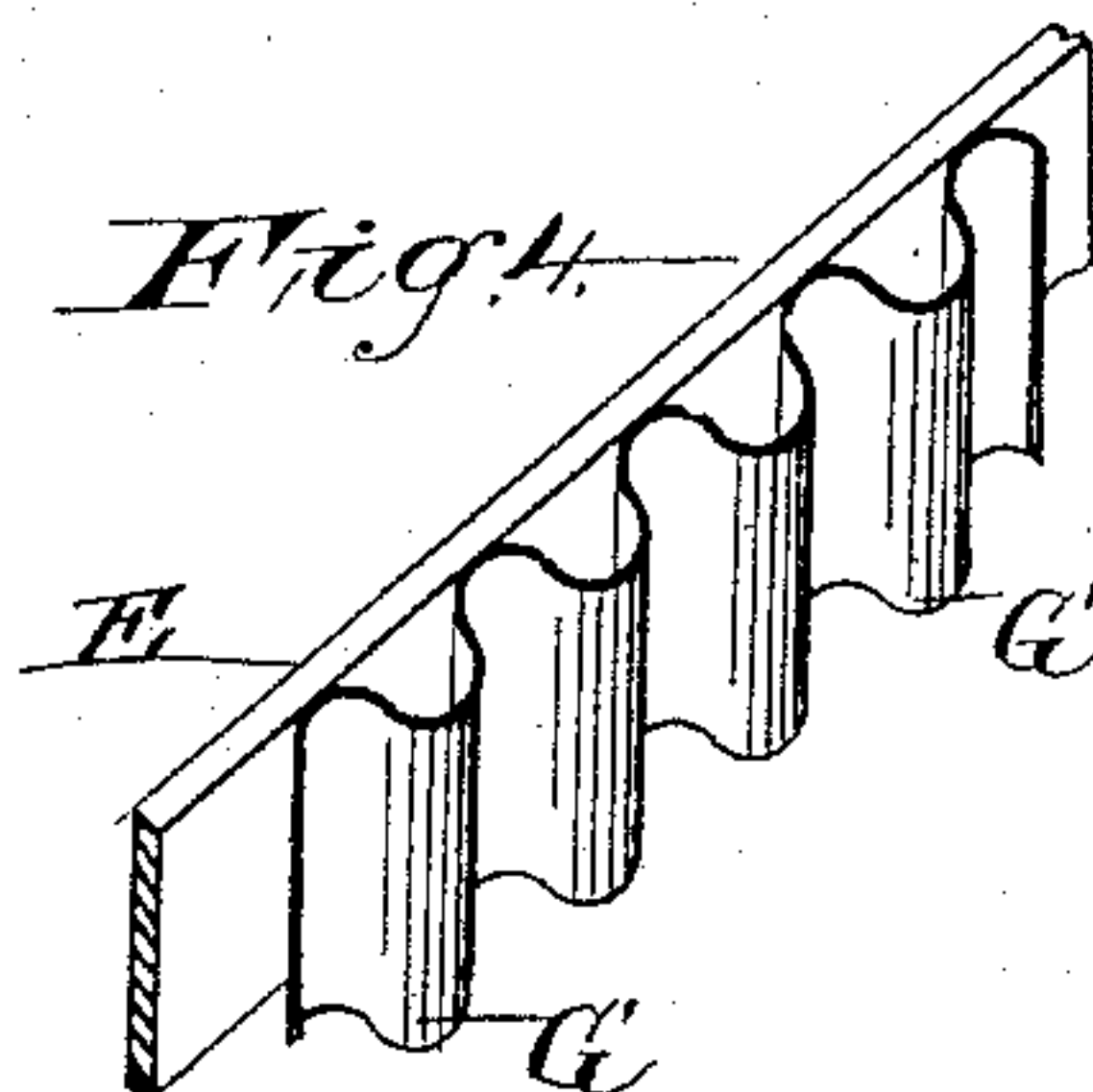
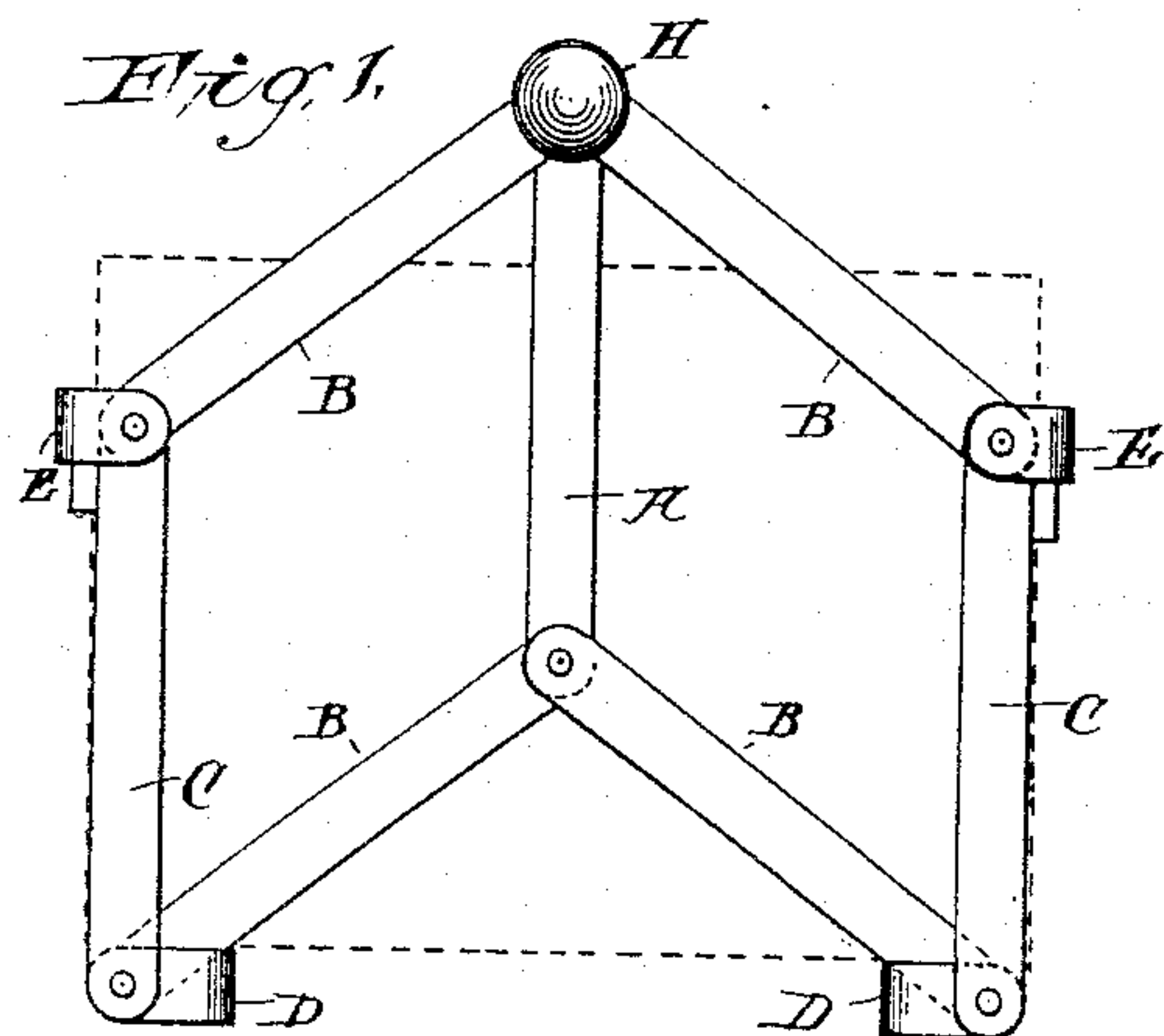


(No Model.)

E. B. BARKER.
PLATE WASHING FRAME.

No. 411,487.

Patented Sept. 24, 1889.



WITNESSES:
Charles W. Benjamin
Frederick Smith

INVENTOR
E. B. Barker
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UNITED STATES PATENT OFFICE.

ERASTUS B. BARKER, OF NEWARK, NEW JERSEY.

PLATE-WASHING FRAME.

SPECIFICATION forming part of Letters Patent No. 411,487, dated September 24, 1889.

Application filed April 25, 1889. Serial No. 308,584. (No model.)

To all whom it may concern:

Be it known that I, ERASTUS B. BARKER, a citizen of the United States, and a resident of Newark, in the county of Essex and State of New Jersey, have invented a certain new and useful Plate-Washing Frame, of which the following is a specification.

My invention relates to a new and useful device for washing photographic and other glass plates; and it consists in an adjustable rack or frame so constructed and arranged that a number of plates of different sizes may be received and held therein for submersion in the washing-liquid, and also so that plates of different sizes may be held therein at the same time of submersion.

In the drawings, Figure 1 illustrates an end view. Fig. 2 illustrates a plan view. Fig. 3 illustrates a plan view showing one end contracted to fit plates of different sizes. Fig. 4 is an enlarged detailed view of a modified construction of the plate-supporting rack attached to the upper side bars of the frame.

A A are two vertical bars in the end frames, and B B B B are four bars at each end of the device, pivoted, respectively, to the vertical bars A A.

C C C C are other vertical bars pivoted to the outer ends of the bars B B B B, &c., at each end.

D D are two bars fastened to the lower ends of the bars C C C C, thus connecting the two end frames of the device at the lower part, and E E are similar bars at the upper ends of the bars C C C C. The bars D and E constitute the side frames. The bars D D extend inwardly beyond the vertical line of the bars E, and the bars E E are provided on their inner faces with corrugated metallic or notched wooden surfaces G G. (Shown in Fig. 4 at G' as made in corrugated metal.)

H H are set-screws which are threaded, respectively, onto the pivots which unite the ends of the uppermost bars B, there being preferably a set-screw at each end of the apparatus. They may be applied to the lowermost sets of the bars B, however, if preferred.

It will be noticed that all the eight bars B at each end of the apparatus are of the same length, and that they are all pivoted to each other at their meeting ends, and that they are

also pivoted to the vertical bars C C C C at each end. Thus by the upward movement of the inner ends of these bars B, the bars turning on their respective pivots, the sides of the frame will be brought together in parallel relation to each other, thus restricting the space between them, and that by means of the set-screws H the frame may be held in its position as adjusted, and also that one end of the apparatus may be made somewhat smaller than the other end by collapsing the bars at that end more than at the other, as shown in Fig. 3, thus adapting it to hold plates of different sizes at the same time. The plates are supported on their lower edge by the bars D D, and are separated and supported laterally by the notches or recesses in the wooden or metallic inner facing-piece of the bars E. The bars E may themselves be given the corrugated or notched surface in any desired manner, instead of having the separate piece G or G' (see Fig. 4) attached to them, if preferred.

It will be noticed that all the bars A, B, and C may be made, as shown, all of the same length, thus reducing cost of manufacture. I do not limit myself, however, to this or any other detail of manufacture.

Having described my invention, I claim—

1. The combination, in a plate-washing device, of collapsible end frames comprising, essentially, four bars pivoted at their inner ends to a central bar and at their outer ends to the side frames, substantially as set forth.

2. The combination, in a plate-washing device, of collapsible end frames comprising, essentially, four bars pivoted at their inner ends to a central bar and at their outer ends to the side frames, and set-screws whereby the apparatus may be held in its position as adjusted, substantially as set forth.

3. The combination, in a plate-washing device, of collapsible end frames comprising, essentially, four bars pivoted at their inner ends to a central bar and at their outer ends to the side frames, and supports for the plates against vertical and lateral movement, located on the side frames, substantially as set forth.

4. The combination, in a plate-washing device, of collapsible end frames comprising, essentially, four bars pivoted at their inner

ends to a central bar and at their outer ends
to the side frames, and supports for the plates
against vertical and lateral movement, located
on the side frames, and set-screws whereby the
5 end frames may be held in their adjusted po-
sition, substantially as set forth.

Signed at New York, in the county of New

York and State of New York, this 23d day of
April, A. D. 1889.

ERASTUS B. BARKER.

Witnesses:

PHILLIPS ABBOTT,
FREDERICK SMITH.