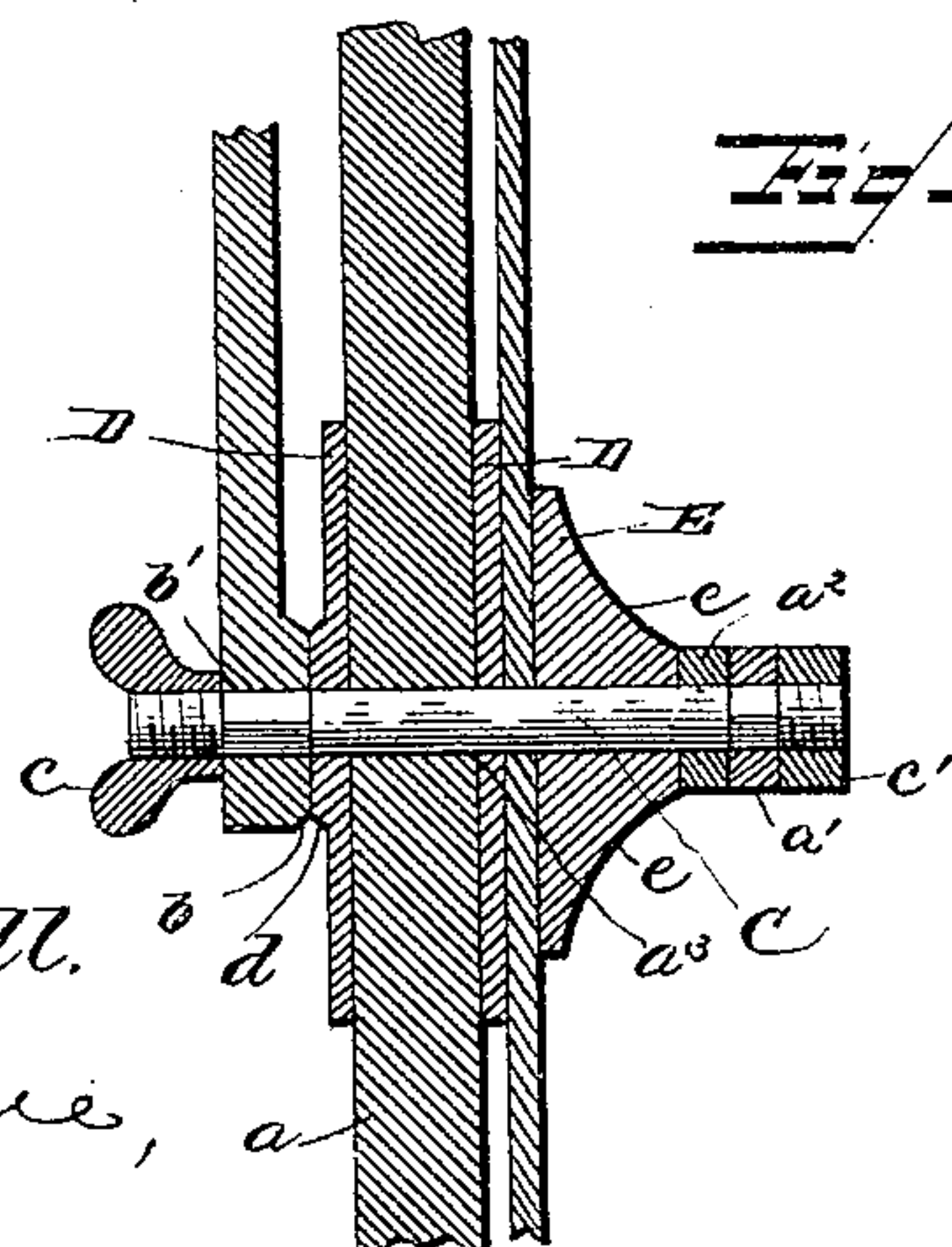
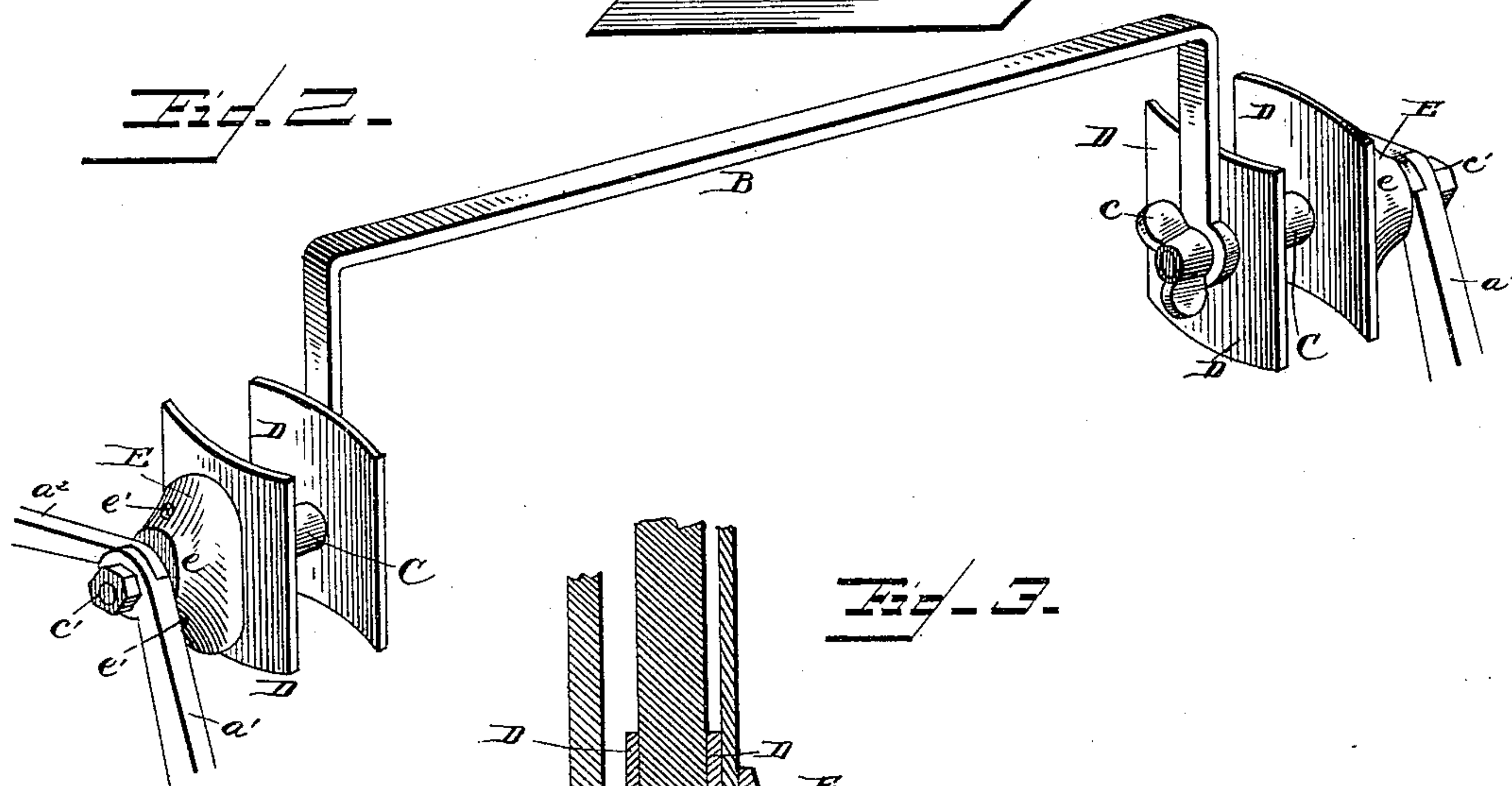
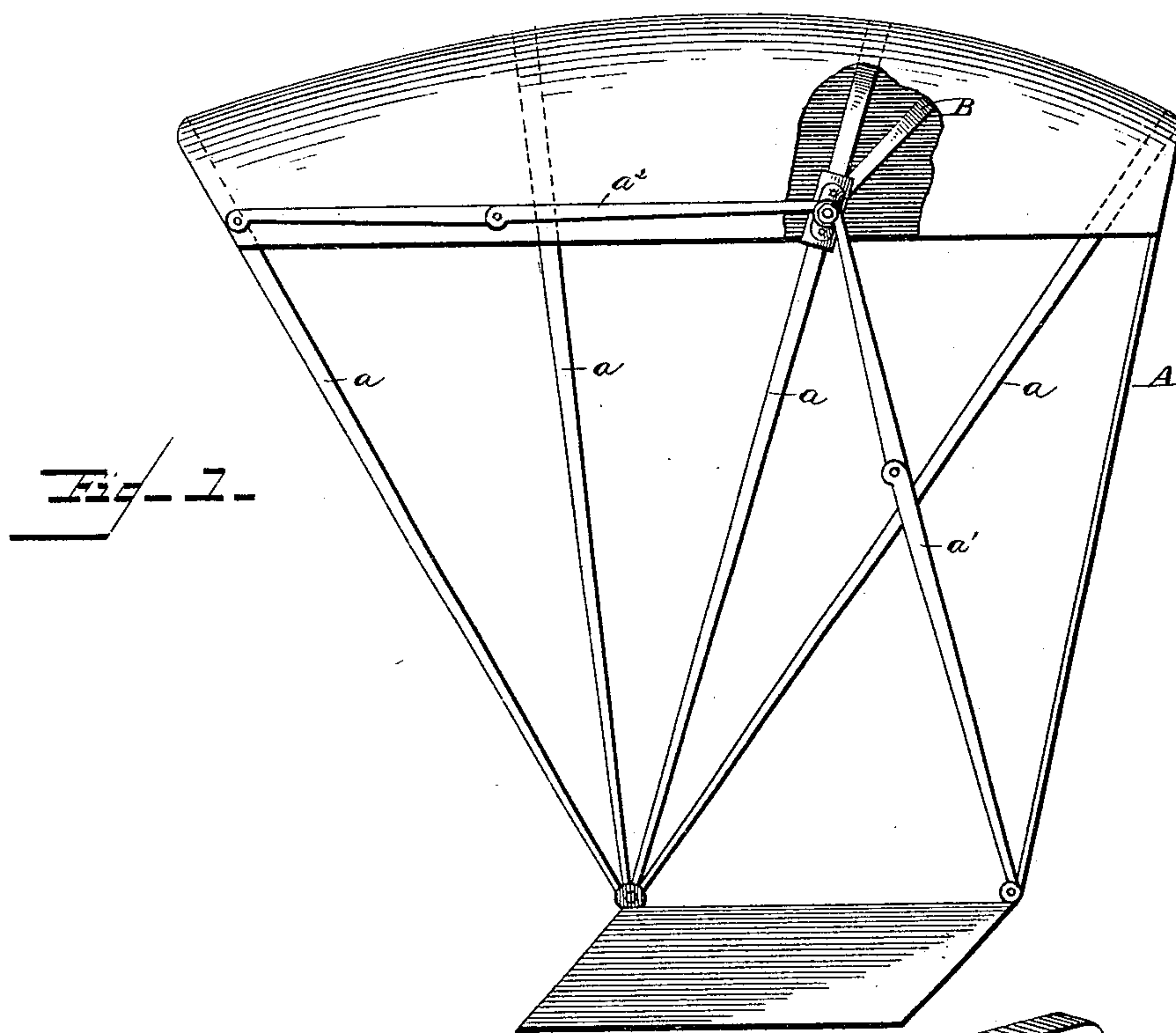


(No Model.)

F. HILL.
BUGGY TOP.

No. 389,222.

Patented Sept. 11, 1888.



WITNESSES,
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UNITED STATES PATENT OFFICE.

FRANCIS HILL, OF SANDUSKY COUNTY, OHIO.

BUGGY-TOP.

SPECIFICATION forming part of Letters Patent No. 389,222, dated September 11, 1888.

Application filed April 14, 1888. Serial No. 270,671. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS HILL, a citizen of the United States, and a resident of Sandusky county, in the State of Ohio, have invented certain new and useful Improvements in Buggy-Tops, of which the following is a specification.

This invention relates to a device for raising and lowering the top of a buggy from the inside; and its object is to provide a device of this character possessing advantages in point of simplicity, durability, inexpensiveness, and general efficiency.

In the drawings, Figure 1 is a side elevation of a buggy-top embodying my invention, parts being broken away to show the construction. Fig. 2 is a perspective view of the device removed. Fig. 3 is a detail sectional view of the connection between the braces and the raising and lowering device.

Corresponding parts in the figures are denoted by the same letters of reference.

Referring to the drawings, A designates a buggy-top comprising the ordinary bows, *a*, and the side and top braces, *a'* *a''*, respectively.

B designates an operating-rod, preferably approximately U-shaped, and provided at its ends with oppositely-disposed circular projections *b b*, having transverse eyes or perforations *b' b'*. This rod is disposed within the top of the buggy-top, and has secured in the eyes or perforations horizontal pins C C by means of set-screws *c c*. The pins C pass through oppositely-disposed eyes or perforations *a''* in one of the bows *a*. Plates D D are provided upon the pins C, one at each side of the bow, having concave inner faces conforming to the contour of said bow, while the outer faces of the inner plates have circular raised portions *d d*, against which the projections *b* rest. Collars E E are provided upon the pins, having tapering central projections, *e e*. The plates D and collars E are secured to the bow by bolts or screws *e' e'*, and the leather top is disposed between the outer plates and the collars. The outer portions of the pins pass through the inner ends of the top braces, through the adjoining ends of the side braces, and are provided at their outer screw-threaded ends with nuts *c' c'*. The portions of the pins which engage the side braces are formed an-

gular, and are located in corresponding eyes or recesses in said braces, so that when the bar B is operated the braces are carried thereby.

The operation and advantages of my invention will be readily understood by those skilled in the art to which it appertains.

The projecting arms of the operating-bar are normally rearwardly inclined and at an angle to the side braces, and when it is desired to lower the top the said bar is drawn forward, thus throwing the top sections of the side braces back and out of locked position. To raise the top, it is drawn up and the operating-bar reversed, thereby locking the top in this position.

It will be obvious that the above described device can be applied to any buggy-top by removing the pins connecting the braces and substituting the pins above described; and by the employment of my device the top can be raised or lowered effectively from the interior of the vehicle.

It will be further obvious that by unlocking one of the side braces from the exterior the corresponding brace upon the other side is also unlocked, thus permitting the top to be lowered from either side.

I claim as my invention--

1. An attachment for vehicle-tops, comprising an operating bar and pins secured at its ends and adapted to be rigidly secured to the side braces of the vehicle-top, substantially as set forth.

2. An attachment for vehicle-tops, comprising an operating-bar and pins secured at its ends adapted to be passed through one of the bows at each side through the top braces, substantially as set forth.

3. An attachment for vehicle tops, comprising an operating-bar, pins secured at its ends and adapted to be passed through one of the bows at each side, through the top braces, and rigidly secured to the side braces, and plates secured at each side of said bows, substantially as set forth.

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

FRANCIS HILL.

Witnesses:

GEO. A. HOOT,
CLARENCE HILL.