

(No Model.)

D. W. MARMON.

BOX SUPPORTER.

No. 318,384.

Patented May 19, 1885.

Fig. 1.

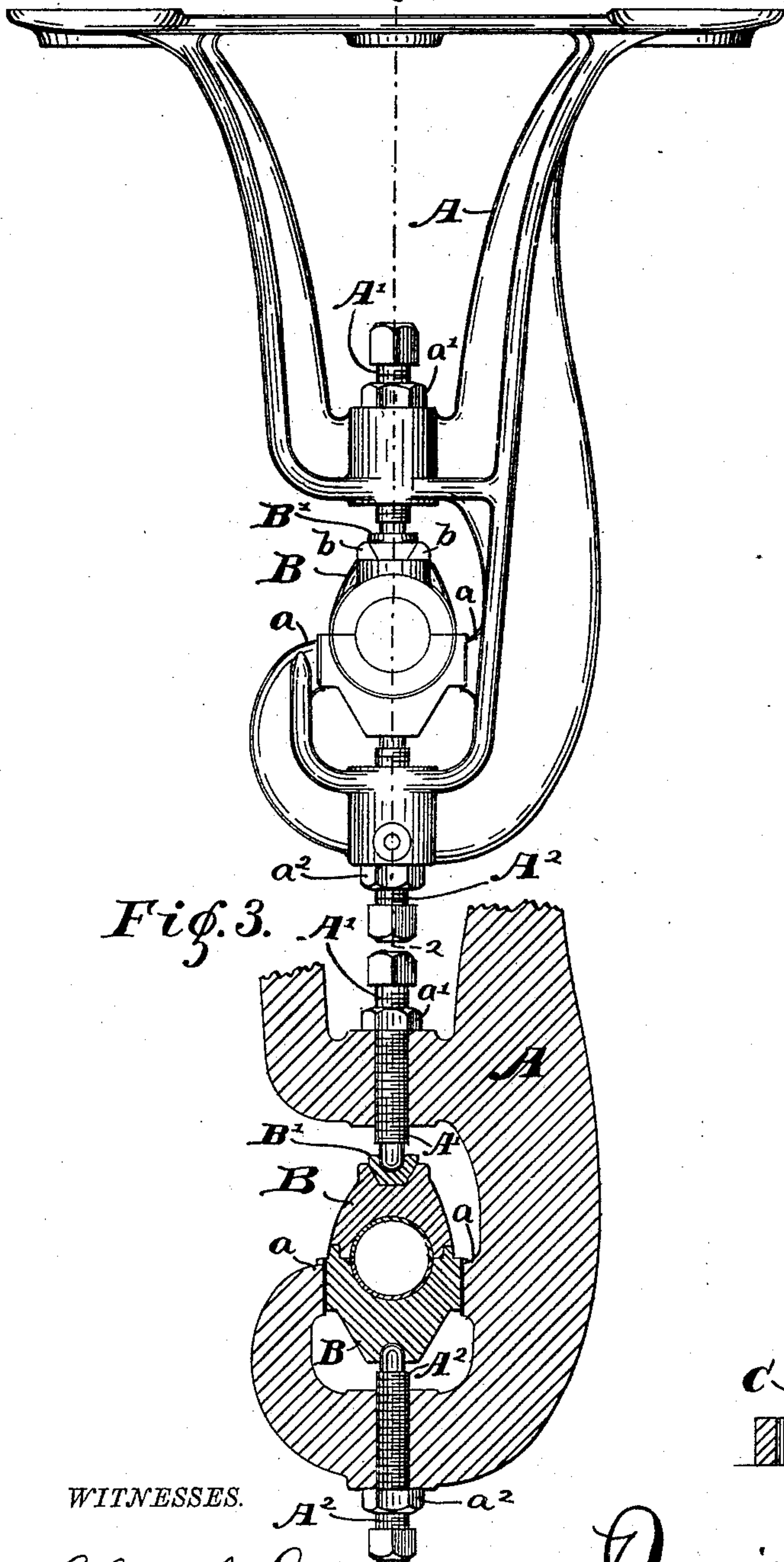


Fig. 2.

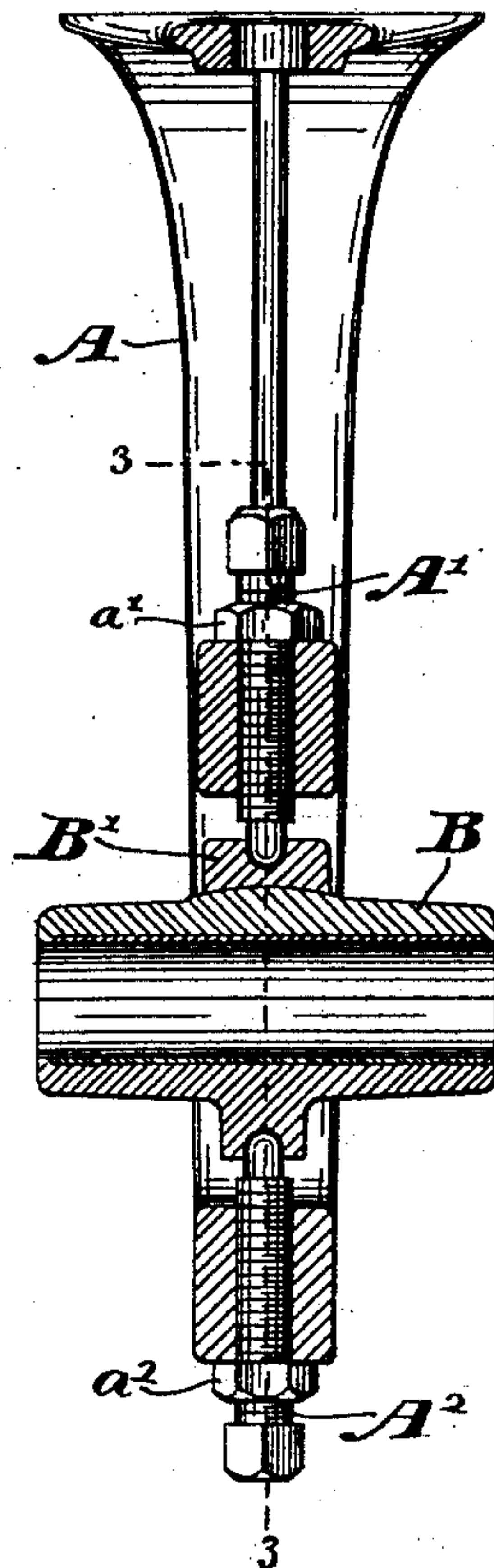


Fig. 3.

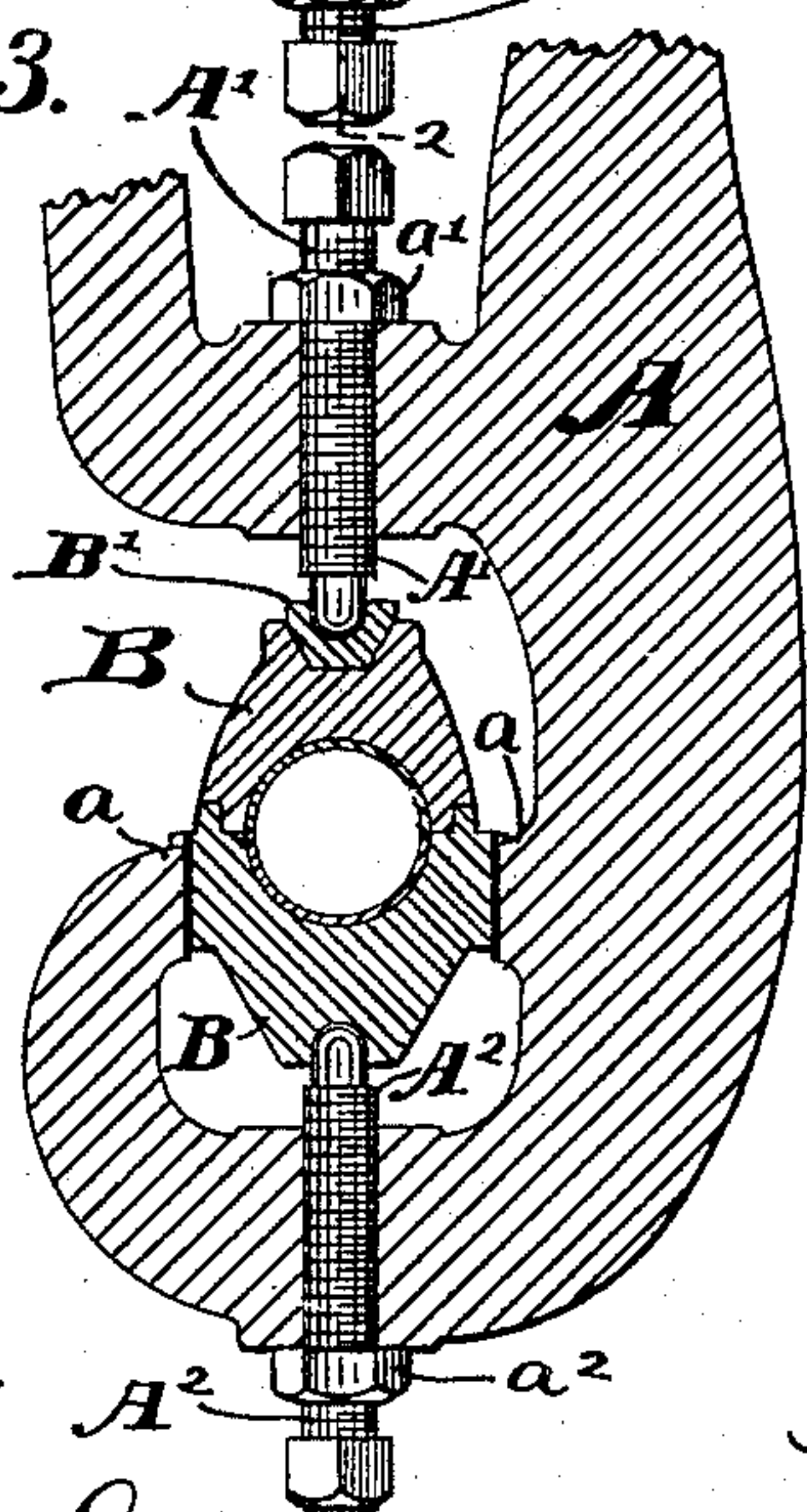
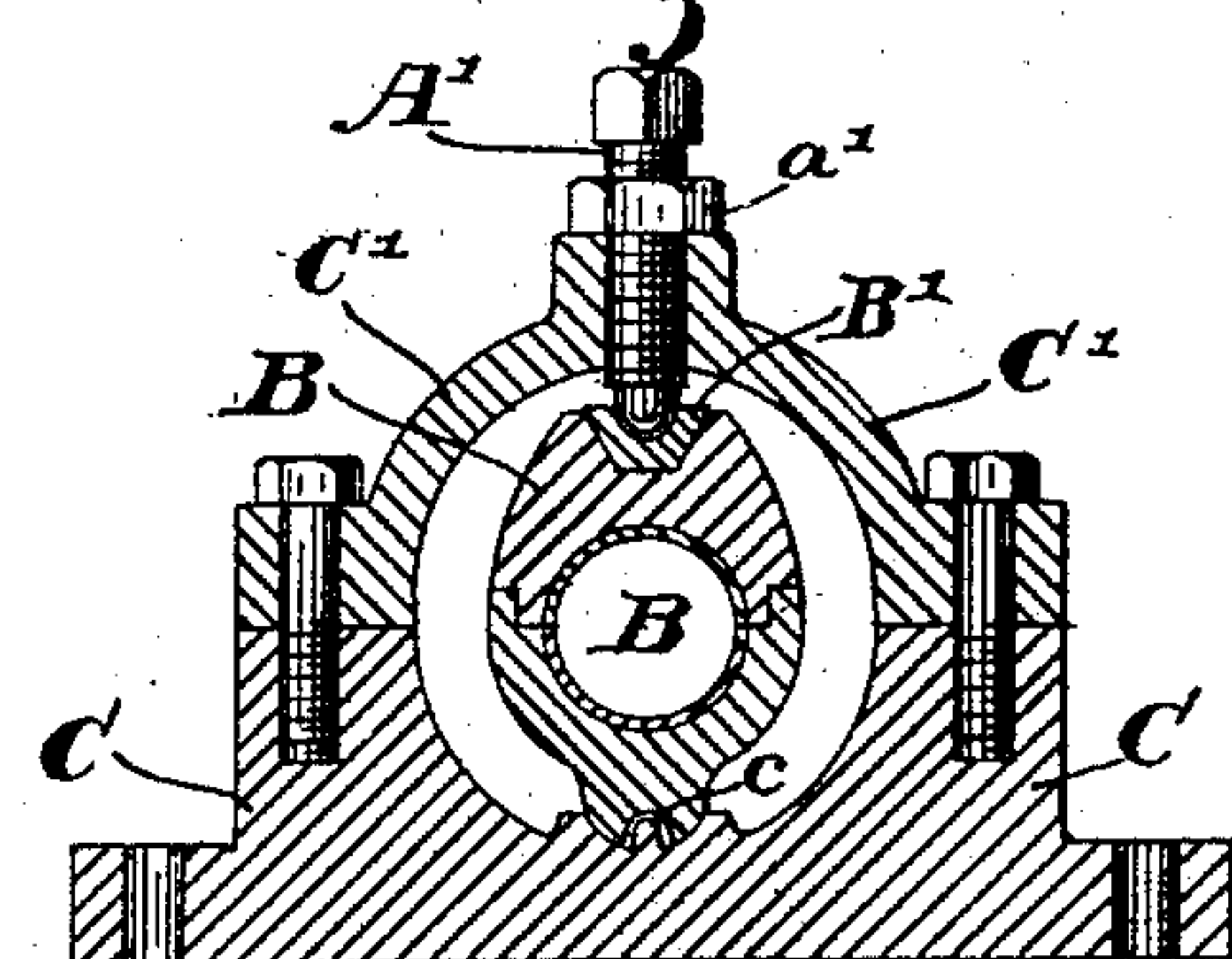


Fig. 4.



WITNESSES.

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DANIEL W. MARMON, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO THE
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BOX-SUPPORTER.

SPECIFICATION forming part of Letters Patent No. 318,384, dated May 19, 1885.

Application filed April 13, 1885. (No model.)

To all whom it may concern:

Be it known that I, DANIEL W. MARMON, of the city of Indianapolis, county of Marion, and State of Indiana, have invented certain
5 new and useful Improvements in Box-Supports, of which the following is a specification.

My said invention relates to that class of devices used for supporting boxes for shafting—such as hangers, pillow-blocks, &c.; and it consists in the manner of mounting said boxes, whereby they may be automatically brought into line with the shafts mounted therein without the tedious process of adjusting the whole hanger or pillow-block, which is necessary
10 when the boxes are rigidly mounted, as will hereinafter be more particularly described.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a side elevation of a hanger, with a box mounted therein embodying my invention; Fig. 2, a central section of the same longitudinally of the shaft on the dotted line 2 2 in Fig. 1; Fig. 3, a similar section transversely of the shaft on the dotted line 3 3 in Fig. 2;
25 and Fig. 4 a view similar to Fig. 3, except that a pillow-block is substituted for the hanger.

In said drawings the portions marked A represent the hanger, B the box, and C the pillow-block, which may be used instead of the hanger.
30 The hanger A is in general form substantially like ordinary open hangers. It preferably has upon its sides projecting lugs *a*, which are adapted to enter corresponding grooves formed in the sides of the box, said grooves and projections being fitted somewhat loosely in order to permit the box to be freely adjusted. Set-screws *A'* and *A*², having either rounded or cup-shaped points, are inserted in suitable
40 bearings in the hanger, and support the box vertically, being provided with jam-nuts *a'* *a*² to secure them properly in position. One of these set-screws, *A*², enters a cavity formed in the box itself, or has a cavity in its end into which a projection on the box enters. Said
45 box is thus adapted to pivot and rock on the point of this screw, said parts being so arranged as to form in effect a ball-and-socket joint. This screw, however, being merely for
50 adjustment, may of course be dispensed with

and an arrangement similar to that shown in Fig. 4 be substituted, without departing from my invention, which depends for its novelty not upon the screw, but upon the rocking-bearing on one side of the box and the sliding block on the other. The other screw, *A'*, fits in a similar manner into said sliding block, which is preferably mounted on top of the box B, as will be presently described. The box B is in general form the ordinary form of
55 box for shafting, and, when the lugs *a* are present, has grooves in its sides, into which said lugs enter, and has a socket in its under side for the reception of the point of the set-screw *A*², or a projection which may enter a socket
60 in the end of the screw or other support. On its upper side it has projections *b*, and in the space between these projections rests the block *B'*. The bottom surface of this space is formed in the arc of a circle struck from at or near
65 the center of the ball-and-socket joint formed at the contact-point of the box and its support. By this means the box is permitted to rock longitudinally upon said support, and thus be brought into line with the shaft carried there-
70 by, in this as well as the other direction. The position of this box vertically may be adjusted by means of the set-screws *A'* and *A*², when they are used, as will be readily understood, and being, by means of the pivot-points and
75 the block *B'*, adjustable in both the other directions, it will be seen that the hanger can be secured in position without attention to that accuracy of fitting which is necessary with the ordinary hangers having rigid boxes, in order
80 that the shaft may fit perfectly true in its bearings.

The pillow-block C supports the box in substantially the same manner as does the hanger. From its location it is usually impossible to
85 use the lower screw, *A*², and therefore it is provided with a socket in which a convex-surfaced projection on the bottom of the box rests.

To prevent the box from being moved out of position, a small orifice is usually formed
90 therein, and a small projection, *c*, extends up into said orifice; but this is a mere matter of convenience, and forms no part of the invention. A strap, *C'*, is secured to the top of the pillow-block over the box, and receives the
100

screw A' in similar manner as does the corresponding portion of the hanger, when a hanger is used, and said screw also extends down and engages with the block B' in the same manner, as shown. The operation of the device, except the capability of vertical adjustment, is thus precisely the same when used in connection with the pillow-block as when used in connection with the hanger.

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

1. The combination of a box for shafting, and means for supporting the same, consisting 15 of a ball-and-socket joint at one side, and a sliding block held in contact with its surface at the other.

2. The combination of a box-support, a box, B, a block, B', on said box, and a screw, A', 20 substantially as set forth.

3. The combination of a hanger, a box supported by screws mounted in said hanger, and a block on said box, one of said screws entering a bearing in said block, and the other entering a bearing in the box, substantially as and 25 for the purposes specified.

4. The combination of a hanger, A, a box, B, projections *b b*, a block, B', having a concave surface which fits onto a corresponding convex surface on the box, and set-screws A' 30 and A², one of which enters a bearing in said box, and the other of which enters a bearing in said block, substantially as set forth.

5. The combination of a hanger having projections *a a*, a box, B, having grooves which 35 fit over said projections, and projections *b b*, between which is a convex-bottomed space, a block, B', fitted between said projections, and set-screws A' and A², mounted in bearings in said hanger above and below said box, one of 40 which enters a bearing in said box, and the other of which enters a similar bearing in said block, whereby the box is adapted to automatically adjust itself to the line of the shafting mounted therein. 45

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 9th day of April, A. D. 1885.

DANIEL W. MARMON. [L. S.]

In presence of—

C. BRADFORD,

CHARLES L. THURBER.