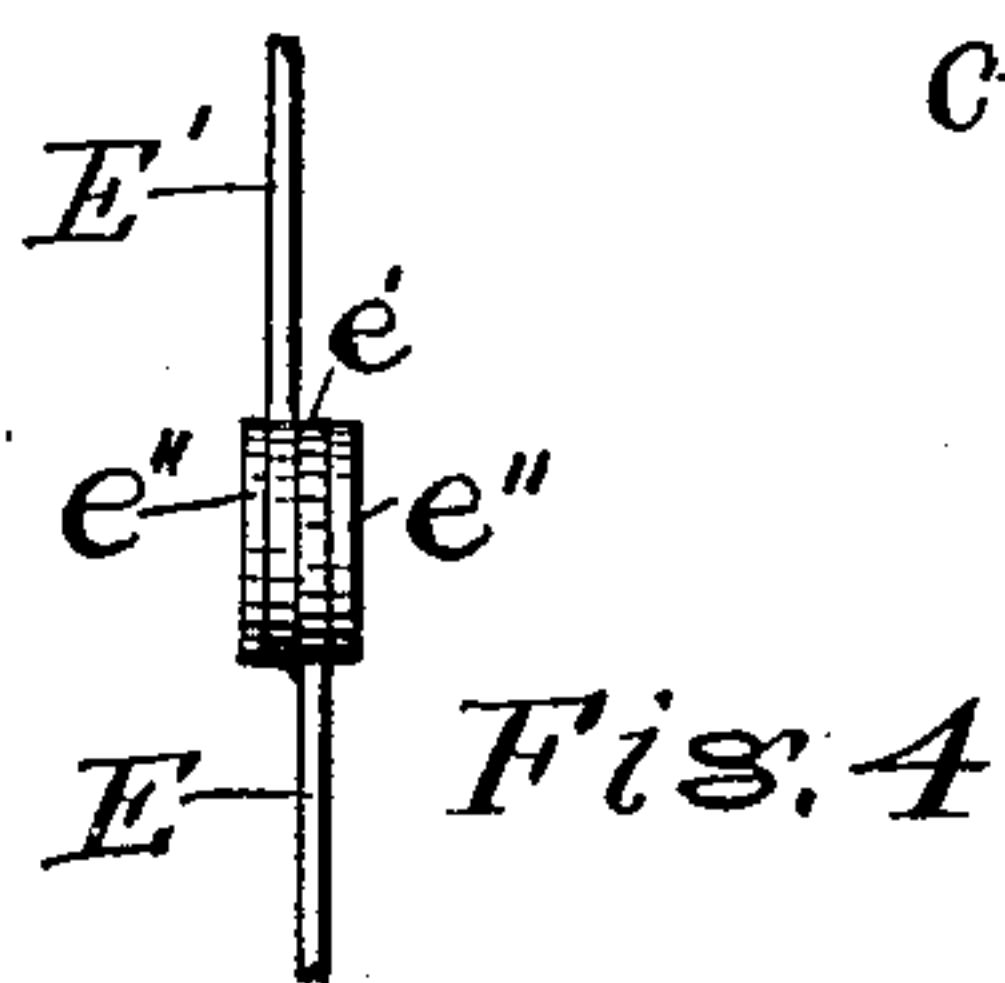
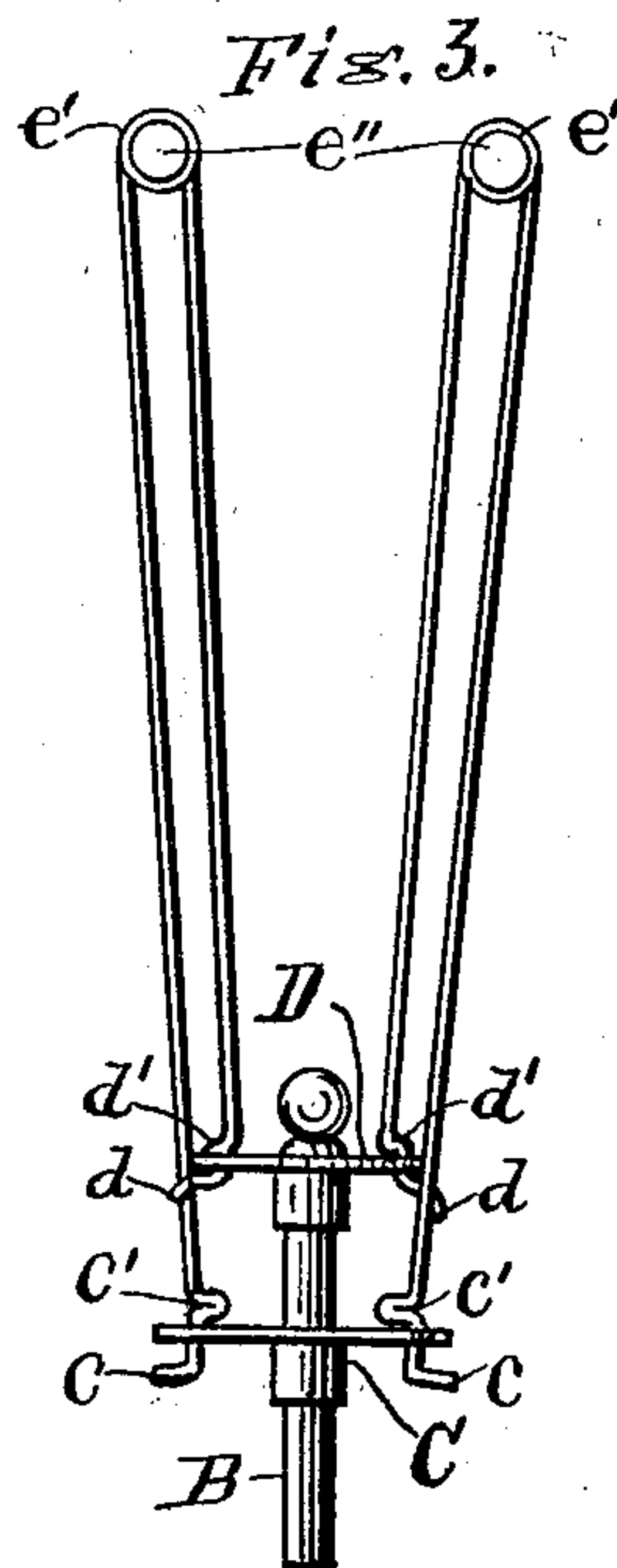
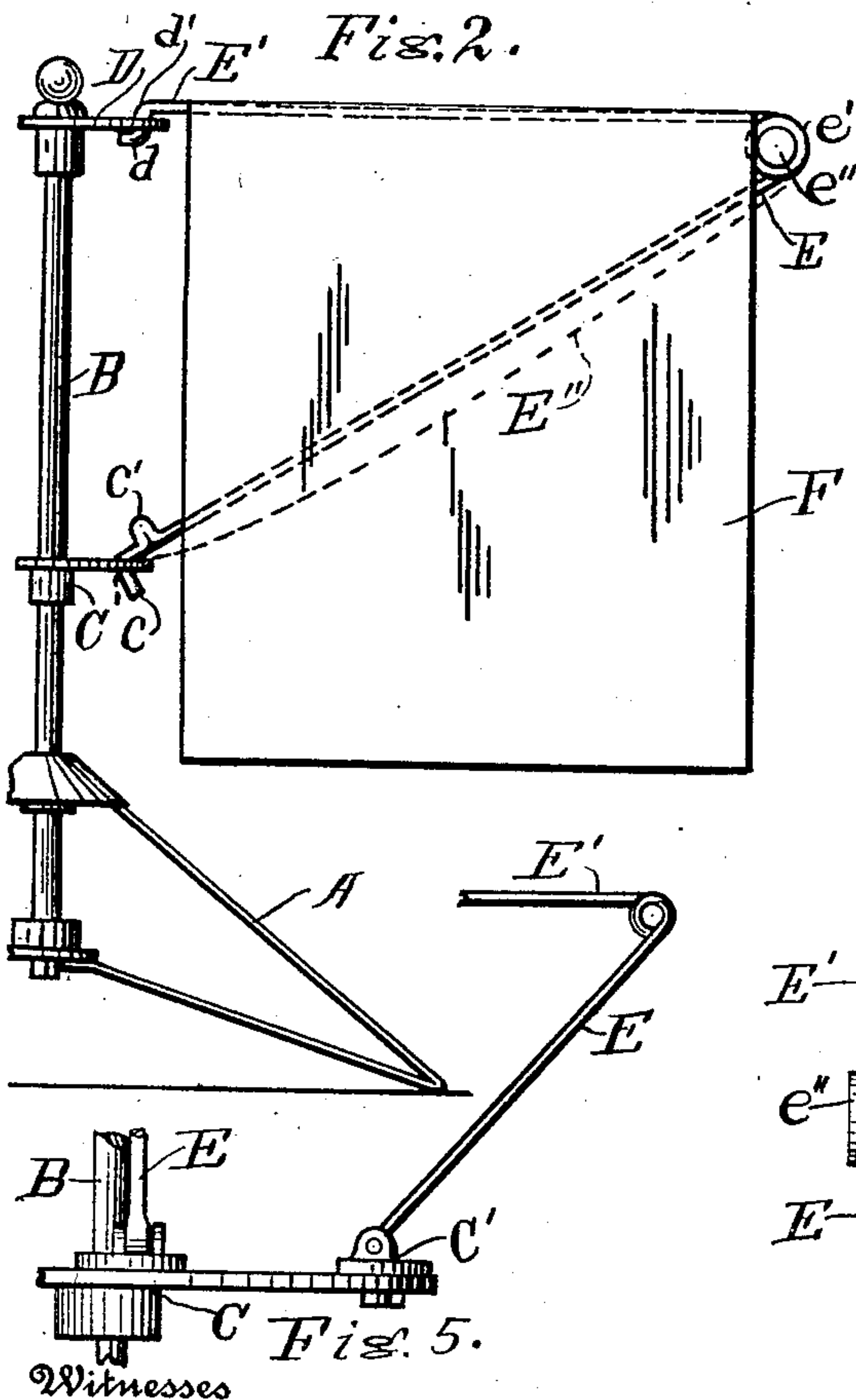
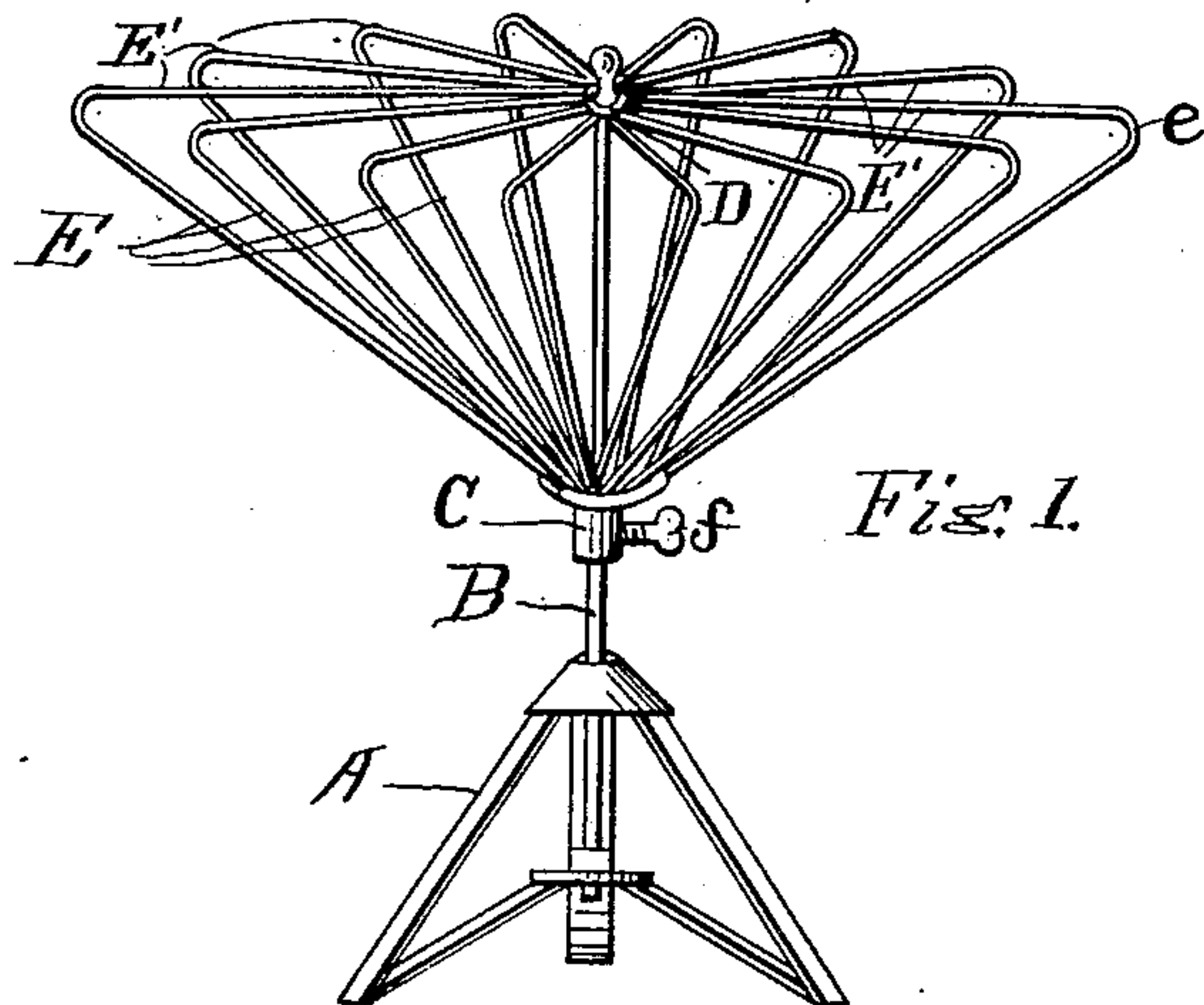


H. H. ALTVATER.
 DISPLAY RACK.
 APPLICATION FILED MAY 10, 1911.

999,189.

Patented July 25, 1911.



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HENRY H. ALTVATER, OF FOWLER, MICHIGAN.

DISPLAY-RACK.

999,189.

Specification of Letters Patent.

Patented July 25, 1911.

Application filed May 10, 1911. Serial No. 626,392.

To all whom it may concern:

Be it known that I, HENRY H. ALTVATER, a citizen of the United States, residing at Fowler, in the county of Clinton and State of Michigan, have invented certain new and useful Improvements in Display-Racks, of which the following is a specification.

My invention relates to improvements in racks for storing and displaying blankets and kindred articles, and its objects are: first, to provide a rack of the kind mentioned with which the arms may be placed in any desired position, radially, from the central supporting standard; second, to provide a means whereby the danger of the arms or their braces being drawn out of their bearings, will be wholly obviated, and, third, to provide a rack of the kind mentioned with which the arms and their braces may be raised to very nearly a vertical position without danger of drawing their ends out of their bearings at the central supports, or of the braces passing through and below their bearings. I attain these objects by the mechanism illustrated in the accompanying drawing, in which—

Figure 1 is a perspective of the rack made in its simple form. Fig. 2 shows the standard and one arm and brace with a blanket on it; said arm and brace being constructed for vertical adjustment. Fig. 3 shows the top of the standard with the arms on opposite sides of the standards in vertical position. Fig. 4 shows one form of pivotal joint between the ends of the arms and braces, and Fig. 5 shows a modified form of connection for the lower end of the braces.

Similar letters refer to similar parts throughout the several views.

In the construction of these racks I make use of the ordinary base or legs A, standard B and supporting flanges C and D, and the arms E' and braces E are, in a sense, in common use, as is, also, the radial adjustment of the arms. My invention, therefore, lies more particularly in the manner of constructing the arms and braces for connection with the flanges, and with each other. The flanges C and D are practically like all flanges used in this class of construction, that is, with a number of holes in the rim for the ends *d* of the arms, and *c* of the braces to pass through, as indicated in Fig. 1 and shown in Figs. 2 and 3.

To avert the danger of the arm and brace

being readily removed from the holes in the flanges I form a shoulder *d'* on the end of the arm above the flange, and a backwardly curved hook *d* below the flange so that when the arms are made to project horizontally from the standard the backwardly curved hook *d* will bear upon the lower surface of the flange far enough back so that it cannot possibly be removed from the flange until the arm has been carried up to a vertical position. I accomplish the same result with the lower flange, C, by bending the end *c* of the brace E exactly at right angles with the brace, as particularly shown in Fig. 2. This brings the body of the brace to bear firmly upon the upper side of the flange and the end of the brace at such an angle that it cannot well be removed from the flange without curving the brace downward, as indicated by the dotted lines E'' in Fig. 2. When the arms are carried to a vertical position the shoulder *d'* rests upon the top of the flange D and prevents the arm from dropping through the hole in the flange and becoming wholly unsupported thereby, and the offset *c'* at the end of the brace acts in a like manner with the flange C, all as indicated in Fig. 3. The flange C is held to place on the standard B, to hold the braces firmly against the weight of any load, as the blanket F, that may be placed upon the rack, by means of a set screw, as *f*, or other suitable device, and to allow the arms and braces to be raised to a vertical position it is understood that this screw must be released so the flange may slide freely upward on the standards, to the position indicated in Fig. 3.

With the simple form of rack the bend between the arms and the braces may be of simple form, as indicated at *e* in Fig. 1, but when constructing the arms for vertical adjustment it is necessary to make the arms and braces separate and form a pivotal bearing between them, as indicated at *e'* in Figs. 2 and 3, and I find that one of the most convenient, economical and easily applied forms of pivotal bearing to make consists of an eyelet, as *e''* passed through rings formed in the meeting ends of the arms and braces, as indicated in Figs. 2, 3 and 4.

Though I have shown but two arms in Fig. 3 and but one arm in Fig. 2, it is to be understood that all my racks are made with a number of radiating arms, as indicated in Fig. 1, and that said arms may be adjusted to any desired angle with a line

drawn horizontally through the standard in any direction.

In Fig. 5 I have shown, at C', a connection for the lower end of the braces E that
5 will work a little more freely than the hook c shown in Figs. 2 and 3 when the arms and braces therein shown are to be used.

What I claim as new and desire to secure by Letters Patent of the United States, is:

10 1. In combination with the standard, flanges, arms and braces of a display rack, a shoulder and backwardly extending lug on each arm to engage one flange, a hook on
15 each of the braces to engage the other flange, and an offset at the end of each brace near said hook.

2. In combination with the standard, flanges on said standard, and the arms and braces of a display rack having a number of radiating arms, a shoulder and a backwardly
20 projecting lug on each arm, and a hook and offset on one end of each brace to engage the flanges to hold the arms and braces securely in the flanges, and a pivotal joint
25 securing the connected ends of each pair of arms and braces together.

Signed at Fowler Michigan May 3rd 1911.

HENRY H. ALTVATER.

In presence of—

J. F. SHRAFT,

J. W. PIERCE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."