

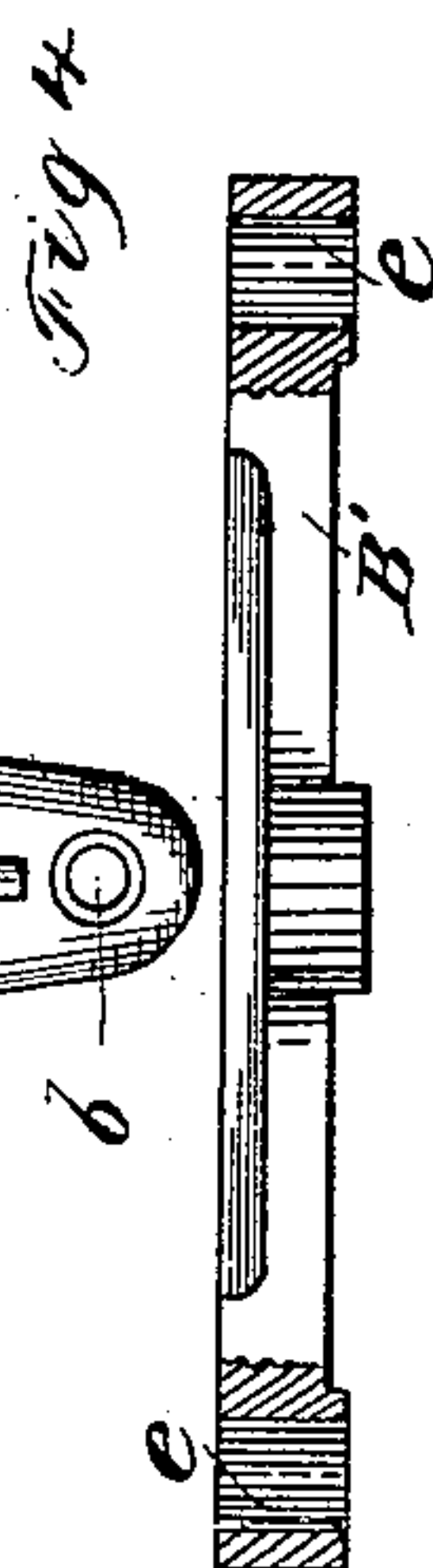
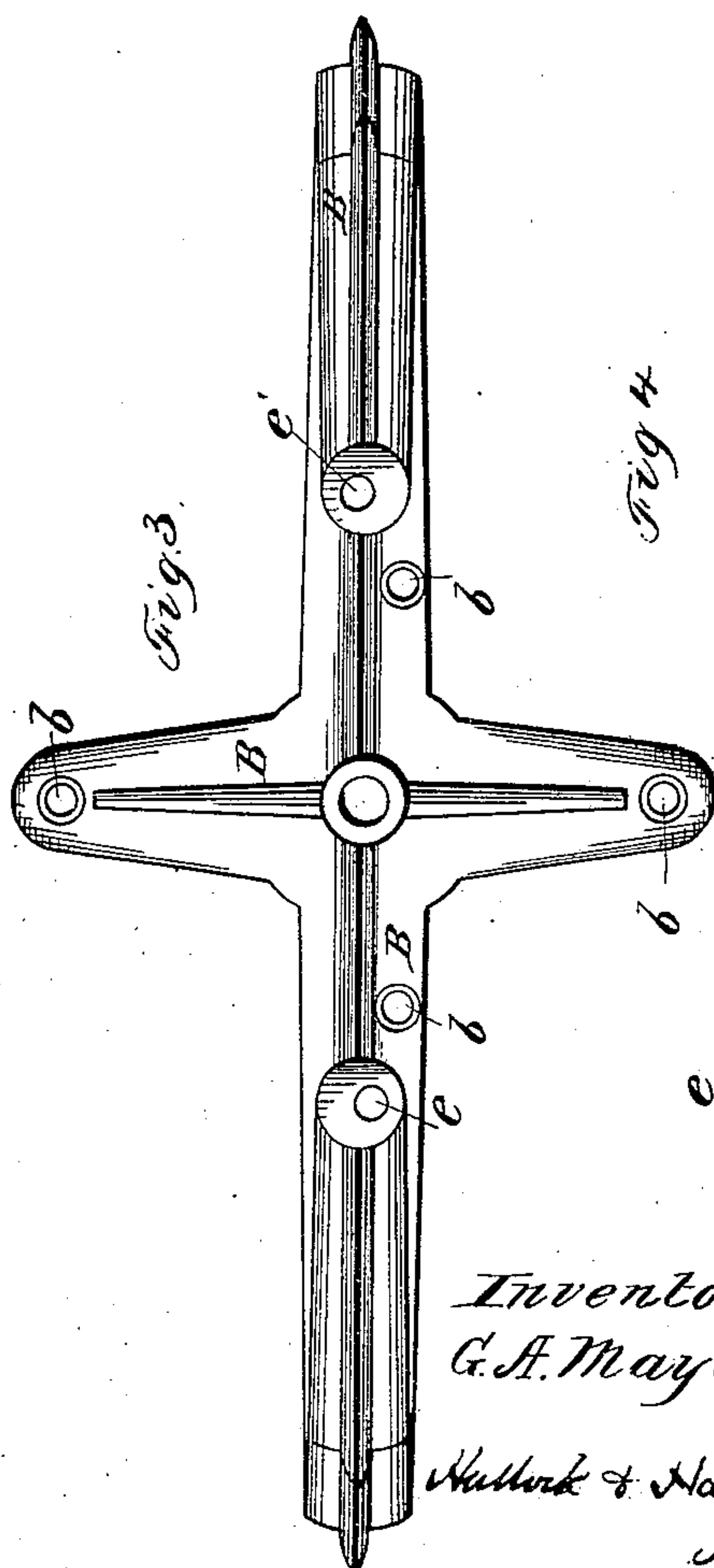
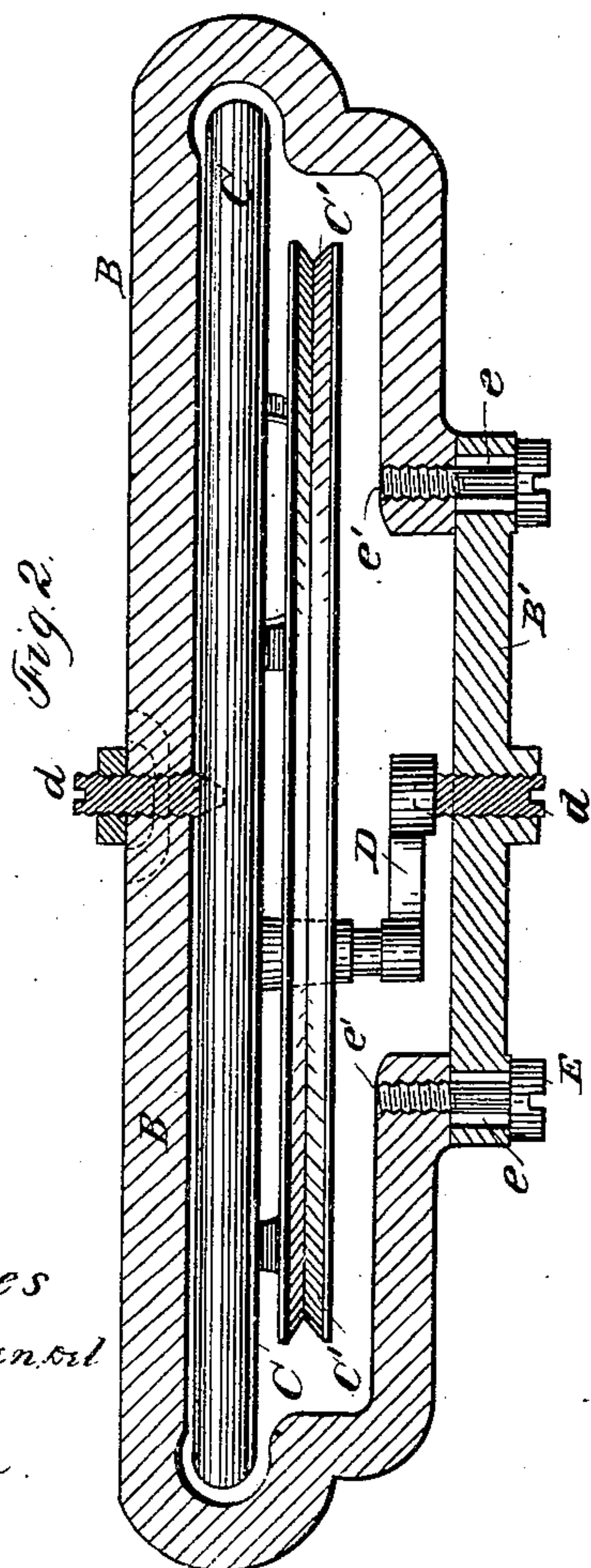
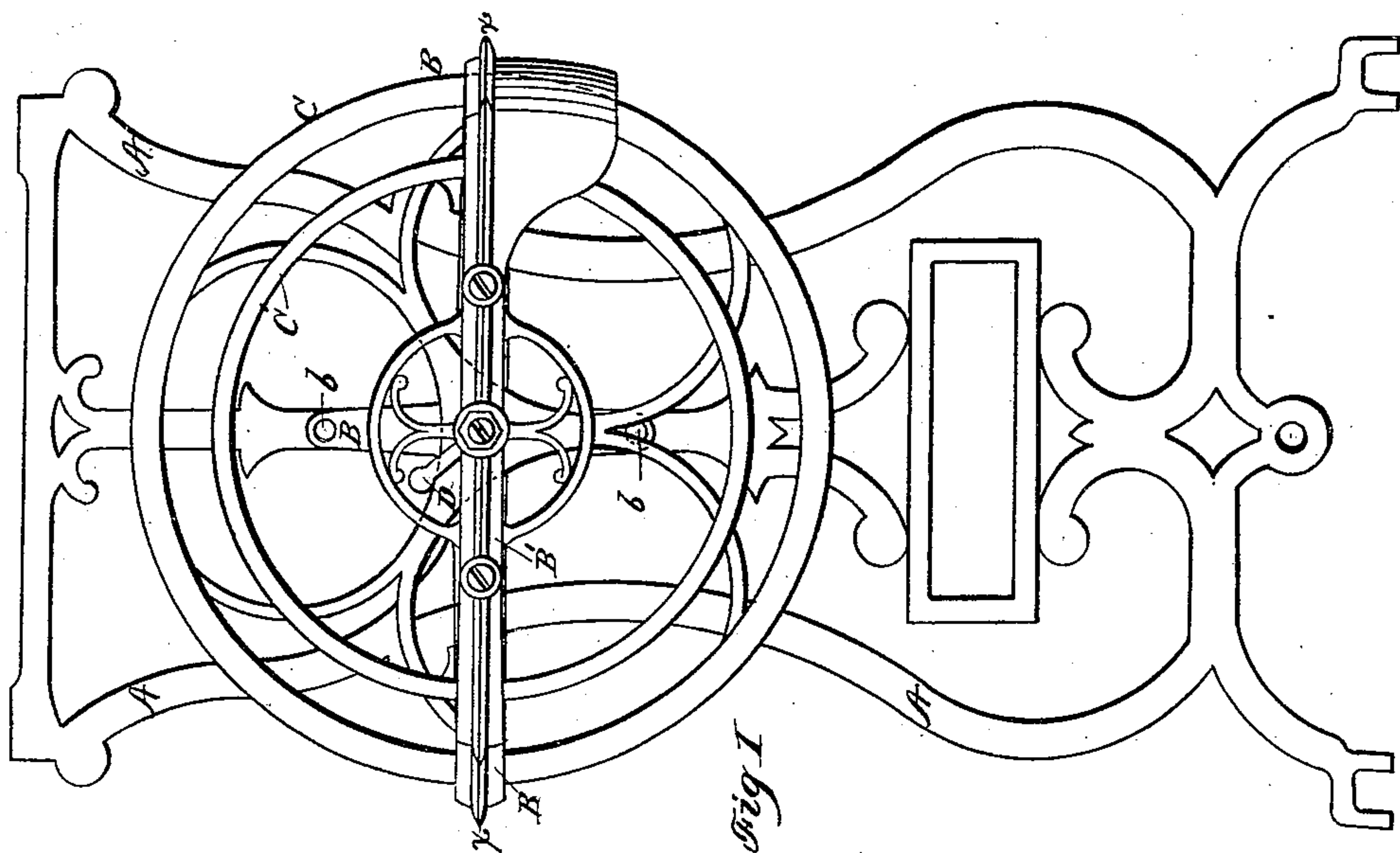
(No Model.)

G. A. MAYO.

# CRANK SHAFT SUPPORT FOR SEWING MACHINES.

No. 265,334.

Patented Oct. 3, 1882.



Witnesses  
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M. A. Edelen.

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Atts



# UNITED STATES PATENT OFFICE.

GOODRICH A. MAYO, OF ERIE, PENNSYLVANIA, ASSIGNOR TO GEORGE H. NOBLE, OF SAME PLACE.

## CRANK-SHAFT SUPPORT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 265,334, dated October 3, 1882.

Application filed May 1, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, GOODRICH A. MAYO, a citizen of the United States, and a resident of Erie, in the county of Erie and State of Pennsylvania, have invented a new and useful Improvement in Crank-Shaft Supports for Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and the letters or figures of reference marked thereon.

The object of the invention is to make a hanger for the crank-shaft, balance-wheel, and drive-wheel which can be cheaply constructed and so adjusted as to accurately center the said parts and make them run true without the usual care and attention in fitting up the hanger and attaching the same to the frame-work.

My device is shown in the accompanying drawings, as follows:

Figure 1 is a side elevation of a sewing-machine frame-work with the balance-wheel and crank-shaft mounted thereon by my device. Fig. 2 is a horizontal section through my improved hanger on the line *x x* in Fig. 1. Fig. 3 is an elevation view of the frame of the hanger. Fig. 4 is a top or edge view of the adjustable part of the hanger, the ends being thrown into section.

The parts shown are indicated by letters of reference, as follows:

A is the frame of the machine.

B B' is the hanger.

C C' are the balance-wheel and drive-wheel.

D is the crank-shaft.

*d d* are the journal-points on which the wheel and crank are pivoted.

*b b b b* are points at which the hanger may be attached to the frame or to the side of a supporting-cabinet, as required.

The hanging device proper consists of the frame B (seen in elevation in Fig. 3) and the strap B', (seen in Fig. 4,) which is attached to the frame B by the screws E E. One of the centerings *d* is on the frame B and the other is on the strap B', and to secure a perfect centering of the rotating parts the strap must be so adjusted as to bring the point *d* on it directly opposite the point *d* on the frame B. The holes *e e* in the strap B', through which the attaching-screws E E pass, are larger than the bodies of the screws, and thereby the position of the strap with relation to the screws can be

very considerably changed, and as the heads of the screws E E are large enough to form a good bearing upon the face of the strap they act as clamps to hold the strap in place when they are firmly screwed up. When it is attempted to adjust the centerings of the rotating parts by having the holes in which they set properly drilled inaccuracies will occur by reason of deviation of the drill while passing through the iron, even where the utmost care is taken.

By my device the work of fitting up will require no particular care, for the position of the holes may vary considerable without any bad effect—as, for instance, in Fig. 3 the holes *e' e'*, into which the screws E E set are shown as out of line, as if carelessly drilled; but such inaccuracy does no harm, for the large holes *e e* in the strap B' permit it to be so adjusted as to bring the centering-pin *d* on the strap exactly opposite the pin *d* on the frame B.

I am aware that sewing-machines have been provided with crank-shaft supports attached to the frame, but am not aware that any have been provided with a strap having a bearing for one end of the shaft and elongated openings provided with holding-screws for adjusting the strap to center the shaft.

What I claim as new is—

1. The combination, with the hanger-frame B, of the detachable strap B', having holes *e e*, through which pass the screws by which it is attached to the frame B, larger than the shanks of said screws, substantially as and for the purposes mentioned.

2. The combination, with the supporting-frame, the drive-wheel, and crank-shaft of a sewing-machine, of the hanger-frame B, having thereon one of the centerings or journals of said wheel and crank-shaft, and the detachable strap B', having thereon the other of said centerings or journals, said strap being provided with means, substantially as shown, whereby it can be adjustably attached to the frame B, substantially as and for the purposes mentioned.

In testimony that I claim the foregoing I have hereunto set my hand.

GOODRICH A. MAYO.

Witnesses:

W. R. EDELEN,

W. S. BROWN.