

(No Model.)

C. GLOVER.
TRANSOM LIFTER.

Patented Mar. 22, 1898.

No. 600,864.

Fig. 1.

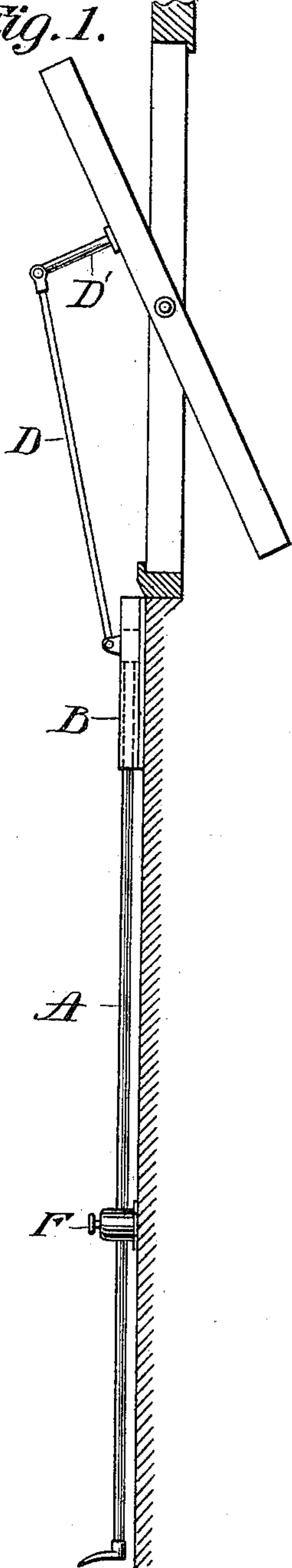


Fig. 2.

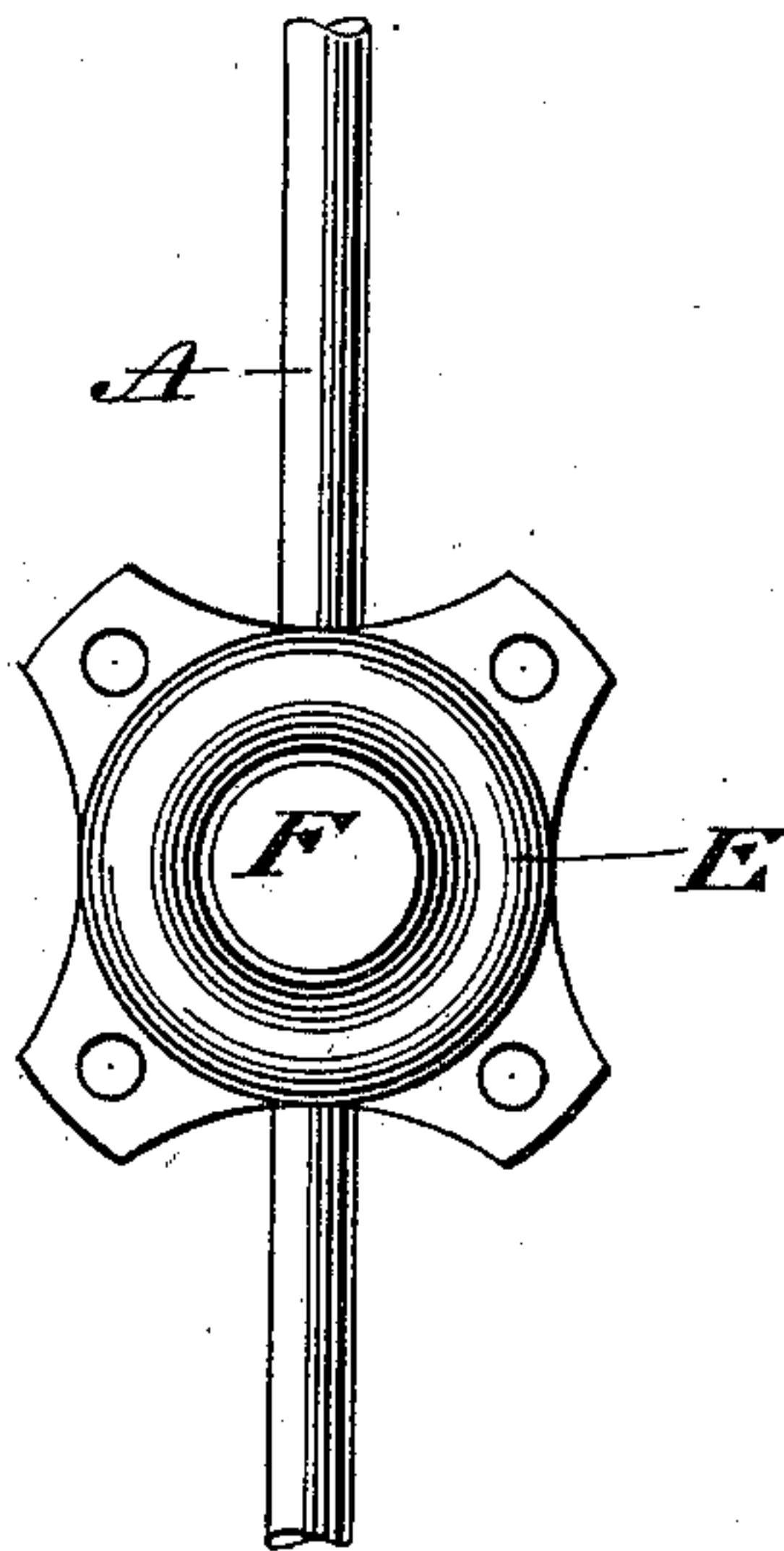


Fig. 3.

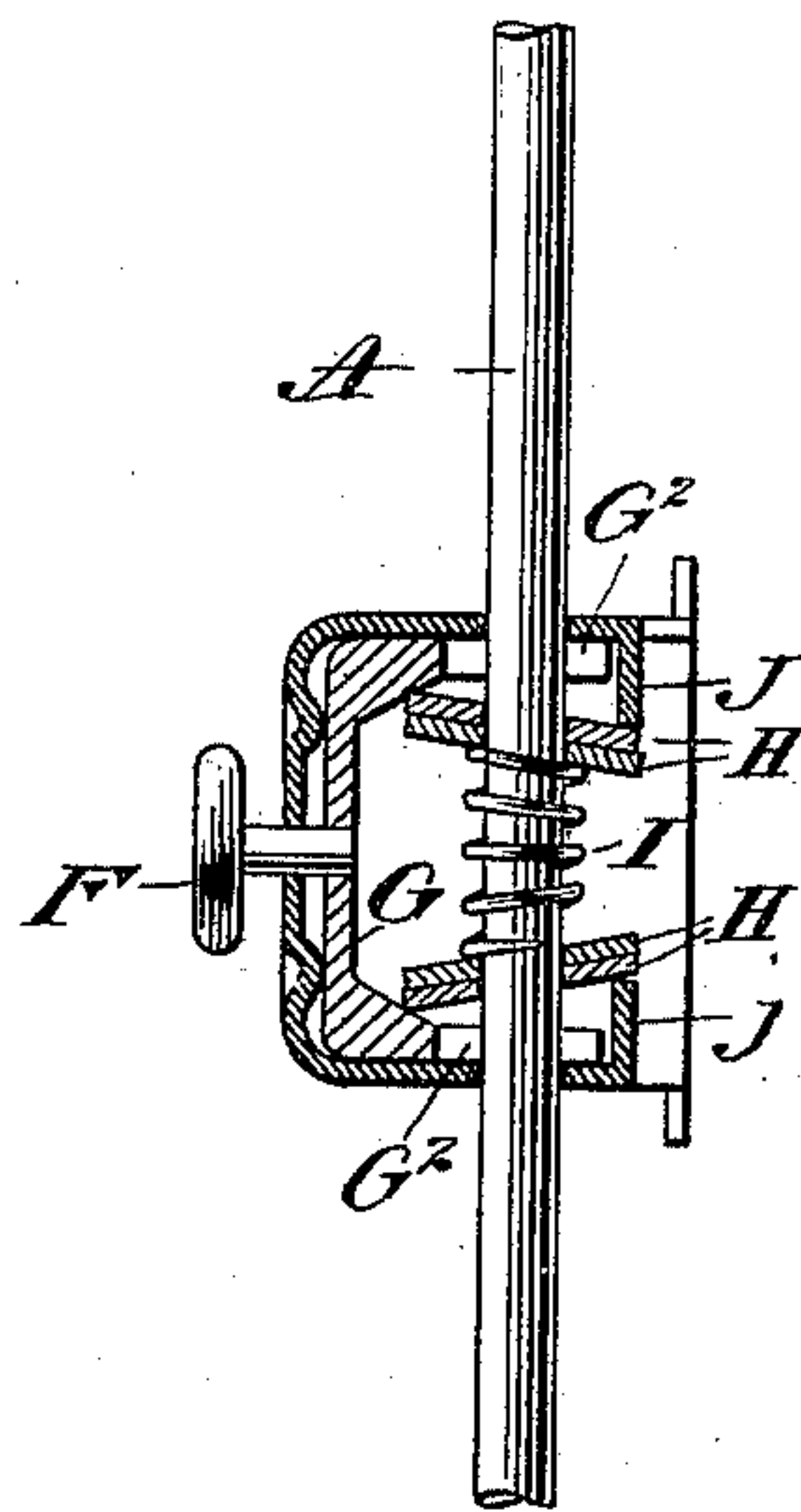


Fig. 4.

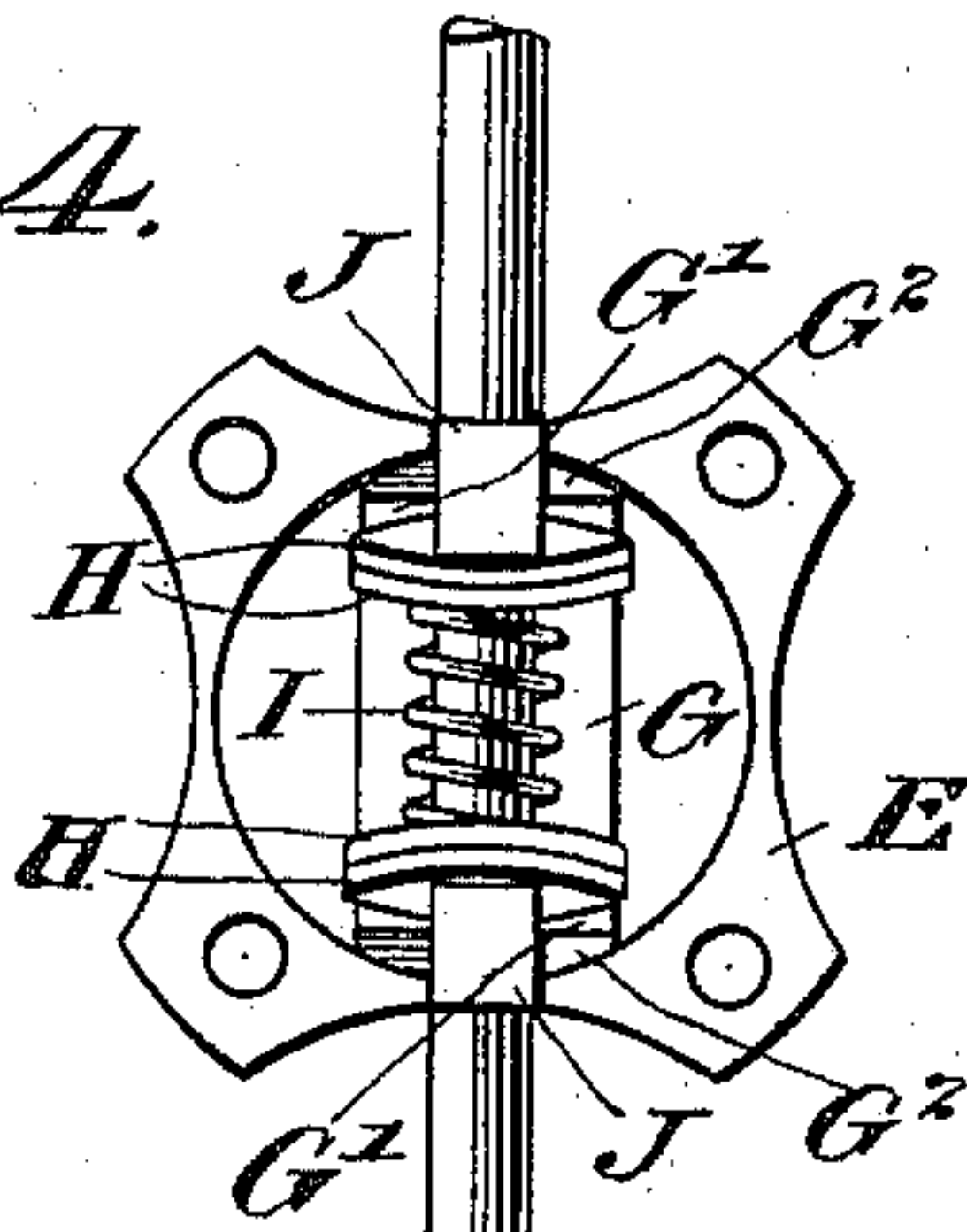


Fig. 5.

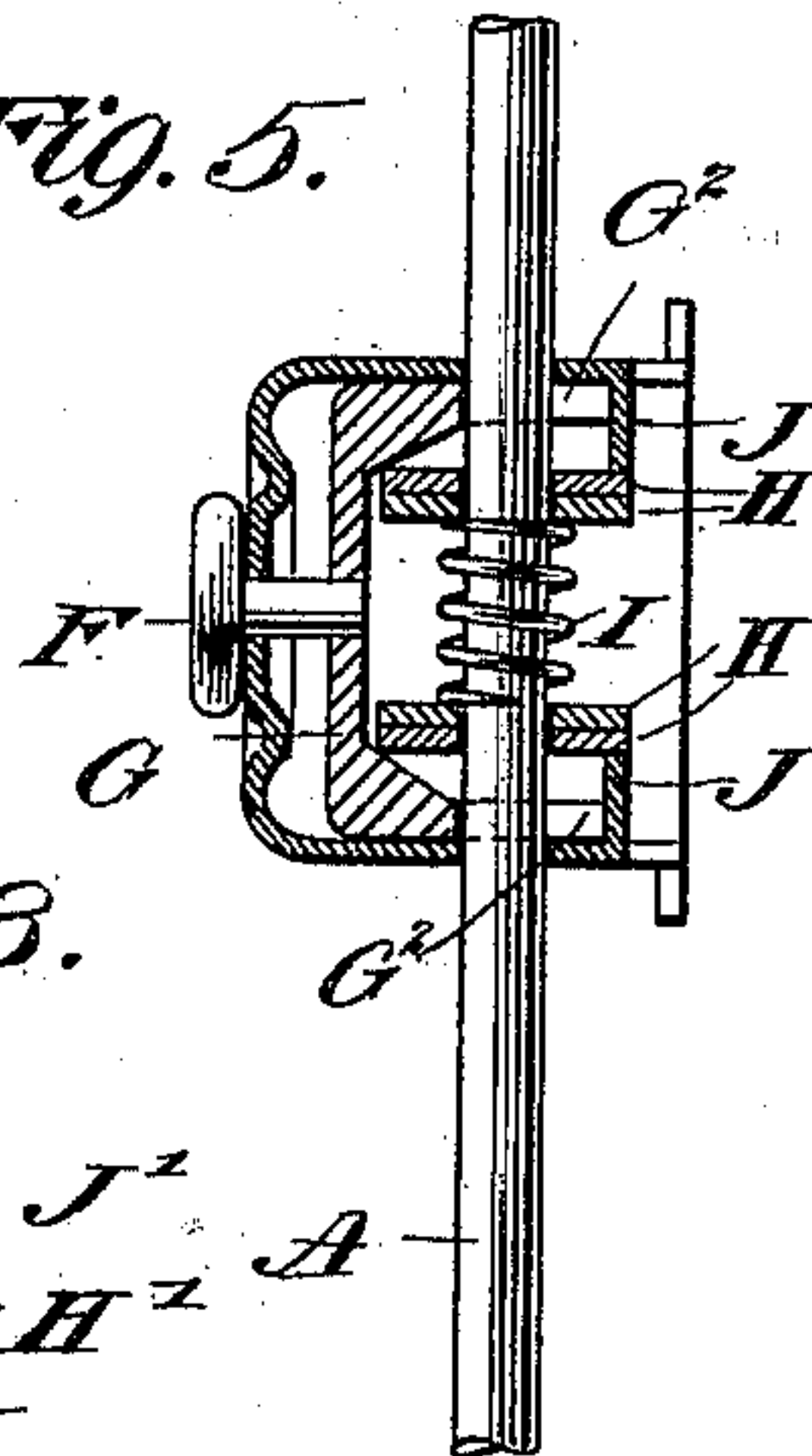


Fig. 8.

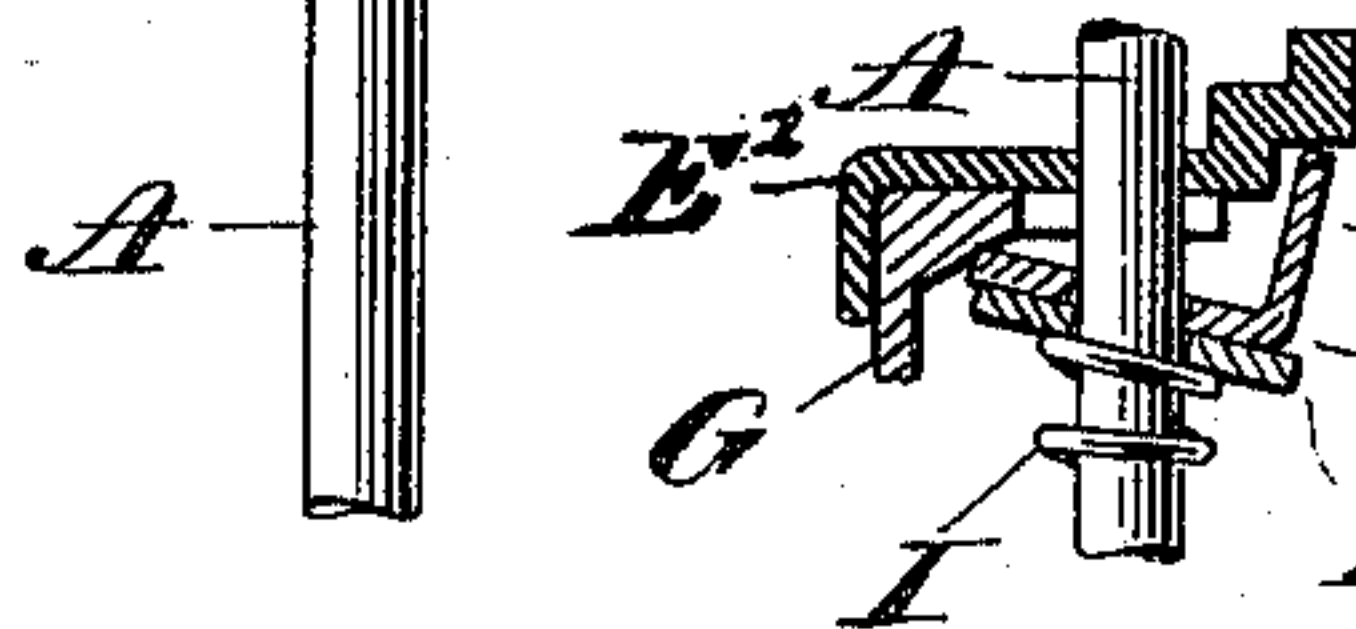


Fig. 6.

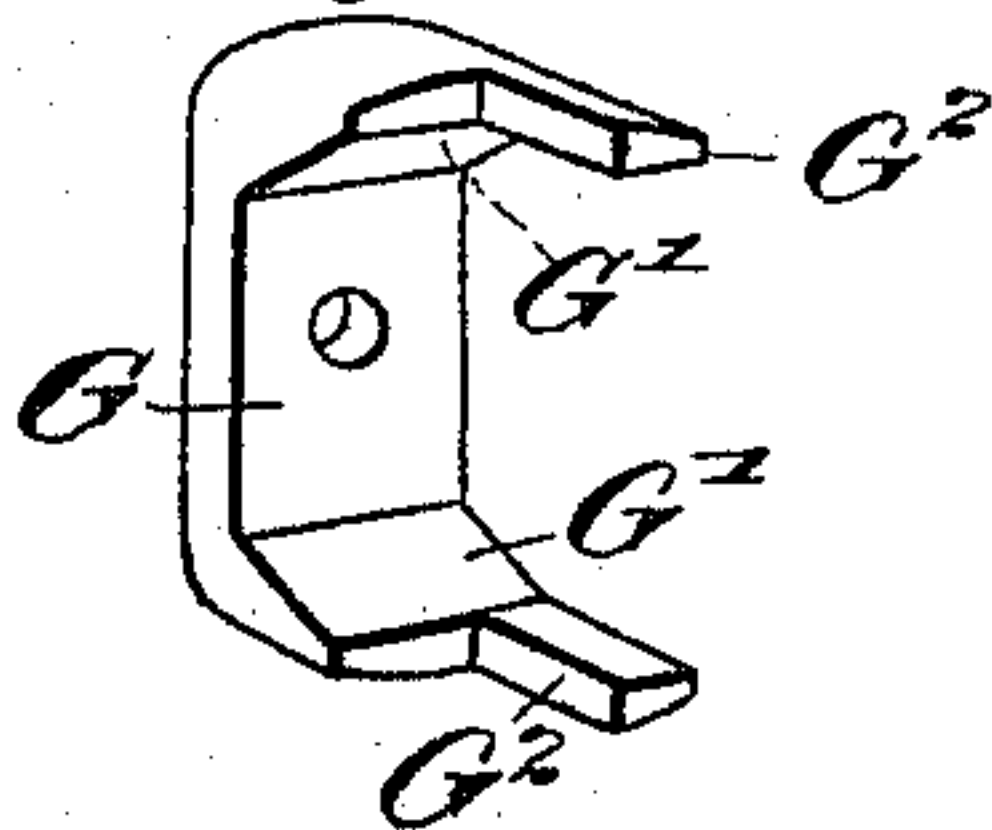


Fig. 7.



WITNESSES:

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CHARLES GLOVER, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE
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TRANSOM-LIFTER.

SPECIFICATION forming part of Letters Patent No. 600,864, dated March 22, 1898.

Application filed October 12, 1897. Serial No. 654,928. (No model.)

To all whom it may concern:

Be it known that I, CHARLES GLOVER, a citizen of the United States, residing at New Britain, Hartford county, Connecticut, have
5 invented certain new and useful Improvements in Transom-Lifters, of which the following is a full, clear, and exact description.

My invention relates to certain improvements in transom-lifts; and it consists in the
10 hereinafter described and claimed constructions.

The main object of my invention is to provide a simple, inexpensive, effective, and durable means whereby the lift-rod, by which
15 the transom is opened or closed, may be securely locked against longitudinal movement.

Referring to the drawings, Figure 1 is a side elevation of my invention in operative position. Fig. 2 is a relatively enlarged plan
20 view. Fig. 3 is a longitudinal section through the center of Fig. 2. Fig. 4 is a reverse view of Fig. 2. Fig. 5 is a section similar to Fig. 3, the operative parts being in a different position. Figs. 6 and 7 are views of details.
25 Fig. 8 is a sectional view of a modification.

A is a lift-rod, its upper end moving in a suitable guide B.

D is a link connecting the rod A to an arm D' on the pivotally-mounted transom D.

30 E is a casing in which the locking mechanism for the lift-rod is located.

F is an operating-button connected at its inner end to a sliding frame G, said frame being located and working within the casing E.
35

G' G' are shoulders on opposite sides of the frame G, said shoulders having diverging beveled inner faces for the purposes hereinafter described.

40 H H are locking-rings loosely surrounding the lift-rod A, the bore of each of said locking-rings being slightly greater than the diameter of the rod A. I is a spring located between and bearing against said rings H.

45 J J are abutments on the opposite inner sides of the casing E, preferably near its base, against which abutment the inner ends of the rings H take a bearing. The abutments J and frame-shoulders G' G' are arranged on
50 opposite sides of the rod A.

By preference a plurality of rings H are

provided at each end of the spring I, and it is desirable that the said rings H be free to revolve around the rod, so as to wear uniformly, and thus keep the bore of said parts substantially circular. When the rings H are substantially parallel, (see Fig. 5,) it is manifest
55 that they do not grip the rod A, which is then free to be raised or lowered. The parts H are moved into this unlocking position by
60 pressing the operating-button F inwardly, so that the beveled faces of the shoulders G' G' will bring the adjacent ends of the said rings into approximate parallelism. As soon as the pressure upon the operating-button F is removed the spring I tends to spread the rings
65 H. The inner ends of the rings are prevented from moving outwardly by reason of the abutments J J, as before stated. Therefore the rings can spread only as the outer ends
70 can separate. As the said outer ends are separated they rub against the inner beveled faces of the shoulders G' G' and thus cause the frame and operating-button F to move from the position shown in Fig. 5 to that
75 shown in Fig. 3. When each of the rings H has tilted sufficiently, they clutch the rod A, and the upper ring serves to prevent the rod from being pushed up, while the lower ring serves to prevent the rod from moving
80 downwardly, thus securely locking said rod A against longitudinal movement in either direction. It will be seen that each ring presents a two-point clutch bearing on opposite sides of the rod A.
85

In practice I have found it desirable to provide, and have therefore shown, a plurality of locking-rings in each set—that is, a plurality of rings at each end of the spring I. Thus each set of two rings will produce a four-point locking engagement. Each set of three
90 rings will provide a six-point locking engagement. By arranging these parts loosely around the arm A the limit of the number of rings that may be provided is governed only
95 by the available space in which the same may be placed, and this may be determined entirely by the size of the casing E. The interior of the casing E may be made cylindrical, oblong, or flattened, as desired. When the casing is round, it may be desirable to allow
100 the ends of the shoulders G' G' to extend

downwardly on one side of the rod A, as shown at G² G³, Fig. 6, thus preventing the frame G from rotating and keeping the inclined faces in operative alinement with the locking-rings.

It is manifest that the abutments J, instead of being carried by the case E, may be carried by the outermost rings H. A detail of such a modification is indicated in Fig. 8, in which H' is the outermost ring and J' the wing which serves the same function as the abutment J. These wings J' should preferably drop into suitable recesses in the casing E' to prevent displacement.

What I claim is—

1. A lock for a transom-lift rod, said lock comprising a ring loosely surrounding said

rod, an abutment in line with said ring and to one side of said rod, a spring to one side of said ring tending to tilt the same, and means to move said ring into a plane at approximately right angles to the axis of said rod.

2. A lock for a transom-lift rod, said lock comprising rings normally arranged in diagonally opposite planes, and loosely surrounding said rod, abutments in line with said rings and to one side of said rod, a spring between said rings tending to separate the same, and means to draw said rings into approximate parallelism.

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Witnesses:

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