

(No Model.)

H. W. BOLENS & J. GILSON.
CHAIR.

No. 535,348.

Patented Mar. 12, 1895.

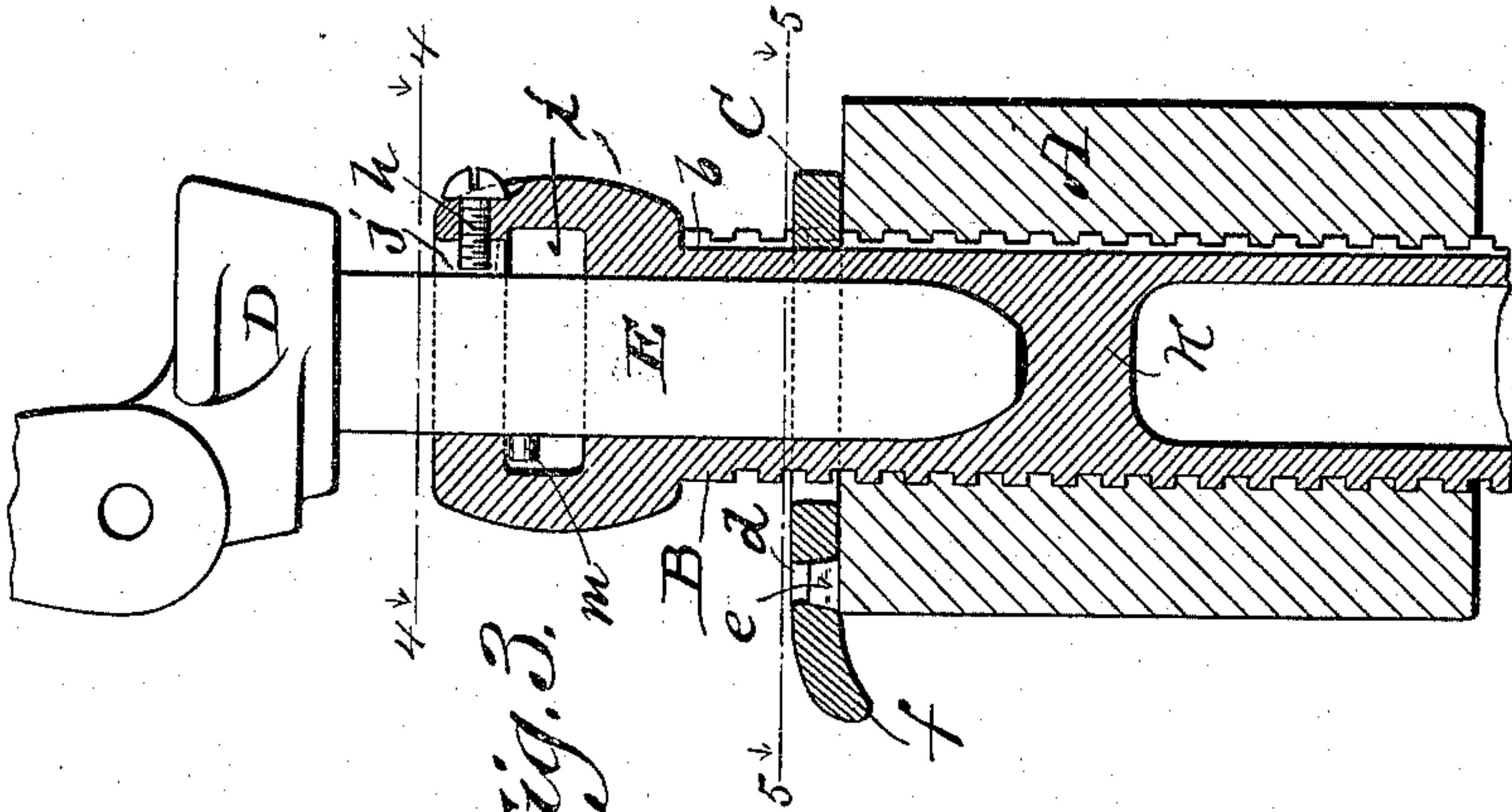


Fig. 3.

Fig. 4.

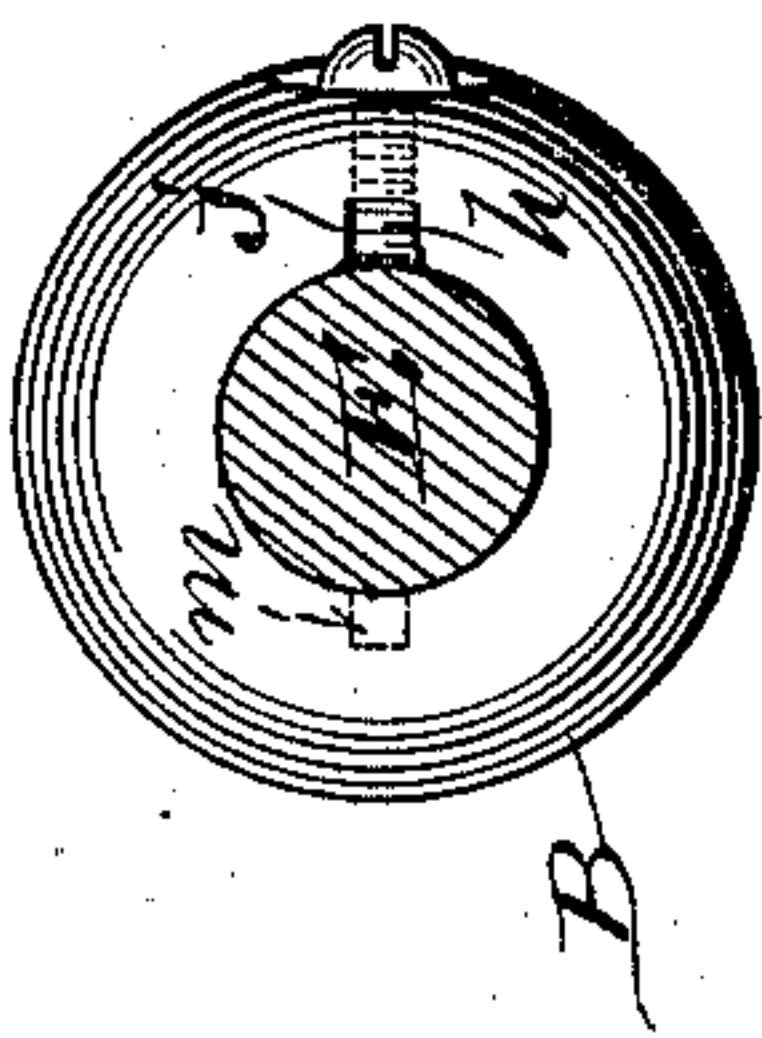


Fig. 5.

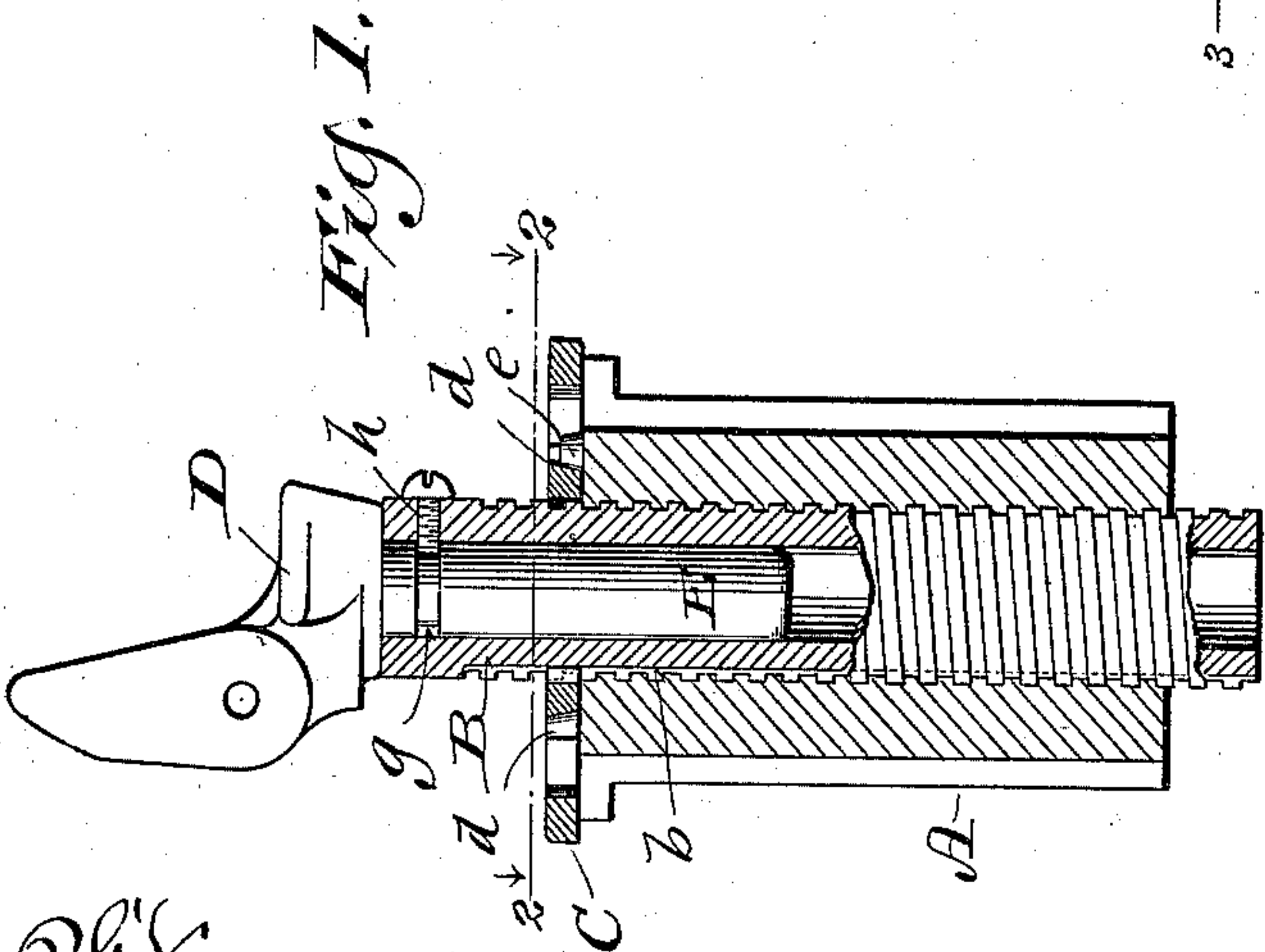
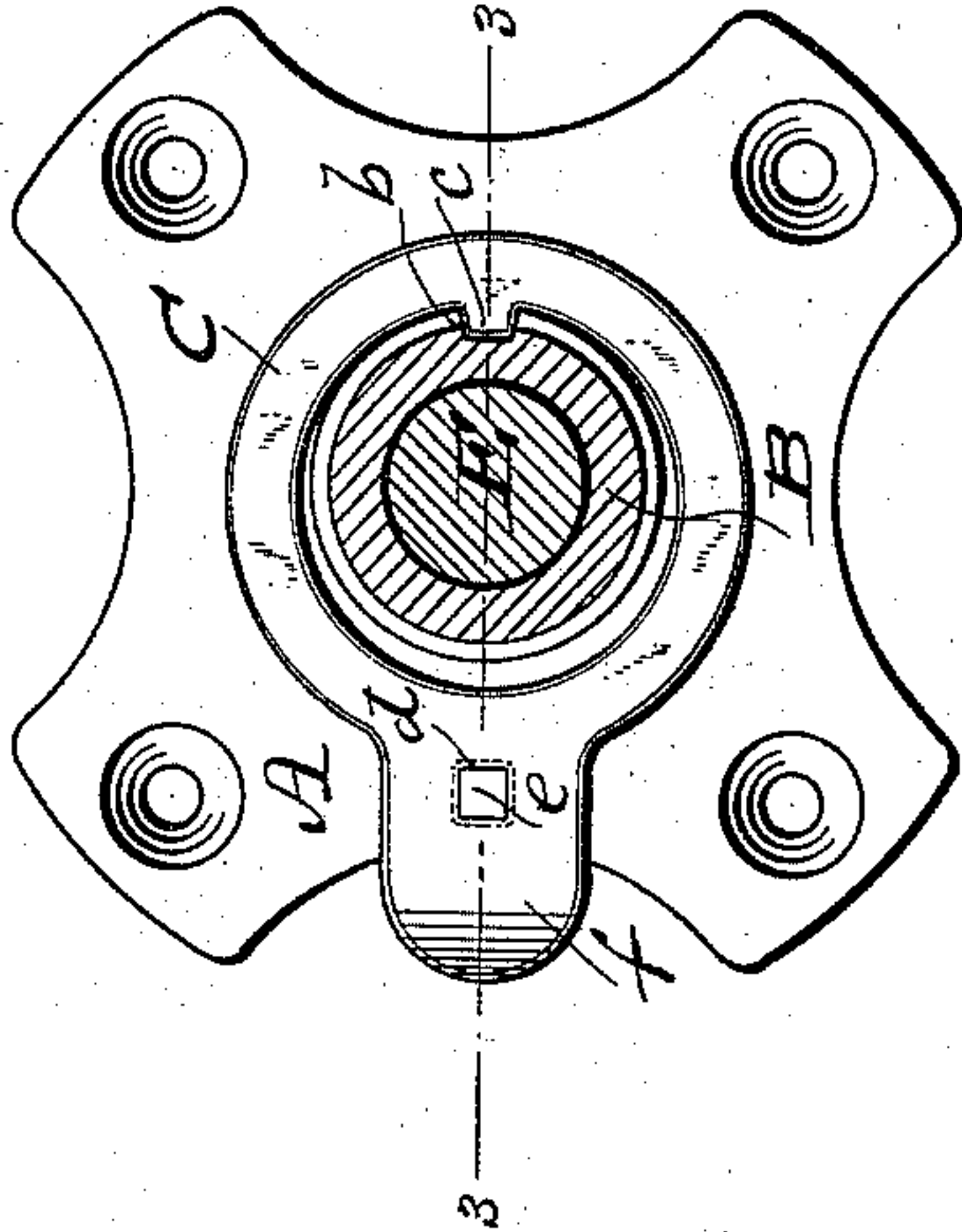


Fig. 1.

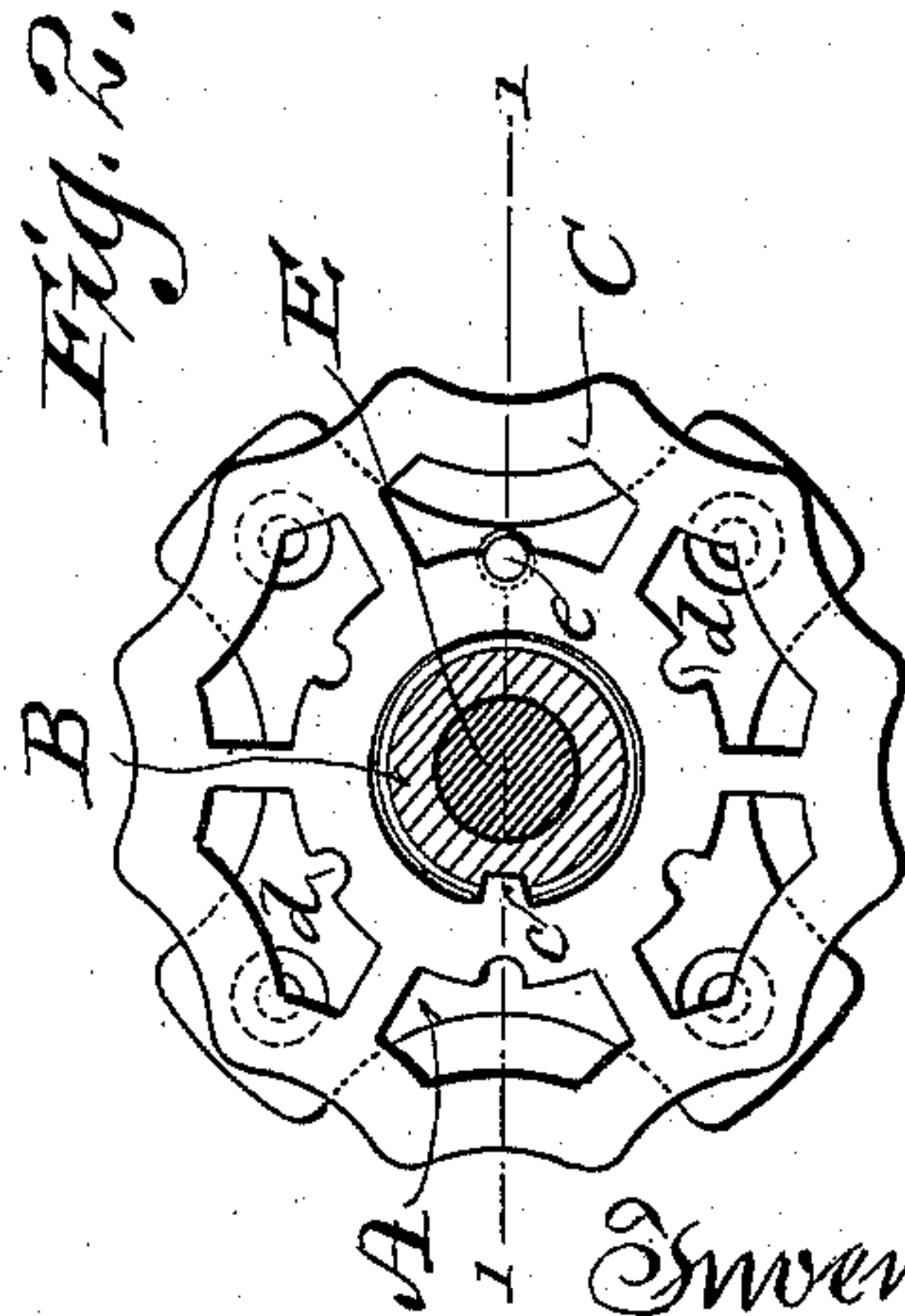


Fig. 2.

Witnesses
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UNITED STATES PATENT OFFICE.

HARRY W. BOLENS AND JOHN GILSON, OF PORT WASHINGTON, WISCONSIN,
ASSIGNORS TO THE GILSON MANUFACTURING COMPANY, OF SAME PLACE.

CHAIR.

SPECIFICATION forming part of Letters Patent No. 535,348, dated March 12, 1895.

Application filed March 26, 1894. Serial No. 505,107. (No model.)

To all whom it may concern:

Be it known that we, HARRY W. BOLENS and JOHN GILSON, citizens of the United States, and residents of Port Washington, in the county of Ozaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Chairs; and we do hereby declare that the following is a full, clear, and exact description thereof.

Our invention has for its object to simplify and cheapen that class of chairs having pivotal seats adjustable to various elevations, and it consists in certain peculiarities of construction and combination of parts for locking a screw spindle in adjusted position, and for holding the seat-iron pivot against withdrawal from the spindle, as well as for preventing rotation of said pivot when desirable, our improved means for accomplishing the above enumerated results being hereinafter specifically set forth with reference to the accompanying drawings and subsequently claimed.

In the drawings: Figure 1 represents a vertical transverse section taken on line 1—1 of the succeeding figure to illustrate one form of locking-collar for the screw-spindle, as well as a means for holding the seat-iron pivot in engagement with said spindle and for locking said pivot against rotation. Fig. 2 represents a plan view partly in horizontal section on line 2—2 of the preceding figure. Fig. 3 represents a section taken on line 3 3 of the fifth figure to illustrate another form of screw-spindle, locking-collar and pivot check, and Figs. 4 and 5 sectional plans respectively viewed on lines 4—4 and 5—5 of the third figure.

Referring by letter to the drawings A represents a chair-base casting having a threaded-bore for a screw-spindle B the latter being preferably hollow for all or a major portion of its length, as a matter of economy, although a screw-spindle longitudinally recessed at the upper portion but otherwise solid may be utilized instead of those herein shown.

In any form of spindle we provide the exterior of the same with a longitudinal groove *b* for the engagement of a stop-key of some description, the one herein shown being in

the form of a lug *c* extended inward from a loose collar C that may be held against rotation when in normal position by any suitable means, such for instance as one or more stops or seats *d* formed with said collar and a lug *e* rising from the base casting to engage any one of the stops or seats.

As shown in Figs. 1 and 2 the collar may be in the form of a hand-ring for utilization as a means for turning the spindle when raised up out of engagement with the lug on the base-casting, or as shown in Figs. 3 and 5 said collar may be provided with a peripheral thumb-piece *f* and have its spindle opening of such dimensions as to permit the disengagement of the key *c* from the spindle-groove *b* when the aforesaid collar is out of lock with the lug on the base-casting, the spindle being then free for independent rotation.

From the foregoing it will be understood that the collar C being in lock with the base casting and the key on said collar being engaged with the groove in the spindle, the latter cannot automatically or accidentally move out of its adjusted position, and it is preferable to make the lug on the base-casting and corresponding collar-seat or seats of such form as to obtain a wedging fit to thereby insure the retention of said collar in lock with said base-casting, and to take up the slack in said spindle so as to prevent wobbling.

As a variation not involving departure from our invention and too obvious to necessitate illustration, the lug *e* may be on the collar and the seat or seats for engagement therein with in the base-casting, this being merely a reversal of the construction herein shown.

As shown in Fig. 1, the seat-iron D of the chair rests on the upper end of the spindle and is rigid on a pivot E depending into said spindle, this pivot being provided with an annular groove *g* that receives a screw *h* having its bearing in the aforesaid spindle. The screw *h* prevents the seat-iron pivot from being accidentally disengaged from the spindle and it may be run in tight enough to prevent turning of said pivot, if at any time it is desirable to lock the seat of the chair against rotation.

As shown in Figs. 3 and 4 the head of the

spindle may be provided with an annular chamber *i* communicating with the bore, and a vertical chamber *j* leading from the upper end of said spindle into the chamber. When
 5 a spindle of the latter description is utilized the seat-iron pivot may have its lower end rest upon a solid portion *k* of said spindle and be held against automatic or accidental displacement by means of a lateral lug *m*
 10 that enters the chamber *i* through the channel *j* the latter being then closed by the inward adjustment of the screw *h* so arranged as to serve this purpose, it also following that said screw may be utilized to lock said pivot
 15 against rotation.

Application for patent, Serial No. 491,374, filed November 20, 1893, by Harry W. Bolens, one of the parties to the present application, sets forth a combination of a chair-base casting,
 20 ing, a spindle connected to the base and recessed at its upper portion to form a vertical socket, an annular chamber communicating with the socket and a vertical entrance-channel to the chamber; a seat-iron having a depending pivot that engages said socket, a
 25 lateral lug on the pivot let into the chamber through said channel, and a suitable device arranged in the spindle to close the aforesaid channel against withdrawal of the pivot-lug
 30 from the aforesaid chamber.

While we have shown all that is recited in the foregoing paragraph, the same, in a generic sense, is conceded to be the invention of the said Harry W. Bolens.

35 The Bolens application shows and describes a spring-stop arranged in the spindle to close a channel against withdrawal of the lug on the seat-iron pivot, while we show and describe a screw having the function of a closure
 40 for the spindle-channel, this screw being a specific limitation in the present application. Bolens' application also shows a means for locking the spindle in adjusted position, but in the present application an entirely different
 45 means for the same purpose constitutes another specific limitation.

Having thus described our invention, what

we claim as new, and desire to secure by Letters Patent, is—

1. The combination of a chair-base casting 50 having a screw threaded bore,— a longitudinally grooved screw-spindle engaging said bore, a collar loose on the spindle, a key extended inward from the collar for engagement with the spindle-groove, and a beveled 55 lug and seat connection between said collar and base-casting, substantially as set forth.

2. The combination of a chair-base casting having a screw-threaded bore, a longitudinally grooved screw-spindle provided with a 60 bore enlarged adjacent to its upper end to form a communicating annular chamber and vertical channel, a screw arranged in the spindle to form a closure for said channel, a seat-iron having a depending pivot that en- 65 gages the spindle-bore, and a lateral lug on the pivot that enters said chamber through the aforesaid channel, substantially as set forth.

3. The combination of a chair-base casting 70 having a screw-threaded bore, a longitudinally grooved screw-spindle provided with a bore enlarged adjacent to its upper end to form a communicating annular chamber and vertical channel, a screw arranged in the spin- 75 dle to form a closure for said channel, a seat-iron having a depending pivot that engages the spindle-bore and is provided with a lateral lug that enters said chamber through the aforesaid channel, a collar loose on said spin- 80 dle, a key extended inward from the collar for engagement with the spindle-groove, and a lug and seat connection between said collar and base-casting, substantially as set forth.

In testimony that we claim the foregoing we 85 have hereunto set our hands, at Port Washington, in the county of Ozaukee and State of Wisconsin, in the presence of two witnesses.

HARRY W. BOLENS.
 JOHN GILSON.

Witnesses:

WM. AHLHAUSER,
 H. B. SCHWIN.