

No. 881,501.

PATENTED MAR. 10, 1908.

T. H. THOMPSON.
DESK.

APPLICATION FILED OCT. 8, 1907.

Fig. 1.

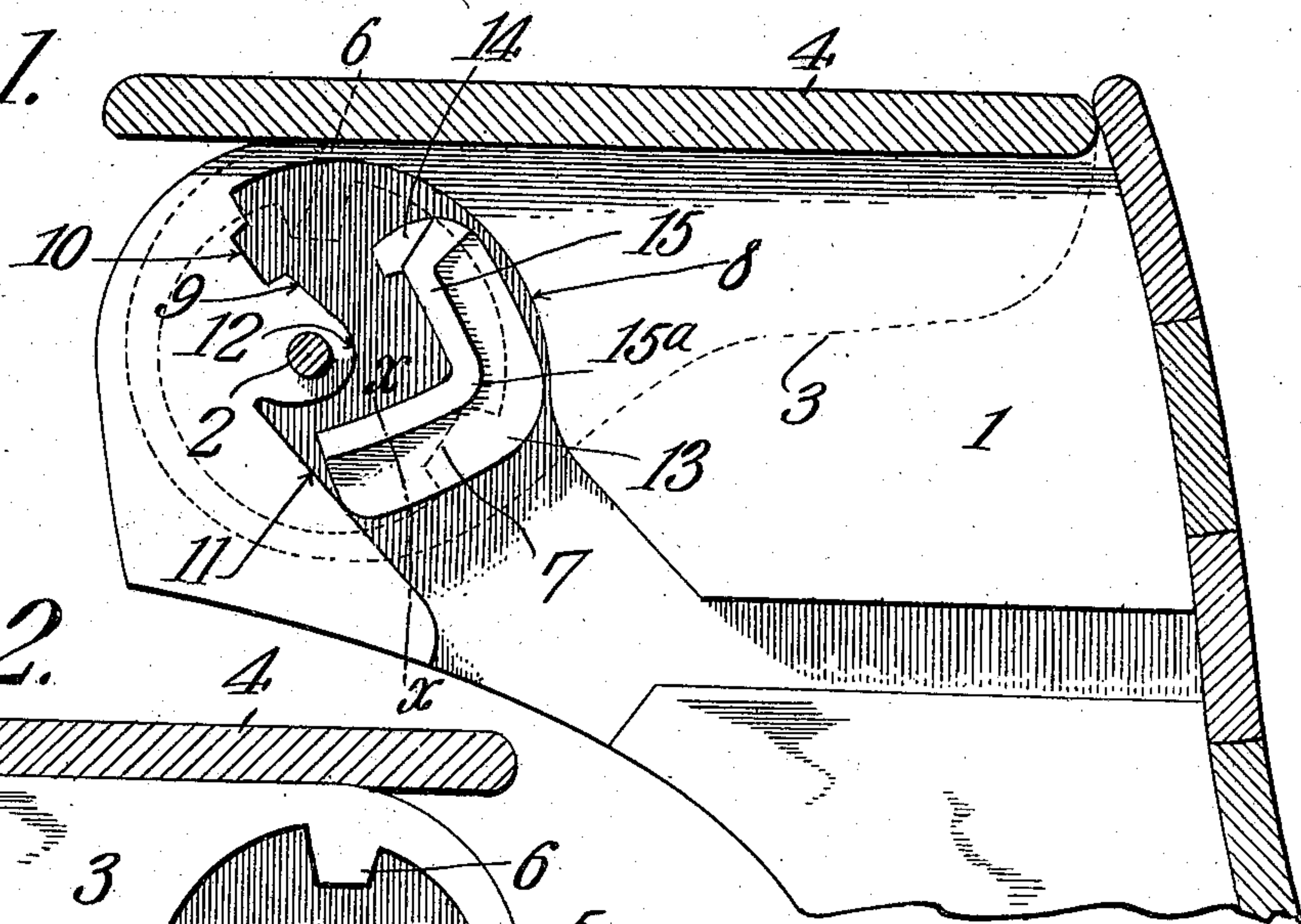


Fig. 2.

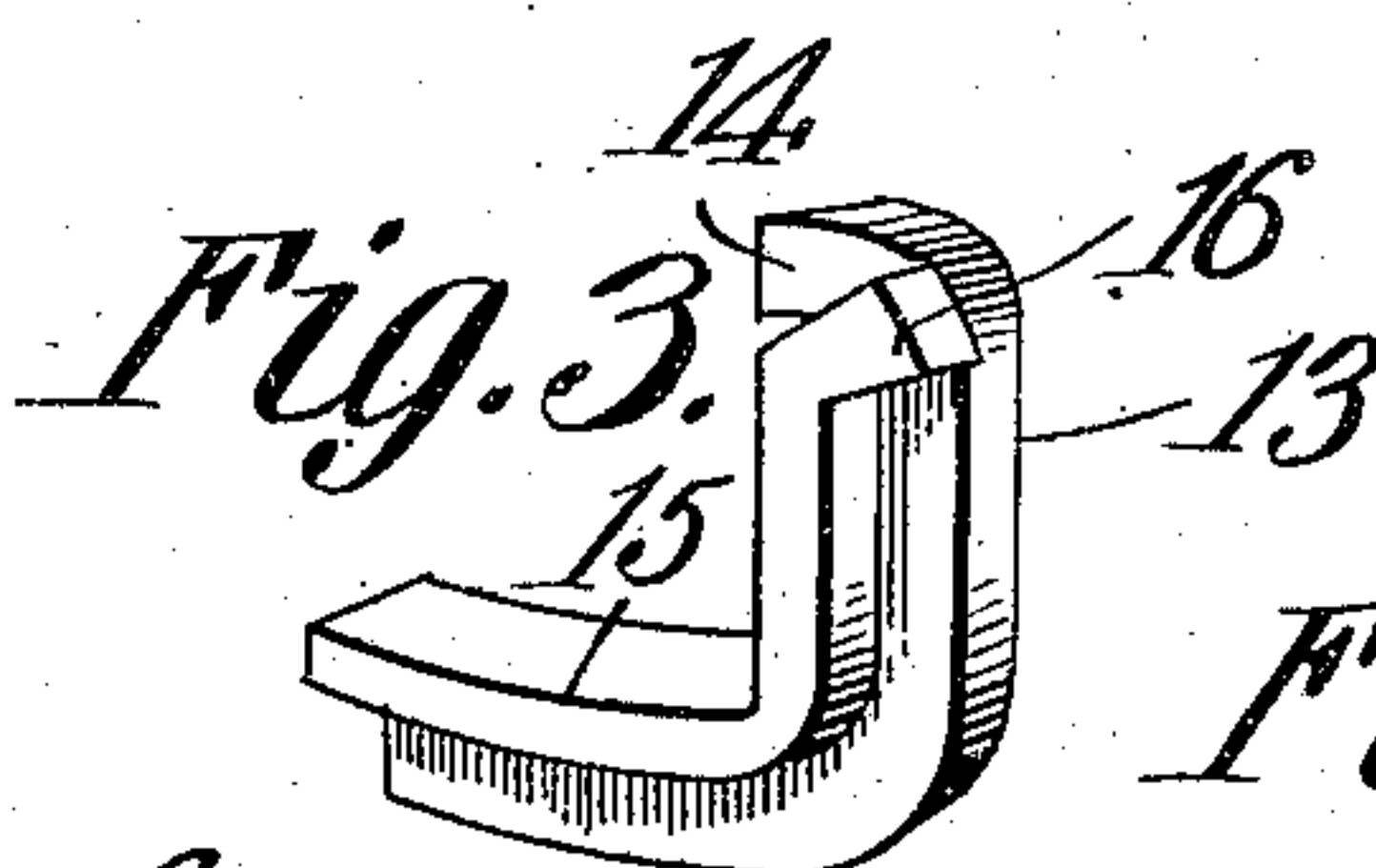
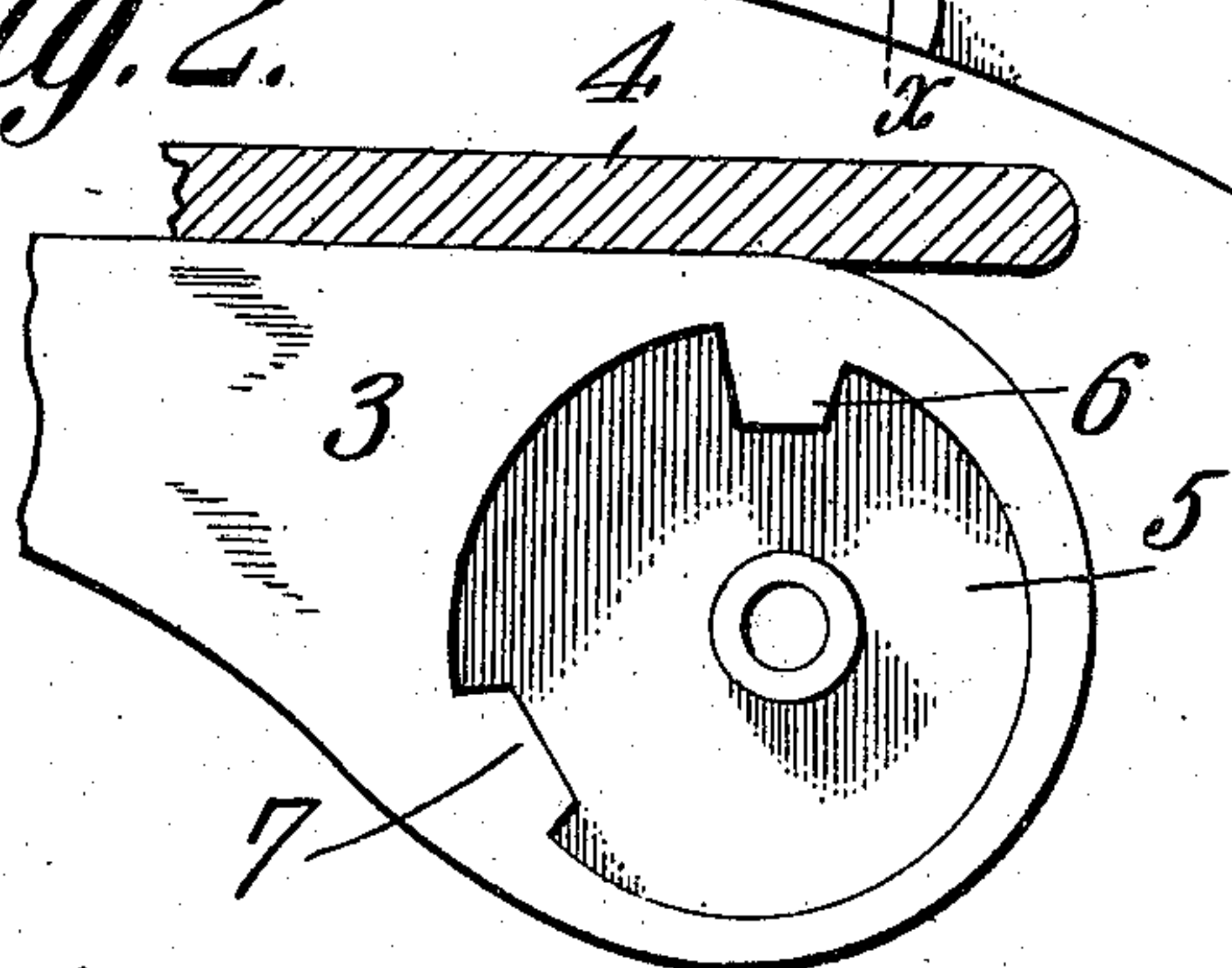


Fig. 4.

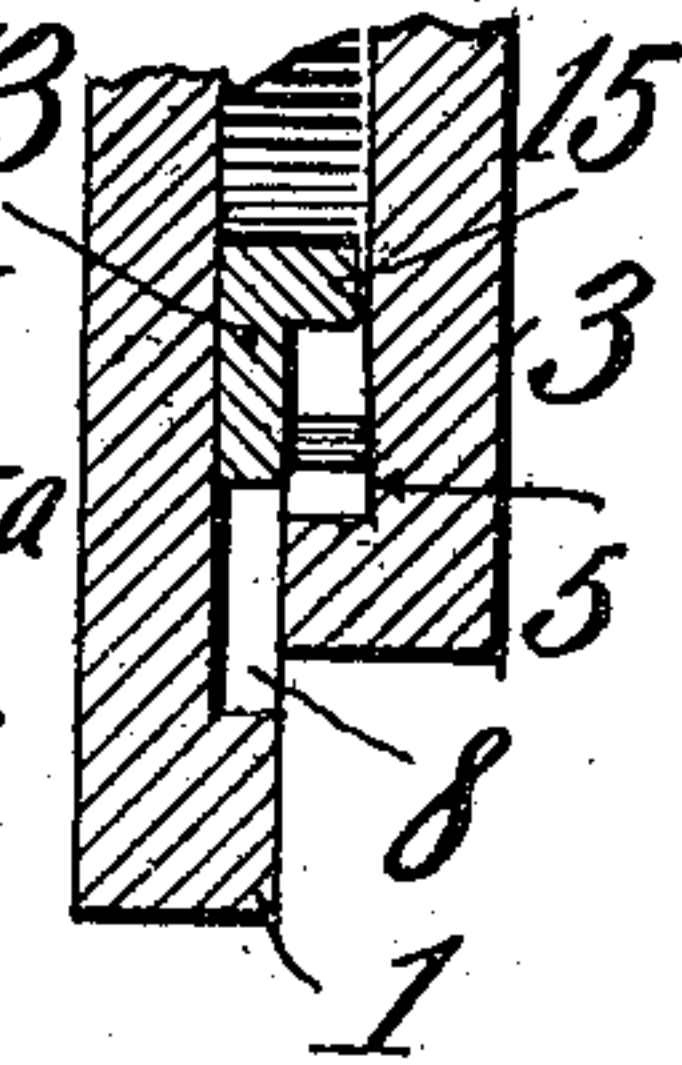


Fig. 5.

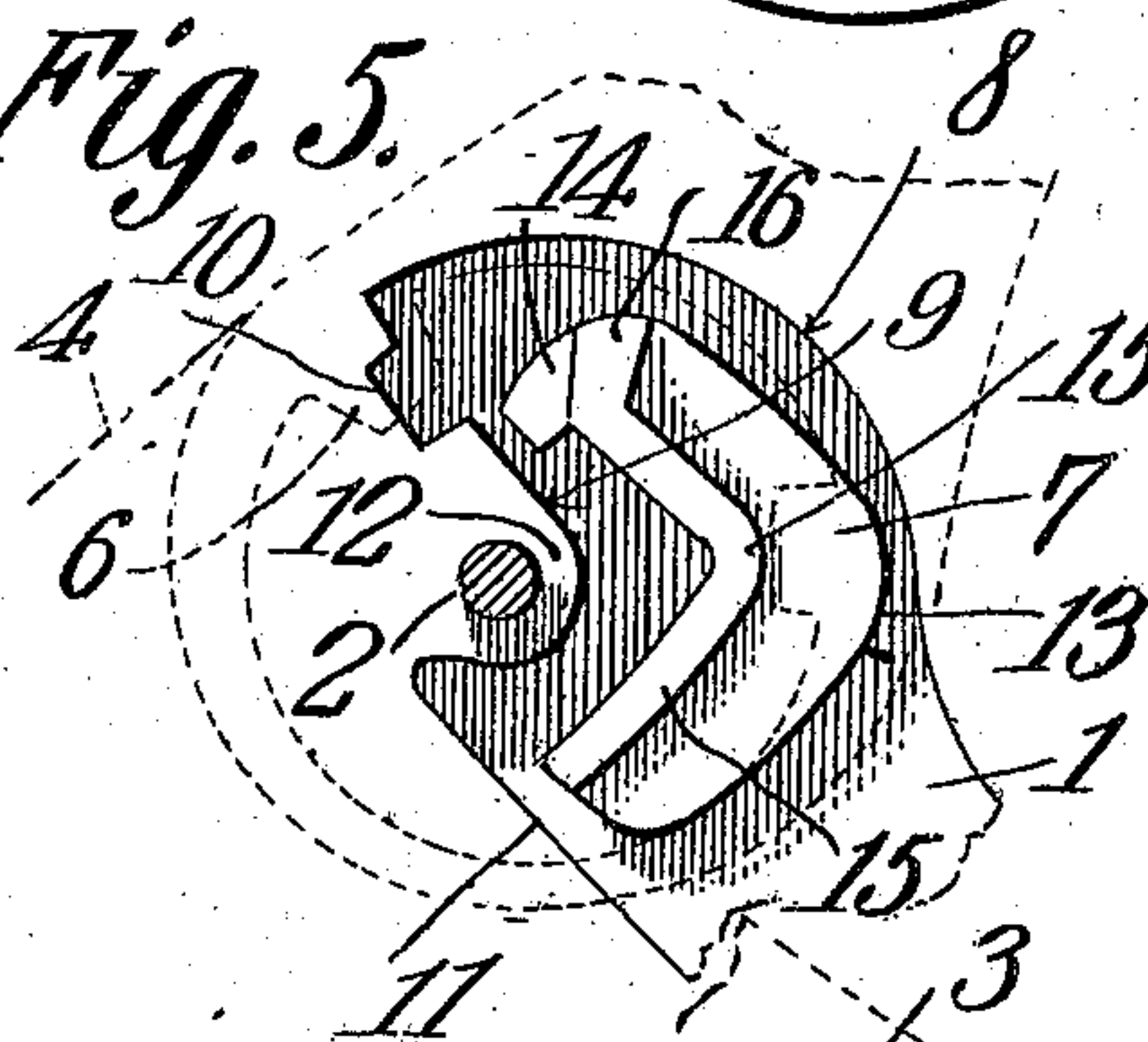


Fig. 6.

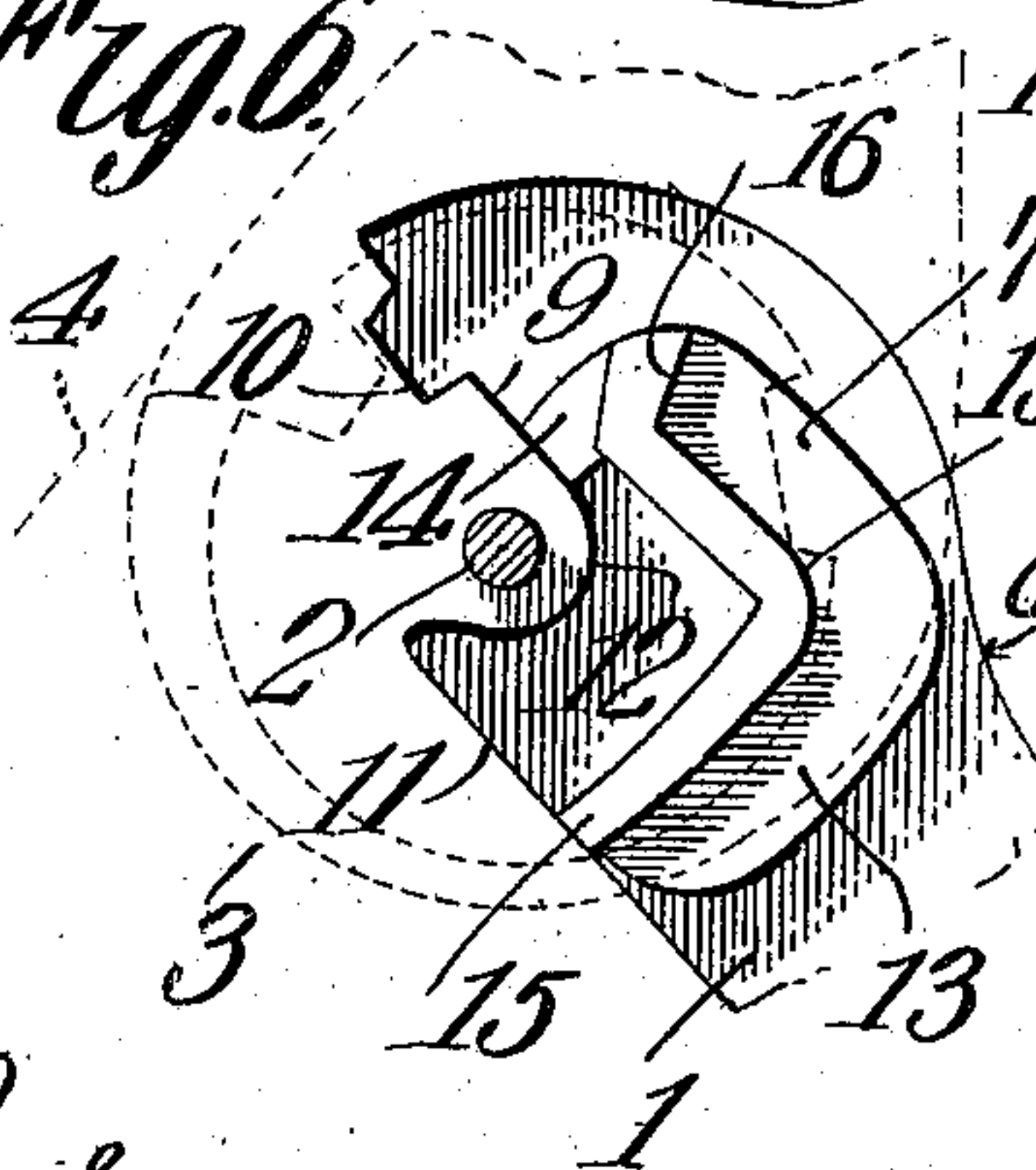
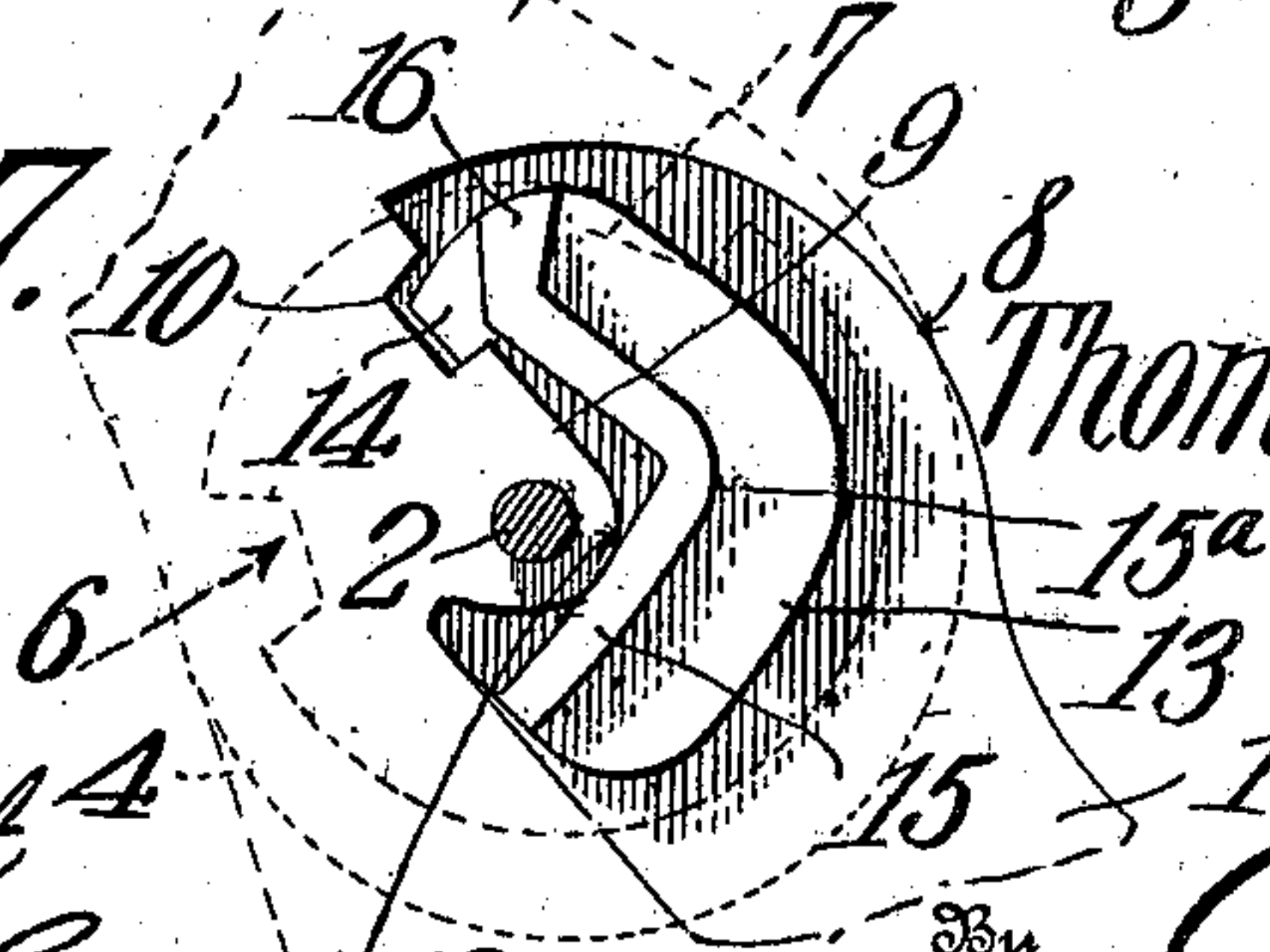


Fig. 7.



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THOMAS HENRY THOMPSON, OF WINFIELD, TEXAS.

DESK.

No. 881,501.

Specification of Letters Patent.

Patented March 10, 1908.

Application filed October 8, 1907. Serial No. 396,482.

To all whom it may concern:

Be it known that I, THOMAS HENRY THOMPSON, a citizen of the United States, residing at Winfield, in the county of Titus and State of Texas, have invented a new and useful Desk, of which the following is a specification.

This invention relates to desks of that class having hinged tops provided with means for locking the tops, and its object is to provide means concealed by the desk whereby the top can be automatically locked when partly raised and which can be unlocked by further raising the top whereupon said top can be lowered to its normal or initial position, this lowering operation resulting in the resetting of the lock.

Another object is to provide a tumbler or locking bolt of novel form cooperating with fixed and movable parts of the desk and interposed between and concealed by them, the bolt being so shaped and mounted as to efficiently lock the top in the manner stated.

With these and other objects in view the invention consists of certain novel features of construction and combinations of parts which will be hereinafter more fully described and pointed out in the claims.

In the accompanying drawings is shown the preferred form of the invention.

In said drawings: Figure 1 is a section through a portion of a desk embodying the present improvements, the bolt being shown in its normal position and that portion of the top cooperating therewith being removed but indicated by dotted lines. Fig. 2 is an elevation of that face of the top designed to cooperate with the bolts. Fig. 3 is a perspective view of the bolt. Fig. 4 is a section on line $x-x$, Fig. 1, the adjoining portion of the top being shown in full lines. Fig. 5 is a view of the lock similar to Fig. 1 and showing the second position of the bolt, the parts of the lock being indicated in the same manner as in Fig. 1. Fig. 6 is a view similar to Fig. 5 and showing the third position of the bolt which is assumed while the top is locked in a partly raised position. Fig. 7 is a view similar to Figs. 5 and 6 and showing the fourth position of the bolt which is assumed upon the completion of the upward movement of the top and which permits said top to be lowered to its normal position.

Referring to the figures by characters of reference, 1 designates one of the sides or standards of the desk, the same having a

pivot bolt 2 extending therethrough and disposed to connect the two sides of the desk. This bolt constitutes the fulcrum of lid arms or flanges 3 which extend downward from the side portions of the top 4 of the desk, said flange portions being preferably enlarged and rounded at their pivoted ends and provided with substantially circular sockets 5 in those faces thereof adjoining the sides 1.

Extending inwardly from the wall of each socket 5 are shoulders 6 and 7 respectively, the shoulder 6 being located normally in that portion of the socket which is normally uppermost while the shoulder 7 is arranged about one hundred and twenty degrees therefrom as indicated clearly in Fig. 2 and by dotted lines in Figs. 1, 5, 6 and 7. That face of each side 1 which is contacted by the flange 3 has a socket 8 therein which extends partly around the pivot bolt 2. This socket is curved partly around and over the pivot bolt 2 and terminates in a substantially straight inclined wall 9 having an angular notch 10 therein. The lower wall of the socket is also preferably straight and inclined and extends from the lower edge of the side 1 to a point close to the pivot bolt 2, the two walls 9 and 11 forming a rounded nose 12 therebetween through which the bolt 2 extends. Loosely mounted within the socket 8 is a locking bolt 13 which is substantially L-shaped the ends and corners thereof being rounded and the upper end of the bolt being provided with a lug 14 extended toward the wall 9. Arranged along those edges of the bolt adjoining the pivot 2 is an outstanding flange 15 which terminates close to the lug 14 and extends transversely of the bolt to form a shoulder 16. This flange 15 and shoulder 16 rest within the socket 5, said shoulder 16 being located at all times between the near faces of the shoulders 6 and 7.

It is of course to be understood that the top 4 is normally closed as indicated in Fig. 1 and when so positioned the flanges 3 extend downward between the sides 1 as shown by dotted lines in said figure. Moreover, when the parts are so located the bolt 13 rests with its lower end in contact with the wall 11 of socket 8 and with the angle portion 15^a of its flange 15 upon the shoulder 7 within socket 5 as indicated in Fig. 1. When the top 4 is swung upward shoulder 7 pushes against the angle portion of flange 15 and moves past it as indicated in Fig. 5 pushing the bolt toward the pivot 2. As soon as shoulder 7

is moved past the angle portion of the locking bolt said bolt drops downward by gravity until the lower end thereof rests upon the wall 11 while the lug 14 rests upon the wall 9 as shown in Fig. 6. The angle portion of the flange 15 therefore assumes a position below and in the path of the shoulder 7 and prevents downward movement of said shoulder and consequently of the top 4. The top will thus be supported in inclined position and can be used as a blackboard, easel, or for other purposes. Should it be desired to lower the top it is first necessary to swing it further upward so that the shoulder 7 will strike shoulder 16 and pull the bolt upward along wall 9 until the lug 14 becomes seated within the notch 10. This position of the parts has been illustrated in Fig. 7. The bolt will thus be held with all parts thereof out of the path of shoulder 7 and the top 4 can be swung downward. As soon as the shoulder 7 passes the angle portion of flange 15 during the downward movement of the top the shoulder 6 presses against shoulder 16 and pushes lug 14 out of notch 10 whereupon the bolt will fall by gravity into its normal position indicated in Fig. 1 and the operation hereinbefore described will be repeated. It will be seen that the lock is very simple, durable and efficient, can not get out of order, and will positively hold the top at a desired angle and prevent it from being lowered unless the same is first swung upward to its greatest extent so as to shift the bolt into inoperative position.

What is claimed is:

1. The combination with a desk standard having a socket, one wall of the socket being notched; of a lid arm pivotally connected to the standard, an L-shaped bolt loosely mounted within the socket and having a shoulder, a notch engaging portion for

the bolt, and means upon the lid arm for successively engaging the angle portion and shoulder of the bolt to shift the bolt out of the path of said means and to seat the notch engaging portion of the bolt within the notch respectively, said bolt being movable by gravity against one wall of the standard socket and below and into the path of said means immediately subsequent to the first or shifting operation.

2. The combination with a desk standard having a socket, a pivot device extending through the standard, said socket being curved partly around and over the pivot device and having a substantially straight inclined wall provided with an angular notch, the lower wall of the socket being also preferably straight and inclined from a point close to the pivot device, said walls forming a rounded nose therebetween; of a lid arm mounted upon the pivot device, an L-shaped bolt loosely mounted within the socket and having a shoulder, a notch engaging portion upon the bolt, and means upon the lid arm for successively engaging the angle portion and the shoulder of the bolt to shift said bolt out of the path of said means to seat the notch-engaging portion of the bolt within the notch respectively, said bolt being movable by gravity against the upper and lower inclined walls of the standard socket and below and into the path of said means upon the lid arm subsequent to the first or shifting operation.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

THOMAS HENRY THOMPSON.

Witnesses:

J. O. BARRETT,
HENRY SMITH.