

(No Model.)

D. W. MARSTON.
SCYTHE ADJUSTER AND FASTENER.

No. 304,211.

Patented Aug. 26, 1884.

Fig. 1.

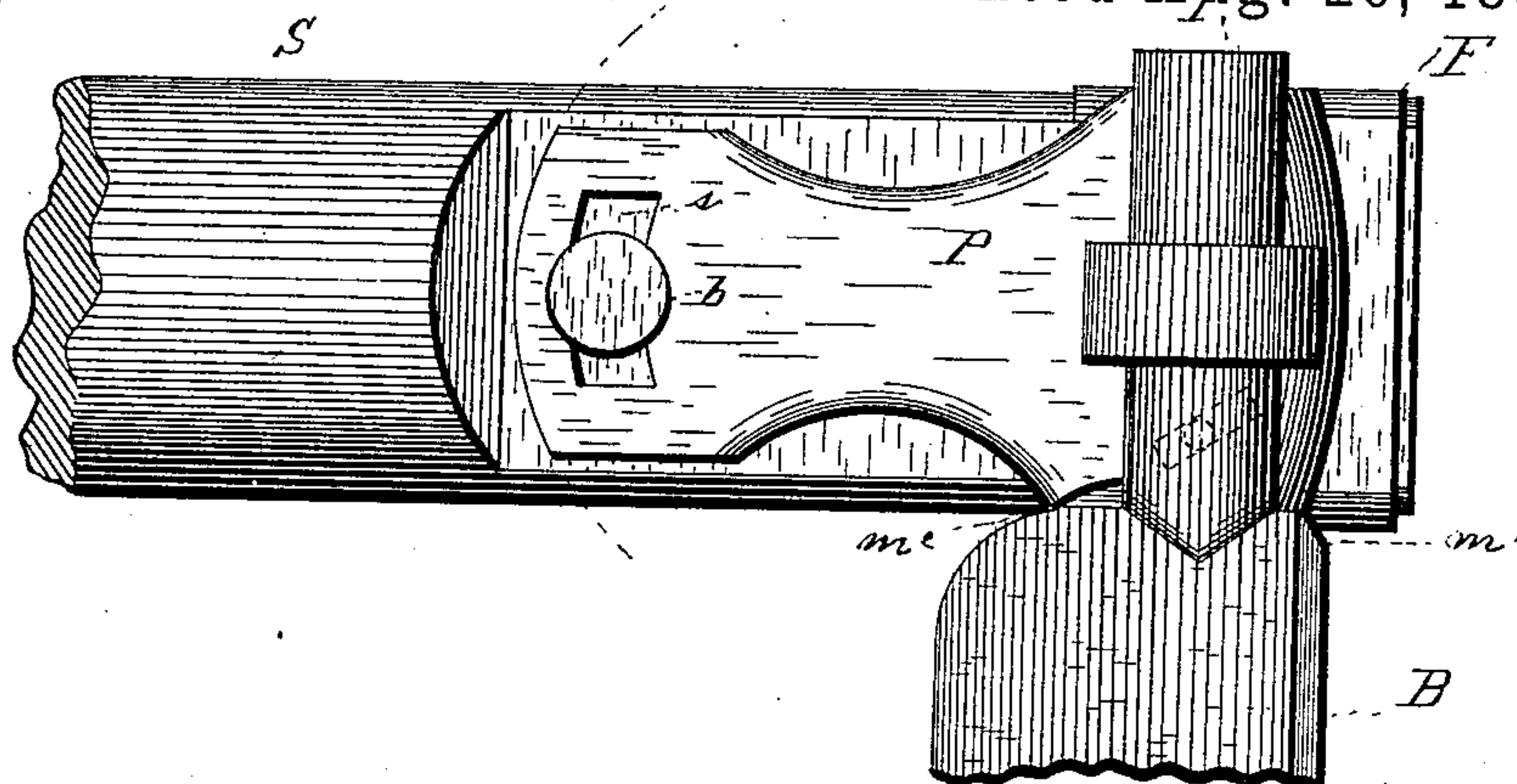


Fig. 2.

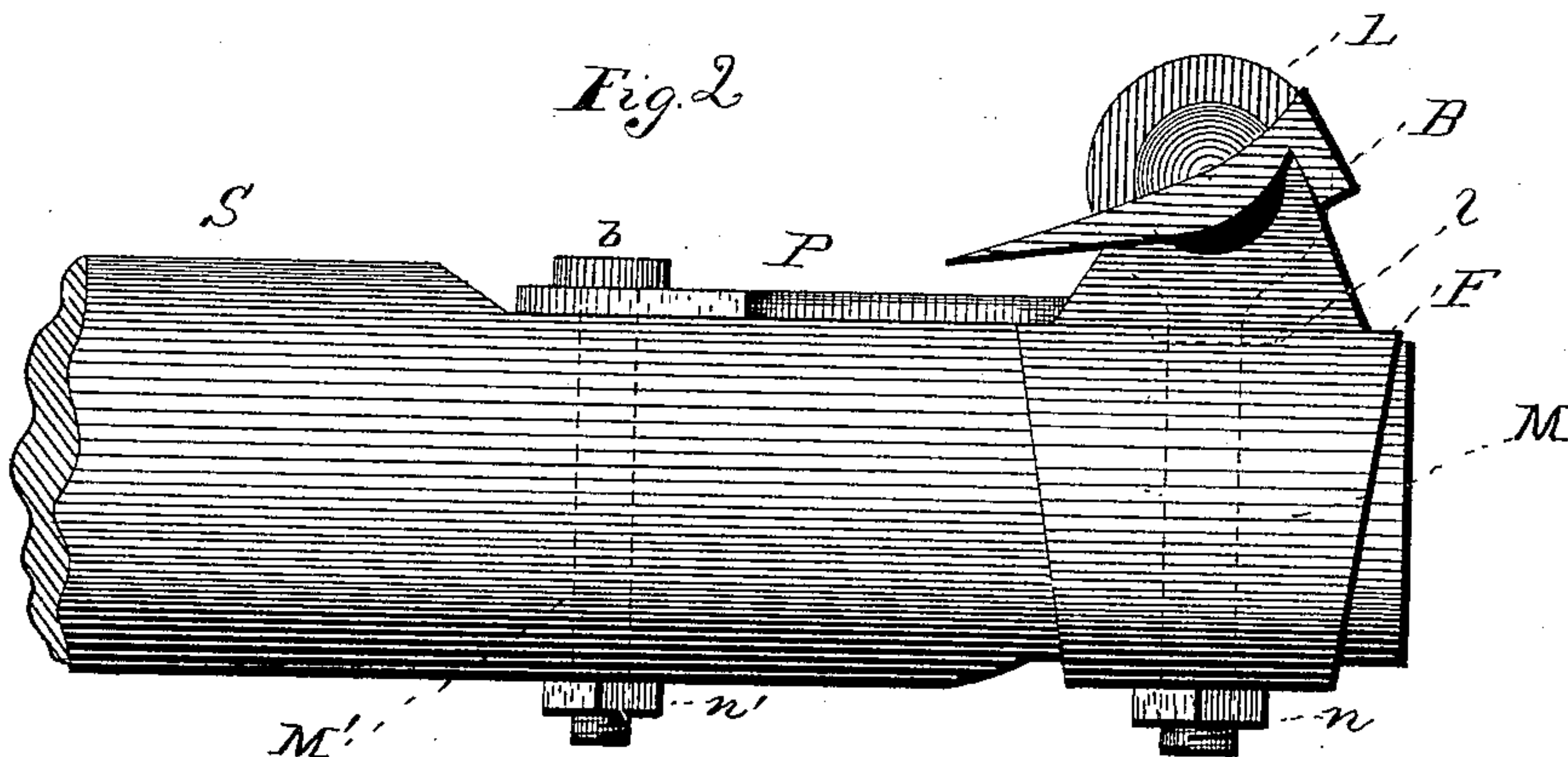


Fig. 4.

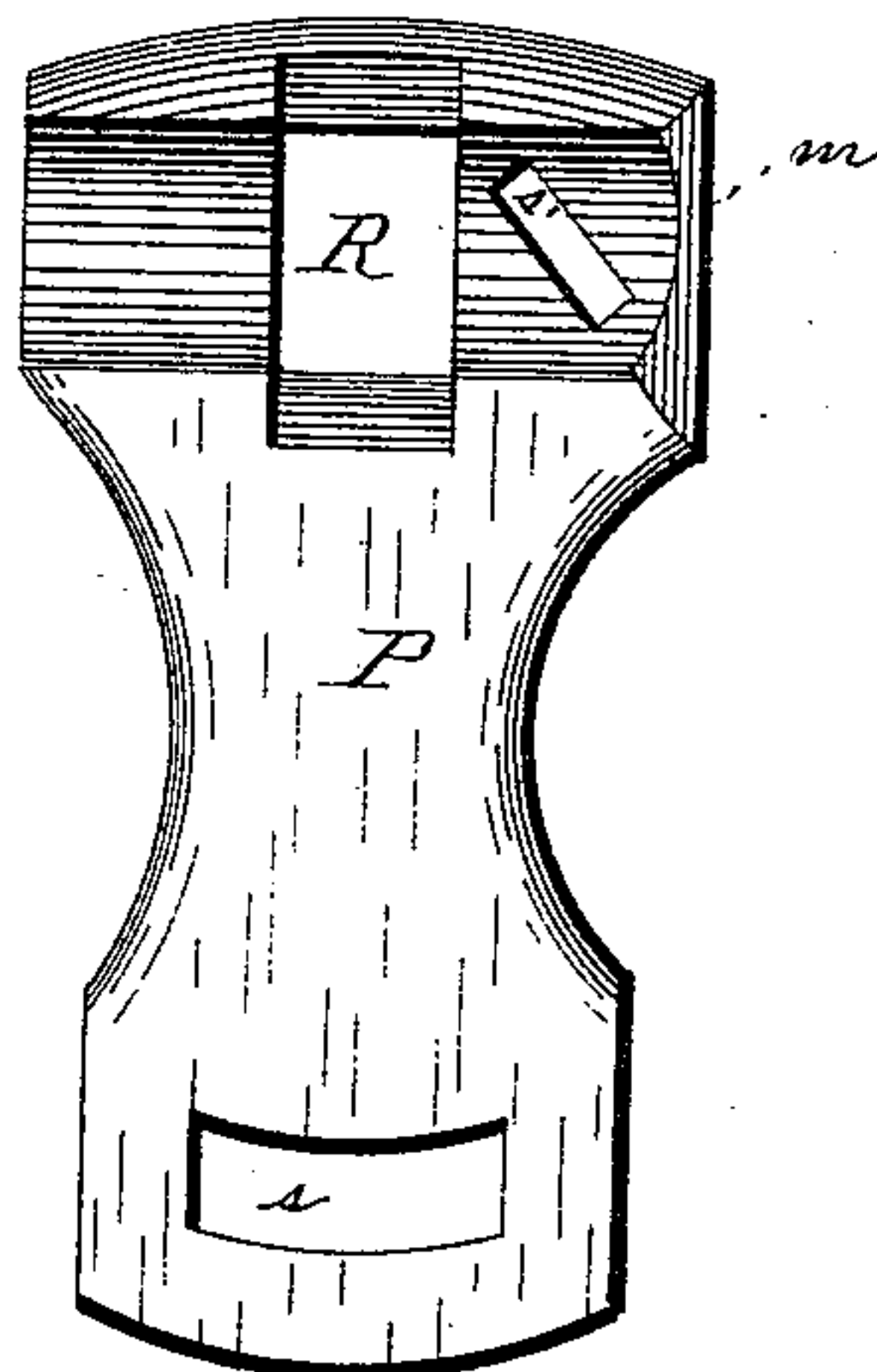


Fig. 5.

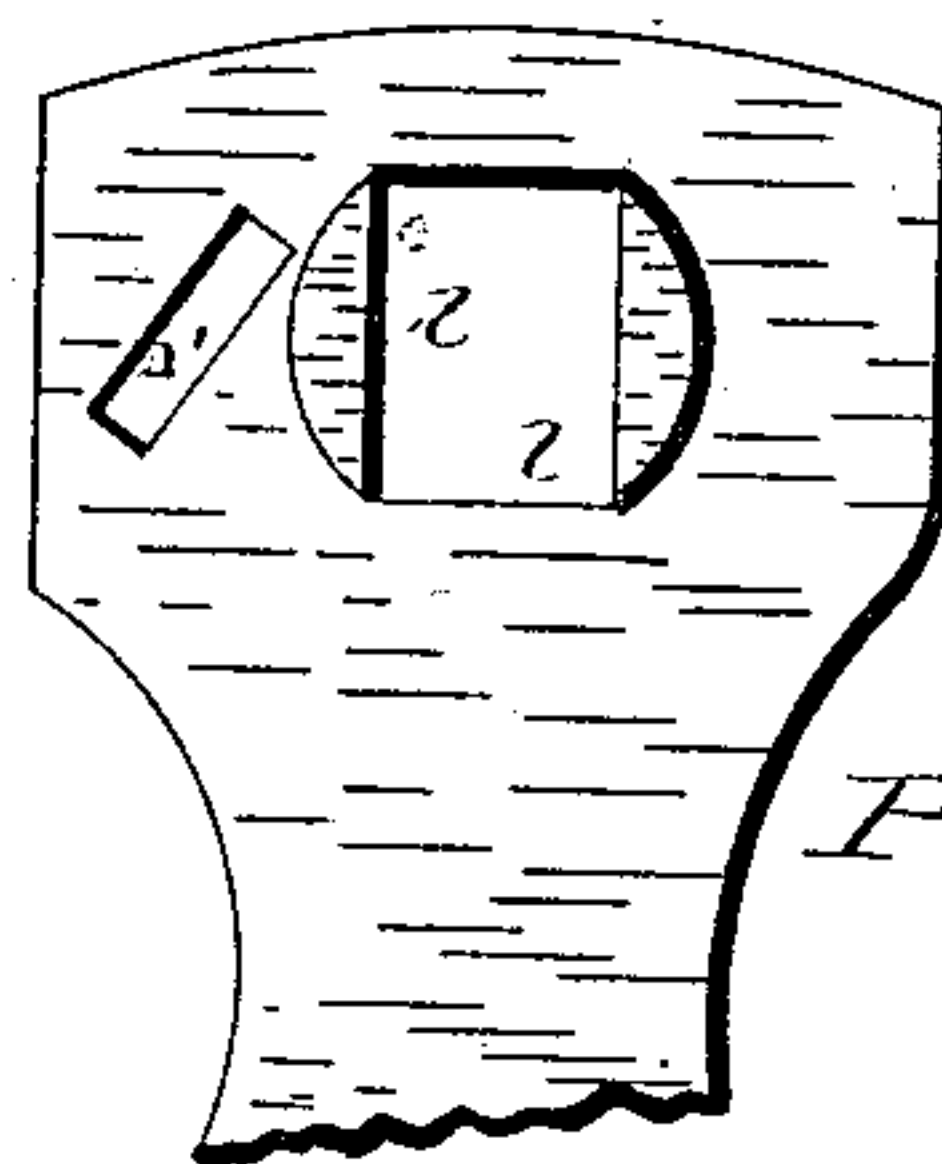
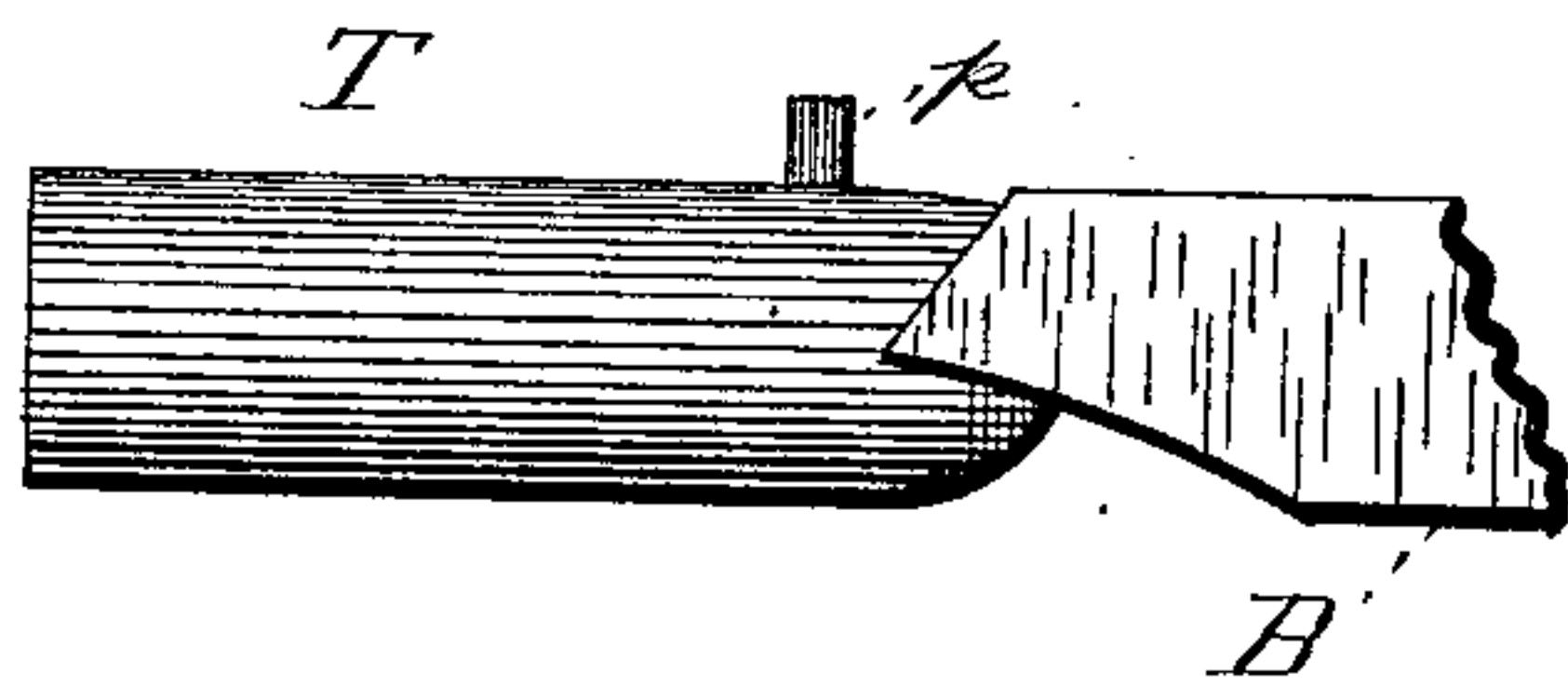


Fig. 3.



WITNESSES.

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UNITED STATES PATENT OFFICE.

DAVID W. MARSTON, OF WEST LEBANON, N. H., ASSIGNOR OF ONE-HALF TO
MARTIN V. PURMORT AND HENRY M. DAY, BOTH OF SAME PLACE.

SCYTHER ADJUSTER AND FASTENER.

SPECIFICATION forming part of Letters Patent No. 304,211, dated August 26, 1884.

Application filed November 24, 1883. (No model.)

To all whom it may concern:

Be it known that I, DAVID W. MARSTON, a citizen of the United States, residing at West Lebanon, in the county of Grafton and State of New Hampshire, have invented certain new and useful Improvements in a Scythe Adjuster and Fastener; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The object of my invention is to fasten the scythe to the under side of the snath end by novel and advantageous means, and in such a manner that the scythe may be adjusted and held at the desired angle to the snath out or in, the dip of the blade from the ground being easily regulated and maintained, both adjustments requiring no removal of the scythe.

To this end my invention consists, principally, in a swing-plate pivoted in the snath-ferrule by two semicircular lips near the end of the upper side of the plate, (and, also, perhaps, additionally, by the loop-bolt,) said plate being provided with a transverse concave groove on the lower side, for receiving a plain round scythe-tang, the grooves being cut away to partly receive the loop of the fastening-bolt, and slotted diagonally at the bottom to aid, in connection with a pin on the scythe-tang, to prevent the scythe from rolling, the rear of the plate having a curved slot for adjusting and limiting the swing by means of a flat-headed screw-bolt.

My invention further consists in a combination of details, which will be described below, and pointed out in the claims.

In the drawings, Figure 1 is a plan view of the under side of the snath end, showing the parts connected. Fig. 2 is a side elevation, the working parts being reversed, the lower side of the snath turned uppermost. Fig. 3 is a detail view of the scythe-tang, the blade mostly broken away. Fig. 4 is a detail view of the under side of the swing-plate. Fig. 5 is

a detail view in broken section of the upper side of the swing-plate.

Like letters refer to like parts.

Fig. 2 is reversed from working order to show the parts more prominently, and this should be kept in mind in connection with the description below. The snath S is cut away at the under side of the outer end, to give a smooth surface for the swing-plate to slide on. An ordinary form of ferrule, F, surrounds said snath, but the lower side of it is flush with the surface of the cut-away just mentioned, (see Fig. 2,) so not to interfere with the movement of the plate, which is represented by P. (See Figs. 1, 4, and 5.) Referring to the head of it, it will be seen that it has integral projecting lips *l l*. They are semicircular on the outside and straight on the inside. (See Fig. 5.) As they extend up into a circular opening in the ferrule, and possibly some distance into the snath, they serve to pivot the swing-plate. (See dotted line, Fig. 2.) It will be noticed that the head of said plate is much thicker than the inner end. The purpose of this is to admit the forming of the deep concave groove G on the underside. (See Fig. 4.) This extends transversely, and receives the round tang T of the scythe, the latter being held from rolling by the loop L of the fastening-bolt M, which draws it hard up into the groove when the nut *n* of this bolt is sufficiently tightened. (See Fig. 2.) Said bolt passes through the opening R in the plate, between the lips *l l* to the other side of the snath, the opening R being formed to receive and hold the loop L as it is drawn up by the nut *n*. It will be readily seen how quickly the tang may be fastened, loosened to roll in the groove G, to change the dip of the blade B, or removed entirely, all by operating the nut *n*.

To further prevent the tang from rolling, a diagonal slot, *s'*, is cut in the bottom of the groove G to receive a pin, *p*, attached to the tang T. (See Figs. 1, 3, and 4.) Said slot *s'* might be cut into the upper part of either side of the groove G and the pin *p* changed to correspond; or a ridge might be formed in

groove G and an opening or slot in the tang T to match, all without departing from my invention. The outer side of the plate P is beveled at m , (see Fig. 4,) and the scythe correspondingly so at $m' m^2$, (see Fig. 1,) to prevent wear and further aid in stopping the tang from rolling, the surfaces causing more friction when gradually beveled than sharp edges would, yet easily sliding over and guiding each other when it is desirable to roll the tang to change the dip of the blade. It will be seen that, if there is any motion at all of the pin p in the slot s' , its tendency will be endwise, the tang not rolling. The rear of the plate P has a curved slot, s , through which and the snath the bolt M' passes. The round bolt-head b is made large enough to draw up on each side of slot s , the bolt proper clearing it. The object of this construction is to securely fasten the plate by nut n' when it has been moved to adjust the desired angle between the scythe and snath, the lips $l l$ acting as bearings, as above described. The curved slot s being quite long, the angle can be varied to meet all requirements without the plate P swinging much, if any, beyond the sides of the snath. Referring again to the angle and dip adjustments, it will be noticed that either may be had independently of the other and upon the same plate, nor is any tool required except a wrench.

The simplicity, durability, and ease of operation of my device as a whole is apparent. No description of the operation thereof is needed, as it will be readily understood by those skilled in the art from the drawings and specification.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination of a scythe provided with a round tang, a snath having a flat under surface at its outer end, an adjustable swing-plate pivoted on said flat surface near the end of the snath and extending rearward,

and provided with a seat for said tang, and means for drawing the tang into said seat and securing it thereto, whereby the dip of the scythe to the ground and its angle to the snath may be independently adjusted, substantially as set forth.

2. The combination, with a scythe-snath, of a swing-plate provided on its under side with a transverse concave groove, a scythe having a round tang, and means for fastening the tang in said groove, whereby the dip of the blade to the ground may be adjusted and the scythe securely fastened, as set forth.

3. A scythe-snath, in combination with a swing-plate pivoted on the lower side of the snath end and provided with a transverse concave groove near the outer end and a curved slot near the inner end, a scythe having a round tang, and means for fastening the tang in said groove, and the plate upon the snath, whereby the dip of the scythe and its angle with the snath may be independently adjusted and the scythe firmly fastened, as set forth.

4. The combination of the snath S with the swing-plate P, provided with lips $l l$ and the groove G, the scythe B, having a round tang, T, the loop-bolt M, and the flat-headed bolt M' , as set forth.

5. The snath S, combined with the swing-plate P, having the groove G and slot s' , a scythe, B, provided with a round tang, T, having a pin, p , and the bolts M M' as set forth.

6. In combination with the snath S, the swing-plate P, beveled at m and provided with the lips $l l$, groove G, and slots $R s'$, the scythe correspondingly beveled at $m' m^2$, the round tang T, pin p , and bolts M M' , as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

DAVID W. MARSTON.

Witnesses:

CHAS. E. CLAFLIN,
HENRY F. HALL.