

(No Model.)

M. SMITH.
SCYTHE SNATH FASTENER.

No. 581,923.

Patented May 4, 1897.

Fig. 1,

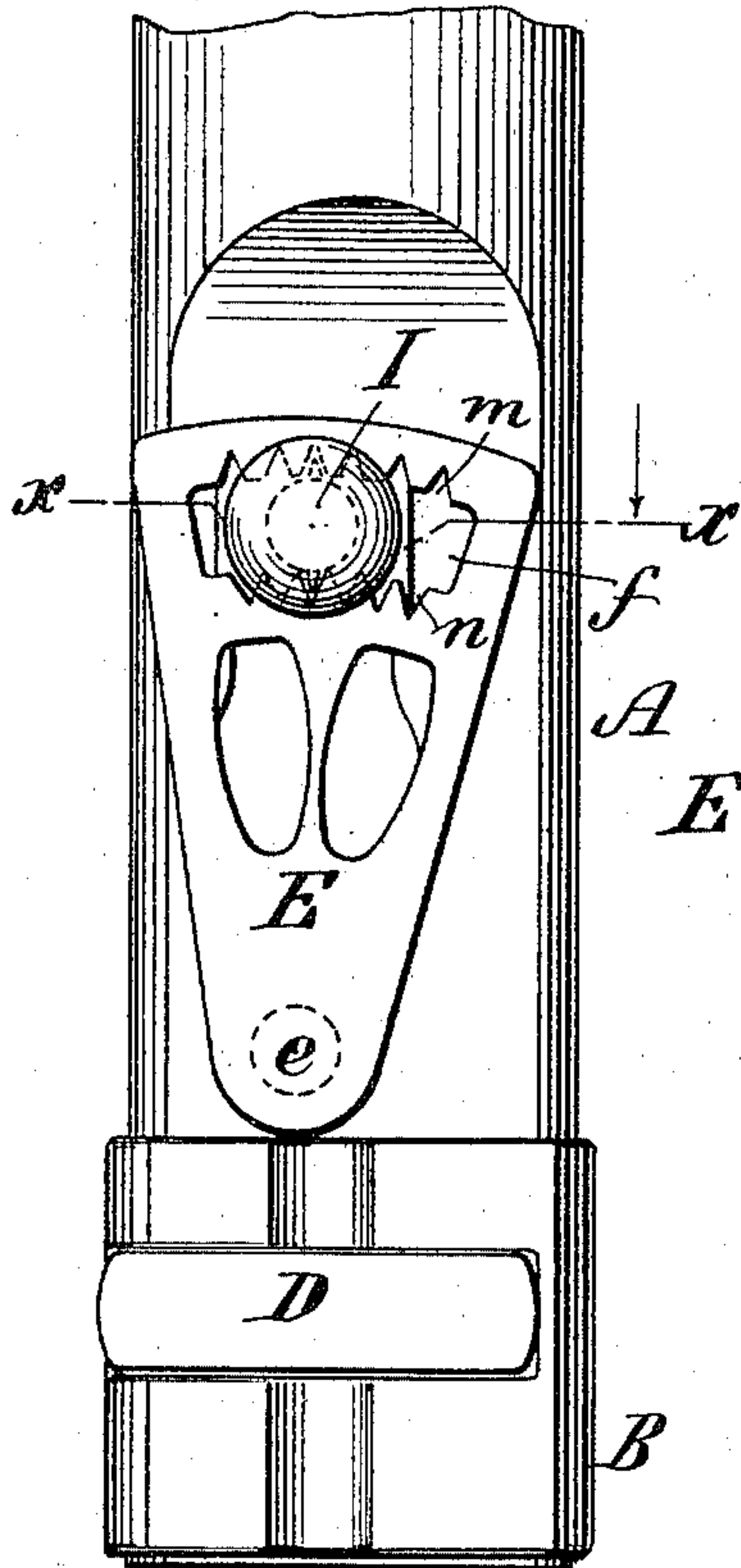


Fig. 2,

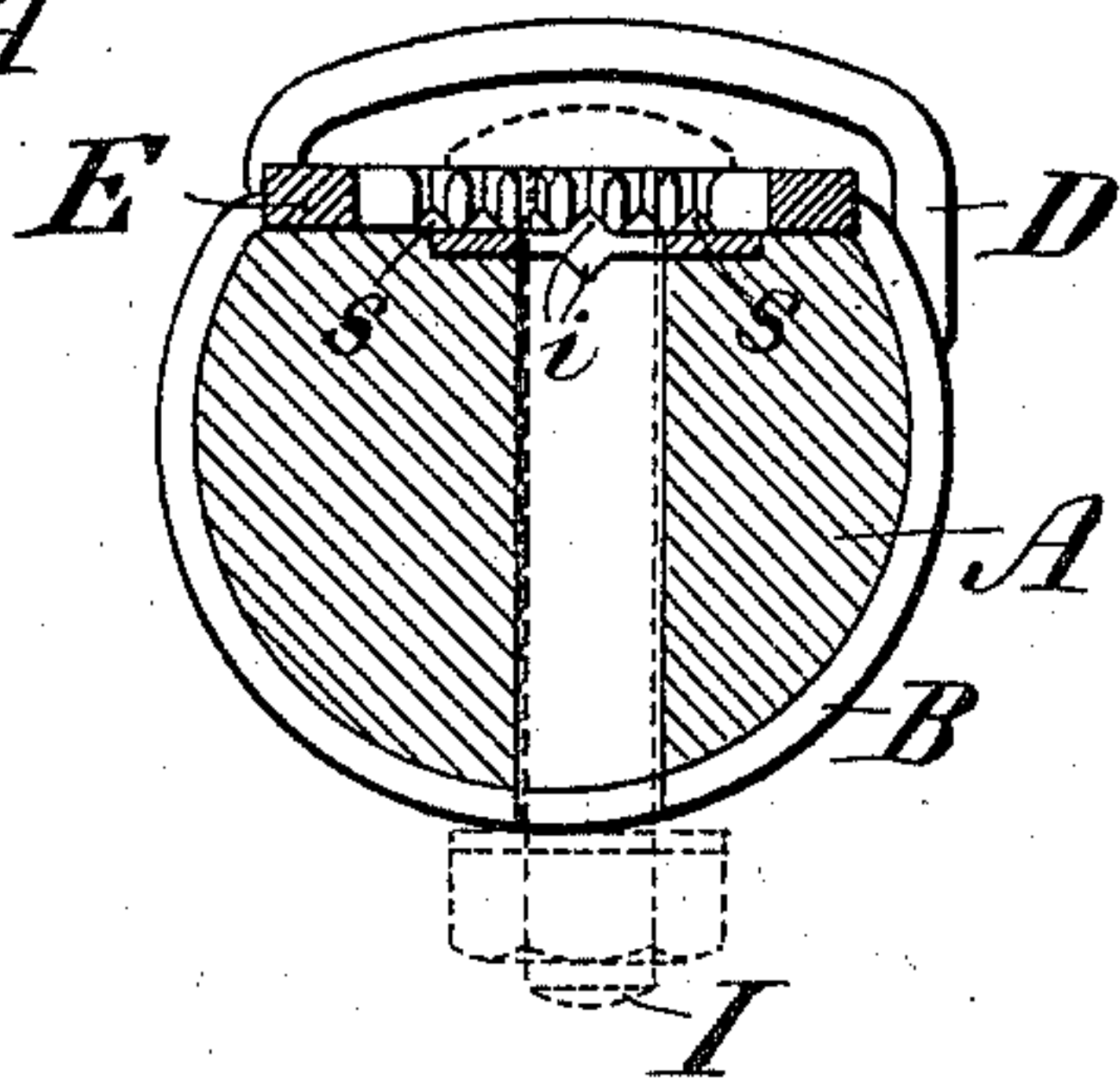


Fig. 3,

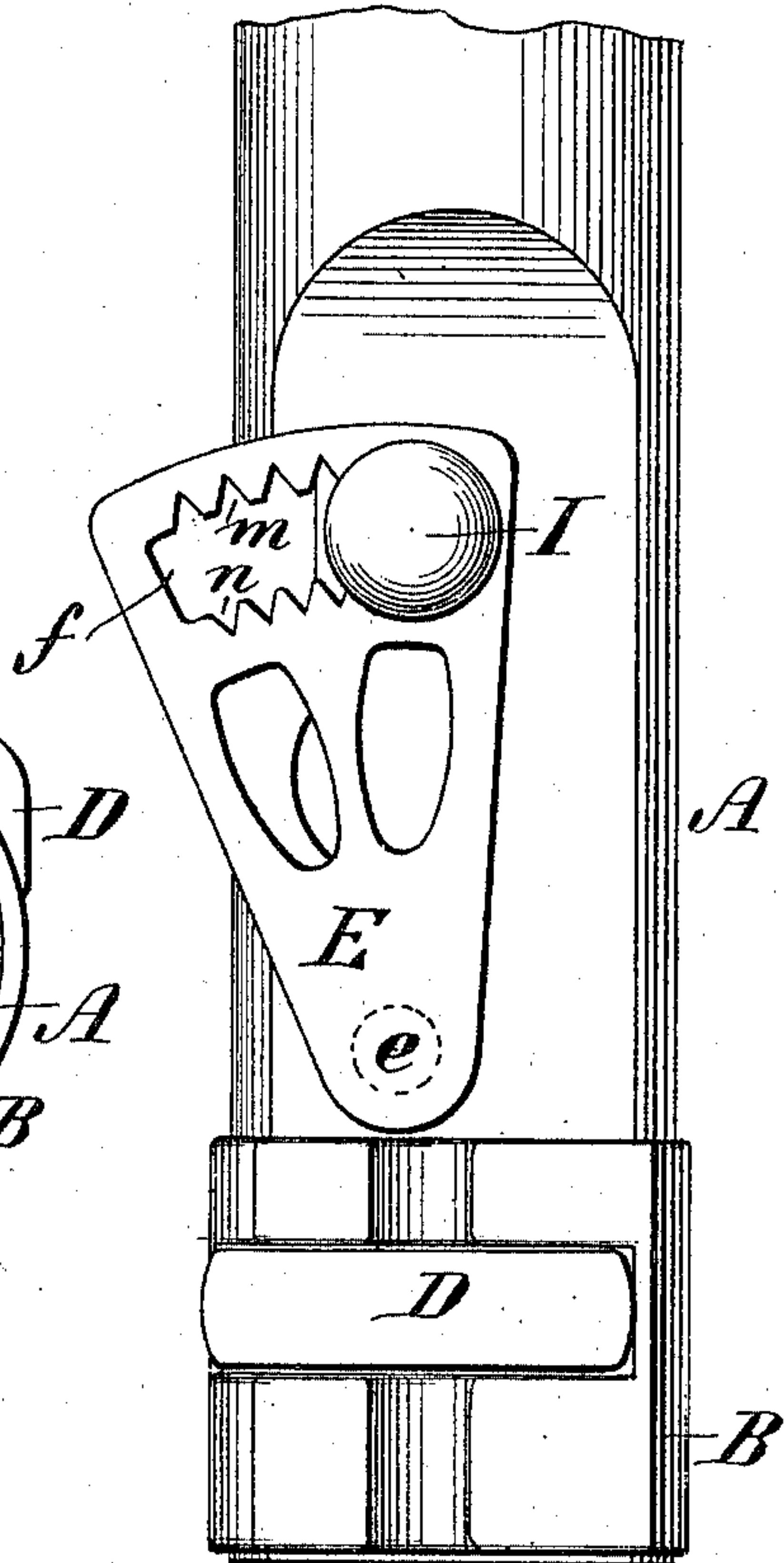


Fig. 4,

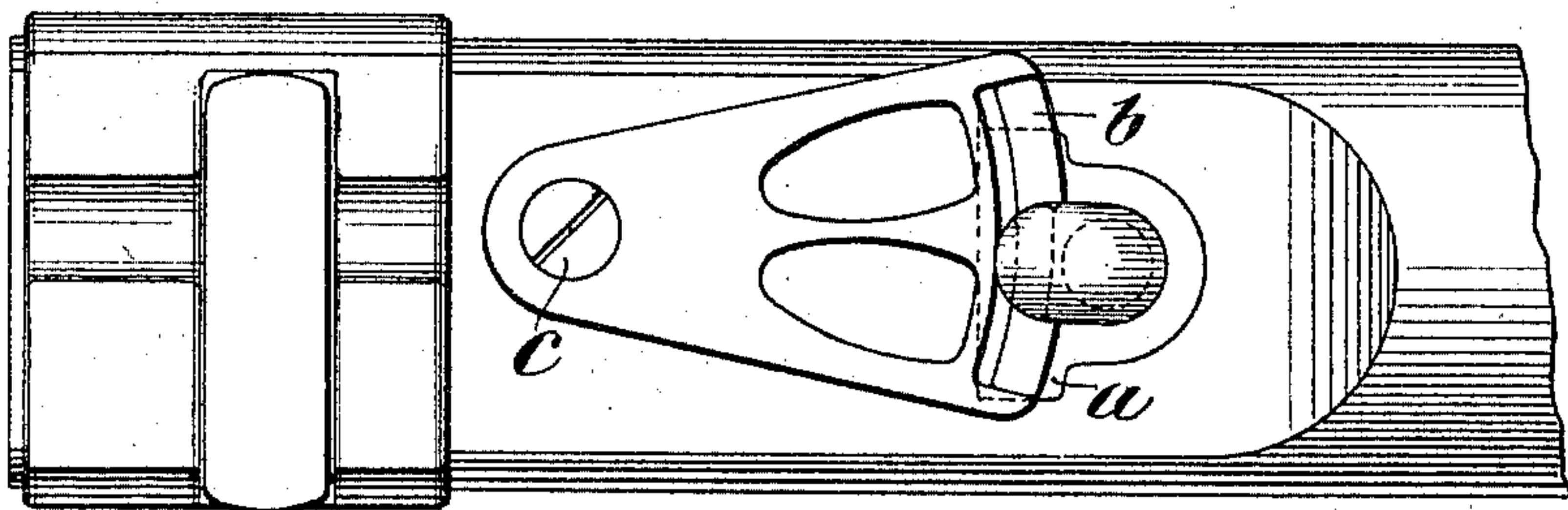


Fig. 5,

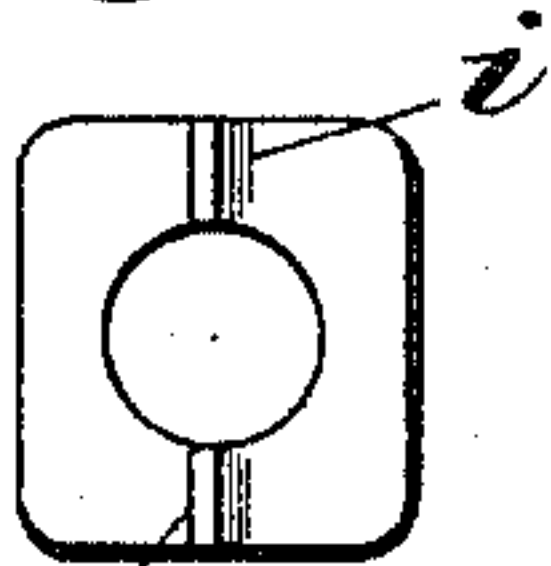
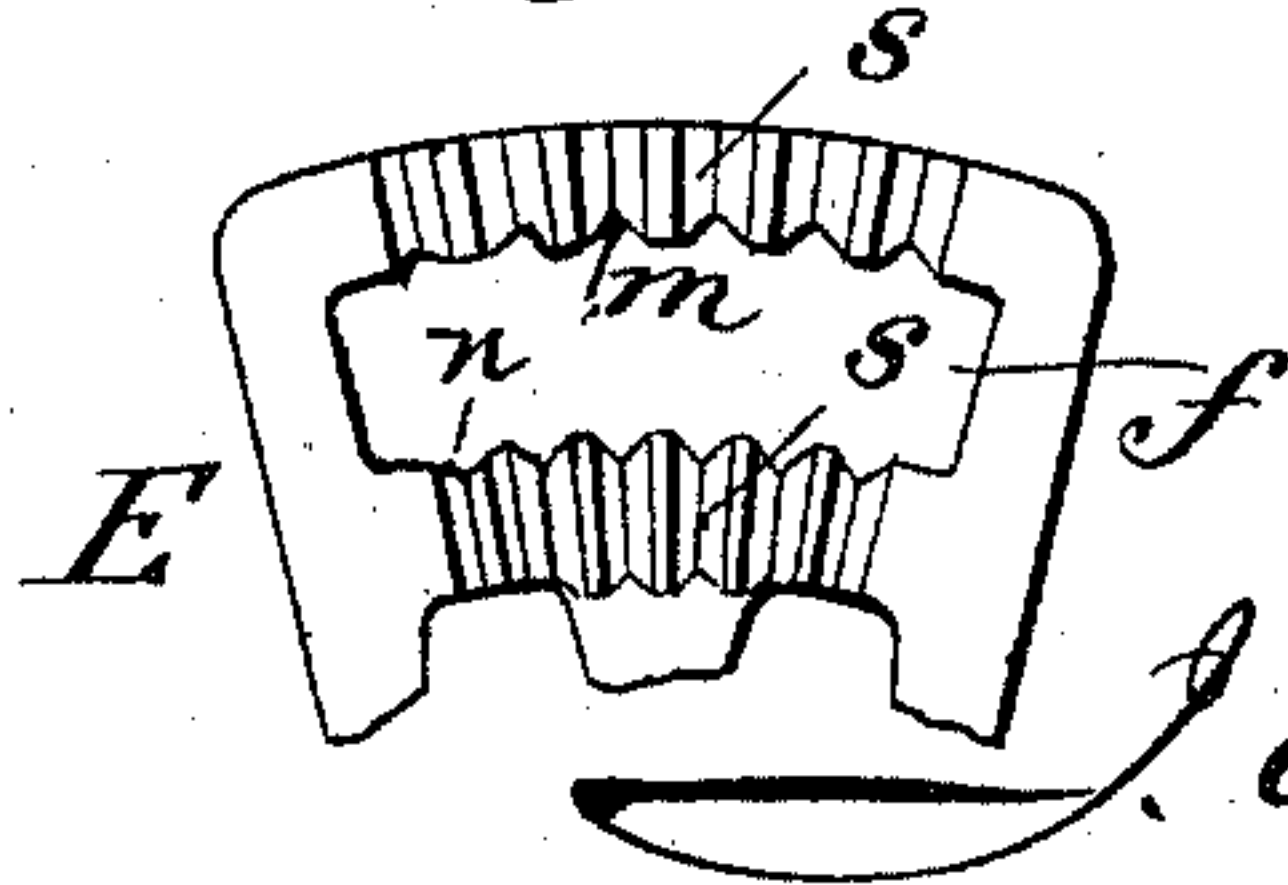


Fig. 6,



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SCYTHER-SNATH FASTENER.

SPECIFICATION forming part of Letters Patent No. 581,923, dated May 4, 1897.

Application filed December 28, 1896. Serial No. 617,142. (No model.)

To all whom it may concern:

Be it known that I, MILES SMITH, of Springfield, in the county of Windsor and State of Vermont, have invented a new and useful
5 Improvement in Scythe-Snath Fasteners; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, which form part of this specification.

10 My invention relates to scythe-snaths, and especially to the mechanism or devices at the heel of the snath which operate to clamp and hold in place the shank of the scythe.

As is well known to those skilled in the art,
15 such shank holding and clamping devices have to be made and have to operate so that the same, by loosening the bolt-nut and adjusting the parts, can be set to hold the shank in different positions relatively to the heel of
20 the snath for the purpose of varying the "hang" of the scythe to suit the user and the character of the work to be done, and, as is also well known, various adjustable shank holding and clamping devices have heretofore
25 been made and applied to the snath-heel for the purpose above mentioned. Perhaps that kind most largely in use is the one made as shown and described in Letters Patent granted to me on the 16th day of January, 1877, in
30 which the vibratory end of a perforated sector-plate, pivoted at its lower end on the shaved-down or flattened surface of the lower portion of the snath, and having its vibratory end roughened or slightly toothed on the lower sur-
35 face to engage with the roughened bolt let into the wood of the snath, and having its upper surface grooved out in the arc of a circle to engage with a projecting point on the head of the clamping-bolt, and is about the best known
40 and used form of device. In this form of clamping device, however, it has been found by long practice and experience that the toothed or roughened surfaces of the swinging plate and underlying device are apt to get worn,
45 so that the clamping-bolt will not always effectuate a positive locking together of these roughened surfaces, so as to insure a perfect retention in place of the snath-shank after the latter shall have been placed and fastened
50 to make the hang of the scythe suit the mower.

I have changed the construction of the ad-

justable clamping mechanism by my present invention or improvement so as to insure a positive locking together of the parts by the
clamping-bolt as long as the scythe-snath and
55 its attachments are capable of use, while at the same time I have somewhat cheapened and simplified the construction and mode of attachment to the wooden snath of the metallic adjustable sector-piece. I therefore
60 propose by my present invention to afford for use a scythe-snath fastener which, while it shall be quite as economic of manufacture and as easy of attachment as any of those heretofore devised, will be more efficient in
65 action and much more suitable.

To these main ends and objects my invention may be said to consist in the combination, with the usual snath-heel, of an adjustable sector-plate pivoted at its lower end to the snath
70 by means of a cylindrical boss or projection which is fitted into and works within a similarly-shaped depression in the stock of the snath-heel, and which not only has the opposite surfaces of its curved slot or aperture at
75 the vibratory end toothed, but also has tooth-like serrations in its under surface, the said tooth-like serrations being adapted to respectively engage positively with a pair of tooth-like projections which project upwardly from
80 a polygonally-shaped plate which is let into the snath-heel flush and which is centrally perforated, the clamping-bolt which passes through the perforation of said plate and also through the heel of the snath being provided at diametrically opposite points on its body portion
85 and immediately beneath its head with projections adapted to engage, respectively, with opposite pairs of the teeth in the opposite edges of the oblong aperture of said sector-plate, the whole constructed, arranged, and
90 operating together in substantially the manner which will be hereinafter more fully explained, and as will be more specifically pointed out in the claim of this specification.

To enable those skilled in the art to which my invention relates to make and use a scythe-snath fastener embodying my improvements, I will now proceed to more fully describe the same, referring by letters of reference to the
100 accompanying drawings, which form part of this specification, and in which I have shown

my invention carried into effect in that precise form of device in which I have so far practiced it, although the details of construction may be more or less modified without changing its novel mode of operation and hence without departing from the spirit of my invention.

Figure 1 is a top view of the lower end of a snath having my improved fastener applied thereto. Fig. 2 is a vertical cross-section at the line *xx* of Fig. 1. Fig. 3 is another top view, but showing the movable parts differently adjusted. Fig. 4 is a top view of a snath-fastener such as patented by me, as hereinbefore mentioned, shown to better exhibit, by comparison, my present invention. Fig. 5 is a top view of one of the parts of my improved fastener detached. Fig. 6 is a partial bottom view of the swinging sector-plate detached.

In the several figures the same parts will be found always designated by the same letter of reference.

As will be seen by a visual inspection and comparison of the two things illustrated in the drawings, the whole reliance in the old-fashioned device had to be placed in the interlocking of the opposing upper roughened surface of the let-in plate *a* and the lower roughened surface of the vibratory end of the sector-plate *b*, and this sector-plate had to be provided with a wood-screw *c*, entered through a hole in the pivoted end of the plate and screwed into the hard wood of the snath-heel, while in the improved contrivance for which I now seek a patent both the perforation of the pivotal end of the vibratory plate and the use of a wood-screw to act as a pivot are entirely dispensed with, and the vibratory end of the swinging plate is securely and positively held or clamped in place by the clamping-bolt enforcing the interlocking of the two tooth-like devices or lugs which project upwardly into the bottom grooves or serrations of the swinging plate and by two laterally-projecting lugs on the body of the clamping-bolt immediately beneath its head, which positively engage with a pair or set of notches cut in the opposite edges of the curved slot or aperture of the swinging plate.

In Figs. 1, 2, 3, 5, and 6, *A* is the lower end or heel portion of the scythe snath or handle, slabbed off on one side, as usual, and provided with the ordinary encircling metallic casing or thimble *B* and the eyebolt *D* for securely clamping in place or holding in engagement with the heel of the snath the root of the shank of the scythe-blade, the outer end of which is, as usual, provided with a laterally-projecting lug adapted to enter one or the other of the two apertures of the adjustable sector-plate *E*. This sector-plate, it will be seen, instead of having its pivotal end connected by a screw with the slabbed-off portion of the snath-heel is cast with a cylindrical boss or lug-like projection *e*, that fits into and easily turns within a cy-

lindrical depression cut in the wood of the snath, and the said sector-plate is, as usual, formed with a curved oblong aperture or cut-out *f*, the opposite faces of which aperture or cut-out are notched or toothed, as seen at *m* and *n*.

As usual, the wooden snath has a cylindrical hole bored through it centrally of the wood widthwise and with its axis located centrally between the two toothed surfaces *m* and *n*, and let into the wood of the snath, so as to have its upper surface come about flush with the slabbed-off portion of the wood, is a polygonally-shaped washer-like plate having a central hole coincident with that bored into the surface of the snath, formed with two upwardly-projecting lug-like teeth *i*, as and for a purpose to be presently explained.

I is the sector-clamping bolt, which passes through the hole cut in the snath and in the let-in plate, just above referred to, and which is provided, as usual, at its protruding threaded end with a suitable washer and threaded nut, while on the body of this bolt, immediately beneath its head, are formed two laterally-projecting fins or lugs that are adapted, when the bolt is clamped in place, to engage with two opposite ones of the notches *m* and *n* of the sector-plate, as best seen at Fig. 1.

The upwardly-projecting teeth *i i* of the plate let into the snath, as above mentioned, are adapted, it will be seen, to positively engage or interlock some one pair of the oppositely-disposed teeth or notches *s s* in the under surface of the sector-plate, so that when said plate shall be forced home or downwardly into its locking position by the clamping-bolt not only will it be securely held against any vibratory movement by the interlocking of the fin-like projections on the bolt-body with the oppositely-disposed vertical notches *m* and *n* of the sector-plate, but it will, furthermore, be positively held against any such sidewise movement by the positive engagement of the stationary teeth *i i* of the let-in polygonally-shaped plate with a pair of longitudinally-cut notches *s s* in the under side of the vibratory or adjustable shank-holding plate. Thus is the device for holding the upper end of the blade in any position to which it may be adjusted rendered more secure and positive in its action, but, furthermore, it will retain its positiveness of action so long as the parts of the scythe-snath-fastening device remain in existence dispensing with the wooden screw-pivot heretofore used and simplifying and cheapening the manufacture of the article, and also rendering the assembling of the parts simpler, and, what is most important of all, avoiding the necessity of the use of a screw-driver or other implement to loosen the screws, and dispensing with the operation of loosening the pivotal device with some sort of tool when the workman has to adjust the parts to change the hang of the scythe. All he has to do is

to simply use the small usual pocket-wrench to loosen the nuts of the clamping-bolts, when by hand he can make the necessary adjustments of the parts.

5 Having now so fully explained my invention that those skilled in the art can make and use scythe-snath fastenings embodying the same, what I claim therein as new, and desire to secure by Letters Patent, is—

10 In a scythe-snath fastener, the combination with the usual snath-heel, slabbed off in the ordinary manner and provided at its extreme end with the usual embracing ferrule and eye-bolt, of a pivotally-arranged sector-plate hav-
15 ing one or more apertures for the accommodation of the laterally-projecting lug on the end of the scythe-shank, and formed with two sets of teeth, one set being on the opposite edges, or faces, of the arc-shaped aper-
20 ture through the vibratory end of the sector-plate and the other being formed on the bot-

tom surface of said portion of said plate; a plate let into the slabbed-off portion of the snath, with its upper surface about coincident with the plane of the lower surface of the vi- 25
bratory sector-plate, and provided with a pair of lug-like teeth adapted to engage with the notches on the under surface of the sector-plate and a clamping-bolt, formed or pro-
30 vided with laterally-projecting fins, or teeth, adapted to positively engage with the teeth cut in the opposite edges of the oblong aperture of the sector-plate; the whole constructed and arranged to operate in substantially the
35 manner and for the purpose hereinbefore set forth.

In testimony whereof I have hereunto set my hand this 10th day of December, 1896.

MILES SMITH.

In presence of—

M. L. LAWRENCE,
ALICE M. WHEELER.