S. Lamson,
Scythe.

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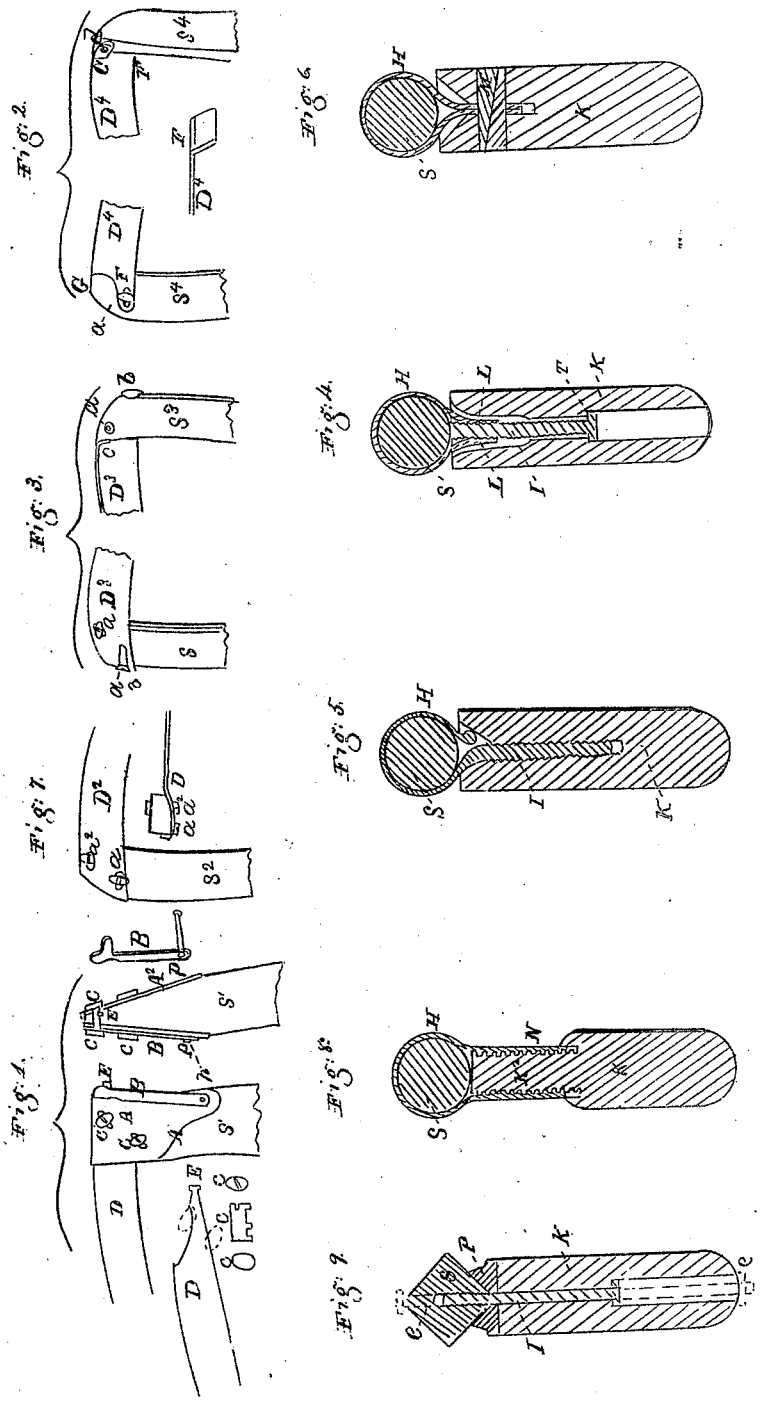

UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN THE METHOD OF SECURING THE SCYTHE UPON THE SNATH AND IN FASTENING THE NIB TO THE SAME.

Specification forming part of Letters Patent No. **2,155**, dated July 1, 1841.

To all whom it may concern:

Be it known that I, SILAS LAMSON, of Shelburne Falls, Berkshire county, State of Massachusetts, have invented a new and useful Improvement in the Mode of Fastening Scythes to Snaths and in the Manner of Attaching the Nibs to the Same, which improvement is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 represents a mode of fastening the scythe to the snath by means of a saddle-plate, screws, or by a spring-catch, also a cam-bolt, shank of the blade and the spring-catch detached. Fig. 2 represents a mode of securing the blade to the snath by slitting the end and turning the parts from a straight line and securing them to a square snath by screws. Fig. 3 represents a mode of fastening the blade by turning it so as to lap over the back of the snath and slitting and turning a portion of it against the front of the snath and securing the blade by screw-bolts. Fig. 4 represents a section through the center of the nib, showing a mode of fastening it by having the ring formed with a female screw and a male screw let into the nib which screws into said female screw. Fig. 5 is a section of the nib showing a female screw therein, into which the shank of the nib-ring formed into a male screw is screwed. Fig. 6 represents a mode of fastening the nib to the snath, by perforating the ends of the ring bent around the snath and brought together with oblong slots for wedges passed through them and through similar slots in the nib. Fig. 7 represents another mode of securing the scythe-blade to the snath by screw-belts in such a manner that the blade can be set as desired. Fig. 8 is another mode of fastening the nib by having the ring formed with a cylindrical shank in which there is formed a female screw into which a male screw on the nib is screwed. Fig. 9 represents a section through the nib, showing a mode of securing the nib to the square snath by means of a bolster and screw-bolt.

Description of the several modes of fastening the blade to the snath:

First, of the mode of fastening the scythe plate or blade by means of a saddle-plate, &c.: The saddle-plate A in its cross-section or end view resembles a figure thus shaped /\, as at A^2, Fig. 1, and the outer extremities or sides are curved in the manner represented at A′, Fig. 1. The end of the snath S′ is of a wedge form, or shaped to correspond with the shape of the saddle which is placed over said wedge-form end of the snath after the shank E of the scythe D has been inserted in its proper place, said saddle being held securely by bolts, screws, or rivets. Cam-shaped bolts *c c* are inserted through oval apertures in the sides of the saddle and corresponding apertures, one above and the other below the shank E, for holding securely the scythe-blade. A spring-hook, B, turning on a pivot, *p*, may be brought over the projecting end of the shank E, for the purpose of securing the blade instead of securing it by the oval bolts. In the use of the latter, one must be turned so as to bear against the under side of the shank. The other must be turned so as to bear against the upper side of the shank. In the use of the spring it must be simply brought over the knob on the end of the shank.

Second, of the mode represented by Fig. 2: The large end of the blade D^4 is slit a short distance. The part F next the cutting edge is bent or deviated slightly from the line of the face of the blade, and fastened on the under side of the snath by a screw, *a*, passed through a slot in said bent part. The portion G of the blade next the back is bent till it forms an angle of about eighty degrees with the upper side of the blade, and is perforated with an oblong aperture, through which is passed a screw, *d*, which fastens it to the front of the snath S^4.

Third, of the mode represented by Fig. 3: The large end of the blade is slightly bent from a right line, and at the extremity *b* it is bent so as to form a right angle with the face of the blade D^3, and perforated with an oblong slot for a screw, *a*, which, with another slot and screw *a*, fastens the blade to the snath S^3, the turned end *b* of the blade D^3 resting against the back of the snath, and a turned-up part, *c*, of the back against the front of the snath S^3.

Fourth, of the mode represented in Fig. 7: In this mode the large end of the blade D^2 is simply rendered concave to fit the convex end of the snath S^2, to which it is secured by screws *a* a^2, passed through slots in the blade into the snath. One of the bolts, a^2, has a broad head,

which laps over the blade, its shank passing through the snath, on which a screw is formed on which a nut is screwed. The other bolt, *a*, has also a broad head, which laps over the blade and screws into the snath for holding the blade, which screw may be loosened at pleasure to set the blade and be screwed up again to hold it securely, the oblong slots allowing of such adjustment.

Description of the several methods of fastening the nib to the snath:

First, of the mode represented by Fig. 4: In this mode the ring H, embracing the snath S, is made with a cylindrical shank, L, in which is formed a female screw, into which is screwed a male screw on a bolt, I, with a large square head, T, let into a corresponding cavity or depression made in the nib K, to prevent the bolt turning in said cavity, so that by turning the nib it is advanced to or receded from the snath and rendered tight or loose, as desired, by the screw on the shank and bolt, before described. A bell-shaped cavity is also made in the end of the nib next the snath, of a size sufficient to admit the shank of the ring, and be thus embraced by the nib, which binds it in the manner of a collar.

Second, of the mode represented in Fig. 5: In this mode one end of the ring H, surrounding the snath, is extended, so as to form a shank, I, on which is formed a male screw, which is screwed into a female screw formed in the nib K.

Third, of the mode represented in Fig. 6: In this mode the ends of the plate forming the ring H, after passing around the snath S, are extended and brought together, so as to form a shank in which is formed an oblong opening into which is inserted a key or keys, M, passed through a corresponding opening in the nib K, which keys, on being driven in, draw the snath firmly against the end of the nib.

Fourth, of the mode represented in Fig. 8: In this mode the shank N of the ring H is perforated with a female screw into which is screwed a male screw, K^2, formed on the end of the nib K.

Fifth, of the mode represented in Fig. 9: In this mode I make use of a round bolster, P, the diameter of the nib K at the end against which it is brought, and in which bolster the snath S is placed and held by a screw-bolt, I, passing partly through the nib and entirely through the bolster P into the snath S; or the bolt may extend entirely through the nib and snath in the manner represented by the dotted lines at *e*. In this arrangement the snath is made square, (which is found to be the cheapest construction,) and is placed in a right-angled notch or depression made in the bolster to correspond with the shape of the part of the snath to be placed therein, and is secured by the screw-bolt I.

In the arrangement represented in Fig. 4 the cavity in the nib admits of the use of a shorter bolt, which tends to lighten it, and the cavity also tends to decrease the weight. Besides, a nut on the end of the shank is dispensed with.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The mode of securing the blade to the snath, as described in Section 1 of the specification, and represented in Fig. 1 of the drawings—that is to say, by means of the saddle-plate A and shank E, in combination with the cam-bolts *c c*, or the spring-catch B, arranged as before described.

2. The mode described in Section 2, and represented in Fig. 2—that is to say, by slitting the heel end of the blade and deviating a portion from a straight line and turning the other portion at right angles to the blade and securing said portions to the end of the snath by screws, one of which having a large flat head to lap over the blade, and the shank placed in an oblong mortise in the turned-up end of the blade, to allow of its being regulated at pleasure.

3. The mode described in Section 3 and represented in Fig. 3—that is to say, by rendering the heel end of the blade concave to fit the convex end of the snath, and turning a portion over the back of the snath and a portion at right angles against the front of it, and securing the blade by screw-bolts placed in oblong slots by which the blade can be set at pleasure, as described.

4. The mode described in Section 5 and represented in Fig. 7, by which the blade can be adjusted easily without removing the screws from the snath, by simply loosening them and adjusting the blade on the shanks by means of the oblong slots.

5. The mode represented in Fig. 6—that is to say, by forming the two ends of the bar which surrounds the snath into a shank and perforating the same with oblong apertures to admit wedges or keys which pass through the nib, and said apertures for drawing the snath home to the nib, as described.

6. The mode represented in Fig. 9, by means of the combination of the square snath S, saddle P, and bolt I, as described.

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Witnesses:

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