

UNITED STATES PATENT OFFICE.

PINCKNEY FROST, OF SPRINGFIELD, VERMONT.

IMPROVEMENT IN SCYTHE-FASTENINGS.

Specification forming part of Letters Patent No. 42,081, dated March 29, 1864.

To all whom it may concern:

Be it known that I, PINCKNEY FROST, of Springfield, county of Windsor, and State of Vermont, have invented a new and Improved Scythe-Fastening; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a view representing a scythe secured to its snath according to my invention. Fig. 2 shows a side view of the fastening. Fig. 3 is a section of Figs. 1 and 2, taken at the point indicated by red line *xx*. Fig. 4 is a perspective view of the looped clamp. Fig. 5 is a perspective view of the perforated claw-plate inverted. Fig. 6 is a perspective view of the leather wedge used for adjusting the point of the scythe, either up or down.

Similar letters of reference indicate corresponding parts in the several figures.

The object of my invention is to enable the mower to readily adjust and to firmly fasten his scythe in any required position upon the snath without the necessity of bending or twisting the web or arm of the scythe for this purpose, as will be hereinafter described.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawings, A represents the lowermost end of the snath or handle of the implement. B is the scythe-blade, of which *a* is its handle, and *a'* the claw formed on the small end thereof, as shown in Figs. 1 and 2. The lower end of the snath A is cut out so as to leave a flat surface, *b*, adapted to receive the corresponding surface of the scythe-handle *a*, and the extreme end of A receives on it a ferrule, C, which has two flat surfaces, *c c'*, through which perforations are made for receiving the screw-tapped ends of a loop, D, and also the screws *d d*, which operate this loop and draw it up, so as to clamp and confine the lower part of the handle *a* against the flat surface of the ferrule or against a leather wedge, which will be hereinafter described. The loop D is constructed with nuts *e e* on its bent ends, which receive the ends of the screws *d d*, and which enter perforations made through the flat surface *c* of the ferrule, and also recesses formed in the wood inclosed by the ferrule, as shown in Fig. 3. By inserting the nuts *e e* into their

respective recesses and introducing the arm *a* of the scythe-blade under the loop D, the latter can be drawn up tightly against said arm by means of the two screws *d d*, and the arm may be thus firmly clamped to the snath. The claw or right-angular projection *a'*, which is formed on the small end of the scythe-handle *a*, is received by a perforated plate, E, which is firmly secured to the snath, as shown in Figs. 1 and 2. This plate E is formed with four recesses, *g*, through it, the sides of which recesses form supports for preventing the arm *a* from having any lateral motion when the claw *a'* is adjusted in any one of these recesses. Four are used for the purpose of adjusting the point of the scythe toward or from the snath, and by inserting the claw into the proper hole in said plate the mower can give the desired pitch to his scythe. I find that it is impossible by the use of the ordinary slides to make as much variation of the point of the scythe toward or from the snath as is necessary in order to use conveniently all lengths and shapes of scythes without having the claw bind in some positions and loose in others. To avoid this difficulty I have two spurs, *h h*, on the under side of the plate E, which extend deeper into the wood than does the claw. By this arrangement I am enabled to bring the holes sufficiently near together to admit of four being made upon the face of this plate E. The sides of these perforations against which the claw bears are made converging toward the loop D, for the purpose of adapting the holes to receive the claw freely in whatever angle the arm *a* may be placed with respect to the length of the snath. The loop D is made of sufficient length to admit of a variation of the handle *a* equal to the distance of the two claw-holes (in plate E) apart, and thus the loop will clamp the arm *a* firmly in whichever hole the claw may be set. By having a screw at each end of the loop D either end may be set up so as to fasten the arm firmly, whatever may be its position. This cannot be done by a single screw, as the draft would then be equal on both ends of the loop, and it would be necessary to keep the arm in the center of the loop, or the bearing would only be on one side thereof.

The leather wedge G, it will be seen, is much thinner on one side than it is on the other. This wedge is inserted between the arm *a* and flat surface of the snath for the purpose of

throwing out the heel of the scythe more or less, according to circumstances, and also for the purpose of raising the edge of the scythe to a higher angle from the ground when in use than it otherwise would be, and also for the purpose of varying the point of the scythe above or below a level with the spotting. The former object is accomplished by increasing or diminishing the thickness of leather under the heel of the scythe, and the latter object is effected by increasing or diminishing the thickness of leather under one side or the other of the arm *a*. These two adjustments are made by means of the leather wedge *G*, shown clearly in Fig. 6, which is beveled laterally as well as longitudinally. The longitudinal slot *i* in this wedge corresponds to a slot, *k*, which is formed in the surface *c* of the snath for allowing the scythe to be removed from the snath without entirely detaching the loop *D*, the groove *k* receiving the claw *a'* as the scythe is detached.

From the above description it will be seen that my improved fastening consists of a very few parts, and that the scythe can be adjusted in any required position upon the snath, and then rigidly secured in place by a very simple manipulation.

In adjusting the point of the scythe to or from the snath, by changing the claw *a'* from one hole in plate *E* to another the amount of movement can be nicely regulated by slipping

the arm *a* to one side or the other of the clamping-loop *D*.

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

1. The loop *D*, constructed with screw-tapped ends fitting into recesses formed in the snath, in combination with the two screw-fastenings *d d*, the whole constituting a clamp for securing the scythe to its snath, substantially as described.

2. The perforated claw-plate *E*, when constructed substantially as and for the purposes described.

3. The construction of the ferrule *C* with flat sides *c c'*, groove *k*, and perforations for receiving the ends of a clamping-loop, *D*, substantially as described.

4. The double-beveled wedge *G*, in combination with a clamping-loop, *D*, constructed and operating substantially as described.

5. The combination of clamping-loop *D*, scythe-handle *a*, claw *a'*, and perforated claw-plate *E*, constructed and operating substantially as described.

6. The tenons or spurs *h h*, formed on the claw-plate *E*, substantially as and for the purposes described.

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Witnesses:

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