P. FROST.

Scythe Snath.

No. 87,251. Patented Feb. 23, 1869.

Fig: 1.

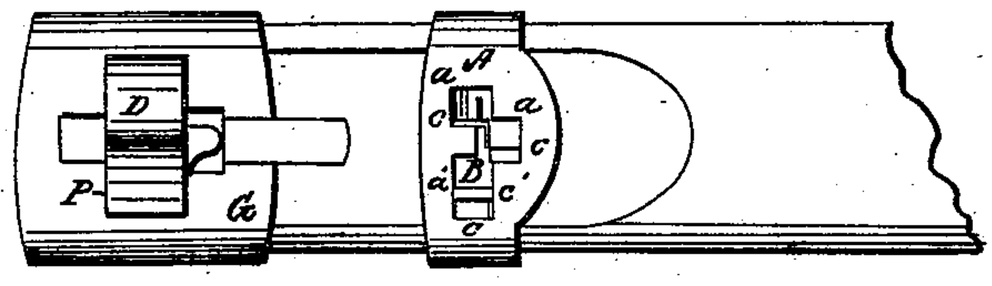


Fig: 3.

Fig: 2.

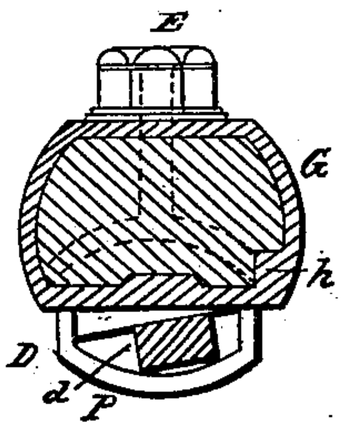


Fig: 4.

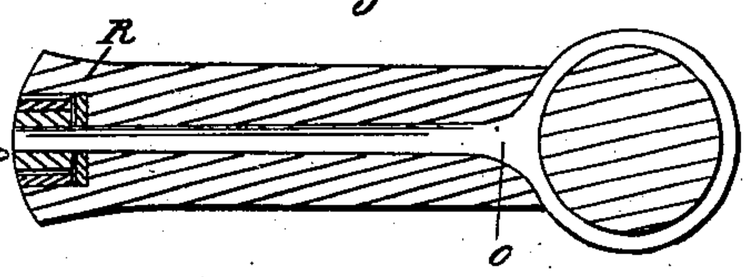
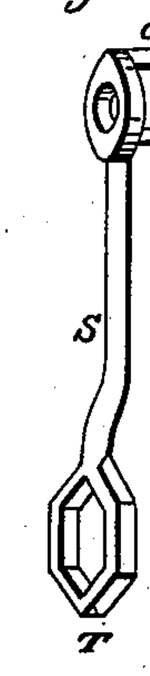


Fig: 5.



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Witnesses:

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PINCKNEY FROST, OF SPRINGFIELD, VERMONT.

Letters Patent No. 87,251, *dated February* 23, 1869.

IMPROVEMENT IN SCYTHE-SNATHS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, PINCKNEY FROST, of Springfield, Windsor county, State of Vermont, have invented certain new and useful Improvements in Scythe-Handles; and I do hereby declare that the following is a full and clear description thereof, reference being had to the accompanying drawings, and to the letters of reference thereon.

In the drawings—

Figure 1 is a bottom view,

Figure 2, an end view, and

Figure 4, a sectional view of a part of my improvements; and

Figures 3 and 5 are detailed views of parts of the same.

My improvements are such that the scythe-blade can be easily and firmly attached to the snath at any desirable angle or elevation of point. The ferrule at the end of the snath is prevented from turning on the same, and the handles are neatly attached, and easily adjusted to any position, and firmly fixed there.

In the drawings, fig. 1 shows my device for adjusting the angle of the blade and snath relatively, and it consists of one or more socket-places *a a a'*, into which the heel of the blade will fit indifferently, and be tightened by a common wedge.

These sockets *a*, *a*, and *a'*, are cut through a plate, A, which is firmly fastened on the under side of the snath, at the proper distance from the end, for the heel to reach, and a corresponding recess is cut into the snath behind this plate, into which slides a plate, B, with as many clamping-shoulders, *c*, *c*, and *c'*, as there are sockets *a*, one shoulder to each.

The common wedge C is put between the projection, or shoulder, *a'*, which is extended through the opening corresponding to it in the plate A, being made longer than the others, for its double purpose, and the outer edge of the socket *a'*, and, when the wedge is inserted, the plate B is driven in an opposite direction, the shoulder *c'* clamping the end of the heel in its socket, if so be it is placed there, or one of the shoulders *c* clamping it if it be placed in the corresponding socket.

In this manner, several different arrangements of the blade may be accomplished with only one wedge. This, in connection with my peculiar device for fastening the heel to the end of the snath, gives a wide range of adjustability to the blade.

The main clamp consists of an eye-bolt, D, made adjustable by means of a nut, E, on its upper end, the bolt playing through the end of the snath, and being guided and sustained by means of the ferrule G around the end of the snath.

When the nut is turned, so as to draw the bolt toward it, the under side *d* of the eye F clamps against the surface of the heel, and holds it firmly between it and the flat surface of the snath and ferrule.

The surface *d* of the eye F is made arch-shaped, for the purpose of clamping the heel firmly in whatever position of elevation or depression the blade may be placed; for it may be that the plane of the resting-surface of the snath does not give the desired position to the point of the blade, when the heel is clamped flat upon it, and, in such case, a washer, of leather or other suitable material, is made, with one side higher or thicker than the other, and placed between the snath and the heel, the thicker side toward the blade if depression is desired, and *vice versa* if otherwise.

Now, if the clamping-surface of the eye F were made parallel to the plane of the resting-surface of the snath, the heel would not be clamped firmly in its place when the washer was used, as the pressure of the eye-band would come only against one edge, but, being curved, it adjusts itself to both edges of the heel, and holds it firmly. This is shown in the end view, fig. 2.

In order to prevent the ferrule G from turning upon the snath, I form, in its inside corner, toward the blade, a double shoulder, *h*, which fits into a corresponding notch cut for it in the edge of the snath-end.

This, in connection with a projection, *j*, on the back part of the eye-bolt, renders the ferrule secure from slipping or turning, from ordinary wear and tear.

The projection *j* on the eye-bolt is placed at the junction of the shank and the eye, and serves greatly to strengthen this otherwise weak point. A groove is cut in snath and ferrule, for it to play in when the eye-bolt is moved up or down, in arranging the heel, and it would require a great strain against the blade to twist the ferrule and eye-bolt both upon the snath.

In this manner, I obtain a perfected device for holding the blade upon the snath, and easily setting it, and resetting it, allowing all reasonable changes to be made in angle or elevation, with very little trouble, greatly simplifying this operation by the use of inexpensive yet perfect devices.

The handles of my snath are attached in an improved manner, so that they can be easily shifted, and firmly held in place afterward by very simple means.

In fig. 4 is shown a sectional view of one of my improved handles, in which it is seen that the eye-bolt O extends entirely through the handle, which is clamped by means of a nut, P, screwing on the end of the bolt, and bearing upon a metal washer, R, sunk in the end of the handle sufficiently far to bring the surface of the nut flush with the end of the handle, and so leave no projection at that point.

The nut is made round, with rectangular slots cut into its perimeter for the projections *o o* on the wrench S, fig. 5, to fit into, in order to turn it.

This device makes a neat and simple attachment, and leaves no projecting bolt or nut at the end of the handle to jag the hands or clothing of the farmer using the scythe.

The wrench S is made with an eye, T, at one end, to fit the nut E of the fastening on the end of the

snath, and, at the other, the two projections *o* and *o* to turn the nut P in the handle.

Having described my invention,

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

1. The combination of the plate A with two or more sockets *a a a'*, and the piece B with two or more corresponding shoulders *c c c'*, the parts being arranged and constructed substantially in the manner and for the purpose shown.

2. The construction of the eye F, with curved clamping-surface *d* and projection *j*, when arranged substantially as and for the purpose described.

3. The projecting double shoulder *h* on the inside corner of the ferrule G, substantially as shown.

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Witnesses:

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