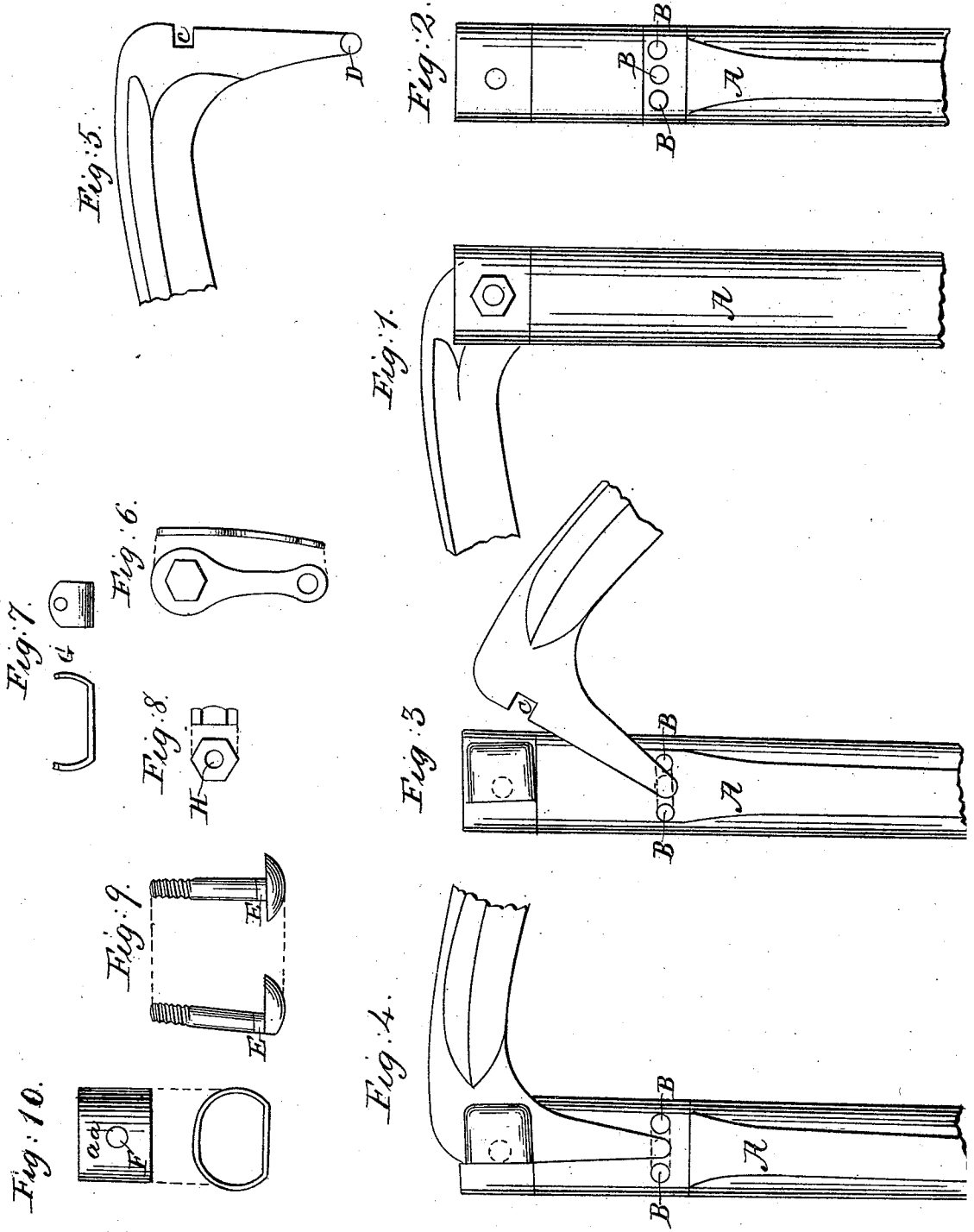


W. P. GREENLEAF.

Scythe Fastening.

No. 13,033.

Patented June 12, 1855.



UNITED STATES PATENT OFFICE.

WM. P. GREENLEAF, OF WASHINGTON, NEW HAMPSHIRE.

IMPROVEMENT IN FASTENING SCYTHES TO SNATHS.

Specification forming part of Letters Patent No. **13,033**, dated June 12, 1855.

To all whom it may concern:

Be it known that I, WILLIAM P. GREENLEAF, of Washington, in the county of Sullivan and State of New Hampshire, have invented a new and Improved Mode of Fastening Scythes to Snaths; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, in which—

Figure 1 represents a plan of my invention. Fig. 2 is a view of the under side of the snath, the scythe having been removed. Fig. 3 is an under side view of the same, showing the scythe with the claw or toe of the shank placed in one of the holes in the guide-plate, ready to be fastened under the head of the bolt E, which is done by turning the nut on the other end of the bolt. Fig. 4 is a view of the under part of the snath and scythe after the latter has been secured to the snath. Fig. 5 is a view of the upper side of the scythe disconnected from the snath. Fig. 6 is a plane and edge view of the wrench by which the nut on bolt E is turned. Fig. 7 represents two views of the guide-plate, made of suitable metal, and containing holes for the reception of the claw or toe of the scythe-shank. Fig. 8 represents two views of the nut for fastening the scythe to the snath, in connection with the bolt E and the notch in the scythe-shank for the reception of the aforesaid bolt. Fig. 9 represents two views of the bolt E, which is so inclined in relation to its head as therewith to describe an angle slightly acute, the object of which is that, when the scythe is fastened in its place, the shank shall set back upon the snath sufficiently, while the end of the bolt E upon which the nut is placed shall project from the center of the snath as nearly as may be. Fig. 10 represents two views of a metallic ferrule, *a a*, which is to be fitted upon the lower end of the snath and recessed its thickness into the wood.

My improved mode for fastening scythes to their snaths consists in the use of a metallic ferrule, which I fit to the lower end of the snath, as seen in the drawings, Fig. 10, *a a*. It may be of any shape to answer its purpose, although I prefer it shaped as represented in the drawings. Through this ferrule and the snath I form a hole of suitable size and shape to receive the bolt E, as seen in Fig. 9. The bolt

E, I construct of suitable metal about one-fifth of an inch in diameter that portion of it to be inserted in the notch in the back of the shank of the scythe being square and of sufficient size for the purpose, of suitable length for the thickness of the scythe-shank, the diameter of the scythe snath and ferrule, and the nut by which the same is fastened, the head of the bolt being beveled and formed, as seen in Fig. 9, so that its outer edge shall first come in contact with the scythe-shank, thus enabling it to grasp the shank more firmly to the snath. The head as well as the diameter of the bolt may be varied in size as experience may suggest. On the extremity of this bolt I form a male screw to be fitted to a female screw formed in the nut, as seen in Fig. 8. I then form a square notch in the back edge of the scythe-shank, as seen in the drawings at C, Figs. 3 and 5. Its place of location upon the shank of the scythe may be farther from or nearer to the claw or toe of the scythe, as may be desired. It is, of course, to be made of a size sufficient to receive the sides of the square portion of the bolt E, permitting all the flat surface of the head of the bolt to be locked into and upon the shank of the scythe. This notch serves two important purposes, first, to prevent the bolt from turning when the nut is turned to fasten the scythe; second, to permit all the flat surface of the bolt-head to lap upon and lock into the shank of the scythe, thus by its friction holding the scythe firmly and securely in its place and allowing the shank a more desirable position upon the snath.

For the purpose of fastening the toe or claw of the scythe I place upon the under side of the snath, about four inches from the extremity, (the distance from which must conform to the space between the notch in the scythe-shank and the claw or toe,) a metallic guide-plate about one-half of an inch in width and two and a half inches in length. This plate is recessed into the wood and fastened by wood screws or rivets. Upon this guide-plate I describe the segment of a circle by a line subtending from the center of the bolt E, upon which segment I perforate three or more circular holes of sufficient size to receive the claw or toe of the scythe, which I also make round. This arrangement also permits the point of the scythe to be hung inward or outward, to or

from the mower, as he may desire. This device may be seen in Fig. 7, letter G.

To connect the scythe to the snath by my mode of fastening, all that is necessary is to place the claw or toe of the scythe in either of the holes in the segment of a circle in the guide-plate above described as may be desired for the hang of the scythe, then swing the scythe-shank around under the bolt-head and tighten the bolt by turning the nut with the wrench, part of one revolution being sufficient to secure the scythe to the snath, and the friction of the bolt-head upon the scythe-shank being sufficient to hold the scythe firmly and securely in its place.

To disconnect the scythe, all that is necessary to do is to place the wrench upon the nut and turn it part of a revolution back, when the scythe is at liberty to be removed.

In my judgment malleable iron is best adapted to make my scythe-fastenings of, although other metal can be used if desired.

Having above described my invention, I will state that I do not claim separately any of the parts or devices used by me in it; but

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

The mode of fastening scythes to snaths by the employment of the ferrule *a a* at the end of the snath, the bolt E, the nut H, the notch C in the shank of the scythe, the toe or claw D of the scythe, and the perforated guide-plate G, constructed, formed, shaped, arranged, and operating as herein described and set forth.

WM. P. GREENLEAF.

Witnesses:

LANGDON HEALY,
EDWIN V. WRIGHT.