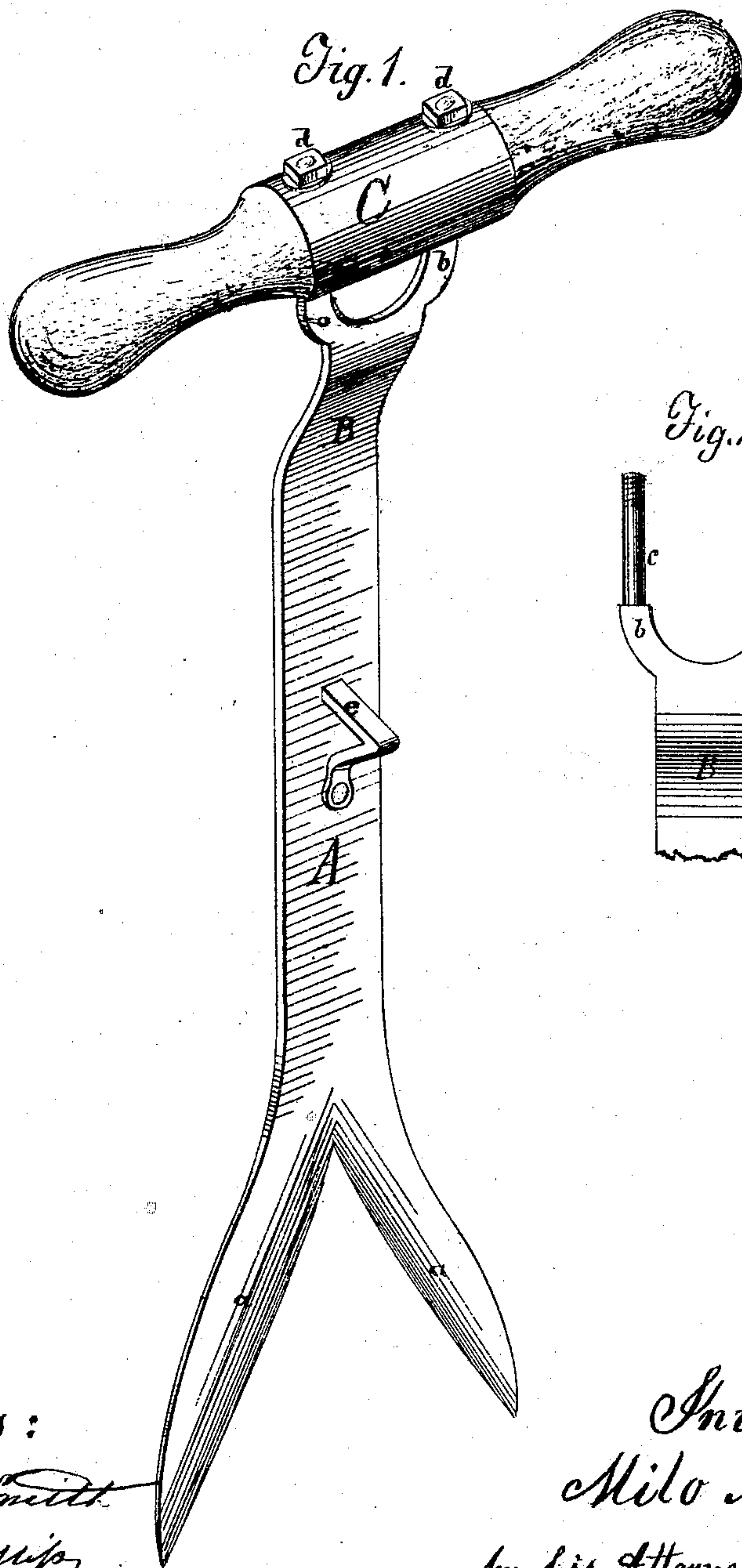


M. Merrill,

Hay Knife.

No. 98876.

Patented Jan. 18. 1870



Witnesses :
Frank Smith
J. H. Phillips

Inventor:
Milo Merrill
by his Attorneys. Immons and Lang

United States Patent Office.

MILO MERRILL, OF ONEIDA COUNTY, NEW YORK.

Letters Patent No. 98,876, dated January 18, 1870.

IMPROVEMENT IN HAY-KNIFE.

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

I, MILO MERRILL, of the county of Oneida, and State of New York, have invented certain Improvements in Hay-Knives, of which the following is a specification.

My invention relates to the manufacture of a very durable and economical hay-knife, with flaring or V-shaped edges, which is also very convenient to operate.

In the accompanying drawings—

Figure 1 is a perspective view of my hay-knife.

Figure 2 shows the mode of its fastening to a cross-handle.

A is the body or shank of the hay-knife, which is flared, at the lower end, into two edges, *a a*, formed as the letter V.

The other end of the shank is forked, and provided with two bolts, *c c*, which are inserted into a wooden handle, C, and fastened to it by nuts *d d*. The arms *b b* being square, and presenting larger area than the bolts, keep the handle in position.

Near the upper end, at B, the shank is bent forward, which enables the operator to propel the hay-knife with his foot, on the stirrup or brace *e*, without losing the balance of his own body.

To manufacture this hay-knife, I select a plate of steel of the proper thickness, and of the length of the intended hay-knife. I cut said steel plate into parallel strips, of the breadth intended for the shank of my hay-knife. I then split the said strips at both ends,

and after this, shape the cutting-edges and bolts on each strip, give the bend at B, and finally, after the proper grinding and polishing, fasten the stirrup *e*. The fastening of the cross-handle I have already described.

The advantages of this construction may easily be understood. This method enables me to save a good deal of labor, which fully balances the expense for the superior material. The implement so made, is far more durable, and of less weight, than those hay-knives with iron shanks welded on to steel knives, which are used at present.

But the greatest advantage of my improved hay-knife is, that when the blades *a a* begin to get short by wearing and sharpening, the shank A may be split further up, and the blades stretched and reshaped. Thus the shank itself will prove its usefulness until it ceases to exist.

I am fully aware that flaring knife-blades are patented, also stirrups and foot-braces, therefore I do not claim said parts of my invention.

I claim, as an improved article of manufacture, the within-described hay-knife, constructed substantially as set forth.

MILO MERRILL.

Witnesses:

FRANK SMITH,
J. H. PHILLIP.