

J. Tyler,
Manf Hoes.
 No. 112,867. *Patented Mar. 21. 1871.*

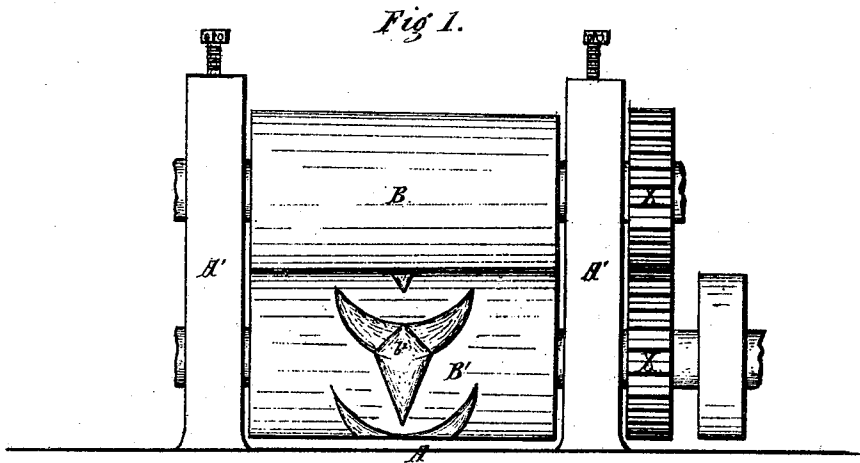


Fig 2.

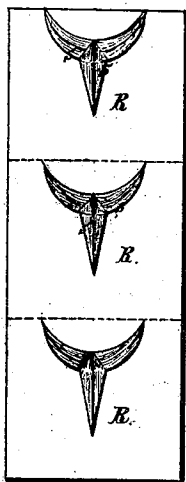


Fig 3.

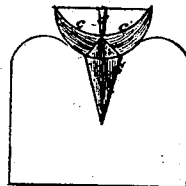


Fig 4.



WITNESSES.
R. Fallows.
F. D. Taylor.

INVENTOR.
John Tyler per
Proval Beck et.
att. for above

United States Patent Office.

JOHN T. TYLER, OF PITTSBURG, PENNSYLVANIA.

Letters Patent No. 112,867, dated March 21, 1871.

IMPROVEMENT IN ROLLS FOR THE MANUFACTURE OF PLANTERS' HOES.

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, JOHN T. TYLER, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Manufacture of Planters' Hoes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon which form a part of this specification.

In order that my invention may be understood, I will describe the construction and operation thereof.

In the accompanying drawing—

Figure 1 is a front elevation of my invention.

Figure 2 is a plan of a number of rolled blanks in sheet.

Figure 3 is a plan of a trimmed blank.

Figure 4 is a plan of a finished hoe.

A bed-plate, A, of suitable construction, supports and carries a pair of housings, A', of any suitable design, provided with the ordinary bearings, in which are revolved in any suitable manner, as shown in the drawing by the gear X, the rolls B and B', the roll B being smooth and cylindrical, the roll B' being provided on its periphery with one or more dies, according to the size of the roll, cut out from or indented in said roll.

At the part b^2 of the said die it is of a diamond shape, from which projects downward and in a lengthwise direction the lower portion of the die, tapering until it comes flush with the periphery of the said roll at its required length.

From each side of the upper part, or where it assumes a diamond shape, it projects laterally in a crescent form, and gradually lessens in depth, until it reaches the required length on the periphery of the said roll, the whole being so arranged that, upon passing ordinary bar iron, heated, through the said rolls B and B', the action of the said rolls attenuate and press out the iron around the said die, pressing part of it into the die, causing a raised portion, S, figs. 2 and 3, on the blank R, being a counterpart of the said die,

and being raised in proportion to the depth of the die in the roll. The blank R is then cut into oblong lengths, each piece having a raised portion thereon, and is ready for the process of manufacture.

After the blanks R have been cut into the required lengths they are again cut so as to assume the shape shown, fig. 3, having a slit, C', in the upper portion.

The two divisions *c c* are then hammered out, in an elongated form, to the required length. They are then beaten flat, so as to form two plates, leaving their faces opposite each other, after which operation they are bent over and around a mandrel, the two ends overlapping each other, and so forming a circular hole for the insertion of the handle.

The advantages gained by the manufacture of blanks in the manner described is in forming the eye, which, in this class of hoe, requires a rib or support, D, fig. 4.

The raised portion of the blanks, in the ulterior process of manufacture, make these ribs without hammering and squeezing, as is ordinarily done. Besides, in the old process of manufacture the iron had to be heated many times, endangering it to be burnt, as the iron is thin. By the use, however, of my invention, the iron has not to be heated so many times, and also is not hammered, save in the welding of the eye, thus freeing the hoe from the danger of fracture, which so often occurs in the old process of manufacture.

Having thus described my invention,

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

The roll B', provided with a sunken die, b^2 , in combination with the roll B, substantially as described and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

J. T. TYLER.

Witnesses:

JNO. P. CLARKE,
PERCEVAL BECKETT.