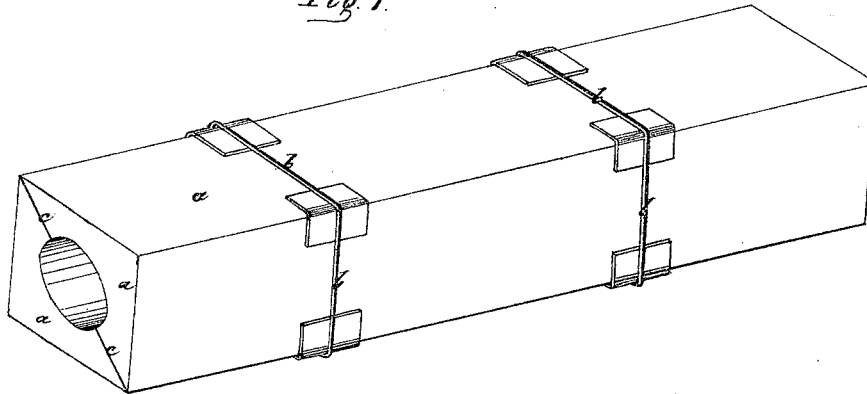


J. OSTRANDER.

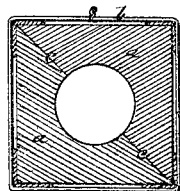
Improvement in Piles for Nut-Blanks, Tubes, &c.  
No. 114,187.

Patented April 25, 1871.

*Fig 1.*



*Fig 2.*



Witnesses:

*H. J. Smith*  
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Inventor:

*Jonathan Ostrander.*

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# UNITED STATES PATENT OFFICE.

JONATHAN OSTRANDER, OF MANCHESTER, VIRGINIA.

## IMPROVEMENT IN PILES FOR NUT-BLANKS, TUBES, &c.

Specification forming part of Letters Patent No. **114,187**, dated April 25, 1871.

*To all whom it may concern:*

Be it known that I, JONATHAN OSTRANDER, of Manchester, in the county of Chesterfield and State of Virginia, have invented a new and useful Improvement in Pile for Nut-Blanks, Tubes, &c.; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, making a part of this specification, in which—

Figure 1 is a perspective view, and Fig. 2 is a transverse section.

This invention relates to a pile to be welded by rolling into a skelp, from which nut-blanks may be sawed off, or hollow shafting or tubing be rolled; and the invention consists in a pile square in cross-section and having a cylindrical bore, and made up of two longitudinal halves, each triangular in cross-section, so that when the pile is made up the dividing plane runs diagonally of the pile, and consequently presents the greatest amount of welding-surface that can be obtained in right lines.

Referring to the drawing, *a a* are the longitudinal halves of the pile, which halves consist of crude puddled iron, scrap bar-iron, or

bloom-iron, and are previously manufactured by means of ordinary rolls, one roll having a tongue, used for forming the groove, and either from pig-iron or scrap-iron. *b* are the straps which bind the halves together so as to make the pile. *c* is the dividing plane between the halves *a*, said plane running diagonally from one corner of the pile to another.

When the pile thus formed is rolled into a skelp, the inclined faces of the halves *a* present the greatest possible amount of welding-surface that can be obtained without resorting to the more expensive device of corrugations or alternate ribs and depressions formed on or in the adjacent faces.

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

A pile made up of halves, the dividing plane between which runs diagonally of the pile, substantially as specified.

JONATHAN OSTRANDER.

Witnesses:

JNO. D. BAIRD,  
DOUGLAS BAIRD.