

L. JONES.  
 Pile, for Re-rolling Old Rails.

No. 202,266.

Patented April 9, 1878.

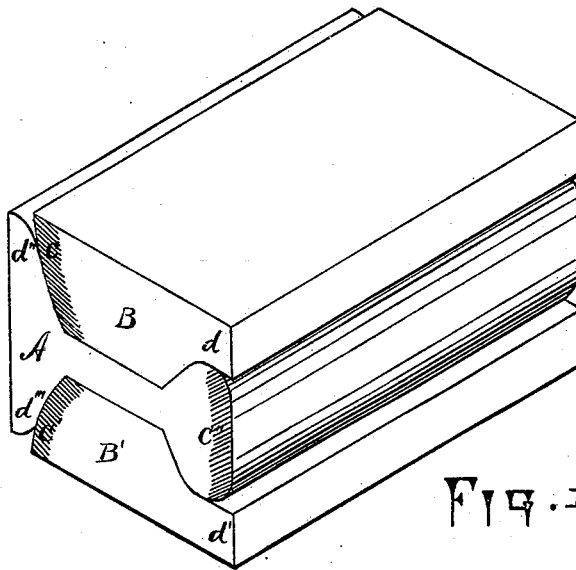


FIG. 1.

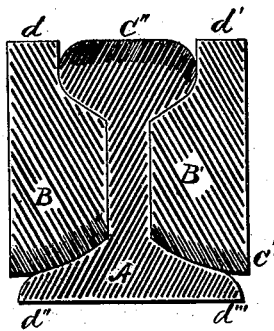


FIG. 2.

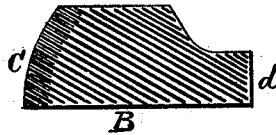


FIG. 3.

Witnesses  
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# UNITED STATES PATENT OFFICE.

LEWIS JONES, OF WHEELING, WEST VIRGINIA.

## IMPROVEMENT IN PILES FOR REROLLING OLD RAILS.

Specification forming part of Letters Patent No. **202,266**, dated April 9, 1878; application filed March 11, 1878.

*To all whom it may concern:*

Be it known that I, LEWIS JONES, of the city of Wheeling, in the county of Ohio and State of West Virginia, have invented certain new and useful Improvements in Piles for Reducing Old Rails to Merchantable Bar-Iron; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to an improvement in the mode of reducing old rails to bar or merchantable iron, whereby a great saving is effected in the handling and manipulation of the old rail, and a better quality of iron produced than by any mode or process known or practiced by the trade; and to this end it consists of forming a pile for final rolling into bar-iron, composed of a center piece of old rail, and two side or supplementary bars rolled from old rail-iron into proper shape to conform substantially to the outline of the rail against which they are placed, and form, when together, a compact, rigid pile, all of which will be hereinafter more fully explained in detail, reference being had to the drawing, in which—

Figure 1 is a perspective view of the pile ready for rolling into bar-iron. Fig. 2 is a cross-section of pile. Fig. 3 is a section of side bar.

In the drawings, A represents an interposed piece of old rail; B B', side bars, made each from an old rail. *c c' c''* indicate granular iron; *d d' d'' d'''*, fibrous iron.

Heretofore it has been the practice to "break down" the old rails into "flats," so called, and forming a pile with a series of flats placed one upon another, and then heating the same, and rolling it out into bar-iron in the usual way. Sometimes the flats are combined with an old rail, and the interstices filled up with scrap or small bars. These modes are objectionable in many ways. They are expensive piles to form, on account of the large amount of rolling, and they are unsteady, and necessarily inconvenient to handle.

It is impossible, unless the utmost care is exercised, to combine the granulated and fibrous portions of the flats in the pile so a bar will be formed containing iron of uniform texture and strength.

To overcome these objections, I construct the pile as follows: The supplementary or side bar B is made by breaking down with suitable rolls a piece of old rail into the form shown at Fig. 3, so as to conform substantially to the outline of the rail against which it is placed. Two of these bars, B B', are placed one on each side of a piece of old rail, A, (shown in Figs. 1 and 2,) thus forming a pile ready for the furnace, where it is heated to a proper heat, treated with suitable flux, and then rolled out into merchantable bar-iron in the usual way.

In forming the side piece B the head of the rail, which contains granular iron, is worked into the edge *c*, and the flange part, which contains fibrous iron, is worked into the edge *d*. This formation of the bar permits of placing the granulated iron *c* of one bar in juxtaposition with the fibrous portion *d''* of the interposed rail A, thus combining and equalizing the different qualities of each piece, and forming a bar of iron of uniform texture and strength.

The peculiar form given the side bar B serves to prevent mistakes in forming the pile, as is invariably the case where flats are used.

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

1. The bars B B', as described, and adapted to fit the sides of a railroad-rail, and having their grain and fibrous iron arranged, substantially as described and shown, to form a pile for reducing old rails.

2. The side bars B, in combination with a railroad-rail, the said bars having their fibrous iron next to the grain iron of the rail, and vice versa, substantially as described.

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

LEWIS JONES.

Witnesses:

CY. BATES HOWARD,  
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