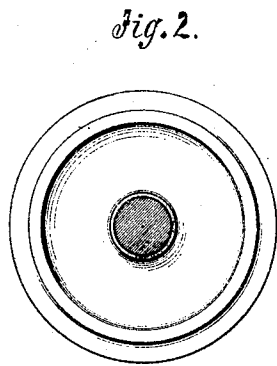
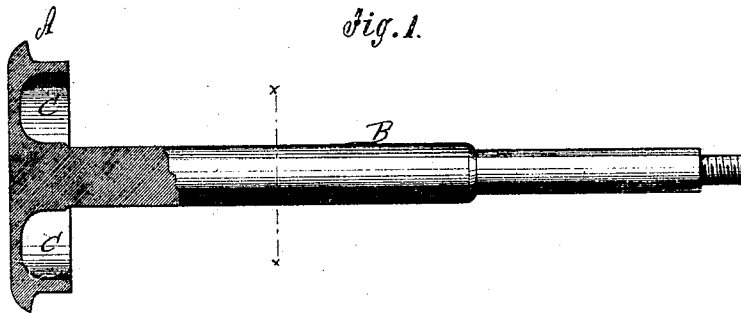


*A. W. P. A. & F. A. Whitney,*

*Tinner's Rolls,*

*No 101,068.*

*Patented Mar. 22, 1870*



**Witnesses:**

*A. Bennett*  
*L. S. Mabee*

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*A. W. Whitney*  
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PER *Winn & Co.*  
**Attorneys.**

# United States Patent Office.

AARON W. WHITNEY, PARDON A. WHITNEY, AND FOSTER A. WHITNEY,  
OF WOODSTOCK, VERMONT.

Letters Patent No. 101,068, dated March 22, 1870.

## IMPROVEMENT IN TINNERS' AND SHEET-IRON WORKERS' ROLLS.

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

To all whom it may concern:

Be it known that we, AARON W. WHITNEY, PARDON A. WHITNEY, and FOSTER A. WHITNEY, of Woodstock, in the county of Windsor and State of Vermont, have invented a new and useful Improvement in Tanners' and Sheet-Iron Workers' Rolls; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings forming part of this specification.

This invention relates to a new and useful improvement in the construction of rollers for tanners' machines for working tin and sheet-iron or other sheet metal, whereby such rolls are rendered more durable than they have hitherto been, while the cost of manufacturing them is greatly reduced; and

It consists in making the roll and shaft or spindle of a single piece of cast-steel, cast for the purpose, as hereinafter more fully described.

In the accompanying drawings—

Figure 1 represents a sectional longitudinal view of the rolls and shaft.

Figure 2 is a section looking from the line  $xx$  of fig. 1.

Similar letters of reference indicate corresponding parts.

These figures are designed to show the general shape or form of these rolls, for which no novelty is claimed, although by our method we are enabled to make the rolls lighter than they have hitherto been made.

A represents the roll, and

B, the shaft or spindle.

The rolls vary in the outline of their peripheries

or faces to adapt them to the particular purposes for which they are intended.

These rolls have hitherto been made by welding the steel roll A onto an iron shaft or spindle, B. This process involves a great amount of labor, requires much more material, and produces a roll greatly inferior to those for which we solicit protection by Letters Patent.

We make our rolls and shaft of a single piece of cast-steel, cast to near the required size, from a pattern, thereby enabling us to make the roll solid on the shaft, and also light in weight, by dispensing with a large quantity of metal, as seen by the broad opening C.

As heretofore made, this space is solid metal, which is quite unnecessary, but indispensable in the welding process.

When the cast-steel casting is simply turned to or "finished up" it is tempered and polished and is ready for use. By our improvement we produce an article greatly superior to the ordinary roll, and at a greatly reduced cost.

Having thus described our invention,

We claim as new and desire to secure by Letters Patent—

As a new and improved article of manufacture, rolls for machines for working tin and sheet-iron, made of a single piece of cast-steel, cast for the purpose from a pattern, substantially as described.

A. W. WHITNEY.

P. A. WHITNEY.

F. A. WHITNEY.

Witnesses:

THOMAS RUSSELL,

GEORGE MELLISH.