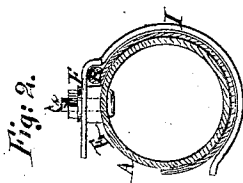
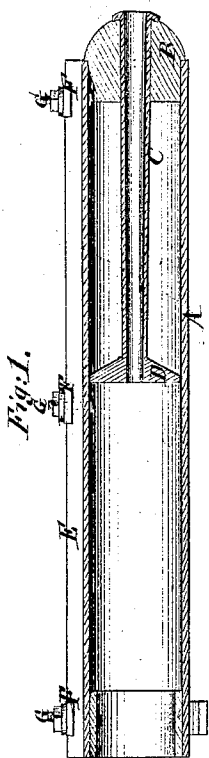


*J. N. Adams,*

*Tin Gutter Machine.*

*No. 102465.*

*Patented May 3, 1870.*



**Witnesses:**

*M. Veclaude*  
*Sp. A. Morgan*

**Inventor:**

*J. N. Adams*

PER *[Signature]*  
**Attorneys.**

# United States Patent Office.

JAMES N. ADAMS, OF CHILLICOTHE, MISSOURI.

Letters Patent No. 102,465, dated May 3, 1870.

## IMPROVEMENT IN TIN-GUTTER MACHINE.

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, JAMES N. ADAMS, of Chillicothe, in the county of Livingston and State of Missouri, have invented a new and improved Tin-Gutter Machine; 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 make and use the same, reference being had to the accompanying drawings forming part of this specification.

This invention relates to improvements in machines for making tin gutters, and consists of a sheet-metal cylinder, of the same radius as the gutter to be formed, provided with guides, by which the previously bent-up sheets of tin are confined to it while being shoved along from end to end for soldering, and also provided with a socket, for supporting it, while in use, on a "candle-mold stake"—a tool in common use in tinners' shops.

Figure 1 is a longitudinal section of my improved machine, and

Figure 2 is a transverse section of the same.

Similar letters of reference indicate corresponding parts.

A is a sheet-metal tube, of the same radius as the groove of the gutter to be made, and about the length of two sections. It is provided with a wooden plug, B, at one end, the same having an axial hole in which a tapered tube, C, is inserted, and which extends nearly to the center of the tube A, where it is supported in the center of a disk, D, which fits the inside of said tube A.

E is a long rib of wood, attached to the exterior of the tube A, and extending along its whole length. It is intended for a guide, along which the bead of the previously-formed sections of the gutter shall move, and it supports hooked brackets F, attached to it by the same bolts, G, which connect rib E to the tube.

One or more of these brackets may have curved extensions, I, extending as far around the cylinder as the gutters do when placed on the cylinder, as represented in fig. 2.

The mandrel is suitably supported on the "candle-mold stake," so as to be turned freely while soldering the joints, and the previously-bent sections of the gutter are shoved along the cylinder, as shown in fig. 2, with the beads R held against the rib E by the brackets F, while the other parts are confined by the extensions I, and are thereby held in position for soldering them together, the ends being suitably lapped, and the whole being moved along from left to right, as the succeeding sections are added, until the required length is produced.

Having thus described my invention,

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

The combination with the cylinder, provided with the heads B D and tube C, of the guide-rib E, hooked brackets F, and one or more extensions, I, of the latter, all substantially as specified.

Witnesses:

JOHN COOMBS,  
F. K. FLETCHER.

J. N. ADAMS.