J. Glover.

Sheet Metal Seaming Mach.

No. 93,704. Patented Aug 17. 1869.

Fig 1

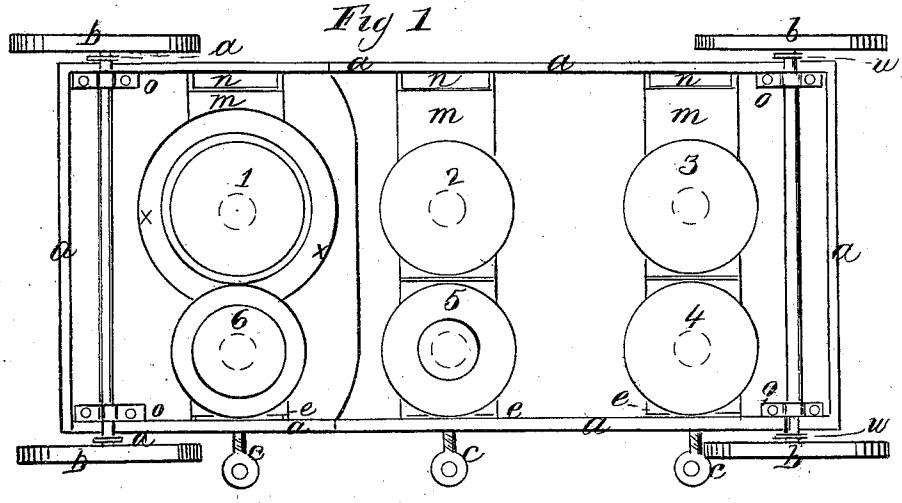


Fig 2

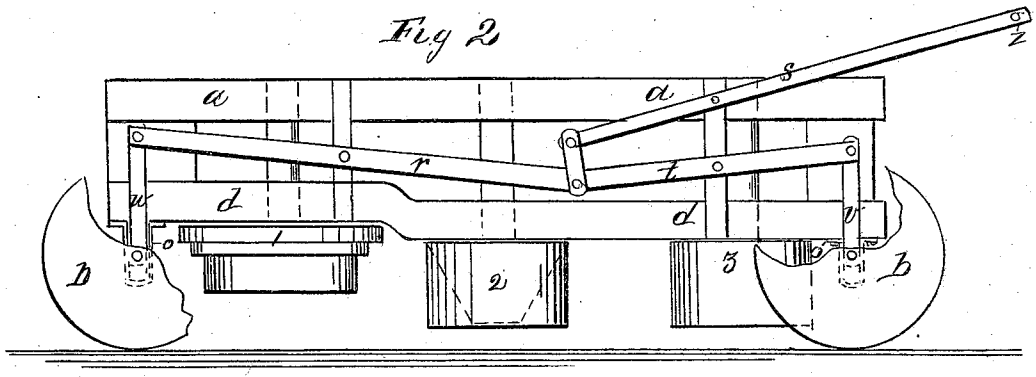


Fig 3



Witnesses

Thos H. Hutchins

H. Lowe

Inventor

James Glover

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

United States Patent Office.

JAMES GLOBER, OF OMAHA CITY, NEBRASKA.

Letters Patent No. 93,704, *dated August* 17, 1869.

IMPROVEMENT IN MACHINE FOR DOUBLE-SEAMING SHEET-METAL.

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

Be it known that I, JAMES GLOBER, of Omaha City, Douglas county, State of Nebraska, have invented a new and useful Machine for Double-Seaming Sheet-Metal; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a plane view on the bottom;

Figure 2, a side elevation; and

Figure 3, a diagram, showing the metal after the double seam is perfected.

The construction and operation of said machine, I will proceed to explain.

a is the main frame, resting upon the axles of the wheels *b*, and bearing the metal rollers 1, 2, 3, 4, 5, and 6, which rollers are attached to vertical shafts passing up through both sections of the frame, as shown in fig. 2, and turn in suitable journals or boxes.

This machine is intended more particularly to double over the two edges of long strips of tin for roofing, as is shown in fig. 3.

The mode of operation is about as follows:

The tin or metal is first nailed down in its place on the roof, in long strips, side by side, with their edges turned up at right angles, touching each other. The frame of the machine is then raised up by means of pressing down on the outer end of the lever *s*, which, in conjunction with the levers *r* and *t*, and the upright posts *u*, through the lower ends of which the axles pass, until the axles touch the lower part of the long journals or boxes *o*. This is done so that the rollers 1 and 6 (between which the tin first starts) catch the two turned-up edges of the tin near the top, and start the first turn. The roller 1 is constructed with two vertical offsets, into the first one of which the roller 6 operates, as is shown in fig. 2. The tin passing through between said rollers, leaves them bent into the shape of a right angle, the rim *x* serving to gauge the depth of their grip on the tin. The machine then passes on until the turned edge of the tin comes between the two next rollers, 2 and 5, so that the edge of the tin strikes the conical surface of the roller 5, shown also in fig. 2, by the dotted lines on the roller 2, which changes the angle into which the two edges were just turned from a right angle into an acute angle, so that when it comes between the two parallel vertical rollers 3 and 4, they complete the turn, by pressing the two surfaces together, as shown in fig. 3.

In order to make the second or double turn, the same operation is repeated, after the frame is let down, so that it rests on the axles of the wheels *b*.

The machine is propelled by pushing on the cross-bar *z*. The end which passes through the lever *s* only is shown.

The system of leverage is the same on both sides of the machine.

The boxes *m* and *e* are movable, as shown in fig. 1, for the purpose of setting the rollers nearer together or further apart, as desired, which is accomplished by means of the thumb-screw *c*.

A strip of rubber, *n*, is placed between the boxes *m* and the main frame *a*, so the boxes will be flexible, that the cross-seams in the tin may pass between the rollers without difficulty.

The boxes may be similarly arranged in the upper section of the frame, if desired.

Having thus described my invention,

What I desire to secure by Letters Patent is as follows:

I claim the combination of the levers *s*, *r*, and *t*, posts *u*, and long box *o*, with the main frame *a*, arranged, operating, and constructed as and for the purposes set forth.

JAMES GLOBER.

Witnesses:

THOS. H. HUTCHINS,

H. LOWE.