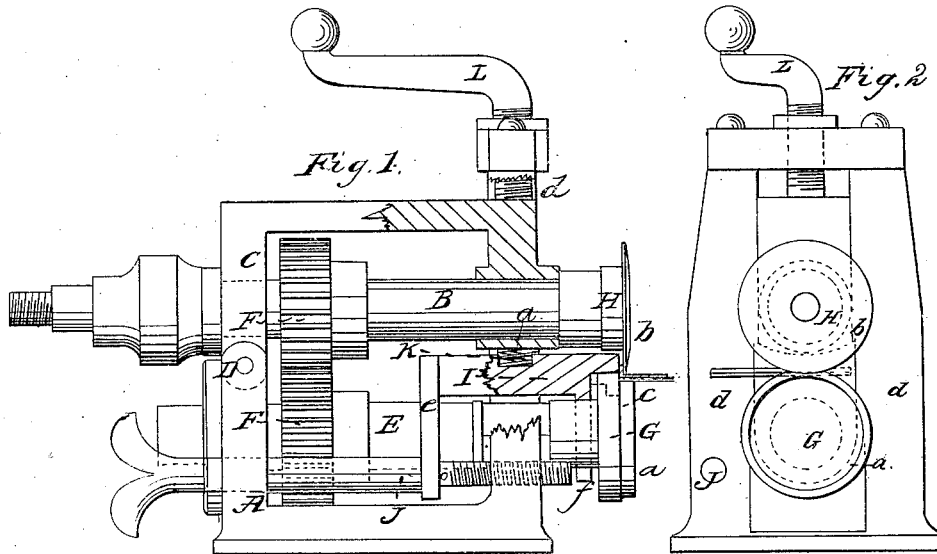


O. W. Stow,

Tinners' Rolling Machine.

N^o 22,459.

Patented Dec. 28, 1858.



Witnesses:

Stephen Walkley Jr.
Enos & Stow

Inventor:

O. W. Stow

UNITED STATES PATENT OFFICE.

O. W. STOW, OF SOUTHTON, CONNECTICUT.

IMPROVED BURRING-MACHINE.

Specification forming part of Letters Patent No. 22,459, dated December 28, 1858.

To all whom it may concern:

Be it known that I, O. W. STOW, of Southington, in the county of Hartford and State of Connecticut, have invented a new and useful improvement in burring-machines used by tinner and workers in sheet-metal for turning up the edges of sheet-metal plates and for similar purposes; and I do hereby declare that the following is 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 side of a burring-machine with my improvement applied to it. Fig. 2 is a front view of the same.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in a novel manner of applying the gage to the implement, as hereinafter fully shown and described, whereby the gage is permitted to adjust itself with the lower roller and compensate for all wear of the journal of the lower roller-shaft.

The object of the invention is to prevent the difficulty attending the wear of the journal of the lower roller-shaft and the consequent separation of the lower roller from the gage, whereby the latter is frequently rendered useless or prevented from performing its proper function.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the permanent or lower portion of the frame of the machine, which is constructed in the usual way.

B is the upper roller-shaft, the bearings of which are in the upper portion, C, of the frame, the upper portion of the frame being connected to the lower portion by a joint, D.

E is the lower roller-shaft, placed horizontally in the lower part, A, of the frame, and F F are gear-wheels, which are attached to the shafts B E and mesh into each other. The lower roller, G, has a rabbet, *a*, formed at its outer edge, and the upper roller, H, has a thin circular flange or plate, *b*, projecting from it, said flange or plate *b* projecting down when the upper roller is depressed over or near the shoulder *c*, at the inner side of the rabbet *a*. (See Fig. 1.)

I represents the gage, which is fitted between uprights *d d* at the front end of the lower part, A, of the frame. The gage is a rectangular metal bar having a vertical pendent plate, *e*, at its back, and through which the lower roller-shaft, E, passes, and also a screw-rod, J, by which the gage I is adjusted. Near to the front end of the gage a pendent plate, *f*, is attached, through which the shaft E also passes. The outer end or face of the gage projects over on the lower roller, G, as shown clearly in Fig. 1, and may be adjusted thereon to any point by turning the screw-rod J. The gage I is fitted loosely between the uprights *d d*, and between the under side of the front bearing, *a*^x, of the shaft B and the upper surface of the gage I a spring, K, is placed, as shown clearly in Fig. 1.

From the above description of parts it will be seen that the gage I will always be kept in contact with the roller G, for in case the bearings of the shaft E become worn and the roller G depressed the gage I will follow the roller, the spring K keeping the two in contact.

In ordinary machines or those previously constructed the gage I passes through the uprights *d*, which serve as guides for the same, and when the journals of the shaft E become worn the roller G leaves the gage, and the sheet of metal to be operated upon will frequently pass between the under side of the gage and the periphery of the roller G. (See Fig. 1, in which a sheet of metal properly acted upon is shown in red, and one improperly acted upon is shown in blue.) This falling of the roller from the gage renders the latter quite useless. By my improvement this difficulty is entirely obviated, and the gage is made to follow the lower roller, thereby compensating for the wear of the journals of the lower shaft, more particularly the front journal and its bearing.

It will be seen that the upper roller is adjusted by turning a hand screw-rod, L, as usual.

I do not claim the rollers G H nor the manner of adjusting the upper roller, H; nor do I claim the gage I in itself considered, nor the manner of adjusting the same on the lower roller, G, by the screw-rod J, for these parts

are well known and have all been previously used; but,

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

The arrangement and combination of the spring K, gage I, and rollers G H, substan-

tially as and for the purpose herein shown and described.

O. W. STOW.

Witnesses:

STEPHEN WALKLY, Jr.,
ENOS E. STOW.