J. A. Wells.

Cutting Sheet Metal.

No. 95,294. Patented Sep. 28, 1869.

Fig. 1.

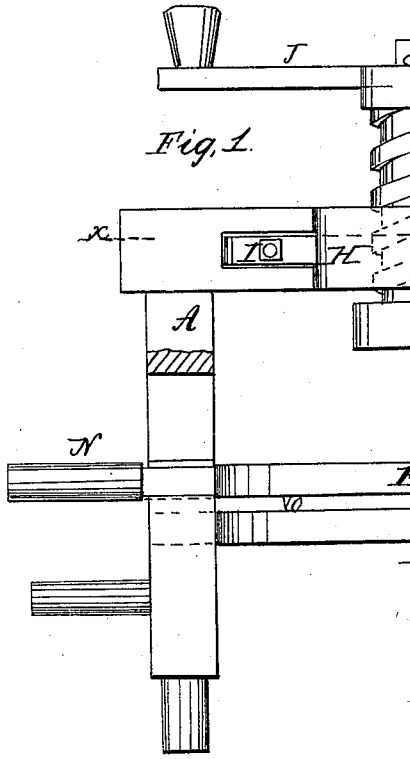


Fig. 3.

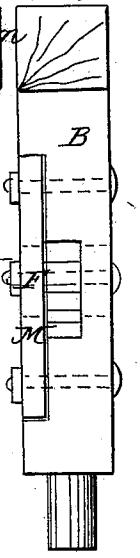
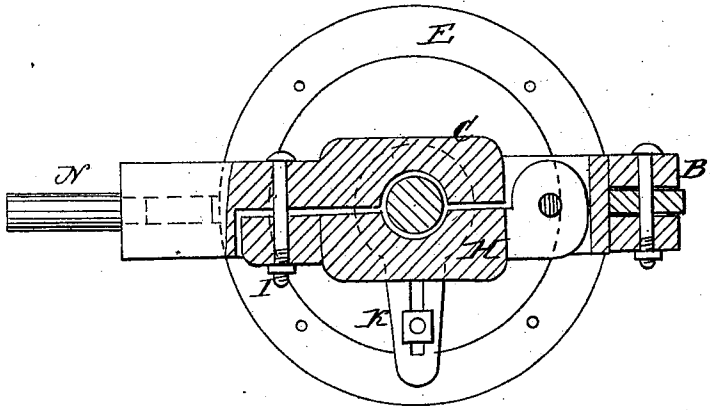


Fig. 2.



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JOHN A. WELLS, OF HOLLY SPRINGS, MISSISSIPPI.

Letters Patent No. 95,294, *dated September* 28, 1869.

IMPROVEMENT IN MACHINES FOR CUTTING SHEET-METAL.

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, JOHN A. WELLS, of Holly Springs, in the county of Marshall, and State of Mississippi, have invented a new and useful Improvement in Machines for Cutting Sheet-Metal; 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 a new and improved machine for cutting circles from tin and other sheet-metal; and consists in the construction, arrangement, and combination of parts as hereinafter described.

In the accompanying sheet of drawings—

Figure 1 represents a side elevation of the machine.

Figure 2 is a horizontal section through the line $x\,x$ of fig. 1.

Figure 3 is an end view of the fulcrum-stand.

Similar letters of reference indicate corresponding parts.

This machine consists of two upright stands, A B, connected together by a cross-piece, C, at their top ends, their lower ends being made fast to a bench or table, by which the machine is supported.

A removable open circular bed-piece, D, is supported by the stands A B, upon the top of which is an open adjustable circular lever, E, the fulcrum of which lever is at F, in the stand B.

G is a screw, which works through the cross-piece C, as through a nut, the screw-thread being cut, one-half in the cross-piece and one-half in a hinged clamp, H, which is secured in position by a bolt, as seen at I.

J is a crank, for turning the screw, secured to its upper end.

K is a slotted crank on the lower end of the screw, for carrying the cutter L.

The central portions of the bed D and the lever E are in the form of rings, and both the bed and the lever may be changed at will, for others, with larger or smaller inner circles, when necessary.

The cutter L is secured in the slot in the crank K, by a nut on its upper end, and its outer side forms the arc of a circle, the centre of which circle is the centre of the screw G. This form is necessary to insure a smooth edge to the metal cut.

Different cutters may be used for circles of different diameters.

The bed D and the lever E have projecting ends or lugs, on opposite sides, by which they are secured in the stands.

In the fulcrum-stand B, they are secured by the cap-piece M, by means of bolts.

In the stand A, the lug of the bed-piece rests in an open recess, while the handle N of the lever E works in a slot.

The lower side of the circle of the lever is provided with two or more spikes, O, which penetrate the sheet of metal as it is placed on the bed for cutting.

A downward pressure on the handle of the lever drives the spike through the metal, and holds the sheet securely while the cutter L is revolved by turning the crank J.

In manufacturing tin-ware, this machine is of the greatest utility, as any desired circle may be cut thereby with the greatest accuracy and expedition.

Having thus described my invention,

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

The frame, composed of the stands A B and cross-piece C, the screw G, with its cranks J and K, the cutter L, the bed D, and the lever E, the whole constructed, arranged, combined, and operating substantially as described.

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