A. Heaton,

Spinning Sheet-Metal.

No. 4924. Patented Jan. 13, 1847.

Fig. 5.

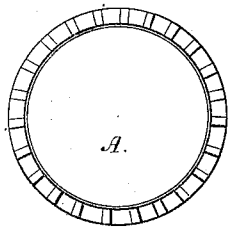


Fig. 6.

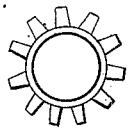


Fig. 1.

Fig. 3.

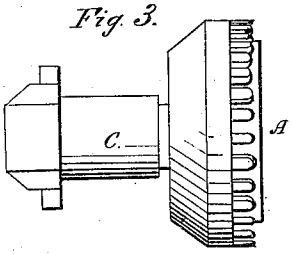


Fig. 4.

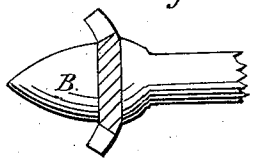
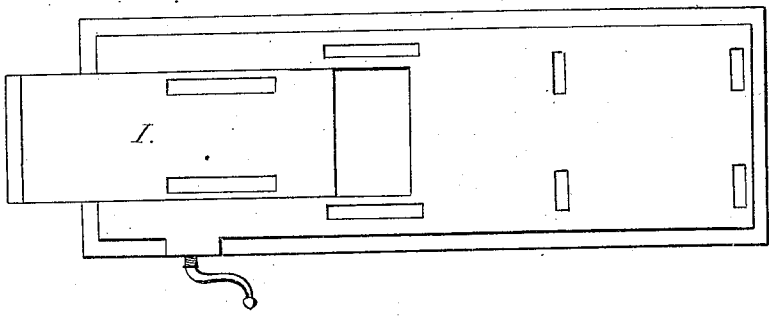


Fig. 2.



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

UNITED STATES PATENT OFFICE.

ALONZO HEATON, OF IRVING, NEW YORK.

IMPROVEMENT IN MACHINERY FOR RAISING SHEET METAL.

Specification forming part of Letters Patent No. **4,924**, dated January 13, 1847.

To all whom it may concern:

Be it known that I, ALONZO HEATON, of Irving, Chautauqua county, New York, have invented a new and useful Machine for Making Tinware, called "A Tin-Raising Machine;" and I hereby declare that the following is a full and exact description.

To enable others to make and use my invention, I proceed to describe its construction and operation, reference being had to the drawings hereunto annexed, and making part of this specification.

Figure 1 is a perspective view of the machine; Fig. 2, a plan; Fig. 3, a side of the concave; Fig. 4, the cone; Fig. 5, a plan of the concave; Fig. 6, the pinion upon the cone.

Upon the platform, Fig. 2, are set two uprights, E F, in the top of which are the slots for the boxes G H, holding the main shaft with the crank. Over the journals in the cap-piece are set-screws for adjusting the cone upon the concave. Upon a slide, I, in the platform are two supports, K, on which, upon journals, rests the stem of the concave C, made to take out and in with facility. A friction-roller, D, supports the concave. Upon the end of the shaft L is the cone, the apex of which reaches exactly to the center of the concave, the cone and concave being made to fit each other exactly. At the base of the cone upon the shaft L is a pinion fitting into a horizontal spur-wheel or set of teeth around the outer edge of the concave.

To raise (technically) or to make hollow a piece of tin, the plate (being cut circular) is placed upon the concave, (the set-screw over the journal of the shaft being set back, so as to lift the cone off the concave.) The cone is then set down upon it by means of the screw over the journal and the crank turned. This operation will form a hollow piece.

Different sets of cones and concaves may be used in the same machine, and any degree of concavity can be produced by using a succession of concaves and cones.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the concave A with the cone B, for raising or making concave a plate of tin or other metal, as described.

In witness whereof I have hereunto set my hand, at the city of New York, October 8, 1846.

ALONZO HEATON.

Witnesses:

OWEN G. WARREN,

ROBT. S. MITCHELL.