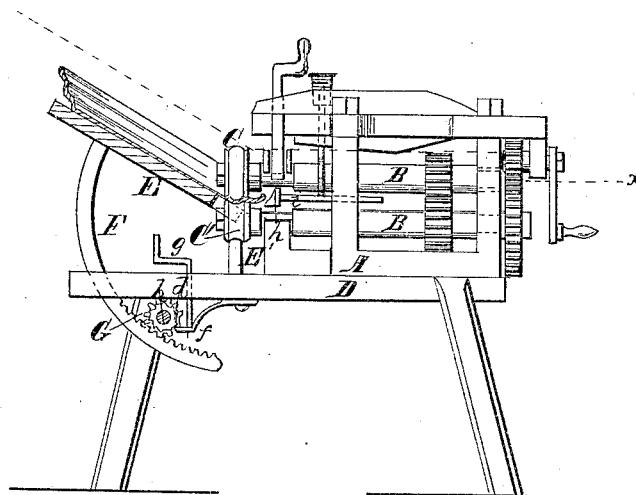


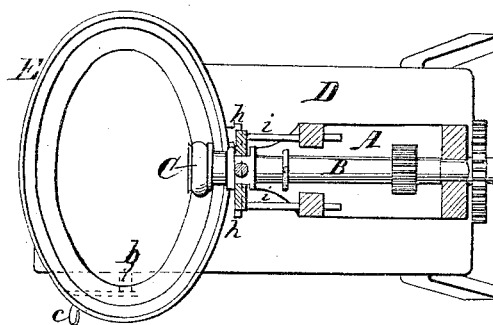
*H. Packs,*  
*Making Sheet-Metal Vessels.*  
*N<sup>o</sup> 44,945.      Patented Nov. 8, 1864.*

*Fig. 1.*

*Fig. 3.*



*Fig. 2.*



*Witnesses:*  
*James P. Hall,*  
*Wm. J. McManis.*

*Inventor:*  
*Henry Packs*

# UNITED STATES PATENT OFFICE.

HENRY FACHS, OF NEW YORK, N. Y.

## IMPROVED MACHINE FOR RAISING SHEET-METAL PANS.

Specification forming part of Letters Patent No. 44,945, dated November 8, 1864.

*To all whom it may concern:*

Be it known that I, HENRY FACHS, of the city, county, and State of New York, have invented a new and Improved Machine for Raising 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, in which—

Figure 1 represents a sectional side elevation of this invention; Fig. 2, a sectional plan or top view of the same, the plane of section being indicated by the line *x x*, Fig. 1; Fig. 3, a detached section of one of the raising-dies.

Similar letters of reference indicate like parts.

The object of this invention is an improvement in that class of machines which are used to raise or turn up the edges of sheet-metal articles, such as plates, dishes, waiters, coffee-trays, &c.; and the invention described in the following specification relates particularly to a machine intended for the purpose of producing the raised edges of oval or elliptical coffee-trays.

The invention consists in the employment or use, in combination with the rotating raising-dies, of a swinging platform, which can be raised to and retained at any desired inclination in such a manner that the blank can be gradually brought from a horizontal to an inclined position, while its edge is exposed to the action of the raising-dies, and thereby the rim is turned up and shaped according to the configuration desired. In turning between the dies the blank is guided by its edge being held in contact with two adjustable stops, which determine the height or width of the rim to be produced.

A represents a frame, of metal or other suitable material, which forms the bearings for the horizontal arbors B of the ordinary dies, C. The arbors B are geared together, so that the dies rotate with a uniform speed in opposite directions, and the upper arbor is so arranged that it can be raised from or depressed to the lower arbor, and it is held at the desired distance from the same by a suitable hand-screw. The raising-dies C are secured to the arbors by suitable nuts or other means, so that they can be readily taken off and re-

placed by others of a different shape. The frame A is secured to the top of a bench, D, and from this bench rise two standards, E', which form the bearings for the gudgeons of the tilting platform E. A curved arm, F, which extends from the bottom of this platform, and the toothed edge of which gears in a pinion, G, under the bench D, serves to bring said platform gradually from a horizontal to an inclined position. The pinion G is secured to a horizontal shaft, *b*, which is turned by means of a winch, C, and mounted on this shaft is a ratchet-wheel, *d*, the teeth of which engage with the point of a spring-pawl, *f*, and prevent the shaft *c* from turning back. By these means the platform can be adjusted to and held in any desired position. A hand-screw, *g*, passing down through the bench, serves to disengage the pawl from the ratchet-wheel whenever it is desired to lower the platform or to turn the shaft *b* back. The blank to be raised by the action of the raising-dies is cut out in the desired form and placed on the platform E, with its edge pressed up against two stops, *h*, which are secured to rods *i*, between the dies, and run on either side of the same. The rods *i* are secured in the frame A, and they are or may be made adjustable to determine the width of the rim to be raised. At the beginning of the operation the platform E is in a horizontal position, but it is gradually raised to the position shown in Fig. 1 of the drawings, or to such a position as the desired inclination of the rim may demand. By turning the raising-dies in the usual manner the blank is carried round on the platform, with its edge constantly bearing against the stops *h*, and a coffee-tray of oval or elliptical form, or of any other desirable shape, can thus be produced without the use of the hammer in a simple manner and with little labor.

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

The tilting platform E, applied, in combination with the dies C, in the manner and for the purpose substantially as herein shown and described.

HENRY FACHS.

Witnesses:

JAMES P. HALL,  
WM. F. McNAMARA.