D. BRIX.

DEVICES FOR CUTTING DISKS OF METAL, &c.

No. 181,138.

Patented Aug. 15, 1876.

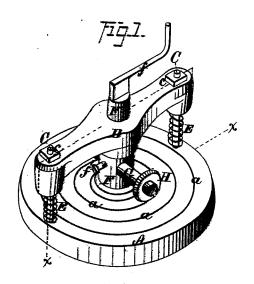
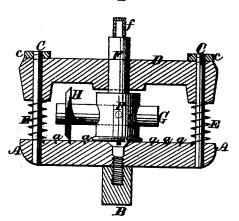


Fig.Z.



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UNITED STATES PATENT OFFICE

DOMINICUS BRIX, OF GENESEO, ILLINOIS.

IMPROVEMENT IN DEVICES FOR CUTTING DISKS OF METAL, &c.

Specification forming part of Letters Patent No. 181,138, dated August 15, 1876; application filed July 14, 1876.

To all whom it may concern:

Be it known that I, D. Brix, of Geneseo, in the county of Henry and in the State of Illinois, have invented certain new and useful Improvements in Apparatus for Cutting Disks of Metal, Paper, Leather, &c.; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, making a part of this specification, in which—

Figure 1 is a perspective view of my improved device; and Fig. 2 is a central vertical

section of the same.

Letters of like name and kind refer to like

parts in each of the figures.

The design of my invention is to enable sheet metals, paper, wood, leather, &c., to be easily and quickly cut into circular forms having any desired diameter; and to this end it consists in the peculiar construction and combination of the operative parts of the machine, substantially as and for the purpose hereinafter specified.

In the annexed drawing, A represents a table, which is constructed in circular form from any suitable material, and when in use is supported upon, and held in horizontal position by means of, a square lug, B, that extends down ward from its lower side at its center, and may be grasped by the jaws of a vise, or may be inserted within a correspondingly-shaped opening in a bench. Secured within, and extending vertically upward from opposite sides of, the plate A are two standards, C and C, which at their upper ends receive a cross-bar, D, that passes over said ends, and is confined thereon by means of a nut, c, which fits over a threaded portion of the same. Between said cross-bar and plate are interposed two spiral springs, E and E, one of which encircles each of said standards, and operates to hold said cross-bar upward against said nut. Journaled vertically within the center of the cross-bar D is a shaft, F, which extends nearly to the plate A, and between the latter and said cross-bar has such dimensions as to cause it to be retained in position between said parts, where

it may be freely rotated by means of a crank, f, that is secured to or upon its upper end. Passing horizontally through the shaft F, midway between the plate A and cross-bar D, is a bar, G, which is adjustable longitudinally, and, when so adjusted, may be secured in place by means of a set-screw, f', that passes radially inward into said shaft. A circular cutter, H, journaled upon the outer end of the bar G, completes the device, the operation of which is as follows:

The bar or arm G is adjusted longitudinally until the cutter H will describe the desired circle, after which the article to be cut is placed upon the table A, between the shaft F and said cutter, and said parts then rotated, and at the same time pressed downward, when it will be found that said cutter will easily and neatly divide the material, and separate therefrom the desired disk.

If desired, concentric grooves a may be formed in the face of the plate A for the reception of the edge of the cutter, one of said grooves being provided for each size of disk that is to be cut.

The device thus constructed is simple and efficient, and furnishes a means whereby from sheets of any desired material disks having any required dimensions may be cut with little labor, and without skill upon the part of the operative.

Having thus fully set forth the nature and merits of my invention, what I claim as new

As a means for cutting circular forms the plate A, standards C and C, cross-bar D, spiral springs E and E, shaft F, crank f, adjustable arm G, and cutter H, all constructed and combined to operate in the manner and for the purpose substantially as specified.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 11th day of July, 1876.

DOMINICUS BRIX, M. D. [L. s.] Witnesses:

L. C. CAMPBELL, SIMON C. OTT.