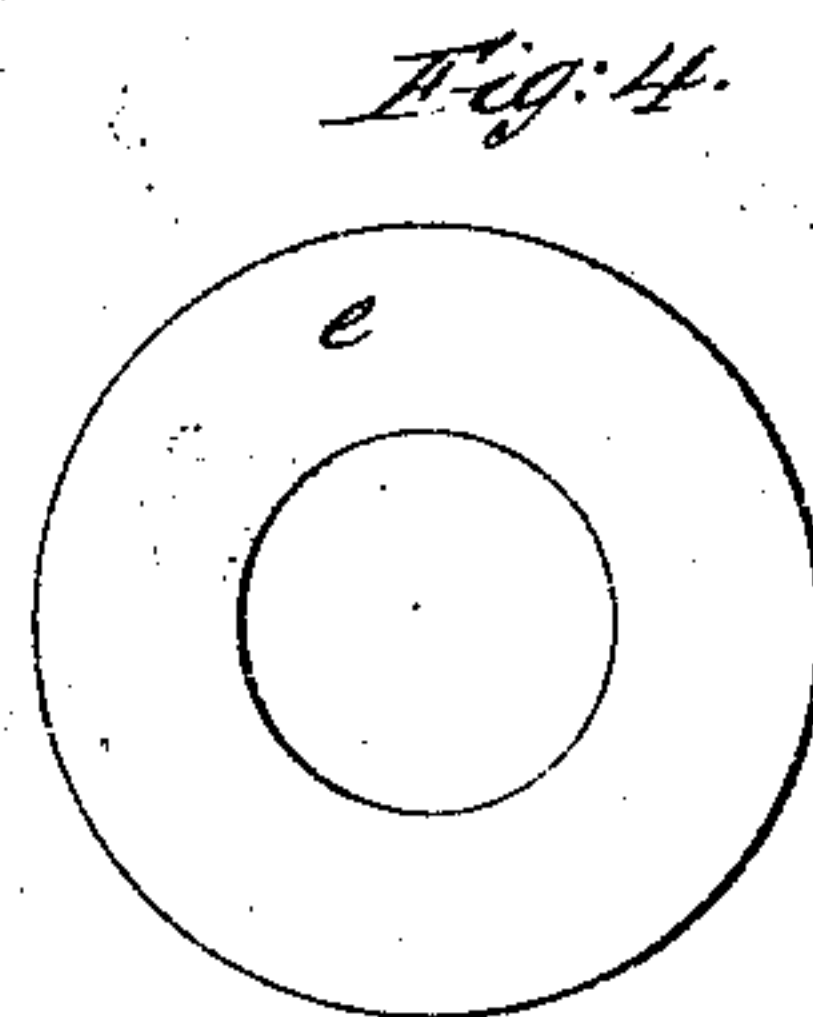
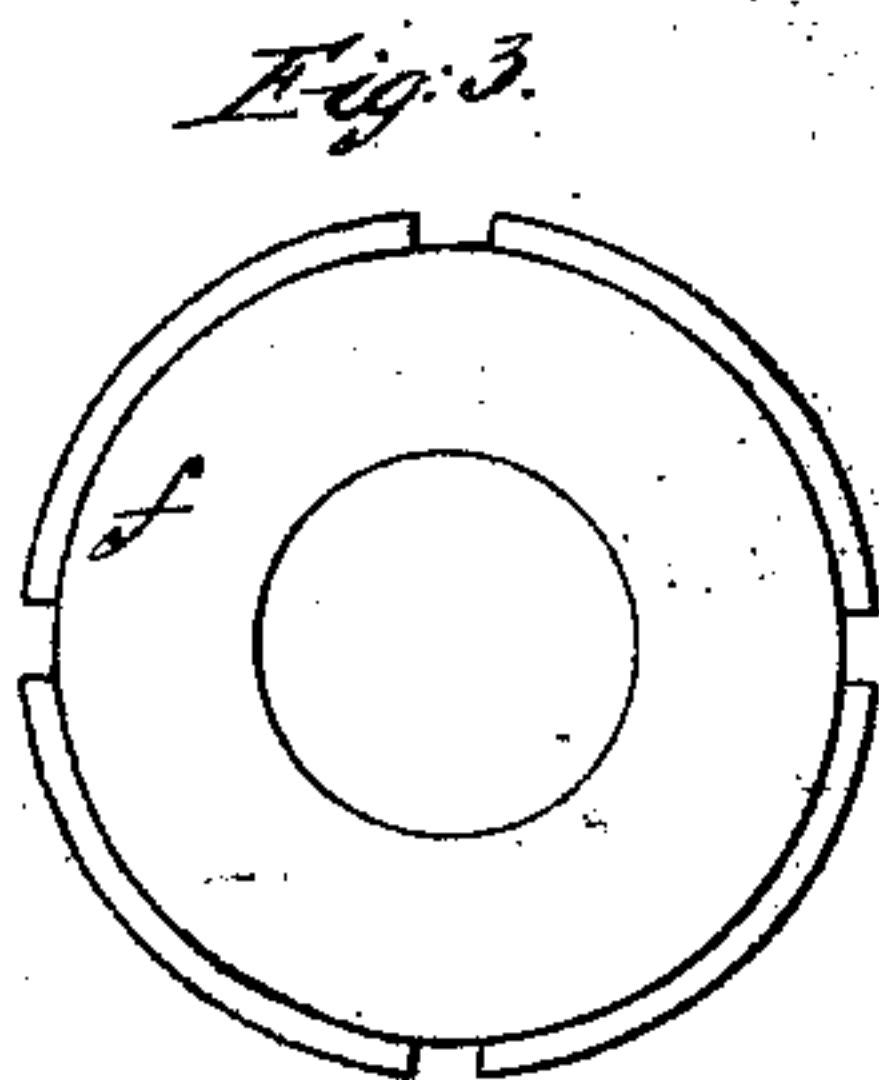
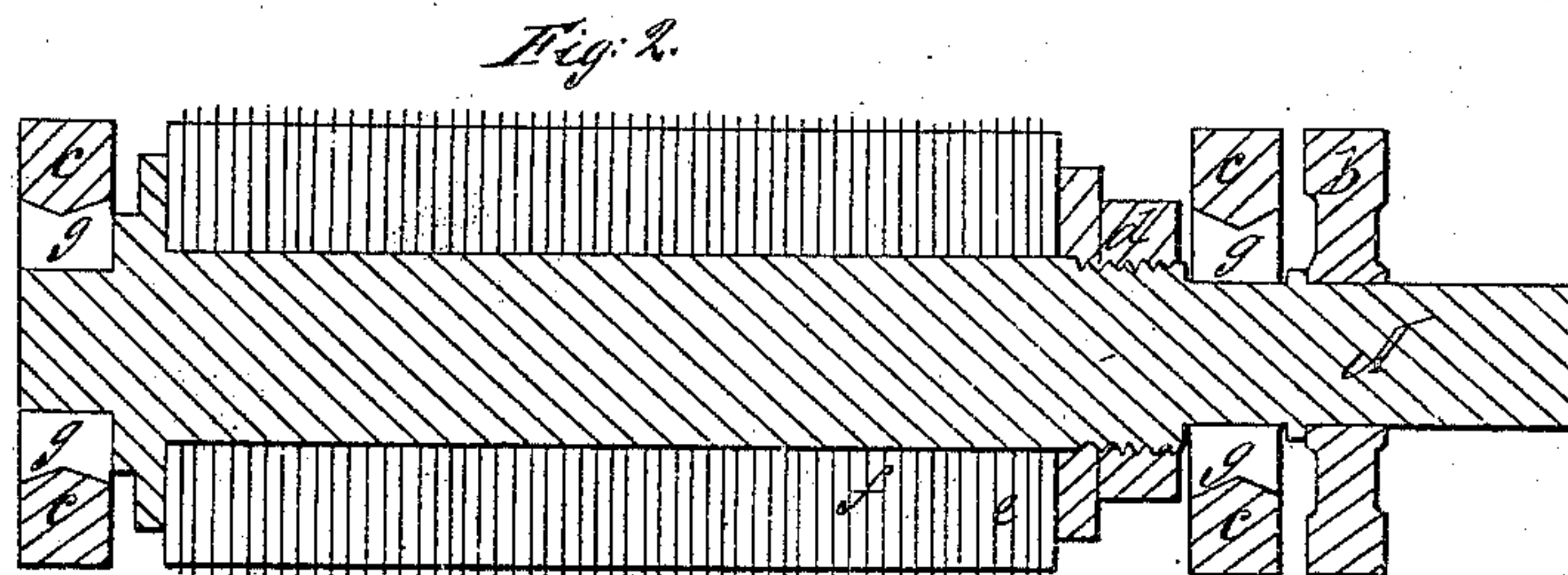
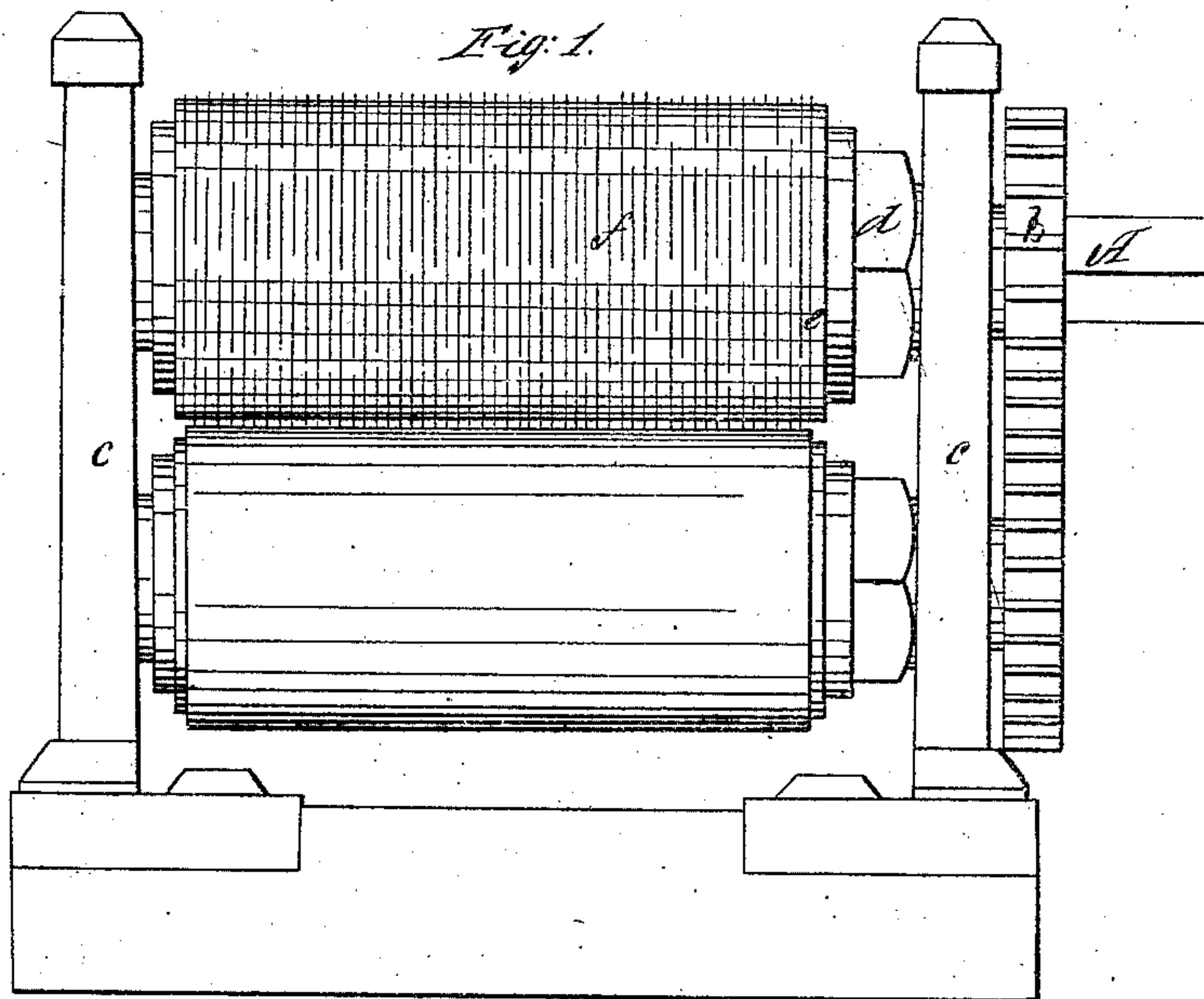


A. Worden,

Cutting Leather.

N^o 41,459.

Patented Feb. 2, 1864.



Witnesses:

*H. B. Dodge
R. J. Storck*

Inventor:

Alva Worden

UNITED STATES PATENT OFFICE.

ALVA WORDEN, YPSILANTI, MICHIGAN.

MACHINE FOR CUTTING LEATHER FLY-NETS.

Specification forming part of Letters Patent No. 41,459, dated February 2, 1864.

To all whom it may concern:

Be it known that I, ALVA WORDEN, of the city of Ypsilanti, in the county of Washtenaw and State of Michigan, have invented a new and useful Machine for Cutting Leather Fly-Nets for Horses; and I do declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the machine set up and ready for use. Fig. 2 is a transverse section. Fig. 3 represents one of the circular knives, and Fig. 4 one of the plates or washers used upon the shaft of the cylinder to hold the knives the required distance apart.

The letter A represents the horizontal shaft upon which the knives are attached.

Letter B represents two pinions, which cause both shafts to revolve at the same time.

Letter C represents the perpendicular standard or frame-work in which said shafts revolve.

Letter D represents the nut by which the knives are held stationary upon the shaft.

Letter E represents one of the washers or plates that separate the knives.

Letter F represents one of the knives detached from the cylinder, and letter G represents the box in which the journals of the shaft revolve.

The nature of my invention consists in arranging circular knives, separated by uniform plates or washers, upon a horizontal shaft or

cylinder, with spaces or breaks in the circular knives, so arranged that the space or break in each alternate knife will form direct rows or lines, so that when the knife-cylinder is made to revolve by means of a crank or pulley the edges of the knives working upon smooth surface or corresponding cylinder fitted with grooves in which the edges of the knives work closely, uniform slits or incisions with breaks in each alternate row will be made in a strip of leather of the desired width to form a net-work.

The machine is constructed by round or circular knives fitted upon a small horizontal shaft with a round or circular plate of smaller size, also fitted upon the same shaft between the knives, with spaces of uniform size and distances cut out of the edges of the knives, and when the required number of knives are fitted upon the shaft the whole is firmly united, forming a firm cylinder by means of nuts and screws at the end of the shaft.

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

The arrangement of circular knives upon a revolving cylinder so that passing a strip of leather under the cutting cylinder uniform incisions will be made in the leather with uniform breaks in each alternate row of incisions; so that the leather when cut by the machine forms a diamond net-work.

ALVA WORDEN.

Witnesses:

R. J. STUCK,
A. C. BLODGET.