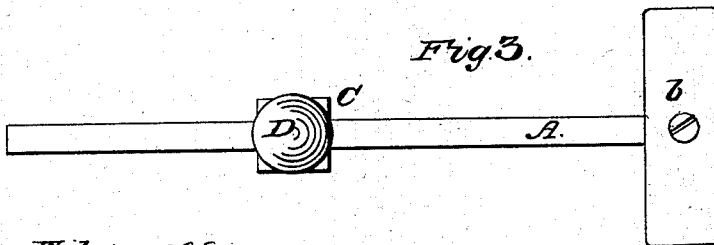
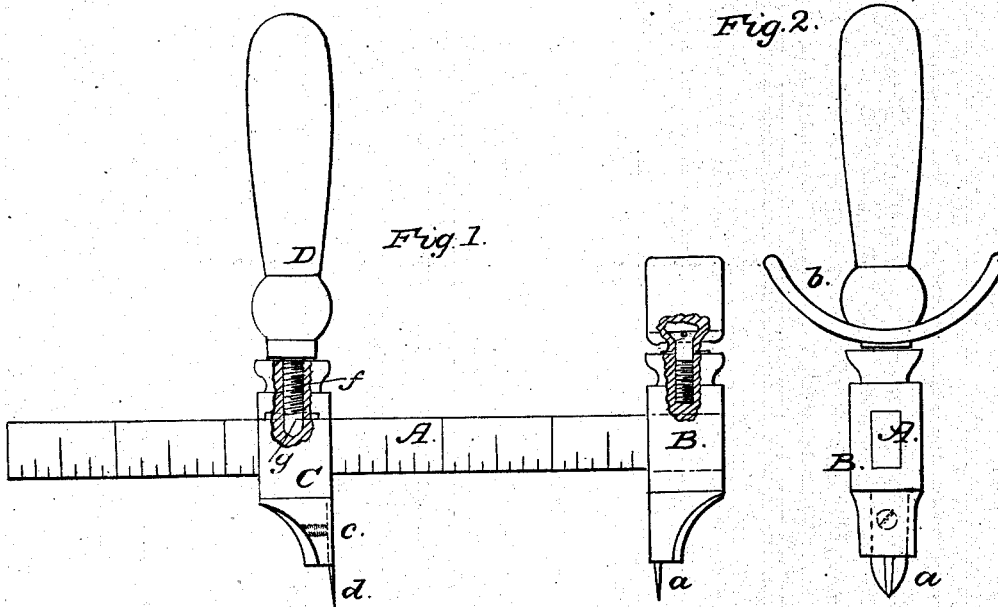


E. HUBNER.

Implement for Cutting Rubber; &c.

No. 47,421.

Patented April 25, 1865.



Witnesses
M. M. Livingston
C. L. Schaff

Inventor
Emil Hubner

UNITED STATES PATENT OFFICE.

EMIL HUBNER, OF NEW YORK, N. Y.

IMPROVED IMPLEMENT FOR CUTTING RUBBER, &c.

Specification forming part of Letters Patent No. 47,421, dated April 25, 1865.

To all whom it may concern:

Be it known that I, EMIL HUBNER, of the city, county, and State of New York, have invented a new and Improved Circular Cutter; 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 is a side elevation of this invention, partly in section. Fig. 2 is an end view of the same. Fig. 3 is a plan or top view of the same.

Similar letters of reference indicate like parts.

The object of this invention is to cut out circular disks or rings of india-rubber or other material, such as used for packing of flanges and other circular parts of steam-engines and other machines. To effect this purpose a movable knife-holder is secured to a rod provided with a rule and with a screw-handle and fixed center in such a manner that the knife can be adjusted at any desired distance from the fixed center, and by turning the handle the knife-holder can be released or fastened at any desired point on the rule. The fixed center is secured in a stationary head provided with a surrounding arm rest in such a manner that the operator is enabled to press the fixed center down with his arm and take hold and operate the knife with one hand, while his other hand is free to hold the material and move it against the knife, and the cutting operation can be executed in a short time with ease and with perfect exactness.

A represents a rod or rule of a square, oblong, or polygonal cross-section, made of wood or metal, and provided with a scale of inches, half-inches, quarters, and eighths, and, if desired, the division may be carried on still further. This rule is firmly secured at one end to a head, B, which carries in its bottom end the stationary center *a*, made of a pointed piece of steel wire or other suitable material, and from the top of said head rises the arm-rest *b*, which is so arranged that it can swivel in either direction independent of the head. The rule A forms the guide for the movable

head C, to the lower end of which the knife *d* is secured by means of a screw or screws, *e*, in such a manner that it can be readily removed whenever it may be necessary to sharpen it or replace it by another. Said knife is provided with a rounded point and two cutting-edges—one on each side—though I do not wish to confine myself to any particular-shaped knife, but reserve the right to change the same as circumstances may make desirable. Both the knife and stationary center are secured to their respective heads on the inner faces thereof, or as close to the arm as possible, so that they can be brought as close together as may be desirable. The movable head is operated by a handle, D, which is fastened to the same by a screw, *f*, the inner end of which bears upon a friction-plate, *g*, sliding on the edge of the rule. By turning the handle in one direction said friction-plate is pressed down hard upon the edge of the rule and the head is rendered rigid with the same, and by turning the handle in the opposite direction the head is released so that it can be adjusted at any desired distance from the stationary center. If it is desired, for instance, to cut out a flange with a three-inch hole and nine inches outside diameter, the head C is first adjusted at a distance of four and one-half inches from the stationary center, and by placing the right arm in the arm-rest and taking hold of the handle with the right hand the center-pin can be held down in the desired spot and the knife operated while the left hand is free to move the material against the knife. After the flange has been cut out in this manner the head C is moved to a distance of one and one-half inch from the center, and the hole is cut out in the same manner. By means of this tool packing for circular flanges and other circular parts of steam-engines and other machines can be cut out with little loss of time, and all unnecessary waste of the material from which the packing is made can be avoided.

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

1. An adjustable circular packing-cutter, constructed as herein described, as a new article of manufacture.

2. The movable head C, holding the knife *d*, in combination with the rule A, screw-handle D, and stationary center *a*, constructed and operating substantially as and for the purpose set forth.

3. The swiveling or stationary arm-rest *b* in the stationary head B, in combination with

the center *a* and adjustable knife *d*, constructed and operating substantially as and for the purpose described.

EMIL HUBNER.

Witnesses:

M. M. LIVINGSTON,

C. L. TOPLIFF.