

King & Smith, Cutting Leather.

N^o 50600.

Patented Oct. 24, 1865.

Fig. 1.

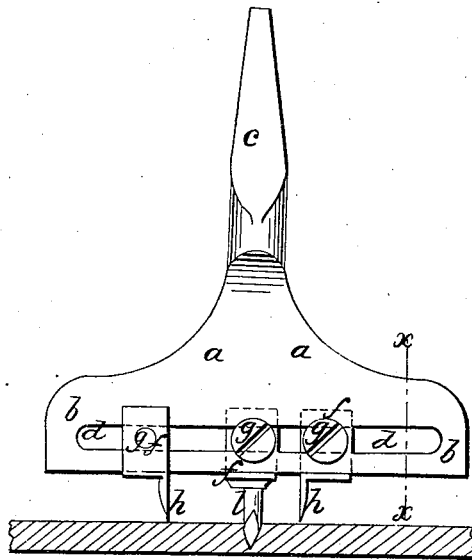


Fig. 2.

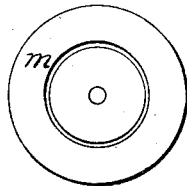


Fig. 3.

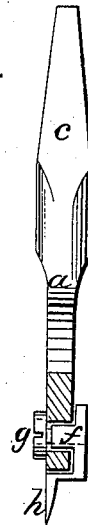


Fig. 4.

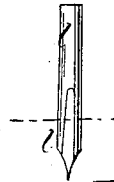


Fig. 5.

Witnesses;

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UNITED STATES PATENT OFFICE.

CHARLES A. KING AND OTIS A. SMITH, OF MIDDLETOWN, CONNECTICUT.

IMPROVED TOOL FOR CUTTING WASHERS.

Specification forming part of Letters Patent No. 50,600, dated October 24, 1865.

To all whom it may concern:

Be it known that we, CHARLES A. KING and OTIS A. SMITH, of Middletown, in the county of Middlesex and State of Connecticut, have invented a new and Improved Tool for Cutting Washers; and we 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.

The present invention relates to a new and very simple but useful tool for the cutting of washers from leather and other materials ordinarily employed therefor, used upon carriages, wagons, and for pump-packing, and many other and various purposes too numerous to herein enumerate, but which are well known to all conversant with mechanics; and it consists in arranging within the shank of the tool a center pin and one or more cutters in such a manner that they can be adjusted with regard to each other, according to the size of the washer to be cut, by revolving or turning the tool upon its center pin in the material from which the washer is to be made, as will be more fully explained in the following description, reference being had to the accompanying plate of drawings, of which—

Figure 1 is a side view of the tool, showing it applied to a piece of leather for the cutting of a washer therefrom, the size and shape of which is represented in the Fig. 2 below; Fig. 3, a transverse section taken in the plane of the line *x x*, Fig. 1; Figs. 4 and 5, detail views of the center pin of the tool.

a a in the drawings represent the shank of the tool, made of an elongated shape at its outer end, *b*, and at its inner end, *c*, suitably formed to be inserted in the socket of a bit-stock or other handle for using it.

d is a straight slot formed in the lower end of the shank, and extending in the direction of its length, in which slot are inserted three slides, *f f f*, each having a set-screw, *g*, for securing them in any desired relative position with regard to each other, these slides, when their set-screws are unfastened, being free to

be moved forward and backward within the said slot. In each of the outer ones of these three slides a projecting knife or cutter blade, *h*, is inserted or otherwise properly secured or attached thereto, and in the center or intermediate one a sharp pointed center pin, *l*, on which as a center the tool turns, when used, the cutters cutting the leather or other material in a circular shape corresponding to the circle described by them as the tool turns, which, in the case of the adjustment shown in Fig. 1, produces a washer-ring, *m*, of the size and shape as seen in Fig. 2.

The size of the washer-ring, as well as its width, can, of course, be varied at pleasure by simply changing the relative positions of the cutters and the center pin, according to that wished, as is obvious, and, furthermore, if desired to cut a flat circular disk-shaped washer, it is obvious that only one cutter is necessary, which in that case should be arranged at the proper distance from the center pin to produce a washer of the requisite diameter.

The center pin, in lieu of being adjustable, as described, may be fixed, and the cutters only adjustable with regard thereto; but we deem it best to arrange it as explained and shown in the drawings, as more changes of the cutters can thus be effected, rendering the tool more general in its use; also, more cutters may be used than two, as described, and first having properly adjusted them with regard to each other and the center-pin, several concentric washer-rings can be cut out at one and the same operation, as is evident without further explanation.

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

A tool for cutting washers, having either a fixed or adjustable center pin and one or more adjustable cutters, all arranged within the tool, substantially in the manner described.

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Witnesses:

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