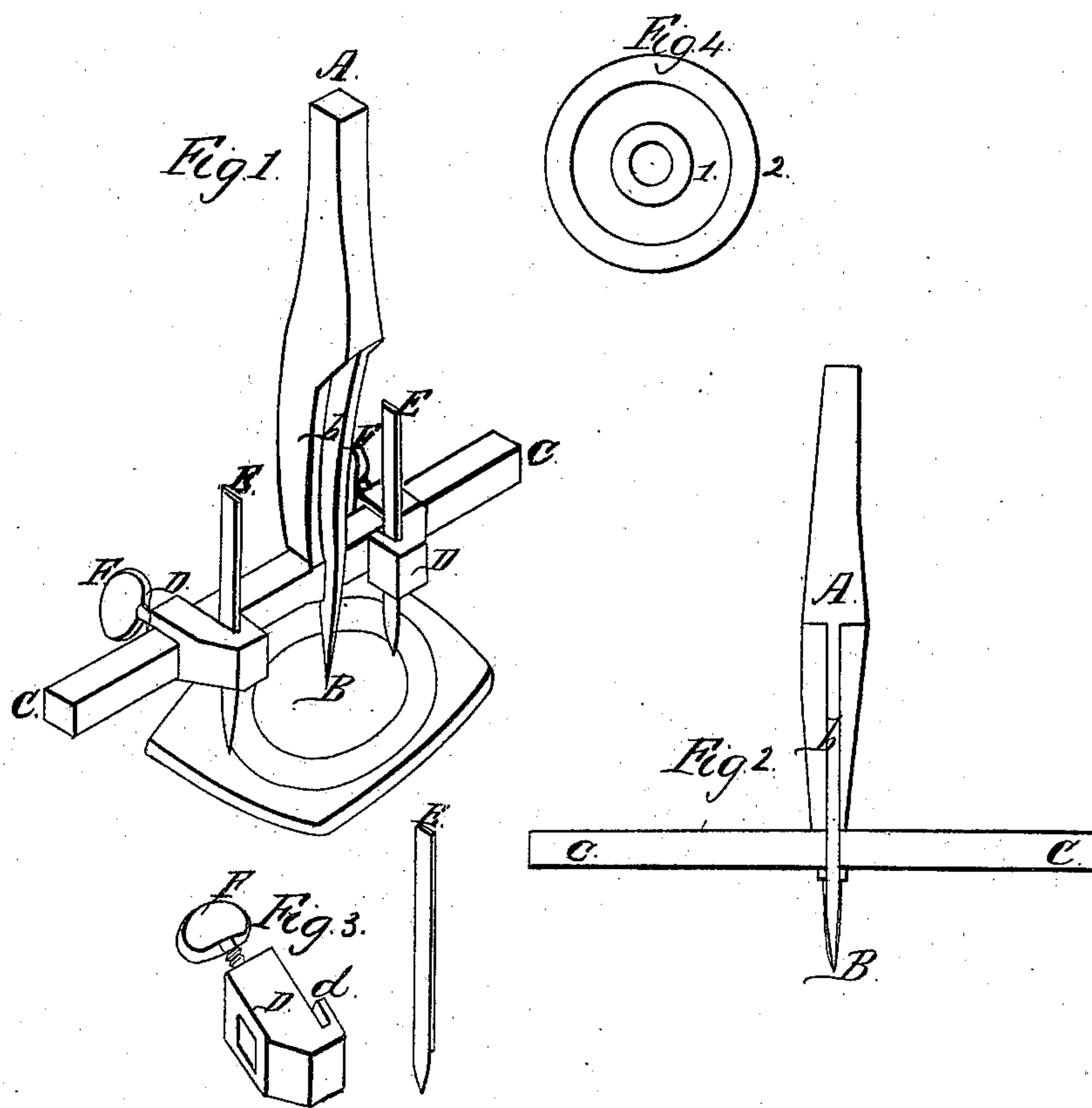


A. P. Gruger,
Cutting Leather.

N^o 63,882.

Patented Apr. 16, 1867.



Witnesses:
Wm. B. Miley
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United States Patent Office.

ADAM P. GRUGER, OF LANCASTER, PENNSYLVANIA.

Letters Patent No. 63,882, dated April 16, 1867

IMPROVED DEVICE FOR CUTTING WASHERS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, ADAM P. GRUGER, of Lancaster, in the county of Lancaster, and State of Pennsylvania, have invented improvements on a Tool or Implement for Cutting Washers or Rings out of leather; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the implement with all its parts in place.

Figure 2 is a front elevation of the brace-shaft with its centre point and cross-bar all in one piece.

Figure 3, a perspective view of the sliding-socket head and slotted knife-clamp or holder combined, held by a single screw.

Figure 4 shows two washers 1, 2, cut by the cutter or implement.

The object of this invention is to have an instrument with a pair of adjustable knives, both as to lengthening them or feeding down as worn by use and sharpening, as well as to cut circular rings of any desired size or width by regulating or adjusting them upon a stationary or fixed cross-bar, held by a single screw for clamping both the head and knife.

Fig. 1 clearly shows the central shaft A, adapted to a socket in an ordinary brace-handle, with its point B as a centre. This shaft is cut out on the sides, leaving a central flange, b, so that the sliding-socket head D, with the knife-holder d, may be slid close to the centre point, in order to cut a smaller inner ring. The square cross-bar C is cast or wrought with the vertical shaft A B at right angles to the same, and forms one piece, as shown by fig. 2. The socket-heads D, fig. 3, are so constructed as to slide on the horizontal square bar C, one on each side of the central shaft A. These sockets have an open slot, d, into which the blade or knife E is inserted, made right and left, in such a manner that when slipped upon the cross-bar C the slots for the knives are towards the central shaft, as shown in fig. 1, and the binding or thumb-screws F on the same side of the bar, say the rear. The sliding sockets are, however, alike, being simply turned by introducing them upon the shaft from opposite sides. The slot d for the knife is open on the inner side so that the blade or knife E, when inserted into the slot, will come with its square inner edge flush against the vertical side of the cross-bar C, in order that the same may be firmly clamped and held against the fixed cross-bar by the thumb or binding-screw F, that also firmly holds the socket-head D, and prevents it from yielding from the position to which it is adjusted on the cross-bar, on the under side of which there is a graduated scale for setting the knives to any desired point for any special washer, the same gauge of which can be again accurately set when altered in the interior to some other size.

I am aware that cross-bars moving through an opening in the shaft, and held by a screw with a fixed knife on one end and an adjustable or sliding-knife on the other end, may have been in use, but such must necessarily prove defective from the liability of yielding sufficiently in the socket of the vertical shaft as to cause an inequality in the cutting as one or the other of the knives is further removed from the centre; besides, both the fixed point B of the vertical shaft, as well as the fixed knife, will shorten by wear, and when worn out will require a new knife or cutting-blade and cross-bar. I am not aware that two adjustable cutters on a rigid cross-bar have ever been used for said purpose; but I do not claim the employment of two adjustable knives on a rigid bar broadly. What I consider novel is the construction of the open slot d in the sliding-head D, and single screw that binds both the head and knife-blade against the bar, and the advantage in making both the knives and socket-heads adjustable on a fixed bar united or forming one piece with the vertical shaft. This combination and arrangement give this cutter several important advantages, and constitutes a new or improved tool for cutting washers from leather or other materials.

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

The manner of constructing the sliding-socket head D, with its open knife-slot d, and single binding-screw F to each, thereby making the knives doubly adjustable in combination with a horizontal bar, C, united firmly with the vertical brace-shaft A, and centre point B, in the manner and for the purpose specified.

A. P. GRUGER.

Witnesses:

WM. B. WILEY,

JACOB STAUFFER.