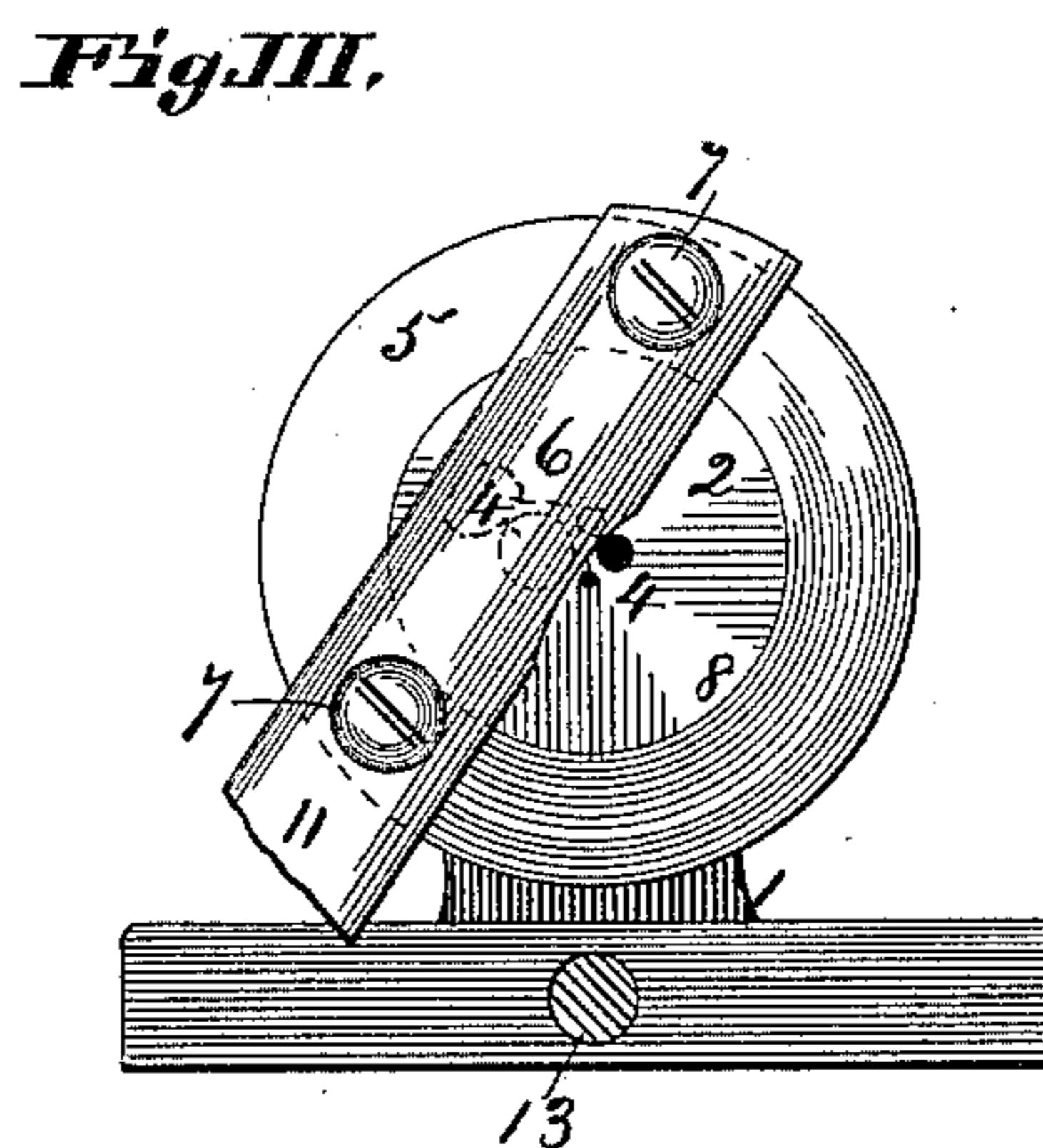
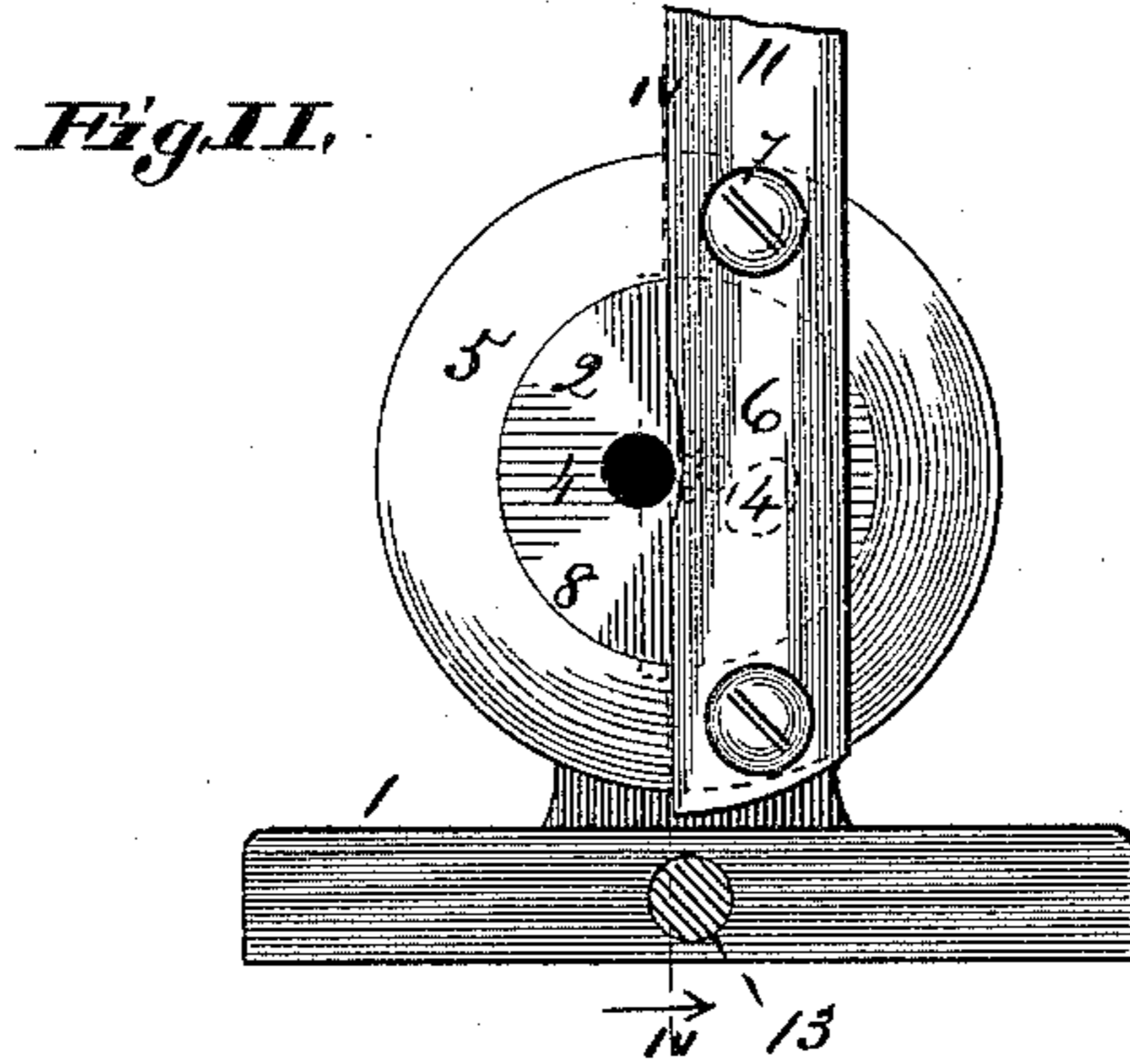
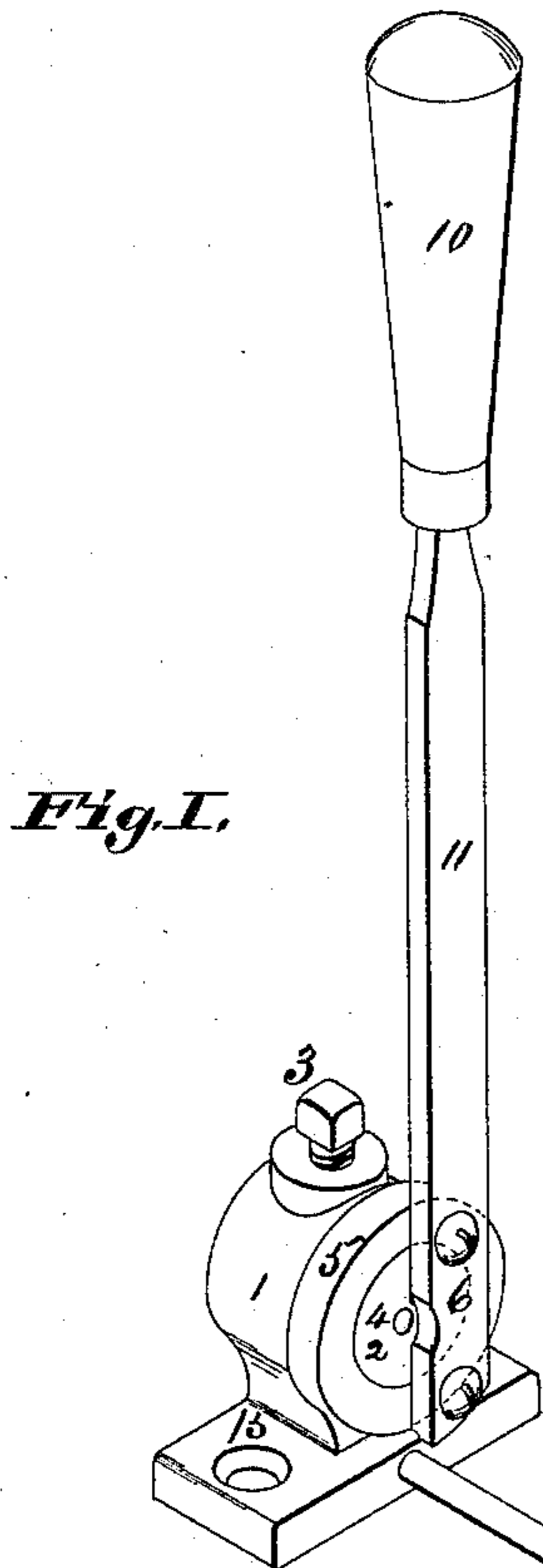


(No Model.)

O. COLLINS.
WIRE CUTTER.

No. 415,621.

Patented Nov. 19, 1889.



UNITED STATES PATENT OFFICE.

OLMSTEAD COLLINS, OF ST. LOUIS, MISSOURI, ASSIGNOR TO THE COLLINS
GOODIN MANUFACTURING COMPANY, OF SAME PLACE.

WIRE-CUTTER.

SPECIFICATION forming part of Letters Patent No. 415,621, dated November 19, 1889.

Application filed January 24, 1889. Serial No. 297,388. (No model.)

To all whom it may concern:

Be it known that I, OLMSTEAD COLLINS, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Wire-Cutters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

This is an instrument for cutting wire, in which the cutting-jaw is fixed to a sleeve having bearing on the removable and adjustable piece or block in which are made the holes through which the wire is passed and which forms one jaw of the cutter.

Figure I is a perspective view of the machine. Figs. II and III are front views with the shank of the movable jaw broken off, the two figures showing the parts in different positions. Fig. IV is a vertical section at IV IV, Fig. II.

1 is the body or standard, having a socket in which fits the cylindrical block 2, the block being held in position by a set-screw 3. The block should be made of hardened steel, so that shearing ends of the wire-holes 4 may retain their sharp corners. Four of the holes 4 are shown of different sizes. There may be as many of these holes as desired, and of any preferred sizes. The block may be turned in its bearing to bring any one of the holes 4 into any position in relation to the jaw 6, the block having countersinks to receive the point of the set-screw 7, by which the block is held in the various positions for the use of the various holes 4. The holes 4 are made tapering, so that the cutting-edges at their front edges shall be of an acute angle, and so that the edges may be sharpened by the use of a tapering reamer. The jaw is secured by screws 7 or otherwise to the end of the sleeve 5. The sleeve is counterbored to fit a circular flange 8 on the block 2, so as to form an annular flange 9 on the interior of the sleeve fitting the cylindrical part of the block 2.

10 is the handle of the jaw 6, and 11 the shank or arm between the jaw proper and the handle.

12 is the gage, and 13 the gage-rod. The rod is screwed fast into the base of the standard. The gage slides on the rod and is secured rigidly to it by a set-screw 14.

In the use of the cutter the block is fixed, by means of the set-screw 3, in the position best suited for the use of the hole 4 which is

best suited for the wire to be cut. Then the wire is pushed through the hole 4 until its end touches the gage, and is then cut by depression of the handle. It will be seen that the jaw has not a simple movement transverse to the wire, but that it has a "draw cut," as it has to be to a greater or less degree a revolutionary movement according to nearness of the wire to the center of the block 2. This renders a greater movement of the handle necessary in cutting the wire and proportionately increasing the power of the machine and ease of working it. The cutter-bearing is very firm, as the sleeve cannot shake on the block 2, and the cutter is secured to the sleeve on both sides of the point of action on the wire, so that it cannot spring away from the end of the block 2. The standard may be secured to a bench by screws passing through the holes 15.

I claim as my invention—

1. In a wire-cutter, the combination of the fixed standard, a cylindrical perforated block mounted in said standard and having a peripheral groove, a set-screw in said standard secured in said groove, a sleeve fitting on said block, a cutter-jaw crossing said block, and screws 7, securing said jaw on both sides of the block to said sleeve, substantially as set forth.

2. The combination, in a wire-cutter, of the standard 1, the block 2, having a cylindrical part fitting a socket in the standard, holes 4 for the passage of wire, and a flanged part giving bearing to the sleeve 5, a set-screw holding the block fixed in the standard, and a cutting-jaw fixed to the sleeve and extending in front of the block 2 and having an actuating shank or arm with handle, substantially as set forth.

3. The combination, in a wire-cutter, of a standard 1, an adjustable block 2, fixed in the standard by a set-screw 3, countersinks in the block adapted to receive the point of the set-screw, tapering holes 4 of varying size passing through the block, and a cutting-jaw 6, fixed to a sleeve turning on the block and adapted to act in conjunction with the outer edge of the holes 4 to cut the wire, substantially as set forth.

OLMSTEAD COLLINS.

Witnesses:

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THOMAS KNIGHT.