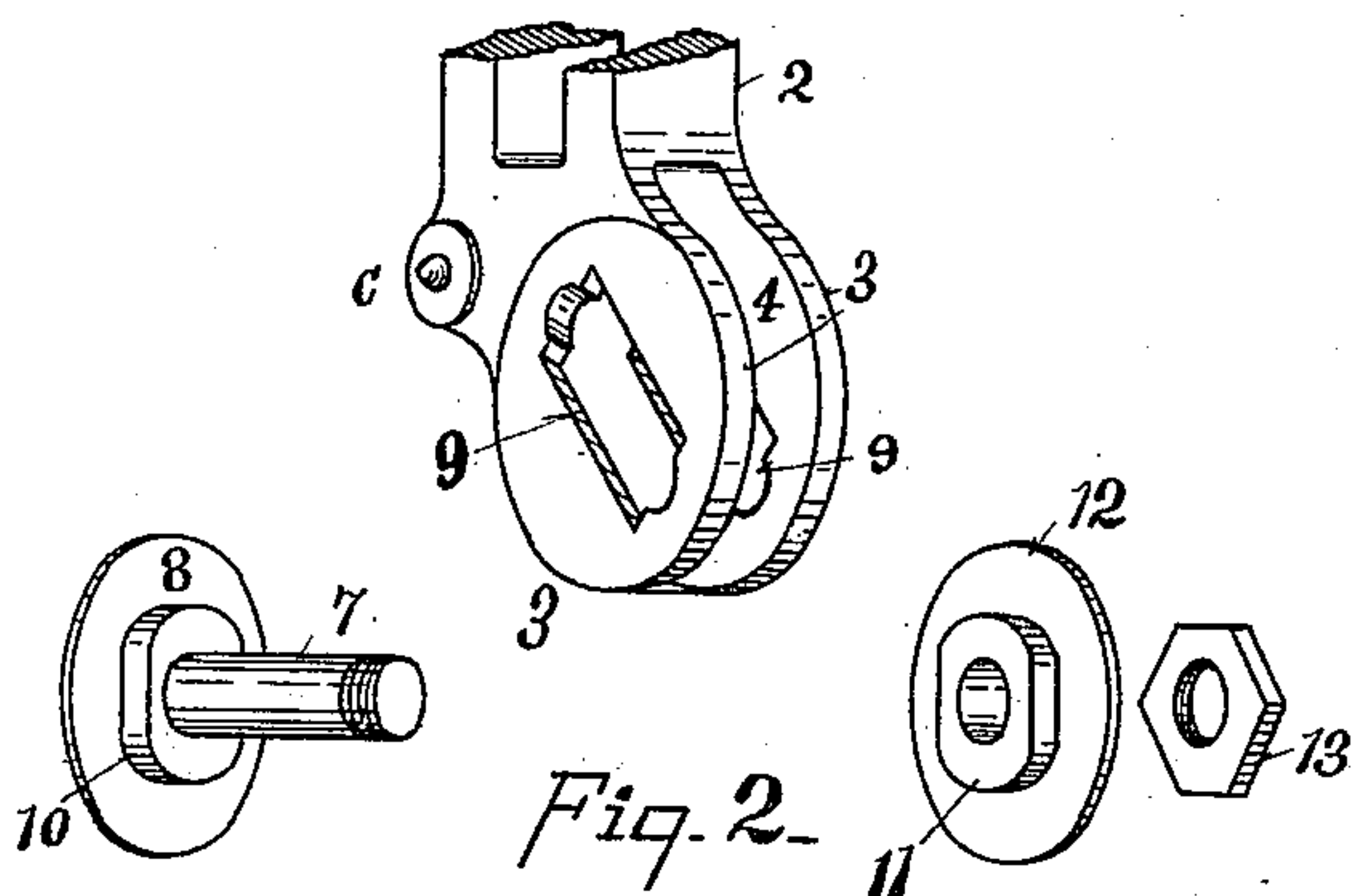
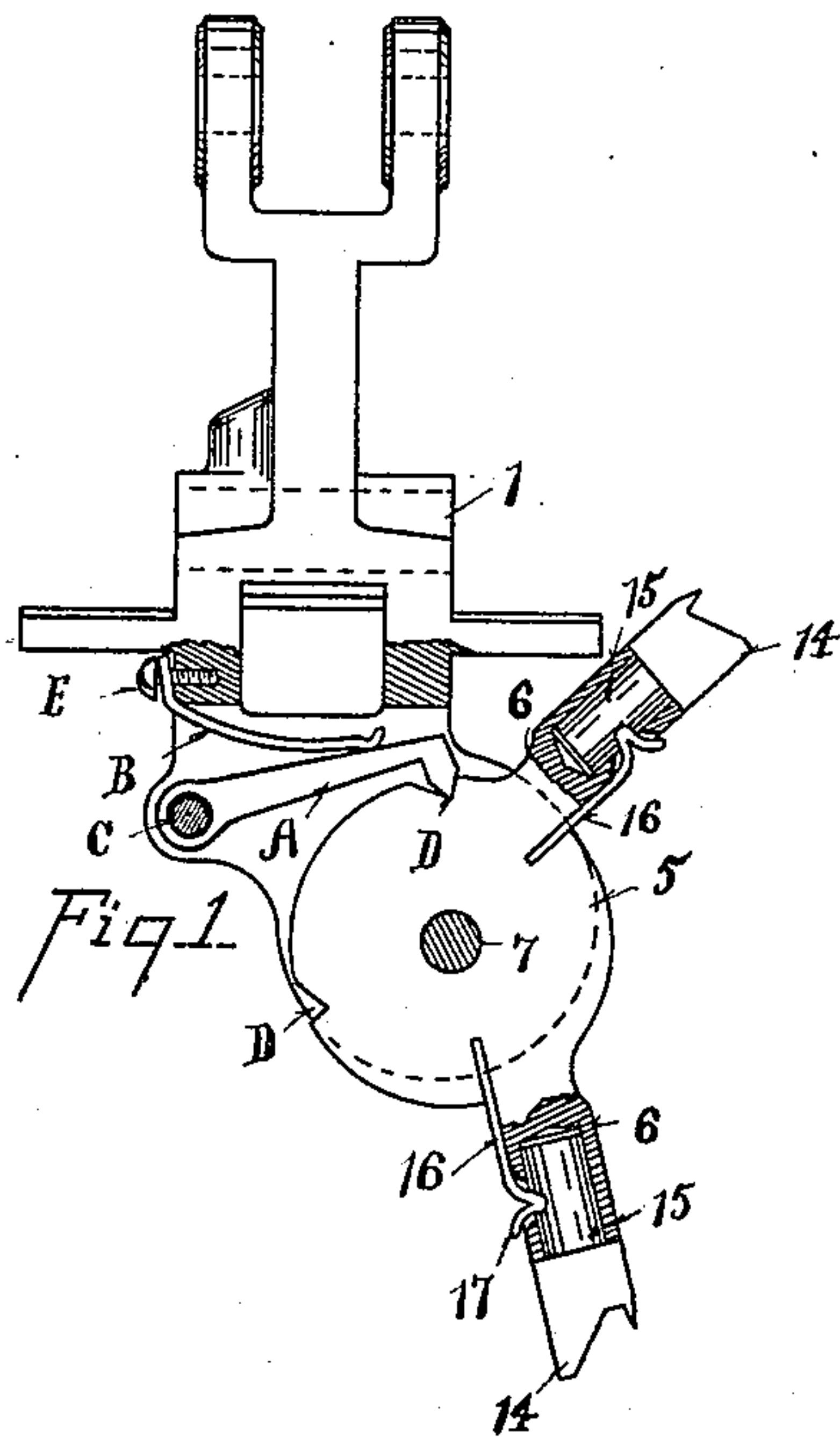


(No Model.)

S. ROSS, Jr.
BURNISHING TOOL HOLDER.

No. 426,861.

Patented Apr. 29, 1890.



Witnesses

--- C. Miles ---
--- T. Simmons ---

Inventor

--- Simon Ross, Jr. ---

By *his* Attorneys *Wood & Bond*

UNITED STATES PATENT OFFICE.

SIMON ROSS, JR., OF CINCINNATI, OHIO.

BURNISHING-TOOL HOLDER.

SPECIFICATION forming part of Letters Patent No. 426,861, dated April 29, 1890.

Application filed October 31, 1889. Serial No. 328,762. (No model.)

To all whom it may concern:

Be it known that I, SIMON ROSS, Jr., a citizen of the United States, and a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Burnishing - Tool Holders, of which the following is a specification.

My invention relates to an improved tool-holder for burnishing-machines. I have shown the same used in combination with a reciprocating arm operated by mechanism shown in Letters Patent No. 368,853, granted August 23, 1887. It is, however, adapted to be operated in connection with reciprocating and oscillating arms on any driving mechanism.

The object of my invention is to provide a tool-holder normally held in position by a dog and spring and adapted to be oscillated to change its position.

The various features of my invention will be fully set forth in the description of the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side elevation of my improvement, showing one of the holding-ears broken off. Fig. 2 is a perspective detail view of the parts.

1 represents a reciprocating arm of the construction shown and described in my said former patent.

2 represents a shank projecting down from the arm.

3 represents ears projecting down from said shank.

4 represents a slot or opening in the ears, in which is journaled a tumbler 5.

6 represents socket-studs, preferably integral with the tumbler 5 and projecting radially therefrom outside of the ears 3.

7 represents a journal-stud projecting from the washer 8, passing through the slots 9 of the ears 3.

10 represents a boss attached to the head 8, with its sides cut away, so as to fit the slot 9 and hold the stud from turning.

12 represents a washer provided with a similar boss 11, which fits into the opposite slot 9. 13 represents a nut for securing said stud 7 in position, and the tumbler 5 journals

upon the stud 7. By providing the slots 9 and the boss 10 the stud-shaft 7 may be moved up and down in said slot for adjustment, as will be hereinafter explained.

14 represents a burnishing-tool, which is provided with tenon 15, seated in the sockets 6.

16 represents a spring, the end of which is secured in the slot pierced in the periphery of the tumbler 5, the upper end projecting forward from the socket and provided with projection 17, which passes through a hole pierced in socket 6 and engaging in the notch in the shank 15 of the tool for holding said tool in position. By having the spring 16 inserted in the slot in the tumbler-shaft, it is protected by the ears 3 against loosening and against lateral movement and avoids the use of a screw attachment, which is apt to break the spring, thereby giving a strong and more durable result.

It is necessary to hold the tool-shank 6 in a fixed radial plane when the machine is in operation. This is accomplished by means of the dog A and flexible spring B. The dog A works upon a pivot C, the forward end engages with the notch D in the tumbler 5, and the notch D, with the dog A, forms a positive stop for holding the tool in either of the adjusted positions, while the spring B will yield under strain and allow it to be turned from one adjustment to the other. The spring B is secured in position by the screw E, and the spring may be adjusted by this screw, as well as by means of the vertical adjustment of the tumbler 5, with its shaft 7, so as to get any desired degree of tension.

Having described my invention, what I claim is—

1. In a burnishing-tool holder, in combination with the movable arm 1 of the oscillating tumbler 5, journaled on the arm, having radial tool-carriers and provided with peripheral notches D, the pivoted swinging dog A, journaled on said arm, engaging with and yieldingly disengaging from said notches, substantially as described.

2. In combination with the moving arm 1, provided with ear-guides 3, the oscillating tumbler 5, provided with radial tool-carriers, and spring-dogging mechanism for holding it

in a fixed position and allowing it to yield under strain for adjustment, substantially as described.

3. In a burnishing-tool holder, the combination, with the bracket 2, provided with depending ears 3, of the oscillating tumbler 5, journaled between said ears, and the spring 16, having its inner end fixed to the tumbler 5 between the ears, with the other end projecting forward and extending through the lateral orifice through notches in the sockets of the tool-holder, substantially as described.

4. In a burnishing-tool holder, in combination with the movable arm 1, having the brackets 2, the guide-ears 3, and the oscillat-

ing tumbler 5, journaled upon the stud 7 and radially adjustable between the ears 3, substantially as herein set forth.

5. The combination of the head of a tool-holder, the ears 3, provided with a slot 9, the shaft 7, vertically adjustable therein, and the notched tumbler 5, oscillating on said journals 7, substantially as specified.

In testimony whereof I have hereunto set my hand.

SIMON ROSS, JR.

Witnesses:

C. W. MILES,

T. SIMMONS.