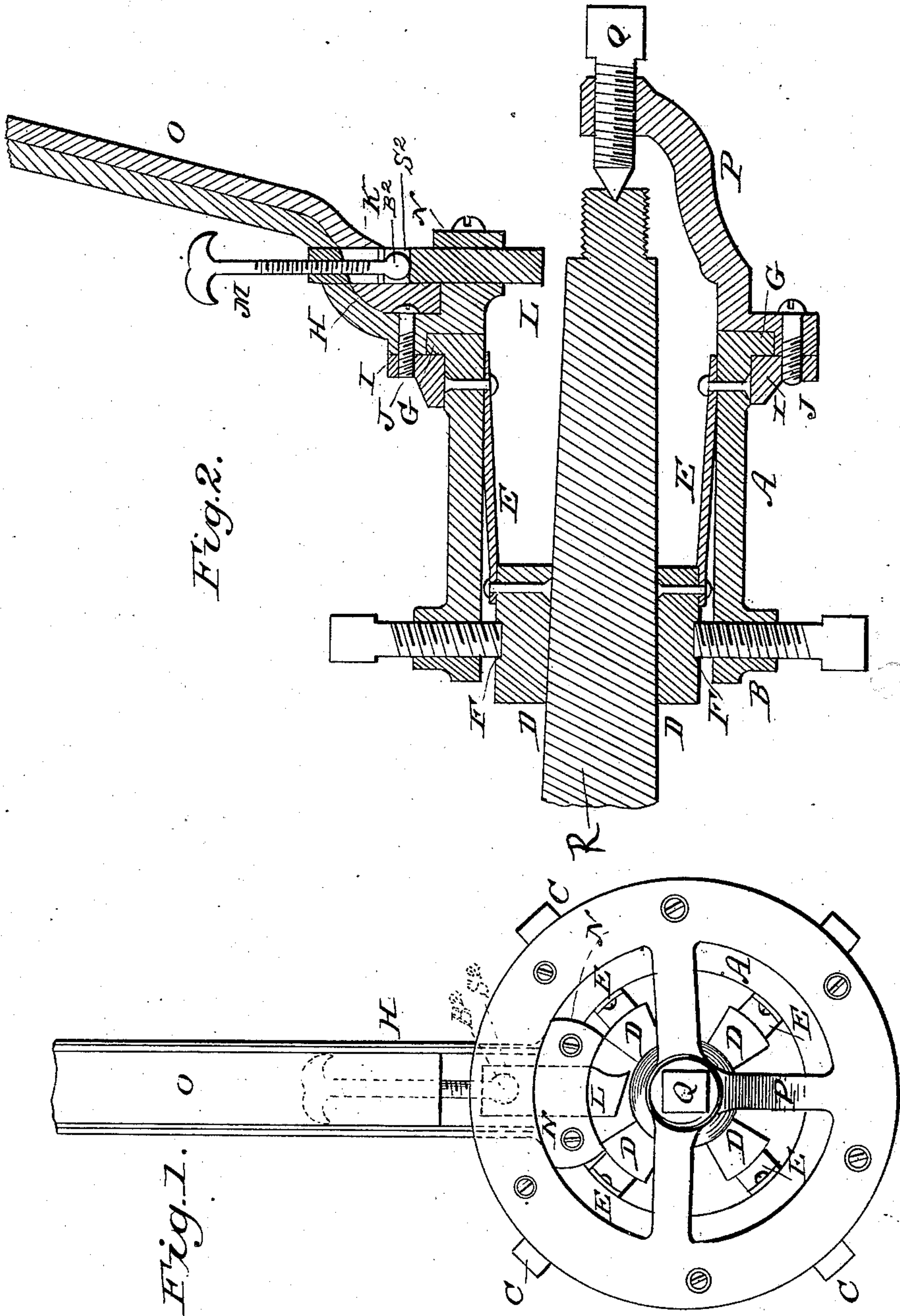


(No Model.)

W. R. SHARP.  
AXLE TRIMMING TOOL.

No. 312,521.

Patented Feb. 17, 1885.



WITNESSES:

*Fred. L. Dieterich,*  
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# UNITED STATES PATENT OFFICE.

WILLIAM R. SHARP, OF NEW PHILADELPHIA, OHIO.

## AXLE-TRIMMING TOOL.

SPECIFICATION forming part of Letters Patent No. 312,521, dated February 17, 1885.

Application filed September 19, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM R. SHARP, of New Philadelphia, in the county of Tuscarawas and State of Ohio, have invented certain new and useful Improvements in Devices for Trimming the Spindles of Vehicle-Axles; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a front view of my improved device for trimming the spindles of vehicle-axles, and Fig. 2 is a longitudinal vertical sectional view of the same.

The same letters refer to the same parts in both the figures.

This invention relates to an improved device or apparatus for trimming the spindles of vehicle-axles, for the purpose of taking up the slack caused by wear; and it has for its object to provide a machine for trimming the shoulder at the front end of the spindle, and, if desired, the front end of the thread, which shall possess superior advantages in point of simplicity, durability, and general efficiency.

With these ends in view the invention consists in the improved construction and arrangement of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, A designates the body of the machine, which consists of a tubular sleeve having at its rear end a flange, B, through which extends a series of set-screws, C C, the inner ends of which bear against a series of clamping-blocks, D D, the inner sides of which are preferably made concave, so that they will readily grasp and clamp an ordinary vehicle-spindle, and which are mounted upon flat springs E E, bolted or riveted to the inner side of the sleeve A, near the front end of the same. These springs serve to hold the clamping-blocks in position in such a manner that they will readily adapt themselves to spindles of various sizes. The outer faces of the clamping-blocks are preferably provided with recesses F, to receive the

points or inner ends of the set-screws C C, thereby preventing lateral displacement of the said clamping-blocks, which latter, by tightening the set-screws, will serve to secure the device firmly in position for operation upon the spindle, as shown in Fig. 1 of the drawings. The front end of the sleeve A is provided with a flange, G, upon which the cutter-head H is fitted to revolve, the said cutter-head being held in position by means of a collar, I, secured to its rear side by screws or bolts J J, and fitted against the rear side of the flange G. The front side of the cutter-head is provided with a radial groove, K, in which slides the cutting-tool L, which is fed forward to its work by a set-screw, M, having a ball, B<sup>2</sup>, fitting in a transverse groove or socket, S<sup>2</sup>, in the outer end of the said cutting-tool, which may thus be also easily retracted. The cutting-tool is retained in its groove by a clip or strap, N, screwed to the face of the cutter-head in front of the groove K. The cutter-head is provided with a crank arm or handle, O, by means of which it may be readily manipulated, and with a curved arm or bracket, P, located diametrically opposite to the said handle, and extending in front of the center of the cutter-head, where it is provided with a bearing for a pointed screw, Q, by means of which the machine may be centered against the front end of the spindle, which latter is shown at R in Fig. 2 of the drawings.

From the foregoing description, taken in connection with the drawings hereto annexed, the operation and advantages of my invention will be readily understood.

The machine may be readily adjusted and centered upon spindles of various sizes. By revolving the cutter-head by means of the crank or handle and feeding the cutting-tool intermittently, the shoulder at the front end of the spindle may be trimmed to the desired extent, and when it is desired to cut the end of the threaded portion off, as is necessary when nuts or burrs having closed outer ends are used, this may be readily done by adjusting the machine accordingly in such a manner as to bring the cutting-tool to register with the portion which it is desired to cut away.

The general construction of the device is



simple, it is easily manipulated, and it may be constructed at a small expense.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a device for trimming the spindles of vehicle-axles, a tubular sleeve or body having radial set-screws at its inner end bearing against clamping-blocks mounted upon springs that are secured interiorly near the front end of the said sleeve or body, substantially as and for the purpose set forth.

2. In a device for trimming the spindles of vehicle-axles, the sleeve or body having clamping-blocks mounted upon springs that are secured interiorly in the said sleeve or body near the front end of the same, said clamping-blocks being provided with recesses in their outer faces, in combination with the radial set-screws, the points of which bear in the recesses in the outer faces of the clamping-blocks, thereby preventing lateral displacement

ment of the latter, substantially as and for the purpose set forth.

3. As an improvement in devices for trimming the spindles of vehicle-axles, the combination of a sleeve or tubular body having clamping-blocks mounted upon springs, and set-screws bearing against the said clamping-blocks, with a revolving cutter-head having a bracket provided with a centering-screw, a radially-sliding cutting-tool, a crank arm or handle, and a set-screw extending through the inner end of the latter and adapted to operate the cutting-tool, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

WILLIAM R. SHARP.

Witnesses:

P. S. OLMSTEAD,  
WM. G. BAILEY.