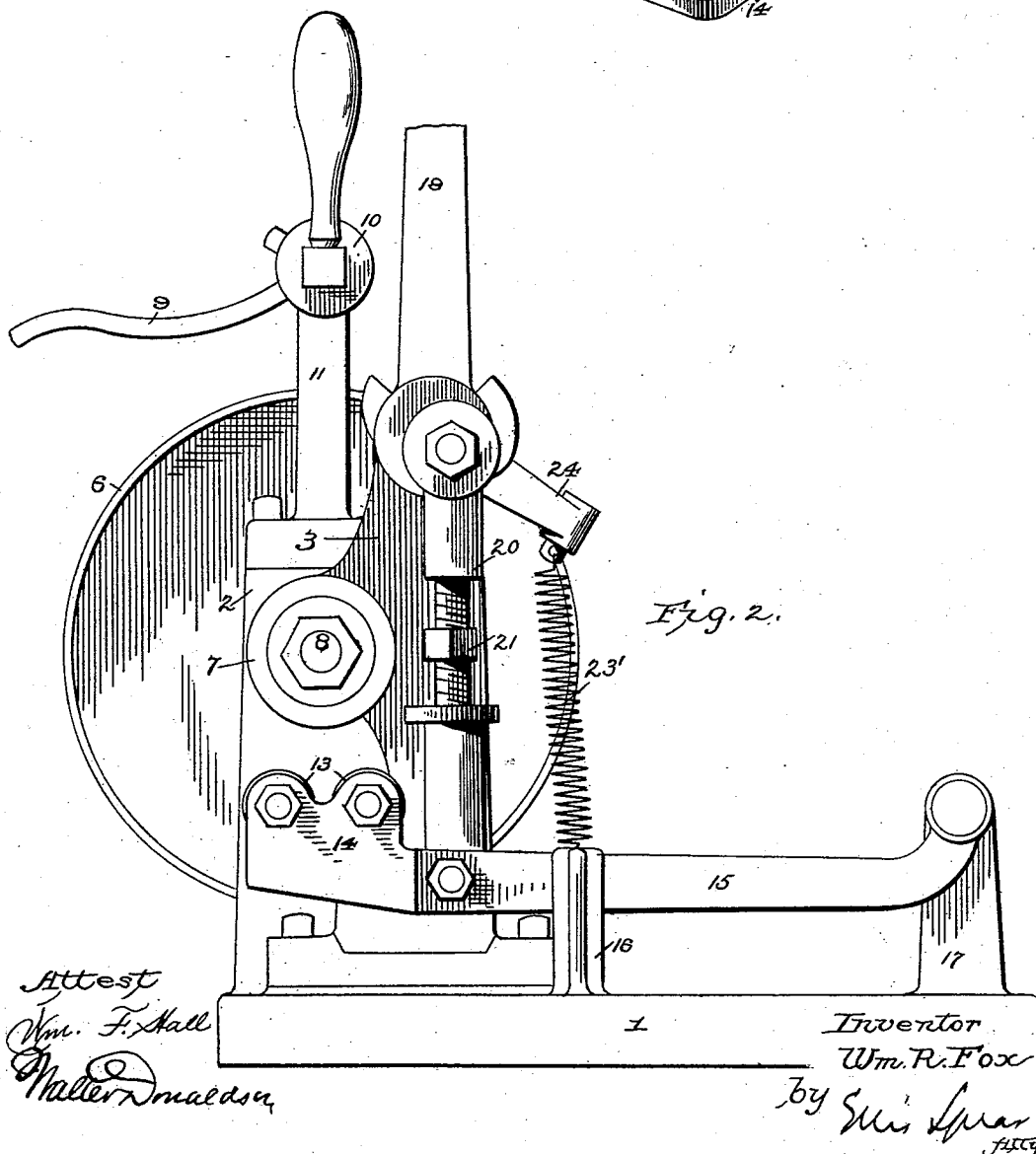
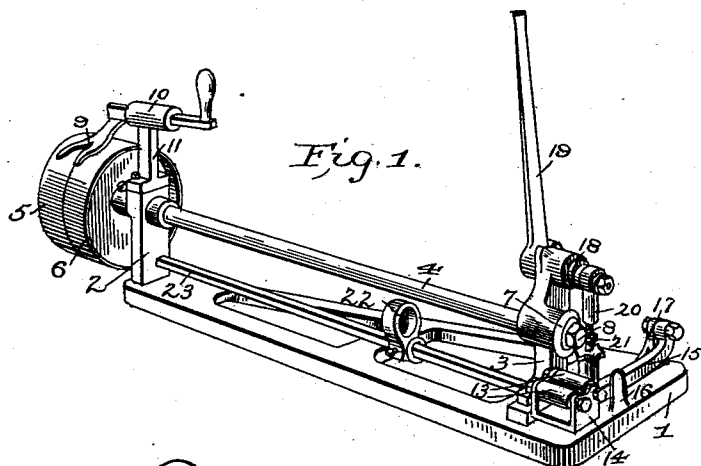


(No Model.)

W. R. FOX.
MACHINE FOR CUTTING BICYCLE TUBING.

No. 570,850.

Patented Nov. 3, 1896.



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UNITED STATES PATENT OFFICE.

WILLIAM R. FOX, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR TO THE FOX MACHINE COMPANY, OF SAME PLACE.

MACHINE FOR CUTTING BICYCLE-TUBING.

SPECIFICATION forming part of Letters Patent No. 570,850, dated November 3, 1896.

Application filed September 18, 1895. Serial No. 562,911. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM R. FOX, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Machines for Cutting Bicycle-Tubing, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to machines for cutting bicycle-tubing; and it is designed as an improvement over the old form of machines of this class wherein the tubing is held in a chuck and severed by a reciprocating cutting-tool, thus very often crushing or bending the parted ends of the tube.

My invention includes a cutting-disk keyed on the end of a revoluble shaft journaled in suitable supports, in conjunction with a vertically-moving bed for supporting the work, with means for raising the bed to bring the same into proximity to the cutting-disk.

The invention includes also the details of construction, as will be hereinafter described, and particularly pointed out in the claims.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view. Fig. 2 is an end elevation.

The base of the machine is shown at 1, supporting the end standards 2 3, which are provided with bearings for the reception of the shaft 4, said shaft carrying the fast and loose pulleys 5 6, on one end thereof, and having the cutting-disk 7 removably secured to its opposite end and held in place thereon by the nut 8. A belt-shifter provided with an operating-handle is shown at 9, which slides in the sleeve 10, forming the upper end of the bracket 11, bolted to the top of the standard 2. The bed upon which the tube to be cut rests consists of the two bearing-rolls 13, journaled in the bracket 14, carried on the end of the arm 15, guided by the brackets 16, extending from the base 1. The opposite end of this arm is pivoted to the short standard or ear 17.

The upper part of the standard 3 is provided with a socket 18, forming a bearing for the boss or journal projecting laterally from the lower end of the lever 19, and having the

upper end of the link 20 eccentrically pivoted thereto. The link is formed of two sections connected by the right and left screw-threaded bolt, upon which is secured the nut 21, adapted to be engaged by suitable implements for turning this bolt in, adjusting the relation of the two sections of the link 20, and thereby the position of the bed in relation to the cutting-disk, the lower end of the link 20 being pivoted to the arm 15 intermediate of its ends. This adjustment is requisite in the cutting of tubes of varying diameters, as it is desirable to have the edge of the cutter come just below the tube to be cut. In operating the machine the tube to be cut is placed on the bearing-rolls, one end resting in a gage-socket 22, adjustable along the rod 23, which is secured in the end standards, and this gage determines the required length of the tube to be cut. The lever 19 is then drawn down to its full extent, thereby raising the roller-bed through the eccentric connection of the link 20, and thus bringing the tube into engagement with the rotating cutter, which will revolve the tube as it is cut. After the tube is cut the lever is released, when the bed will return to normal position by gravity, the lever being drawn back in place by the tension-spring 23', connected at one end to one of the brackets 16 and at its opposite end to an arm 24, projecting from the journal of the lever 19 at an angle to said lever.

Having now described my invention, what I claim is—

1. In combination, the stationary base, the bed, the cutting-disk, the pivoted arm carrying the bed, the lever, and the link connected at one end to said arm, and at its opposite end to the journal of said lever, substantially as described.

2. In a tube-cutting machine, in combination, the cutting-disk, the bed, the pivoted arm carrying the same, the lever, the link comprising the two sections connecting said arm and lever, and the means for adjusting said sections in relation to each other whereby the bed is adjusted in relation to the cutter, substantially as described.

3. In a tube-cutting machine, the flat base, the standard support therefrom, the cutting-disk, the shaft carrying the same with means

for driving said shaft, the bearing for said shaft projecting from said standard, the bearing-rolls, the pivoted arm carrying the same, the operating-lever, the journal extending
5 therefrom and the link eccentrically pivoted at one end to said journal and connected at its opposite end to said arm, substantially as described.

4. In combination, the base, the bearing-
10 rolls, the pivoted arm carrying the same, the

rotary cutter, the front standard, the lever journaled therein and the connection between said arm and lever whereby said bearing-rolls can be raised, substantially as described.

In testimony whereof I affix my signature 15
in presence of two witnesses.

WILLIAM R. FOX.

Witnesses:

JNO. DUFFY,
A. E. BACON.