

(No Model.)

L. B. YOUNG.

SAW SWAGE.

No. 312,061.

Patented Feb. 10, 1885.

Fig 1

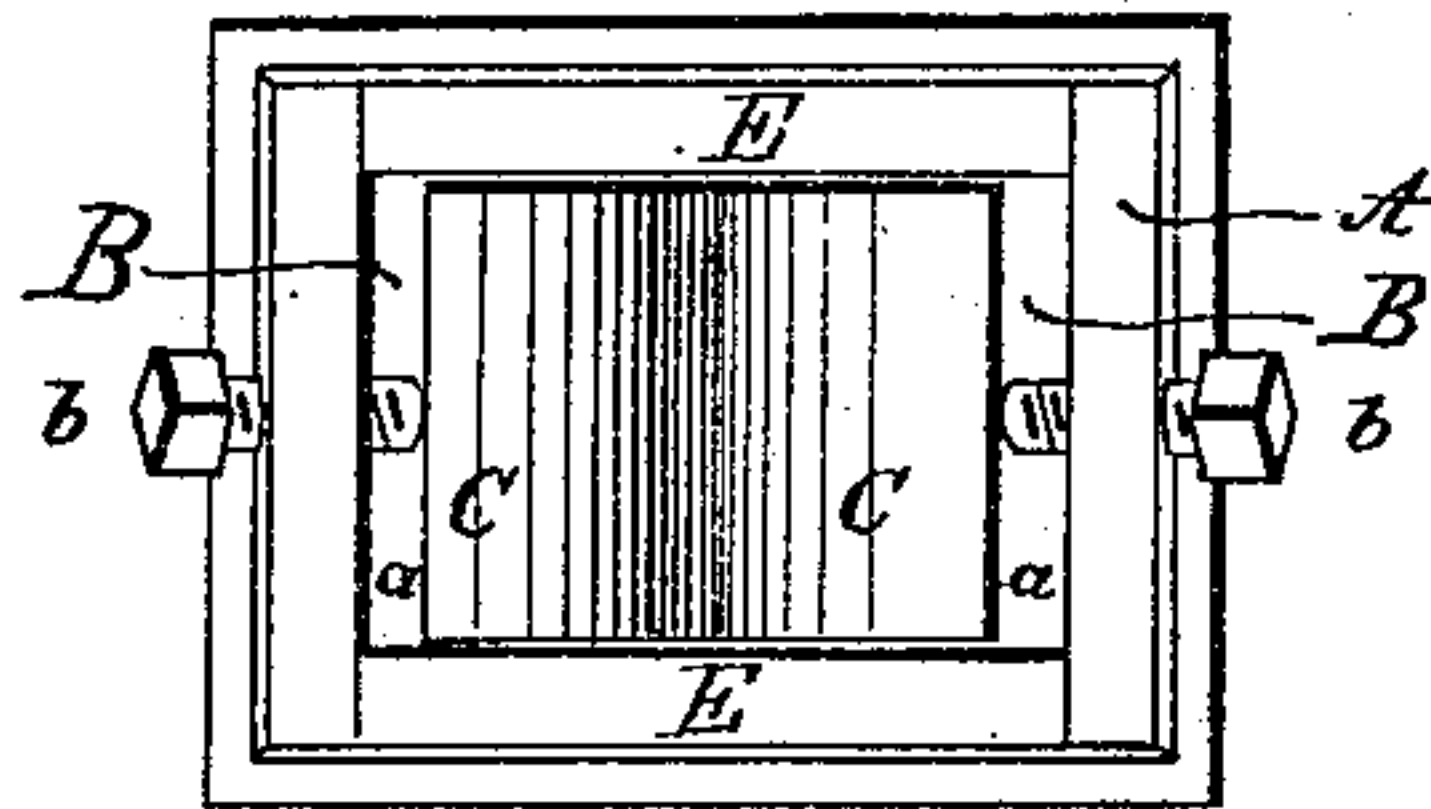


Fig 2

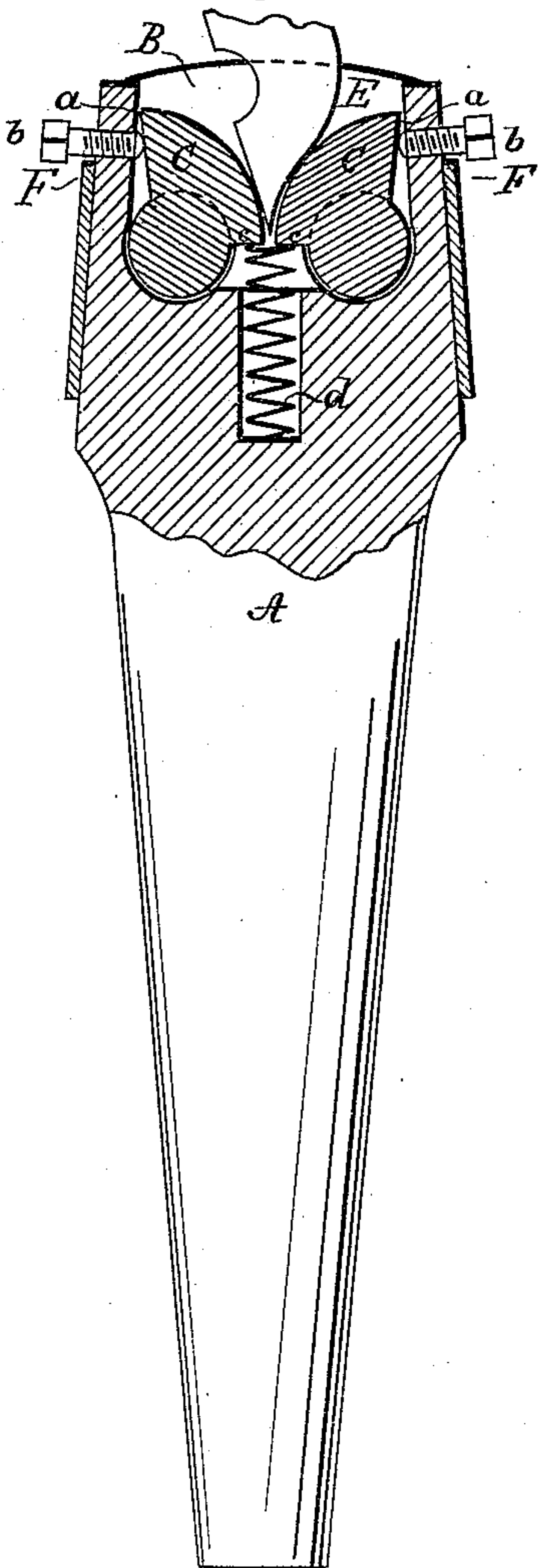
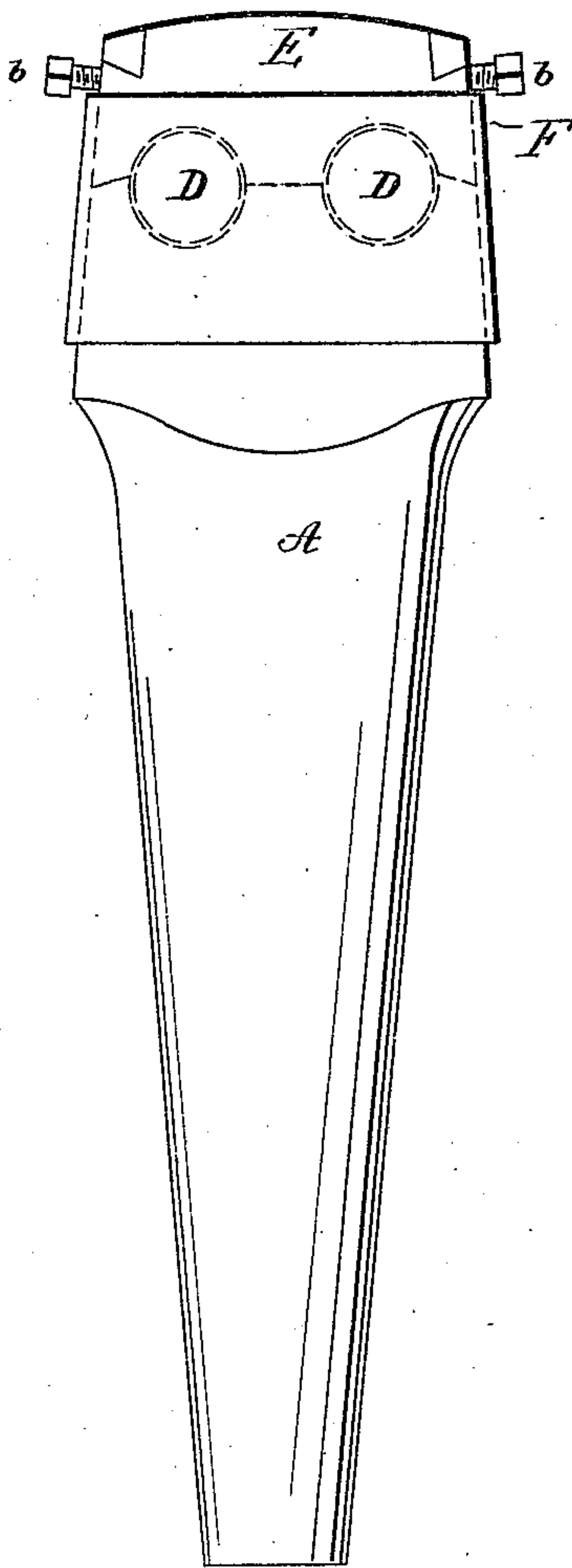


Fig 3



WITNESSES:

C. Bischoff.
C. Sedgwick

INVENTOR:

L. B. Young
BY *Munn & Co*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

LOY BARCLAY YOUNG, OF NEWPORT, ARKANSAS, ASSIGNOR TO HIMSELF
AND SAMUEL O. LEWIS, OF SAME PLACE.

SAW-SWAGE.

SPECIFICATION forming part of Letters Patent No. 312,061, dated February 10, 1885.

Application filed June 11, 1884. (No model.)

To all whom it may concern:

Be it known that I, LOY BARCLAY YOUNG, of Newport, in the county of Jackson and State of Arkansas, have invented a new and Improved Saw-Swage, of which the following is a full, clear, and exact description.

My invention relates to the class of saw-swages which are operated by being driven upon the saw-teeth; and it consists in two eccentric swages pivoted in a socket, and capable of receiving between them the point of the saw-tooth, the object being to spread the points of the saw-teeth when the swage is driven forward without diminishing the length of the tooth.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is an end elevation of my improved saw-swage. Fig. 2 is a side elevation partly in section, and Fig. 3 is a side elevation showing the exterior of the implement.

In the end of the shank A is formed a chamber, B, in which are placed two oppositely-arranged eccentric swages, C, which are provided with journals D, having bearings at the sides and along the bottom of the chamber B. The adjoining faces of the eccentric swages C are nearer the center of rotation of the said swages than the outer portion, so that when the swages are caused to revolve by the insertion of the tooth between them the faces of the swages will approach each other and operate laterally upon the opposite edges of the tooth.

To secure the required force to swage the teeth, the shank A is driven forward by means of a hammer. The swages C are provided with shoulders a, which rest against adjusting-screws b. The swages are provided on their inner sides with shoulders c, which are pressed by a spiral spring, d, resting in a cavity in the

shank A. The journals of the swages C are kept in place by side bars, E, which fit in dovetailed notches in the sides of the chamber B, and are held in place by a band, F, driven or shrunk upon the end of the shank. Said band also re-enforces the latter. The side bars, E, are concaved to adapt them to the journal D and receive one-half of the bearing of the said journals. The ends of the journals are covered by the band F.

My improved saw-swage may be adjusted by means of the screws b, so as to engage the tooth very near the point or at some distance therefrom, as may be required.

The pressure applied by my swage is upon the opposite edges of the tooth and not upon the end; therefore the tooth is elongated in the operation of swaging rather than being upset, as in the usual manner of swaging.

The shank A and the swages C are made of steel, hardened and properly tempered, and with sufficient strength and rigidity to stand the lateral pressure created by driving the implement upon the tooth.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a saw-swage, of the two oppositely-arranged rolling eccentric swages, as herein described.

2. The combination, with a shank, A, provided with a chamber, B, of the swages C, having journals D, and the adjusting-screws b, as herein specified.

3. The combination, in a saw-swage, of the oppositely-arranged eccentric swages C, spring d, adjusting-screws b, and the shank A, as specified.

LOY BARCLAY YOUNG.

Witnesses:

LANCELOT MINOR,
F. M. LAMBERTON.