(No Model.) 2 Sheets—Sheet 1.

K. E. CONANT.

SAW SWAGE.

No. 284,185. Patented Sept. 4, 1883.

Fig 1.

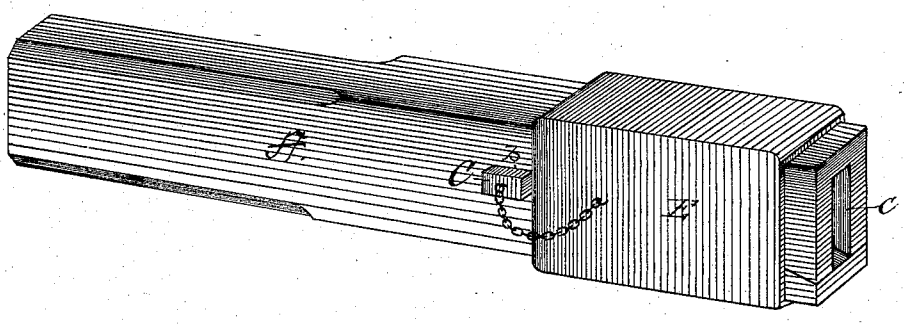


Fig 2.

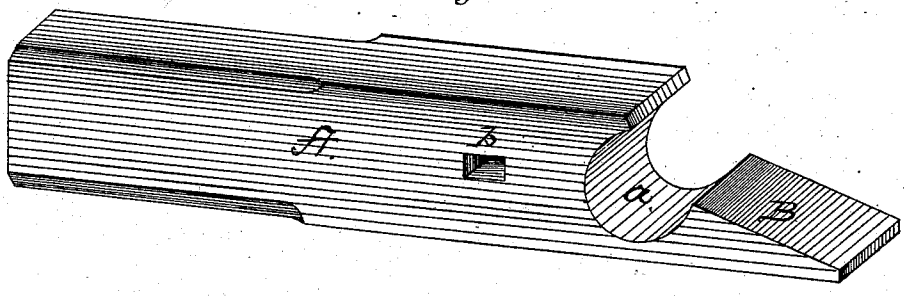
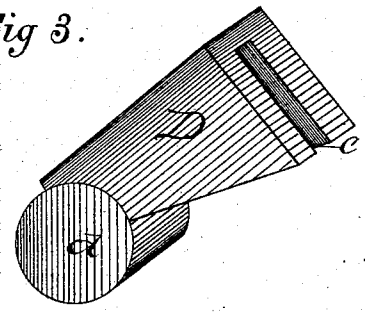


Fig 3.



Witnesses:
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(No Model.)

2 Sheets—Sheet 2.

K. E. CONANT.

SAW SWAGE.

No. 284,185. Patented Sept. 4, 1883.

Fig 4.

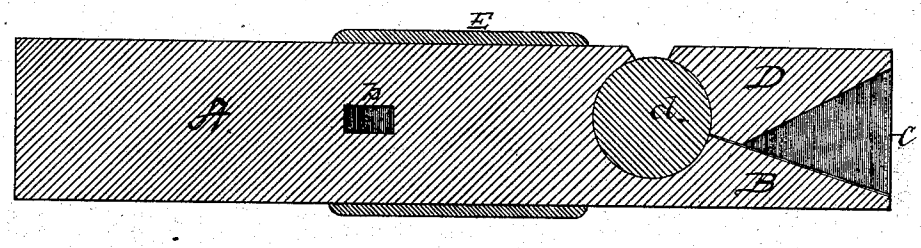
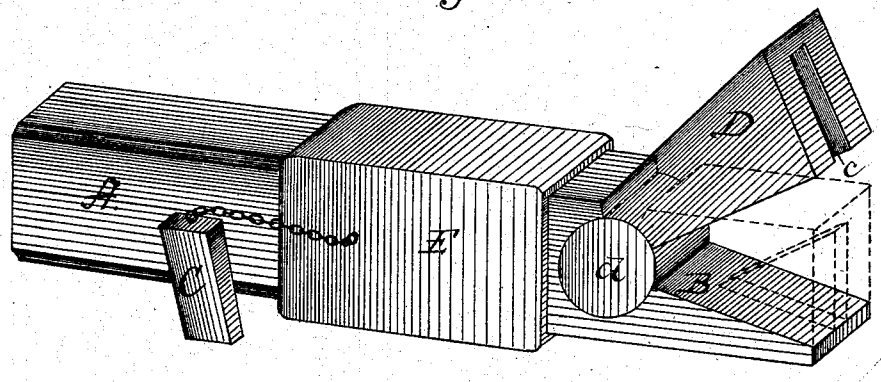


Fig 5.



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UNITED STATES PATENT OFFICE.

KING E. CONANT, OF SPRING CITY, TENNESSEE.

SAW-SWAGE.

SPECIFICATION forming part of Letters Patent No. 284,185, dated September 4, 1883.

Application filed April 6, 1883. (No model.)

To all whom it may concern:

Be it known that I, KING E. CONANT, a citizen of the United States of America, residing at Spring City, in the county of Rhea and State of Tennessee, have invented certain new and useful Improvements in Saw-Swages; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to improvements in saw-swages, and has especial reference to that class of saw-swages adapted to swage the teeth of circular saws.

The objects of this invention are to provide, first, a tool of the kind mentioned which will not "call" or drive the metal of the saw-tooth to one side; second, which will swage the end of a saw-tooth evenly; third, which will swage the ends of a series of teeth all alike, and, fourth, which in continued use on a saw is the least liable to disturb the circumferential regularity.

With these and other objects in view my invention consists in the novel construction and combination of parts, as will be hereinafter more fully set forth.

In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view of my improved saw-swage complete. Fig. 2 is a perspective view of the stock and fixed jaw. Fig. 3 is a perspective view of the removable jaw with slot for the tooth. Fig. 4 is a longitudinal sectional view, showing the sleeve and keyway. Fig. 5 is a view showing the swage open to receive the saw-tooth, and in dotted lines as closed with the tooth in the die and point spread.

The letter A represents the stock or handle of the swage, formed of any desirable length, and breadth, and thickness. Preference is given to that form which will afford a secure grip for the hand of the operator, and at the same time assure that solidity of construction to warrant the necessary strength. This stock is formed with the circular seat *a*, to receive the circular joint of the movable jaw and die. This seat *a* is preferably made to cover a segment of more than half a circle, in order that the movable jaw may be secured against longitudinal displacement. The stock is also formed with the fixed jaw B, inclined from the rim of the seat *a* to the end of the tool, and is made perfectly plain on the upper surface. This jaw B forms the seat for the under side of the saw-tooth in the operation of swaging. At a point in the stock near enough the end to effect the purpose, in connection with the key to drive the sleeve home, is formed the keyway *b* to receive the key C, used to force the sleeve home and retain it in position during the use of the tool for the purposes intended.

The letter D represents the movable jaw, so formed that when it shuts down on the fixed jaw B the two will be of the same exterior dimensions as the stock back of the joint, in order that the sleeve shall operate effectually. This jaw D is formed with the vertical slot *c*, which conforms to any desired sized saw-tooth, and also is formed with the circular joint *d*, accurately fitting the seat *a* in the stock. The movable jaw is removable, and may be inserted and taken out by sliding it in and out from either side of the seat. The slot *c* is formed to suit the contour and shape of the saw-teeth, and one die may be made to suit the swage of two numbers of saw-teeth. The joint *d* and seat *a* are made large, covering as much surface as may be proper, so as to prevent battering when in use. By having the jaw D removable the implement may be supplied with a number of movable jaws, each of different gage and to be used as the work may require.

The letter E represents the sliding sleeve, formed to fit over the stock and down over the jaws of the tool. For convenience and safety, the key C is attached by a small chain to the sleeve.

It is readily seen that by forming the face of the fixed jaw perfectly plain the face of the saw-tooth is kept true, and the steel at the point of the tooth is not likely to be injured by the force of the blow. By forming the vertical slot in the movable jaw a true upright, the points are formed with exactness, the spread being alike on both sides, and hence doing away with gaging and filing to make the teeth true. The other advantages accruing by the use of my improved saw-swage are, that the end of the saw-tooth is not liable to be split by the operation of swaging, that the swage is evenly effected and on all teeth alike, that the circle of the saw is not altered, and that much of the gaging and filing after swaging is done away

with, the teeth requiring only a little touching up with the file on the under side and on top to put them in perfect cutting order.

The operation is readily understood. The movable jaw with die suited to the saw to be swaged is slipped in the tool and the sleeve slid forward to its place adjusting the jaws to the tooth, and then the key is inserted and the blow of the hammer applied as usual.

I reserve the right to vary the construction and arrangement of parts without departing from the spirit of the invention.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The stock or handle formed with a circular seat and fixed jaw, in combination with the movable jaw, formed with the circular joint and vertical slot, substantially as described.

2. The stock or handle formed with a circular seat and fixed jaw, in combination with the movable jaw, formed with the circular joint and vertical slot, and the sliding sleeve, substantially as described.

3. The stock or handle formed with the circular seat and fixed jaw and keyway, in combination with movable jaw, formed with the circular joint and vertical slot, the sliding sleeve, and key, substantially as described.

4. The movable hinged jaw, formed with a vertical slot adapted to receive the tooth of a saw, in combination with a swaging stock or handle, for the purposes set forth.

5. The saw-swage herein described, consisting of the stock A, with keyway, circular seat, and fixed jaw, the removable hinged jaw D, with vertical slot, the sliding sleeve E, and key C, the whole arranged and combined to operate as and for the purpose set forth.

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

KING E. CONANT.

Witnesses:
J. C. WASSON,
BENJN. A. SULLIVAN.