

(No Model.)

J. DINNING.  
SAW SWAGE.

No. 301,343.

Patented July 1, 1884.

Fig. 1.

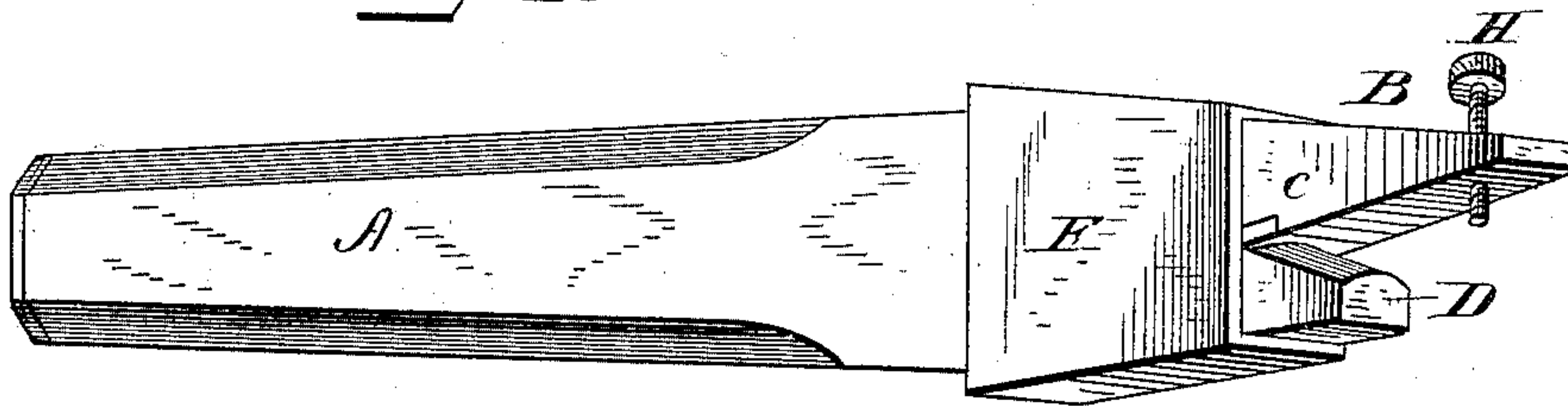


Fig. 2.

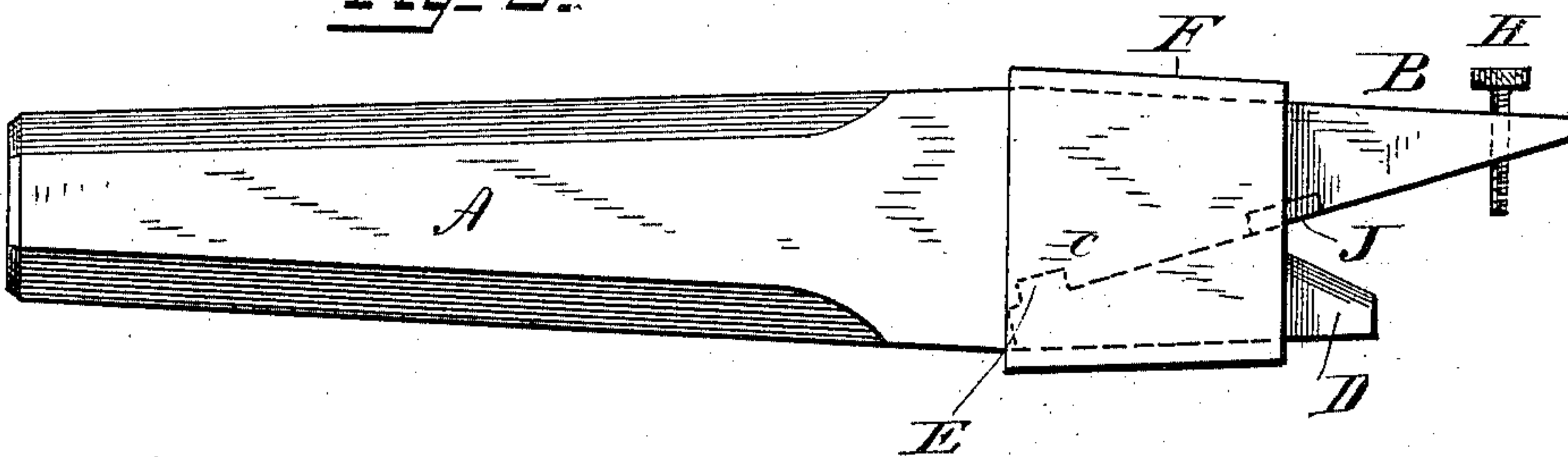
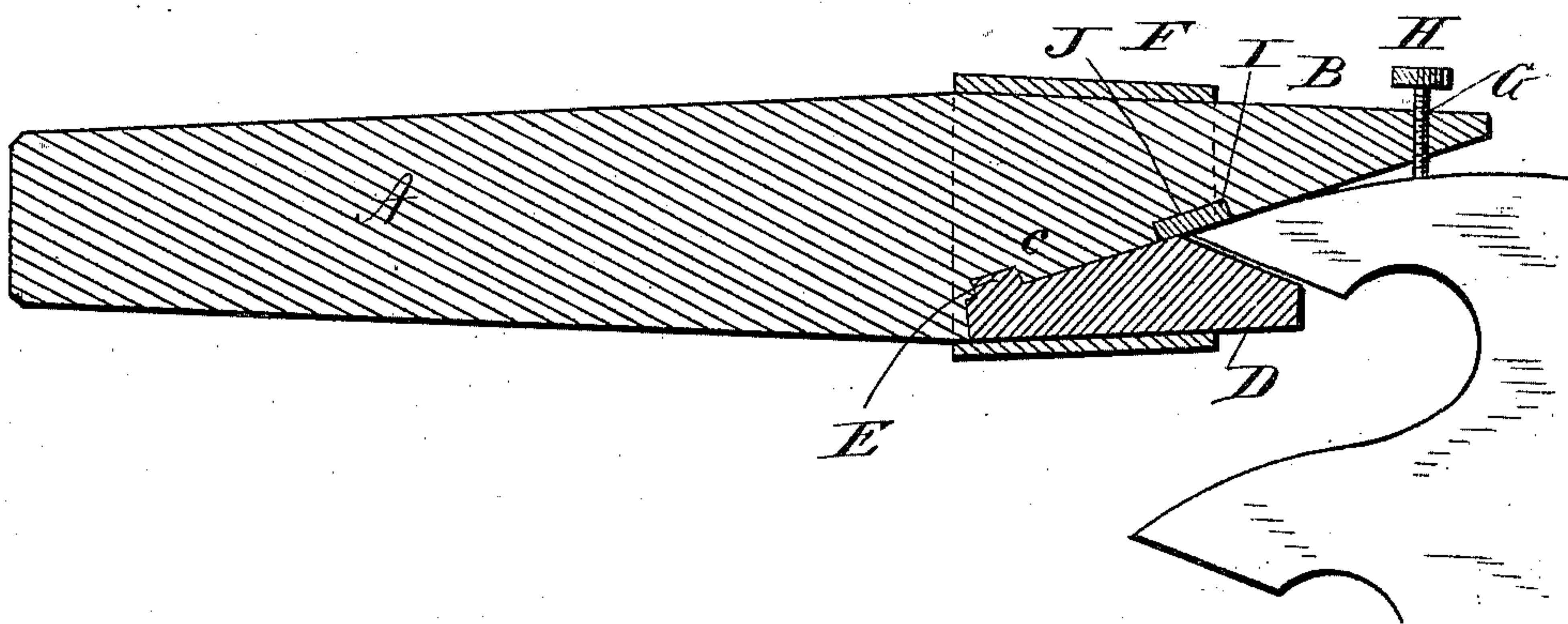


Fig. 3.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

JAMES DINNING, OF SILVER CLIFF, COLORADO.

## SAW-SWAGE.

SPECIFICATION forming part of Letters Patent No. 301,343, dated July 1, 1884.

Application filed December 17, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES DINNING, a citizen of the United States, residing at Silver Cliff, in the county of Custer and State of Colorado, have invented certain new and useful Improvements in Saw-Swages, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to saw-swages; and it has for its object to provide a device which shall possess superior advantages in point of simplicity, durability, and general efficiency. To this end it consists in certain improvements in the construction of the same, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings, Figure 1 is a perspective view of my improved saw-swage. Fig. 2 is a side view, and Fig. 3 is a longitudinal vertical sectional view.

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

A in the drawings designates the stock or handle of my improved device, which terminates at its front end in the upper jaw, B, which is formed integral therewith, and which is provided on its under side with a transverse recess, C.

D is the lower jaw, which is provided with a transverse projection or feather, E, adapted to fit in the recess C.

F is a sleeve uniting the jaws.

The under side of the upper jaw, B, is provided, at about the point of its junction with the lower jaw, D, with a transverse recess, I, in which is fitted a plate, J, of hardened steel, the face of which should be flush, or nearly so, with the face of the jaw B. The said plate may be dovetailed in the recess I; but this is not absolutely essential, as the jaw D and sleeve F will serve to hold it in place, the connection being made by inserting the feather E into the recess C, and then adjusting the sleeve F, which will bind or hold the parts firmly together. The engagement of the key or feather E with the recess C will cause the parts to be held together in a firm and rigid manner. The outer or front end of the upper jaw, B, has a vertical threaded perforation, G, in which is fitted a gage-screw, H, which engages the upper side of the tooth operated up-

on, and thus serves to regulate the pitch or angle and insure an equal angle for all the teeth operated upon.

The upper side of the lower jaw, D, is oval or convex, as shown. The under side of the tooth operated upon is thus made concave. The tooth, after being dressed with my improved swage, will stand a great amount of wear before it becomes flat or blunt.

The lightness of my device enables the operator to handle it easily, and employ a small hammer. A hard or flawy tooth can be spread with ease. The opening to receive the tooth is equally divided, so that the blow comes direct to the tooth, thereby pressing both sides alike. By means of the adjustable gage-screw the operator is enabled to force all the teeth into the jaws at any desired angle. A uniform angle and shape can thus be imparted to all the teeth.

The hardened-steel plate J, it will be seen, protects the upper jaw, B, at the junction between said jaw and the lower jaw, D, which is the point most exposed to wear. This plate, when necessary, can be easily removed, and its face smoothed upon an ordinary whetstone; or it may be replaced by a new one at a trifling expense.

The upper side of the top jaw is made tapering to the forward point. The lower jaw also tapers on its under side from its rear end to the front. The sleeve which unites the jaws also tapers in a corresponding manner. The sleeve, when forced back over the jaws, will remain in position and prevent said jaws from spreading when a blow is applied.

Although the device as constructed is very light, it is strong, durable, and effective, and the parts thoroughly connected, and capable of long wear.

I claim as my invention and desire to secure by Letters Patent of the United States—

1. In a saw-swage, the combination of a stock having an upper jaw integral therewith, said jaw being provided on its underside with two transverse recesses, a detachable jaw having a key or feather fitting in the inner recess, a wear-plate fitting in the outer recess at the junction of the faces of the jaws, and a connecting-sleeve, substantially as set forth.

2. In a saw-swage, a stock, A, having recess

C, threaded opening G, and gage-screw H, jointly with the lower jaw, D, provided with key or feather E, and the sleeve F, substantially as set forth.

- 5 3. A saw-swage comprising a tapering jaw integral with the stock or handle, a tapering detachable jaw, a detachable wear-plate arranged at the junction of the faces of the jaws,

and a tapering sleeve serving to connect the several parts together, as set forth. 10

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

JAMES DINNING.

Witnesses:

J. B. EMERY,

D. F. CROSSLEY.