

(No Model.)

N. W. SPAULDING.  
INSERTIBLE SAW TOOTH.

No. 315,853.

Patented Apr. 14, 1885.

FIG. 1.

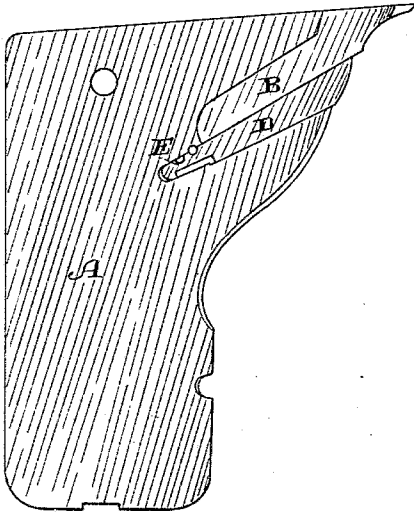


FIG. 2.

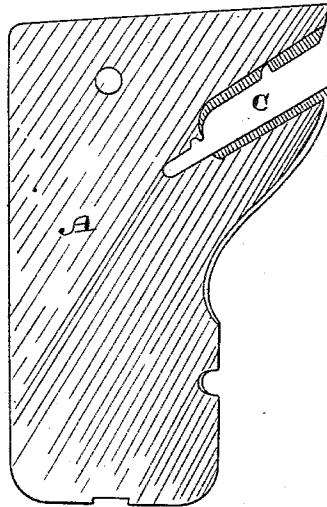
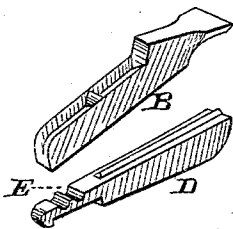


FIG. 3.



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# UNITED STATES PATENT OFFICE.

NATHAN W. SPAULDING, OF SAN FRANCISCO, CALIFORNIA.

## INSERTIBLE SAW-TOOTH.

SPECIFICATION forming part of Letters Patent No. 315,853, dated April 14, 1885.

Application filed December 26, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, N. W. SPAULDING, of the city and county of San Francisco, State of California, have invented an Improvement in a Fastening for Saw-Bits; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to certain improvements in the teeth of saws, and is especially applicable to that class known as "inserted teeth."

It consists in the employment of an independent removable point or bit holder, and in a novel method of securing these points firmly and at the same time so that they may be easily removed.

Figure 1 is a view of the saw tooth or bit holder having my improved point. Fig. 2 is a view of the bit-holder, showing the socket for the bit. Fig. 3 is a view of the locking-key, showing the manner of securing it in the bit-holder.

In the present case I have shown a bit-holder formed like the body of a tooth—such as is used in connection with circular saws—this bit-holder being formed independently of the saw-plate, and having grooves which form V-shaped tongues or projections in the socket, into which it is inserted in the saw-plate, and wherein it is locked by any suitable device.

B is the cutting tooth or bit, which is formed in the manner similar to that shown in my patent of April 10, 1883, and is locked or secured in the socket C, which is made in the bit-holder, by means of a sliding key, D, which is grooved upon its back, so as to fit a corresponding tongue on the edge of the socket C. The meeting edges of the bit and the sliding key are also suitably tongued and grooved, so as to insure their being held in place without any chance of side motion. In my former patent the sliding key was formed with a thin elastic extension at the rear end, having an upwardly-turned point to engage with notches or serrations upon the back part of the socket-extension of the bit-holder, so as to prevent the key from slipping out while in use.

In my present invention I have shown the key having an extension, E, which projects backward in line with the upper part and en-

ters a narrow slot or extension of the bit-socket, which is formed directly in the rear of it, as shown. The rear part of the extension E has a lug which projects downward, so as to rest upon the bottom of the socket into which it passes, and this leaves a narrow slot between the lug and the body of the sliding key, which enables me to introduce a tool for the purpose of driving the key out whenever it is necessary to remove the bit.

In order to retain the key in its place after it is seated, I form a hole or slot, one half of which is made in the upper part of the extension E of the key, and the other half is made in the upper part of the socket and corresponding with it, so that a transverse rivet or key may be driven into the hole thus formed, thus locking the sliding key securely in place. This transverse key or rivet I prefer to make of some soft metal, and as the transverse hole or slot is slightly countersunk upon each side, the key or rivet may be headed down into this countersunk portion to prevent its coming out.

Whenever it is necessary to remove the key E, it may be driven out, and the metal of the transverse key being soft, it will be easily cut off, so as to allow the key E to be removed. The transverse key or rivet must be driven out before the key E can be removed.

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

A saw plate or bit holder having a socket to receive a removable saw tooth or bit, and a sliding locking-wedge, which fits against the bit and locks it into the holder, in combination with a recess in the rear of the socket corresponding to a recess in the sliding wedge and registering therewith, and a transverse key fitting the openings in the socket and wedge and locking the parts together, substantially as described.

In witness whereof I have hereunto set my hand.

NATHAN W. SPAULDING.

Witnesses:

SAMUEL SWIFT,  
JAMES M. DAVIS.