

(No Model.)

S. H. CHASE.  
SAW BIT HOLDER.

No. 455,169.

Patented June 30, 1891.

FIG. 1 -

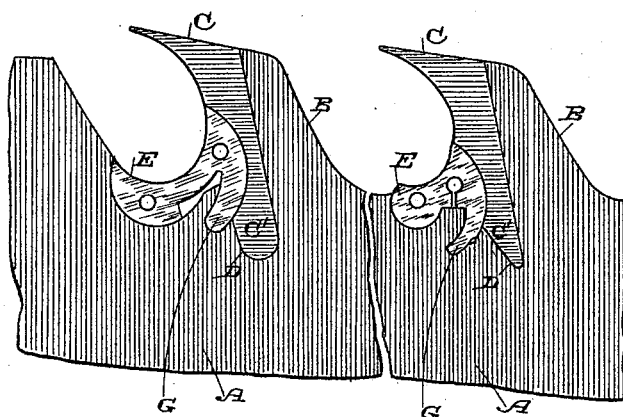
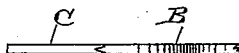


FIG. 2 -



Witnesses,  
*J. H. Morse*  
H. C. Lee.

Inventor,  
*Stephen H. Chase*  
*My Dewey & Co.*  
att<sub>ro</sub>

# UNITED STATES PATENT OFFICE.

STEPHEN H. CHASE, OF SAN JOSÉ, CALIFORNIA.

## SAW-BIT HOLDER.

SPECIFICATION forming part of Letters Patent No. 455,169, dated June 30, 1891.

Application filed August 20, 1890. Serial No. 362,550. (No model.)

*To all whom it may concern:*

Be it known that I, STEPHEN H. CHASE, a citizen of the United States, residing at San José, Santa Clara county, State of California, have invented an Improvement in Saw-Bit Holders; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to certain improvements in saw-bit and holders; and it consists in certain details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a view of a portion of a saw-plate, showing two teeth with their inserted bits and the holders by which they are retained in place. Fig. 2 is an edge view of the saw-plate.

A is a saw-plate having the teeth B and the throats or spaces between the teeth for the escape of the sawdust in the usual manner.

C are the bits or cutters, which in the present case I have shown with straight backs having V-shaped grooves or channels formed in them to fit the corresponding V-shaped beveled tongues which extend along the front edges of the teeth B. The lower ends C' of these bits extend down some distance below the throat and into sockets in the saw-plate, so that the whole lower end fits into a correspondingly-shaped opening or socket, as shown at D. Above this socket the front of the saw-bit is made concave to receive and engage the holder.

The lock or holder consists of a semicircular or segmental piece having the head or portion E adapted to turn in a correspondingly-shaped groove in the side or bottom of the throat opposite to the bit. The other end is formed in a segment of a circle having the center of its curvature corresponding with that of the head E, and the front of the saw-bit is made concave, and is formed in the same curve with this end and has the usual V-shaped central tongue, which fits into a correspondingly-shaped groove or channel formed in the outer curved end of the holder. This holder, as shown, is semicircular in shape, and its front or inner curve forms a continuation of the throat of the bit and the

saw-plate, so as to provide a free escape for the sawdust.

The central portion of the holder is made narrow enough so as to have some elasticity, so that the ends of the semicircle press outwardly, and thus serve to hold the bit firmly in place. The outer curve of the holder, which fits into the concave portion of the bit-holder to lock it in place, is extended downward and forward, as shown at G, and this portion or extension fits into the socket formed in the plate A and just in front of the socket which holds the extension of the bit, and thus steadies and maintains the holder firmly in place. By thus extending the lower end of the bit below the concave front or lock and forming the sockets for the extension of the bit and the holder they are more firmly locked in the plate, prevented from being displaced by sudden strains, and the saw plates and parts may be made much thinner.

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

1. A saw-bit having its rear edge formed to connect with the front of a saw-tooth with a tongue-and-groove joint, a segmental concavity in the front similarly fitted to a correspondingly-shaped holder, an extension below the concave portion adapted to fit into a correspondingly-shaped socket in the saw-plate, and a socket in the plate in front of said extension adapted to receive a projection from the holder, substantially as herein described.

2. The saw-plate and the bit or cutter having an extension fitting a socket in the plate, in combination with a curved holder having heads fitting sockets in the plate-bit, said holder being elastic at its center and having a forward extension from one end fitting a corresponding socket in the saw-plate just in front of the extension of the bit, substantially as herein described.

In witness whereof I have hereunto set my hand.

STEPHEN H. CHASE.

Witnesses:

S. H. DUEY,  
FRED BROWN.