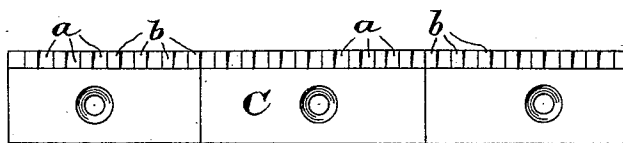
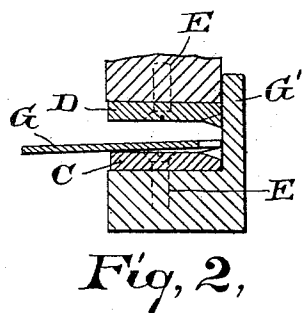
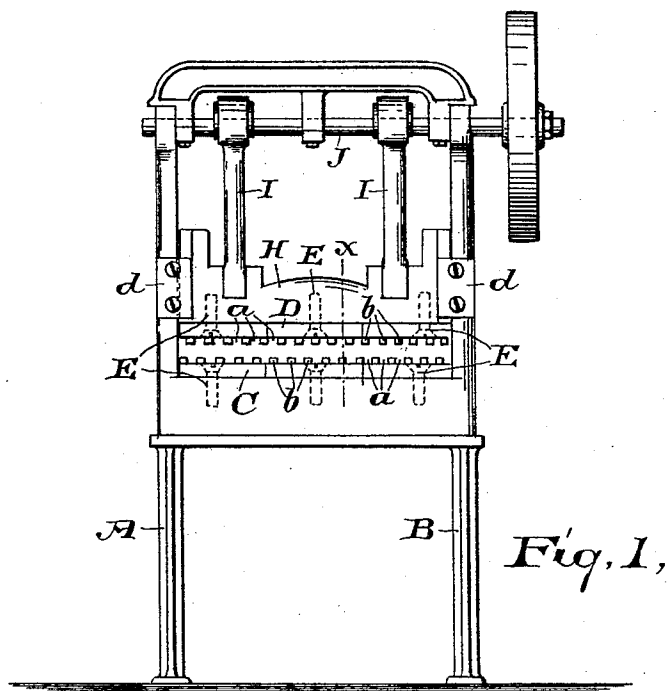


(No Model.)

R. R. COURSEN.
SAW SETTING MACHINE.

No. 569,545.

Patented Oct. 13, 1896.



Witnesses
Robert Sallberger
Beatrice Charles.

Inventor,
Robert R. Coursen,

By Drake. Atty's.

UNITED STATES PATENT OFFICE.

ROBERT R. COURSEN, OF NEWARK, NEW JERSEY.

SAW-SETTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 569,545, dated October 13, 1896.

Application filed May 31, 1895. Serial No. 551,237. (No model.)

To all whom it may concern:

Be it known that I, ROBERT R. COURSEN, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Saw-Setting Machines; 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

15 The object of this invention is to set the saw upon both sides and throughout the length thereof simultaneously or at one operation and to secure other advantages hereinafter set forth.

20 The invention consists in the improved saw-setting machine and in the combination and arrangement of the parts, as herein set forth, and finally pointed out in the claim.

Referring to the accompanying drawings, in which similar letters of reference designate corresponding parts in each of the figures where they occur, Figure 1 represents in front elevation a saw-setting machine embodying my improvements. Fig. 2 is a section taken through line *x* of Fig. 1. Fig. 3 is a plan view of the anvil.

In carrying out my invention I construct a substantial iron frame A B, in which the working parts of the machine are mounted. I also provide a number of bed-plates or anvils C, and hammers D, having recesses and projections *a b* formed on one or both edges thereof, conforming in size and width to the teeth of the saw to be set thereby and extending throughout the length of said bed-plates and hammers. It will be understood, of course, that said recesses and projections on one edge differ in size from those on the other, so that the same plates will answer for the setting of two different-sized teeth. These anvils and hammers are interchangeable and may be removed and replaced by others by backing out the fastening bolts or screws E, as will be understood.

50 The hammers D are of the same length as the anvils and are provided with a series of recesses and projections, (not shown, except in dotted lines in Fig. 2,) varying in size, however, and conforming in size and shape

with those of the anvil in connection with 55 which they are intended to be used, as will readily be understood, and are also interchangeable in the same manner as said anvils. Said hammers are secured to carriers H, which are provided with crank or cam 60 arms I, which are operated by a crank or cam shaft J, mounted in suitable bearings or boxes near the top of the machine, as will be readily understood upon reference to Fig. 1, the shaft being driven by a belt or otherwise. 65

The carrier is arranged to slide in grooves in the uprights A and B of the frame.

It will be seen that the portion of the frame on which the anvil rests is provided with a guide G', which projects above the hammer, 70 against which the tooth edge of the saw G is placed, and by forcing the hammer down thereon all the teeth are set in the one movement.

It will be observed that guides *d*, which 75 form one wall of the grooves in which the carrier works, are removably secured to the frame to admit of the removal or adjustment of the carrier and hammers, as will be understood.

It will readily be seen that by means of this 80 invention the one movement of the hammer serves to set all the teeth of a saw on both sides, or at least as far as the hammers and anvils will extend, and that the set will of necessity be uniform throughout. 85

It will be observed that the anvils and hammers may be made in as many sections as practicable in view of the difficulties that may arise in tempering pieces of considerable length. 90

Having thus described my invention, what I claim, and wish to secure by Letters Patent of the United States, is—

A saw-setting machine having a series of removable hammer and anvil sections, an upwardly-extending guide G' integral with the frame thereof, removable guides *d*, *d*, engaging said frame, and a carrier H adapted to move in said guides and having secured to its under side said hammers, all of said parts 100 being combined substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 15th day of May, 1895.

ROBERT R. COURSEN.

Witnesses:

OLIVER DRAKE,
ROBERT SOLLBERGER.