

(No Model.)

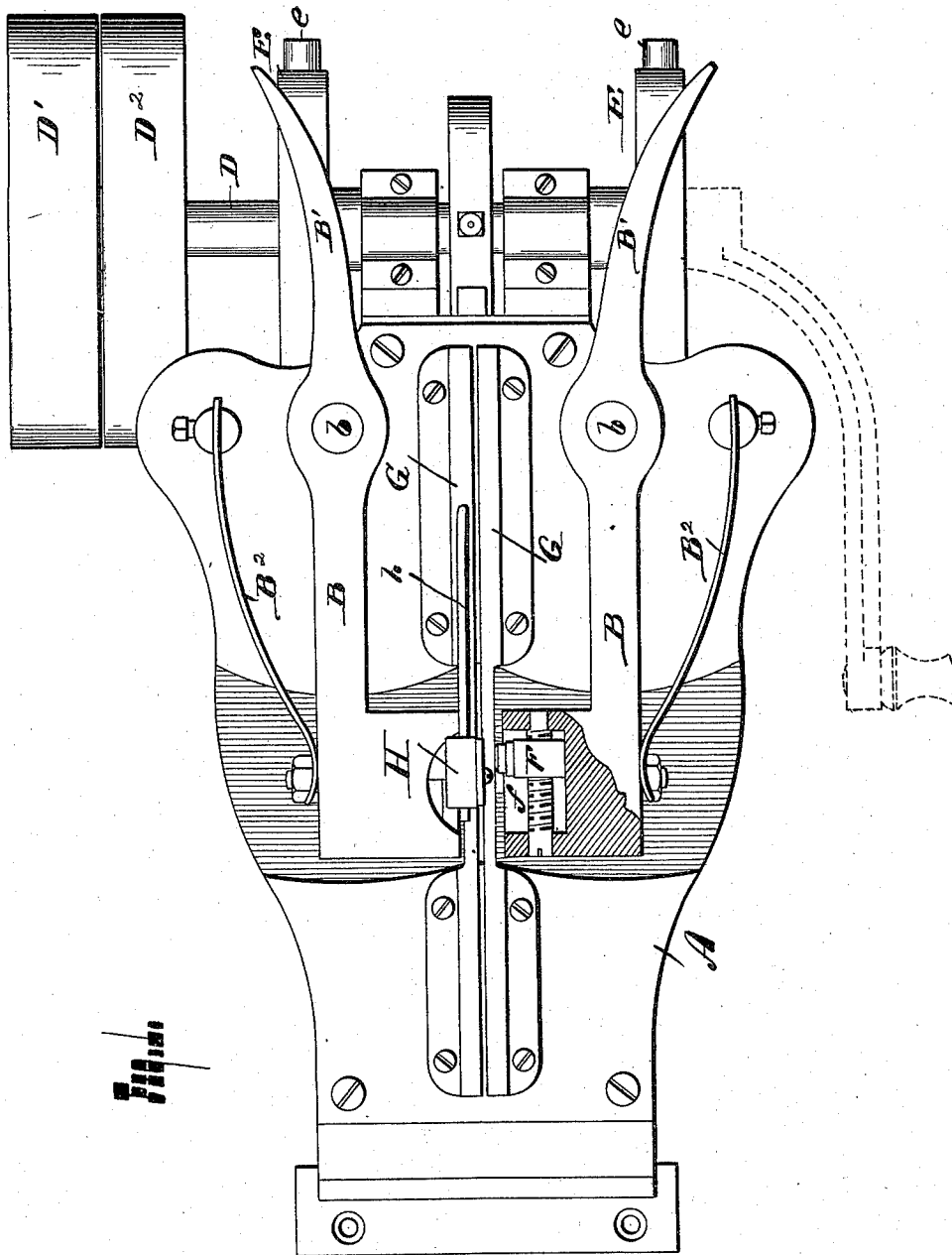
W. H. CHELLIEU.

2 Sheets—Sheet 1.

SAW SET.

No. 579,220.

Patented Mar. 23, 1897.



WITNESSES

J. K. Kuger
U. M. Davis

INVENTOR

Wm. H. Chellieu
By Fisk & Thomas
Attys

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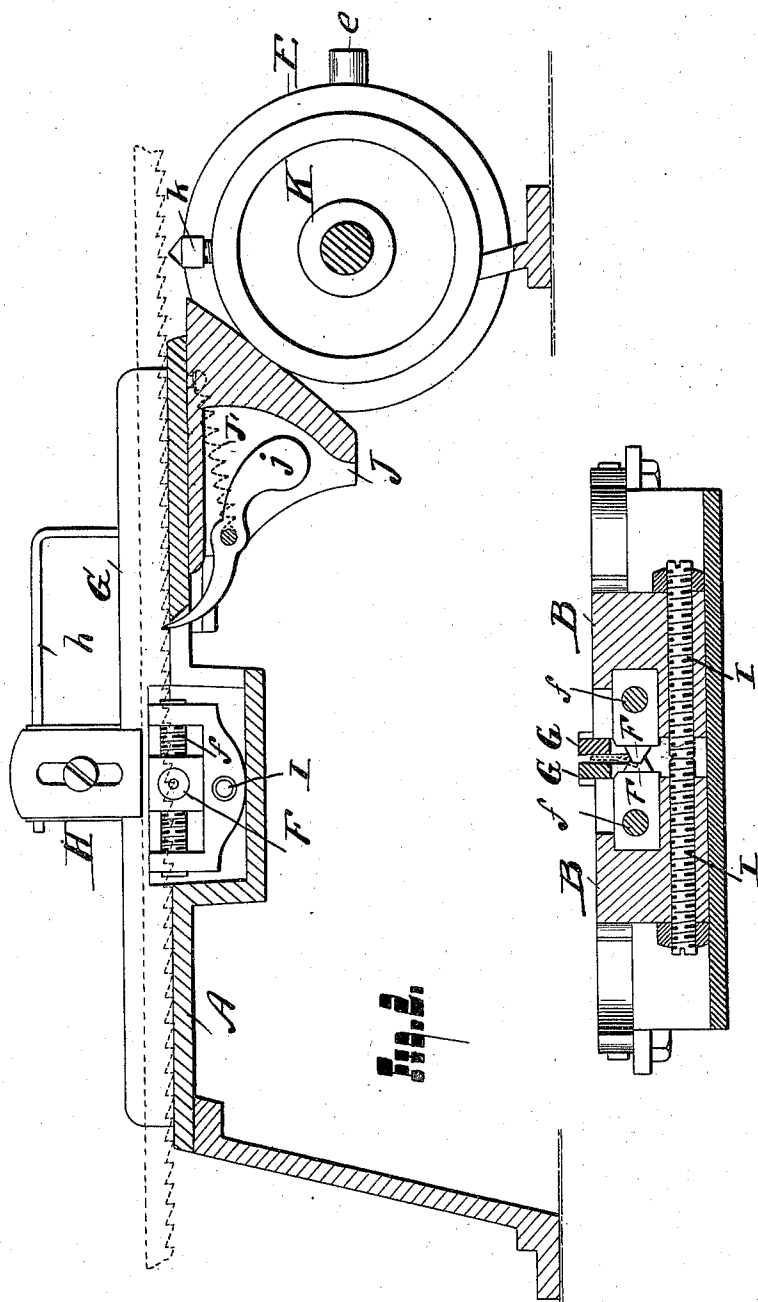
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SAW SET.

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J. H. Karger

G. M. Davis

INVENTOR

Wm. H. Chellieu

By J. S. Thomas
att'y

UNITED STATES PATENT OFFICE.

WILLIAM H. CHELLIEU, OF DETROIT, MICHIGAN, ASSIGNOR OF ONE-HALF
TO FRANK H. SCHULER, OF SAME PLACE.

SAW-SET.

SPECIFICATION forming part of Letters Patent No. 579,220, dated March 23, 1897.

Application filed June 4, 1896. Serial No. 594,242. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. CHELLIEU, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Saw-Sets; and I 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improvement in saw-setting machines.

Referring to the drawings, Figure 1 is a plan view showing tight and loose pulleys when used as a power-machine and in dotted lines crank mechanism for operating the machine by hand. Fig. 2 is a longitudinal vertical section on line with the saw-guides, showing more particularly the mechanism for feeding the saw to the setting-hammers. Fig. 3 is a cross-sectional view showing the mechanism to limit the set of the saw-teeth.

In the drawings, A is the frame of the machine.

B B are striking-jaws pivoted at *b* and provided with cam-shaped arms B'.

D is the power-shaft, on which are mounted the tight and loose pulleys D' and D². Also mounted on the shaft D are the disks E, provided with suitable tripping-lugs *e* for the purpose of engaging the cam-shaped arms B'. Mounted on the striking-jaws B B are suitable striking-hammers F. These hammers are made adjustable for different sizes of saw-teeth by being mounted on a screw-shaft *f*, the bearings of which are in the striking-jaws. These screw-shafts are arranged so that by turning the same the striking-hammers may be moved nearer to or farther apart, as the case may require.

G G are saw-guides secured to the frame of the machine, and H is an adjustable guide for holding the saw firmly against the bed-plate of the machine. This device is used more particularly when it is desired to set band-saws or saws of like character. This adjustable guide is mounted upon a removable spring-arm *h*, one end of which is inserted in one of the saw-guides, or it may be engaged in the frame of the machine. When it is de-

sired to set hand-saws or saws of like character, this guide may be removed.

B² B² are springs, one end of which are engaged in suitable pins mounted upon the frame of the machine. The other ends are caused to bear upon the striking-jaws B B. To limit the set given to the saw-teeth by the setting-hammers, I provide the screw-shafts I I, which are mounted in the striking-jaws B B. By adjusting these screw-shafts in relation with each other any desired pitch may be given to the saw-teeth, for it will be readily seen that the screw-shafts may be so adjusted with relation to each other that when they come in contact it will determine the set given to the teeth of the saws.

J is a traveling carriage in which is mounted a suitable weighted dog *j*, adapted to engage the teeth of a saw. On the shaft D is mounted a cam K. On the face of said cam are secured one or more adjustable lugs *k*. It is seen that when the cam is caused to rotate and the lug *k* comes in contact with the cam-shaped portion of the traveling carriage J (the dog mounted in said carriage having entered one of the teeth of the saw) the carriage will be forced forward by the rotation of the said cam K, carrying the saw with it a sufficient distance to present another set of teeth between the setting-hammers. The lug *k* is made adjustable, so as to adapt the travel of the carriage J to the requirements of the saw to be set. When the carriage has reached the end of its stroke, it is returned to its initial position by the spring J'.

The operation of my device is as follows: The saw to be set is placed between the guides G, and if the saw is what is known as a "band-saw" the adjustable spring-guide H is arranged to force the saw into close contact with the bed of the machine. Power is now applied to the shaft D, and the disks E E are thereby caused to rotate. The tripping-lugs coming in contact with the cam-shaped arms of the striking-jaws will force the jaws apart until they ride over the end of the cam, when the springs will force the jaws together, and the hammers coming in contact with the saw will set the teeth. At the proper moment the cam K for operating the carriage J will force the saw forward, bringing the successive teeth into position to be set.

Having thus described my invention, what I claim is—

1. In a saw-setting machine the combination of striking-jaws, adjustable hammers
5 mounted thereon and arranged to set the successive teeth of a saw, means for operating said jaws, and means for limiting the set of the saw-teeth, said means consisting of two
10 adjustable shafts mounted on the striking-jaws and arranged diametrically opposite each other whereby the ends of said adjustable shafts will abut and limit the set of the saw-teeth when the striking-jaws are operated, substantially as described.
- 15 2. In a saw-setting machine the combination of striking-jaws provided with adjustable hammers, cam mechanism for spreading said striking-jaws apart, suitable springs

bearing on said striking-jaws whereby the striking-hammers are caused to set the teeth
20 of a saw, and a weighted dog mounted in a suitable traveling carriage, below the bed-plate of the machine whereby one end of the weighted dog may enter the teeth of a saw
25 when said saw-teeth are turned toward the bed-plate, and means for operating said carriage, said operating means made adjustable for different lengths of travel, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

WILLIAM H. CHELLIEU.

Witnesses:

S. E. THOMAS,
F. H. SCHULER.