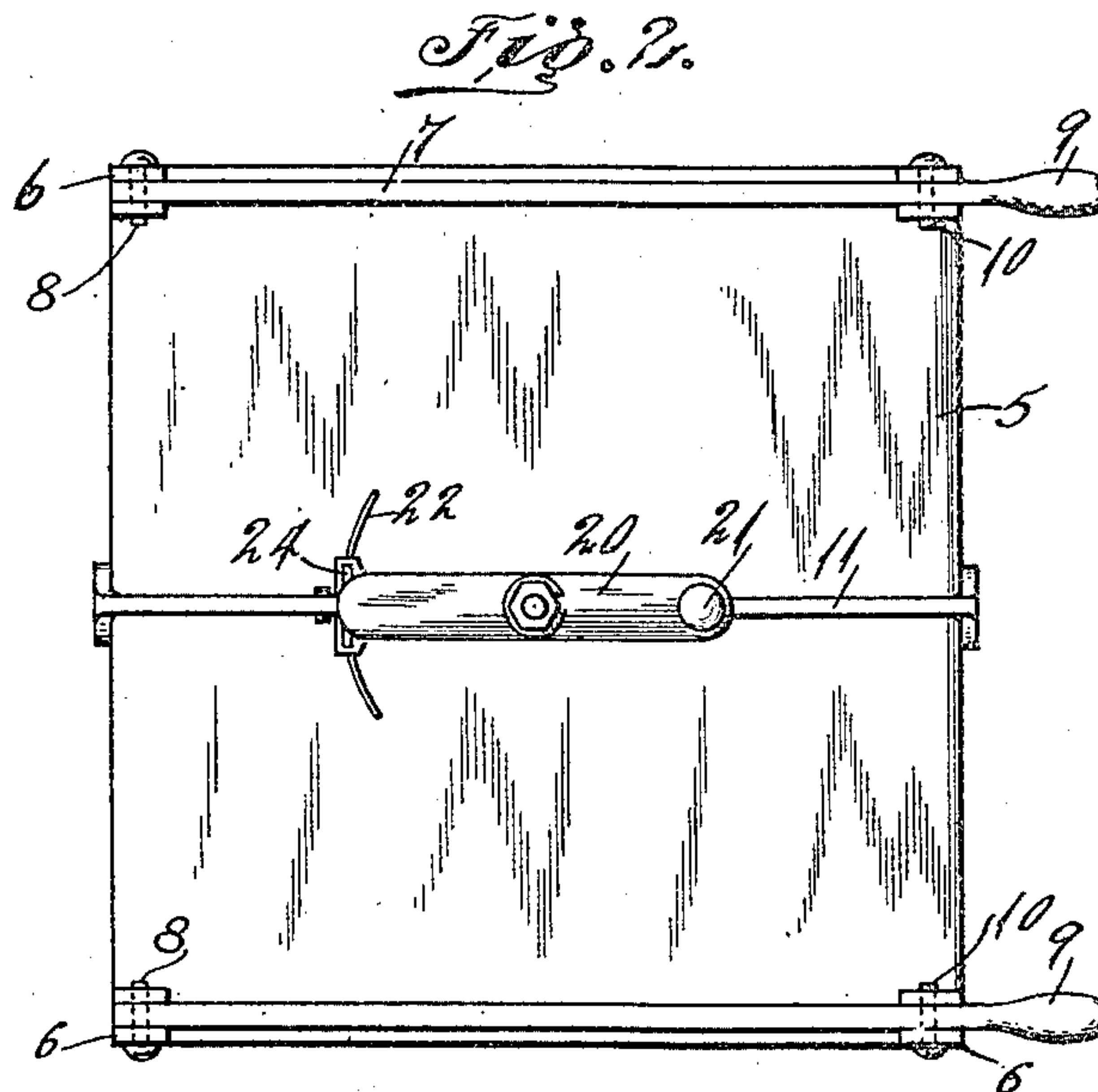
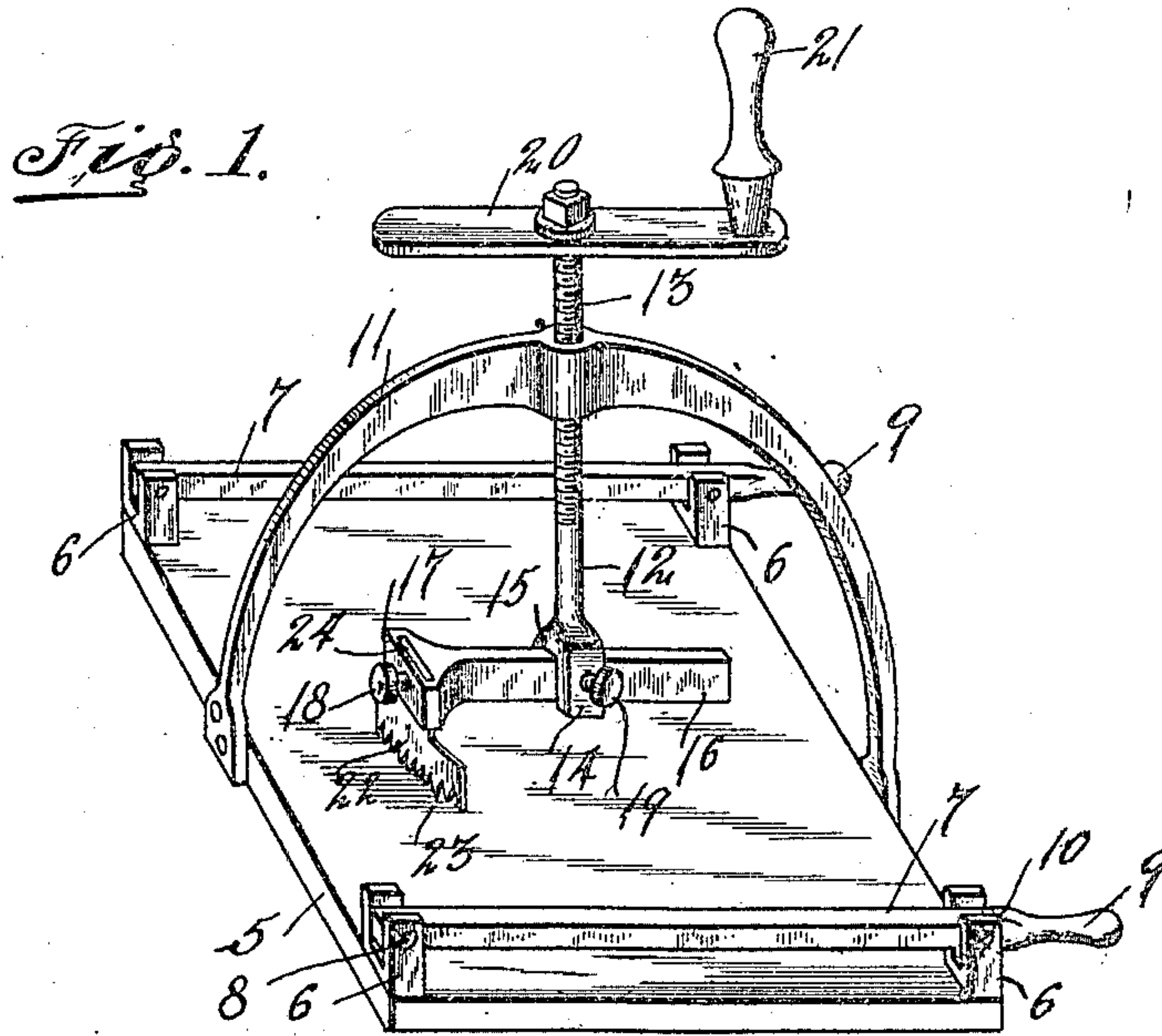


D. H. SMITH.
SAWING MACHINE.
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951,920.

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DOC H. SMITH, OF MOUNDRIDGE, KANSAS.

SAWING-MACHINE.

951,920.

Specification of Letters Patent. Patented Mar. 15, 1910.

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To all whom it may concern:

Be it known that I, Doc H. SMITH, a citizen of the United States, residing at Moundridge, in the county of McPherson, State of Kansas, have invented certain new and useful Improvements in Sawing-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.

This invention relates to improvements in sawing machines and has for its particular object the provision of a device of that kind adapted to saw circular shaped blocks from a strip of wood.

It is well known that considerable difficulty is experienced in sawing circular blocks to be used for pulley sheaves and frequently it is impossible to saw certain kinds of wood and these sheaves have to be turned in a lathe. The present invention aims to remedy this defect by providing a construction which will operate to positively clamp a board and to further provide a saw which will be rotated over the face of the board and fed into the body of the latter as the sawing continues.

With these and other objects in view as will more fully hereinafter appear, the present invention consists in certain novel details of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings and more particularly pointed out in the appended claim, it being understood that various changes in the form proportion, size and minor details of the device may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings forming part of the specification: Figure 1 is a perspective view of the device. Fig. 2 is a plan view thereof.

Similar numerals of reference are employed to designate corresponding parts throughout.

The device consists essentially in a base plate indicated by the numeral 5, this base may be of any suitable material and is shown to be rectangular in contour. Formed at the four corners of the base and on the upper face thereof are spaced lugs 6, the spaces of which extend parallel with the

ends of the base, each pair of lugs is provided with three or more openings and the pair of lugs on one side of the base receive each one end of a lever 7 of a size to fit within the space between the lugs and held secured by means of a pivot 8 insertible into one of the openings. The length of the levers is considerably greater than the width of the base, the free ends terminating in a handle portion 9 which are seated in the lugs on the opposite side of the base. The disposition of the levers is such that when they are seated as shown in Figs. 1 and 2 there will be a space between their lower sides and the upper side of the base sufficient to accommodate the thickness of the board to be operated upon, and when in clamping position as illustrated, they are held secured by means of locking pins 10 extending through alining openings formed in the lugs and levers.

By referring now to Figs. 1 and 2 it will be seen that an arched support 11 has its opposite ends secured to the opposite sides of the base 5 at points substantially in alignment with the horizontal center of the latter. What will subsequently be termed a feeder is shown to consist of an elongated cylindrical rod 12, the major portion of which is screw threaded, as shown at 13 and extends through a similarly threaded opening formed in the highest or intermediate portion of the arched support 11 adjacent the lower end of the feeder a transverse opening is provided, which receives the shank 16 of a saw holder. The latter is preferably of a single piece of metal having at one end an enlarged head 17 provided with an oblong vertical opening, the front face of the head is flat and provided with a centrally disposed orifice for the reception of a set screw 18. In the construction illustrated in Fig. 1 the saw holder is shown to be rectangular in cross section and of a size to enter between the jaws 14 and 15 and is held therein by means of a set screw 19 threaded into an opening formed in the jaw 14. The terminal of the threaded portion 13 of the feeder terminates in a threaded boss to enter an elongated opening in a crank 20 and is clamped therein by means of a nut. One end of the crank arm is provided with an outwardly extending crank arm 21; with this construction the distance between the crank arm and feeder may be increased or diminished.

The saw member is designated by the numeral 22 and is shown to be substantially arcuate in longitudinal section, having the usual teeth 23 on its lower edge and provided at the intermediate portion of its upper side with the shaft 24 which is of a size to snugly fit within the socket in the head 17 of the saw holder member, and is held secured by means of the set screw 18.

In the operation of the device the board to be operated upon is placed upon the base plate 5 and secured by means of the levers, as before described, it being understood that the pivoted ends of the levers may be adjusted in the openings to accommodate the thickness of the board used. When the parts are in this position the saw is adjusted within the socket and turned by means of the crank arm 21 and feeder 12, owing to the position of the saw holder this turning movement will cause the saw to describe a circle on the face of the board and as the turning movement continues the threaded portion 13 will descend through the arched support 11, forcing the saw teeth into the body of the board until a block has been cut therefrom which will be truly circular in contour.

It is to be understood that the curvature of the saws will vary according to the diameter of the block required.

From the foregoing it can be seen that I have provided a device which is compara-

tively simple in structure and inexpensive to manufacture embodying few parts and these so arranged that the danger of derangement will be reduced to a minimum. It can be seen that by adjusting the shank 16 of the saw holder so as to bring the saw blade nearer or farther from the jaws 14 and 15 that blocks of varying diameters may be formed.

Having thus described my invention, what is claimed as new, is:

In a machine for sawing circular blocks, a base plate, a vertically disposed arcuate support having its opposite ends secured to opposite sides of said base plate, said support being medially provided with a vertical threaded opening, a feeder having a cylindrical screw threaded portion threaded into the opening of the support and terminating at its lower end in a pair of spaced jaws, a saw holder arranged between the jaws and capable of lateral adjustment with respect to the feeder, said saw holder being provided at one end with a vertical socket and a curved saw blade having a shank portion removably secured in said socket.

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

DOC H. SMITH.

Witnesses:

JOHN WM. HAURY,
P. D. DIRKS.