

No. 683,930.

Patented Oct. 8, 1901.

G. GLASS.
DEVICE FOR SIDE DRESSING SAWS.

(Application filed Dec. 20, 1900.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.

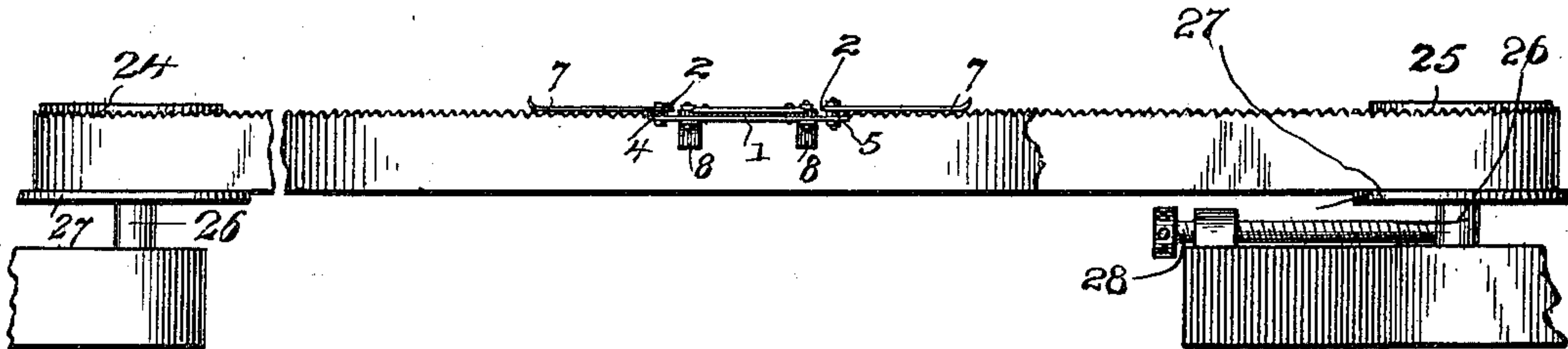


Fig. 2.

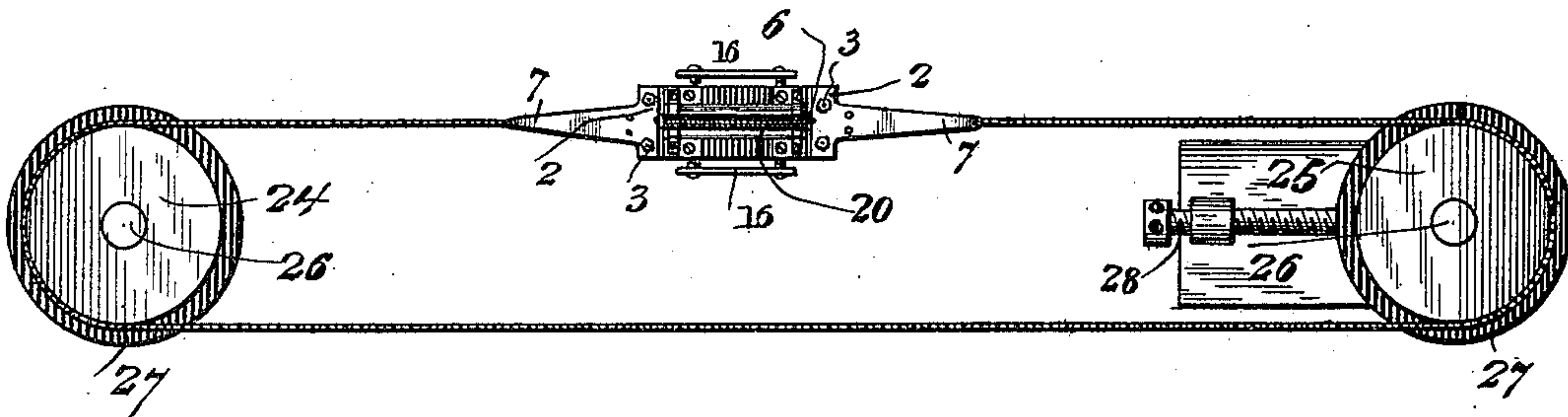
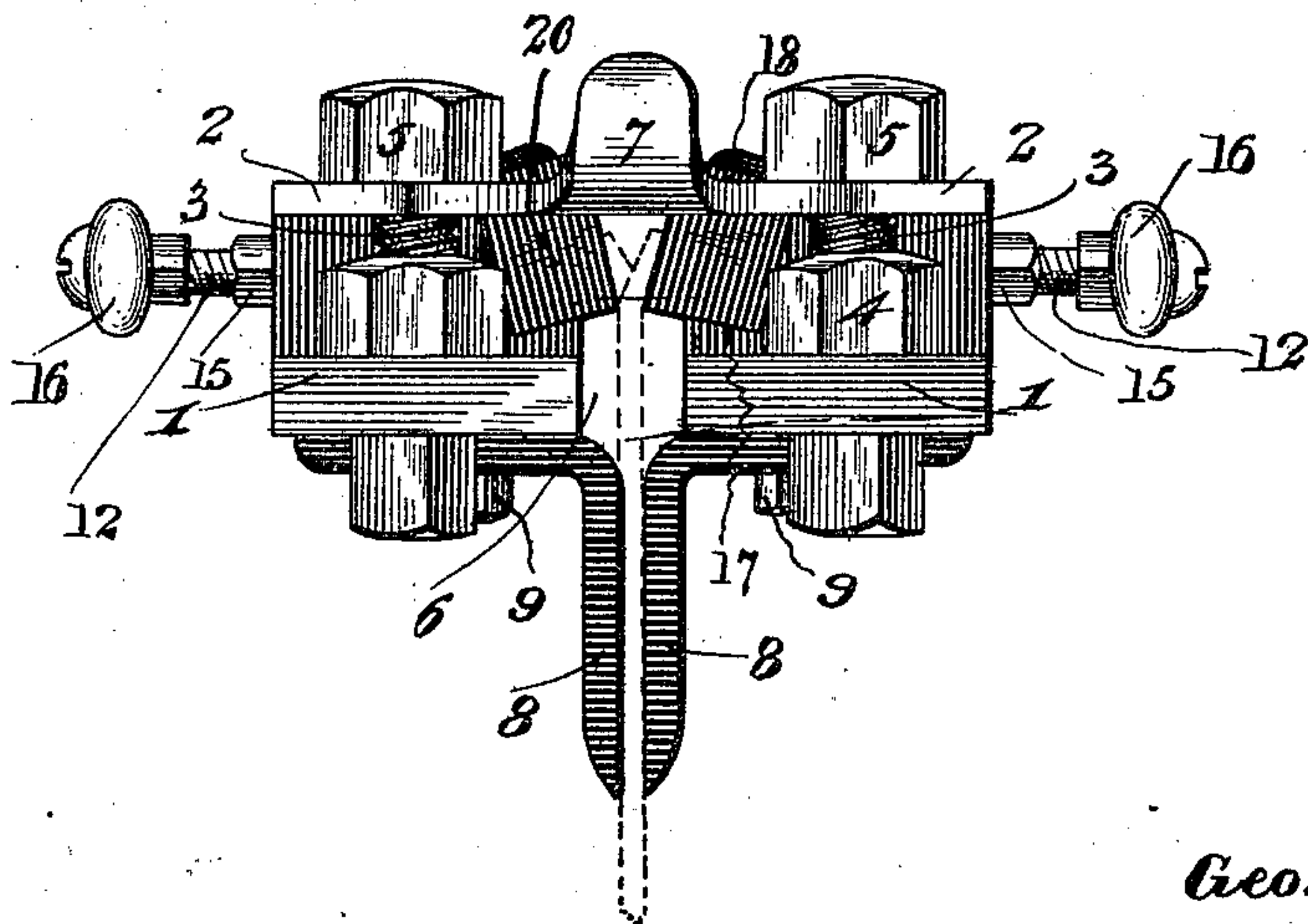


Fig. 3.



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Fig. 4.

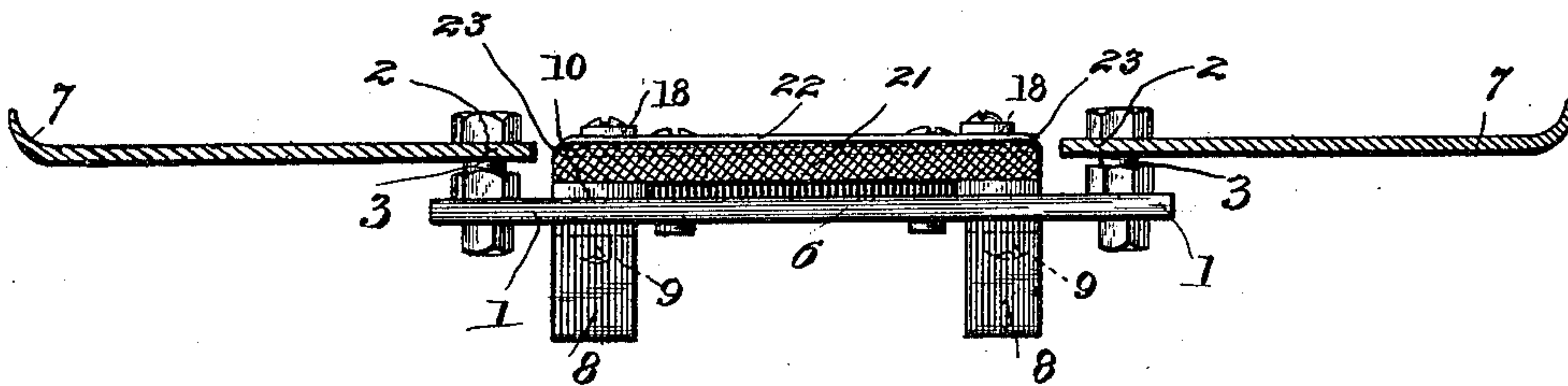


Fig. 5.

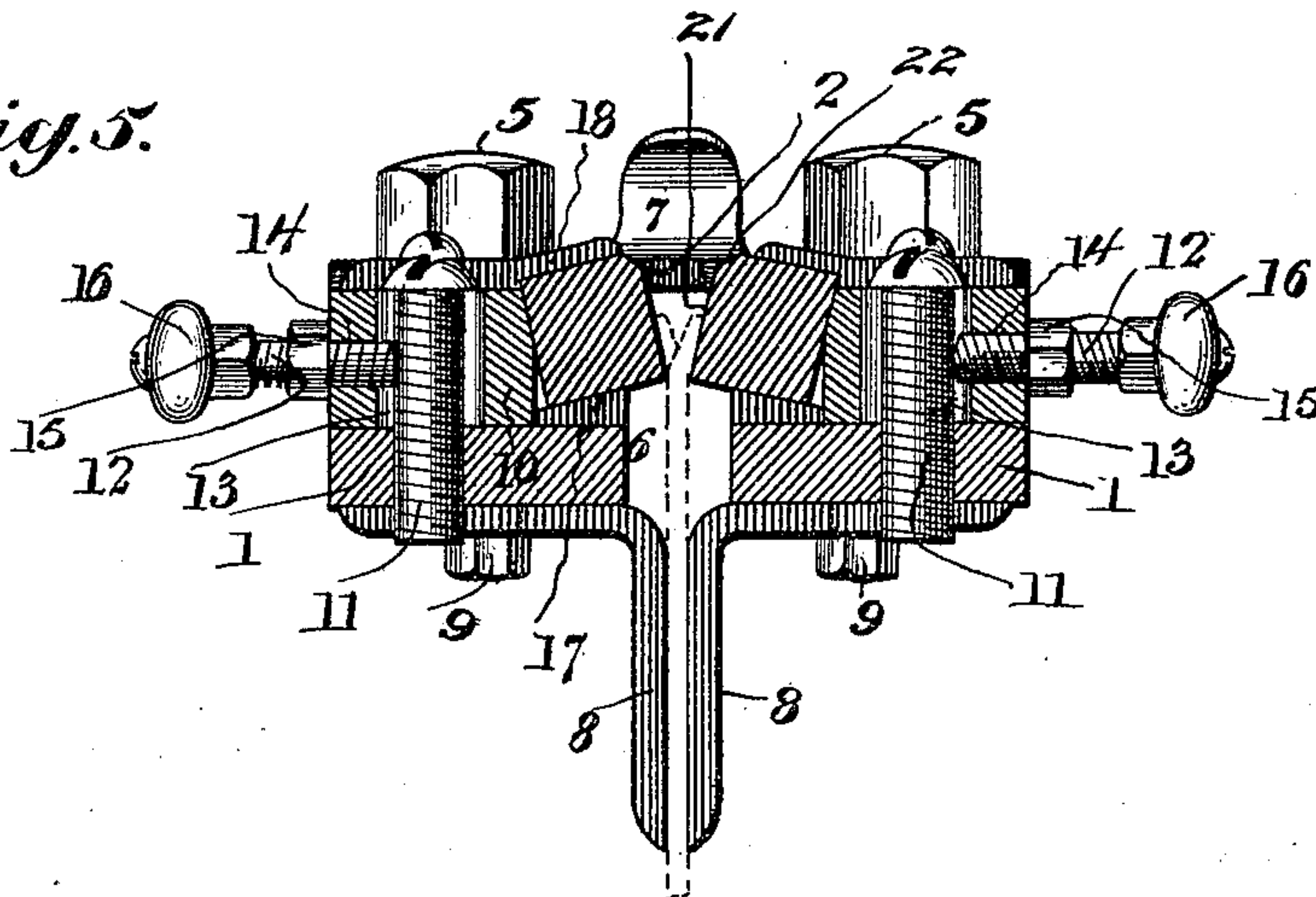
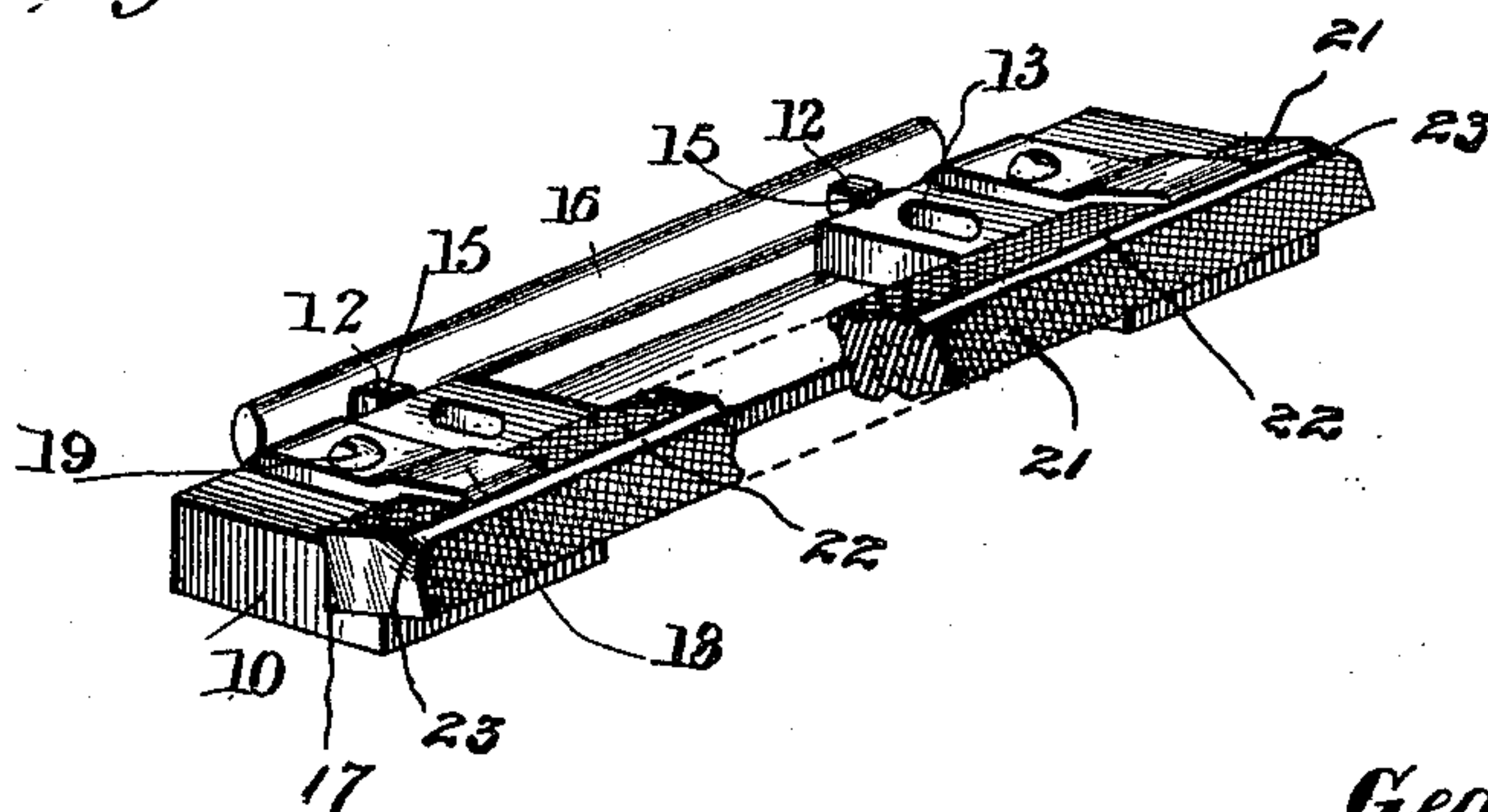


Fig. 6.



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UNITED STATES PATENT OFFICE.

GEORGE GLASS, OF PORT HURON, MICHIGAN.

DEVICE FOR SIDE-DRESSING SAWS.

SPECIFICATION forming part of Letters Patent No. 683,930, dated October 8, 1901.

Application filed December 20, 1900. Serial No. 40,560. (No model.)

To all whom it may concern:

Be it known that I, GEORGE GLASS, a citizen of the United States, residing at Port Huron, in the county of St. Clair and State of Michigan, have invented certain new and useful Improvements in Devices for Side-Dressing Saws; and I do 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 is an improvement in devices for side-dressing saws; and it consists in certain novel constructions and combinations of parts, as will be hereinafter described and claimed.

In my United States Letters Patent No. 384,149, granted June 5, 1888, I have shown a construction wherein the saw-dresser is held stationary while the saw is moved there-through for treatment.

The objects of the present invention are to obviate certain defects found in the patented construction, to simplify and greatly improve the construction, and to provide a dresser which in practice is moved along the saw while the latter is held stationary.

In the accompanying drawings, Figure 1 is a side view showing the application of the invention. Fig. 2 is a top plan view thereof. Fig. 3 is an end elevation. Fig. 4 is a central vertical longitudinal section. Fig. 5 is a cross-section through the dresser on the line of the adjusting-screws of the saw-carriers at one end of the device. Fig. 6 is a detail perspective view of one of the files and its carrier.

The improved dresser comprises in its construction a frame or body portion consisting of a pair of parallel longitudinally-extending bars or plates 1, held spaced apart by transverse end bridge-pieces 2, located above said bars and to which they are connected by vertical bolts 3, each carrying individual clamping-nuts 4 and 5, serving to respectively clamp the plate or bar 1 against the bolt-head and to hold the said bridge-pieces in position. This construction provides an intermediate longitudinal slot 6 for the reception of the toothed edge of the saw, as clearly shown in Figs. 3, 4, and 5. From the bridge-pieces project outwardly and oppositely extending

arms 7, which are adapted to rest upon the edge of the saw when the dresser is in use, and thus act as guides to prevent the dresser from dropping down below the proper operative position. By adjusting the nuts 5 the distance between the plates 1 and bridge-pieces 2 may be varied to suit saws having different-sized teeth. Adjustable guides 8 are also applied to the under sides of the frame bars or plates 1 to guide the saw. These guides are adapted to be secured by set-screws 9, extending through slots therein and working in threaded openings in said plates 1.

On the upper surfaces of the frame bars or plates 1 are arranged the file-carriers 10, which are movable in and out on said bars to set the files against and away from the saw-teeth and to adjust said files to saw-teeth of different thickness. This adjustment of the file-carriers is effected by means of set-screws 11 and 12. The set-screws 11 enter threaded openings in the bars 1 and pass through slots 13, formed in the carriers and act as guides to adapt the carriers to slide in and out in a fixed path. The set-screws 12 work in threaded openings 14, intersecting said slots 13, and are adapted to abut against the screws 11 to limit the movement of the file-carriers and in conjunction with jam-nuts 15 to prevent the files from crowding or pressing too firmly against and cutting too deeply into the saw-teeth. These set-screws 12 are also utilized as securing means, whereby the handles 16, which are grasped to slide the dresser and press the files into engagement with the saw-teeth, are attached to the file-carriers. The file supports or carriers have main plates provided with seats 17 for the files, which files are held in such seats and in operative position by clamp-plates 18, bearing on said files and operated by set-screws 19, passed through the clamp-plates and threaded into the main plates of the file-carriers. The files may, as shown in my aforesaid patent, have faces 21, at the juncture of which are formed smooth bearing-faces 22, which form guides for the saw at a point immediately below the swage of the saw-teeth, and the ends of the file have rounded or beveled surfaces at 23, forming approaches to the bearings 22 and obviating any binding or similar difficulty in the movement of the dresser on the

saw; but this is not essential, and I do not desire to be limited thereto, as I may employ any kind of a square or flat mill-file.

By means of the described device it will be seen the files serve as guides for the saw being treated and are so formed that they will not abrade the teeth below the swaged portion thereof but will equally dress off the opposite sides of the said portion.

In swaging saws the teeth will become sprung more or less to one or the other side, and in dressing them down, if unsupported, when a tooth is sprung to one side the heaviest work comes on the file at that side, and the tendency is to force the tooth to the opposite side, and thus the side that does not require any more filing or dressing is filed, and the result is an irregularity in the saw. By my construction, as will be seen, the teeth are held from being pressed to one side or the other and are dressed off evenly in the desired manner, the files serving to keep the tooth from springing over and being further cut on the side which has already been side-dressed enough.

In operation the saw, if a band-saw, is passed around a pair of drums 24 25, mounted on a rack comprising standards 26, secured to the floor or to a suitable base, said drums having flanges 27 at their lower ends to prevent the saw from slipping down. After the saw is placed on the drums the latter are forced apart by an adjusting-screw 28, thus producing a tension on the saw and making it rigid to enable the operator to either file, swage, or side-dress. The dresser is then fitted down on the saw in the manner shown and the operator grasps the handles 16 and forces said handles inwardly to move the file-carriers inwardly to bring the files into contact with the saw-teeth and the dresser forced along the saw in a similar manner to the stroke of a plane, causing the files to side-dress the teeth in a simple and effective manner. In this operation the bridge-pieces 2 and guide-arms 7 slide upon the upper edges of the teeth and maintain the files against downward movement in proper operative position. By adjusting the parts in the manner heretofore stated the dresser may be employed for side-dressing the teeth of different-sized saws in the desired manner and to the desired extent.

It will be understood that the dresser is intended for use on both band and gang saws, the construction of the rack or supporting means being modified to suit the kind of saw operated upon.

The advantages of my present construction of dresser over my prior patented device will be apparent from the foregoing construction,

taken in connection with the accompanying drawings, from which it will appear that considerable expense in manufacture is saved by dispensing with a number of parts, which my present construction provides for.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States, is—

1. A saw-tooth dresser, comprising a frame having a space to receive the toothed edge of the saw, files to bear upon opposite sides of the saw-teeth, adjustable carriers for said files, supports to rest upon the toothed edge of the saw, and handles for sliding the dresser along the saw, substantially as described.

2. A saw-tooth dresser, comprising a frame having a space to receive the toothed edge of the saw, files to bear upon opposite sides of the saw-teeth, carriers for said files, movably mounted so as to move the files to engage and release the saw, and handles connected to the carriers for sliding the dresser along the saw and varying the pressure of the files upon the saw, substantially as described.

3. A saw-tooth dresser, comprising a frame having a space to receive the toothed edge of the saw, supports to rest upon the toothed edge of the saw, files to bear upon opposite sides of the saw-teeth, carriers for the files, said carriers being movable toward and from each other, and handles connected to said carriers for sliding the dresser along the saw and varying the pressure of the files upon the saw, substantially as described.

4. A saw-tooth dresser comprising a frame having a space to receive the toothed edge of the saw, supports to rest upon the toothed edge of the saw, file-carriers, adjusting means for the file-carriers, means for allowing the carriers to have a limited back-and-forth independent movement to vary the pressure of the files upon the saw-teeth, and operating-handles connected to said carriers, substantially as described.

5. A saw-tooth dresser comprising a pair of spaced longitudinal bars, bridge-pieces located above and connecting the ends of the bars, outwardly-projecting arms projecting from said bridge-pieces to rest upon the toothed edge of the saw, file-carriers adjustably mounted on the bars, and handles connected to said carriers, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GEORGE GLASS.

Witnesses:

ANNA F. RYAN,
MARGARET H. KERS.