L. N. MEADOWS.

SAW SET.

APPLICATION FILED JULY 12, 1909.

985,270.

Patented Feb. 28, 1911.

Fig. 1.

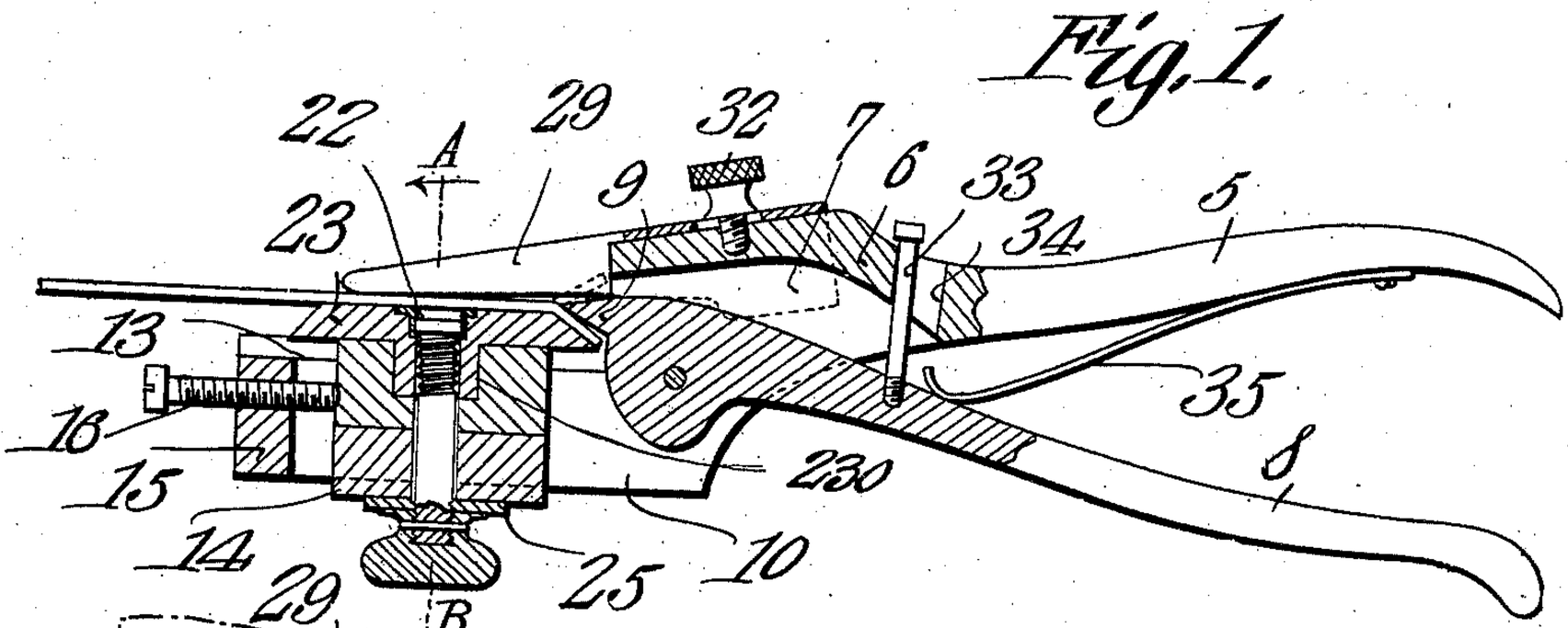


Fig. 2.

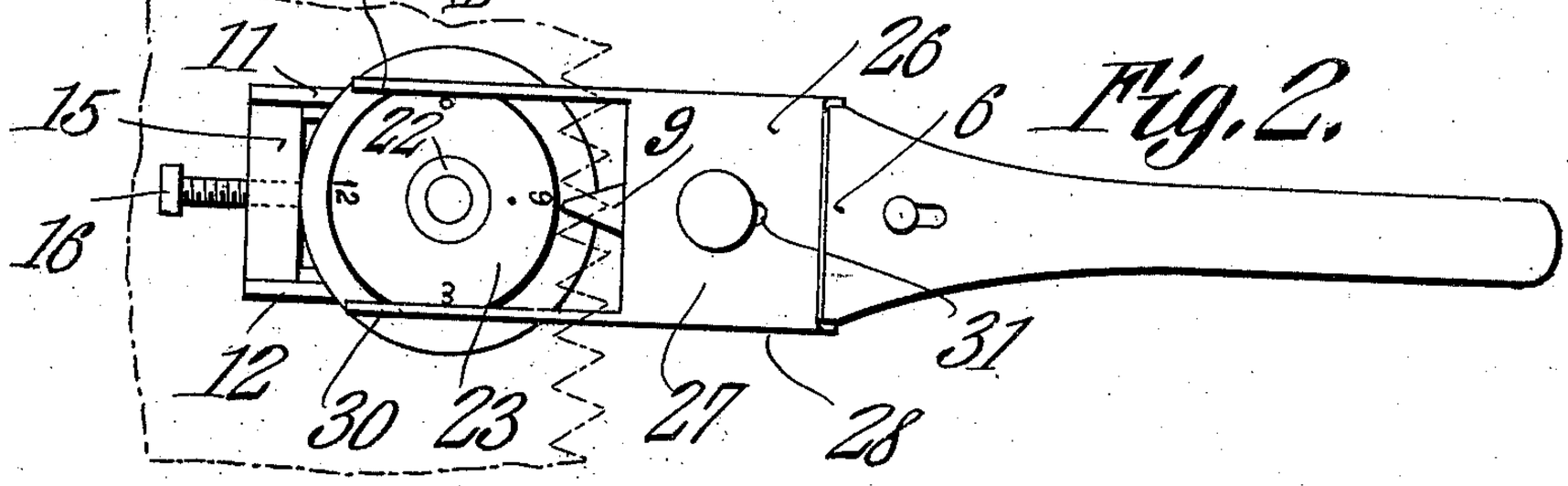


Fig. 4.

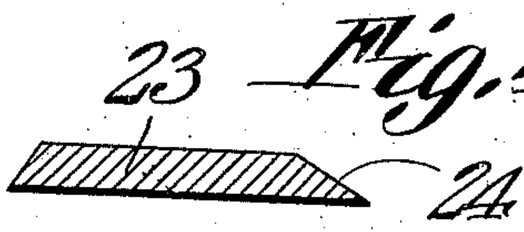
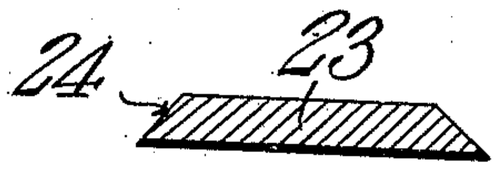


Fig. 5.



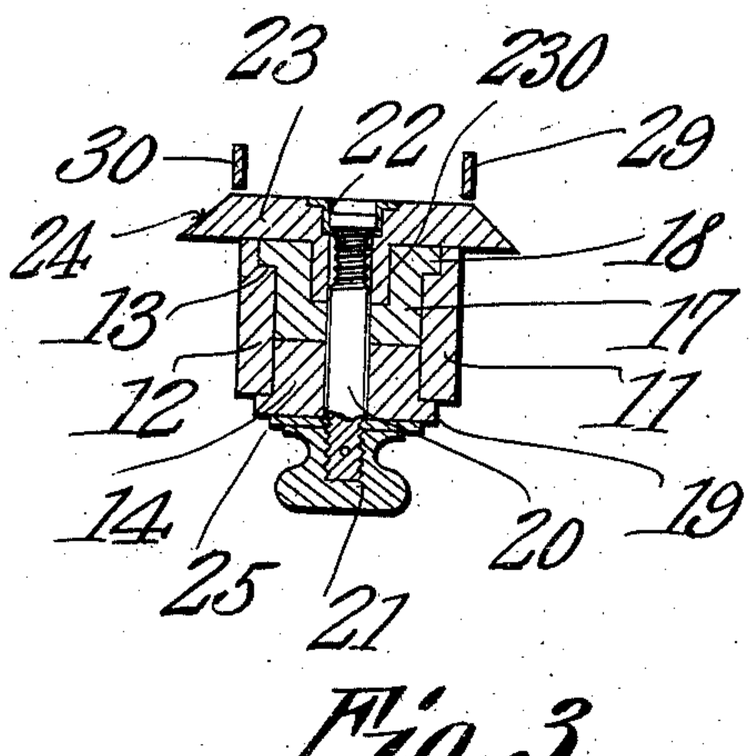


Fig. 3.

Witnesses

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LOYD N. MEADOWS, OF WICHITA, KANSAS.

SAW-SET.

985,270. Specification of Letters Patent. Patented Feb. 28, 1911.

Application filed July 12, 1909. Serial No. 507,165.

To all whom it may concern:

Be it known that I, LOYD N. MEADOWS, a citizen of the United States, residing at Wichita, in the county of Sedgwick and State of Kansas, have invented a new and useful Saw-Set, of which the following is a specification.

My invention relates to saw sets, and has for an object to provide a device of this character which will be adjustable to either a fine or coarse toothed saw.

One of the difficulties experienced with the usual form of saw set is that the set jaw strikes so near the point of each tooth that there is not a sufficient set given to the tooth to prevent the saw from dragging when in operation.

My present invention overcomes this difficulty by the provision of a disk-like anvil having a bevel formed on its periphery which differs at various points so that the rotary setting of the disk provides an adjustable abutment for the set jaw of the tool and which so positions each tooth in relation to the set jaw that it will be sprung from its base rather than from its point as in the usual form of saw sets.

With the above advantages and other objects in view which will appear as the nature of the invention is better understood, my invention consists of the novel details of construction and combination of parts illustrated in the accompanying drawing, described in the following specification and set forth in the appended claims.

In the accompanying drawing, Figure 1 is a longitudinal sectional view of my improved saw set. Fig. 2 is a plan view of the same. Fig. 3 is a cross section through the line A—B of Fig. 1 looking in the direction of the arrow head. Fig. 4 is a sectional detail view through the longitudinal diameter of the gage disk. Fig. 5 is a similar view taken at a right angle to Fig. 4.

In a more detailed description of my invention in which like characters of reference designate similar parts in the views shown, 5 designates the fixed handle of the holding jaw which terminates in a head 6 having a longitudinal slot 7 in which the curved or movable handle 8 of the working jaw is pivoted. On the end of the handle 8 is formed the actuating or set jaw 9 which is substantially pyramidal in facial contour so as to adapt it to set teeth of various sizes and lengths. The set jaw is preferably removably secured in the end of the handle in order to facilitate its removal for repairs.

The head 6 terminates in a frame 10 whose sides 11 and 12 are recessed at their upper edges to form ledges 13. A screw 16 takes inwardly through the outer end 15 of the frame, and is adapted to bear against a supporting member and to adjust it longitudinally within the frame. Said member comprises an upper section 17 having lateral ribs 18 engaging the ledges 13, and a lower section 14 having lateral ribs 19 engaging beneath the lower edges of the sides 11 and 12. Passing loosely upward through both sections of the supporting member is a screw 20 having a winged head 21 fixed to its lower end beneath a washer 25 as shown, and its threaded upper portion extending loosely through a circular boss 230 (depending from the center of an anvil 23) and engaging threads in a nut 22 fixed in said anvil. By these means the latter may be clamped upon the supporting member and the sections of said member simultaneously clamped upon the sides of the frame 10 by tightening up the screw 20, and when said screw is loosened the supporting member can be adjusted longitudinally within the head by the screw 16 and the anvil can be adjusted rotarily upon said member. The edge 24 of the anvil is formed on a bevel which differs at various points around its periphery as seen in Figs. 4 and 5, and opposite such points its upper face is marked by index numerals some of which are shown in Fig. 2. In practice the index figure on the anvil which corresponds to the number of teeth to an inch as usually stamped on the saw blade, is disposed toward the set jaw 9 in order to bring the proper point in the beveled edge 24 into position beneath said jaw so that it will coact therewith, after which the screw 16 is adjusted to bring said beveled edge more or less under the set jaw according to how much of the length of the saw teeth it is desired to set.

For holding a saw blade seated upon the upper surface of the anvil a clamping member 26 is provided. The clamping member comprises a body portion 27 having downturned edges 28 which slidingly fit the sides of the head 6 and extend forwardly in prongs 29 and 30 which have their lower active edges beveled to bear against the upper surface of the saw blade and operate to securely hold the same against the upper

surface of the anvil and prevent the saw from jumping or sliding when the pressure of the set jaw is brought to bear upon its teeth.

Formed in the body portion 27 of the clamping member is a longitudinal slot 31 engaged by the shank of a thumb screw 32 seated in the head 6. The object of this construction is to provide an adjustable clamping member that will securely clamp saws of different thicknesses in position during the operation of the tool, this being effected by loosening the thumb screw and sliding the clamping member lengthwise upon the head 6, thereby increasing the distance between the beveled active edges of the prongs and the anvil so that saws of various thicknesses may be inserted therebetween.

In order to limit the pressure of the set jaw upon the teeth of the saw blade, a stop screw 33 is engaged through a slot 34 formed in the handle of the holding jaw and screwed into a threaded opening in the actuating jaw, as shown, the screw when in contact with the forward end of the slot preventing any further movement of the jaw members.

A spring 35 is seated between the handles of the holding and actuating jaw and serves to normally hold the handles spaced apart.

From the foregoing description, taken in connection with the accompanying drawing, it is thought that the construction and operation of my invention will be easily understood without a more extended explanation, it being understood that various changes in the form, proportion and minor details of construction may be made without sacrificing any of the advantages or departing from the spirit of the invention.

What is claimed is:

1. In a saw set, the combination with two pivoted handles, and a set jaw carried by one of them; of a head on the other forming an open frame, a supporting member composed of two sections having ribs mounted slidably within the frame, a screw through the end of the frame for adjusting said member longitudinally therein, a disk-like anvil having its periphery beveled differently at various points, and a screw passing loosely through the sections of the supporting member at right angles to said other screw and its threads connected with said anvil.

2. In a saw set, the combination with two pivoted handles, and a set jaw carried by one of them; of a head on the other forming an open frame whose sides have ledges along their upper edges, a supporting member composed of two sections mounted slidably within the frame, ribs on the upper section engaging said ledges, ribs on the lower section engaging beneath the edges of the frame, means for adjusting said member longitudinally within the frame, a disk-like anvil having its periphery beveled differently at various points, and a screw passing loosely through the sections of the supporting member and its threads connected with said anvil.

3. In a saw set, the combination with two pivoted handles, and a set jaw carried by one of them; of a head on the other forming an open frame, a supporting member composed of two sections mounted loosely within the frame, ribs on the sections slidably engaging said frame, a disk-like anvil having its periphery beveled differently at various points, a boss depending from its center and journaled in the upper section, a nut seated in the anvil, and a screw passing loosely through both sections and said boss engaging said nut.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

LOYD N. MEADOWS.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."