April 18, 1939. F. W. SEYBOLD 2,154,999

COMPOSING ROOM SAW

Original Filed May 21, 1936

FIG. 1.

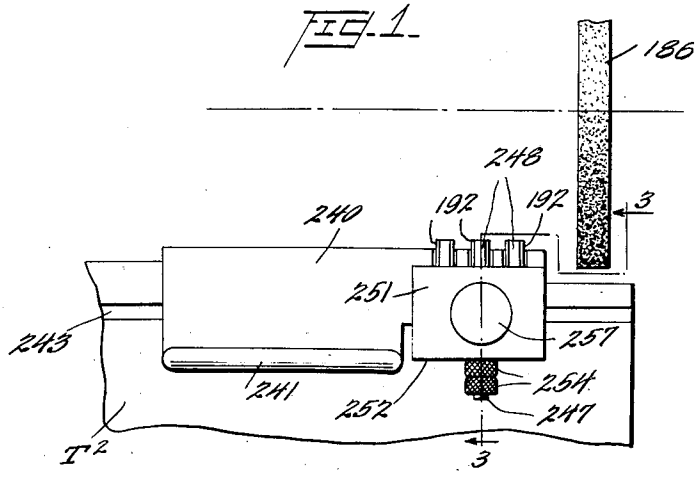


FIG. 2.

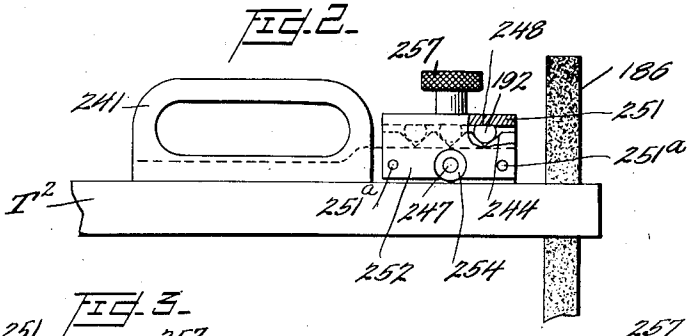


FIG. 3.

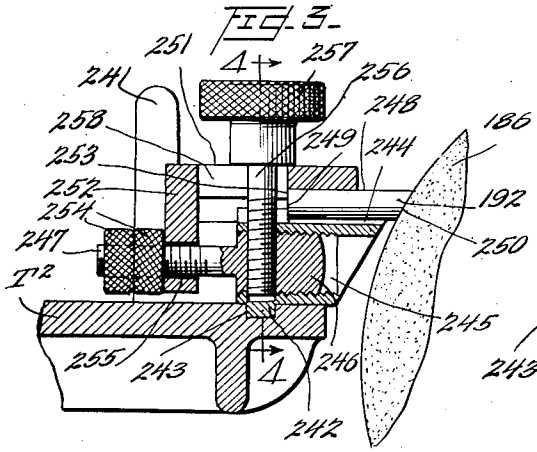
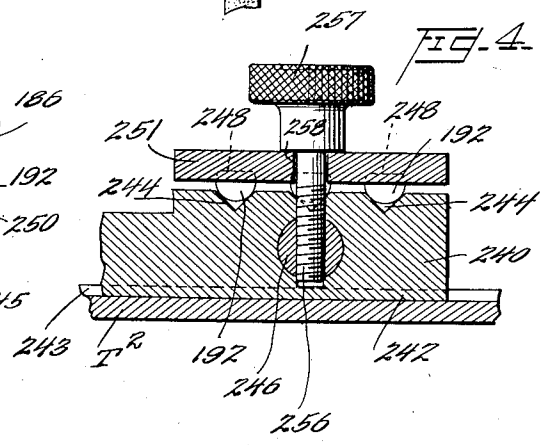


FIG. 4.



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UNITED STATES PATENT OFFICE

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COMPOSING ROOM SAW

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Original application May 21, 1936, Serial No. 81,069. Divided and this application March 12, 1937, Serial No. 130,606

2 Claims. (Cl. 51—92)

The present invention relates to metal saws, and more particularly to composing room saws.

An object is to provide an improved device for grinding the trimmer knives whereby a plurality of knives are all ground to exactly the same length.

Other objects and features of novelty will be apparent from the description taken in connection with the drawing, in which,

Fig. 1 is a plan view of a portion of the table of the machine and the trimmer knife holder mounted thereon;

Fig. 2 is a front elevation of the parts shown in Fig. 1;

Fig. 3 is a sectional elevation taken substantially on the line 3—3 of Fig. 1 and looking in the direction indicated by the arrows; and

Fig. 4 is a sectional elevation taken substantially on the line 4—4 of Fig. 3 and looking in the direction indicated by the arrows.

The function of the trimmer knife grinding device is to hold the trimmer knives in such a way that all can be ground to the same exact length. It is important that all the knives be of the same length because in the saw hub the non-cutting ends abut against the face of an adjusting nut so that each knife projects the same amount and does its share of the work.

The attachment consists essentially of a body 240 having a handle part 241. This body part is provided with a tongue 242 projecting from its under face and adapted to fit and slide in a groove 243 formed in the table T^2, said groove being parallel to the axis of the grinding wheel 186. In its upper face the body part 240 is formed with the V-shaped grooves 244 adapted to receive the knives. The body portion is also formed with a transverse bore 245 in which is threaded the enlarged head 246 of the holder stud 247.

The knives 192 are mainly cylindrical except for a slabbed off portion forming the flat surface 248. The rear ends 249 are flat and at right angles to the axis of the knives. The cutting ends are bevelled to form the cutting edges 250.

The knives are adapted to be clamped in adjusted position in the V grooves 244 by an inverted L-shaped member having the horizontal leg 251 and the vertical leg 252 slidable on pins 251^a. The undersurface of the horizontal leg is formed with the shoulder 253 against which the rear ends of the knives abut. The amount that the knives project from the holder is adjusted by the nuts 254 threaded on the stud 247, the latter extending through a hole 255 in the vertical leg of the L-shaped member. When the nuts 254 are screwed up on the stud 247 the L-shaped member is moved toward the right as viewed in Fig. 3 and because of the shoulder 253 abutting the ends of the knives, the latter, in turn, are moved toward the right. The knives are clamped in adjusted position by the clamp screw 256 having the knurled head 257. This screw extends through a slot 258 in the horizontal leg 251 and is threaded through the body portion 240 and the enlarged head 246 of the holder stud.

To grind three trimmer knives simultaneously to equal lengths, the clamp screw 256 and lock nuts 254 are loosened and the three knives inserted in the V-shaped grooves with the L-shaped clamp over them. The table is elevated and the holder placed on the table so that its tongue engages the slot therein. By elevating the saw table to the right height, the proper angle of bevel, preferably 60°, can be obtained. The inner lock nut 254 is now advanced against the clamp until the points of the trimmer knives barely touch the grinding wheel. Then the clamp screw 256 is tightened and thereafter the lock nuts 254. For the grinding operation, the holder is slid back and forth in the groove thereby bringing the knives across the face of the grinding wheel.

This application is a division of my application, Serial No. 81,069, filed May 21,1936.

Although one form of the invention has been described in detail, it is to be understood that the invention is not thus limited, but includes modifications and changes coming within the scope of the appended claims.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. In a machine of the character described, in combination, a grinding wheel, a table having a guide groove parallel to the axis of the wheel, a trimmer knife holder comprising a body having a tongue, fitting, and slidable in said groove and means to clamp a plurality of trimmer knives to the holder with their non-cutting ends in a plane parallel to the axis of the wheel and having recesses in its top surface to receive trimmer knives each with its axis at right angles to a plane containing the axis of the wheel, an inverted L-shaped clamp member having a shoulder on the underside of its horizontal leg engaging the non-cutting ends of the knives, means cooperating with the vertical leg of the member supporting the same for adjustment toward and from the

wheel and means to lock the member in adjusted position with the knives clamped in the groove by said horizontal leg.

2. In a machine of the character described, in combination, a grinding wheel mounted for rotation about an axis, a table having a guide groove extending parallel to the grinding wheel axis, and a trimmer knife holder comprising a body having a portion projecting into said groove, a clamping member having a portion overlying the body, the surface of said body which directly underlies said clamping member having parallel grooves formed therein for the reception of trimmer knives and the clamping member having means for engaging the non-cutting ends of said knives, means adjustably connecting the body and clamping member whereby the clamping member may be advanced toward the wheel, thus simultaneously advancing any trimmer knives resting in said grooves, and second means for firmly securing the clamping member to the body for any position of adjustment of said member, and securely clamping said knives between said member and body.

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