May 12, 1931. N. PANABAKER 1,804,801

LUMBER MARKER

Filed June 1, 1929

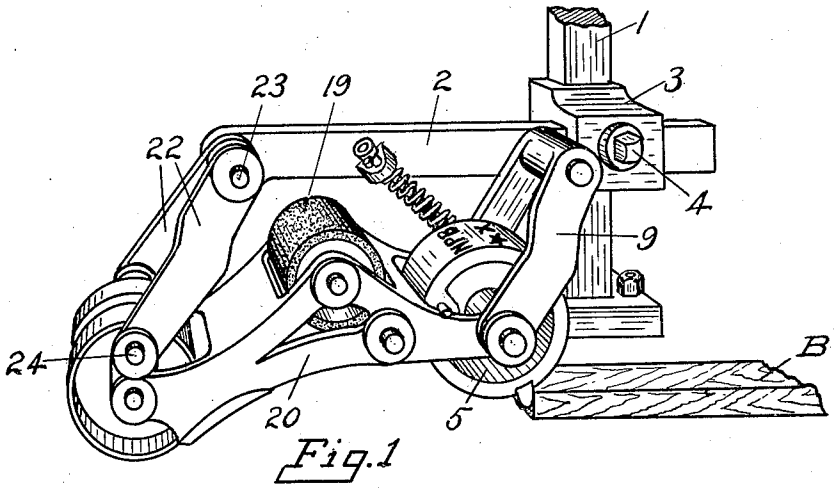


Fig. 1

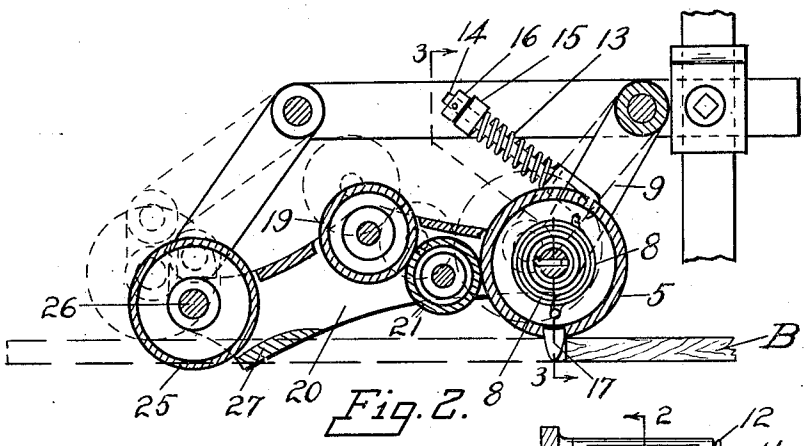


Fig. 2.

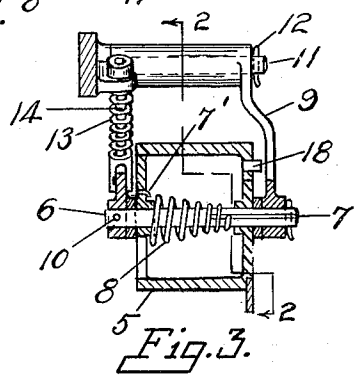


Fig. 3.

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UNITED STATES PATENT OFFICE

NEAL PANABAKER, OF COEUR D'ALENE, IDAHO

LUMBER MARKER

Application filed June 1, 1929. Serial No. 367,697.

My present invention relates to improvements in lumber markers of printing devices of the rotary or rolling contact type operated by the work, as a board or plank, as the latter is fed past the marker. A trip-actuated printing roll is operated by the board or plank, and the marker is trip-operated to remove the printing roller and hold it in inoperative position after the printing roller has performed its function of impressing a brand or symbol on the upper face and at the front end of a board or plank.

The marker of my invention involves the use of a spring pressed printing roller for rolling contact with the board or plank; the printing roller is operated by contact from the board or plank and a reversing spring returns the printing roller to normal initial position; while a pivoted supporting frame for the rollers is trip-operated to lift the marker to inoperative position to permit forward feed of the plank or board. Means are provided for adjusting the marker for varying thicknesses of the boards or planks, and the ink may be supplied for the marker either from a reservoir, or by use of a brush in the hands of an attendant.

The invention consists in certain novel combinations and arrangements of parts as will hereinafter be more fully set forth and claimed. In the accompanying drawings I have illustrated one complete example of the physical embodiment of my invention in which the parts are combined and arranged according to one mode I have thus far devised for the practical application of the principles of my invention.

Figure 1 is a perspective view of the marker showing the end of a board or plank engaging the trip-lug for operating the marker. Figure 2 is a vertical sectional, detail view, as at line 2—2 of Figure 3 with the parts in position of Figure 1 and also showing by dotted lines the position of the marker after it has performed its function of printing the brand or symbol on the board or plank. Figure 3 is a transverse vertical sectional view at line 3—3 of Figure 2.

In Figures 1 and 2 a portion of a plank or board is indicated by the letter B, and it will be understood that the brand, mark, or symbol is applied to the upper face of the board near its forward end as the board advances from right to left in Figures 1 and 2.

The marker is adjustably supported on a vertical or upright stationary post 1, upon which is mounted a slide block 3 that is fixed on the post in adjusted position by a set bolt or screw 4 and the marker may be vertically adjusted on the post to adapt the printing roller 5 for use with varying thicknesses of boards B. The printing roller is provided with a brand, mark, or symbol, as "N B P" a star, and "X" and these symbols are applied to the board as the roller revolves in frictional contact with the upper face of the board.

The printing roller is journaled on an axis 6 which is split at one end 7 to receive one end of a spring 8 that is coiled about the axle, and the latter is mounted in the free ends of the arms of a U-shaped yoke 9. The roller is made hollow to accommodate the spring, and at 7′ one end of the spring is anchored in a wall of the hollow roller whereby the spring returns the roller to initial position after it has revolved on the axle by frictional contact with the board.

As best seen in Figure 3 the axle is fixed within the ends of the arms of the yoke by a pin 10, and the yoke 9 is pivoted to swing on a journal pin 11 that is rigid with and projects latterly from the supporting arm 2 fixed in the adjusting block 3 on the post 1. The yoke is retained on its journal pin by means of a cotter pin 12, and the yoke is adapted to swing in an arc as indicated by dotted and full lines in Figure 2.

The yoke and its printing roller are pressed to operative position by means of a spring 13 coiled about a bolt 14 fixed at one end to the yoke, and at its other end the bolt passes loosely through a perforated lug 15 on the arm 2. At its end above the lug, the bolt is provided with a fixed collar 16 to limit the spring actuated movement of the yoke, and as the spring is interposed between the yoke and the lug, the spring acts as a cushion for the tripping movement of the yoke and printing roller.

A trip lug 17 is carried at the periphery of the roller 5 in the path of movement of the board and for contact therewith in the initial rotary movement of the roller, after which the roller is turned by its rolling contact with the face of the board. A stop pin 18 is also mounted on the roller which abuts against the roller frame 20 to limit the turning movement of the printing roller under tension of the spring 8 within the hollow roller.

An inking roller 19 is journaled in the frame 20, which roller may be supplied with ink from a reservoir, or the ink may be applied thereto by a brush in the hands of an attendant, and the ink is transferred from roller 19 to the printing roller 5 by a transfer roller 21 journaled in the frame 20 intermediate of these rollers.

The roller frame 20 is pivoted on the axle 6 and is suspended from the free end of the supporting arm by means of links 22 pivoted at 23 on the arm and at 24 to the frame, and through the pivoted yoke and the pivoted links the roller frame is suspended at its ends below the arm 2 and adapted to swing on the two pivot points as indicated by dotted lines in Figure 2.

A supporting roller 25 is journaled at 26 in the frame, and adjacent to this roller a cross bar 27 on the frame performs the function of a trip for the frame. Thus, as the end of the board B passes to the left in Figure 2, and by frictional contact operates the printing roller in contact with the upper face of the board, the end of the roller strikes the trip bar 27 to elevate the frame. As the frame is elevated the roller 5 is lifted from contact with the board (after having printed the symbol thereon) and then the supporting roller 25 rides along on the face of the board until the latter passes from beneath the roller. By the roller 25, the frame and inking roller as well as the printing roller, are all held in elevated position as indicating by dotted lines in Figure 2, and after the board passes from beneath the roller 25 the frame is returned to normal lowered position ready for the succeeding board to be printed.

Having thus fully described my invention what I claim as new and desire to secure by Letters Patent is:—

The combination with a supporting arm, a pivoted yoke, pivoted links and a roller frame pivoted in the yoke and links, of a trip arm on the frame and a supporting roller journaled in the frame, an inking roller and a transfer roller journaled in the frame, a spring returned printing roller journaled in the frame and a stop lug therefor, a trip lug on the printing roller, and a cushion spring between the yoke and arm.

In testimony whereof I affix my signature.

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