Jan. 11, 1938. J. A. HUNT 2,104,837

BUFFER ATTACHMENT

Filed May 10, 1937

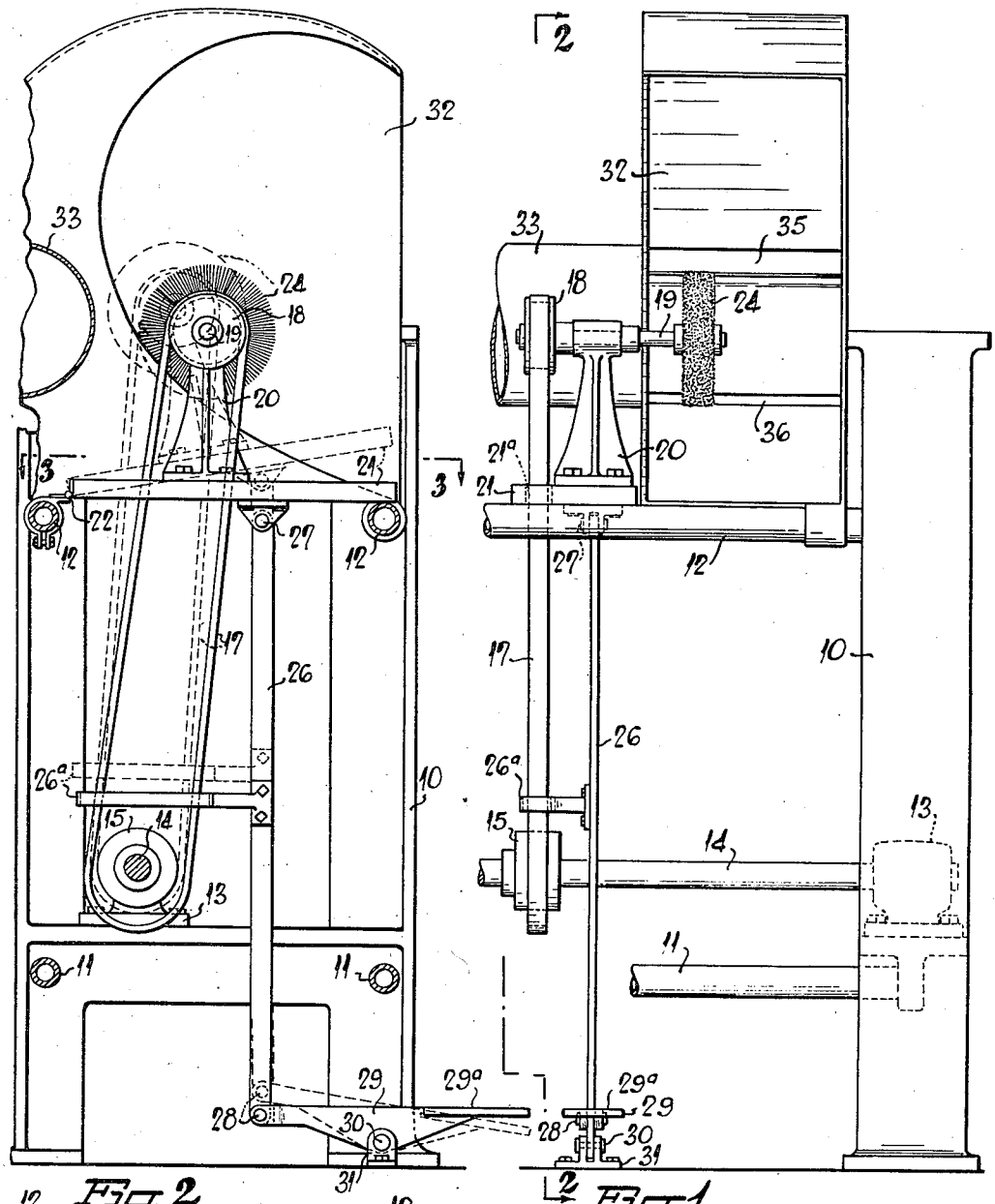


Fig. 2

Fig. 1

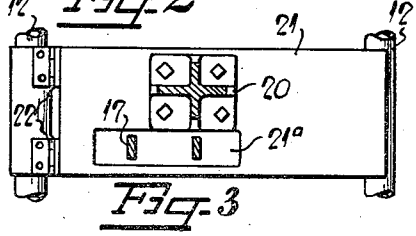


Fig. 3

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Patented Jan. 11, 1938

2,104,837

UNITED STATES PATENT OFFICE

2,104,837

BUFFER ATTACHMENT

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Application May 10, 1937, Serial No. 141,773

2 Claims. (Cl. 12—1)

This invention relates to a buffer attachment and more especially to one which is adapted to be pivotally mounted upon a shoe finishing machine so as to contact the surface of soles and roughen them prior to being glued upon the bottom of a shoe. Heretofore, the buffer attachments have been fixed upon a constantly driven shaft upon which was also mounted other attachments for finishing the sole of a shoe after it has been attached thereto. Since a buffer usually comprises a plurality of sharpened wires it is evident that if the surface of this buffer, while being rotated, comes into contact with any part of the operator's body, severe injury is likely to result.

It is therefore, an object of this invention to provide a buffer for shoe finisher machines which is pivotally mounted and normally disengaged from the drive shaft of the finishing machine, but which may be connected or disconnected to the drive shaft by a suitable foot lever construction. Not only is this type of construction desirable as far as preventing injury to the operator, but it is also very desirable to have the movement of the buffer controlled by the foot of the operator while the hands of the operator are being used to properly manage the work piece. If, for any reason, it is desired to slow up the speed of the buffer, it will only be necessary to relieve the pressure to a limited degree upon the foot-operated mechanism so that a certain amount of slippage will be allowed between the drive shaft pulley and the belt which drives the buffer.

Some of the objects of the invention having been stated, other objects will appear as the description proceeds when taken in connection with the accompanying drawing, in which:

Figure 1 is an elevation of a portion of a finishing machine showing my pivoted buffer attachment applied thereto;

Figure 2 is a vertical sectional view taken along the line 2—2 in Figure 1;

Figure 3 is a sectional, plan view taken along the line 3—3 of Figure 2.

Referring more specifically to the drawing, the numeral 10 denotes an end frame of a shoe finishing machine which has connected thereto suitable longitudinal struts 11 and 12, the strut 11 being used to connect the lower portions of the end frames, whereas, the struts 12 are used to join the upper portions thereof. The end frame 10 has a suitable bearing 13 mounted thereon in which rotates the main drive shaft 14 of the finishing machine, said shaft having conventional pulley 15 secured thereon. The lower portion of a belt 17 normally encircles the pulley 15 and is slightly removed therefrom. The upper end of this belt is mounted upon pulley 18, which, in turn, is fixed on the end of buffer shaft 19. This shaft is rotatably mounted in bearing 20 which is secure to pivoted member 21. The rear end of the member 21 is pivoted as at 22 to one of the struts 12, whereas, the free or the front end of this same member normally rests upon another strut 12 which is disposed at the same level.

It will be noted by referring to Figure 2 that the belt 17 normally does not contact the pulley 15, but when it is desired to cause the shaft 19 to rotate and thereby rotate the buffer 24 on the end thereof it will be necessary to pivot the member 21 and its associated parts to dotted line position as shown in Figure 2. This rotation is effected by means of a suitable foot lever construction comprising a vertically disposed link 26 which is pivotally secured as at 27 to the lower side of member 21. The lower end of the link 26 is pivotally secured as at 28 to foot lever 29 and this lever in turn, is pivoted as at 30 to bracket 31 which rests upon the floor. When the operator presses his foot down upon the surface 29a of foot lever 29, the parts will be rotated to dotted line position in Figure 2, which will cause the belt 17 to move upwardly and frictionally engage the pulley 15 to thereby cause the main drive shaft 14 to rotate the buffer 24.

The belt 17 is held in the proper relative position to pulleys 15 and 18 by means of slot 21a in member 21 and also by belt guide 26a which is secured to the link 26.

When the buffer 24 is being rotated, and a work piece is being applied thereto, a certain amount of dust and shavings will result. In order to properly take care of this waste, the buffer 24 has been disposed within the confines of a conventional dust collector 32 which has leading therefrom a suction draft pipe 33. The draft pipe 33 communicates with the inside of the dust collector 32 by means of restricted slots 35 and 36 inside of the dust collector. Not only does this pivoted buffer attachment provide foot-operated means for effecting rotation of the buffer at will, but it is evident that upon pressure being applied upon the foot lever, the rotation of the board member 21 will cause the buffer to be thrown upwardly and farther back into the dust collector thereby insuring that all portions of the waste will be withdrawn through the suction pipe 33.

In the drawing and specification there has been set forth a preferred embodiment of the invention, and although specific terms are employed,

they are used in a generic and descriptive sense only, and not for purposes of limitation, the scope of the invention being set forth in the appended claims.

I claim:

1. In a shoe repair machine having a main drive shaft and driven shaft, a frame in which said drive shaft is mounted for rotation, a pivoted frame in which said driven shaft is mounted, a buffer mounted on the driven shaft, a pulley on the main drive shaft, a second pulley on the driven shaft, a belt disposed around said pulleys and resting at all times on the second pulley and normally projecting below and out of contact with the pulley on the drive shaft, a foot lever for raising said driven shaft to cause said belt to engage the pulley on the drive shaft to impart rotation to the driven shaft, a suction hood disposed adjacent the buffer, and the pivoted frame being pivoted at its rear end whereby upon raising of the pivoted frame it will also move backwardly and upwardly into said hood and into the zone of suction so as to remove the material removed from a work piece by the buffer.

2. In a shoe repair machine having a main frame, a drive shaft mounted for rotation in said frame, a vertically movable frame mounted in said frame, the inherent weight of the vertically movable frame causing it to occupy normally a lowered position with respect to said main frame, a foot lever for raising said vertically movable frame, a driven shaft mounted in said vertically movable frame, a buffer wheel secured on said driven shaft, a pulley on each of said shafts, a belt normally resting on the pulley on the driven shaft and projecting below the pulley on the drive shaft and out of contact therewith, a foot lever for raising said vertically movable frame to move the belt into contact with the pulley on the drive shaft to impart rotation to the driven shaft and the buffer mounted thereon, said vertically movable frame being pivoted to the main frame at the rear of the vertically movable frame, a suction hood disposed above and rearwardly of the buffer, whereby upon upward movement of the vertically movable frame it will also move backwardly and upwardly to place the buffer close to the opening in said suction hood.

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