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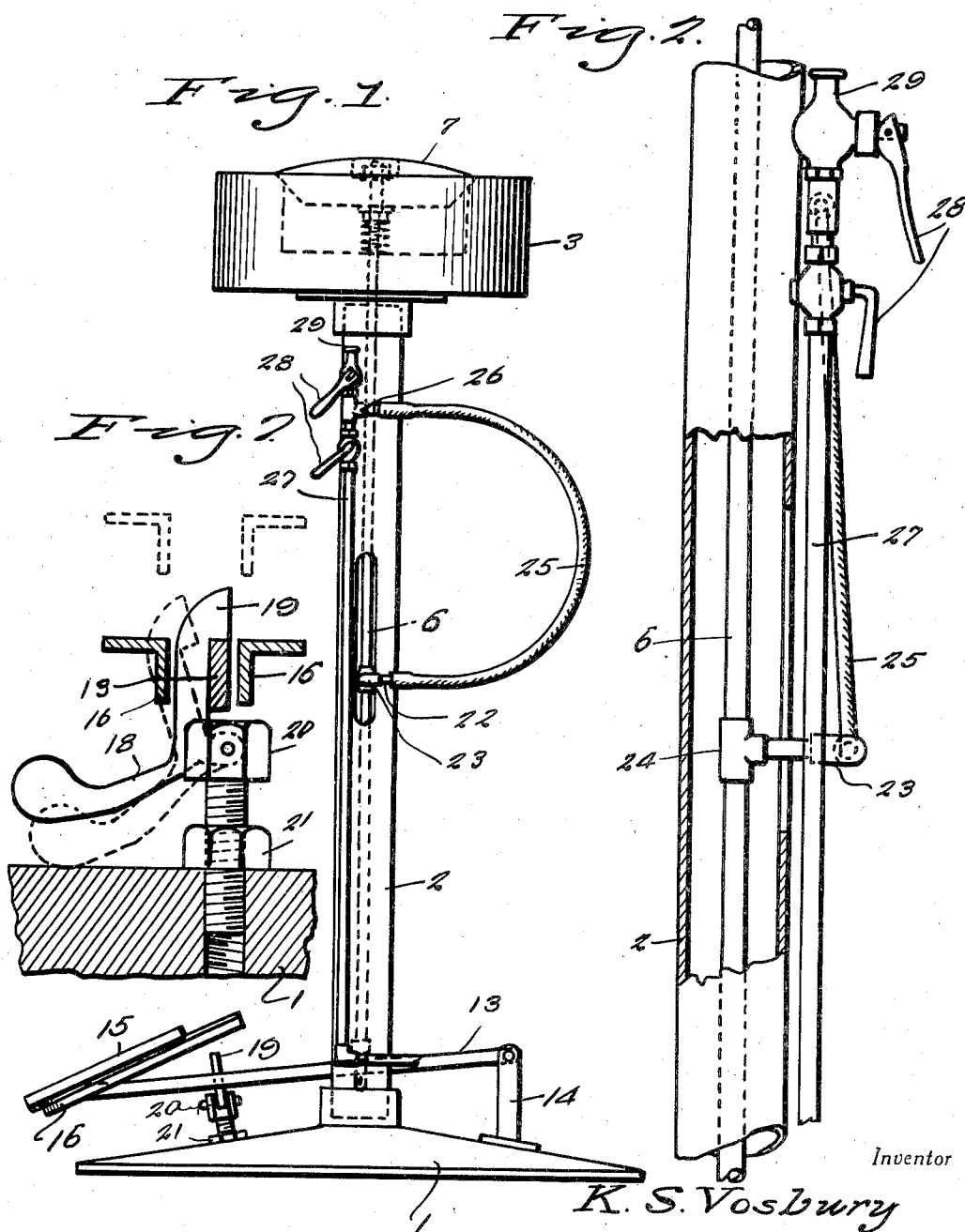
K. S. VOSBURY

2,126,434

GLOVE TESTING DEVICE

Filed Aug. 19, 1937

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

Fig. 3.

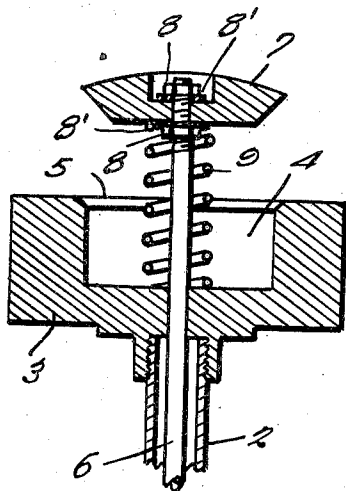


Fig. 4.

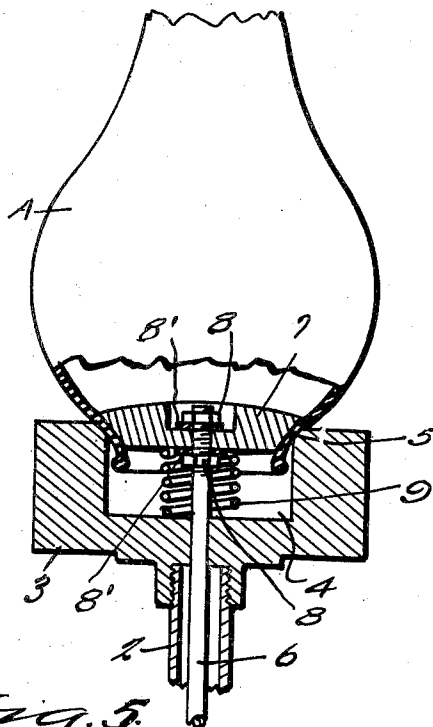


Fig. 8.

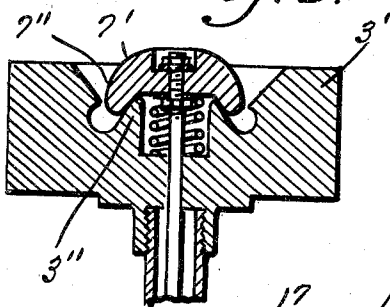
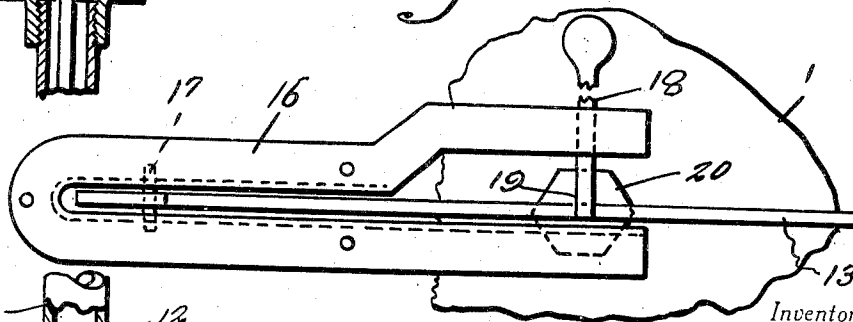


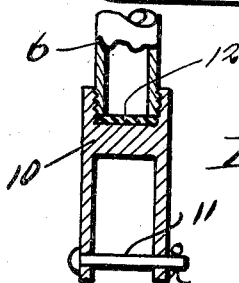
Fig. 5.



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Fig. 6.



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UNITED STATES PATENT OFFICE

2,126,434

GLOVE TESTING DEVICE

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3 Claims. (Cl. 73—51)

This invention relates to a glove testing device, the general object of the invention being to provide means for holding the cuff part of a glove and introducing air or the like into the glove to inflate the same so that the glove can be readily inspected and any defects therein can be easily seen.

Another object of the invention is to provide a foot operated member for operating the holding means so that both hands of the operator are left free for the manipulation of the inflated glove while the same is being inspected.

A still further object of the invention is to provide means whereby the foot operated means is locked in operated position, with means also operated by the foot for easily and quickly releasing the foot operated means from the locking means whenever desired.

This invention also consists in certain other features of construction and in the combination and arrangement of several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claims.

In describing the invention in detail, reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:—

Figure 1 is an elevation of the invention.

Figure 2 is an enlarged elevation with parts in section of the intermediate part of the device looking toward the front thereof.

Figure 3 is a vertical sectional view through the clamping means showing the same in inoperative position.

Figure 4 is a similar view but showing the clamping means as holding a glove in position with the glove inflated.

Figure 5 is a plan view of the pedal lever with the pedal board removed.

Figure 6 is a sectional detail view showing the lower end of the member which is connected with the movable jaw and showing the forked end for the foot pedal lever.

Figure 7 is a sectional detail view showing the latch means for the foot pedal.

Figure 8 is a sectional view showing a modified form of clamping means.

In these drawings, the numeral 1 indicates a base and the numeral 2 indicates a tubular upright, the lower end of which is suitably connected with the base and the upper end of which is suitably connected to a block 3 which forms the stationary jaw of a set of glove holding jaws, this block 3 having a recess 4 therein which opens out through the top of the block and the top of the recess is formed with a beveled top wall 5 which provides the gripping part. A pipe 6 is slidably arranged in the member 2 and slidably passes

through the block 3 and has the movable jaw 7 adjustably connected to its upper end by the upper and lower nuts 8 and a spring 9 encircles the upper part of the pipe 6 and is located between the jaw 7 and the bottom of the recess 4 in the block 3, this spring tending to hold the movable jaw in raised position relative to the stationary jaw 3. The lower end of the pipe 6 is threaded in the upper end of a forked member 10 having a pin 11 passing through its prongs and a gasket 12 is placed in the socket in which the lower end of the pipe 6 fits to prevent leakage of air through the lower end of the pipe 6. A foot pedal lever 13 is pivoted to an upright 14 at the rear of the base 1 and said lever passes through a slot in the tubular upright 2 and between the prongs of the member 10 and over the pin so that when the lever is depressed the member 10 and the pipe 6 are pulled downwardly so as to lower the jaw 7 against the action of the spring 9 to grip a part of a glove between the beveled edge of the jaw 7 and the beveled part 5 of the jaw 3.

A board 15 is fastened to a substantially U-shaped frame 16, preferably formed of angle iron and the front end of the lever 13 extends between the legs of this frame 16 and is pivoted thereto by a pin 17, as shown in Figure 5. One limb of the frame 16 is offset as shown in Figure 5 so as to engage the curved edge of a latch lever 19 which is pivoted to the head of a bolt 20 threaded in a hole in the base 1 and held in adjusted position by the nut 21. Thus the latch lever can be adjusted vertically by turning the bolt. The weighted arm 18 normally holds the latch lever in inoperative position as shown in dotted lines in Figure 7 but when the foot board is depressed by rocking it on the pin 17 a part of the frame 16 will engage the rounded head of the latch lever and move the same to a position over the lever 13, as shown in full lines in Figure 7 so as to lock the lever 13 in lowered position. Then the rear part of the frame 16 moves down alongside the lever 13 and the latch lever so as to hold the latch lever in engagement with the lever 13. Then when it is desired to release the lever 13 the foot board 15 is tilted to the position shown in Figure 1 so that the rear end of the frame 16 will move upwardly into the dotted line position of Figure 7 and then the heavy part 18 of the latch lever will cause the latch lever to move to inoperative position as shown in dotted lines in Figure 7.

A nipple 22 is connected by the couplings 23 with the T 24 which forms a part of the pipe 6 and a hose 25 is connected with the nipple and is connected by a coupling shown generally at 26 with a pipe line 27 leading to a source of air under pressure and valves 28 are located in the pipe one above and one below the coupling 26, the upper valve controlling the outlet 29 for the escape

of air from the hose 25 and the parts attached thereto when the valve 28 is open.

Various types of jaw members may be used with the invention and Figure 8 shows a modification in which the jaw member 3' is formed with a substantially frusto-conical part 3'' which forms a seat for a part of the glove which is placed over the movable jaw 7' which has a depending flange 7'' engaging the seat.

A glove, such as shown at A in Figure 4 is grasped at its cuff opening and a portion of the cuff is placed over the half of the upper jaw 7 farthest from the operator and then the glove is pulled upon until the cuff clears the top jaw.

Then the cuff is released so that it will shape itself over the rim of the jaw. Then the heel of one foot of the operator is placed against the pedal board 15 and pressure exerted to lower the parts and then the pedal board is moved with the toe of the foot to hold the latch lever in engagement with the lever 13. This will lower the jaw 7 and the glove to the position shown in Figure 4 so that the cuff of the glove will be tightly gripped between the two jaws. Then the lower valve 28 is opened, the upper valve being closed so that air will pass from the line through the hose into the pipe 6 and then pass from the upper end of said pipe into the glove to inflate the same. When the glove has been properly inflated the lower valve is closed. Then the glove is examined for defects and the inspector can by pressing upon the glove with his hands or with a suitable tool cause the air to expand desired parts of the glove. After the examination has been completed the glove is grasped with the fingers and the foot board is pressed upon by the heel to raise it above the latch lever so that the lever 13 will raise under the action of the spring 9 and as soon as the cuff of the glove is released the air pressure in the glove will cause the glove to eject itself from the jaw 7. Then to examine the inside surface of the glove a portion of the cuff is reversed, this portion placed on the jaw 7 and the jaw lowered as before described and then when the air is turned on the air pressure will completely reverse the glove and then inflate the same so that the inside surface of the glove can be inspected.

As the air pressure enlarges the glove by inflating the same the defects are also enlarged so that they can be readily seen and thin spots will bulge so that they can readily be detected. The gloves can be easily and quickly put in place and they are removed automatically as soon as the upper jaw is raised and there is no leakage between the parts as the cuff of the glove forms what may be termed a gasket and thus there are no parts to wear as there would be if rubber or other gaskets were used with the machine. As will be seen the pedal parts are self-locking and are sturdy and safe and the surfaces subjected to wear are large and so designed that ordinary wear does not affect them. The defects are easy to find and when found are easy to mark and to be re-examined as the glove does not change its position. Strains may be easily applied to any defective part by manipulating the glove to cause the air pressure to go to such parts and this enables any part of the glove to be broken down.

The pressure of the clamps or jaws on the rubber

glove is adjustable in the following way. First, by varying the thickness and kind of rubber washers used on the top jaw, as shown at 8'; second, adjusting the top jaw up or down by means of the nuts 8; third, adjusting the pedal catch up or down by means of the lock nut; fourth, varying the length of the pedal lever and its fulcrum. The pressure will remain fixed to the desired adjustment.

It is thought from the foregoing description that the advantages and novel features of the invention will be readily apparent.

It is to be understood that changes may be made in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claims.

Having described the invention what is claimed as new is:

1. Means for testing rubber gloves and the like comprising an upright, a jaw member at the upper end of the upright having a gripping face at its upper end, a movable jaw having a gripping face for engaging the face of the first-mentioned jaw, a tube slidably arranged in the upright and the stationary jaw and connected with the movable jaw, spring means for normally holding the movable jaw in raised position, a pedal lever connected with the tube for lowering the same to bring the movable jaw against the stationary jaw and valve controlled means for introducing air into the tube to inflate a glove, the cuff of which is held between the jaws.

2. In a device of the class described an upright, a member connected with the upper end of the upright and having a recess therein, a portion of the wall of which forms a gripping surface which is located at the upper part of the member, a movable jaw having a gripping surface cooperating with the first-mentioned surface for gripping the cuff of a rubber glove between them, a tube connected with the upper jaw and slidably passing through the lower jaw and the upright, a lever connected with the lower end of the tube, a latch member for holding the lever in lowered position with the parts in position holding the upper jaw in lowered position, a pedal member pivotally connected with the lever and having a part for locking the latch in operated position on the lever and said latch having a weighted part for moving it to releasing position when the pedal is in raised position, spring means for normally holding the upper jaw in raised position and valve controlled means for introducing air into the tube to inflate the glove.

3. Means for testing rubber gloves and the like comprising an upright, a stationary jaw at the upper end of the upright having a gripping part in its upper portion, a movable jaw having a gripping part for engaging the gripping part of the first-mentioned jaw, a tube slidably arranged in the upright and the stationary jaw and connected with the movable jaw, spring means for holding the movable jaw in one position, a pedal lever connected with the tube for moving the tube to actuate the movable jaw to its other position and valve controlled means for introducing air into the tube to inflate a glove, the cuff of which is held between the jaws.

KENNETH S. VOSBURY.