April 30, 1946. J. J. BERRY 2,399,538

SQUEEGEE DEVICE

Filed Dec. 8, 1944 2 Sheets-Sheet 1

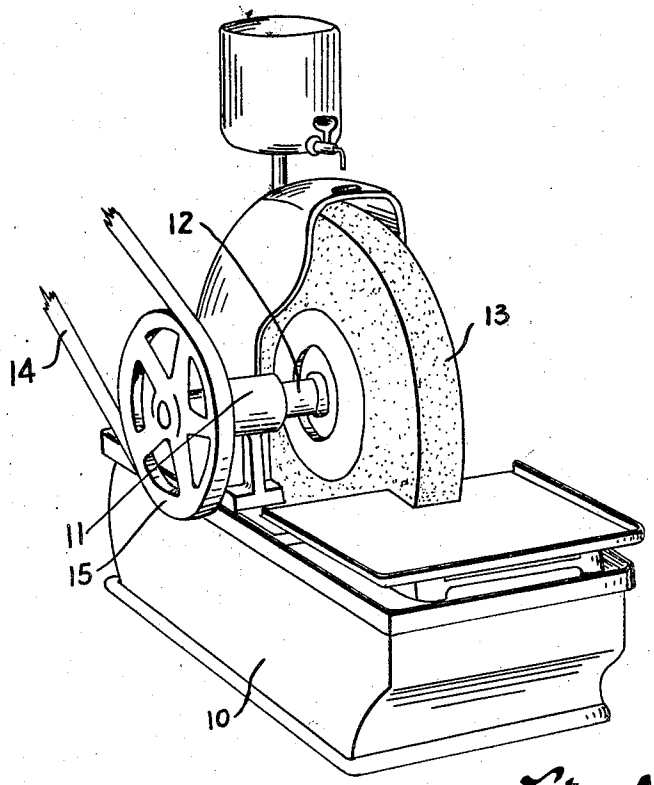



Fig. 1

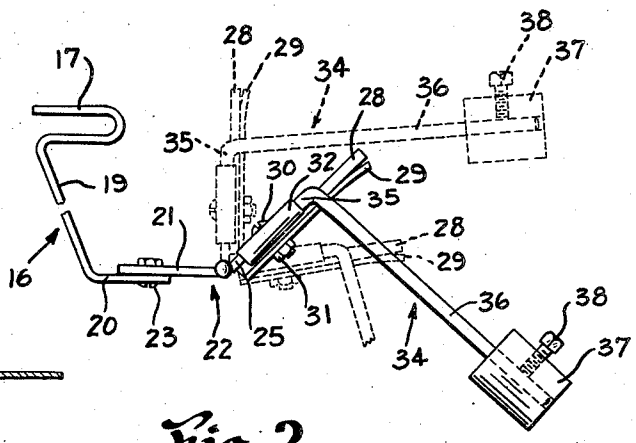



Fig. 2

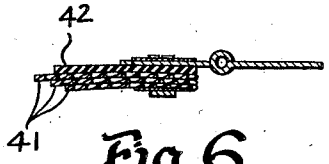



Fig. 6

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SQUEEGEE DEVICE

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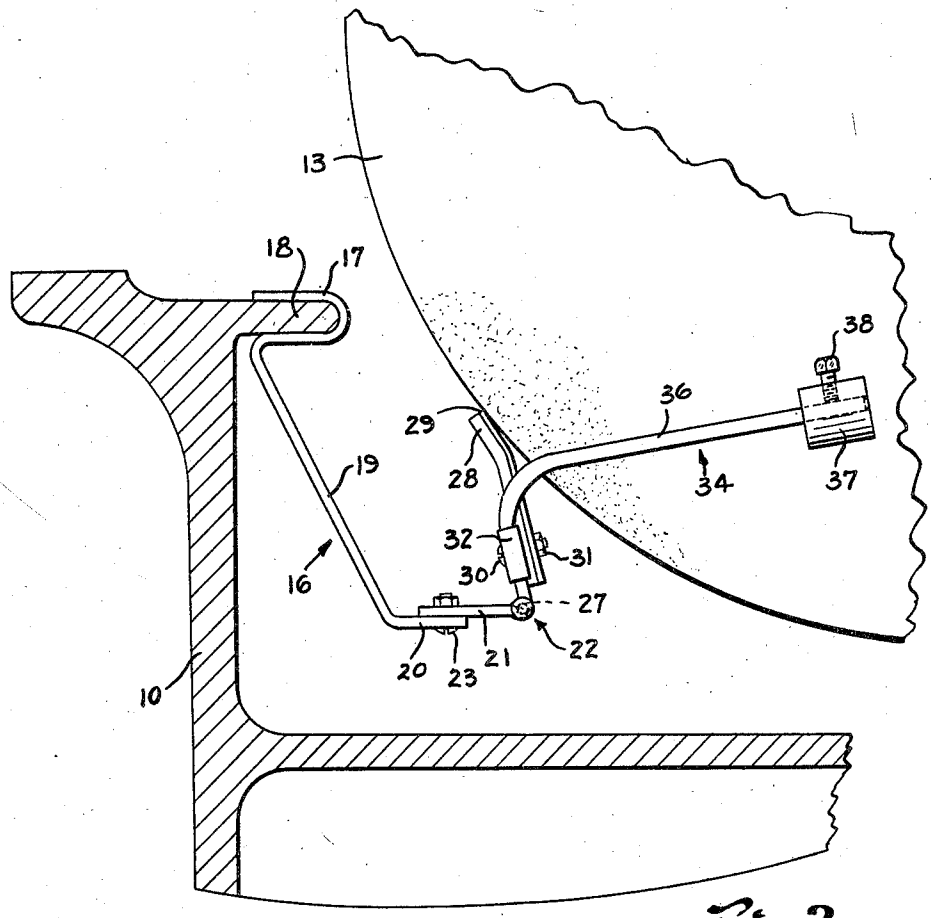



Fig.3

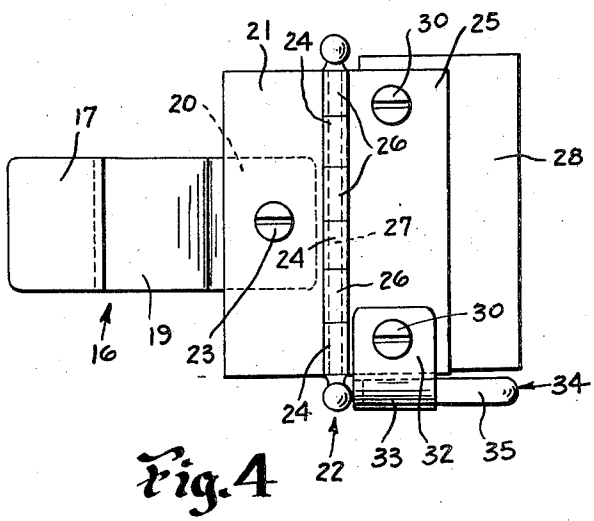



Fig.4

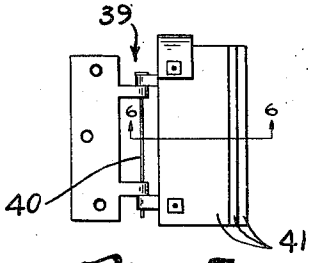



Fig. 5

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2,399,538

# UNITED STATES PATENT OFFICE

2,399,538

## SQUEEGEE DEVICE

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Application December 8, 1944, Serial No. 567,272

6 Claims. (Cl. 51—272)

This invention relates to improvements in wipers for edging stones, and more particularly to the type used in edging ophthalmic lenses.

One of the principal objects of the invention is to provide means which will remove excess water from the edging surface of the stone which would otherwise be thrown from the stone into other parts of the machine or onto the operator.

Another object of the invention is to provide a wiper of this nature whereby the wear on the wiper will be automatically taken up as the wiper is used.

Another object of the invention is to provide a device of this nature which may be quickly and easily attached to an edging machine.

Another object of the invention is to provide means whereby the tension of the wiper against the stone may be readily adjusted to properly regulate the flow of water thereon.

Another object of the invention is to provide a more economical means of regulating the water on the surface of an edging stone.

Other objects and advantages of the invention will become apparent from the following description taken in connection with the accompanying drawings, and it will be apparent that many changes may be made in the details of construction, and arrangement of parts shown and described, without departing from the spirit of the invention as expressed in the accompanying claims. I, therefore, do not wish to be limited to the exact details, as the preferred form only has been shown by way of illustration.

Referring to the drawings:

Fig. 1 is a perspective view of an edging machine with which the wiper may be used.

Fig. 2 is a side elevational view of the wiper with the dotted lines indicating the wiper in different positions of adjustment.

Fig. 3 is a fragmentary sectional view of the edging machine showing the wiper in position of use.

Fig. 4 is a plan view of the wiper.

Fig. 5 is a top plan view of a modified form of wiper.

Fig. 6 is a sectional view, taken on line 6—6 of Fig. 5.

In the past the most common means for regulating the water on edging stones was the use of sponges. These sponges were placed between the stone and the bottom of the tub-like portion of the machine, in contact with the surface of the stone. It will be seen that with this arrangement great difficulty arose in keeping the sponges clean and soft, as particles of the lenses and stone would adhere thereto. This would greatly shorten the period of time that a sponge could be used as the sponge would tend to harden up and wear out, even when taken out and cleaned regularly.

Other means have been tried but none have provided means of adjusting the pressure against the stone or for allowing for wear.

Referring more particularly to the drawings wherein like characters of reference designate like parts throughout the several views, Fig. 1 shows an edging machine of the type with which my device may be used and comprises a base 10 provided with suitable bearings 11 adapted to rotatably support a shaft 12 on which is mounted an edging stone 13.

Power from any suitable source is transmitted to the edging stone 13 through the belt 14 and the pulley 15, which is attached to the end of the shaft 12.

The wiper, as shown in Figs. 2, 3, and 4, comprises a strip or bracket of resilient material 16 having one end bent to form a U-shaped portion 17 which is adapted to fit over, and hold in clamping relation therewith, a portion of the base 18 of the edging machine adjacent the stone. From the U-shaped portion 17 the strip 16 has an angled portion 19 extending downwardly to a portion 20 which extends outwardly in substantially the plane of the U-shaped portion 17. The portion 20, as shown in Fig. 3, extends towards the edging stone and is adapted to support and have attached thereto a plate 21 of a hinge member 22. The plate 21 is attached to the portion 20 by means of a screw or the like 23.

The hinge member 22 is of a conventional type and comprises the plate 21 having spaced bearings 24 formed along one edge thereof and a plate 25 having spaced bearings 26 formed on one side thereof which are adapted to fit in aligned relation with the bearings 24 of the plate 21 and to be held in this position by means of a pin 27 extending through the bearings 24 and 26. It will readily be seen that the plate 25 may be rotated about the pin 27 to different positions as shown in dotted lines in Fig. 2.

Attached to the plate 25 and extending from said plate on the opposed side thereof from the bearings 26 is a piece of semi-resilient material 28 such as rubber, plastic or thin metal or the like adapted to act as a backing support for a sheet of felt or the like 29 which acts as a wiper when positioned against the edging stone 13. The semi-resilient material 28 and the felt or the like 29 are attached to the plate 25 by means of the screws, bolts, rivets or the like 30 and 31.

A supporting member 32, provided with a socket-like portion 33 at one end thereof is attached to one end of the plate 25 with the socket portion extending from the edge of the plate and secured to said plate by one of the means 30 and 31 on the side of the plate opposed to the wiper member. A bar-like member 34 having a substantially right angled bend at one end thereof and having the short portion 35 adjacent the bend is inserted in the socket-like portion 33. The bar-like member has a long portion 36 extending substantially at right angles to the plane of the wiper and is adapted to adjustably support a suitable weight 37. The weight 37 may be adjusted along the arm 36 and is held in adjusted position by means of a screw or the like 38. This is to adjust the pressure of the wiper against the edge surface of the edging stone. This is clearly shown in Fig. 3.

The modified form of wiper shown in Figs. 5 and 6 consists of a skeleton hinge member 39, which is so constructed that a minimum of bearing surfaces will be in contact with the pin 40, thus assuring free movement of the wiper to its different positions of use.

The stone contacting portion of this wiper comprises a plurality of sheets of felt or the like 41, positioned with their contacting edges in spaced relation with each other. These members are provided with a piece of semi-resilient material 42 which acts as a backing member.

The staggered outer edges of the superimposed sheets or pieces of felt 41 are adapted to engage the surface of the stone 13 in a manner generally similar to the sheet 29 of Fig. 3. The edges are staggered so that each edge will engage the surface of the stone and thereby provide a larger bearing surface with the stone and greatly increase the life of the wiper.

As shown best in Fig. 3, it will be seen that the device may be quickly and easily attached to an edging machine by the U-shaped end 17 of the strap or bracket 16, and that due to the shape of said bracket will be positioned in proper relation with the edging stone. Fig. 3 also shows the wiper in operative position against the stone and that, through the action of the hinge member 22 and the adjustable weight 37, positioned on the bar 34, the tension of said wiper against the stone may be quickly and easily adjusted and wear of the wiper will be automaticaly taken up. It will also be seen that with this construction that the wiper mechanism is positioned away from the bottom of the machine which is apt to become filled with sediment composed of particles of the stone and the lenses being edged.

From the foregoing description, it will be seen that simple, efficient and economical means for accomplishing all the objects and advantages of the invention have been provided, particularly that of providing a wiping device which is economical, easily attached and quickly adjusted for use with an edging machine.

Having described my invention, I claim:

1. An edging stone wiper of the character described comprising hinged plates, wiping means carried by one of said hinged plates, attaching means on the other of said hinged plates and tension adjusting means carried by the plate having the wiping means thereon.

2. An edging stone wiper of the character described comprising hinged plates, a clamp member attached to one of said plates, wiping means attached to the other of said plates, attachment means on said second named plate, a bar-like member attached to said second plate by means of said attachment means and a weight adjustably supported on said bar-like member.

3. In a device for wiping the surface of an edging stone comprising a bracket, clamp means on said bracket, a hinge member attached to the other end of said bracket, a resilient backing member attached to said hinge member, a wiper overlying said backing member and also attached to said hinge member, supporting means attached to one side of said hinge member and adjustable means supported in said supporting means for varying the tension of the wiper against an edging stone.

4. In a wiping attachment for edging stones, a hinge member, clamping means on one side of said hinge member, a wiping blade on the other side of said hinge member, and adjusting means extending from said side of the hinge member carrying the wiping blade for adjusting the tension of said wiping blade on said stone.

5. An edging stone wiper of the character described comprising a bracket, attachment means on said bracket, a hinge member attached to the other end of said bracket, a resilient backing member attached to said hinge member, a plurality of wiping means overlying said backing member and attached to said hinge member, supporting means attached to one side of said hinge member and adjustable means supported in said supporting means for varying the tension of the wiper against an edging stone.

6. An edging stone wiper of the character described comprising a support having an attachment portion adjacent one end thereof and an adjustable portion adjacent its opposed end, said adjustable portion having wiper means thereon for engaging the face of the edging stone during use and means carried by said adjustable portion for varying the tension of said wiper means.

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