Jan. 1, 1957 W. G. MATTSON 2,775,778

EYEGLASS LENS CLEANER WITH MATERIAL SUPPLY

Original Filed April 28, 1945

Fig. 1.

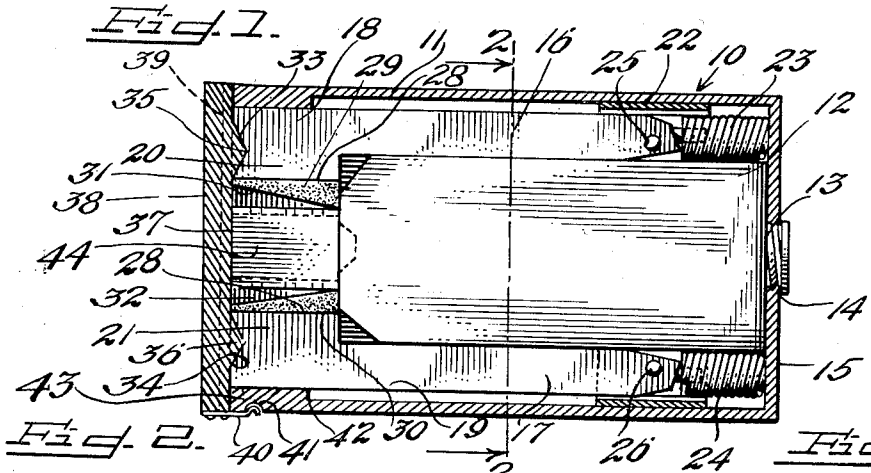


Fig. 2.

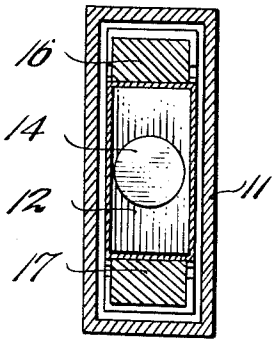


Fig. 3.

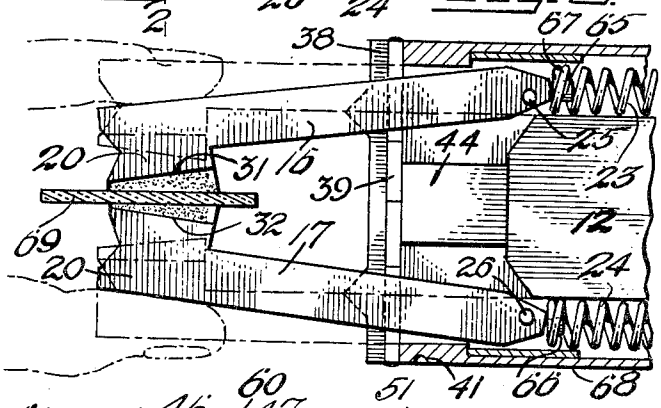
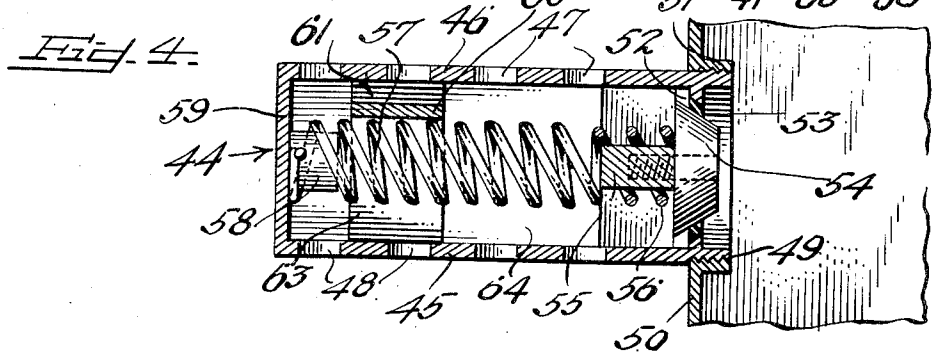


Fig. 4.



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EYEGLASS LENS CLEANER WITH MATERIAL SUPPLY

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Substituted for abandoned application Serial No. 590,899, April 28, 1945. This application April 25, 1955, Serial No. 503,432

3 Claims. (Cl. 15—131)

This is a substitute for application Serial No. 590,899, filed April 28, 1945.

This invention relates to a cleaner for eyeglasses and spectacle lenses and an object thereof is to provide means whereby such lenses may be cleaned wthout coming into contact with the human fingers.

Another object of the invention is to provide a case compact with means and material for cleansing eyeglass lenses.

A further object of the invention is to provide in a case a cleaning fluid together with an applicator therefor.

Other features and advantages will become more readily apparent from the following description and the accompanying illustrative drawings in which:

Figure 1 is a longitudinal sectional view of the compact,

Figure 2 is a section on line 2—2 thereof,

Figure 3 is a view similar to Figure 1 but on an enlarged scale showing the top of the case shown open and cleaning arms in operative position, and

Figure 4 is a greatly enlarged detail sectional view of a valve.

In the accompanying drawings as above enumerated and in the following specification like characters of reference indicate like parts throughout and in which **10** indicates the lens cleaner which comprises a case **11** in which is secured a container or tank **12** for a glass cleaning fluid. The container **12** is provided with a neck **13** extending through an opening **14** in the bottom wall **15** of the case **11**. On each side of the container **12** is provided just sufficient space for the shanks or arms **16** and **17** whose outer ends **18** and **19** are provided with inwardly extending jaw members **20** and **21**, and the slidable collar **22** to which the inner ends of said jaw members **20** and **21** are pivotally secured in offset relation at **25** and **26** so that the coil spring **23** and spring **24** which engage the inner ends of said shanks or arms **16** and **17** will urge the shanks or arms **16** and **17** to the extended position. To the faces of said jaws **20** and **21** are secured pads **29** and **30** formed of sponge having preferably a covering of chamois **31** and **32**. The outer extremities of the jaws **20** and **21** are provided with V-shaped transverse cut-outs **33** and **34** into which the similarly formed extensions **35** and **36** of the inner wall **37** of a cap **38** seat. This cap is hingedly connected at **39** to said case **11** and is provided with a snap catch **40** for engaging the recess **41** in the wall **43** of the case. Upon release of the catch **40**, the tension of the springs **23** and **24** will cause the cap **38** to fly back and permit the shanks to project outwardly of the case as indicated in Figure 3 of the drawings. Upon returning the jaws within the case **11**, and closing the cap **38**, its V-shaped projections **35** and **36** will seat into the V-shaped recesses **33** and **34** of said jaws and cause them to close in adjacent the perforated side walls of a valve.

The said valve is in the form of a rectangular casing or cage **44**, the walls **45** and **46** of which are provided with a series of perforations **47** and **48**. The lower end of the valve cage **44** is screw threaded into an opening

49 in the wall **50** as indicated at **51**. The valve cage **44** is provided with an inner end wall **52**, in which is a seat **53** for a valve plate **54** having a boss **55** around which is coiled one end **56** of a spring **57**, the other end of which spring is engaged by an inwardly extending boss **58** of the outer wall **59**. This spring is of such tension that upon moving the cage **11** with some slight force the valve plate **54** will become unseated and permit a small quantity of liquid in the case **12** to enter the valve cage **44** and be absorbed by the wiper sponges **29** and **30**. The valve plate **54** is limited in travel by a transverse wall **60** in the valve cage **44**. The said wall **60** forms a portion of a slide member generally indicated at **61** which is slidably mounted in the valve cage **44**. The said slide member **61** is composed of walls **63** which are integrally connected with the transverse wall **60**. The said walls **63** seat on the walls **64** of the cage **44** for reciprocating movement therein. The said slide member **61** serves the purpose of providing additional inertia to help actuate the valve plate **54** against the tension of the spring **57**, by its (slide member **61**) reciprocatory movement within the valve case **44** during reciprocation of the entire device.

In use the catch **40** is released, the cap **38** is opened, permitting the shanks **16** and **17** to project outwardly of the case, said shanks being provided with projecting pins **65** and **66** which seat in the upper ends **67** and **68** of said springs **23** and **24** in such a manner as to cause the said members **16** and **17** to spring outwardly of the casing **11** upon being released therefrom. As the wipers **29** and **30** have previously been dampened through the reciprocating movement of the case **11**, an eyeglass **69** may be placed therebetween and the members **20** and **21** pressed thereagainst by the fingers of the user and the wipers moved around over the surfaces of the lens.

Through the use of the above described device eyeglasses may be cleaned without the contact of fingers of the user, the acid from which acts to dim the surfaces of an eyeglass lens. It should be stated that the end **42** of the wall of the case **11** is inwardly extended to form stops for the collar **22**.

It is thought that persons skilled in the art to which the invention relates will be able to obtain a clear understanding of the invention after considering the description in connection with the drawings. Therefore, a more lengthy description is regarded as unnecessary.

Minor changes in shape, size and rearrangement of details and parts such as come within the purview of the invention claimed may be resorted to, in actual practice, if desired.

What is claimed as new is as follows:

1. A device of the character described including a casing closed at one end to form an inner wall, and provided with a hinged closure at its other end, a fluid container disposed longitudinally in said casing spaced from the opposite inner side walls thereof and supported by the closed end of the casing, a collar disposed in said casing for longitudinal movement, stop shoulders in said casing adjacent said hinged closure for limiting the outward movement of said collar, arms pivotally connected to said collar slidably disposed in said casing at either side of said fluid container, resilient tensioning means between the inner ends of said arms and the inner wall of said casing for projecting said arms from said casing when said hinged closure is opened, wiping pads supported in opposed position on the outer ends of said arms, an apertured valve cage secured to the forward end of said fluid container and communicating therewith by means of a valve seat, a valve plate in said cage adapted to seat in said valve seat, means seated in said case for resiliently biasing said valve plate, said biasing means being capable of biasing the valve plate to the closed position in the

valve seat and of such strength that the inertia of the valve plate allows separation of the valve seat and the valve plate when the casing is reciprocated, said cage being disposed between said pads when the arms are retracted whereby fluid from said container may be discharged onto said pads when said casing and said fluid container are reciprocated to unseat the valve plate.

2. A device of the character described including a casing closed at one end to form an inner wall and provided with a closure at its other end, a fluid container disposed longitudinally in said casing spaced from the opposite inner side wall thereof and supported by the closed end of the casing, a collar disposed in said casing for longitudinal movement, stop shoulders in said casing adjacent said hinged closure for limiting the outward movement of said collar, offset pivotally connected arms secured to said collar slidably disposed in said casing at either side of said fluid container, resilient tensioning means between the inner ends of said arms and the inner wall of said casing for projecting said arms from said casing when said hinged closure member is open, wiping pads supported in opposed position on the outer ends of said arms, an apertured valve cage secured to the forward end of said fluid container and communicating therewith by means of a valve seat, a valve plate in said cage adapted to seat in said valve seat, means seated in said cage for resiliently biasing said valve plate, said biasing means being capable of biasing the valve plate to the closed position in the valve seat and of such strength that the inertia of the valve plate allows separation of the valve seat and the valve plate when the casing is reciprocated, said cage being disposed between said pads when the arms are in retracted position, whereby fluid from said container and said casing are reciprocated rapidly to unseat the valve plate.

3. A device of the character described including a casing closed at one end to form an inner wall and provided with a hinged closure at its other end, a fluid container disposed longitudinally in said casing spaced from the opposite inner side walls thereof and supported by the closed end of the said casing, a collar disposed in said casing for longitudinal movement, stop shoulders in said casing adjacent said hinged closure for limiting the outward movement of said collar, offset pivotally connected arms secured to said collar slidably disposed in said casing at either side of said fluid container, resilient tensioning means between the inner ends of said arms and the inner wall of said casing for projecting said arms from said casing when said hinged closure is opened, wiping pads supported in opposed position on the outer ends of said arms, an apertured valve cage secured to the forward end of said fluid container and communicating therewith by means of a valve seat, said cage being between said pads when the arms are in retracted position, a valve plate in said cage adapted to seat in said valve seat, means in said case for resiliently biasing said valve plate, said biasing means being capable of biasing the valve plate to the closed position in the valve seat and of such strength that the inertia of the valve plate allows separation of the valve seat and the valve plate when the casing is reciprocated, whereby fluid from said container may be discharged onto said pads when said casing and said container are rapidly reciprocated to unseat the valve plate, and cooperating aligning lock means on the ends of said arms and on the inner surface of said hinged closure.

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