July 12, 1938.

I. H. HEDLUND

2,123,172

VEHICLE SCREEN

Filed May 7, 1936

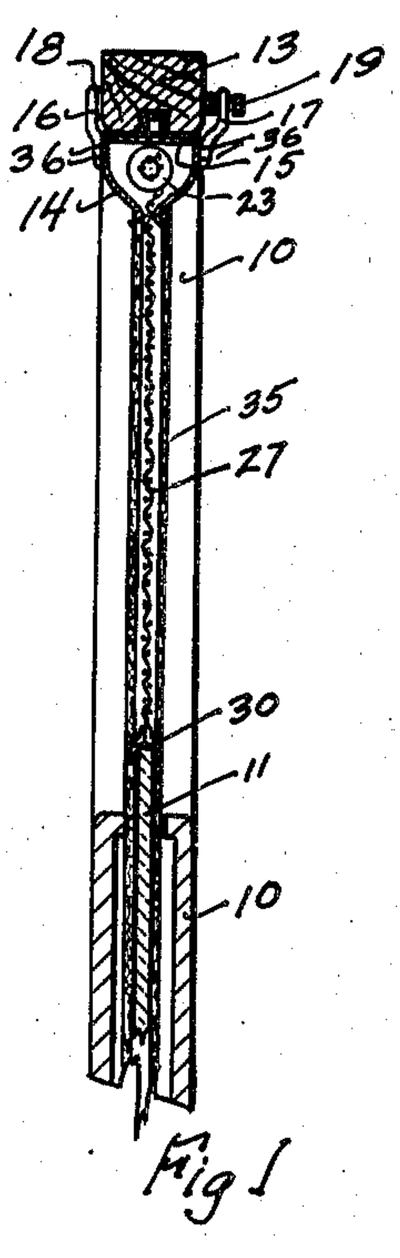

Fig. 1

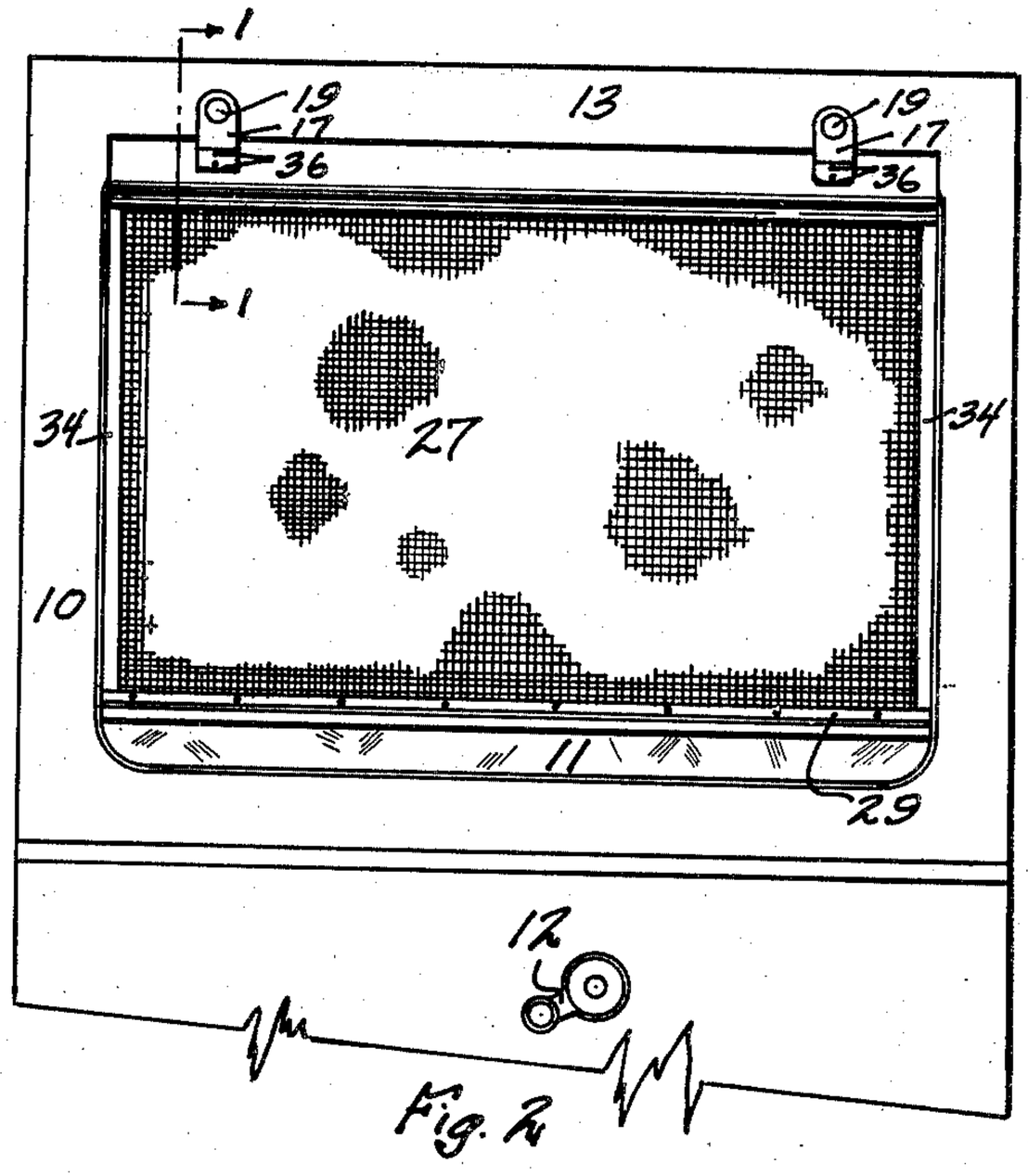

Fig. 2

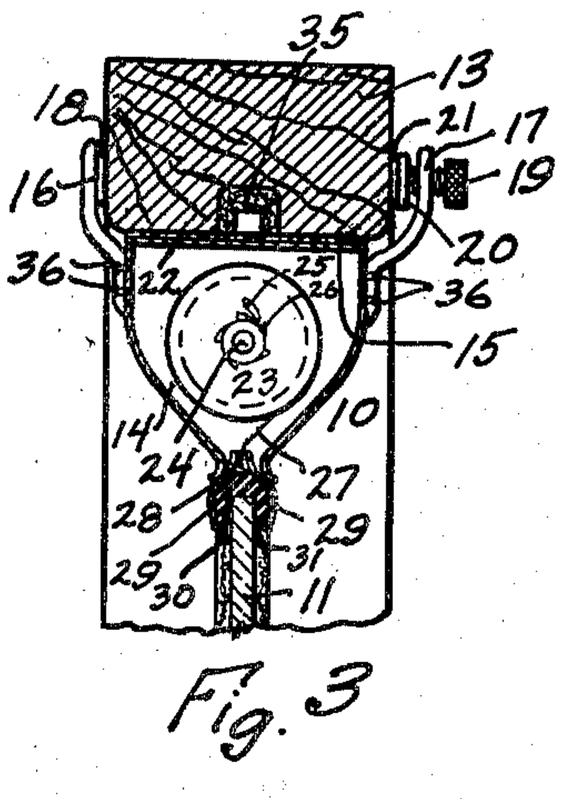

Fig. 3

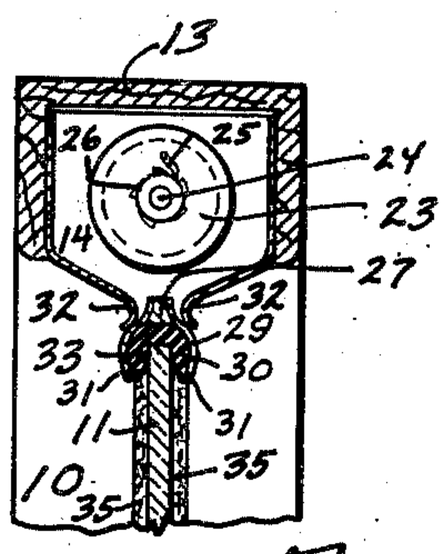

Fig. 4

Inventor

Iver H. Hedlund

Lynn H. Latta

By

Attorney

Patented July 12, 1938

2,123,172

UNITED STATES PATENT OFFICE

2,123,172

VEHICLE SCREEN

Iver H. Hedlund, Sioux City, Iowa

Application May 7, 1936, Serial No. 78,381

1 Claim. (Cl. 156—39)

My invention relates to a screen to be used primarily in connection with a vehicle window or door.

An object of my invention is to provide such a screen which will prevent glare, or the entrance of undesirable foreign objects from entering through the window.

A further object of my invention is to provide such a screen device which can be readily rolled up out of the way and which can be incorporated together with a vehicle door or which can be made as a separate part, or as an accessory to be fitted to any standard vehicle door.

A further object of my invention is to provide a screen of this character which can be rolled or unrolled in cooperation with the vehicle window.

A further object of my invention is to provide a screen which is very pliable to permit of such unrolling.

A further object of my invention is to provide the above mentioned objects in a construction of great simplicity which can be manufactured at a very reasonable cost.

With these and other objects in view, my invention consists in the construction, arrangement and combination of the various parts of my device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claim, and illustrated in the accompanying drawing, in which:

Figure 1 is a sectional view taken generally on the lines 1—1 of Figure 2,

Figure 2 is a side elevation of the device as used in conjunction with the vehicle door,

Figure 3 is an enlarged detail of Figure 1, and

Figure 4 is a modification showing the device built in the door frame.

I have used the character 10 to designate the door generally, which, of course, is the standard side door of any automotive vehicle or the like.

This door receives the usual window 11 which is raised or lowered by means of the handle 12.

The upper frame of the door is indicated generally by the character 13. To the upper frame is attached my device which includes the sheet metal casing 14 having the top 15. Attached to the sheet metal casing are the brackets 16 and 17.

Attached to the brackets 16 is the rubber disc 18, and threadedly engaged with the bracket 17 is the thumb screw 19 which terminates in an enlarged portion to which is attached a rubber disc 21. Attached to the bottom 15 is the felt spacer 22.

It will be seen that by the use of the brackets 16 and 17 and the association of the thumb screw 19 therewith that the entire device can be rigidly attached against the upper portion of the vehicle door by merely screwing the thumb screw 19 inwardly.

The rubber buffers 18 and 21 as well as the felt member 22 will prevent marring of the door.

Journalled within the casing 14 is the roller 23 which is journalled about the shaft 24. The roller works on a ratchet principle similar to a curtain blind rod which ratchet is indicated generally by the characters 25 and 26.

Wound about the roller is the pliable screen 27. This screen may be made of any suitable material, but it should be clearly brought out here that the preferred form as used by my invention is an extremely pliable form made of a suitable fiber base or such material having features of pliancy and the like.

Attached at 28 to the lower edge of the screen 27 are the spring members 29 which are made of resilient metal strips, and between which is the rubber member 30 which includes the beveled shoulders 31.

The strips 29 are received between the arcuate portions 32 which are integral extensions of the casing 14. The rubber member 30 also includes the rectangular opening 33 which is adapted to receive the upper edge of the glass window 11 so that when the rubber member 30 is pressed down against the upper edge, this edge will be received in this opening along the length thereof and will be maintained under spring pressure by the resilient strips 29.

The beveled shoulders of the rubber member, of course will permit positive entrance of the window. In this way, the lower edge of the screen will be held against the window edge so that when the same is lowered or raised, the screen will follow correspondingly thereby forming a screened opening automatically.

In this case the curtain roller ratchet effect will not be used, and it will be understood that a suitable spiral spring will be inserted between the shaft 24 and the reel so that the screen will be released and the reel will wind up the same when the window moves upwardly and conversely in the downward direction.

However, it will be understood that when it is desired to use the arrangement without fol-

lowing the vertical movement of the window, this can be done by merely releasing the engagement of the rubber member **30** from the upper edge of the window, and correspondingly either desired arrangement can be used using the ratchet arrangement as explained.

The vertical edges of the screen are attached to pliable strips **34**.

It will be understood that the screen travels through the vertical felt channels **35** which are the standard type to guide the windows **11** and which are also located at the upper portion of the door **13** in which they are positioned horizontally.

It will be noted from Figure 3 that when the rubber member **30** is at its topmost position, that is that when the window is raised to the top, it will be engaged with this rubber member and will provide a seal from the outside elements since the pressure will just be sufficient to maintain a seal in this instance, since if it is desired to use the screen to cooperate with the window, the rubber member **30** will need to be forced over the edge by a greater pressure.

Alternative construction is shown in Figure 4 in which the casing, which incorporates all of the other features, is inserted within the upper wooden frame **13** of the door and into which it is suitably affixed. This construction is more of the type which can be built into a vehicle during the process of manufacture of the same and incorporates similar features throughout.

It will be noted that the brackets **16** and **17** are suitably riveted to the casing **14** at **36**.

It will now be seen that I have provided a vehicle screen which can be readily attached or built as a composite unit together with a vehicle side door, which screen can be automatically rolled or unrolled together with the vehicle window, or which can be operated independently therefrom.

It will be seen further that this device is constructed of such material that it will readily roll or unroll, and that it includes features for instantly attaching or detaching the same if such is desired.

It will also be seen that the device is compact, neat, and presents an attractive appearance, as well as being of great simplicity to insure a reasonable cost of manufacture.

Some changes may be made in the construction and arrangement of the parts of my invention without departing from the real spirit and purpose of my invention, and it is my intention to cover by my claim any modified forms of structure or use of mechanical equivalents, which may be reasonably included within its scope.

I claim as my invention:

A vehicle screen comprising a casing, a reel rotatably mounted in the casing, a pliable screen wound on the reel, means attached to the lower edge of the screen to permit engagement of the upper edge of a vehicle window therewith, said means including a pair of arcuate resilient members, a rubber member having a channel and bevelled shoulders adapted to receive the upper edge of a vehicle window, received between the resilient members.

IVER H. HEDLUND.