March 14, 1961 J. HILBERS 2,974,989

AUTO TRUNK LID HOLDER

Filed Feb. 20, 1959

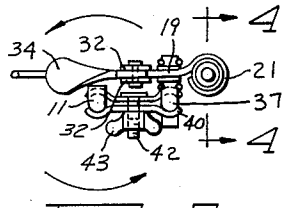


Fig. 2

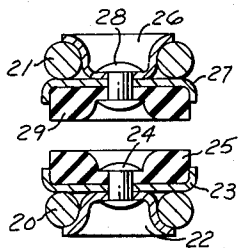
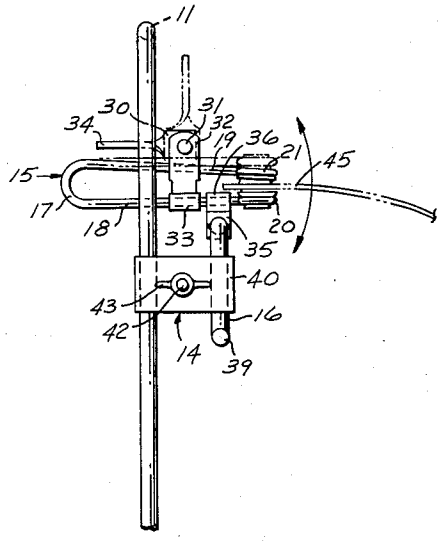
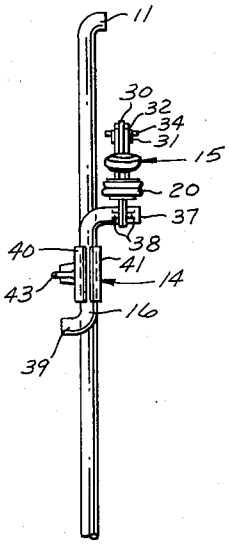


Fig. 4





3

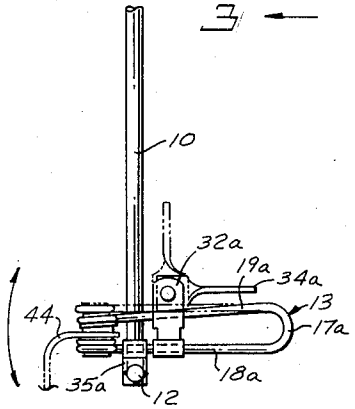


Fig. 1

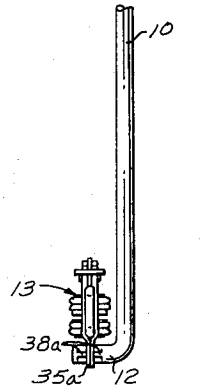


Fig. 3

INVENTOR.
JOHN HILBERS

BY
Donnelly, Mentag & Harrington

ATTORNEYS

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AUTO TRUNK LID HOLDER

John Hilbers, 20013 Edmunton, St. Clair Shores, Mich.

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2 Claims. (Cl. 292—276)

This invention relates generally to improvements in the auto trunk art, and, more particularly to a novel auto trunk lid holder adapted to hold an auto trunk lid in any desired opened position.

It is desirous in many instances to have the trunk lid of an auto open when hauling articles which are bulky and lengthy, as for example, when hauling step ladders, Christmas trees and so forth. In order to keep the trunk lid from moving up and down and damaging the articles being hauled it is necessary that some device be used to secure that lid in some manner while the auto is traveling. Accordingly, it is the primary object of this invention to provide a new and useful holder apparatus which is capable of securing an auto trunk lid in any desired opened position, and which is adjustable, and quickly and easily mountable in position.

It is another object of this invention to provide an auto trunk lid holder which incorporates an elongated rod having a first universally mounted quick acting clamp on the lower end thereof and a second universally mounted quick acting clamp on the upper end thereof, with said second quick acting clamp being carried on a bracket means which is slidably mounted on the rod.

It is a further object of this invention to provide an auto trunk lid holder which is simple and compact in construction, economical of manufacture, light in weight, and, efficient and safe in operation.

Other objects, features and advantages of this invention will be apparent from the following detailed description and appended claims, reference being had to the accompanying drawing forming a part of the specification wherein like reference numerals designate corresponding parts of the several views.

In the drawing:

Fig. 1 is a broken elevational view of a preferred embodiment made in accordance with the principles of the invention;

Fig. 2 is a broken top plan view of the structure illustrated in Fig. 1;

Fig. 3 is a broken side elevational view of the structure illustrated in Fig. 1, taken in the direction of the arrow "3"; and

Fig. 4 is an enlarged fragmentary elevational sectional view of the structure illustrated in Fig. 2, taken along the line 4—4 thereof and looking in the direction of the arrows.

Referring now to the drawing, and in particular to Figs. 1 and 3, wherein is shown a preferred embodiment of the invention, the numeral **10** indicates the holder arm which is shown in rod form with the upper and lower ends being bent outwardly at right angles therefrom, as indicated by the numerals **11** and **12**, respectively. The holder arm or rod **10** may be made from any suitable material, as for example, from a rust resistant steel rod material.

The holder rod **10** is adapted to carry a first universally mounted quick acting clamp as **13** on the lower end thereof and an adjustable bracket as **14** on the upper

end thereof. The bracket **14** is adapted to carry a second universally mounted quick acting clamp as **15** on the short arm or rod **16**. The upper quick acting clamp comprises a horizontally disposed U-shaped member which includes the bight portion **17** and the integral arms **18** and **19** which are provided at the outer ends thereof with the eye ends **20** and **21**, respectively. The arm end **20** is adapted to be seated around the retainer member **22** and to be held thereagainst by means of the cup member **23** and the rivet **24**. The rivet **24** also fixedly secures the clamp engagement annular rubber pad **25** in the cup member **23**. The arm end **21** is similarly secured between the retainer member **26** and the cup member **27** by means of the rivet **28** which also secures the rubber clamp pad **29** in the cup member **27**.

As shown in Fig. 1, the upper clamp arm **19** is adapted to be moved toward the lower clamp arm **18** to fixedly secure an object therebetween by means of the cam member **30**. The cam **30** is pivotally mounted by means of the pin **31** between the strap arms **32**, the lower ends of which are positioned around and fixed to the clamp arm **18**. The cam **30** is provided with the operating handle **34**. When the handle **34** is in the solid line position shown in Fig. 1, the clamp arm **19** will be cammed downwardly into a clamping position. When the clamp arm **34** is moved to the dotted position shown in Fig. 1, the clamp arm **19** will spring upwardly into its dotted line released position shown in Fig. 1.

As shown in Figs. 1 and 3, the upper clamp **15** is swingably mounted on the metal strap member **35**, the upper end of which encircles the lower clamp arm **18**, as indicated by the numeral **36**. The ends of the strap **35** are brought down and are provided with a hole therethrough for the reception of the bent over upper end **37** of the short holder rod **16**. The rod portion **37** is peened on each side of the strap **35**, as indicated by the numeral **38**, to prevent the strap **35** from coming off of the rod **37**. The strap **35** is, however, swingably mounted on the rod portion **37** and such action is not restrained by the peened portions or projections **38**. As shown in Figs. 1 and 3, the lower end of the rod **16** is bent outwardly at right angles from the rod **16** in a direction opposite to the bent portion **37**.

As shown in Figs. 1, 2 and 3, the rods **10** and **16** are adapted to be secured together in any adjusted vertical position by means of the bracket or carrier means **14**. The bracket **14** includes the two complementary mating plates **40** and **41** which are provided with arcuately formed end portions for the reception and carrying of the rods **10** and **16**. The plates **40** and **41** are adapted to be fixedly secured together and to clamp the rods **10** and **16** therebetween by means of the screw **42** and the wing nut **43**. It will be seen that the bracket **14** may be moved upwardly and downwardly on the rod **10** to any desired position. The lower clamp means **13** is constructed the same as the upper clamp means **15** and the corresponding parts are marked with similar numerals followed by the small letter "*a*." The lower clamp carrier strap **35***a* is adapted to be swingably mounted on the carrier rod portion **12** in the same manner as the upper clamp **15** is carried on the rod portion **37**.

In the use of the auto trunk holder lid the lower clamp would be positioned so as to grip the auto body **44** at any desired position around the periphery of the auto trunk opening as illustrated in Fig. 1. The upper clamp **15** would be clamped over the edge of the auto trunk lid **45** and then the bracket **14** would be slid to the desired position and clamped in place to provide the desired trunk lid opening. It will be obvious that, if desired, the bracket **14** could first be secured in its desired position and then the clamp **15** secured. It will be seen that the clamp means **13** and **15** are mounted on the car-

rier rod 10 for universal movement whereby the holder may be used for any type auto and in any desired position. Experience has shown that an auto trunk holder of the present invention is efficient in operation and very useful.

While it will be apparent that the preferred embodiment of the invention herein disclosed is well calculated to fulfill the objects above stated, it will be appreciated that the invention is susceptible to modification, variation and change without departing from the proper scope or fair meaning of the subjoined claims.

What I claim is:

1. An auto trunk lid holder, comprising: a first elongated rod having the lower integral end extended outwardly at right angles therefrom; a first clamp; means for adjustably mounting said first clamp on the lower outwardly extended end of said first rod for movement about the longitudinal axis of said lower extended end and about an axis at right angles to said lower extended end; a bracket adjustably mounted on said first rod; said bracket including a pair of plates with arcuately formed end portions; the arcuately formed end portions on one end of said plates receiving said first rod for clamping engagement therewith; a second rod received in the arcuately formed end portions on the other end of said plates and having the upper integral end thereof extended outwardly at right angles therefrom; means for fixedly securing said plates in clamping engagement with said rods; a second clamp; and means for adjustably mounting said second clamp on the outwardly extended upper end of said second rod for movement about the longitudinal axis of said upper extended end and about an axis at right angles to said upper extended end.

2. The auto trunk lid holder as defined in claim 1, wherein: each of said clamps includes an arm portion; each of said means for adjustably mounting said clamps on their respective rods comprises a strap encircling and engaging the arm portion of the clamp to rotatably support the same, and, each of the ends of the strap being provided with holes for rotatably mounting the strap on the aforementioned respective rod ends.

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