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Fleming

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[54] **ANTENNA MOUNTING BRACKET FOR A TRUCK CAB**

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[52] **U.S. Cl.** **248/43;** 248/203; 343/715

[51] **Int. Cl.**[2] **H01Q 1/32**

[58] **Field of Search** 248/38, 40, 41, 43, 203; 52/110; 343/715

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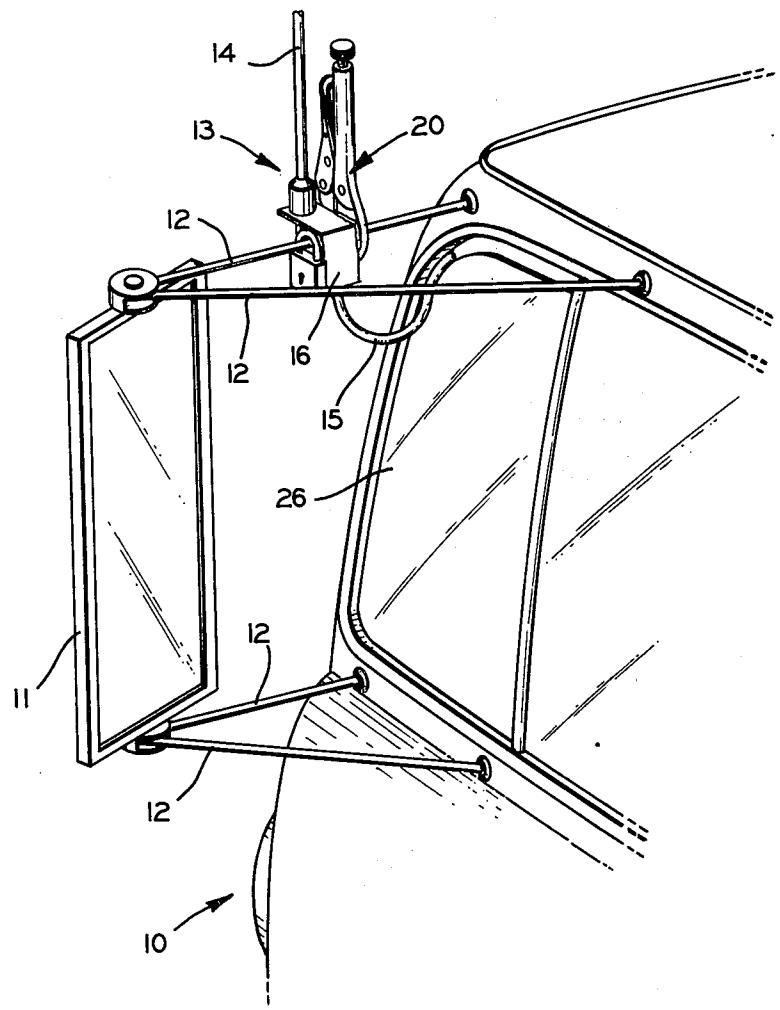
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Primary Examiner—J. Franklin Foss

[57] **ABSTRACT**

A mounting bracket for an antenna to be removably mounted on the rear view mirror support bar of a highway truck. The bracket consists of an antenna support element, a clamp having two jaws, one of which is welded to the support element, and a padlock. The hasp of the padlock is welded to the support element and aligned with the jaws of clamp. The clamp is adjustable to grip mirror support rods of different diameters or cross sections after which the padlock is closed around the rod to prevent removal of the bracket off of the rod.

2 Claims, 3 Drawing Figures



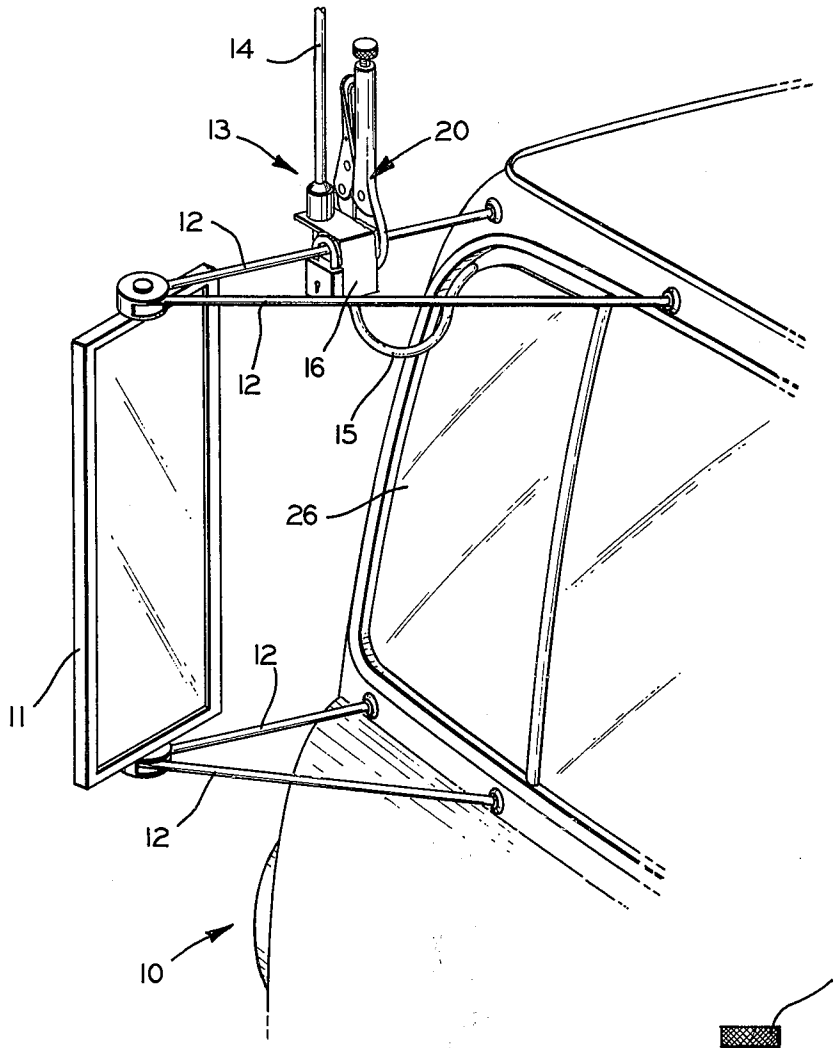


FIG. 1

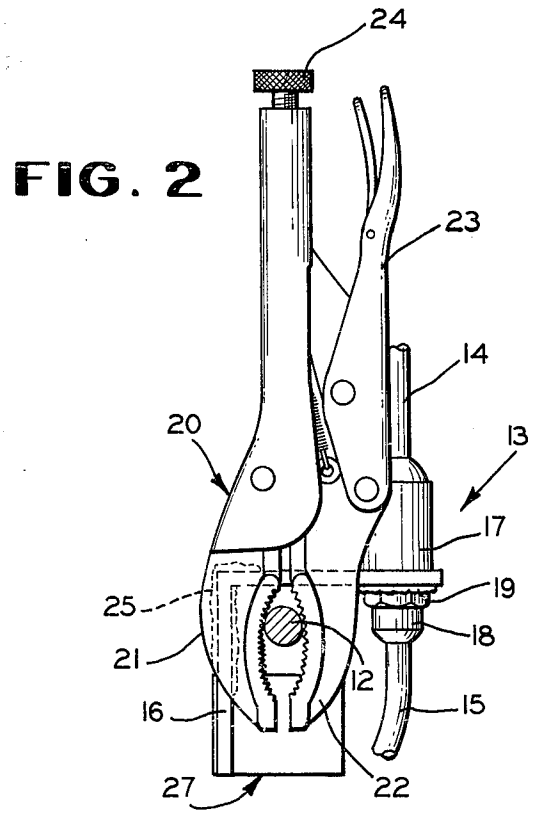
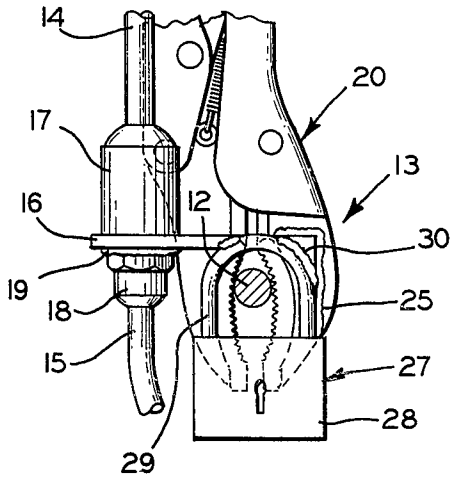


FIG. 2

FIG. 3



ANTENNA MOUNTING BRACKET FOR A TRUCK CAB

BACKGROUND OF THE INVENTION

In recent years many long distance professional truck drivers have purchased personal transmitting and receiving radio sets by means of which they communicate, not only with their respective dispatchers, but also with each other. These sets are relatively expensive and for best operation each should have an antenna mounted exteriorly of the driver's cab in order that the metal of the cab will not interfere with transmission and reception. With the current emphasis on highway safety more and more professional truck drivers are purchasing and utilizing radios of this type in order to warn each other of bad highway conditions, of road obstructions, of traffic jams and the like.

While the radio itself usually can be left interiorly of the cab and thus is protected from theft by locking the cab, because the antenna is mounted exteriorly of the cab, many such antennas have been stolen from trucks parked in truck stops or otherwise left unattended. Although the radio is much more expensive than the antenna, a suitable antenna, mounting bracket and a length of co-axial cable connecting the antenna to the radio set, still represents a considerable loss to the individual owner.

For these reasons, it is the principal object of the instant invention to provide an antenna mounting which will not only removably support the antenna exteriorly of the truck cab but which also has means by which the antenna can be locked to a structural element of the truck cab to discourage or make difficult, if not to prevent, thievery of the antenna, its mounting bracket and a length of the co-axial cable.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a fragmentary view in perspective of a truck cab showing how an antenna mounting bracket embodying the invention may be removably locked onto a support rod illustrated as being one of the extension support rods for a widely spaced rear-view mirror of the type with which many truck tractors and wide bodied trucks are equipped;

FIG. 2 is a detailed view in elevation taken from the inward side of an antenna mounting bracket embodying the invention and illustrating how an adjustable clamp is employed for positioning the antenna on the support rod; and

FIG. 3 is a fragmentary view in side elevation taken from the outer side of a bracket embodying the invention and illustrating how a lock is utilized for locking the antenna mounting bracket onto the mirror support rod.

DESCRIPTION OF PREFERRED EMBODIMENT

In FIG. 1 a driver's cab generally indicated by the reference number **10** is shown fragmentarily and in perspective. In the case of highway tractors for large semi-trailer type long distance trucks, or even for large trucks which are not of the semi-trailer type, the truck bodys are usually wider than the cabs. It is, therefore, necessary to have a rear view mirror **11** carried by horizontally extending support rods, in the illustrated case there being four of the rods **12** mounted on the outer side wall of the cab **10** and supporting the mirror **11** at the outer ends. These elements are rigidly and permanently mounted on the cab **10** and remain in place thereon regardless of who is driving the particular truck or tractor.

An antenna mounting bracket embodying the invention is generally indicated by the reference number **13** and is illustrated in FIG. **1** as being mounted upon an upper one of the support rods **12** in order to mount a suitable antenna **14** exteriorly of the cab **10** for best reception and transmission, the antenna **14** being connected to the radio set (not shown) which is located interiorly of the cab **10,** by a co-axial cable **15.** It will be appreciated, of course, that the support rods **12** on various trucks are not necessarily of the same diameter nor is it necessary that they be circular in cross-section. For this reason an antenna mounting bracket embodying the invention has clamp means which can be adjusted in order to clamp the bracket **13** on support ords of varying cross-sections and varying sizes.

The antenna mounting bracket **13,** itself, comprises an antenna support element **16,** in this case a simple, right angle metal bar of such size that the antenna **14** can be securely mounted thereon by a conventional mounting boss **17** and the co-axial cable **15** connected thereto by a conventional connector **18.** While not essential to the invention, it is also preferable that the mounting boss **17** or connector **18,** or both, be welded or otherwise permanently fixed to the support element **16** and a weld for this purpose is generally indicated by the reference number **19.** A mounting bracket according to the invention also has a two-part clamp, generally indicated by the reference number **20,** and, in this simple embodiment of the invention, the clamp **20** is a toggle-type adjustable pliers having a main jaw **21** and an adjustable jaw **22.** The jaw **22** is connected by means of a handle **23** through toggle mechanism of conventional type and the spacing between the jaws **21** and **22** at which the pliers lock is adjustable by means of an adjusting knob **24.** A clamping plier of this type is a standard commercial item, one such make being called a " Vise Grip". The main jaw **21** of the clamp **20** is fixedly connected, for example, by welding, indicated by the reference number **25,** to the support element **16.** Thus the entire antenna mounting bracket may be mounted on the support rod **12** by opening the clamp **20,** adjusting its "bite", and then closing the jaws **21** and **22** tightly around the support rod **12** in position so that the antenna **14** is erected vertically outside of the cab **10.** The co-axial cable **15** may be led into the cab **10** through an opening left by lowering or swinging open a conventional vent window **26,** which is part of most driver's cabs.

The antenna mounting bracket **13** also comprises a two-part lock generally indicated by the reference number **27** and consisting of a case **28** and a generally U-shaped hasp **29.** In this simple embodiment of the invention, the hasp **29** is welded permanently to the support element **16** by a weld generally indicated by the reference number **30.**

The lock **27,** when closed, defines a loop around the support rod **12** and is generally aligned with the space between the jaws **21** and **22** of the clamp **20** so that when the antenna bracket **13** is clamped onto the support rod **12** the lock **27** may be closed, thus locking the antenna support **13** on the support rod **12.** When the driver moves to another vehicle, as is commonly done by long distance professional truck drivers, he simply opens the lock **27** and the clamp **20** which then enables

him to completely remove the antenna **14** and its support bracket **13** from the particular truck so that he can take it and the radio to the next vehicle which he is to drive.

Having described my invention, I claim:

1. An antenna mounting bracket for a highway vehicle having a support rod attached to the exterior of the vehicle, said bracket consisting of

an adjustable two-part clamp adapted to be removably tightened on said support rod and adjustable to tightly close the jaws thereof on such rods of varying sizes and cross sections,

an antenna support element having at least two legs and being integrally connected to one jaw of said clamp, and

a pad lock having a case and a generally U-shaped hasp defining a loop surrounding said rod when closed and aligned with the gripping portions of said jaws, said pad lock being openable for removal from said rods, one part of said lock being integrally connected to one arm of said support element.

2. An antenna mounting bracket according to claim **1** in which the support element is inverted L-shaped and the one jaw of said clamp and the hasp of said padlock are integrally connected, as by welding, to at least the vertical arm of said element.

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