Jan. 3, 1967 H. J. HAVEN 3,295,732

QUICK-ACTING CLAMP FOR VEHICLES

Filed Oct. 21, 1965

FIG. 1

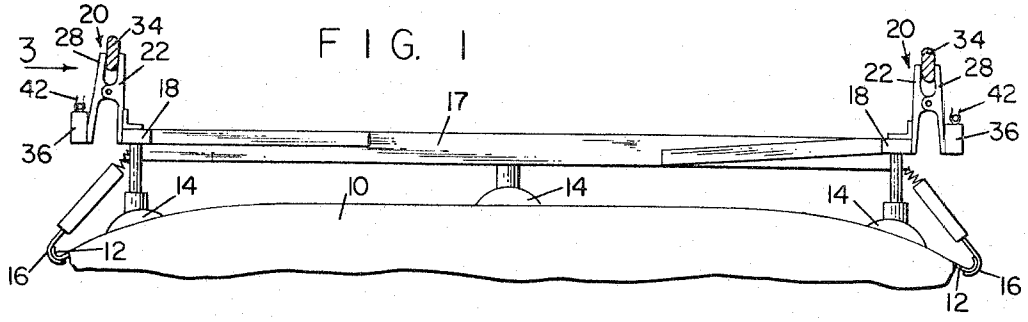


FIG. 2

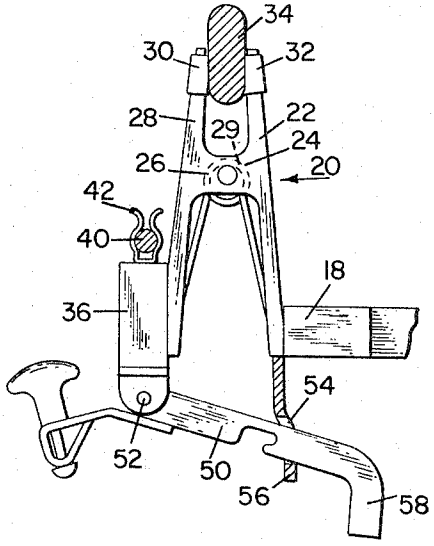


FIG. 4

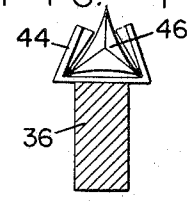
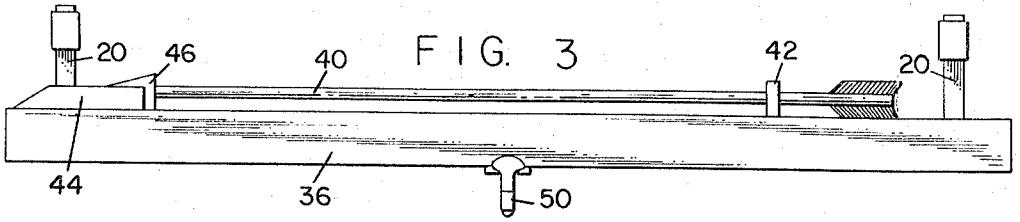


FIG. 3



INVENTOR
HARLAN J. HAVEN

Charles R. Fay.

BY

ATTORNEY

United States Patent Office

3,295,732

Patented Jan. 3, 1967

3,295,732

QUICK-ACTING CLAMP FOR VEHICLES

Harlan J. Haven, 1 N. Main St.,
Bellingham, Mass. 02019

Filed Oct. 21, 1965, Ser. No. 499,139
2 Claims. (Cl. 224—42.1)

This invention relates to a new and improved vehicle roof article carrier which is particularly adapted for a bow. When hunting with bow and arrow, the hunter usually carries his bow and arrow in his car or on a rack on the top of the vehicle and oftentimes when traveling along country roads suddenly sees an animal so that it is imperative to be ready to utilize his bow and arrow as quickly as possible. Ordinarily it takes so long to get the bow out of the rack or out of the car and pick up a hunting arrow and string it, that the animal has disappeared, and accordingly it is an object of the present invention to provide a quick acting clamp which is very quickly released even when the driver of the vehicle is in the vehicle or in the act of opening the door and getting out. He can do this simply by reaching up through the window or doorframe of the car to the carrier on the roof with one hand manipulating the clamp so that the bow is released, and in the very shortest time possible he has his bow in hand. Also the carrier provides for holding a single hunting arrow and by the use of this invention the hunter is enabled to be in position to loose his arrow at the game within the shortest possible time.

Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawings in which:

FIG. 1 is a view in elevation illustrating the invention;

FIG. 2 is a view on an enlarged scale illustrating the clamping means;

FIG. 3 is a view in side elevation looking in the direction of arrow 3 in FIG. 1, and

FIG. 4 is a view in elevation illustrating the arrowhead holder.

In illustrating the invention the reference character 10 indicates the roof of a car and at 12, 12 are shown the rain gutters usually found at the sides of the car. The rack of the present invention is conveniently held on by suction cups 14 or by hooks 16 extending under the rain gutters or both of these devices can be used as is well known in the art.

The framework of the rack may assume many different forms and preferably is adjustable in length (across the roof) as to the main supporting bar 17 on which are mounted the suction cups or hooks. This bar extends across the top of the vehicle and at each end of this main transverse bar are secured longitudinal bars 18, 18 which extend along the side edges of the roof of the car adjacent the windows.

Each bar 18 is provided with two clamp members generally indicated at 20, see particularly FIG. 3. These clamps are widely spaced and may assume any particular form desired but are preferably spring clamps which tend to close when released. In the case shown, a leg 22 has one end secured to a longitudinal frame member 18. It has an ear 24 pivoted to a like ear 26 on a similar but reversed leg member 28 and a spring at 29 causes the top clamping portions 30, 32 of the legs to tend to move together to resiliently clamp an object, in this case a bow 34.

The legs 28 are mounted on outboard longitudinal frame members 36, extending the length of the entire carrier. The outboard members 36 form a substantially elongated handle member for actuating the two respective clamps 20, 20, see particularly FIG. 3. Thus, the operator, or passenger at the opposite side, merely reaches up

and grasps the outboard member 36, pushing it inwardly, the release the bow.

An arrow 40 is mounted on each outboard member 36 parallel thereto in a spring clip 42 and a channel 44 which can have the sides canted inwards, see FIG. 4, to hold the head 46 of the usual hunting arrow. This arrow is quickly grasped and the hunter is ready for a shot.

A strut may be applied to hold the clamps open against the action of their springs if desired. A notched bar 50 is hinged at 52 to the bar 36 and extends through a hole 54 in a plate 56 on the bar 18. By placing a notch to engage the lower edge of the hole, the clamps are easily held open ready to receive the bow once more. The end of the notched bar at 58 can be flipped up releasing the notch, and the clamps automatically close.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claims, but what I claim is:

1. A carrier for an elongated article for application to a vehicle roof in which the vehicle has a door, means to secure the carrier to the roof adjacent the door,

the carrier including an elongated frame part located on the roof just over the door, said frame part extending along the roof, a clamp member on the frame part,

an elongated clamp opening member generally parallel to the frame part, a clamp member thereon, the clamp members being interconnected to clamp the elongated article therebetween parallel to the frame part,

means normally holding the clamp members adjacent each other in clamping condition, the elongated member separating the clamping members upon motion thereof relative to the frame part, and being accessible from the interior of the vehicle through the door,

the clamp members supporting the elongated clamp opening member, the article clamped being a bow, and an arrow carrier on the elongated clamp opening member.

2. A car-top carrier construction for an elongated article comprising a frame including a first elongated member and means to mount it on a car top, a second elongated member generally parallel to the first member, said second member being movable relative to the first member, and means connecting the members and mounting the second member on the first member,

said means comprising a pair of spaced clamps each comprising a pair of legs, means interpivoting each pair of legs intermediate the ends thereof, one leg of each pair having an end mounted on the first member, the other leg of each pair having a corresponding end mounted on the other member, the legs being free-ended at their opposite ends,

spring means for each clamp tending to bring the free ends of the legs of each clamp toward each other to clamp an elongated article,

motion of the second member toward the first member causing the free ends of the legs of both clamps to separate to release the article.

References Cited by the Examiner

UNITED STATES PATENTS

1,691,155	11/1928	Howell	248—316
1,974,255	9/1934	Behrendt	294—87.24
2,632,619	3/1953	Wilson.	
2,940,652	6/1960	Willard	224—42.1

GERALD M. FORLENZA, *Primary Examiner.*

F. WERNER, *Assistant Examiner.*