Aug. 23, 1938. A. S. JONES 2,127,690

BARRIER FOR VEHICULAR TRAFFIC

Original Filed Dec. 28, 1936

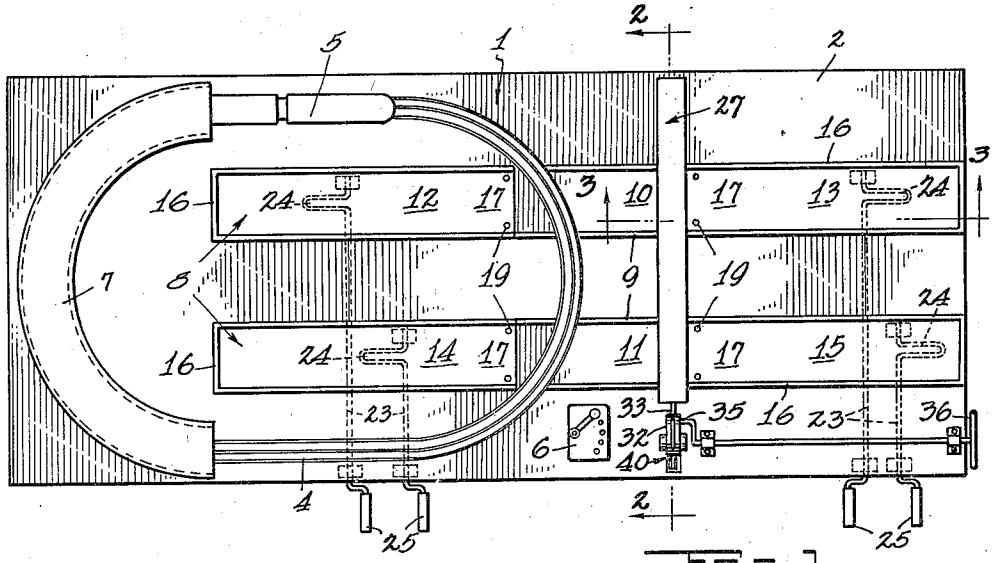


Fig. 1

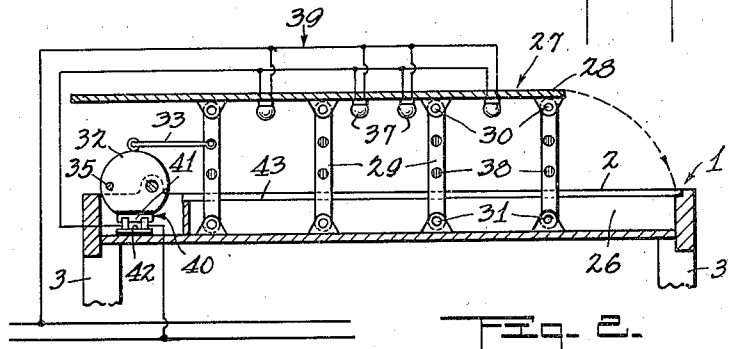


Fig. 2

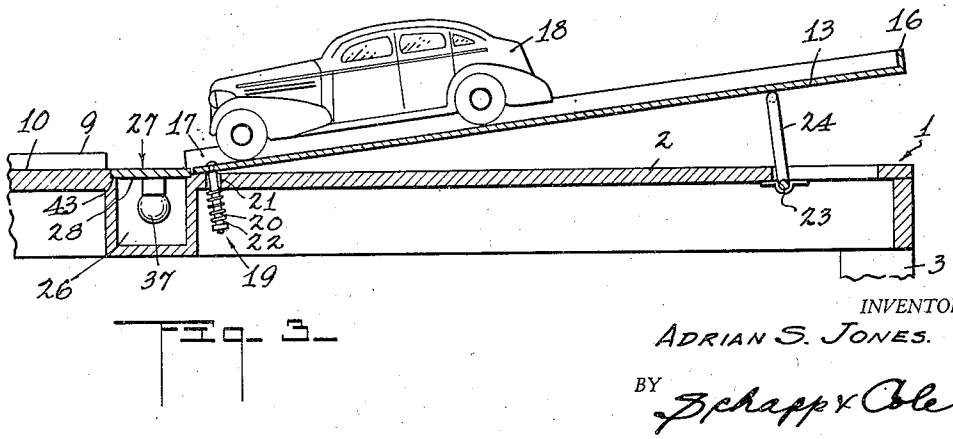


Fig. 3

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BARRIER FOR VEHICULAR TRAFFIC

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Original application December 28, 1936, Serial No. 117,692. Divided and this application May 26, 1937, Serial No. 144,815

2 Claims. (Cl. 104—164)

The present invention relates to improvements in a barrier for vehicular traffic, and has particular reference to a barrier adapted for controlling the movement of traffic along a roadway. This application is a division of my copending application on amusement devices, filed December 28, 1936, and bearing Serial Number 117,692.

In the parent application I disclosed an apparatus which is constructed in such a manner that youngsters will not only be afforded amusement in operating the train and other traffic, but will also derive a certain amount of instruction in traffic problems therefrom.

As a part of the amusement device shown in my copending application, I provide a roadway for traffic having means for moving traffic thereabout. In connection with the roadway I make use of a barrier that is normally disposed beneath the level of the roadway, and which may be raised for halting traffic, particularly at a railroad crossing or at an intersection.

The vehicular barrier, which forms the subject-matter of this application, is made in the nature of a parallelogram, which may be extended above the roadway to halt traffic or which may be lowered to allow traffic to pass thereover.

Although the barrier is shown in connection with an amusement device, it should be made clear that the barrier may be utilized on regular highways for controlling vehicular or other traffic.

Other objects and advantages of my invention will appear as the specification proceeds and the novel features will be particularly set forth in the claims hereto annexed.

In the accompanying drawing, forming part of this application,

Figure 1 is a plan view of an amusement device having my vehicular barrier incorporated therein;

Figure 2 a sectional view taken along line 2—2 of Figure 1 with the barrier in elevated position, this view also showing the wiring diagram; and

Figure 3 an enlarged sectional view taken along line 3—3 of Figure 1.

While I have shown only the preferred form of my invention, it will be understood that various changes or modifications may be made within the scope of the appended claims without departing from the spirit of the invention.

In carrying out my invention I provide a frame generally indicated at 1, and comprising in its structural features a top 2 having legs 3 for supporting the top at a convenient height above a floor or the like.

It will be noted from Figure 1 that I mount an endless track 4 on the upper surface of the top 2, and an electric train 5 is adapted to travel along the track. The construction of the train is conventional, and a reversible rheostat is provided as at 6 for regulating the speed and direction of travel of the train. I have shown a tunnel at 7, which houses part of the track.

I provide a roadway indicated generally at 8, which is arranged to cross the track 4 in the manner shown in Figure 1. Partitions 9 rise from the top 2 in parallel relation with respect to each other to define stationary road sections 10 and 11. Runways 12 and 13 are alined with the road section 10, while runways 14 and 15 are arranged in alinement with the road section 11.

It will be noted that each of the runways 12 to 15, inclusive, has a wall 16 extending along three sides thereof, the open ends 17 of the runways being arranged to face the stationary road sections 10 and 11 so as to allow traffic, such as an automobile 18, to pass from the runway on one side of the track 4 to the alined runway on the other side of the track.

For imparting movement to the traffic I provide means for hinging the ends 17 of the runways to the top 2 as at 19, whereby the runways may be tilted into an inclined position for moving traffic from one runway to the alined runway on the opposite side of the railroad track. I have shown the hinging means as consisting of bolts 20 fixed to the runways and projecting downwardly through openings 21 in the top 2 (see Figure 3). Springs 22 are arranged to urge the runways upon the top 2.

The runways are tilted by means of rods 23 having offset portions 24 disposed beneath the runways, and these rods have crank handles 25 at the outer ends thereof. The rods are rotatably supported, and upon turning the handles 25, the runways are tilted into angular position for imparting movement to the traffic.

It will be noted that I provide a recess 26 extending transversely across the roadway 8. A barrier 27 normally forms a closure over the recess to allow passage of traffic thereover.

In Figure 2 I have shown the barrier as being raised above the level of the roadway for halting traffic, while in Figure 3 the top barrier plate 28 of the barrier is arranged flush with the roadway and forms part of the latter. Strips 29 are hinged to the barrier plate at 30 and to the bottom of the recess 26 as at 31.

The barrier 27 is made in the nature of a parallelogram-shaped frame, and may be raised to halt traffic or collapsed into the recess 26. For raising and lowering the barrier, I make use of an eccentric 32 that is connected to one of the strips 29 by means of a link 33. A crank 34 is connected to the eccentric at 35, and the crank is operated by a hand-wheel 36. Upon actuating hand-wheel, the barrier 27 may be raised or lowered.

As a further warning to traffic I mount electric lights 37 on the underface of the barrier plate 28, and reflector buttons 38 may be placed on the strips 29. A conventional electric circuit for the lights 37 is indicated at 39, and a switch 40 is provided in the circuit.

The switch 40 has the movable contact 41 thereof mounted on the eccentric 32 and insulated therefrom, and while the stationary contact 42 is fixed in the bottom of the recess 26. Upon raising the barrier to halt traffic, the lights 27 are illuminated, and when the barrier is lowered the lights are automatically turned out.

It will be noted that the crank 34 serves as a common means for raising and lowering the barrier 27 and for controlling the lights 37. In Figure 3 I show the lights 37 as being accommodated within the recess 26 when the barrier is lowered into inactive position.

Shoulders 43 are provided in the upper side walls of the recess 26, which are made to serve as supports for the barrier plate when the latter is lowered to the level of the roadway.

The traffic is moved over the roadway by inclining the selected runway. In the event that the operator should desire to stop all traffic, the barrier 27 is raised by extending the parallelogram-shaped frame. Thereafter, the frame 27 may be collapsed to fold the entire barrier within the recess 26, with the barrier plate 28 arranged on a level with the roadway and forming part thereof.

I claim:

1. In an amusement device, a portable table top having a transverse recess, a barrier plate for forming a closure over the recess, strips hinged to the plate and to the wall of the recess for raising and lowering the plate when the strips are moved, one end of the plate extending beyond the strips when the plate is raised, an eccentric swingably mounted on the table top and being disposed to have said extended end of the plate project thereover when the plate is raised, a link connected to the eccentric and to one of the strips for raising and lowering the plate, the link being movable into the recess and substantially concealed by said extended end of the plate when the plate covers the recess, and a crank for operating the eccentric.

2. In an amusement device, a portable table top having a transverse recess, a barrier plate for forming a closure over the recess, strips hinged to the plate and to the wall of the recess for raising and lowering the plate when the strips are moved, one end of the plate extending beyond the strips when the plate is raised, an eccentric swingably mounted on the table top and being disposed to have said extended end of the plate project thereover when the plate is raised, a link connected to the eccentric and to one of the strips for raising and lowering the plate, the link being movable into the recess and substantially concealed by said extended end of the plate when the plate covers the recess, and a crank for operating the eccentric, said crank including a rod extending lengthwise of the table top and having a handwheel secured thereto beyond an end of the table top.

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