Jan. 7, 1941. C. H. TROMBLA 2,227,918

CAR PLANE

Filed Aug. 5, 1940

Fig. 3

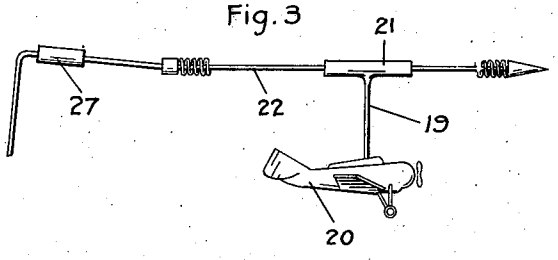


Fig. 2

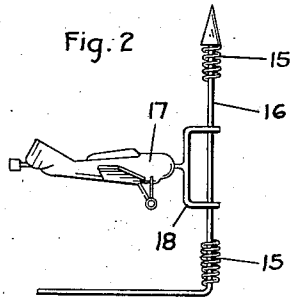


Fig. 1

Fig. 4

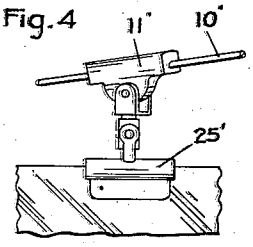


Fig. 5

Fig. 6

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CAR PLANE

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Application August 5, 1940, Serial No. 351,528

6 Claims. (Cl. 46—53)

My invention relates to wind toys and more particularly to wind toys which are adapted for attachment to an automobile to project outwardly from the automobile window.

The primary object of my invention is the provision of a wind toy to project outwardly from the automobile window and having a manually operable handle within convenient reach of a child or other passenger in the automobile whereby some of the movements of the toy are under the control of the operator.

Another object of my invention is the provision of a wind toy having a plurality of dummy airplanes or the like having rotating and sliding movements on axes which are shiftable to a plurality of positions, both bodily and angularly.

Another object of my invention is the provision of a wind toy including a dummy airplane rotatable and slidable on axes which is secured to a clamp adapted for attachment to the upper part of the open windshield of an automobile, the axis having movement relative to the clamp.

Having in view these objects and others which will be pointed out in the following description, I will now refer to the drawing, in which

Figure 1 is an elevational view of the entire assembly showing one form of clamp which may be employed.

Figure 2 is a view in elevation showing an optional connection between a dummy airplane and its axis, whereby the dummy airplane is entirely in the rear of its axis.

Figure 3 shows in elevation a connection between a dummy airplane and its axis whereby the dummy airplane is underneath its axis when the toy is at rest.

Figure 4 is a view in elevation showing a modified form of clamp for securing the toy to the upper edge of a window.

Figure 5 is a sectional view showing the clamp arrangement of Figure 1.

Figure 6 is a view of a different clamp arrangement showing a modification which may be employed.

At 10 is shown the main shaft which is slidingly and rotatably secured in a block 11, the position of the shaft 10 being under the control of the operator through the handle 12. The free end portion of the shaft 10 terminates in one or a plurality of bends, preferably right angularly, providing shafts 13*a*, 13*b*, and 13*c* each adapted for slidably and rotatably supporting a dummy airplane 14*a*, 14*b*, and 14*c*. To absorb the shock of the sliding movements of the dummy airplanes each shaft 13*a*, 13*b*, and 13*c* is surrounded at its ends by a coil spring 15.

In Figure 1 the shafts 13*a*, 13*b*, and 13*c* pass through the bodies of the dummy airplanes in more or less balanced relation. When the dummy airplanes are made of very light material they may be secured to shafts 16 in the manner shown in Figure 2, the shaft 16 and the dummy airplane 17 being in spaced relation. In this case, a U-shaped bracket 18 projects from the nose of the dummy airplane 17, the bracket 18 being slidably and rotatably secured between two buffers 15 on the shaft 16. Likewise, the dummy airplane unit may include a rod 19 projecting upwardly from the dummy airplane 20 and terminating in the sleeve 21 surrounding the shaft 22.

The toy is designed for use by a child or other operator in an automobile. The handle 12 must be within convenient reach of the operator who is seated in the automobile. The assembly of dummy airplanes must be outside the automobile to take advantage of all the air currents, both those caused by the wind and those which are set up by the moving vehicle. To provide the maximum flexibility in the operation of the toy, the main shaft 10 must have the maximum of movement under the control of the operator. The shaft 10 is slidable in the block 11 which is pivotally secured at 23 to a post 24 which in turn is rotatably secured to a clamp 25, the post 24 projecting upwardly from the clamp 25 which is U-shaped to seat over the upper edge of the glass of a window of an automobile. When the clamp 25 is too insecure to hold the toy in the violently fluctuating air currents, the wedge 26 may be employed to seat within the open space of the automobile frame to hold the toy firmly in place. In Figure 4 I employ a very slight modification in which the main shaft 10' is slidably secured in the block 11' which has a universal joint connection with the clamp 25 which is made of resilient material of sufficient rigidity to hold the toy in place.

The operation of the toy will be obvious. With the toy in the position shown in Figure 1, the child or other operator grasps the handle 12 to impart the desired movement of position to the toy. The sliding movement of the main shaft 10 in the block 11 as well as the rocking movement in these elements enables the operator to cause the toy to assume almost every desired position. Added to these is the large number of angular positions which are possible because of the universal joint connection with the block 11. All of these changes as above described are under the

control of the operator. With every change of position the dummy airplanes rotate and slide on the axes. Considerable dexterity is required for shifting and maintaining the dummy airplanes in the desired positions but since the operation is fascinating, the operator quickly acquires the necessary dexterity to cause the dummy airplanes to loop the loop or to simulate the various flight formations.

Having thus described my invention in such full, clear, and exact terms that its construction and operation will be readily understood by others skilled in the art to which it pertains, what I claim as new and desire to secure by Letters Patent of the United States is:

1. In combination, a main shaft and a second shaft in angular relation to each other, a wind toy slidable and rotatable on said second shaft, buffers at the ends of said second shaft, a block, said main shaft being slidably secured to said block, a clamp for engaging the upper edge portion of a glass window of an automobile, and a universal joint connection between said block and said clamp.

2. In combination, a main shaft and a second shaft in angular relation to each other, a wind toy slidable and rotatable on said second shaft, buffers at the ends of said second shaft, a block, said main shaft being slidably and rotatably secured to said block, a clamp for engaging the upper edge portion of a glass window of an automobile, a universal joint connection between said block and said glass, and a handle at the free extremity of said main shaft for manipulation by an occupant of the automobile.

3. A wind toy including a main shaft and a second shaft in angular relation, a dummy airplane slidably and rotatably secured to said second shaft, a clamp for engaging the upper edge portion of the glass of an automobile windshield, and a block having a vertical pivotal connection with said clamp, said main shaft passing through said block whereby an occupant of an automobile may grasp the free end portion of said main shaft to project and retract said dummy airplane toward and away from the automobile window.

4. In combination, a shaft having a handle at one extremity thereof, a block pivotally and slidably receiving said shaft, means for securing said shaft and said block in the window of an automobile with said handle accessible to an occupant of an automobile, said means including a universal joint, a second shaft projecting angularly from the first said shaft, and a dummy airplane slidably and rotatably secured to said second shaft.

5. In combination, a shaft and a block for pivotally and slidably receiving said shaft, means including a universal joint for securing said block in an open window of an automobile with the extremity of said shaft accessible to an occupant of the automobile, a plurality of secondary shafts projecting in succession from said first named shaft, said secondary shafts being parallel to each other and spaced apart, and dummy airplanes slidably and rotatably secured on said secondary shafts.

6. In a wind toy, a plurality of dummy airplanes arranged in flight formation, shafts for slidably and rotatably supporting said dummy airplanes, said shafts being positioned in succession and in parallel and spaced apart relation, buffers at the ends of said shafts for limiting and cushioning the sliding movements of said dummy airplanes, a manually operable shaft rigidly secured to one of the end shafts of said succession of shafts, a clamp, a block, and a universal joint between said clamp and said block, said manually operable shaft being slidable and rotatable in said block, and a handle at the free extremity of said manually operable shaft.

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