April 21, 1931. R. E. CARIVEAU 1,802,195

TOY AEROPLANE

Filed Nov. 30, 1928

Fig. 1.

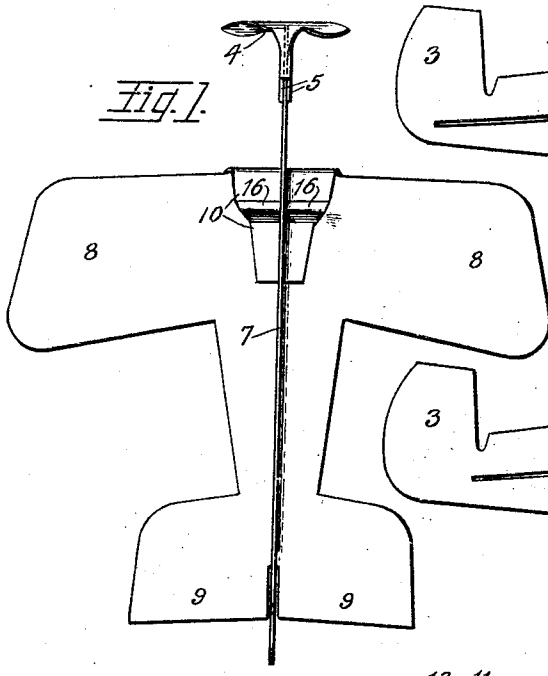


Fig. 2.

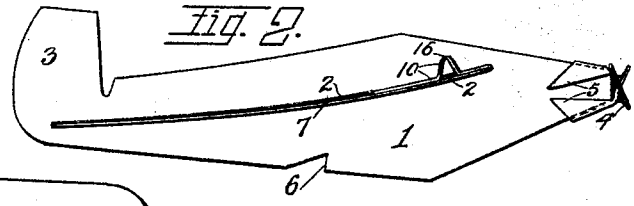


Fig. 3.

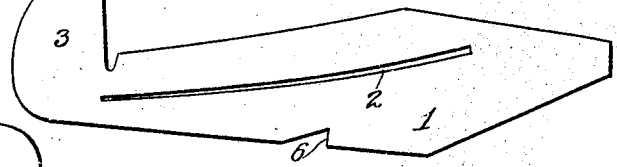


Fig. 4.

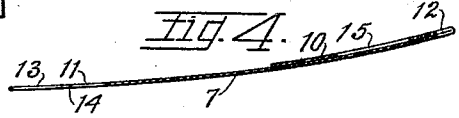


Fig. 5.

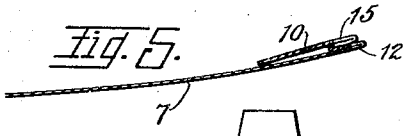


Fig. 6.

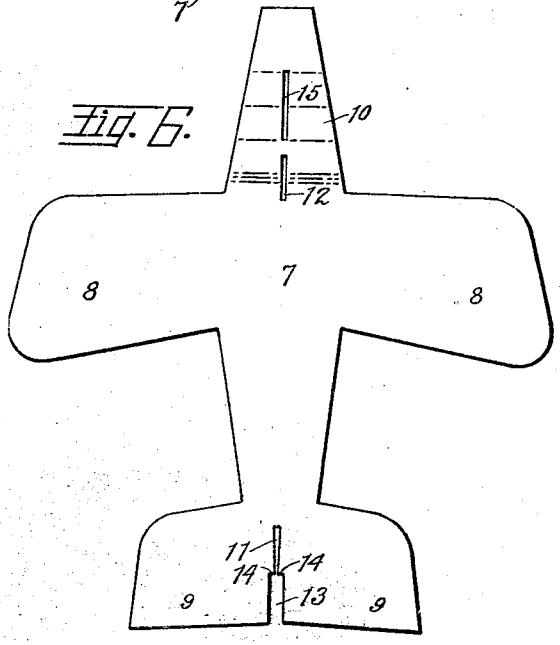


Fig. 7.

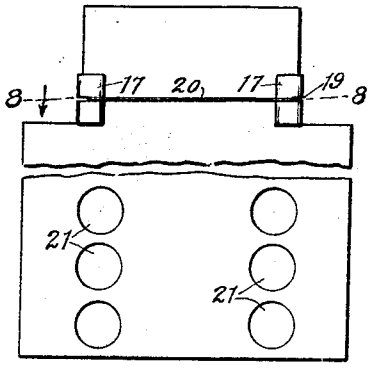
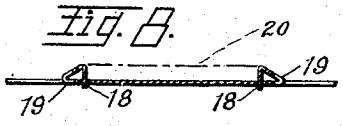


Fig. 8.



INVENTOR,
R E Cariveau
BY
Sterling P. Buck,
ATTORNEY.

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UNITED STATES PATENT OFFICE

ROBERT EDWARD CARIVEAU, OF ST. PAUL, MINNESOTA

TOY AEROPLANE

Application filed November 30, 1928. Serial No. 322,864.

This invention relates to game devices, and especially to an improved form of toy aeroplane.

One object of this invention is to provide a toy aeroplane which can be very quickly and easily constructed of two blanks of sheet material which are interlocked with one another so as to avoid the necessity of using glue, paste or other fastening means.

Another object of the invention is to provide a toy aeroplane of this character having one of said blanks formed with a bendable slotted tongue to form abutments for holding the blanks at right angles to one another while interlocked with one another.

Another object is to provide an improved and simplified form of projector by means of which the aeroplane is projected or shot into the air.

Other objects and important features are pointed out or implied in the following details of description, in connection with the accompanying drawings, in which:

Figure 1 is a top plan view of a toy aeroplane constructed according to this invention.

Figure 2 is a side elevation of the toy aeroplane shown in Figure 1.

Figure 3 is a side elevation of the blank which represents the fuselage of the toy aeroplane.

Figure 4 is a vertical sectional view along the median line of the blank which represents the planes, the slotted bendable tongue being folded back upon the main body part of the blank, so this blank can be inserted through the longitudinal slot of the blank shown in Figure 3.

Figure 5 is a view somewhat similar to Figure 4, but showing the tongue crimped or double-folded so it can be passed through the slot of the fuselage-blank when the edges of the slot are flexed in opposite directions.

Figure 6 is a plan view of the blank shown in Figures 4 and 5, the slotted tongue being unbent, but the broken lines representing the bend-lines.

Figure 7 is a top plan view of a simple and effective form of combined projector and runway, the middle part being broken out.

Figure 8 is a transverse sectional view along the line 8—8 of Figure 7, the broken line representing the position of the rubber projecting element.

Referring to these drawings in detail, in which similar reference characters correspond to similar parts in the several views, it will be seen that the toy aeroplane comprises two blanks such as separately shown in Figures 3, 4, 5 and 6, these blanks being cut or punched from somewhat flexible and springy light-weight material, for instance, cardboard or the like, and it should be understood that the thickness of the material is exaggerated in the drawings, so the width of the slot in Figure 3 is also exaggerated.

The fuselage-blank or body 1 has a slightly curved slot 2 extending longitudinally therein, the slot terminating at a considerable distance from the front and rear ends of the blank, and such rear end is formed with a simulation of a rudder, as indicated at 3. The front end of this blank is forwardly converging and has a simulation of a propeller thereon, as indicated at 4. This member 4 is provided with upper and lower pairs of clamping tongues 5, and is preferably formed of thin sheet aluminum or similar material which is somewhat springy, so the tongues 5 will exert their spring action in holding this part 4 in place. The lower edge is provided with a centrally disposed shoulder 6 which is engageable with any suitable form of projector for shooting the aeroplane forward.

The blank 7, which is separately shown in Figures 4, 5 and 6, includes wings or planes 8, tail members 9 and a slotted tongue 10. As shown in Figures 1 and 2, the member 7 is inserted through the slot 2 of the member 1, and in view of the fact that the member 7 is considerably longer than the slot 2, it will readily be seen that the member 1 must have medially disposed slots to embrace the ends of the slot 2, these medially disposed slots are shown at 11 and 12, (Figures 4, 5 and 6), and the slot 11 is preferably restricted at its rear end, and merges into a relatively wide slot or opening 13 which terminates in shoulders or abutments 14 at the rear end of the slot 11.

The blank 7 is bendable along the broken lines, through the longitudinal center of the slot 12, so the tongue 10 can be folded back on the main body part of the blank 7, as shown in Figures 1, 2, 4 and 5. When thus folded, the slot 12 is open at its front end, and the blank or body 7 can be inserted through the slot 2, by manipulation as follows:

First, insert one of the tail members 9 through the slot 2, flex such tail members so the rear end of the slot 2 will enter the restricted end of the slot 11; second, move the blank 7 rearwardly until the front end of the folded blank 7 (Figures 4 and 5) can be moved through the slot 2; third, move the front end of such blank 7 until the slot 11 is within the slot 2; 4th, turn the blanks to right angled relation to one another; 5th, move the blank 7 forward with relation to the blank 1, so the slot 12 will embrace the front end of the slot 2; and 7, crimp the tongue along the lines at the ends and longitudinal center of the slot 15. By thus crimping the tongue into the shape shown in Figures 1 and 2, the slot 15 embraces the material at the upper or lower side of the slot 2, according to the position in which the blank 7 is inserted. In other words, the material at opposite sides of the slot 15 forms abutments 16 which rest against opposite sides of the vertically disposed fuselage blank, and thereby retain the blanks 1 and 7 in the right angled relation to one another. At the same time, the shoulders 14, having been moved forward into the slot 2, engage with the rear end of the slot 2 so as to prevent the member 7 from moving rearward with respect to the member 1.

Referring now to the combined projector and run-way shown in Figures 7 and 8, it will be seen that a blank of sheet material such as card-board or "fibreboard" is formed with tongues 17 that are turned inwardly and inserted through slots 18 that hold them in place. The tongues are slotted at 19 to receive a rubber band or strip 20 that may have its ends knotted to prevent it from pulling through the slots.

The card or run-way may be provided with any suitable handle, for instance, any desired number of finger-holes 21 may be provided in any desired locations, and the material between these finger-holes may be used as handles for holding the device with either hand while manipulating the toy aeroplane with the other hand.

The game may be played in numerous ways, but for the present purpose, it is only necessary to describe or explain one way, and such explanation is given as follows:

Goals (not shown), may be provided to represent different countries. When each player has decided which country to choose as his from which to "take off" or fly to another country or goal, he chooses an aeroplane bearing a suitable color or symbol to represent such home country or goal from which the aeroplane is to fly. He then stations his chosen aeroplane on a corresponding run-way at such home-country, which may be on a floor or table, where the other goals or representations of countries are located, and there should be one or more yards of space between each of such countries and the nearest adjacent ones of such countries.

To start the game, one of the players takes up a run-way such as shown in Figures 7 and 8, for instance, with one or more fingers through one or more of the finger holes 21, inclines the run-way at the desired angle, and with the other hand, he holds the chosen aeroplane by its rudder 3, hooks the notched lower edge over the projector member 20, pulls back the aeroplane so the abutment 6 retracts the middle part of the elastic member 20, at the same time aiming at one of the goals or countries by means of the run-way. When the player thinks he has the correct aim and angle, he releases the aeroplane and the elastic member 20 shoots the aeroplane across the game field. The competing player likewise chooses and manipulates an aeroplane and run-way, and shoots the aeroplane towards the same or another goal or country. The first player to touch the goal, with the aeroplane, is the winner, provided that the aeroplane has not touched the game field before touching the goal. If either aeroplane touches the game field before hitting the goal, or if it overturns in its flight, such accident may be counted against the player having the accident.

Each aeroplane may also be used independently of the goals, and the players may shoot at one another. Moreover, each aeroplane may be used as a separate toy, and may be thrown or shot by any appropriate means, or may be dropped from a height and permitted to "volplane".

From the foregoing, it will be seen that the aeroplanes have various applications as toys and game pieces, and that they are comparatively inexpensive, while being exceedingly durable, consistent with the necessary lightness to enable them to remain in air while travelling a considerable distance across a game field.

Although I have described this embodiment of my invention specifically, and explained one mode of applying the invention as a game device, I do not intend to limit my patent protection to these exact details of construction and operation, for numerous changes are contemplated within the scope of the inventive ideas, as implied and claimed.

What I claim as my invention is:

A toy aeroplane comprising two blanks of light-weight sheet material, one of said blanks being plane and representing the

fuselage and having a slot extending longitudinally therein, the second blank representing the planes and extending through the said slot and provided with a medially slotted tongue which is bent to form two abutments on opposite sides of the blank that represents the fuselage, the first said one of the blanks being held in the median line of said second blank and at right angles thereto by means of said abutments.

In testimony whereof I affix my signature.

ROBERT EDWARD CARIVEAU.