

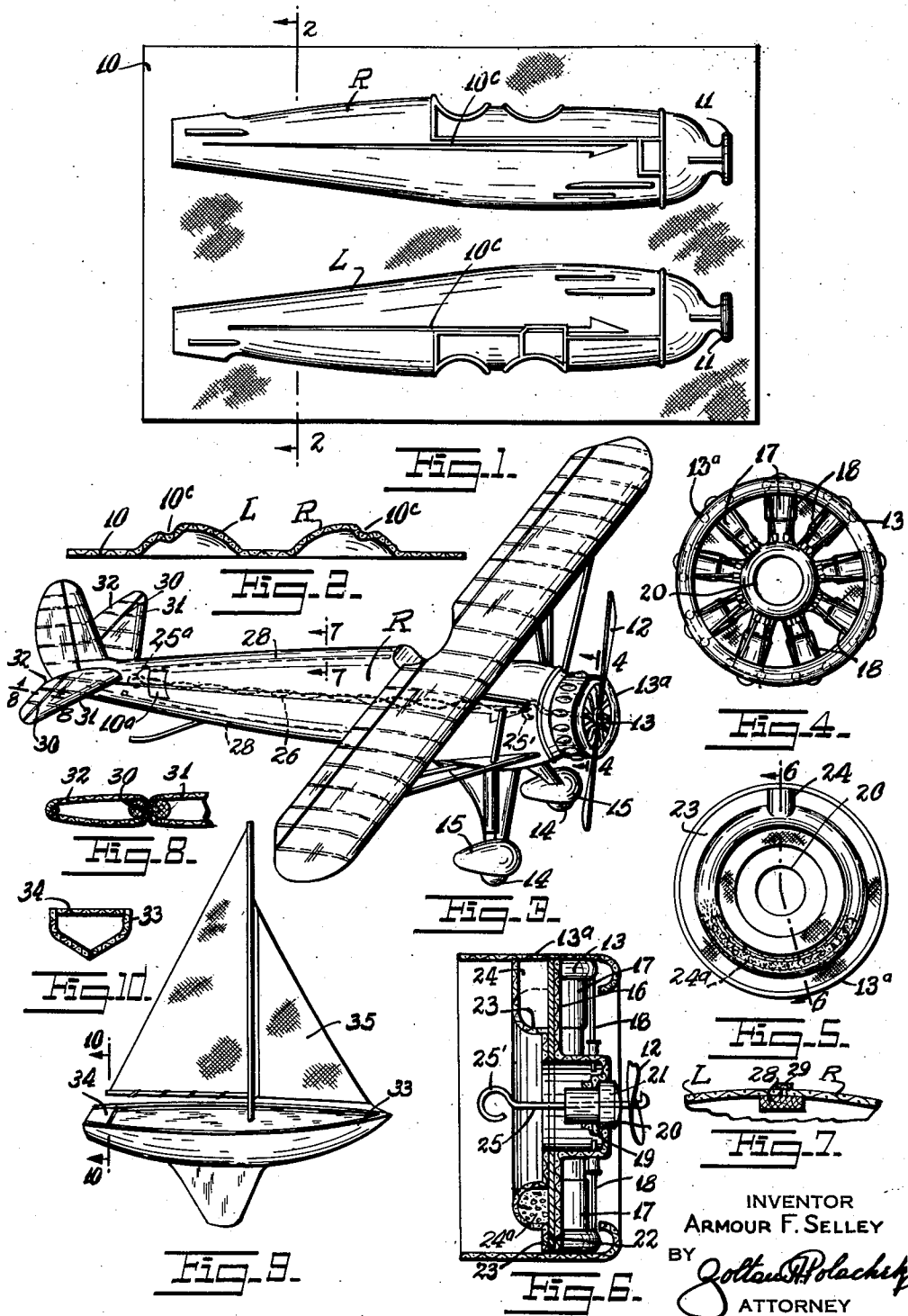
Oct. 20, 1936.

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2,058,265

MODEL OF AIRPLANE

Filed April 9, 1935



UNITED STATES PATENT OFFICE

2,058,265

MODEL OF AIRPLANE

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Application April 9, 1935, Serial No. 15,373

3 Claims. (Cl. 35—8)

This invention relates to new and useful improvements in models of airplanes, boats and rolling stock such as locomotives, pullman cars, etc.

5 The invention has for an object the making of models, utilizing sheets of buckram or other similar prepared fabric for the materials of the models.

10 It has been discovered that sheets of buckram and other similar fabric may be moistened and in the moistened state moulded into various shapes by heated dies. It has further been discovered that when the heat of the dies evaporates the moisture, the buckram or similar prepared material will maintain its moulded condition. It is proposed to construct the various component parts of models and to assemble these parts into the finished model.

20 With specific reference to an airplane model, it has been discovered that when constructed from buckram or other similar material according to this invention it is "tail" heavy and for this reason it is proposed to provide a novel arrangement at the "motor" portion of the model to counterbalance the "tail" weight known as a balancing ring.

25 Still further the invention proposes the construction of a model as mentioned which is simple and durable and which can be manufactured and sold at a reasonable cost.

30 For further comprehension of the invention and of the objects and advantages thereof, reference will be had to the following description and accompanying drawing, and to the appended claims in which the various novel features are more particularly set forth.

In the accompanying drawing forming a material part of this disclosure:—

40 Fig. 1 is a plan view of a sheet of buckram or similar material after it has been withdrawn from a mold, according to this invention.

Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1.

45 Fig. 3 is a perspective view of an airplane model constructed according to this invention.

Fig. 4 is an elevational view of the motor portion of the model shown in Fig. 3, seen as though looking in the direction of the line 4—4 of Fig. 3.

50 Fig. 5 is a rear elevational view of Fig. 4, showing the back of the motor.

Fig. 6 is a sectional view taken on the line 6—6 of Fig. 5.

55 Fig. 7 is a fragmentary sectional view taken on the line 7—7 of Fig. 3, showing in particular the

method by which certain of the parts are connected together.

Fig. 8 is a vertical sectional view taken on the line 8—8 of Fig. 3.

Fig. 9 is a perspective view of a model of a boat 5 constructed according to this invention.

Fig. 10 is a sectional view taken on the line 10—10 of Fig. 9.

The models, according to this invention, are made by moistening a sheet of buckram 10 or 10 other similarly prepared fabric of one or more plies, and while in the moistened state, forming the parts of the model by engagement thereof into heated forming dies or moulds. The dies or moulds are not shown on the drawing since they 15 form no part of the invention and in the art the construction of forming dies is generally known. Any of the universally used forming dies, used in forming metal parts or molding mâché or similar materials, may be used. Many of these dies are 20 provided with heating elements, and if not, the dies may be heated in a suitable oven or furnace.

The material 10 is shown formed with the side portions R and L of the body of an airplane. The portion R represents the right hand side thereof, 25 and the portion L the left hand side. It should be noted that these portions are formed from the sheet material 10 (see Fig. 2) and each of the portions is formed with suitable raised and recessed parts 10^c necessary in the body construction. For example, such parts 10^c may be for 30 ornamental purposes or may be foundation supports, etc., for receiving and holding of other portions of the models. The parts R and L are formed at the front ends with a motor attaching 35 base 11.

In Fig. 3 an assembled model is shown formed from parts and including the parts illustrated in Figs. 1 and 2. This model is shown provided with the dummy motor 13 and the propeller 12. Preferably, the propeller should be constructed of wood as is customary in small airplane models. The blades of the propeller may also be constructed from the buckram. The motor 13 is 45 constructed from buckram sheets or the like. The accessories such as the wheels 14 and the wheel pants 15 may or may not be constructed from sheet buckram depending merely upon desire. A motor cowl 13^a is formed with suitable ribs and is used to cover the motor 13. 50

The motor is illustrated in detail in Figs. 4-6, inclusive. It is composed of an annular shaped member 16 having a plurality of raised portions 17 simulating the cylinders of the motor. Metallic pins 18 are arranged longitudinally across the 55

front of the cylinders simulating the rods which operate the valves of the cylinders. The annular member 16 is formed with a hollow crank case 19 which is engaged upon and secured to the motor attaching base 11 illustrated in Fig. 1. The crank case portion 19 is formed with an opening 20 adapted to receive a propeller bushing plug 21.

The propeller bushing wood plug 21 is inserted through hole 20 and into the motor attaching base 11 so that when the shaft 25 of the propeller 12 is inserted axially, the propeller is free to rotate. The other end of the propeller shaft 25 is formed with a wire loop 25' in which one end of the rubber motor 26 is held. The other end of the rubber motor is engaged into a fixed hook 25^a at the tail end of the fuselage by opening a hinged door 10^a.

The annular disc 22 is cemented on to annular shaped member 16. The annular section 23 is formed with a hollow concave section with a channel opening at the top 24. This annular section 23 is cemented to balsa annular disc section 22 on which member 15 is also cemented. With this arrangement it is possible to counterbalance the "heavy" tail effect of the airplane model by filling with shot or sand 24^a, within the compartment 23 to counterbalance the tail heaviness of the model.

In Fig. 7 a detail is shown of the means used in connecting the parts of the body of the airplane together. A wooden strip 28 is cemented, pasted or glued, etc., along one edge of one part of adjacent edge of the adjacent part and is secured thereto also with cement, paste, glue, etc. In Fig. 3 the strips 28 are shown extending substantially the entire length of the airplane fuselage and a buckram covering strip 29 is used as a trimming over the joint edges. This method of securing the parts together may be used for other parts of the model.

In Fig. 8 a buckram strip 30 is shown to be used as a hinge between the elevator 31 and aileron 32.

In Figs. 9 and 10 another embodiment of the invention has been disclosed wherein a boat 33 having a rear seat 34 and a sail 35 is shown constructed from buckram or other similarly prepared material in a fashion similar to the construction of the airplane model. The purpose of showing this boat is to bring out the fact that various objects may be constructed embodying the features of the invention.

While I have illustrated and described the pre-

ferred embodiment of my invention it is to be understood that I do not limit myself to the precise construction herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

Having thus described my invention what I claim as new and desire to secure by United States Letters Patent is:—

1. A model of an airplane for educational purposes consisting of a hollow fuselage, hollow wings, a hollow false motor, a hollow annulus attached to the back of said false motor, all of said parts being constructed of die formed sheets of buckram, said hollow annulus having an opening in its upper portion for the free addition or removal of ballast, whereby the ballast may be freely added or removed to teach the art of balance.

2. A model of an airplane for educational purposes consisting of a hollow fuselage, hollow wings, and a hollow false motor constructed of die formed sheets of buckram, all of said parts being assembled, said motor having an annular member attached to its rear side and said annular member being formed with an axially annular compartment having a top opening for free addition or removal of weights, whereby the art of balance in flying may be observed.

3. In a model of an airplane for educational purposes, a hollow false motor constructed of buckram and adapted to be supported on a body of an airplane, said motor comprising, an annular disc section adapted to give said motor needed rigidity, an annular shaped member fastened to said annular disc section and formed with an opening, a propeller bushing block adapted to engage said disc section within said opening, a propeller shaft engaging through said bushing block and adapted to support a propeller, raised portions on the front of said annular shaped member to represent cylinders, metallic pins arranged longitudinally in front of said cylinder to represent the rods which operate the valves, an annular section formed with a concave section and a channel opening at the top is engaged on said annular disc section, and a motor cowl adapted to cover said motor, said cowl being formed with a top opening above said channel whereby ballast may be freely added to said concave section or removed from said concave section to teach the art of balance.

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