Oct. 30, 1928. 1,689,807

C. H. TRAVER

HYDROPLANE

Original Filed Nov. 27, 1926 2 Sheets-Sheet 1

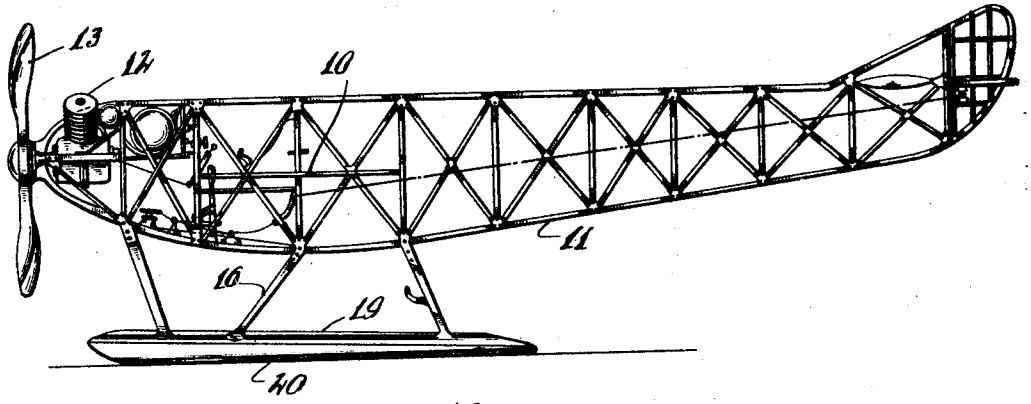


Fig. 1.

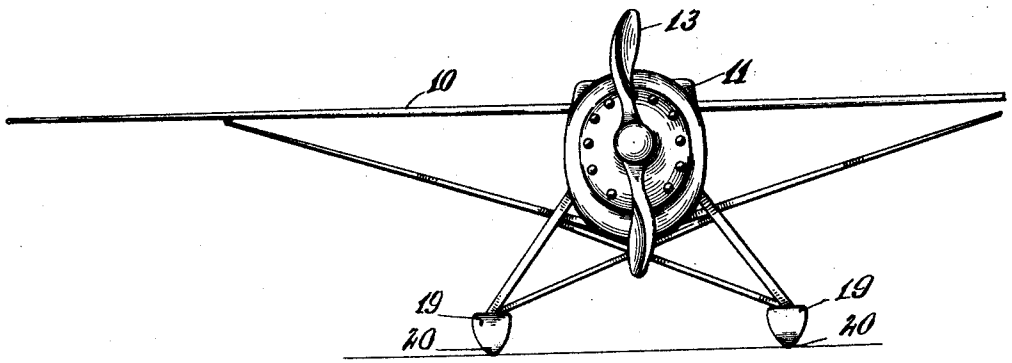


Fig. 2.

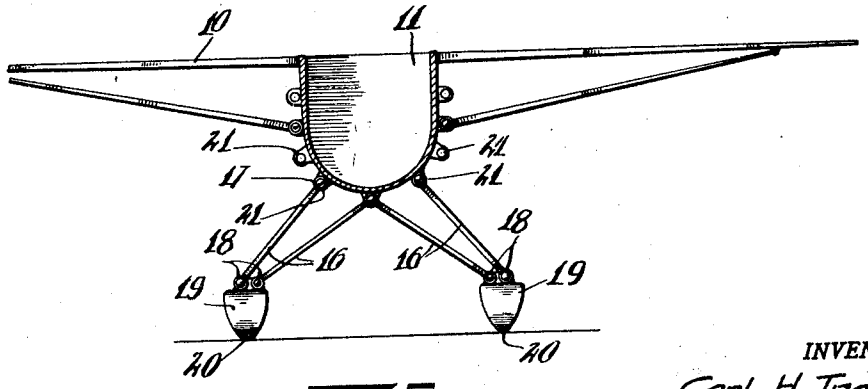


Fig. 3.

INVENTOR
Carl H. Traver
BY
ATTORNEY

Oct. 30, 1928. 1,689,807

C. H. TRAVER

HYDROPLANE

Original Filed Nov. 27, 1926 2 Sheets-Sheet 2

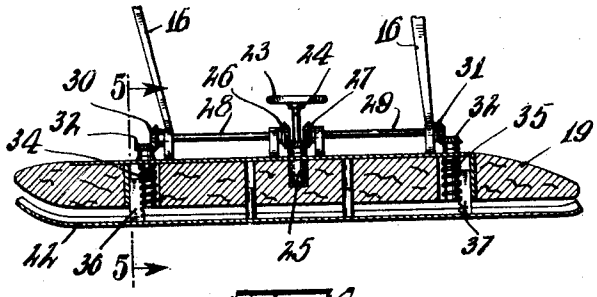


Fig. 4.

Fig. 3.

Fig. 5.

INVENTOR
Carl H. Traver
BY
ATTORNEY

Patented Oct. 30, 1928. 1,689,807

UNITED STATES PATENT OFFICE.

CARL H. TRAVER, OF BINGHAMTON, NEW YORK.

HYDROPLANE.

Application filed November 27, 1926, Serial No. 151,058. Renewed April 18, 1928.

This invention relates to improvements in aeroplanes and in particular to adjustable devices so as to render the aeroplane more useful.

The object of the invention is to provide a means of permitting the aeroplane to land on water, snow, ice or the like.

In the accompanying drawings:

Fig. 1 shows a side elevational view of an aeroplane equipped with my improved device.

Fig. 2 shows a front elevational view thereof.

Fig. 3 shows a top plan view thereof.

Fig. 4 shows an enlarged longitudinal detail sectional view of my improved device.

Fig. 5 shows an enlarged transverse sectional view taken on the line 5—5 of Fig. 4.

Fig. 6 shows a further development of my improved device.

The fuselage 10, the body 11, the motor 12, operatively connected to the propeller 13, the operator's seat 14, the controls 15, the fuel tank 16 are the general elements of an aeroplane, such as commonly used for flying. It being understood that I do not necessarily limit the use of my invention to monoplanes such as here illustrated, but to biplanes and all types and classes of aeroplanes such as are manufactured and used for all purposes.

Referring in particular to Fig. 6 of the accompanying drawings in which the undercarriage comprises a plurality of struts 16, hinged, as at 17, to the body 11. The struts 16, extend downwardly from the body 11 and are hinged, as at 18, to the pontoons 19, which extend longitudinally to the body 11. The pontoons 19 are formed or shaped so as to provide a V shaped section, terminating in a pointed element 20. The above described construction being such as will permit the pontoons 19 to be displaced from the body 11, so as to provide a better means of landing on the said pontoons. It being understood that the struts 16, may be hinged to the lugs 21, for the purpose as here stated.

Referring in particular to Figs. 4 and 5 of the accompanying drawings in which I have provided a means of extending the supplementary runners 22, so as to permit the aeroplane to land on snow or the like. The hand wheel 23 is attached to the shaft 24, rotatively mounted in the pontoons 22. The bevel pinion 25 is attached to the shaft 24 and meshes with the bevel pinions 26 and 27, attached to the shafts 28 and 29, respectively, rotatively mounted in suitable supports attached to the pontoon 22. The bevel pinions 30 and 31 are attached to the shafts 28 and 29, respectively and mesh with the bevel pinions 32 and 33, respectively, attached to the worm wheels 34 and 35, respectively. The worm wheels 34 and 35 are rotatively mounted in the pontoon 19 and mesh with worm racks 36 and 37, slidably mounted in the runner 22. The supplementary runner 22 is of convex construction and extends the entire length of the runner 20. The worm racks 36 and 37 are attached at their lower extremities to the supplementary runners 22. The above described construction being such as will permit the hand wheel 23, when turned or rotated, to lower or extend the supplementary runner 22, for the purpose as hereinbefore set forth.

Having thus described my invention, what I claim as new and desire to protect by Letters Patent of the United States is as follows:

1. In an aeroplane, runners attached to pontoons, and a means of extending the said supplementary runners.

2. An aeroplane comprising pontoons, supplementary runners attached to the said pontoons and a means of extending the said supplementary runners.

3. An aeroplane comprising pontoons, supplementary runners mounted in the said pontoons, and a means of extending the said supplemenary runners.

4. In an aeroplane, a means of extending supplementary runners, said supplementary runners attached to pontoons, a hand-wheel operatively connected to the said supplementary runners.

5. In an aeroplane, a hand-wheel operatively connected to supplementary runners, as a means of extending the said supplementary runners, said supplementary runners mounted in pontoons.

In testimony whereof I have affixed my signature.

CARL H. TRAVER.