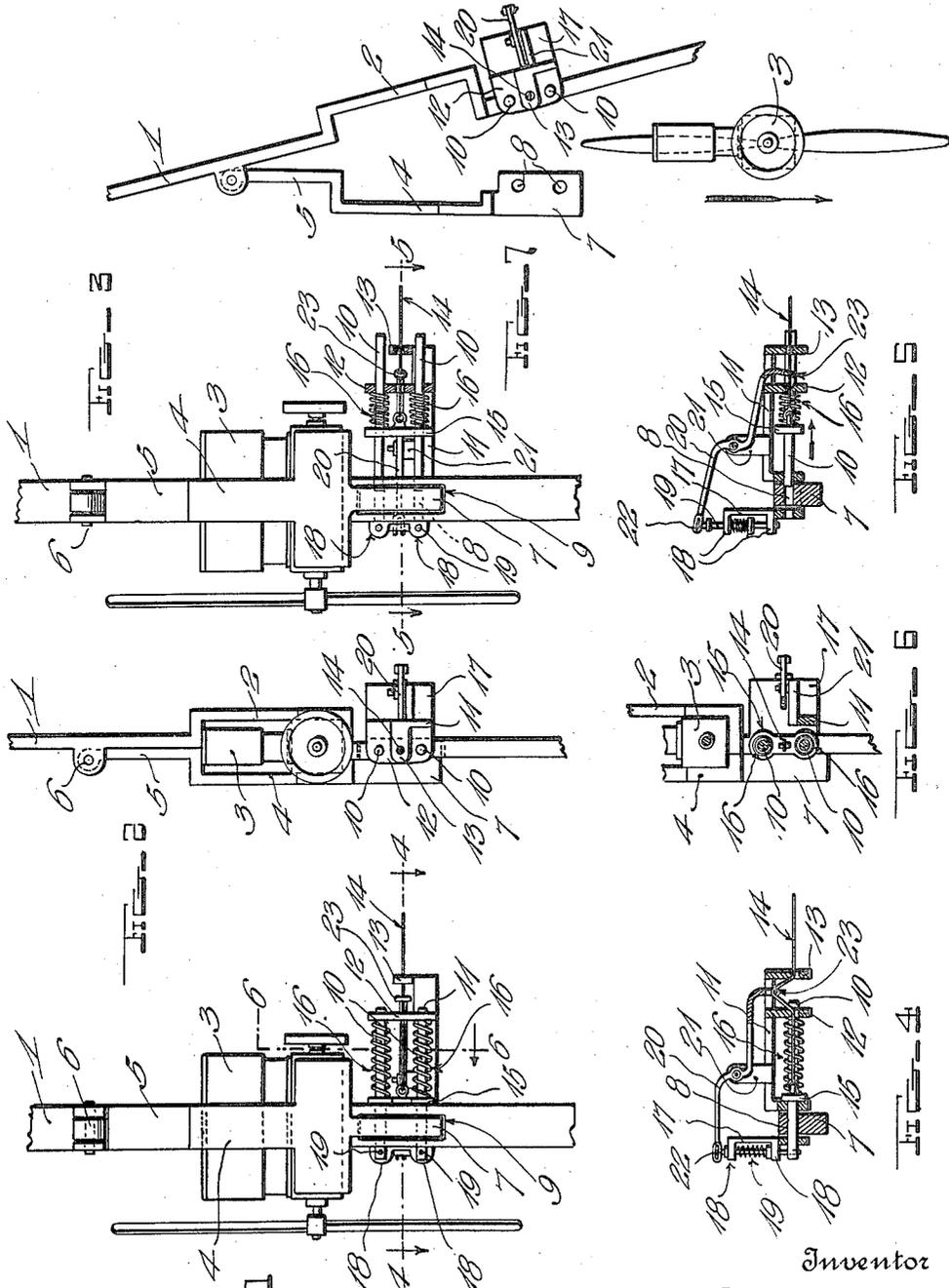


A. FERNANDEZ.
 AIRSHIP ENGINE RELEASE.
 APPLICATION FILED OCT. 14, 1916,

1,237,889.

Patented Aug. 21, 1917.



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ALPHONSE FERNANDEZ, OF WASHINGTON, DISTRICT OF COLUMBIA.

AIRSHIP-ENGINE RELEASE.

1,237,889.

Specification of Letters Patent. Patented Aug. 21, 1917.

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To all whom it may concern:

Be it known that I, ALPHONSE FERNANDEZ, a subject of the King of Spain, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Airship-Engine Releases; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in engine mounts for air craft and more particularly to one so constructed as to permit the engine to be released and cast from the ship in case said engine is disabled or if its weight is detrimental due to injury to other parts of the ship.

The device is intended primarily for use on belligerent aeroplanes and dirigibles and its object is to carry out the end above mentioned by the provision of simple yet highly efficient and positive means.

With the foregoing general object in view, the invention resides in certain novel features of construction and in unique combinations of parts to be hereinafter fully described and claimed, the descriptive matter being supplemented by the accompanying drawing which constitutes a part of this specification and in which:

Figure 1 is a side elevation showing an engine clamped in the improved mount;

Fig. 2 is an edge view of the mount showing one end of the engine therein;

Fig. 3 is a view similar to Fig. 1 with parts broken away and in section and showing the engine partly released;

Figs. 4 and 5 are horizontal sections on the planes of the lines 4-4 and 5-5 of Figs. 1 and 3 respectively;

Fig. 6 is a detail vertical section on the plane designated by the line 6-6 of Fig. 1; and,

Fig. 7 is a view similar to Fig. 2 with the engine released.

In the drawing above briefly described, the numeral 1 designates a vertical bar carried rigidly by an airship and offset between its ends at 2 to provide a half seat for the engine 3, the other half 4 of said seat being formed between the ends of another vertically extending bar 5 which is hinged at 6 to bar 1. The lower end of bar 5 is provided with a locking plate 7 having openings 8, said plate being adapted for reception in

a slot 9 in the bar 1, a pair of horizontal bolts 10 being passed slidably through said bar for reception in the openings 8.

A rigid arm 11 extends laterally from one edge of bar 1 and carries a guide plate 12 having openings in which the outer ends of the bolts 10 are slidably mounted, said arm also having a perforated ear 13 through which a bolt retracting cable 14 passes, said cable being connected to a cross bar 15 secured at its ends to the bolts 10. Coil springs 16 are interposed between bar 15 and plate 12 and normally project the bolts 10 as shown in the numerous views of the drawing.

Extending from one side of bar 1 is another arm 17 having ears 18 in which a pair of spring-projected locking bolts 19 are slidably mounted, said bolts being normally projected through the active ends of the bolts 10 to prevent retraction of the latter as indicated most clearly in Fig. 4. A bolt releasing lever 20 is fulcrumed between its ends to an ear 21 extending laterally from the arm 11 and at 22 said lever is connected with both bolts 19, the other end of said lever being disposed between the ear 13 and the guide plate 12 and having an eye 23 through which the cable 14 passes. Eye 23 is offset from the openings in the plate 12 and ear 13 through which the cable 14 passes and thus when said cable is pulled upon, the offset therein will first straighten out as shown in Fig. 5 with the result that lever 20 is rocked to release the bolts 19. A further pull on said cable will now retract the bolts 10 and when the ship lists or tilts (see Fig. 7) the bar 5 will swing laterally and will thus release the entire engine 3 to permit it to drop.

The device is of use if one of the engines of the ship becomes disabled and is therefore useless weight, or if other parts of the ship such as some of the supporting planes are injured and cannot therefore support the weight of any particular engine or engines. Under such circumstances, therefore, the lives of those in the air craft may often be saved whereas otherwise they would probably be lost.

From the foregoing taken in connection with the drawing, it will be obvious that although the invention is simple, it may be applied to numerous types of air craft and will be extremely advantageous in cases of emergency. For these reasons, the general structure shown and described is preferable,

but in conclusion I will state that although certain specific details have been illustrated and have been herein described, numerous changes may be made without sacrificing the principal advantages.

I claim:

1. The combination with an airship, of an engine mount formed of a fixed and a releasable section clamped rigidly around the engine and separable horizontally, and releasable means for locking the movable section in operative position and for releasing it at will to permit the engine to fall from the ship.

2. An engine mount for airships composed of a fixed and a movable section clamped rigidly around the engine and separable horizontally, and means for locking the movable section in operative position and for releasing it at will to permit the engine to drop from the mount.

3. A mount for airship engines formed of a fixed and a movable section clamped rigidly around the engine, said movable section being pivoted at its upper end to the fixed section, and means for locking the lower end of said movable section to the fixed section and for releasing it at will.

4. The combination with an airship engine mount formed of fixed and movable sections, of a locking member for holding said movable section in operative position, a second locking member for locking the first named member against movement, and

means for successively releasing said second and first named locking members.

5. The combination with an airship engine mount formed of a fixed and a movable section between which the engine is clamped, of a sliding bolt for locking the movable section in operative position, a second sliding bolt at right angles to the first named bolt for locking the latter against movement, a release cable for the first named bolt passing through a pair of guides, and a releasing lever for the second bolt connected with this bolt at one end, the other end of said lever being disposed between the aforesaid guides and offset from the cable receiving portions thereof, said last named end of the lever having an eye through which the cable passes.

6. An engine mount comprising a vertical bar carried rigidly by an airship and offset between its ends to form a half seat for the engine, a second bar hinged at its upper end to said first bar above said half seat, said second bar being offset to form the other half of the engine seat, and releasable means for securing the lower end of said second bar to said first bar.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ALPHONSE FERNANDEZ.

Witnesses:

J. A. GRIESBAUER,
T. A. NOONE.