June 13, 1939. LE ROY S. DUNHAM 2,161,955

MAGNETO MOUNTING MEANS

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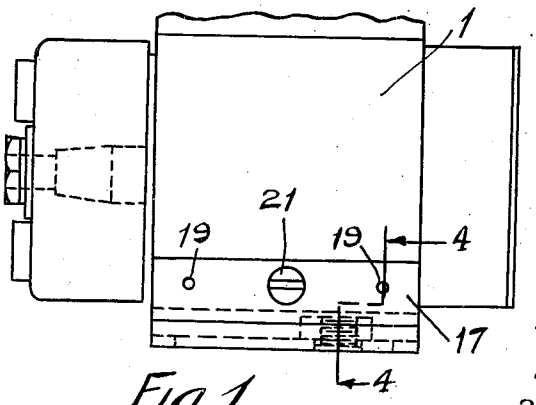


Fig. 1

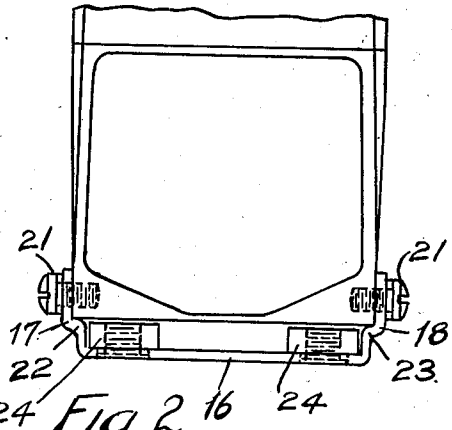


Fig. 2

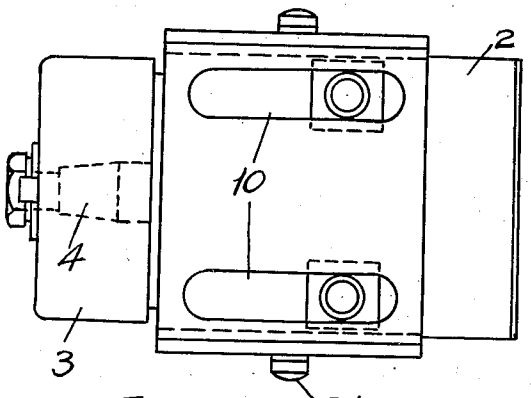


Fig. 3

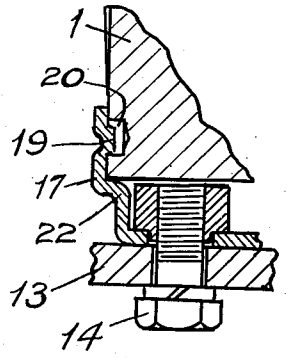


Fig. 4

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MAGNETO MOUNTING MEANS

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4 Claims. (Cl. 248—23)

This invention relates to means for mounting a dynamo electric machine, and is best adapted for use in mounting ignition magnetos on the engines for which they are to furnish ignition current.

While certain mounting dimensions, such as shaft height, size of shaft, taper, location of base holes with respect to the taper, and certain other dimensions for magnetos have been standardized over a long period of time, the introduction of new and smaller engines and new and smaller magnetos with the use of impulse couplings, the dimensions of which have not been standardized and which vary in size according to the difference in design of various manufacturers, has brought about variations in the location of base holes in the magnetos. Some manufacturers of small types of magnetos have provided numerous auxiliary or sub-bases to provide the necessary height distance from the base mounting to the center line of the shaft, and more especially to accommodate different locations of holes in the engine supports with respect to the driving shaft or driving member on the engine. Under these conditions, manufacturers have been obliged in the past to carry numerous auxiliary bases having differently located mounting holes therein, all of which means expense to the manufacturer and expense and annoyance to the user who might have occasion or desire to replace one make of magneto by another.

It is the object of my present invention to provide a magneto mounting means which will take in or cover the full range of variations now existing or which, as far as can be foreseen, are likely to come up in the future.

While attaining the principal object of my invention, it is another object to provide a simpler and cheap means for attaining the principal object.

My invention will be readily understood by reference to the annexed drawing, wherein:

Figure 1 is a part-elevational view showing one form of construction.

Figure 2 is a view of Figure 1 looking from right to left.

Figure 3 is a bottom view of Figure 1.

Figure 4 is a fragmentary, sectional view on the line 4—4 of Figure 1.

Referring now to the details, wherein like numbers refer to corresponding parts in the various views, 1 illustrates generally the framework or lower portion of a magneto, the circuit breaker mechanism being housed within a casing part 2, and an impulse coupling within the casing member 3. The shaft of the magneto is indicated by the dotted line 4. The lower portion of the magneto 1 may be considered as a fixed base portion to which an auxiliary base portion 16 is adapted to be fastened. The auxiliary base 16 is provided with a pair of spaced T-shaped slots, the open portions toward the engine support 13 being numbered 10.

The auxiliary base 16 is made from a suitable piece of sheet metal with oppositely disposed upturned sides 17 and 18. These sides are provided with one or more bosses 19, two being indicated in Figure 1, for each side. The bosses 19 are adapted to enter depressions 20 in some part, preferably the lower base portion of the magneto. The bosses 19 are so positioned as to first engage the lower portion of the depressions, as will be seen from Figure 4, so that when the clamping means in the form of a screw 21, at least one of which is carried by each of the sides 17 and 18, is screwed into the frame of the magneto as shown in Figure 2, the action is such as to draw the auxiliary or detachable base 16 upwardly into secure engagement with the frame of the magneto. It will be noted that the sides 17 and 18 are pressed inwardly at the points 22 and 23, thereby forming a seat for the lower portion of the frame 1 of the magneto. Furthermore, the inwardly set portions 22 and 23 are so positioned as to cooperate with the nuts 24 to prevent them from turning when the engine set screws 14 are drawn up to clamp the magneto to the support 13.

As shown in Figure 3, the slots 10 are not T-shaped but open directly within the interior of the auxiliary base 16. While I have shown the nuts 24 positioned within the auxiliary base and the studs 14 extending through the engine support 13 into cooperation with these nuts, the reverse location of these parts may be used; that is to say, the stud 14 might be positioned and carried by the auxiliary base and passed through the engine support 13, and nuts and lock washers used on the bottom portion thereof in cooperation with the said screw studs. However, the form indicated is much more convenient.

On some installations, where a standard-height magneto shaft from the base is used, the base may be made thick enough to have the slots 10 made therein, but in the great majority of cases the auxiliary base is required, so that only this form of construction is shown in the drawing.

From what has been said, it will be understood that this invention avoids the great variety of auxiliary mounting plates heretofore used, by

substituting for all of them the construction of the present application.

What I claim is:

1. A magneto mounting means comprising, in combination, a magneto, a base for the magneto, said base having spaced slots therein extending longitudinally of the magneto, and a nut non-rotatably but slidably positioned in each slot to receive screw-studs coming from an engine support, the portion of the base carrying the nuts being detachable from the lower part of the magneto, said detachable portion having upturned sides embracing the lower part of the magneto on opposite sides of the shaft, and means for fastening said upturned sides to the lower part of the magneto.

2. A magneto mounting means comprising, in combination, a magneto, a base for the magneto, said base having spaced slots therein extending longitudinally of the magneto, and a nut non-rotatably but slidably positioned in each slot to receive screw-studs coming from an engine support, the portion of the base carrying the nuts being detachable from the lower part of the magneto, said detachable portion having upturned sides embracing the lower part of the magneto on opposite sides of the shaft, and means for fastening said upturned sides to the lower part of the magneto, said fastening means including bosses located one at each end of each of the upturned sides, with depressions in the frame of the magneto to receive said bosses, and a screw carried by each of said upturned sides and entering the frame of the magneto to draw said sides securely into fixed position.

3. A magneto mounting means comprising, in combination, a magneto, a base for the magneto, said base having spaced slots therein extending longitudinally of the magneto, and a nut non-rotatably but slidably positioned in each slot to receive screw-studs coming from an engine support, the portion of the base carrying the nuts being detachable from the lower part of the magneto, said detachable portion having upturned sides embracing the lower part of the magneto on opposite sides of the shaft, and means for fastening said upturned sides to the lower part of the magneto, said fastening means including bosses located one at each end of each of the upturned sides, with depressions in the frame of the magneto to receive said bosses, the bosses being located so as to at least firstly engage the lower periphery of the depressions, and a screw carried by each of said upturned sides and extending into the frame of the magneto to force the bosses into their respective depressions thereby drawing the detachable base portion securely against the fixed base portion of the magneto.

4. A magneto mounting means comprising, in combination, a magneto, a fixed base portion and a detachable auxiliary base portion punched from sheet metal and having two oppositely disposed upturned sides and slots extending parallel to the upturned sides and closely adjacent thereto, screw and dowel means for fastening said upturned sides preferably to the fixed base portion, and means carried by said auxiliary base portion and prevented from rotation by said upturned sides for assisting in fastening the auxiliary base portion to an engine support.

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