L. W. FEAGIN.

PUMP OPERATING MECHANISM.

APPLICATION FILED MAR. 28, 1917.

1,250,825.

Patented Dec. 18, 1917.

2 SHEETS—SHEET 1.

FIG. 1.

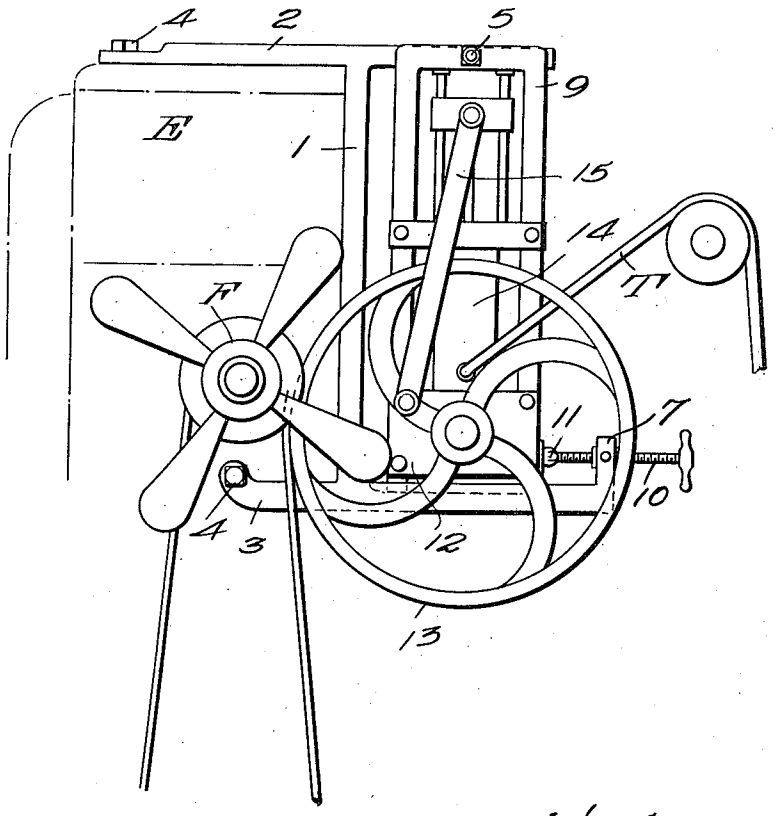
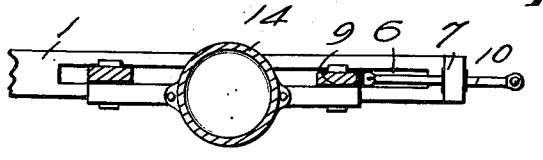


FIG. 4.



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2 SHEETS—SHEET 2.

Fig. 2.

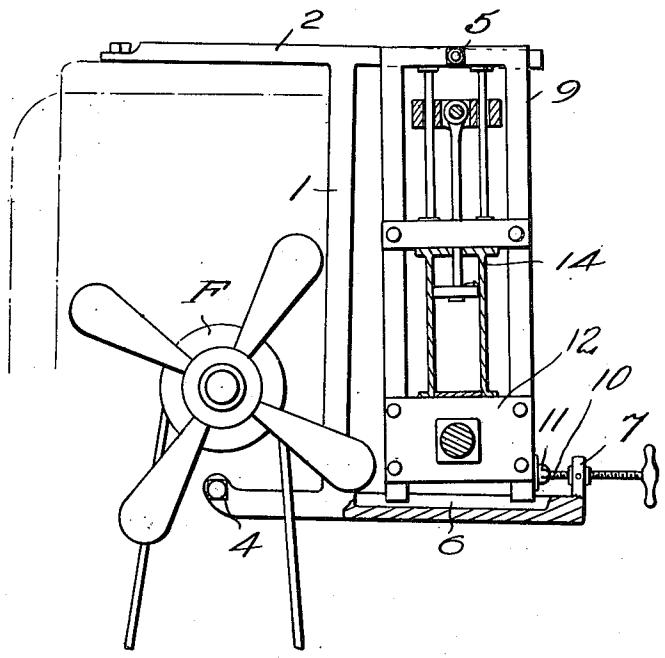
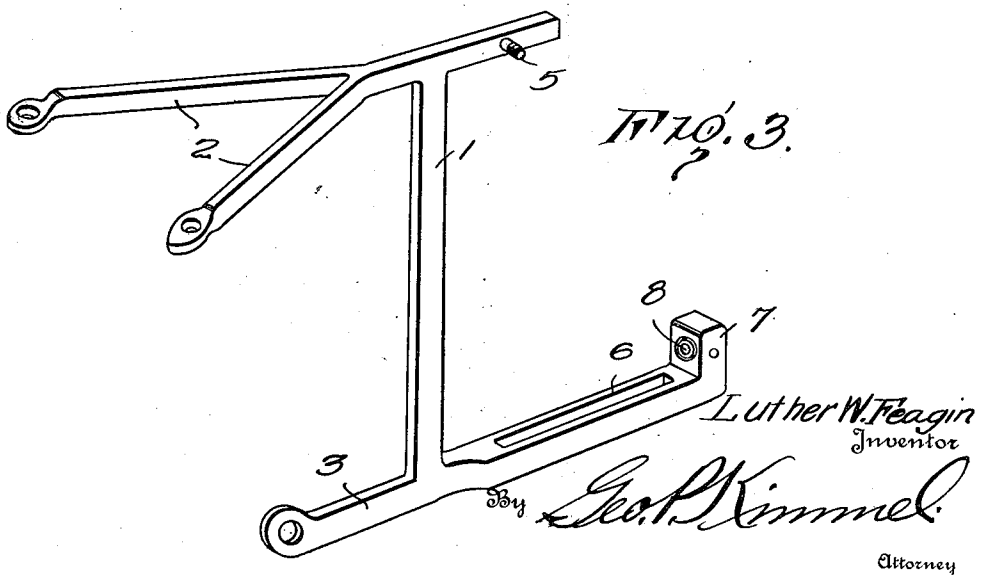


Fig. 3.



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UNITED STATES PATENT OFFICE.

LUTHER W. FEAGIN, OF HENDERSON, TEXAS.

PUMP-OPERATING MECHANISM.

1,250,825. Specification of Letters Patent. Patented Dec. 18, 1917.

Application filed March 28, 1917. Serial No. 158,056.

To all whom it may concern:

Be it known that I, LUTHER W. FEAGIN, a citizen of the United States, and resident of Henderson, in the county of Rusk and State of Texas, have invented certain new and useful Improvements in Pump-Operating Mechanism, of which the following is a specification.

The present invention relates to pneumatic pump operating mechanism and the invention has for its primary object to provide a pump attachment for motor driven vehicles operable by engagement with the usual fan belt and pulley of the engine cooling means, whereby air will be pumped into the tires through a hose of suitable length.

It is a more specific object of the invention to provide a novel mounting for the air compressing pump, whereby, the same can be moved into positive engagement with the fan belt and pulley and a mounting which can be readily attached to an engine with but little alteration thereto.

Among other aims and objects of the invention may be recited the provision of a device of the character mentioned with a view to compactness, and in which a number of parts are few, the construction simple, the cost of production small, and efficiency and operation high.

In order that the invention and the manner of its application may be readily understood by those skilled in the art, I have in the accompanying illustrative drawings and in the detailed following description based thereon, set forth a preferred embodiment of the invention.

In the drawings:

Figure 1 is a front elevation of my improved pump operating mechanism as applied to a fragment of an internal combustion engine;

Fig. 2 is a vertical section therethrough;

Fig. 3 is a detail in perspective of the pump supporting brackets, and;

Fig. 4 is a horizontal section through the mechanism.

Similar characters of reference are employed in all of the above described views to indicate corresponding parts.

Referring now more specifically to the several figures of the said drawings, there is provided a supporting bracket designated 1, which bracket has the upper extremity thereof provided with bifurcated engaging arms 2 the extremities of which are apertured, while upon the lower portion of the said bracket an apertured arm 3 is formed. As shown in the Fig. 1, the arms 2 and 3 are connected to the engine indicated by the reference character E, through the medium of bolts 4 or the like. A laterally extending bearing pintle 5 is formed upon the upper bracket arm, preferably, intermediate the ends thereof, while in the lower bracket arm, which, as will be noted is of a greater length, there is formed an elongated recess 6, the outer extremity of the said arm being upturned as at 7 and provided with a screw threaded opening 8 extending longitudinally thereof. A transversely disposed opening is also formed within the upturned portion 7, and communicates with the opening 8, the purpose of which will be subsequently apparent.

A substantially U-shaped frame 9 having an opening formed in the upper horizontal portion thereof, is pivotally mounted upon the bearing pintle 5 and is locked thereon by turning a nut or like connection into engagement with the threaded extremity of the said pintle. The frame 9, as shown in the Fig. 2 is of such length as to permit the lower extremities thereof to loosely move within the elongated recess 6 formed in the lower bracket arm and as a consequence, undue movement or displacement of the frame during operation will be prevented.

To operate the frame 9, that is, to move the frame upon its pivot point a screw threaded shank 10 is loosely engaged with the outermost extremity of the same through the medium of a connection 11 and is turned into engagement with the screw threaded opening 8 formed in the upturned portion 7 of the lower bracket arm. To facilitate rotation of the shank 10 a suitable handle is mounted upon the free extremity thereof.

To the lower extremities of the U-shaped frame 9 a supporting bed 12 is secured, and has rotatably mounted thereon a fly wheel 13 while upon the upper portion of the said bed an air compressing pump, preferably of the reciprocating piston type indicated in its entirety by the numeral 14 is arranged. A pitman 15 is engaged with the fly wheel 13 and with the usual cross head of the pump piston in order that the same may be operated to pump air.

It may here be noted, that the frame 9 is mounted in proximity of and in longitudinal alinement with the fan belt and pulley F

of the usual engine cooling fan mounted on the forward end thereof and is driven from the power shaft of the said engine.

In operation when it is desired to operate the pump the screw threaded shank 10 is rotated by means of its handle, thus, causing the frame 9 to be swung forwardly to a point where the fly wheel 13 engages the fan belt and pulley F. Motion will now be transmitted from the belt and pulley by way of the flywheel to the pump and as a consequence air will be pumped thereby and discharged through a conveying tube T into the tires in which inflating is needed. It is obvious, that to disengage wheel 13 from the fan pulley F, the shank 10 is rotated in a counter direction thus swinging the frame 9 to a point away from and allowing the pump to remain idle.

While I have herein illustrated and described with a considerable degree of particularity, constructional details of the device embodying my invention, it is to be understood that the invention is not limited to the particular form and arrangement of the several parts, which may be modified within a wide range without departing from the essence of the invention, the construction shown and the description based thereon being intended to be taken in an illustrative rather than a limiting sense.

I claim:

1. In a pump operating mechanism, the combination with the fan driving belt and pulley of a combustion engine, of a bracket secured to the engine, a pump supporting frame pivotally mounted on the bracket, the free end of said frame having slidable engagement with the bracket to prevent undue lateral movement of the same, a pivotal internally screw threaded bearing mounted on the bracket, and a screw threaded shank swivelly connected to the frame and receivable through said bracket for moving the frame at times.

2. In a pump operating mechanism, the combination with the fan drive belt and pulley of a combustion engine, a bracket secured to the engine said bracket having an elongated groove formed in the lower arm thereof, a pump supporting frame pivotally mounted on the bracket and having lugs on the lower extremities thereof slidably engaged in said groove, a pump bed secured to the frame, a pump mounted on said base, a fly wheel mounted on said said bed and connected to the piston of the pump, and means carried by the bracket and engaged with the frame for moving the same and the fly wheel into engagement with the drive pulley.

3. In a pump operating mechanism, the combination with the cooling fan drive belt and pulley of a combustion engine, a bracket secured to the engine, and having upper and lower laterally projecting arms formed thereon, one of said arms having an elongated groove formed therein, a frame pivotally mounted on the upper arm of the bracket having lugs on the free extremities thereof slidably received in the elongated groove, a pump bed secured to said frame, a pump arranged on the bed, a fly wheel mounted on the bed and connected to the piston of said pump, and a screw threaded shank carried by the bracket and loosely engaged with the frame for moving the fly wheel into engagement with the cooling fan drive belt and pulley.

4. In a pump operating mechanism, the combination with the fan driving belt and pulley of an internal combustion engine, of a bracket having rearwardly extending arms formed thereon, one of said arms being bifurcated, said bracket having engagement with the engine, a pump supporting frame pivotally mounted on the bracket and having slidable engagement with a portion of the same, a pivotally mounted internally screw threaded bearing arranged on the bracket, and a screw threaded shank swivelly connected to the pivotal frame and receivable through the bearing for moving the frame and the fly wheel into engagement with the drive pulley.

In testimony whereof, I affix my signature hereto.

LUTHER W. FEAGIN.