V. A. JOHNSON.

HOLDER FOR STARTING CRANKS OF ENGINES.

APPLICATION FILED MAY 21, 1914.

1,127,257.

Patented Feb. 2, 1915.

2 SHEETS—SHEET 1.

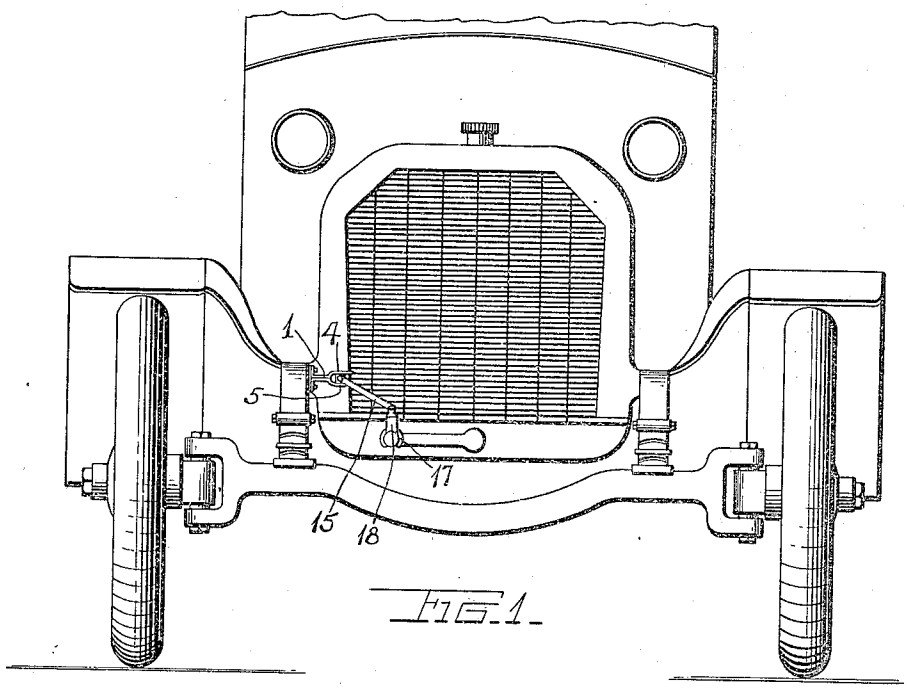


FIG. 1.

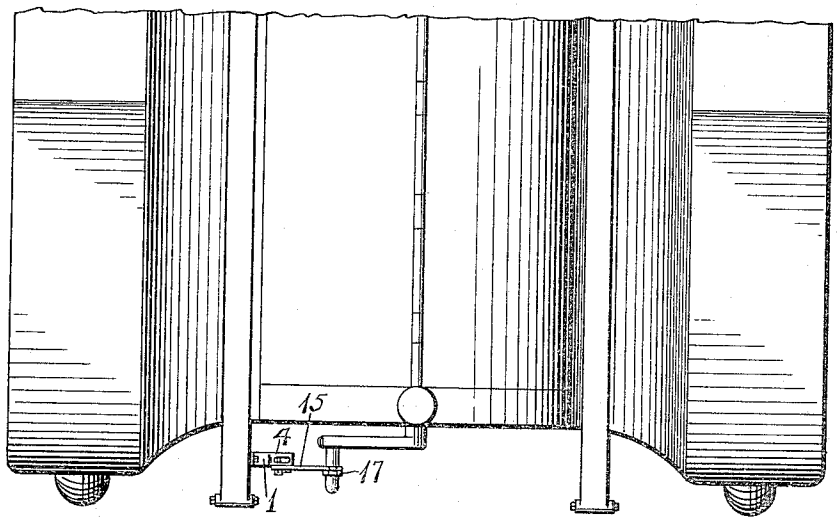


FIG. 2.

Witnesses

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2 SHEETS—SHEET 2.

FIG. 3.

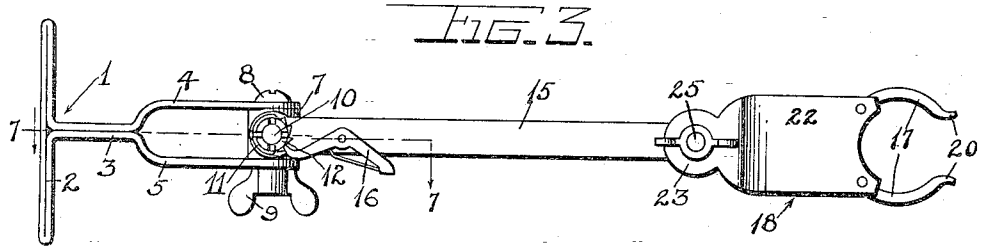


FIG. 4.

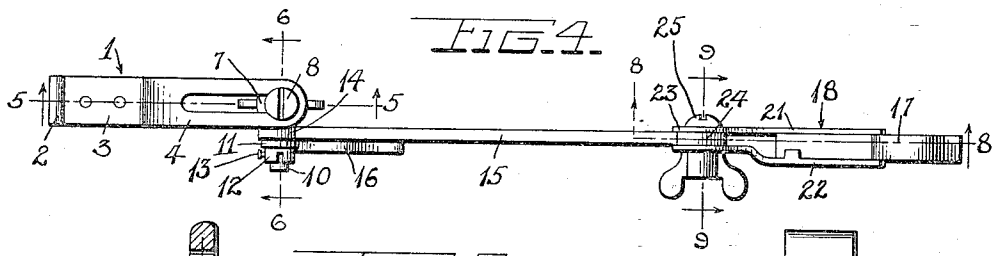


FIG. 5.

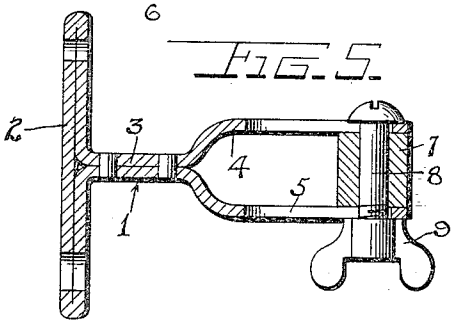


FIG. 6.

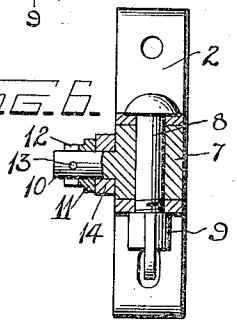


FIG. 9.

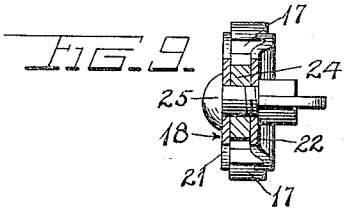


FIG. 8.

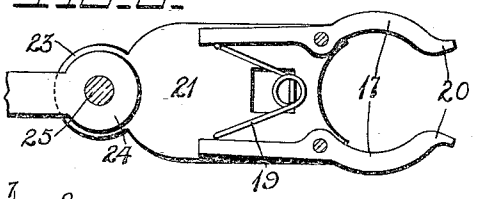
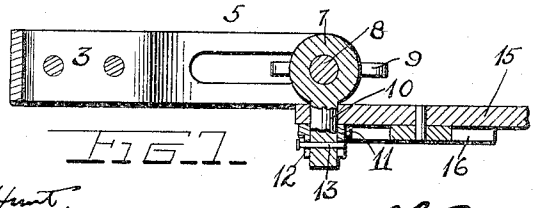


FIG. 7.



Witnesses

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UNITED STATES PATENT OFFICE.

VICTOR A. JOHNSON, OF DETROIT, MICHIGAN.

HOLDER FOR STARTING-CRANKS OF ENGINES.

1,127,257. Specification of Letters Patent. Patented Feb. 2, 1915.

Application filed May 21, 1914. Serial No. 840,044.

To all whom it may concern:

Be it known that I, VICTOR A. JOHNSON, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Holders for Starting-Cranks of Engines; 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.

This invention relates to improvements in holders for the starting cranks of engines.

The object of the invention is to provide a simply constructed and efficient holder for engine cranks more especially those used in connection with motor vehicles.

Another object is to provide a device of this character which may be readily applied and adjusted to vehicles of different makes having cranks of varying lengths.

With these and other objects in view the invention consists of the novel features of construction, and the combination and arrangement of parts as will be hereinafter described and claimed.

In the accompanying drawings: Figure 1 represents a front elevation of a portion of a motor vehicle showing this improved holder applied. Fig. 2 is a top plan view thereof: Fig. 3 is a side elevation of the holder detached: Fig. 4 is a top plan view thereof: Fig. 5 is a detail longitudinal vertical section, on an enlarged scale, taken on the line 5—5 of Fig. 4: Fig. 6 is a transverse vertical section taken on the line 6—6 of Fig. 4. Fig. 7 is a horizontal section taken on line 7—7 of Fig. 3: Fig. 8 is a longitudinal vertical section taken on line 8—8 of Fig. 4. Fig. 9 is a transverse vertical section taken on line 9—9 of Fig. 4.

In the embodiment illustrated a T-shaped bracket 1 is shown for connecting the holder to a suitable support, the arms of the head 2 thereof being apertured to receive fastening elements. This bracket as shown is composed of a single metal strip of any desired width folded to form the head 2 and stem 3. The parts of the strip forming the stem are disposed in contact from the head to a point midway the length of the stem and are preferably secured together by riveting or otherwise. The members 4 and 5 of this stem 3 diverge at this point, being offset in opposite directions and extended in parallel planes between which a tubular bearing 7 to be described is adapted to be seated and adjustably mounted. These spaced parallel members 4 and 5 are longitudinally slotted as shown at 6 for a purpose to be described.

The tubular bearing 7 is adapted to be mounted between the slotted arms 4 and 5 of the bracket stem and to be secured in adjustable position between said arms by means of a bolt 8 which passes through said bearing 7 and is held in adjusted position by a wing nut 9 which is designed to be tightened for clamping the bearing 7 between said arms 4 and 5. Extending laterally from this bearing 7 is a stud 10, rigidly attached to said bearing and on which is loosely mounted a ratchet member 11 the teeth of which extend around a portion only of the periphery thereof. This member 11 is provided with a notched hub 12 the notches of which are arranged diametrically opposite to receive a pin 13 which is adapted t extend through said stud 10 and be engaged with two of the opposite notches to hold said ratchet member against turning on said stud. Between this ratchet and the bearing 7 is disposed an apertured head 14 of a bar 15. Positioned on this bar adjacent the head thereof is a spring pressed pawl 16 arranged to engage the teeth on the ratchet member 11 for holding said bar in adjusted position. From the above it will be obvious that the bar 15 may be swung or rotated on the bolt 8 in one direction and that it may be swung on the stud 10 in a plane at right angles to its plane of movement when swung on bolt 8. Pivotally mounted on the other end of this bar 15 are a pair of spring clamping jaws 17 having their free ends normally spaced apart and adapted to receive the engine crank when not in operation in a manner similar to the strap now commonly used for this purpose. These jaws 17 are outwardly bowed and are pivotally mounted intermediately of their ends in a suitable casing 18 and a spring 19 is disposed between the inner ends of the arms thereof to hold the gripping ends normally in closed position, said gripping ends having outwardly turned terminals 20 to facilitate the insertion of the engine crank between them. The casing 18 as shown comprises two laterally spaced plates 21 and 22 the inner ends of which terminate in apertured ears 23 which are designed to register with each other and with an apertured head

24 formed on the end of the bar 15 and through which registering apertures a set screw or bolt 25 is designed to pass for adjustably connecting said casing on the bar.

In the use of this device the bracket 1 is secured to any suitable part of the engine or vehicle and the bar 15 carrying the clamping or gripping jaws 17 is swung into suitable position to position said jaws to receive the engine crank handle. When it is desired to use the crank it is slipped out between said jaws and the bar 15 is swung upwardly out of the path of the crank and is held in adjusted position by the pawl 16 engaging the ratchet 11 and after said crank has been used, this bar is swung downwardly again in position to receive the crank which is sprung between the clamping jaws and is securely held there until again desired for use.

From the above description it will be obvious that the bearing 7 may be adjusted in the slotted arms 4 and 5 of the bracket stem to adapt the device for use in connection with cranks of varying lengths.

I claim as my invention:

1. An engine crank holder comprising a T-shaped bracket, the free end of the stem thereof being bifurcated and the furcations slotted longitudinally, a bearing adjustably mounted in said slotted furcations, means for locking said bearing in adjusted position, a crank engaging element carried by said bearing and operable to swing in a plane at right angles to the plane of movement of the bearing, and means for holding said member in adjusted position.

2. An engine crank holder comprising a T-shaped bracket, the free end of the stem thereof being bifurcated and the furcations slotted longitudinally, a bearing adjustably mounted in said slotted furcations, means for locking said bearing in adjusted position, a crank engaging element carried by said bearing and operable to swing in a plane at right angles to the plane of movement of the bearing, and a ratchet and pawl mechanism mounted respectively on said bearing and said member for locking said member in adjusted position.

3. An engine crank holder comprising an attaching bracket having laterally spaced longitudinally slotted arms, a tubular bearing adjustably mounted in said slotted arms and having a stud extending laterally therefrom, a bar having an apertured head pivotally mounted on said stud, a ratchet carried by said stud, a pawl carried by said bar for engaging said ratchet to lock said bar in adjusted position, and crank receiving fingers carried by said bar.

4. A holder for engine cranks comprising an attaching bracket, a bar mounted for longitudinal and lateral adjustment therein and provided with adjustable yieldable gripping fingers for engaging the crank.

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

VICTOR A. JOHNSON.

Witnesses
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O. BINGHAM.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."