

W. S. HARLEY.
PEDAL.

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1,243,165.

Patented Oct. 16, 1917.

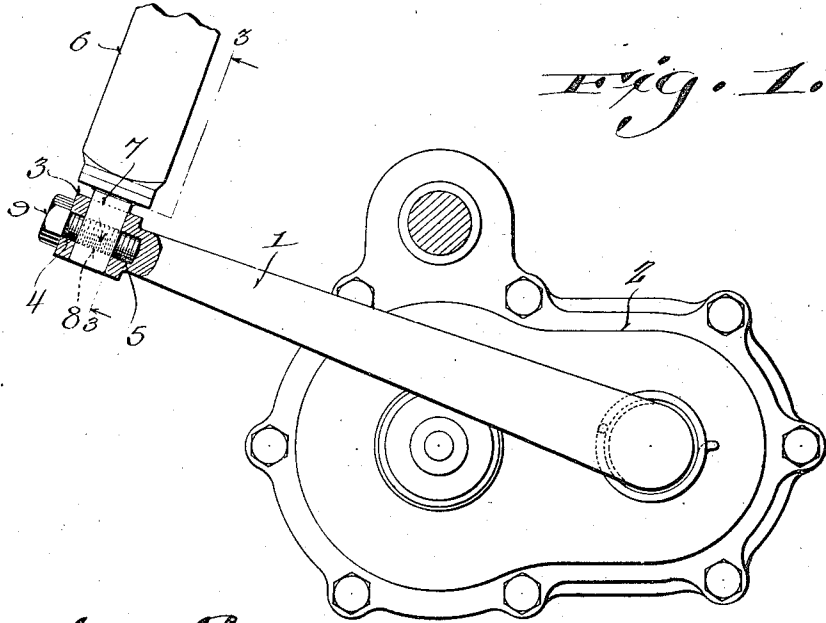


Fig. 1.

Fig. 2.

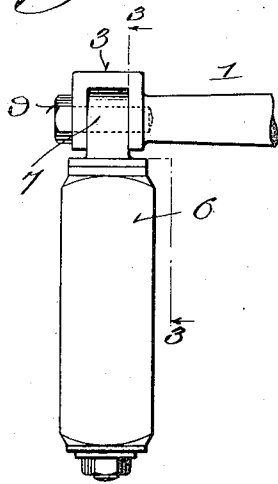
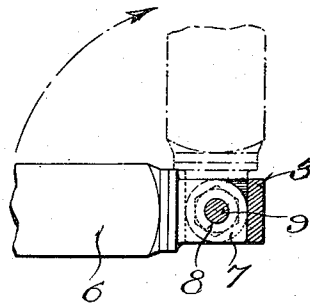


Fig. 3.



Inventor:

William S. Harley

Chas. W. Young

Attorney.

Witness:
Charles W. Young

UNITED STATES PATENT OFFICE.

WILLIAM S. HARLEY, OF MILWAUKEE, WISCONSIN, ASSIGNOR TO THE HARLEY-DAVIDSON MOTOR CO., OF MILWAUKEE, WISCONSIN.

PEDAL.

1,243,165.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM S. HARLEY, a citizen of the United States, and resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Pedals; and I do hereby declare that the following is a full, clear, and exact description thereof.

This invention relates to the subject of pedals for motor and other cycles, and the primary object of the invention is to provide a novel form of connection between the pedal and the crank whereby the pedal can be readily used for engine starting, and when not in use can be swung to a position parallel with the machine of the frame so that it will not be in the way of the rider, and also not be likely to be damaged in the event of a side fall of the machine.

One simple and practical embodiment of the present invention is shown in the accompanying drawings, wherein—

Figure 1 is a fragmentary view in elevation, partly in section of the improved pedal and crank shown in connection with a portion of a motor-cycle.

Fig. 2 is a fragmentary plan view, the pedal being shown in operative position.

Fig. 3 is a sectional view, the dotted representation being taken on the line 3—3, Fig. 1 and the full line representation being taken on the line 3—3, Fig. 2.

In the accompanying drawings, the improved pedal has been shown as a starter for the engine of a motor-cycle, the pedal crank 1 being an extension of the usual crank shaft projecting from the casing 2 that incloses the starting gears. The pedal crank 1 so far as general appearances are concerned, may be of the usual or any preferred or convenient form, the outer ends thereof being provided with a bifurcated portion 3 disposed at right angles to the longitudinal length of said crank 1. The side and end walls of the bifurcated portion 3 are flat and said side walls have alined threaded openings 4 and 5 extending through them, the opening 5 preferably extending into the crank 1.

The pedal 6, may be of the usual or any preferred or convenient type, and the outer end of its spindle is shaped complementary to, and adapted to have a tight, but mov-

able fit within the bifurcated portion of the crank 1. The outer end of the spindle is designated by the numeral 7 and is provided with a transverse opening 8 adapted to be alined with the threaded openings 4 and 5 of the side walls of the bifurcated portion 3 for the reception of a threaded pivot bolt 9 that is extended through said alined openings.

The outer end 7 of the spindle is rounded at its top portion and squared at its lower portion to permit its being raised to inoperative position and to also prevent its collapsing when the operator exerts pressure thereagainst, in other words, to prevent the pedal from describing an arc of more than 90°, as will be clearly seen by reference to Fig. 3.

With the described manner of connecting the pedal and crank, it will be seen that the pedal may be swung on the pivot bolt 9 to the position indicated by Fig. 1 of the drawing, in which position the pedal will lie in a plane parallel with the frame of the machine, and thereby not interfere with the rider, or be damaged should the machine fall sidewise. And when it is desired to use the pedal 6, the same may be readily swung to the position indicated by Figs. 2 and 3 of the drawings, which are operative positions.

In connection with the foregoing it will be seen that this invention provides simple yet practical means whereby the pedal can be quickly attached to, or detached from, the crank 1, the bolt 9 serving both as a pivot and a fastener for connecting the pedal and crank, and as the bolt has a threaded connection with the crank, the same can be readily removed or replaced.

I claim as my invention:—

In combination with a pedal crank having its outer free end bifurcated at right angles to the longitudinal length of the crank, of a pedal spindle, one end of which is shaped complementary to and adapted to have a tight but movable fit within the bifurcated end of the crank and having a central pivot receiving aperture therein, said bifurcated end having openings therein adapted to aline with the aperture in the spindle, one of said openings extending into the crank and being provided with screw threads, a pivot pin for the spindle of said

openings and having its inner end threaded
for engagement with said threaded opening,
and said spindle having its extreme inner
end provided with a rounded corner and a
5 squared corner whereby to limit its pivotal
movement substantially as described.

In testimony that I claim the foregoing

I have hereunto set my hand at Milwaukee,
in the county of Milwaukee and State of
Wisconsin, in the presence of two witnesses. 10
WILLIAM S. HARLEY.

Witnesses:

EDWIN F. CASPER,
CREPTAL HAYDEL.

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