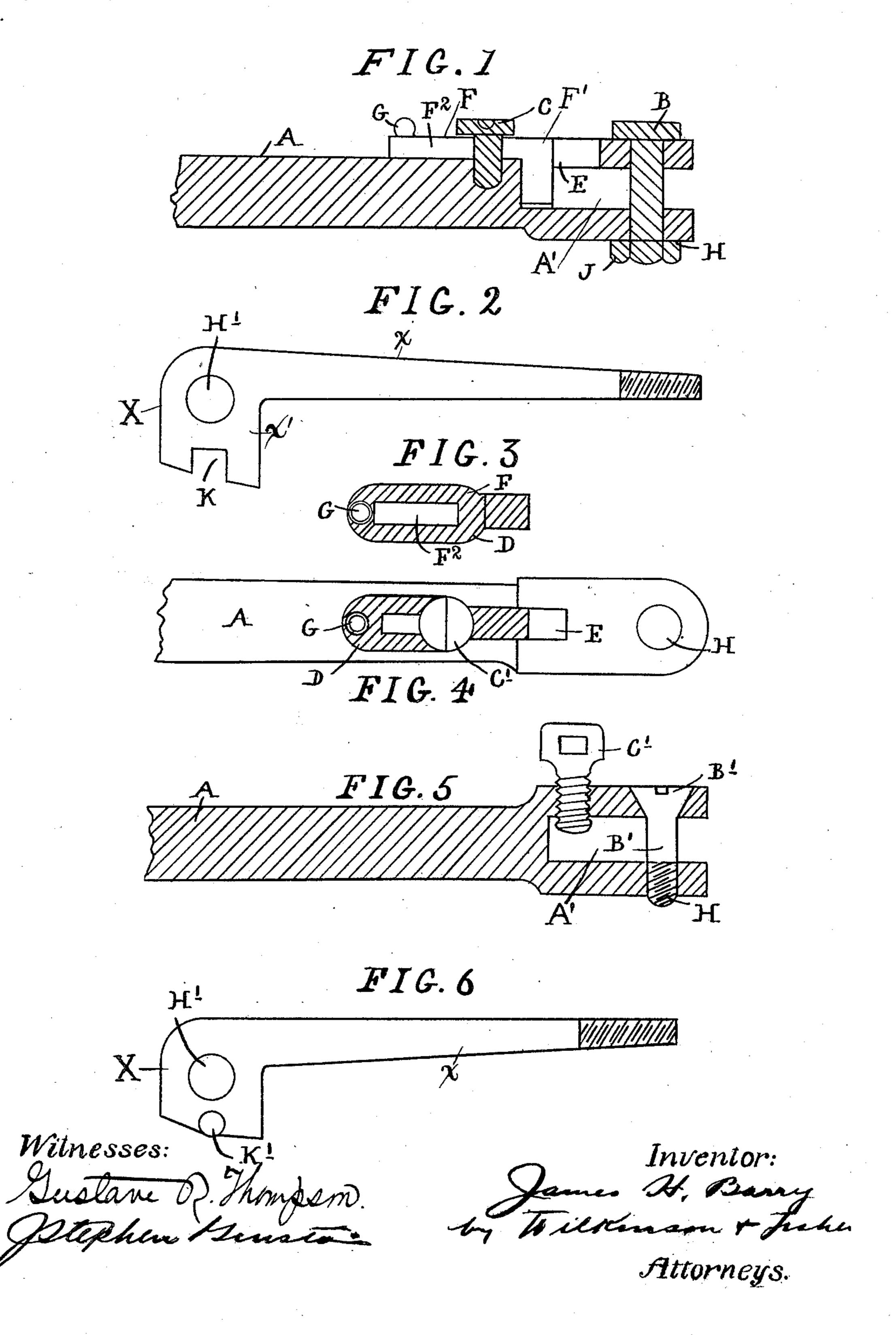
## J. H. BARRY. PEDAL FOR VELOCIPEDES.

(Application filed Oct. 5, 1901.)

(No Model.)



## United States Patent Office.

JAMES H. BARRY, OF LONDON, ENGLAND.

## PEDAL FOR VELOCIPEDES.

SPECIFICATION forming part of Letters Patent No. 697,780, dated April 15, 1902.

Application filed October 5, 1901. Serial No. 77,714. (No model.)

To all whom it may concern:

Be it known that I, James Harold Barry, a subject of the British King, residing at Basinghall street, in the city of London, England, have invented certain new and useful Improvements in Pedals for Velocipedes and the Like; and I do hereby 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 folding pedals or spindles for cycles or velocipedes, the object being to produce a spindle or pedal which can be folded up against the crank-arm to be out of the way. I attain this object by means of the mechanism to be hereinafter fully described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a longitudinal section through the crank-arm, showing the pivot-pin in place, but with the spindle removed. Fig. 2 is a side elevation of the pedal-spindle. Fig. 3 is 25 a plan of the sliding bolt for retaining the spindle in position. Fig. 4 is a plan of the crank-arm shown in Fig. 1 with the sliding bolt in place, but with the pivot-pin removed. Fig. 5 is a longitudinal section of the crank-30 arm, showing a modified means for holding the spindle in either of its positions. Fig. 6 is a side elevation of a spindle arranged for use with the crank-arm shown in Fig. 5.

A designates the end of the crank-arm, which is enlarged, as usual, at its outer end, and in this instance is slotted, as at A', for the reception of the head X of the spindle x. This head X is flattened to fit the slot A' and is provided with an aperture H', which when the said spindle is in place in the slotted end of the crank-arm A coincides with apertures H in the said crank-arm, and a pivot-pin B passes through the apertures H and H', thus holding the spindle in the slot A', but allowing it to turn about the pivot-pin B. A recess K is formed in one side of the head X, and a sliding bolt F, having a nose F', adapted

The sliding bolt F is provided with a slot a recess therein, and a slid F<sup>2</sup>, through which a screw C passes into a threaded opening in the crank-arm, and the substantially as described.

side of the crank-arm A.

to enter the recess K, is mounted upon one

nose F' of the said sliding bolt extends through a slot E in one side of the crank-arm into the slot A'. The sliding bolt F is provided with 55 a knob G, by which it may be moved longitudinally for a distance limited by the length of the slots  $F^2$  and E.

When the pedal-spindle is at right angles with the crank-arm, which is its position when 60 in use, the nose F' of the sliding bolt F is pushed into the recess K to hold the parts rigidly in this position, and when it is desired to fold the spindle against the crank-arm the sliding bolt F is pulled back by means of the 65 knob G until the nose F' is out of the recess K, when the spindle is free and may be turned about the pivot-pin B and folded against the crank-arm A, where it may be held by pushing the nose F' against the straight side x' of 70 the head X of the spindle.

In Figs. 5 and 6 is shown a slight modification in which a thumb-screw C' is used in place of the sliding bolt F. In this instance the screw C' passes through one side of the 75 crank-arm A into the slot A' and is adapted to engage in a recess K' in the head X of the spindle.

The pivot-pin B may be held in place by a nut J, as shown in Fig. 1, or it may be screwed 80 into the crank-arm on one side of the slot A', as shown in Fig. 5. If desirable, the head may be countersunk, as shown at B' in Fig. 5.

Having thus described my invention, what I claim, and desire to secure by Letters Pat- 85 ent of the United States, is—

1. In a folding pedal, a crank-arm having a slot in its outer end, a spindle having a head pivoted in said slot, a recess in said head and a movable part in said crank-arm adapted 90 to engage said recess; substantially as described.

2. In a folding pedal, the combination with a crank-arm having a slot in its outer end; of a spindle having a head pivoted in said slot, 95 a recess in said head and a movable part in said crank-arm adapted to engage said recess; substantially as described.

3. In a folding pedal, the combination with a crank-arm having a slot in its outer end; 100 of a spindle pivoted in said slot and having a recess therein, and a sliding bolt on said crank-arm adapted to engage said recess; substantially as described.

4. In a folding pedal, the combination with | a crank-arm having a slot in its outer end; of a spindle pivoted in said slot and having a recess therein, and a sliding bolt on said 5 crank-arm having a nose adapted to engage said recess; substantially as described.

5. In a folding pedal, the combination with a crank-arm having a slot, a spindle pivoted in said slot and having a recess therein; of a to sliding bolt on said crank-arm, and a nose on said sliding bolt adapted to enter said slot and engage said recess in said spindle; substantially as described.

6. In a folding pedal, the combination with a crank-arm having a slot, a spindle pivoted 15 in said slot and having a recess therein; of a sliding bolt on said crank-arm, a nose on said sliding bolt adapted to enter said slot and engage said recess in the spindle, and a knob on said sliding bolt; substantially as described. 20

In testimony whereof I affix my signature

in presence of two witnesses.

JAMES H. BARRY.

Witnesses:

ARTHUR T. SPEECHLY, H. Peter Venn.