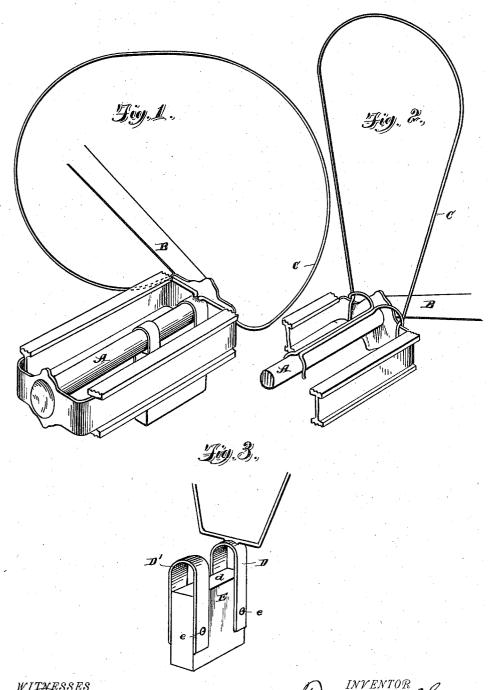
(No Model.)

## F. A. McGINNIS. PANTS GUARD FOR BICYCLES.

No. 576,411.

Patented Feb. 2, 1897.



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## UNITED STATES PATENT OFFICE.

FRANCIS A. McGINNIS, OF DETROIT, MICHIGAN.

## PANTS-GUARD FOR BICYCLES.

SPECIFICATION forming part of Letters Patent No. 576,411, dated February 2, 1897.

Application filed June 6, 1896. Serial No. 594,527. (No model,)

To all whom it may concern:

Be it known that I, Francis A. McGinnis, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, 5 have invented a certain new and useful Improvement in Pants-Guards for Bicycles; and I 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 10 it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.
This invention relates to a guard to be em-

ployed in connection with the pedals of a bi-15 cycle or other vehicle which is arranged to be driven by foot-power, and has for its object an improved guard adapted to prevent the clothing of the rider from coming in contact with the frame or driving-gear of the bi-

20 cycle.

In the drawings, Figure 1 shows my improved guard attached to the pedal of a bi-cycle. Fig. 2 shows a modified method of attaching the guard to the pedal-spindle. Fig. 25 3 shows in detail the counterweight, by means of which the guard is kept upright.

In the drawings, A indicates the spindle on

which the pedal turns.

B is the crank-arm, and C is the loop of the 30 guard. This guard consists of a wire bent into an oval or circular loop, which may or may not have an interlacing of cross wires or cords, if the same should be found desirable. The oval loop of wire is attached at its ends 35 to a ring D, which embraces the pedal-spindle just inside of the framework of the pedal.

The ring D has a broad bearing on the spindle, or, as shown in the drawings, may be made in the form of a double ring DD', spaced 40 from each other but coupled together with a suitable yoke-piece. The yoke-piece shown in the drawings is a heavy block E, which serves the double purpose of yoking or coupling the rings D D' together and also as a 45 counterweight to balance the guard-loop C and keep the guard C in an upright position when the foot of the user is removed from the pedal.

The rings DD' are preferably made as open 50 or half rings, to be completed by inserting the weight E between the open ends and making the weight fast to the rings by screws ee, and the upper edge d of the weight is arranged to

set up against the under side of the spindle and prevent the guard-rings from rattling on 55 the spindle.

In the form shown in Fig. 3 the guard C is attached to the pedal by bending the ends around the yoke, which connects the treadbars of the pedal, and then passing the ends 60 along the spindle far enough to furnish a sta-

ble bearing.

I prefer to make the guard of wire, but it might be made of any suitable substance, as thin sheet metal or cardboard or a thin sheet 65 of wood, and its means of attachment to the spindle of the pedal may be varied, the important feature being that there shall be a guard rising from the pedal at that end of the spindle which engages the crank-arm, so ar- 70 ranged that it shall remain above the spindle during the revolutions of the crank.

The counterweight E will automatically hold the guard in place with the loop above the axis of the spindle, but this, while desir- 75 able, is not essential to the utility of the guard, which will be quite useful when used in the form shown in Fig. 3 without the counterweight, although the user will be required to see that the guard is above the spindle when 80

mounting. What I claim is—

1. In combination with the crank of a footdriven vehicle, a guard adapted to be interposed between the garment of the leg of the 85 rider and the mechanism, and attached to the crank-spindle, with means for keeping the guard uppermost during the revolutions of the crank, substantially as described.

2. As a new article of manufacture a guard 90 for a foot-driven vehicle consisting of a shield with means for attaching it to the crank-spindle of a bicycle, and means for holding the shield in an upright position, substantially as

described.

3. In combination with a guard adapted to be attached to the spindle of a pedal, and a weight attached to the guard to hold the guard upright with respect to the pedal, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

FRANCIS A. McGINNIS.

Witnesses:

CHARLES F. BURTON, MARION A. REEVE.