

(No Model.)

W. G. NUTSFORD.
MUD GUARD FOR BICYCLES.

No. 597,471.

Patented Jan. 18, 1898.

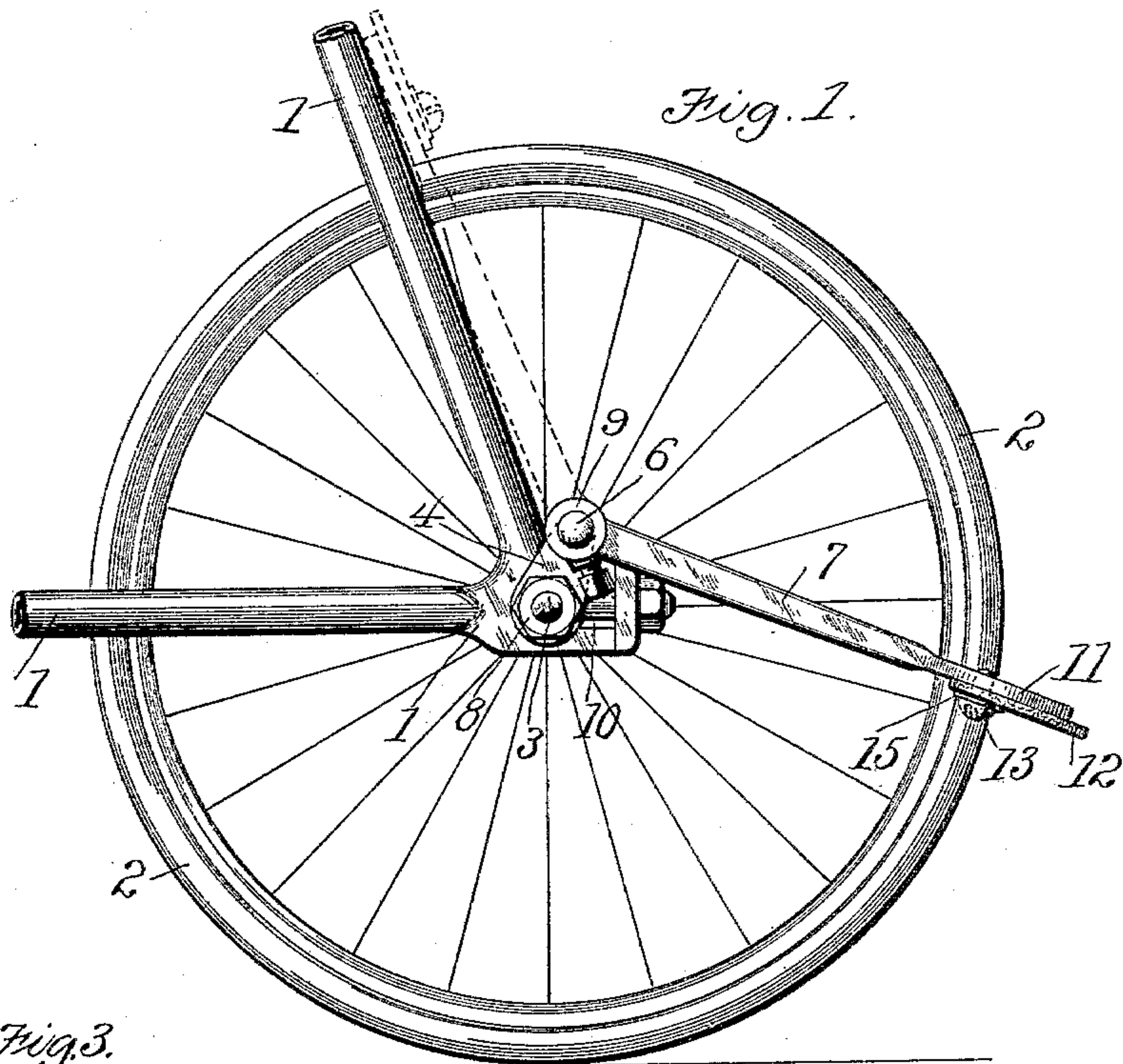


Fig. 3.

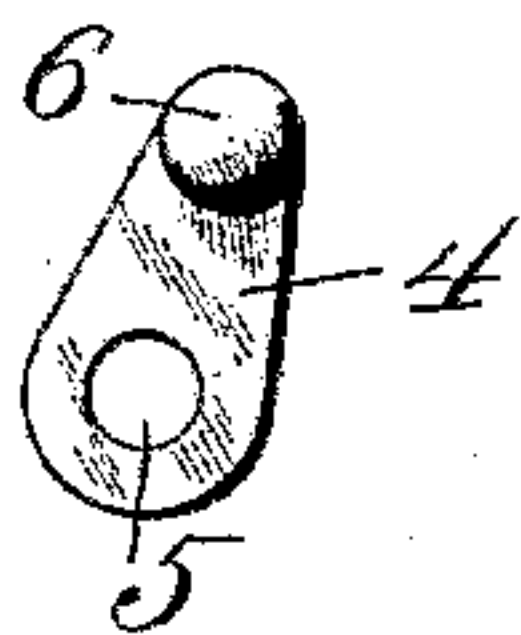


Fig. 2.

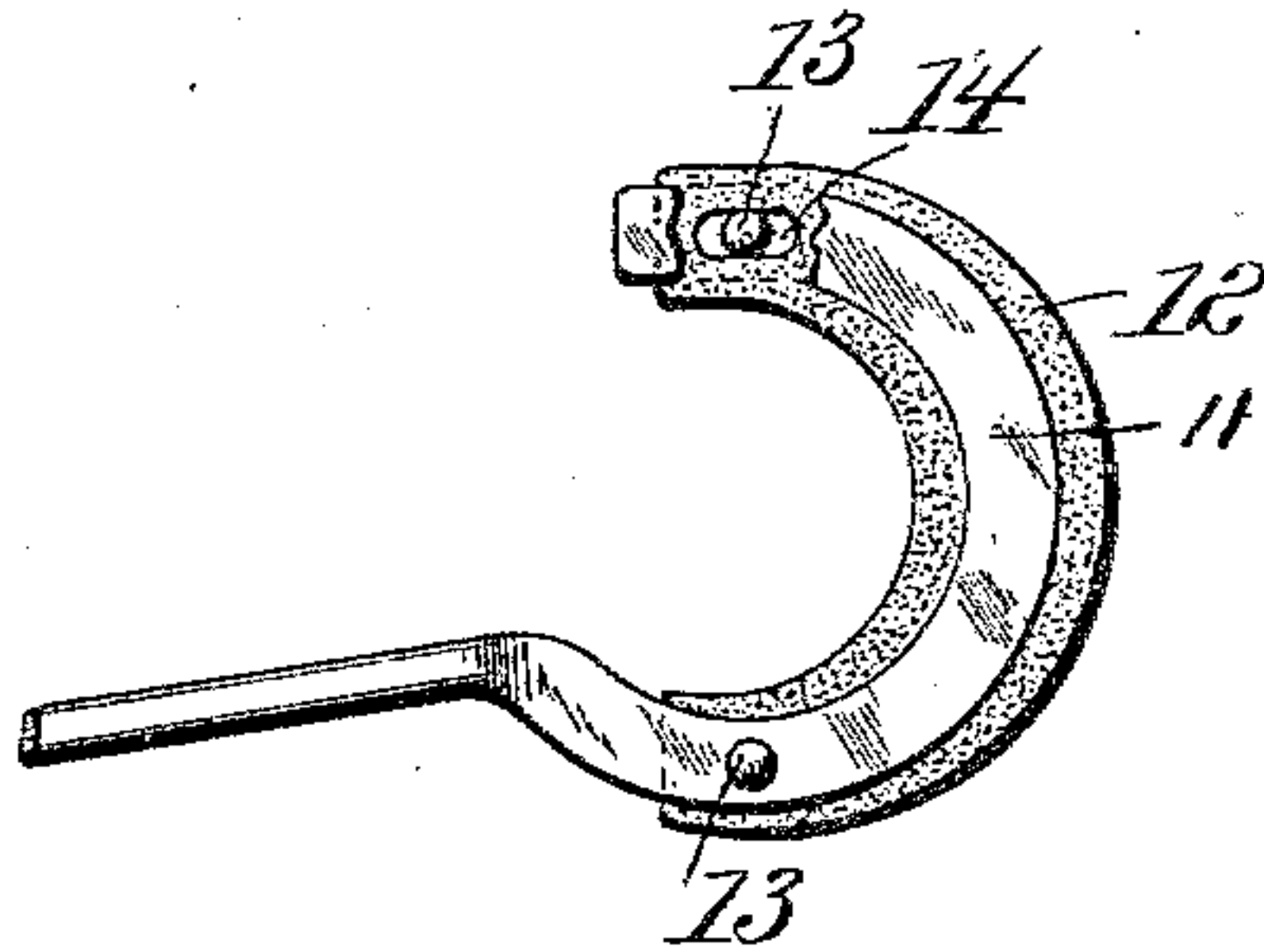
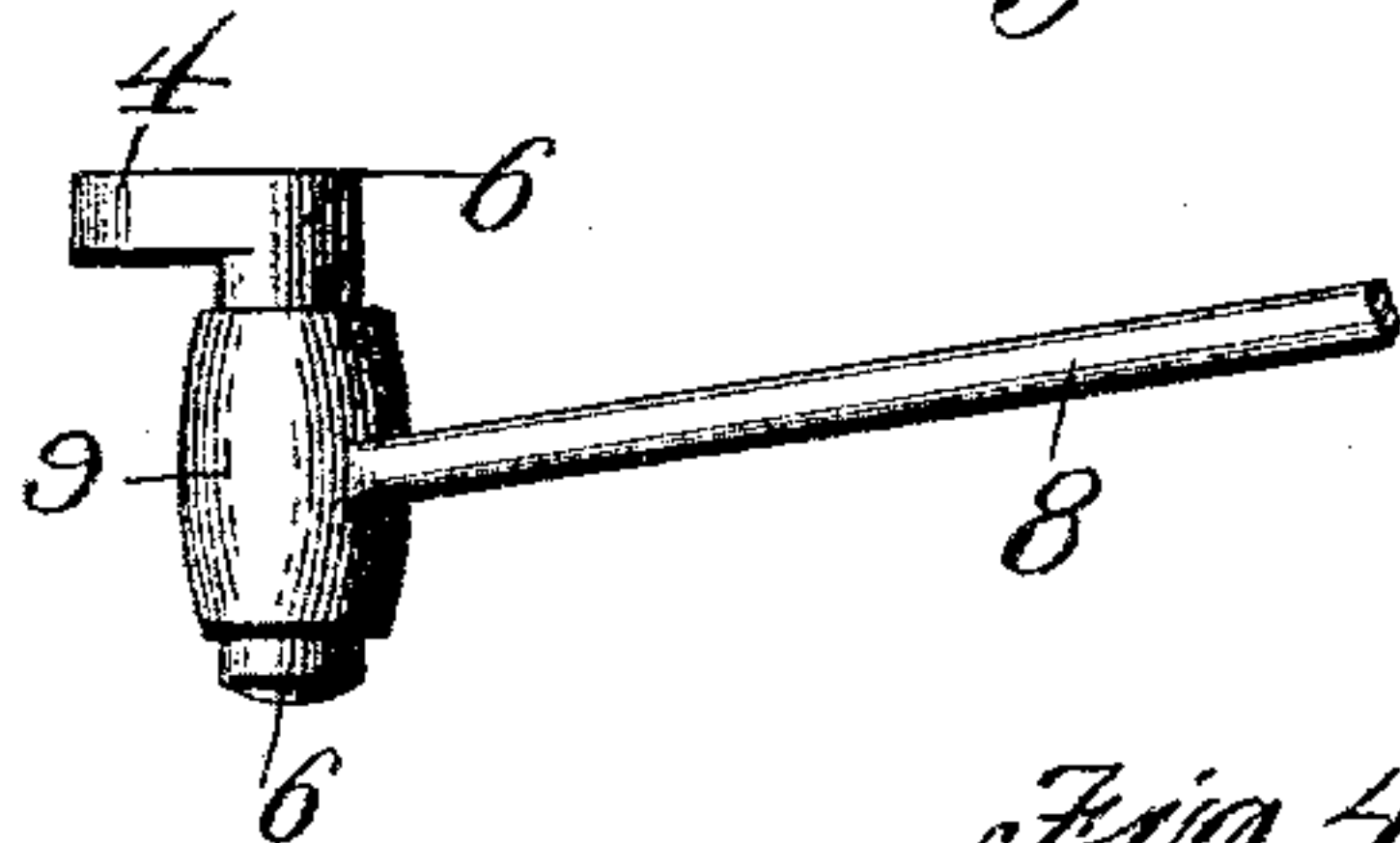


Fig. 4.

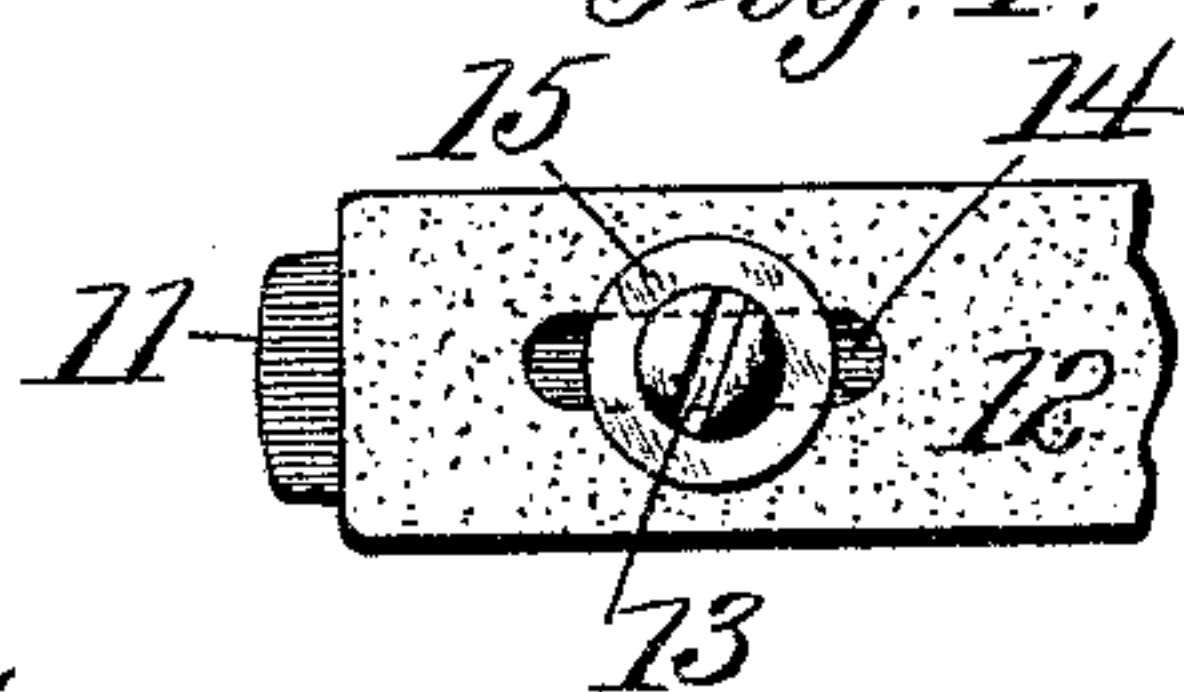
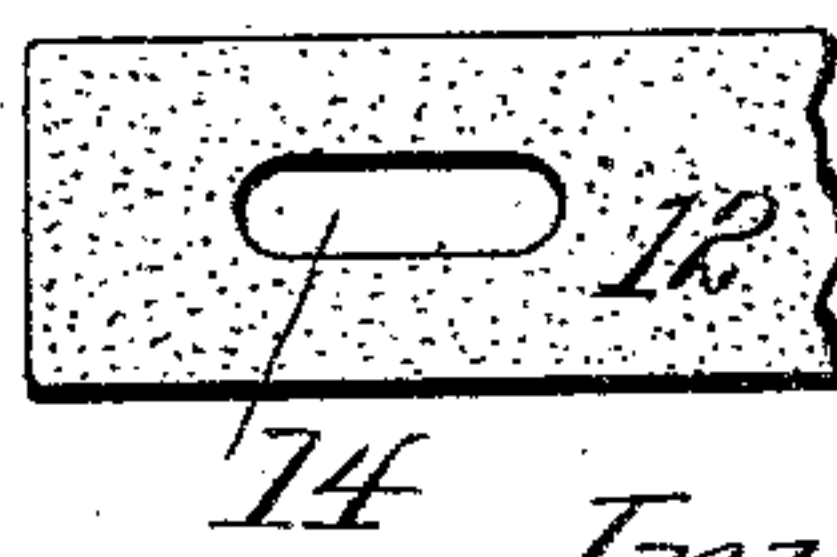


Fig. 5.



Attest:
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UNITED STATES PATENT OFFICE.

WILLIAM G. NUTSFORD, OF CHICAGO, ILLINOIS.

MUD-GUARD FOR BICYCLES.

SPECIFICATION forming part of Letters Patent No. 597,471, dated January 18, 1898.

Application filed July 31, 1896. Serial No. 601,284. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM G. NUTSFORD, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Mud-Guards for Bicycles, &c.; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification.

The present invention relates to that type of mud-guards for the wheels of bicycles and the like in which a fixed guard or deflector is arranged in close proximity to the periphery of the wheel and adjacent to the point where centrifugal action causes adhering particles to fly off from the rim of such wheel.

The object of the present improvement is to provide a simple and improved form of such type of guards, in which special provision is made whereby the present guard is capable of a varied adjustment, so as to suit varying diameters of wheels as well as to attain proper adjustment with relation to rim of the wheel, all as will hereinafter more fully appear, and be more particularly pointed out in the claim. I attain such object by the construction and arrangement of parts illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the rear portion of a safety-bicycle to which my present invention is applied; Fig. 2, a detail plan view of the present mud-guard detached; Fig. 3, an elevation of the attaching-crank or bracket-arm of the appliance; Fig. 4, a detail plan view illustrating the adjustable attachment of the flexible guard-plate to its metal frame or holder; Fig. 5, a detail plan of the flexible guard-plate, showing its adjusting-slot.

Similar numerals of reference indicate like parts in the several views.

Referring to the drawings, 1 represents the rear forks of a bicycle-frame, and 2 the wheel, journaled on same in the usual manner.

3 is the usual non-rotary supporting-axle of the bicycle-wheel.

4 is the attaching-crank or bracket-arm of the present invention, having at one end an eye 5, that fits the axle 3 of the wheel, and at the other end lateral extending arbor 6 for the attachment of the holding-frame 7 of the mud-guard.

8 is a nut screwing on the axle and adapted to firmly clamp the bracket-arm 4 in place and at any desired circular position.

The holding-frame 7 is in the form of a metal bar formed at one end with an attaching-eye 9, that fits the arbor 6 of the bracket-arm and is secured thereto by a set-screw 10, and at the other end with a semicircular loop 11, that is adapted to support the semicircular-shaped flexible guard-plate 12, that is formed of rubber or other like material and which is clamped in an adjustable manner upon the under side of the semicircular loop 11 and in a manner to inwardly overlap the same, as shown, by means of two or more attaching-screws 13, passing through elongated holes 14 in the flexible guard-plate 12 and screwing into the metal of the loop 11, 15 being a bearing-washer interposed between the head of the screw 13 and the flexible guard-plate 12, so as to attain a more effective attachment.

With the present improvement by an adjustment of the bracket-arm 4 from a vertical toward a horizontal position the parts are extended, so as to suit a larger diameter of wheel, and vice versa. Again, the lateral arrangement of the supporting-arbor 6 admits of a ready adjustment of the guard-plate laterally to insure a proper relative position of such plate and rim. At the same time the laterally-arranged arbor serves as a step for use in mounting the wheel.

Having thus fully described my said invention, what I claim as new, and desire to secure by Letters Patent, is—

A mud-guard for cycles, comprising in combination, a wheel, an axle, a bracket-arm attached to the axle and having at its outer end a lateral arbor, a mud-guard frame having at one end a pivotal eye fitting said arbor in a pivotally-adjustable manner, and the other end a curved loop, and a flexible guard-plate secured to such curved loop of the guard-frame, substantially as set forth.

In testimony whereof witness my hand this 6th day of July, 1896.

WILLIAM G. NUTSFORD.

In presence of—

ROBERT BURNS,
M. H. HOLMES.