

**No. 614,007.**

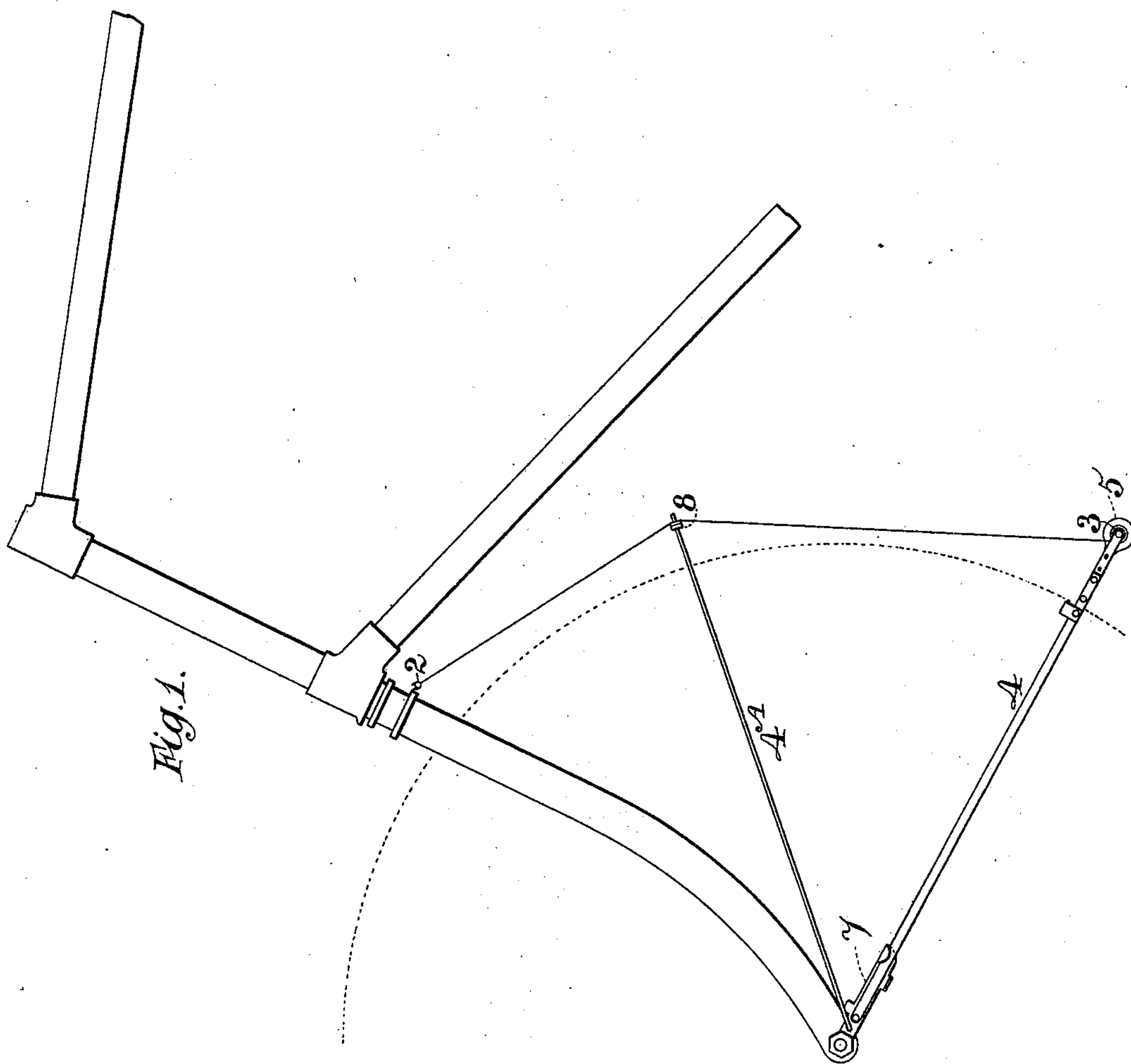
**Patented Nov. 8, 1898.**

**H. KIDDER.**  
**MUD GUARD FOR CYCLES.**

(Application filed Dec. 16, 1896.)

(No Model.)

**4 Sheets—Sheet 1.**



Witnesses:  
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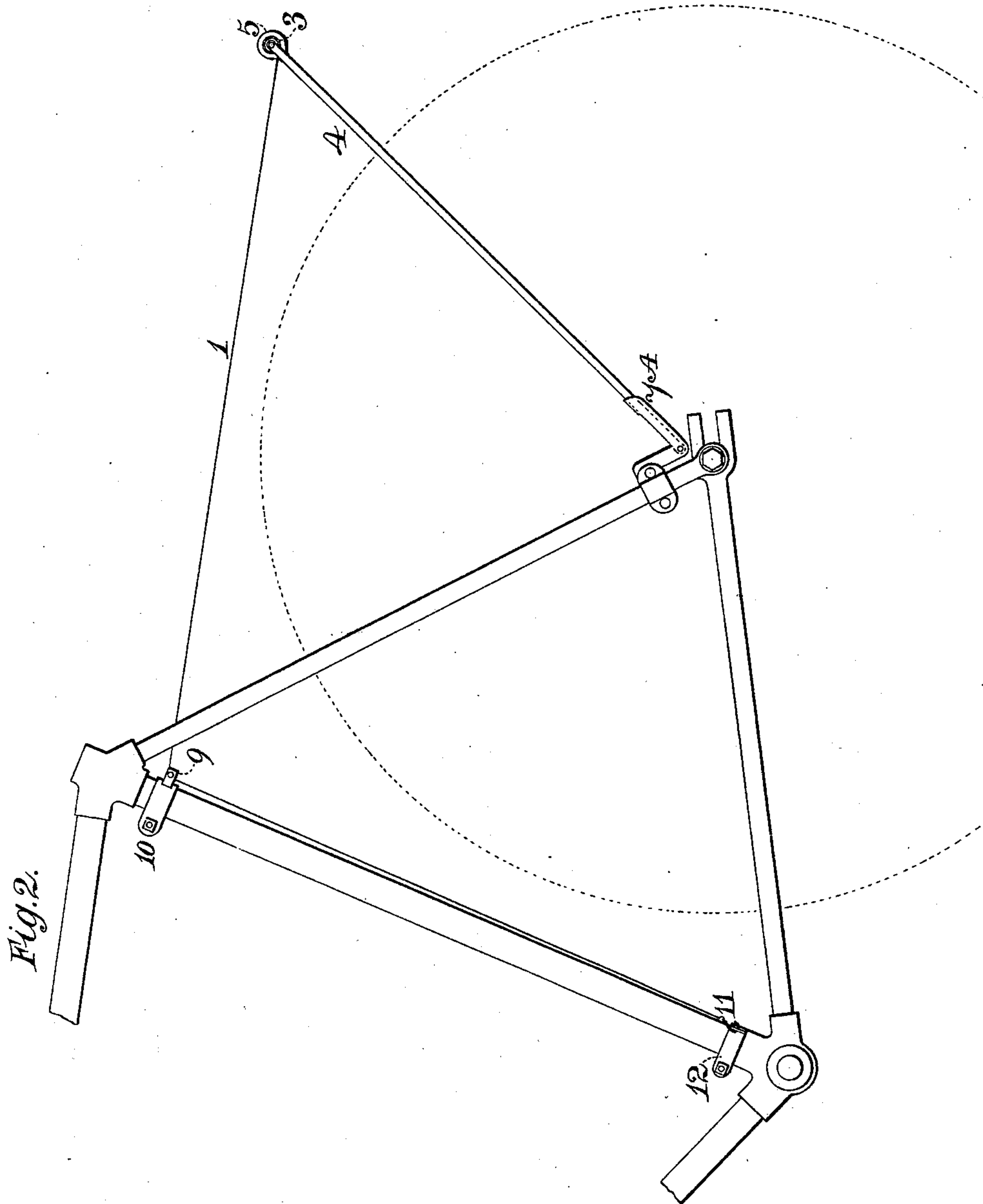
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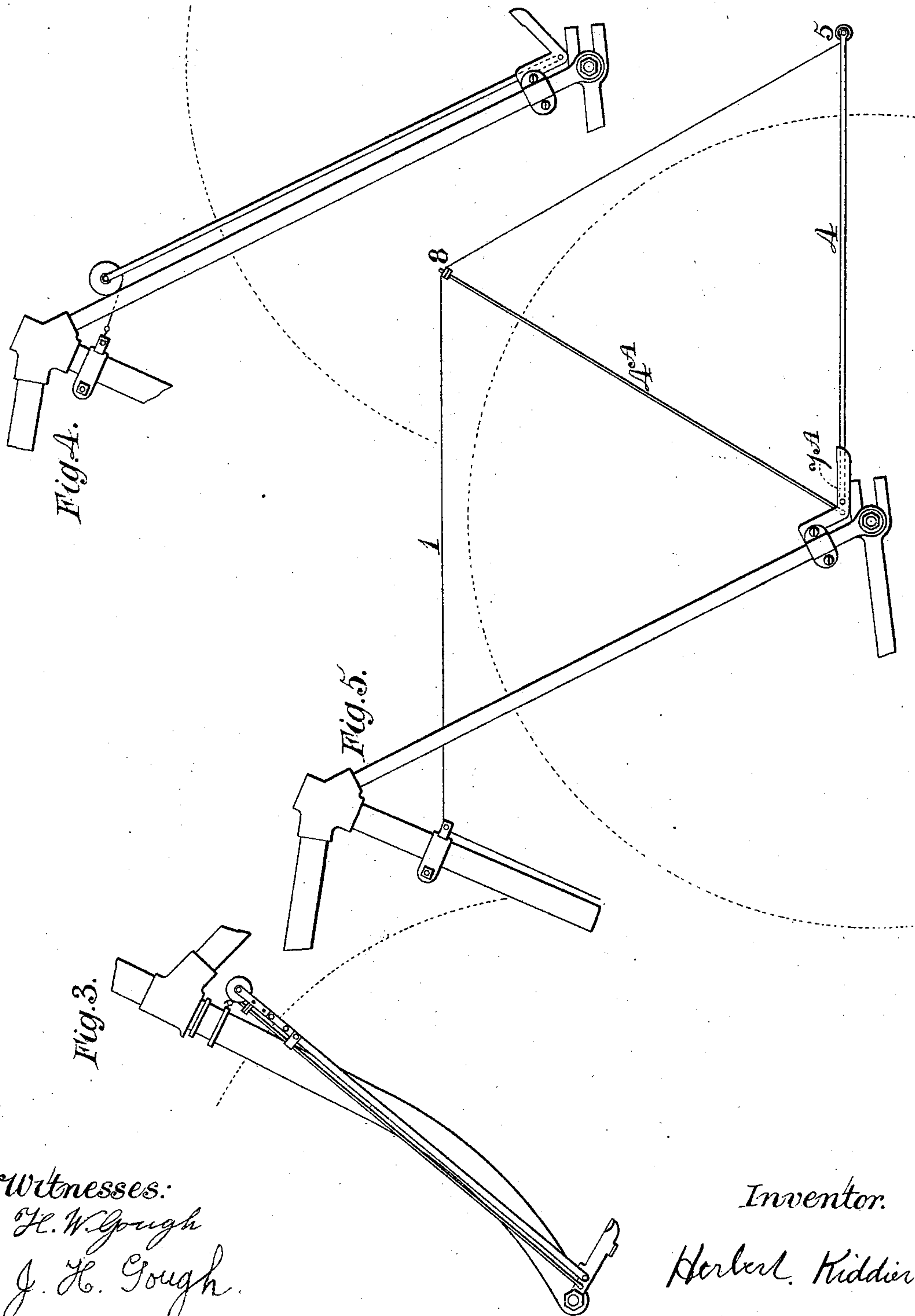
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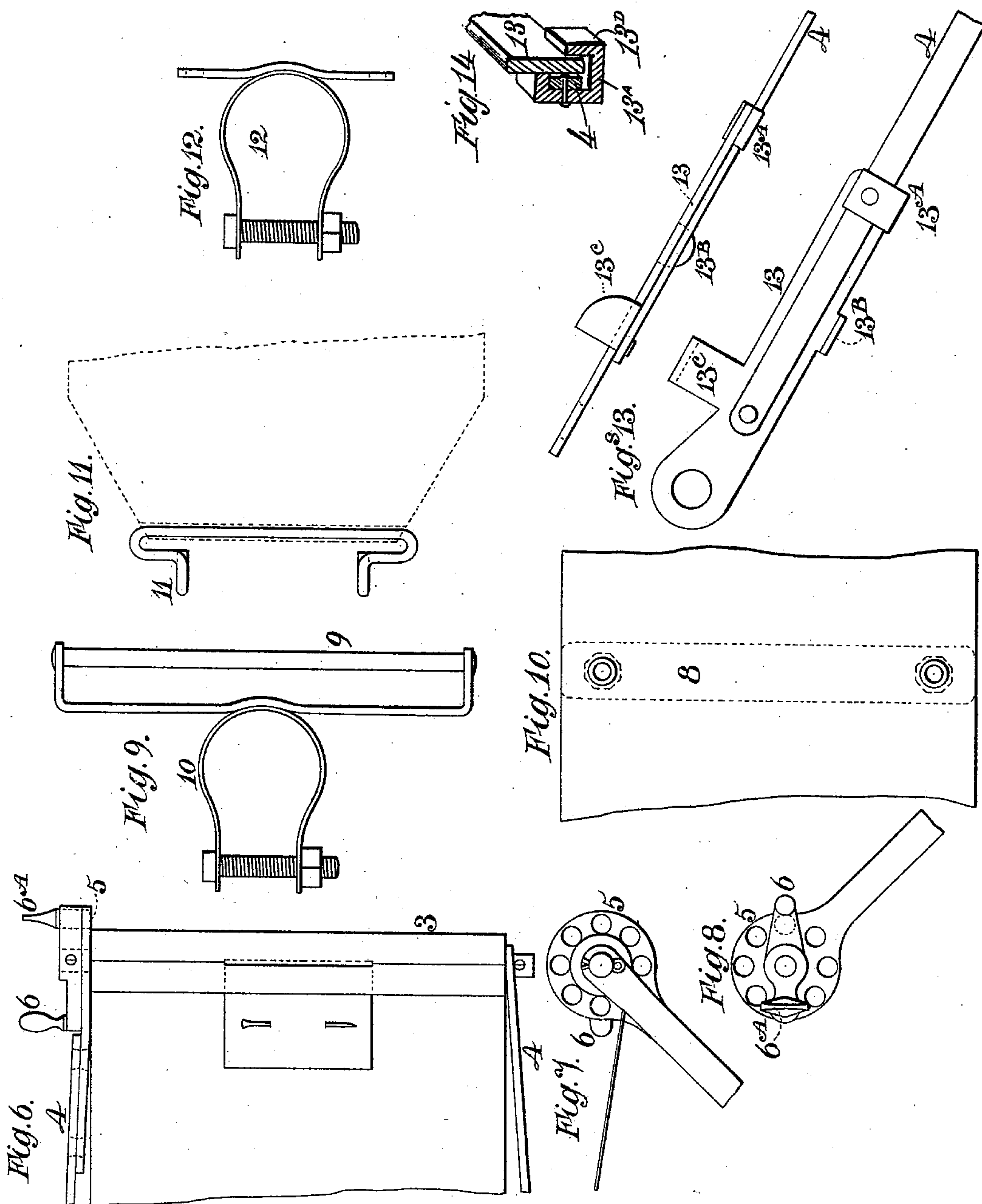
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# UNITED STATES PATENT OFFICE.

HERBERT KIDDER, OF NOTTINGHAM, ENGLAND.

## MUD-GUARD FOR CYCLES.

SPECIFICATION forming part of Letters Patent No. 614,007, dated November 8, 1898.

Application filed December 16, 1896. Serial No. 615,884. (No model.)

*To all whom it may concern:*

Be it known that I, HERBERT KIDDER, hosiery-machine builder, a subject of the Queen of Great Britain, residing at Waterway street, Nottingham, England, have invented certain new and useful Improvements in Mud-Guards for Cycles and other Vehicles, (for which I have obtained Letters Patent in Great Britain, No. 20,052, dated September 10, 1896,) of which the following is a specification, reference being had to the accompanying drawings.

Figures 1 and 2 show left-side views of my improved mud-guard as applied to the front and rear wheels of a cycle when in use. Figs. 3 and 4 show the mud-guards closed up when not in use. Fig. 5 shows a left-side view of a mud-guard of greater length as applied to the rear wheel of a cycle and held by two pair of rods. In the above figures sufficient only of the framing is shown to illustrate my invention. Fig. 6 shows in plan a tube on which the band is wound. Figs. 7 and 8 show side views of a bracket at one end of the tube. Fig. 9 shows in plan a band-guide rod. Fig. 10 shows in plan a plate secured to the under side of the band. Fig. 11 shows a pair of hooks attached to the outer end of each band. Fig. 12 shows in plan the bracket to which the band is hooked. Figs. 13 show a side view and plan of an alternative bracket. Fig. 14 is a sectional view of one of the rod-supporting brackets, taken on the line *xx* of Fig. 13.

Each of the above-described figures is severally referred to hereinafter, and the corresponding parts are indicated by the same figures where necessary.

The mud-guard applied to the front wheel of a cycle consists of a band of india-rubber webbing or other flexible material 1, the upper end being secured to a wire hooked to two hooks 2, projecting from the crown of the front wheel. The lower end of the band is passed through a slot in a tube 3 and secured thereto, as shown at Fig. 6. The ends of the tube revolve in the outer ends of two bearing-rods 4, as shown in detail in Fig. 6. The outer end of one rod terminates in a four or more holed bracket 5, and the end of the tube carries a cross-piece provided with a

6<sup>A</sup> at the other, adapted to enter one of the apertures in the bracket 5 to adjust the tension of the band. Outside each bearing-rod 55 is a second rod 4<sup>A</sup>, hinged to a bracket 7, carrying the bearing-rod 4, a bracket being secured to each end of the axle of the front wheel. The outer ends of the second rods extend through holes in a plate 8, (shown at Fig. 10,) secured to the band to hold it clear of the wheel. 60

The mud-guard for the back wheel consists of a band 1, slotted tube 3, a four or more holed bracket 5, a cross-piece with a handle 65 6, and pin or projection 6<sup>A</sup>, a pair of bearing-rods 4, each hinged to a bracket 7<sup>A</sup>, secured to the rear-wheel bearing-fork, the band passing over a guide-rod 9, (shown at Fig. 9,) carried by a clamp-bracket 10, secured to the framing. The front end of the band is provided with two hooks 11, (shown at Fig. 11,) hooked to a bracket 12, (shown at Fig. 12,) attached to the lower end of the framing. 70

When the mud-guards are not in use, each 75 may be wound up on its tube by the handle before named.

The rods 4<sup>A</sup> to the front guard when not in use are folded onto the bearing-rods 4, as shown at Figs. 3 and 4. 80

When a mud-guard of greater length than the one shown at Fig. 2 is applied to the rear wheel, it is carried by a tube and two bearing-rods, (shown in detail in Fig. 6,) as before described, and two rods 4<sup>A</sup>, terminating in a 85 plate 8, as shown at Fig. 5, hinged to a bracket 7<sup>A</sup> or to an alternative bracket 13. (Shown in side view and plan at Fig. 13.) This bracket 13 comprises a body portion, as shown, which is attached at one end to the frame, and it has 90 an upwardly and laterally projecting stop-lug 13<sup>C</sup> near its attached end, which abuts against the fork of the cycle-frame, as shown in Fig. 1, and serves to retain the bracket in proper position and prevents the same from rising under the pull or strain put upon the rod through 95 the flexible band 1. A stop-lug 13<sup>B</sup> is also formed on the bracket, upon its under side, and serves to prevent the bearing-rod 4 from falling too low. The said bearing-rod 4 is 100 hinged or pivoted to the bracket behind the stop-lug 13<sup>B</sup>, and it has a loop or clip 13<sup>A</sup> attached thereto in such a position that its free end 13<sup>D</sup> will engage with the bracket 13 near



its end, so as to lock or hold the rod in its operative position.

To wind up each band, the pin or projection 6<sup>A</sup> is unscrewed clear of the hole in the bracket 5 it engages with. The band is then wound tight on the tube 3 by the handle 6 and again secured by the set-screw.

What I claim is—

1. In a mud-guard for cycle-wheels, the combination with rod-supporting brackets secured to the frame of the vehicle upon opposite sides thereof and each bracket provided with a rod-supporting lug, and a laterally-extending stop-lug 13<sup>C</sup>, arranged to bear upon 15 the fork of the cycle to support the brackets against upward movement, of a foldable rod hinged to each bracket and each rod having its outer end projecting beyond the periphery of the wheel being guarded, said rods being 20 arranged to be folded up against a part of the frame when not in use and to be supported against downward movement by the said supporting-lugs when in operative position, a loop or clip 13<sup>A</sup>, carried by each rod and arranged to engage with the said brackets to 25 lock said rods in operative position, a tube journaled in the outer ends of said rods, a flexible band having one end secured to said tube and its opposite end arranged to be detachably secured to a part of the cycle-frame, 30 and means for rotating and locking said tube so as to wind the flexible band thereon, substantially as described.

2. In a mud-guard for cycle-wheels, the combination with rod-supporting brackets secured to the frame of the vehicle upon opposite sides thereof and each bracket provided with a rod-supporting lug, of a foldable rod hinged to each bracket and each rod projecting beyond the periphery of the wheel being guarded, said rods being arranged to be folded up against a part of the cycle-frame when 40 not in use and to be supported against downward

movement by the said supporting-lug when in use, a transverse rod 9 clamped to a part of the frame, an apertured bracket 12, 45 clamped to another part of the frame below the said transverse rod, a tube journaled in the outer ends of the said foldable rods, a flexible band having one end secured to said tube and its opposite end provided with hooks 50 11, said band being arranged to pass over the transverse rod 9, and have its hooks engage with the said apertured bracket 12, a handle for rotating the said tube, and means for 55 locking the tube against rotation, substantially as described.

3. In a mud-guard for cycle-wheels, the combination with the rod-supporting brackets 13, secured to the frame of the cycle upon opposite sides thereof and each bracket provided with a rod-supporting lug 13<sup>B</sup>, and a laterally-extending stop-lug 13<sup>C</sup>, which latter are arranged to bear against the fork of the cycle-frame to support the brackets against 65 an upward movement, of a foldable rod hinged to each bracket and each rod having its free end projecting beyond the periphery of the wheel being guarded, said rods being arranged to fold up against the frame when not 70 in use and to be supported against downward movement by the said supporting-lugs when in operative position, a loop or clip 13<sup>A</sup>, carried by each rod and arranged to engage with the said brackets and lock the rods in operative position, and a flexible band having its 75 opposite ends attached to the said foldable rods and frame of the cycle respectively and covering a portion of the wheel, substantially as described. 80

In testimony whereof I have hereunto set my hand this 25th day of November, 1896.

HERBERT KIDDIER.

Witnesses:

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