

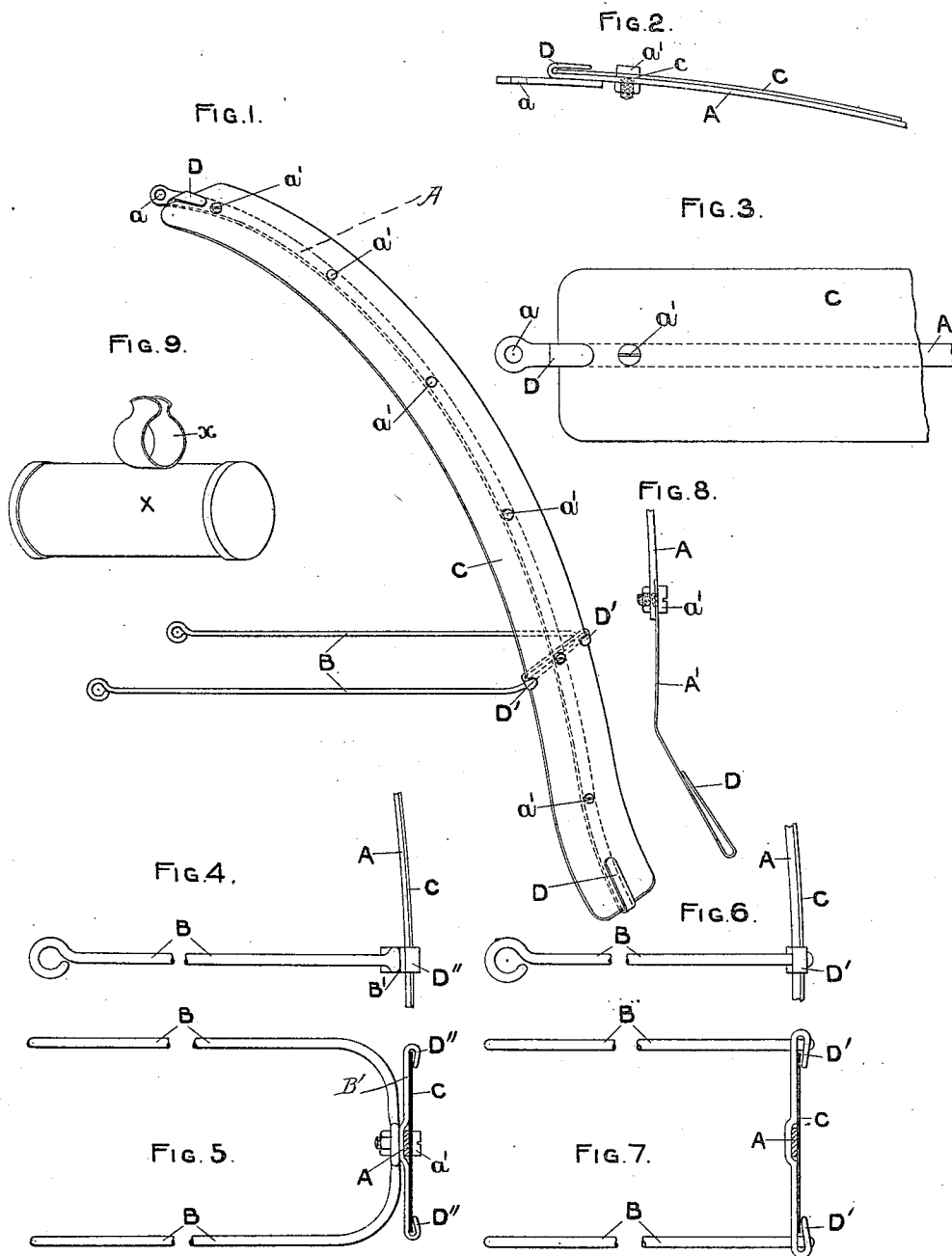
(No Model.)

2 Sheets—Sheet 1.

R. A. DAY.
MUD GUARD FOR VEHICLES.

No. 529,368.

Patented Nov. 20, 1894.



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(No Model.)

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FIG. 16.

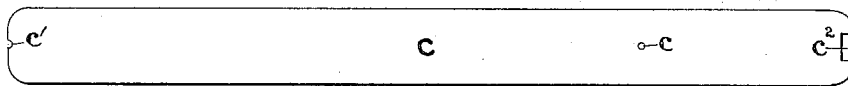


FIG. 11.

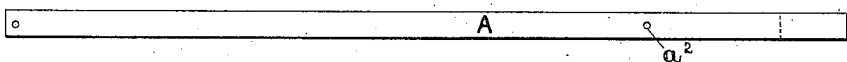


FIG. 12.

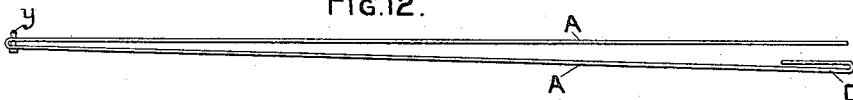


FIG. 13.

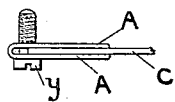


FIG. 10.

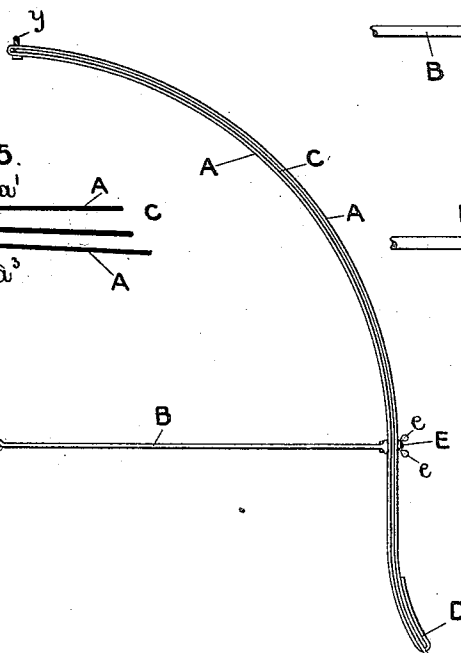


FIG. 14.

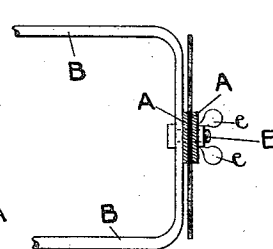
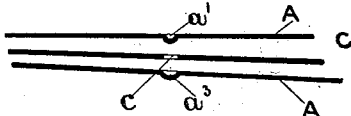


FIG. 15.



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UNITED STATES PATENT OFFICE.

ROBERT ARTHUR DAY, OF HARROGATE, ENGLAND.

MUD-GUARD FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 529,368, dated November 20, 1894.

Application filed June 7, 1894. Serial No. 513,724. (No model.) Patented in England November 4, 1893, No. 20,964.

To all whom it may concern:

Be it known that I, ROBERT ARTHUR DAY, a subject of the Queen of Great Britain, residing at Harrogate, in the county of York, England, have invented a certain new and useful Improvement in Mud-Guards for Velocipedes, (for which I have obtained a patent in Great Britain, No. 20,964, bearing date November 4, 1893,) of which the following is a specification.

My invention relates to an improved detachable mud-guard for velocipedes, and it consists of a cover of flexible but self-supporting material such as xylonite or celluloid, and of a frame for carrying the said cover consisting of a single bar or strip adapted to lie over the center of the tire of the wheel the guard is intended to cover, and of one or more supporting forks or stays, the object being to obtain a light and easily detachable cover the supporting frame of which when left on the machine is not in the way of the rider and has not an unrepresentable appearance. I attain this end in the manner shown by the accompanying drawings which illustrate by way of example only a mud-guard for the front or steering wheel of a velocipede.

Figure 1, Sheet No. 1, is a view in perspective of a guard constructed according to my invention. Figs. 2 and 3, Sheet No. 1, are broken views in side elevation and plan respectively—on an enlarged scale—showing the upper end of the supporting frame and the cover of the guard. Figs. 4 and 5, Sheet No. 1, are broken views in side elevation and plan respectively—on an enlarged scale—showing the lower end of the supporting frame and the cover of the guard. Figs. 6 and 7, Sheet No. 1, are broken views in side elevation and plan respectively—on an enlarged scale—showing an alternative construction of the supporting frame. Fig. 8, Sheet No. 1, is a broken view in side elevation—on an enlarged scale—showing a device for making the free end of the supporting frame flexible. Fig. 9, Sheet No. 1, is a view in perspective of the box adapted to carry the cover of the guard when not in use and intended to be fixed by the clip it carries to any suitable part of the frame of the machine. Fig. 10, Sheet No. 2, is a view in side elevation showing a modification of my invention, and Figs.

11, 12, 13, 14, 15 and 16, Sheet No. 2, are views—some on an enlarged scale—showing the details of construction of the said modification. Similar letters refer to similar parts throughout the several views.

The frame of the mud-guard consists of a strip of metal A bent to suit the diameter of the wheel it is intended to cover, and of a light fork B adapted to be attached to the strip A at or near one end and to be attached to the axle of the wheel or to the fork carrying it. The other end of the strip A is provided with an eye *a* by which it is attached by means of a screw to the crown of the front fork of the velocipede, but it may be attached thereto in any other convenient manner. Both ends of the strip A are turned over to form clips D, D, to hold the cover C and it is also provided with one or more studs *a'* to keep the said cover in place.

The cover C of the guard consists of a strip of any suitable flexible but self-supporting waterproof material such as xylonite or celluloid and it has a series of small holes *c* in it to engage with the studs *a'* on the strip A of the frame. As an extra support for the cover C the crown of the supporting fork B may be shaped to form clips D', D', to embrace it as shown by Figs. 6 and 7, or a cross strip or bar B' having clips D'', D'', at its ends, may be attached to the crown of the fork B as shown by Figs. 4 and 5. This cross strip or bar B' may be mounted on the crown of the fork B so as to swivel and lie over the strip A when not in use.

The supporting frame is intended to remain on the machine, but the cover is only intended to be used when a guard is required, and when not in use it is rolled up and carried either in a small cylindrical box X adapted to be attached to any convenient part of the frame of the velocipede by means of the spring clip *x* or its equivalent, or in the rider's pocket or tool bag. To attach the cover to the frame of the guard it is simply sprung into the clips D, D', &c., the holes *c* in it engaging with the studs *a'* on the strip A to prevent its lateral movement thereon.

In order that the end of the guard may be brought as near to the ground as possible, the lower end of the strip A is made of a piece of a flexible strip of steel A' so that it will yield

in case it comes into contact with any obstacle on the ground.

A guard for the rear or driving wheel or wheels of a velocipede is constructed in a similar manner to that hereinbefore described, its length being such that it will cover as much of the said wheel as may be desired, but the rear end of the strip A of the supporting frame need not be made flexible.

As an alternative construction the strip A may be formed in two pieces adapted to lie one over the other so that the cover C of the guard can be placed between them as shown by Fig. 10, Sheet No. 2. In this construction the double strip A is preferably made out of a length of thin steel bent double on itself as shown by Fig. 12, Sheet No. 2, the end of one part of the strip forming a clip D to receive the cover and if desired the end of the other part of the strip. The closed end of this double strip is attached to the crown of the fork of the velocipede by a screw *y* or its equivalent, and at or near the other end of the strips are holes *a*² adapted to pass over a stud E carried by the crown of the supporting fork B so that the double strip can be fixed thereto by a fly nut *e* or its equivalent.

To attach the cover C, the double strip is opened by removing the fly nut *e*. The cover is then introduced between the two parts of the strip, being guided into its proper position by having a slot *c*¹ at one end to engage with the screw *y* and a slot *c*² at the other end to engage with the clip portion D of the strip A and also having a hole *c* at or near its other end to fit over the stud E. The fly nut is then screwed on to the stud E to lock the two parts of the strip A and the cover C together, and to the crown of the supporting fork B. To more securely hold the cover in position one or more holes *c* may be made in it for projections *a*¹ on one of the strips to engage with, depressions or holes *a*³ being formed in the other strip to receive the said projections as shown by Fig. 15, Sheet No. 2.

I wish it to be particularly understood that I do not limit myself to the precise details of construction hereinbefore described and illustrated by the accompanying drawings,

but that I hold myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of my invention.

I am aware that mudguards have already been made with detachable covers and I do not therefore claim such broadly; but

What I do claim, and desire to secure by Letters Patent, is—

1. In a mudguard, the combination of a supporting frame consisting of a single strip A having a flexible end A' adapted to lie over the center of the periphery of the wheel and having clips D, D, formed at its ends and studs *a*¹, *a*¹, on its outer face, of a fork B and of a transverse strip or bar B' carried by the fork B and having clips D'', D'', at its ends, and of a flexible but self-supporting cover C as set forth.

2. In a mudguard, the combination of the strip A having clips D and studs *a*¹, of the fork B, and of the cover C having holes *c* in it to engage with the studs *a*¹ on the strip A, all combined, arranged, and adapted to operate as set forth.

3. In a mudguard, the combination of the strip A having clips D and studs *a*¹, of the fork B, of the transverse strip or bar B' having clips D'' at its ends, and of the cover C having holes *c* in it to engage with the studs *a*¹ on the strip A, all combined, arranged, and adapted to operate as set forth.

4. A mud guard for a velocipede, consisting of a curved support A, and fastening devices permanently securing the said support vertically over the backbone of the velocipede; in combination with a detachable cover of flexible, self-supporting material, such as celluloid; and fastening devices attaching the central portion of the cover to the said support with its edges projecting on each side thereof and permitting the cover to be removed and rolled up in dry weather, substantially as set forth.

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