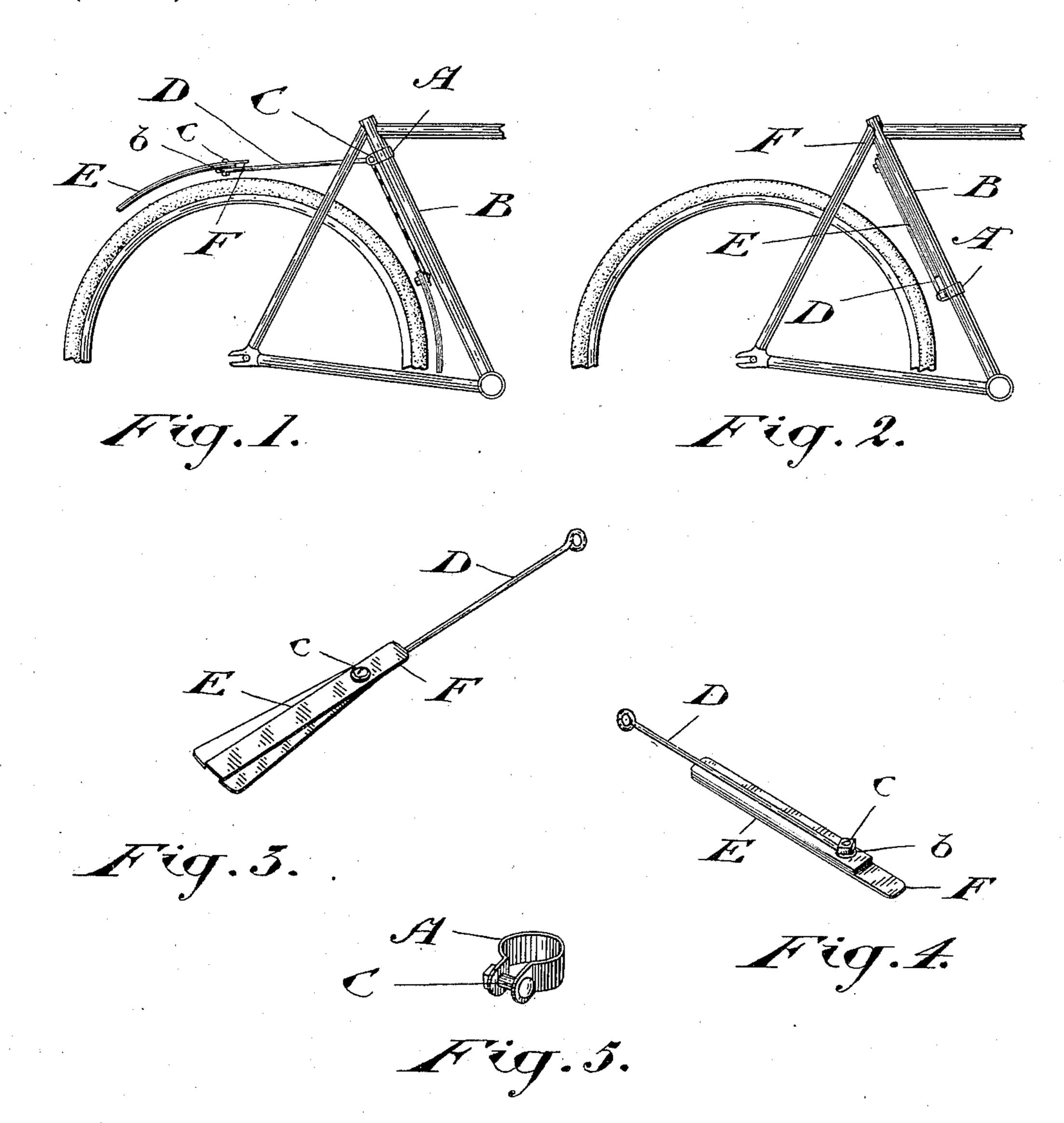
E. R. HOOGS. MUD GUARD FOR BICYCLES.

(Application filed June 10, 1899.)

(No Model.)



Witnesses: A. J. Colbourne. J. W. Wibshir

Edward R. Hoogs by Ridout Maybee Attys

United States Patent Office.

EDWARD R. HOOGS, OF TORONTO, CANADA.

MUD-GUARD FOR BICYCLES.

SPECIFICATION forming part of Letters Patent No. 652,269, dated June 26, 1900.

Application filed June 10, 1899. Serial No. 720,121. (No model.)

To all whom it may concern:

Be it known that I, EDWARD REMLER Hoogs, a subject of Her Majesty the Queen of Great Britain, residing at Toronto, in the 5 county of York, Province of Ontario, in the Dominion of Canada, have invented an Improved Mud-Guard for Use on Bicycles, to be known as "The Dart," of which the following is a specification.

The object of my invention is to devise a light, simple, and effective mud-guard for bicycles which when not in use may be folded up out of the way; and it consists, essentially, of a fan formed of sheet-metal plates pivot-15 ally secured to a steel rod adjustably secured by a suitable clip to the seat-post or other

convenient part of the bicycle.

Figure 1 is a side elevation of a portion of a bicycle, showing my mud-guard in position 20 for use. Fig. 2 is a similar view showing the mud-guard folded up out of the way. Fig. 3 is a perspective detail of the mud-guard and rod, the guard being extended. Fig. 4 is a similar view showing the mud-guard folded. 25 Fig. 5 is a perspective detail of the clip.

In the drawings like letters of reference indicate corresponding parts in the different

figures.

A is a clip adapted to embrace the seat-30 standard B and provided with a pinch-bolt C.

D is a steel rod having an eye adapted to embrace the pinch-bolt C. The other end of this rod is provided with an eye b, through which passes a bolt c. Pivoted upon this bolt 35 are two or more plates E, forming a fan. The top plate of the fan has an extension F thereon, which when the guard is folded up, as shown in Fig. 2, fits between the seat-standard and the rear forks, and thus retains the 40 guard in position and prevents its rattling.

When in use, the rod B is extended rearwardly over the top of the rear wheel and is clamped in that position by tightening the pinch-bolt C. The plates E of the fan are 45 formed of thin aluminium and are usually given a downward bend, as shown in Fig. 1, before the fan is opened. When the fan is so opened, it forms a very effective mudguard, catching and throwing downward any 50 dirt thrown up by the rear wheel. As it has

a slight vibrating motion, owing to the springiness of its construction, mud will not accumulate upon it, but is quickly dropped off. I may also connect a similar mud-guard to the clip A and extend it down in front of the 55 rear wheel to stop any dirt which may fly off the wheel at that part. (See Fig. 1.) When through with the mud-guard, it may be straightened by the hands and the fan folded. Afterward the plates may be released by loos- 60 ening the bolt c and then turned back over the rod D. By loosening the pinch-bolt C the clip A may be slid down the seat-standard till the extension F is in such a position that it may be pushed up between the seat- 65 standard and the rear forks. By tightening up the pinch-bolt C the guard may be securely held in its folded position.

From the above description it will be seen that I have devised a mud-guard which is 70 exceedingly light and effective and which when not in use may be folded up into a position where it will be exceedingly inconspicuous and not likely to spoil the appearance of

the bicycle.

What I claim as my invention is—

1. As a mud-guard for bicycles, a clip adapted to embrace a portion of the frame in combination with a rod vertically and adjustably hinged upon the said clip and two or more 80 plates forming a fan horizontally hinged upon the other end of the said rod, substantially as and for the purpose specified.

2. As a mud-guard for bicycles, a clip adapted to embrace a portion of the frame in com- 85 bination with a rod vertically and adjustably hinged upon the said clip and two or more plates forming a fan horizontally hinged upon the other end of the said rod; one of the plates being provided at its hinged end with 90 an extension, substantially as and for the pur-

pose specified.

3. As a mud-guard for bicycles, two or more plates pivotally connected to form a fan and provided with suitable means for attachment 95 to a portion of the frame of a bicycle, the said plates also being pivoted or hinged to the said attaching means and thereby arranged to fold over the same, substantially as described.

4. As a mud-guard for bicycles, two or more plates pivotally connected together to form a fan and arranged over the tread of the tire, means for connecting said plates to the frame of a bicycle, the said plates being pivoted or hinged to said holding means and arranged to fold over the same, and the said means be-

ing arranged to hold the plates in their fan shape over the tread of the tire or in their folded position, substantially as described. EDW. R. HOOGS.

Witnesses:
W. W. Fox,
T. M. Wood.