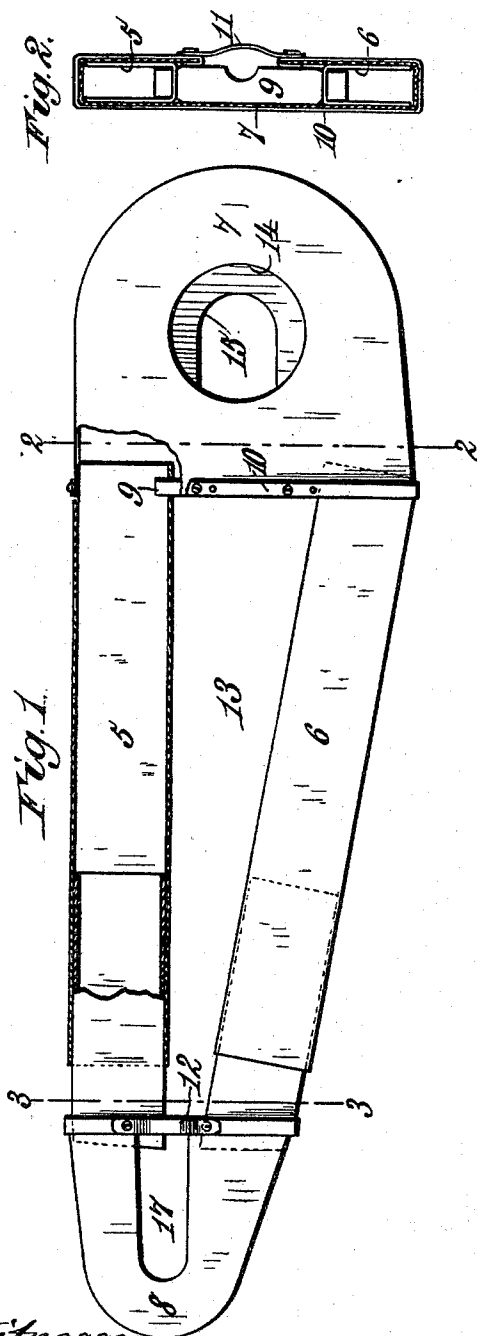


(No Model.)

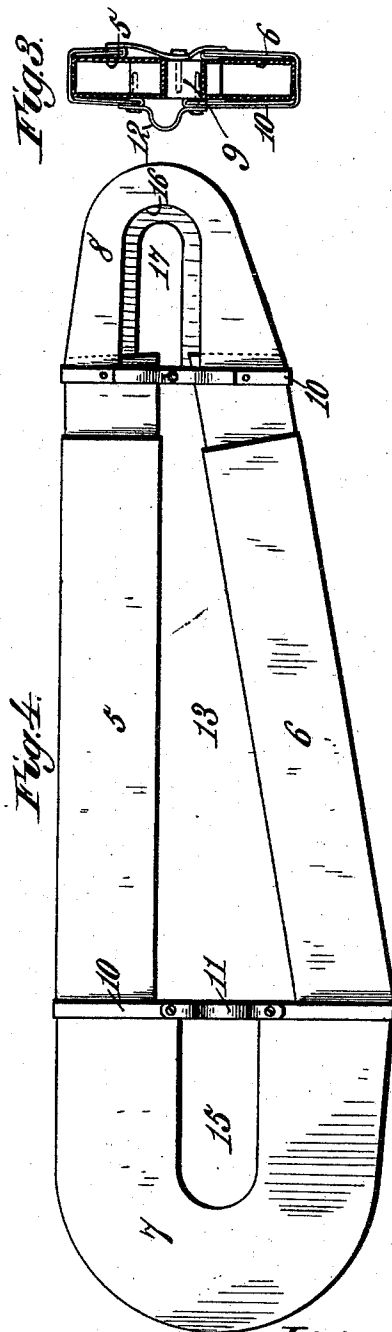
J. SALISBURY.
DUST PROOF CHAIN GUARD.

No. 582,099.

Patented May 4, 1897.



Witnesses.
Robert Spratt,
Albert H. Norris.



Inventor:
John Salisbury.
By *James L. Norris.*

UNITED STATES PATENT OFFICE.

JOHN SALISBURY, OF ARLINGTON, NEW JERSEY, ASSIGNOR TO THE ARLINGTON MANUFACTURING COMPANY, OF SAME PLACE.

DUST-PROOF CHAIN-GUARD.

SPECIFICATION forming part of Letters Patent No. 582,099, dated May 4, 1897.

Application filed August 5, 1896. Serial No. 601,751. (No model.)

To all whom it may concern:

Be it known that I, JOHN SALISBURY, a citizen of the United States, residing at Arlington, in the county of Hudson and State of New Jersey, have invented new and useful Improvements in Dust-Proof Chain-Guards, of which the following is a specification.

This invention relates to gear-cases for cycles, and has for its object to provide a detachable practically dust-proof gear-case and chain-guard constructed from transparent material to permit inspection of the condition and working of the chain and capable of adjustment to suit the distance between the sprocket-wheels with which the driving-chain connects.

The invention consists in certain features of construction in a gear-case and chain-guard for bicycles, as hereinafter described and claimed.

In the annexed drawings, illustrating the invention, Figure 1 is an outer side elevation of my improved gear-case and chain-guard. Fig. 2 is a vertical section of the same on the line 2 2 of Fig. 1. Fig. 3 is a similar section of the same on the line 3 3 of Fig. 1. Fig. 4 is an inner side elevation of the case or guard.

In order to furnish a gear-case and chain-guard that shall be light, durable, and transparent, it is preferable to construct it from a material such as pyralin or a like pyroxylin compound. This material can be readily molded into required shapes and is transparent, tough, and light.

For the purpose of making the gear-case adjustable to increase or diminish its length it may be constructed in telescopic sections to slip readily one into another.

The gear-case, as shown, is made in three sections—namely, a central or main section that comprises an upper tube 5 and a lower tube 6 to inclose the corresponding parts of the driving-chain, a curved end section 7 to inclose the sprocket-gear on the cranked driving-shaft, and a smaller curved end section 8 to inclose the sprocket-gear on the axle of the rear wheel of a bicycle or velocipede.

At or near their ends the tubular parts 5 and 6 are connected by vertical braces 9, preferably composed of pyralin in the form of blocks. The upper and lower tubes 5 and 6

are slotted to receive the ends of the braces 9, which will thereby more securely stiffen the adjustable gear-case or chain-guard.

The ends of the chain-inclosing tubes 5 and 6 are fitted into the curved end sections 7 and 8, that are to inclose the sprocket-gears, and as a means for securely connecting these tubes and end sections there may be provided metal bands 10, arranged to closely embrace the end sections at the points of junction with the tubes. These metal bands 10 may be bolted or riveted in any convenient manner to the braces 9 and also to the tubes 5 and 6 and the curved end sections. The bands 10, or clamping attachments 11 and 12 thereon, may serve as means for detachably securing the gear-case and chain-guard to the usual horizontal rod, tube, or stay at the lower part of a bicycle-frame. The longitudinal space 13 between the tubes 5 and 6 permits a proper arrangement of the gear-case with relation to the said stay portion of the bicycle-frame. The curved end section 7 of the gear-case is provided with suitable openings 14 and 15 for passage of the pedal-crank shaft, and suitable openings 16 and 17 are provided in the end section 8 for passage of the axle or hub of the driving-wheel.

In order that the gear-case may be readily adjustable to vary its length according to the distance from one sprocket-gear to the other, the tubes 5 and 6 are each divided transversely or formed in two sections that will telescope one within the other, as shown. It will be seen that this gear-case may be readily detached when desired and may be easily and conveniently adjusted to the length of driving-chain required.

The case or guard is practically dust-proof and will protect the driving-chain and gears from mud and dirt, and consequently lessen the need for cleaning and lubrication. Being constructed of transparent material the case or guard will permit inspection of the condition and working of the chain at all times, so that the guard need not be removed for that purpose. In a lady's wheel the guard serves to prevent the skirts from catching in the chain. It is light and not heavy or cumbersome, as one made from leather, wood, metal, or similar material, and it is susceptible of

ornamentation and may be produced in colors with either opaque or transparent effects, as usual with articles made from pyralin or like pyroxylin compounds.

- 5 To make each of the tubes 5 and 6 telescopic, they may be divided at any preferred point either centrally or toward either end of the gear-case, and the respective sections may be made to slide one into another any desired
10 distance to afford the required range of adjustment. If preferred, the adjustment of the gear-case may be effected by a telescopic connection at the junction of the tubes 5 and 6 with the curved end 7 of the gear-case.

- 15 What I claim as my invention is—

The herein-described cycle gear-case and chain-guard composed of the upper and lower tubular members 5 and 6, the vertical bracing-

blocks 9 secured in transverse slots in the under and upper portions of the said upper 20 and lower tubular members, respectively, and intermediate the end portions of said members, for the purpose of bracing the gear-case, and the two separately-attached curved end pieces 7 and 8 that receive the ends of the 25 said upper and lower tubular members adjacent to the points of attachment for the said bracing-blocks, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses. 30

JOHN SALISBURY.

Witnesses:

EMMET SCHULTZ,
P. E. BROCKWAY.