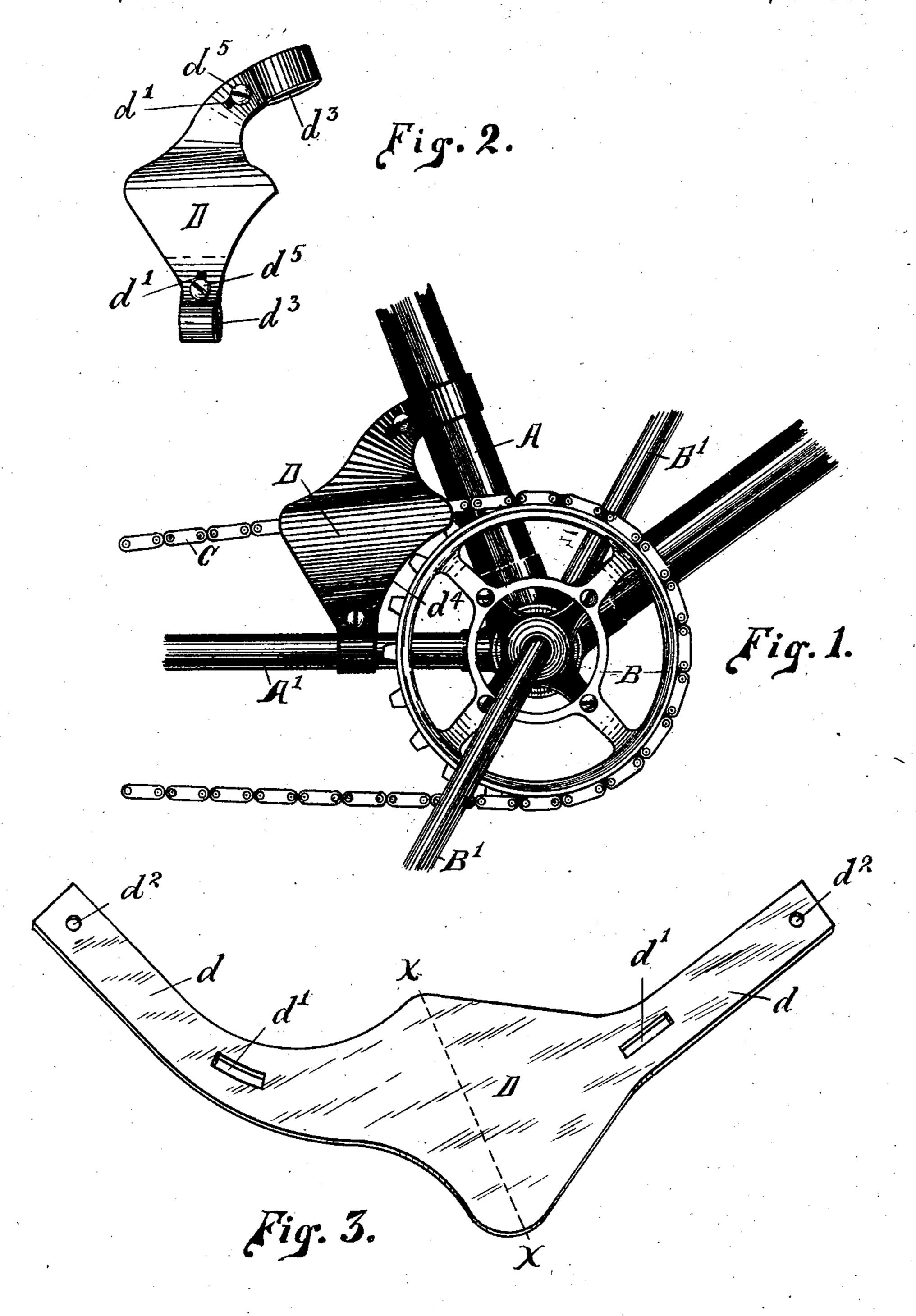
(No Model.)

## A. A. BILLINGSLEY. PANTS GUARD FOR BICYCLES.

No. 557,181.

Patented Mar. 31, 1896.



Will Q. Olden. Frank B. Stenney. Inventor, Undrew A. Billingsley, By N. DuBois Atti

## United States Patent Office.

ANDREW A. BILLINGSLEY, OF SPRINGFIELD, ILLINOIS.

## PANTS-GUARD FOR BICYCLES.

SPECIFICATION forming part of Letters Patent No. 557,181, dated March 31, 1896.

Application filed July 5, 1895. Serial No. 554,922. (No model.)

To all whom it may concern:

Be it known that I, ANDREW A. BILLINGS-LEY, a citizen of the United States, residing at Springfield, in the county of Sangamon 5 and State of Illinois, have invented a certain new and useful Pants-Guard for Bicycles, of which the following is such a full, clear, and exact description as will enable those skilled in the art to which it pertains to make and use 10 my said invention.

The purpose of my invention is to provide a simple, light, and inexpensive guard of novel and improved form adapted to protect the pants of a rider from injury by being 15 caught between the chain and the sprocket, as well as to keep the pants from contact with the greasy chain, and which may be readily attached to or detached from the bicycle.

My invention is fully illustrated in the an-20 nexed drawings, to which reference is hereby made, and is hereinafter fully described and specifically claimed.

Figure 1 is a side elevation of the sprocketwheel, the sprocket-chain, and part of the 25 frame of a bicycle, and shows the pants-guard in position on the frame of the bicycle. Fig. 2 is a detached perspective view of the pantsguard. Fig. 3 is an enlarged top plan of the blank from which the pants-guard is formed.

Similar reference-letters designate like

parts in all of the views.

In the drawings I have shown only so much of the bicycle-frame as is necessary to illustrate the connection of the pants-guard there-35 with.

The letter A designates the saddle-posts, A' the tube of the rear fork, B the sprocketwheel, B' the cranks, and C the sprocketchain, of the bicycle.

The pants-guard consists of a curved plate D, having its upper end secured to the saddle-post A, and its lower end secured to one of the tubes A' of the rear fork of the bicycle.

The front edge  $d^4$  of the lower part of the 45 plate D lies adjacent to the outer edge of the periphery of the sprocket-wheel B and approaches closer to the sprocket-wheel as it reaches the central part of the plate, this to prevent the pants from being caught and torn 50 between the wheel and the chain. The central part of the plate is bent so as to form an approximately horizontal part lying above the

sprocket-chain C and an approximately vertical part parallel to the sprocket-chain, as

clearly shown in Fig. 1.

The pants-guard is made from a single blank or sheet of metal, the contour of which is clearly shown in Fig. 3. The blank has extensions d, which are pierced by longitudinal slots d' and holes  $d^2$ . In forming the com- 60 plete pants-guard the blank is bent along the line X X. The elongated parts d are each bent inward until the holes  $d^2$  register with the slot d', and eyes or loops  $d^3$  (see Fig. 2) are formed adapted to surround and be clamped 65 upon the post A and the tube A'. Screwbolts  $d^5$  pass through the holes  $d^2$  and the slots d', and serve to clamp on the standard A and the tube A' the loops  $d^3$  formed by the extensions d.

The slots d' serve to adapt the plate for use on any size of seat-post and tube. The plate is of such width in its wide part and is so placed on the bicycle-frame that the pedalnut on the inside of the crank will just clear 75

the edge of the plate.

It will be seen that when the pants-guard is in place on the bicycle the widened central part covers all that part of the chain with which the pants of the rider are likely to come 80 in contact. By making the plate with narrow and elongated parts, as described, the weight of the plate is reduced to the minimum, and convenient means for attaching the plate to the bicycle-frame are provided. By 85 use of a blank having the contour shown I am enabled to produce a pants-guard which is light, inexpensive, symmetrical in form, and adapted to effectually protect the pants of the rider, and which may be readily at- 90 tached to or detached from any bicycle and be used on either the right-hand or the lefthand side of the bicycle.

Having fully described my invention, what I claim as new, and desire to secure by Letters 95

Patent, is—

1. An article of manufacture; a pants-guard formed from a single sheet or blank, said blank having a wide central part and having elongations pierced by slots and holes, said 100 elongations forming loops, as set forth.

2. A pants-guard, consisting of a plate widened and bent in its central part, and adapted to overlie and lie parallel to the up-

per part of the sprocket-chain of a bicycle; said plate having extensions forming loops adapted to be clamped upon the frame of a bicycle; and being provided with bolts adapted to clamp said loops on a bicycle-frame; as set forth.

In witness whereof I have hereunto sub-

scribed my name, at Springfield, Illinois, this 29th day of June, 1895.

ANDREW A. BILLINGSLEY.

Witnesses:

ALF. F. WALLACE, Jos. ZIMMERMAN.

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