## N NILSON. VELOCIPEDE PEDAL.

No. 580,706.

Patented Apr. 13, 1897.

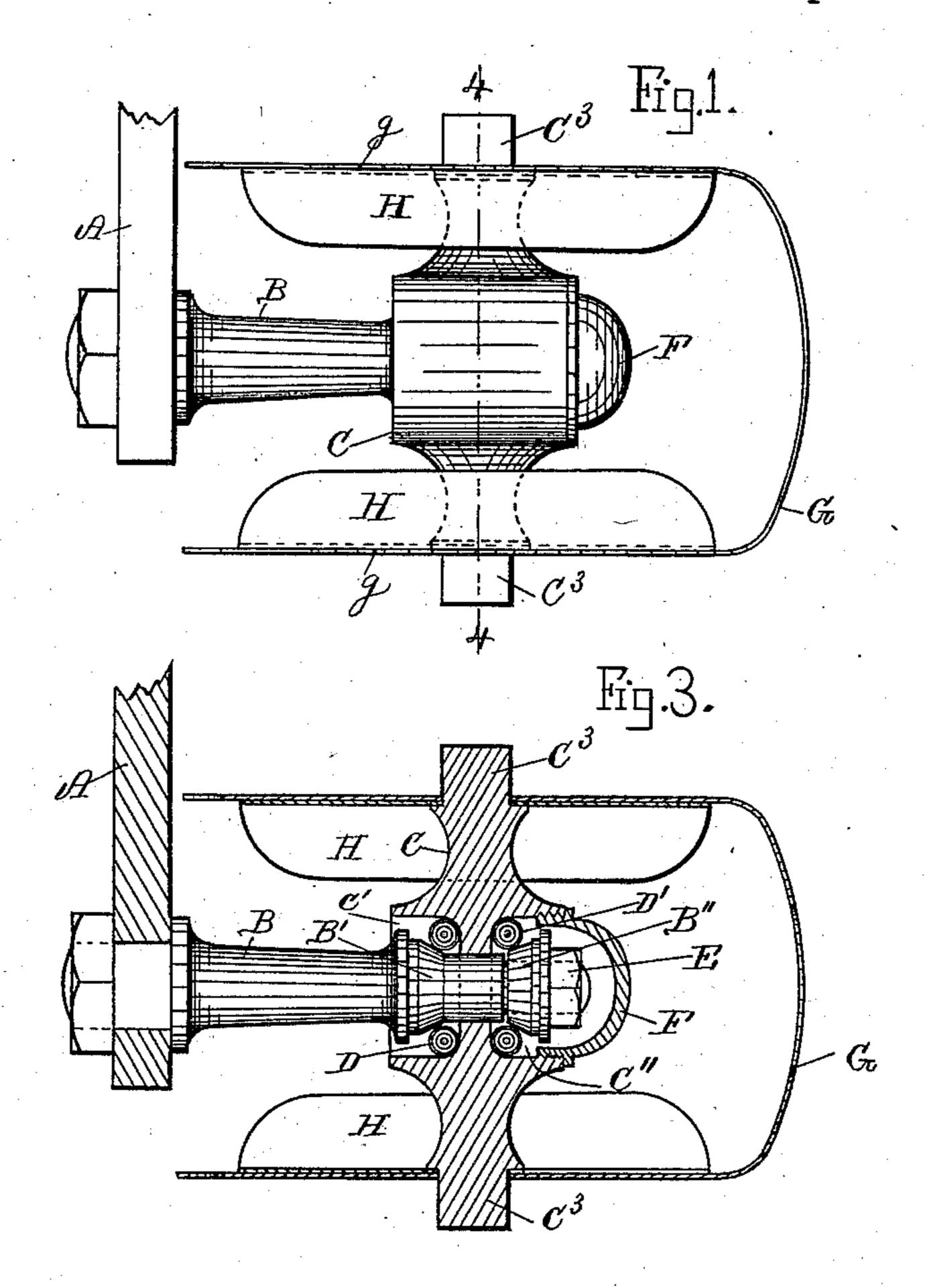
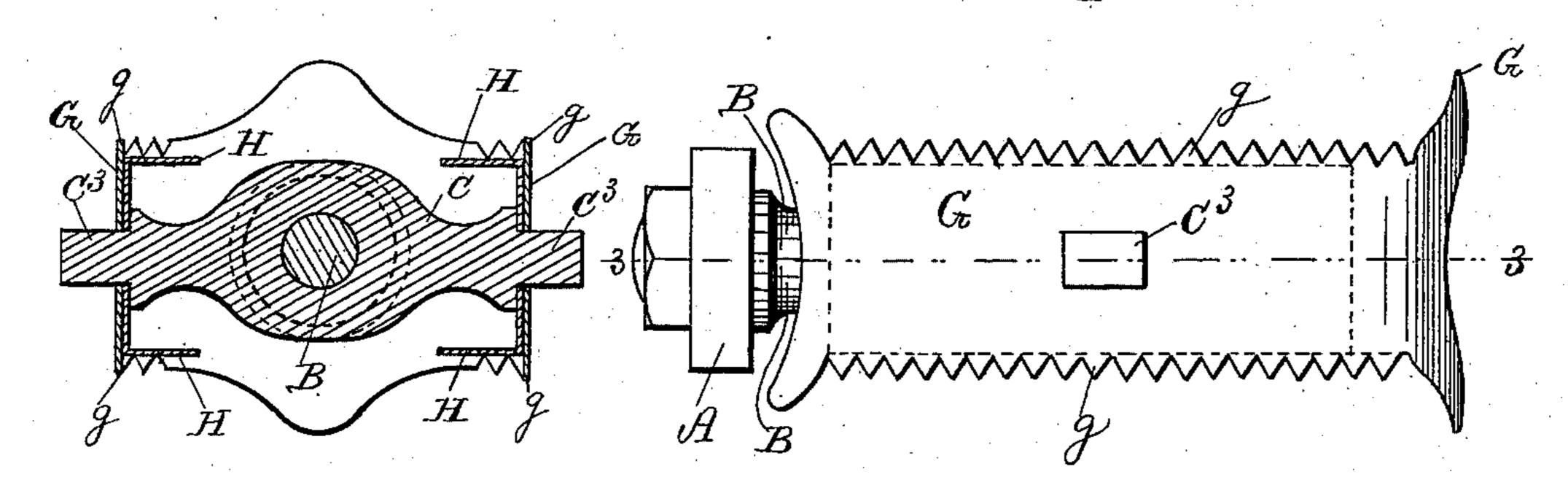


Fig.4.

Fig. 2.



Wilgeses.

Lairitz. W. Moller. Indeles & maxwell) ITTETTOV.

Nils Nilson.
his atts.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

## United States Patent Office.

NILS NILSON, OF NEEDHAM, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO ERIK V. ULFVES, OF SAME PLACE.

## VELOCIPEDE-PEDAL.

SPECIFICATION forming part of Letters Patent No. 580,706, dated April 13, 1897.

Application filed June 5, 1896. Serial No. 594,456. (No model.)

To all whom it may concern:

Be it known that I, NILS NILSON, a citizen of Sweden, and a resident of Needham, in the county of Norfolk and State of Massachusetts, have invented new and useful Improvements in Velocipede-Pedals, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention relates to improvements in velocipede-pedals; and it is carried out as follows, reference being had to the accompanying drawings wherein

nying drawings, wherein—

Figure 1 represents a top plan view of the improved pedal. Fig. 2 represents a side ele-15 vation of the same. Fig. 3 represents a longitudinal section on the line 3 3 shown in Fig. 2, and Fig. 4 represents a cross-section on the line 4 4 shown in Fig. 1.

Similar letters refer to similar parts wher-20 ever they occur on the different parts of the

drawings.

In the drawings, A represents the crank, to which is secured the crank-pin B in any well-known manner. On the crank-pin B is journaled the cross-bar C, having on its opposite sides annular pockets C' C", containing antifriction-balls D D', as shown in Fig. 3.

B' is a cone-bearing for the balls D, which cone-bearing is preferably made integral with the crank-pin B. B" is a similar cone-bearing for the balls D'. Said cone-bearing B" is screwed onto the end of the crank-pin C and firmly held in place thereon, preferably by means of a check-nut E, as shown in Fig. 3.

F is a dust cap or cover screwed into the outer end of the annular pocket C", as shown in said Fig. 3.

The cross-bar C is provided with square or polygonal ends  $C^3$   $C^3$ , which are received in correspondingly-shaped perforations in the 40 **U**-shaped sheet-metal pedal G, which is preferably made of spring steel or metal and provided with serrated edges g g, as shown.

To the insides of the pedal G are secured sheet-metal strengthening and tread plates or 45 foot-rests H H, as shown, said plates H H being made  $\square$ -shaped in section, as shown in

Fig. 4.

The middle portion of the cross-bar C also serves as a support for the sole of the boot or 50 shoe of the wearer.

If so desired, this my improved pedal may be provided with rubber, cork, or equivalent tread-surfaces without departing from the essence of my invention.

What I wish to secure by Letters Patent

and claim is—

In a velocipede-pedal in combination a crank-pin and a single cross-bar antifrictionally journaled on said pin and its ends conected to a U-shaped pedal-plate and \_\_\_\_\_shaped foot-rests and strengthening-plates secured to the interior of the said pedal-plate substantially as and for the purpose set forth.

In testimony whereof I have signed my 65 name to this specification, in the presence of two subscribing witnesses, on this 30th day

of March, A. D. 1896.

NILS NILSON.

Witnesses:

Alban Andrén, Lauritz N. Möller.