

(No Model.)

F. HAMACHEK.  
HANGER FOR PLOW WHEELS.

No. 540,251.

Patented June 4, 1895.

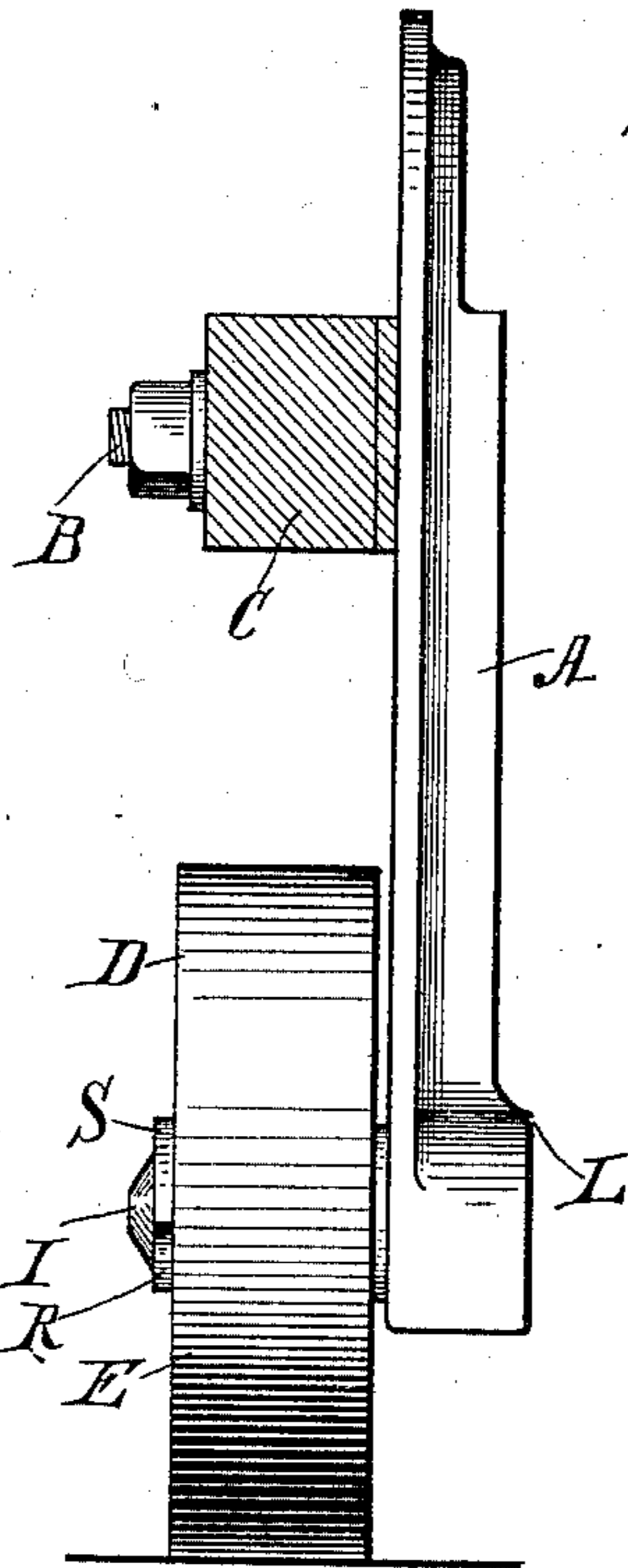
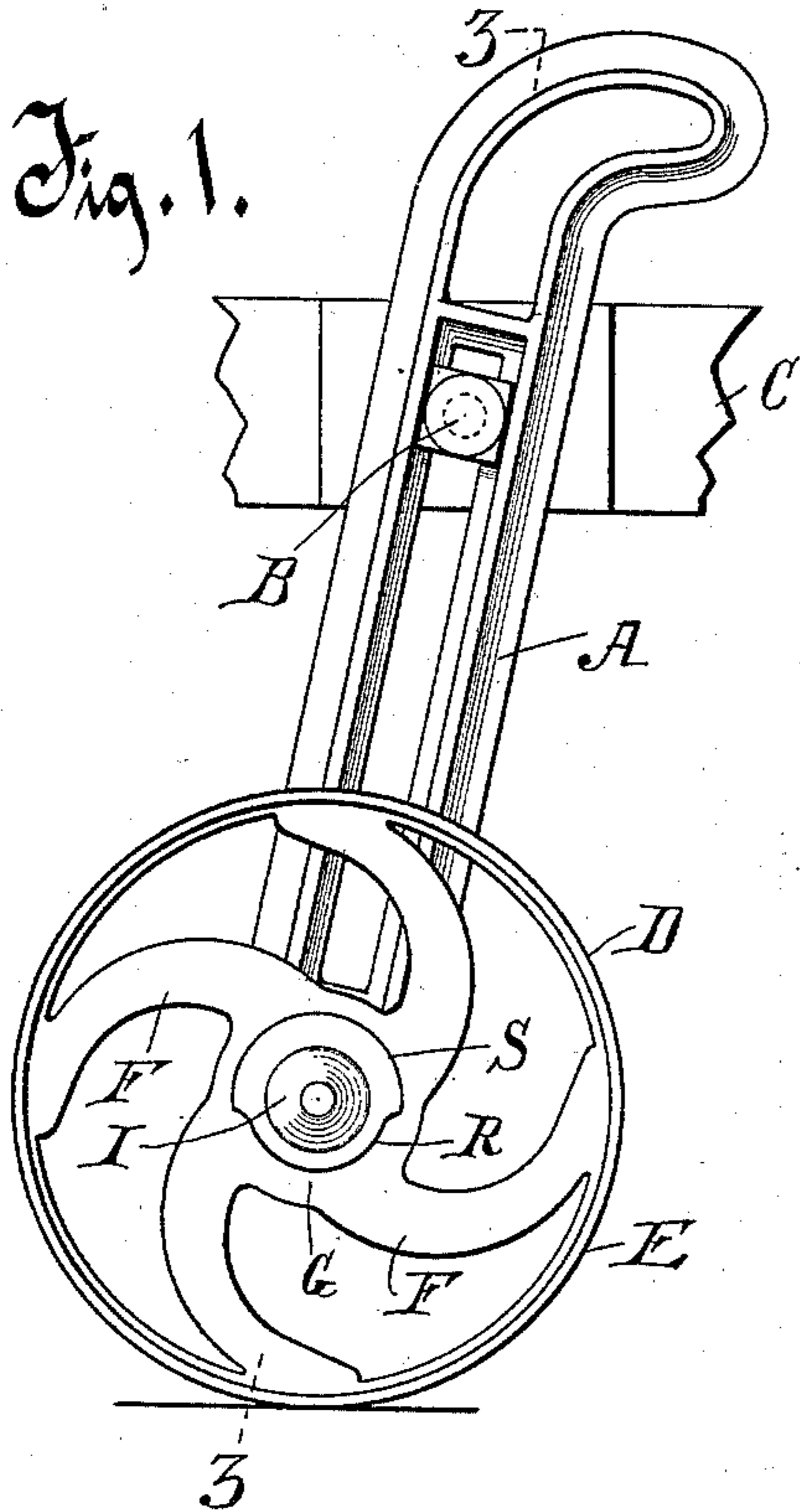


Fig. 3.

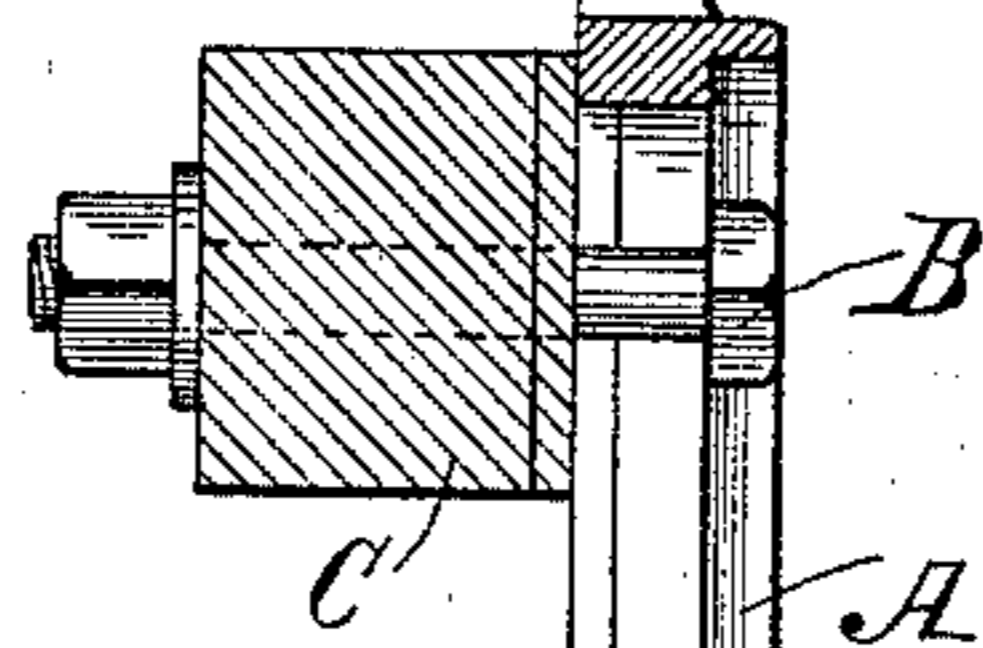


Fig. 4.

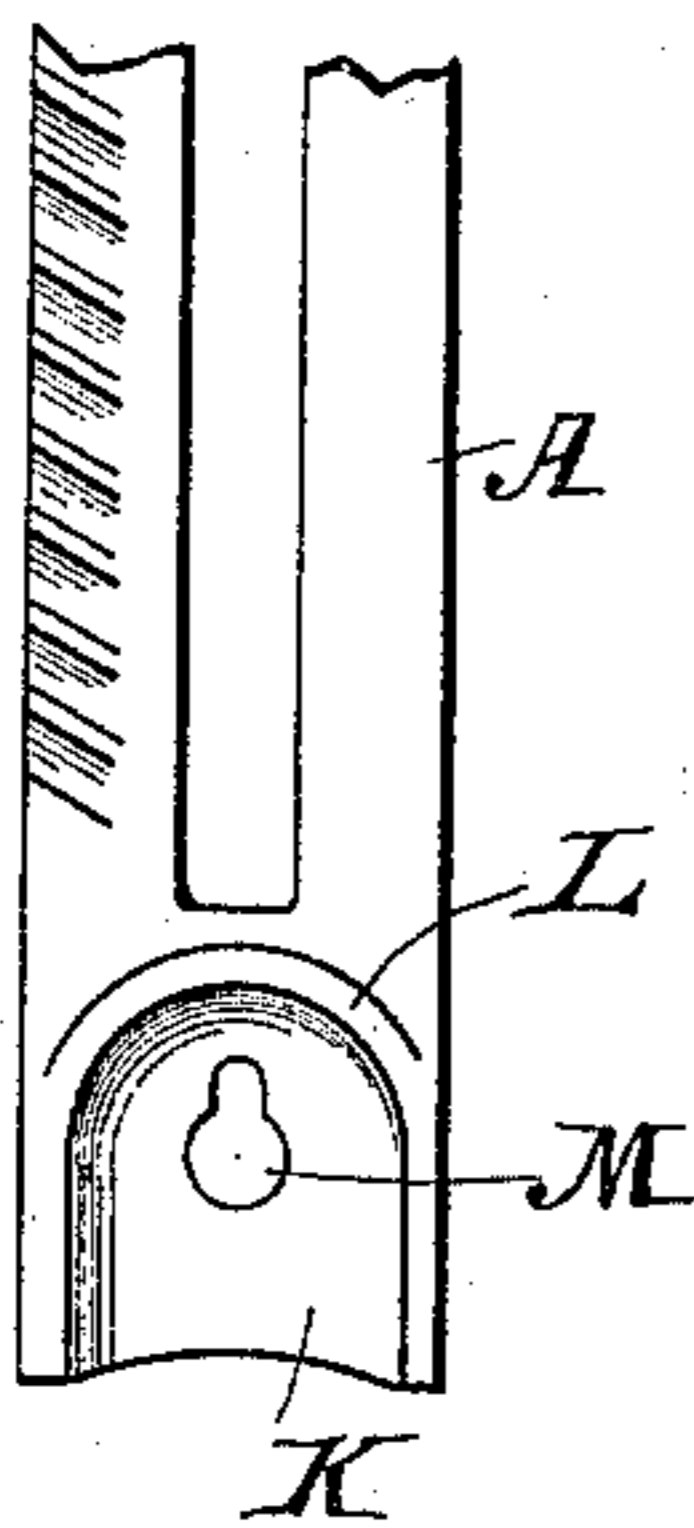


Fig. 5.

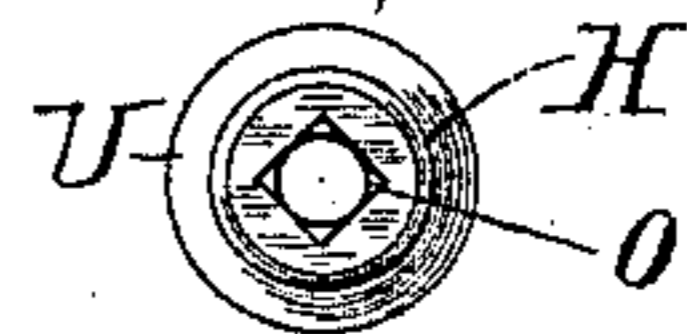


Fig. 6.

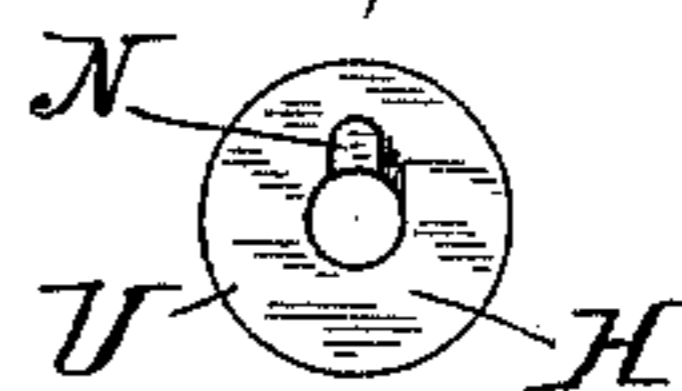
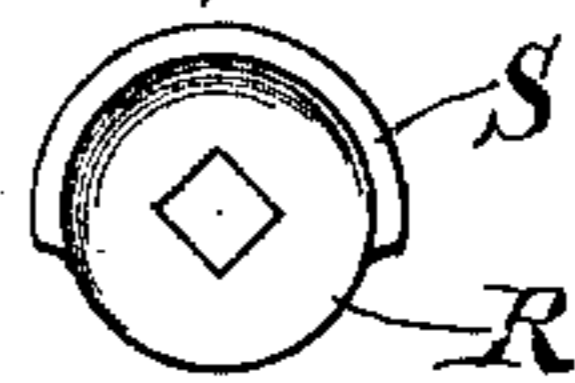


Fig. 7.



Witnesses:

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# UNITED STATES PATENT OFFICE.

FRANK HAMACHEK, OF KEWAUNEE, WISCONSIN.

## HANGER FOR PLOW-WHEELS.

SPECIFICATION forming part of Letters Patent No. 540,251, dated June 4, 1895.

Application filed June 28, 1894. Serial No. 515,964. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK HAMACHEK, of Kewaunee, in the county of Kewaunee and State of Wisconsin, have invented a new and useful Improvement in Hangers for Plow-Wheels, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

10 The object of my invention is to provide a hanger having wheel-supporting and adjusting devices that are readily secured to or detached from the standard, that are strong and secure in place, that are adapted to exclude  
15 dirt and grit from their joints and bearings, and that can be reversibly attached to the standard, and incidentally thereto, that includes a construction of the standard itself adapted for the purposes indicated.

20 The invention consists of the devices and their parts and combinations as hereinafter described and claimed, or their equivalents.

In the drawings, Figure 1 is a side elevation of my improved hanger shown in connection with a fragment of a plow-beam to which it is adjustably attached. Fig. 2 is a front elevation of the hanger and wheel in connection with the plow-beam in cross-section. Fig. 3 is a central longitudinal section on line  
25 3 3 of Fig. 1. Fig. 4 is the lower fragmentary extremity of the hanger, exhibiting novel features of its construction. Fig. 5 is a view (at the outer end) of the stud-axle or arbor. Fig. 6 is a view (at the inner end) of the same stud-  
35 axle or arbor. Fig. 7 is an outside or end view of the cap that fits against and covers the outer end of the arbor.

In the drawings, A is the hanger standard provided with an elongated slot through which  
40 a bolt B is inserted loosely that passes through the plow beam and secures the hanger adjustably to the beam. The wheel D is mounted at one side or the other on the standard at its lower extremity by means of my improved de-  
45 vices. The wheel is commonly made with a laterally expanded rim E, thin spokes F and a hub G that is laterally substantially as wide as the rim E. In the drawings the hub is shown as projecting laterally at one side beyond the  
50 plane of the edge of the rim. This is a convenient form of construction for mounting the wheel on the standard at one side thereof.

The wheel is mounted revolvably directly on the stud-axle or arbor H, which is secured detachably to the standard at one side or the  
55 other thereof by the bolt I. For securing the arbor to the standard and for protecting the joints from earth or foreign matter that is carried up by the wheel as it revolves and falls therefrom, the standard at its lower extrem-  
60 ity is constructed with a terminal part K, having flat vertical faces on both sides thereof, which faces are each bordered above and at their downwardly disposed edges by a continuous laterally projecting hood L. The  
65 part K is provided centrally with a bolt aperture M, which is elongated at one side for the purpose hereinafter stated. The stud-axle or arbor H is provided at its inner end with a lug N adapted to enter the elongated portion  
70 of the aperture M, whereby the arbor is prevented from rotating on the standard. The arbor is bored centrally longitudinally for receiving therethrough the bolt I, and at its outer extremity the bore is squared as seen at  
75 O to receive therein the square portion P of the bolt I, whereby the bolt is prevented from rotating in the arbor. A circular cap R having a squared central aperture, whereby it is fitted on the squared part P of the bolt I and  
80 thereby prevented from rotating, bears against the outer end of the arbor H, and a substantially semi-circular hood S projecting laterally from the cap around its upper pe-  
85 riphery, fits loosely over and covers and protects the hub of the wheel, so that no dirt or grit, falling from the top of the wheel can get into the bearing between the hub and the arbor. The bolt I through the cap R, the  
90 arbor H (on which the wheel rotates), and through the part K of the standard secures the parts in position, by means of a nut T turning on the bolt against the part K.

It will be understood that by removing the nut T, the arbor and the wheel can be taken  
95 from the side of the standard, to which they are attached as shown in Fig. 3, and that they can be placed on the other side of the standard, so that the wheel will be immediately under the plow-beam C, and secured in that  
100 position by applying the nut to the bolt on the other side of the part K. In both positions the joint between the inner edge of the hub G and a flange U on the arbor, against

which the hub bears, is protected from dirt or grit falling thereon from the top of the wheel, by one or the other of the hoods L. In either case the hood over the nut T protects it from injury, and as the bolt does not project beyond the edges of the hood, there is no projecting part to catch on to grass or clothing or to be otherwise objectionable as a projecting and unguarded pin or point. The hoods L and S are open or omitted below the parts they are intended to cover, so that dirt or grit will not lodge thereon to bank up against such parts.

It must be understood that it is desirable to have the wheel when used on a plow travel close to the edge of the unplowed land, and that when a narrow slice of land is being cut, it is desirable to have the wheel located on that side of the standard that will bring it directly below and in the plane of the plow beam, but that when a wide slice of land is being cut, that by reason of the side strain, and thereby of the obliquity of the plow beam to the line of motion, it is better to have the wheel on the outside of the standard, in the position shown in Fig. 3. For these reasons it is frequently necessary to change the wheel from one side to the other of the standard.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination in a plow-wheel hanger, of a standard having a part K, with a flat vertical face and an elongated aperture M there-through, a stud-axle H having an annular flange at its inner end bearing against the part K and a lug N that enters the aperture

M and prevents rotation of the stud-axle on the standard, a cap R bearing against the outer end of the stud-axle, and a bolt provided with a nut, which bolt is faced near its head to fit corresponding apertures in the cap and stud-axle and preventing rotation of the parts, said bolt passing through and securing the stud-axle and cap detachably to the standard, substantially as described.

2. The combination in a plow-wheel hanger, of a standard having a terminal part K provided with flat vertical faces on both sides and an elongated aperture therethrough, opposite laterally projecting hoods above the part K on both sides of the standard, a stud-axle having an annular flange at its inner end bearing against the flat part K and a lug N that enters the elongated aperture in the part K and prevents rotation of the axle, a cap bearing against the outer end of the axle, a bolt passing through the cap the axle and the standard securing the axle and cap detachably to the standard and having means by which the cap and bolt are made non-revoluble with the axle, and a wheel mounted on the axle the hub of which wheel bears only against the axle and the cap and is covered and protected at one extremity by the hood on the standard and at the other extremity by the cap, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK HAMACHEK.

Witnesses:

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ANNA V. FAUST.