(No Model.)

## I. KNOWLDEN. BICYCLE STAND.

No. 545,631.

Patented Sept. 3, 1895.

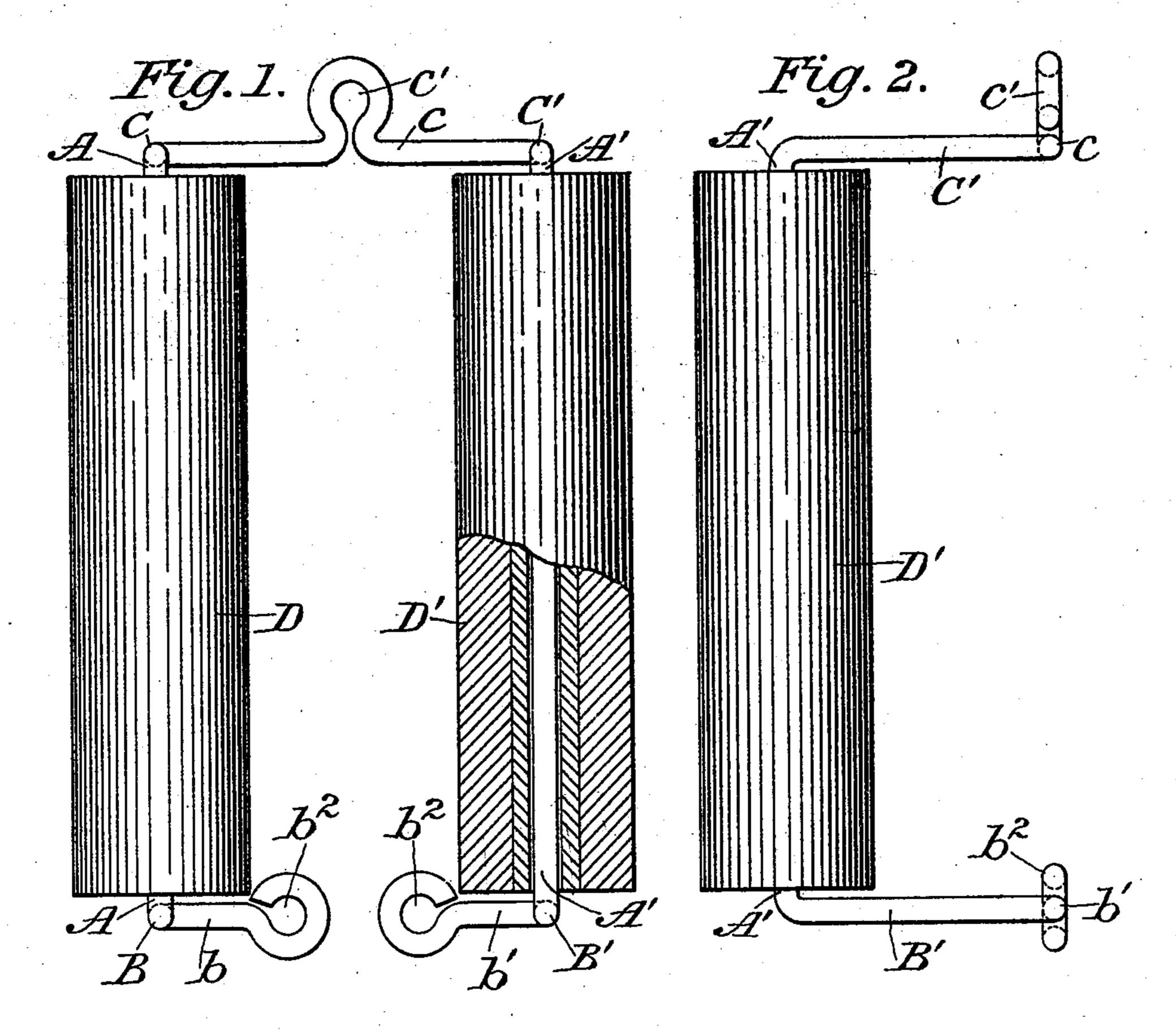
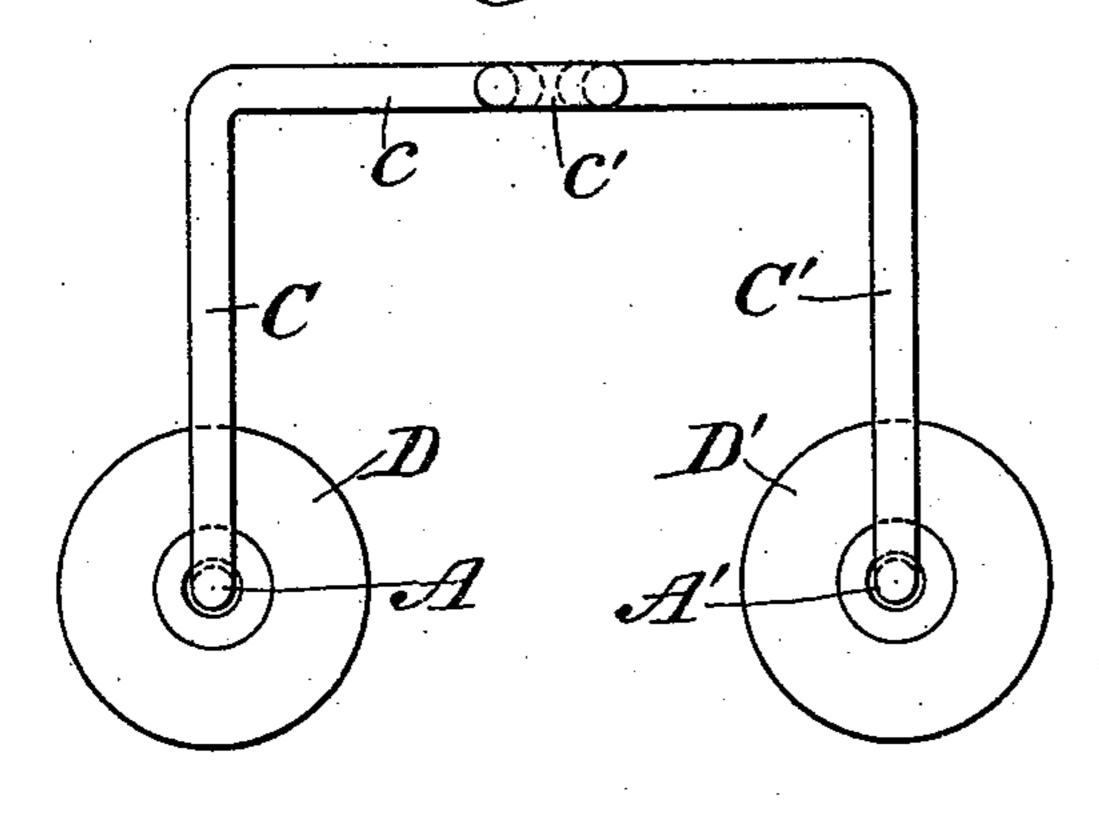


Fig. 3.



Attest: G. M. Cygliston. S. H. Shish Inventor: Dsaac Knowlden Ly Redding & Kiddle Attys.

## United States Patent Office.

ISAAC KNOWLDEN, OF BROOKLYN, NEW YORK, ASSIGNOR TO THE POPE MANUFACTURING COMPANY, OF PORTLAND, MAINE, AND HARTFORD, CONNECTICUT.

## BICYCLE-STAND.

SPECIFICATION forming part of Letters Patent No. 545,631, dated September 3, 1895.

Application filed May 7, 1895. Serial No. 548,422. (No model.)

To all whom it may concern:

Be it known that I, Isaac Knowlden, a citizen of the United States, and a resident of the city of Brooklyn, in the county of Kings, 5 in the State of New York, have invented certain new and useful Improvements in Bicycle-Stands, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, annexed hereto

ro and forming a part hereof.

This invention relates to devices which are intended to support bicycles in an upright position and are commonly called "stands," whether attached to a vertical wall or to the 15 floor; and it has for its object the production of a device of this character which shall be exceedingly simple and inexpensive in construction, neat and compact, easily secured in the desired position, and capable of holding a 20 bicycle with sufficient firmness without marring its finish.

The construction of the improved device will be fully described hereinafter, and its novel features will be pointed out in the claims

25 which follow.

In the accompanying drawings, Figure 1 is a front elevation of an approved form of the device, one of the rollers being shown partly in section. Fig. 2 is a side elevation of the 30 same in position for use. Fig. 3 is a plan view

of the same.

The improved device, as represented in the drawings, is preferably made from a continuous piece of wire bent into the required form, 35 and this description will proceed upon the assumption that it is so made, although it will be obvious that it may be made in two or more separate pieces. The device comprises two vertical members A and A', which are suit-40 ably supported, as hereinafter described, to receive the rim of the bicycle-wheel between them, and are of sufficient length to hold the wheel steady. The two vertical members A and A' are supported, preferably at each end, 45 by arms BB' and CC', which are substantially at right angles to the respective vertical members, and are also substantially at right angles to the wall to which the device is to be secured. The arms are of such length

cal members at a proper distance from the wall, but preferably may have a sufficient degree of elasticity to permit them to yield slightly as the wheel is introduced and then to grip the rim thereof snugly. The elasticity 55 of the arms is not, however, essential, as the bicycle would be properly held if the vertical members were rigidly supported, provided the space between them were about equal to the width of the wheel rim or tire.

The supporting-arms at one or at both ends of the vertical members are adapted to be secured to the wall, and for this purpose may be provided with feet or socket-pieces. As shown in the drawings, each arm B and B' 65 has a foot-piece b and b', bent at right angles thereto and parallel with the wall, and each foot-piece has an eye  $b^2$  for the reception of a screw or nail by which the device may be securely fastened to the wall. The arms C and 70 C' are shown as having a common foot-piece c, which serves to unite the two vertical members and to hold them at the proper distance apart, and which may also have an eye  $c^\prime$  for a screw or nail.

To increase the grip of the device upon the wheel, as well as to facilitate the introduction of the wheel and to guard against possible injury, it is desirable to apply to the vertical members A and A' rollers D and D', which 80 may be of any suitable material-such, for example, as vulcanized rubber.

In the use of my device it is secured to the wall at about the height of the axle of the bicyle from the floor. The wheel of the bicycle 85 is run in between the vertical members or the rollers thereon, and by them is held in an upright position.

What I claim, and desire to secure by Letters Patent, is--

1. A bicycle stand comprising two vertical members, and horizontal arms to support said members in substantial parallelism and at a proper distance from the wall, each of said arms having a foot bent at right angles thereto 95 and parallel with the wall and provided with an eye, substantially as set forth.

2. A bicycle stand formed of a continuous piece of wire bent to form vertical members, 50 that they may not only support the verti-I horizontal supporting arms for said vertical roo

members and a foot to bear against the wall and connecting the horizontal arms at one end of the vertical members, substantially as set forth.

5 3. A bicycle stand comprising two vertical members, horizontal arms to support said members in substantial parallelism and at a proper distance from the wall, means to secure said arms to the wall, and rollers mounted on said vertical members, substantially as set

forth.

4. A bicycle stand comprising two vertical members, and horizontal arms to support said members in substantial parallelism and at a proper distance from the wall, each of said arms having a foot bent at right angles thereto and parallel with the wall and provided with

an eye, and rollers mounted on said vertical members, substantially as set forth.

5. A bicycle stand formed of a continuous 20 piece of wire bent to form vertical members, horizontal supporting arms for said vertical members, a single foot for each of the arms at one end of the vertical members and a common foot connecting the horizontal arms at 25 the other ends of the vertical members, and rollers mounted on said vertical members, substantially as set forth.

This specification signed and witnessed this

6th day of May, A. D. 1895.

ISAAC KNOWLDEN.

In presence of— W. B. GREELEY, ALFRED W. KIDDLE.