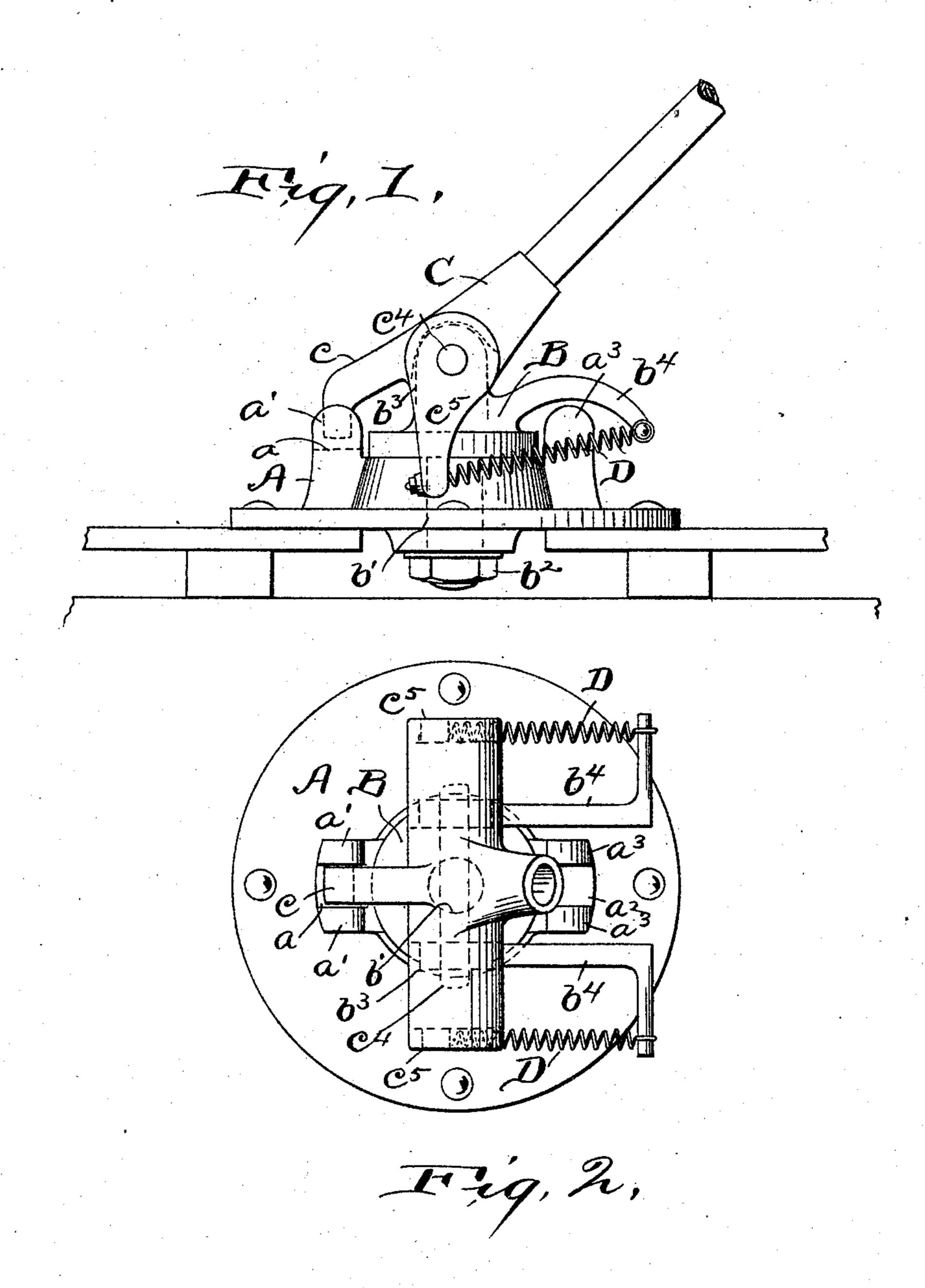
## S. H. SHORT. TROLLEY STAND.

No. 584,606.

Patented June 15, 1897.

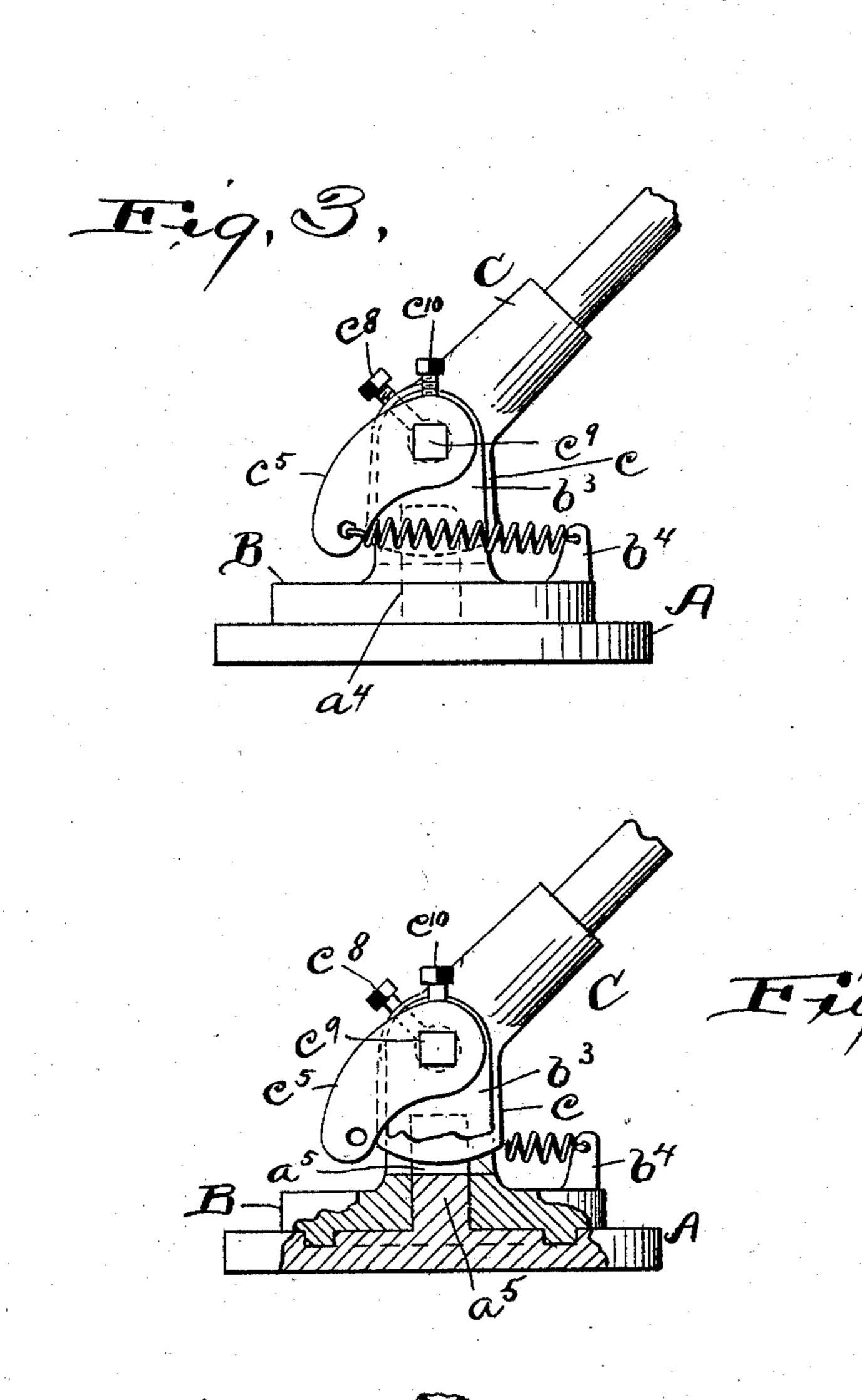


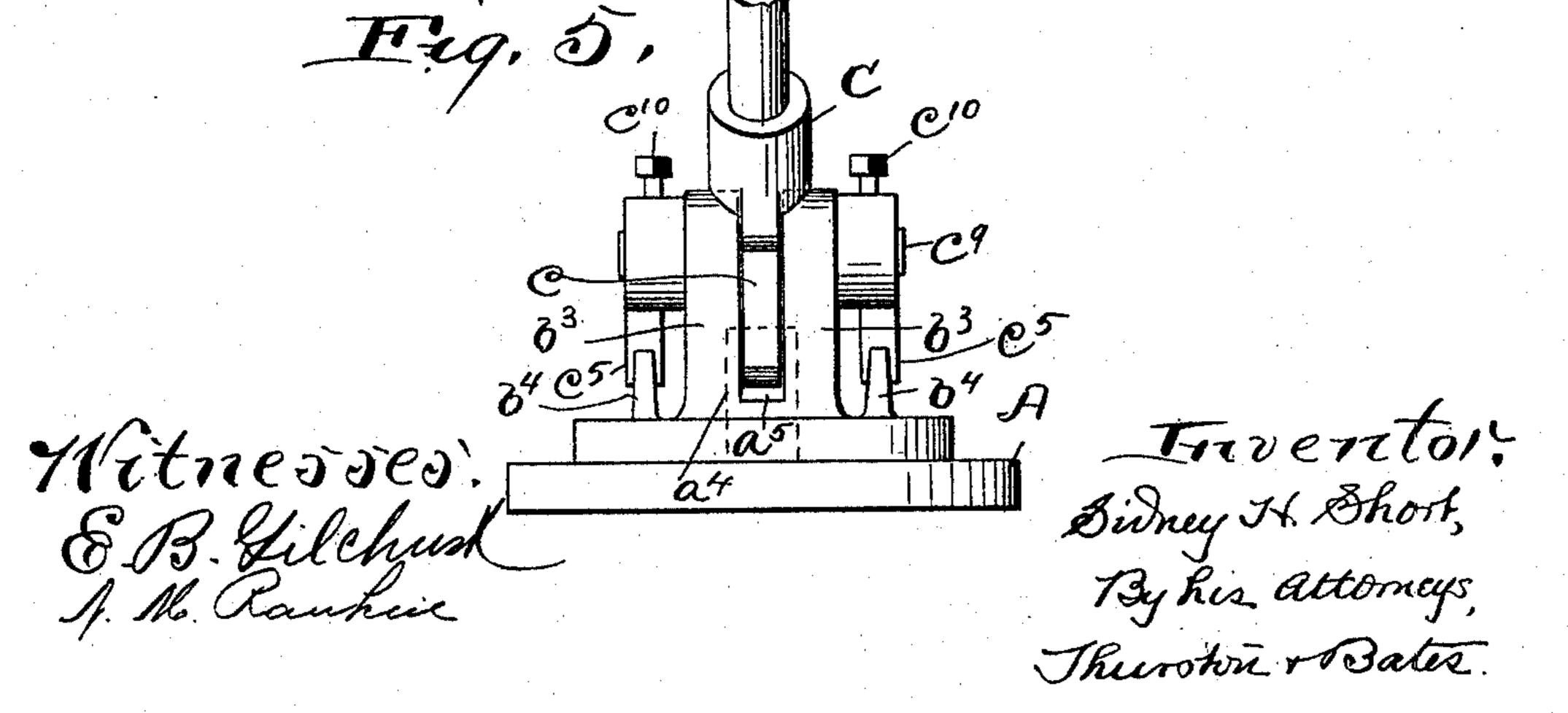
Witnesses. E. B. Gilchnich A. M. Rankin Traverator. Sidney IX Short, By his attorneys; Thurston Y Batis.

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## United States Patent Office.

SIDNEY H. SHORT, OF CLEVELAND, OHIO.

## TROLLEY-STAND.

SPECIFICATION forming part of Letters Patent No. 584,606, dated June 15, 1897.

Application filed February 16, 1897. Serial No. 623,757. (No model.)

To all whom it may concern:

Be it known that I, SIDNEY H. SHORT, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State 5 of Ohio, have invented certain new and useful Improvements in Trolley-Stands; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to 10 which it appertains to make and use the same.

My invention relates to a trolley-stand, the object being to provide simple, cheap, and effective construction whereby the trolleyarm when in service will have no lateral 15 motion, but which may nevertheless be drawn out of contact with the conductor and then turned around so as to reverse its position relative to the car, whereby it will be operative when the car runs in the reverse direc-20 tion.

The invention consists of a base adapted to be secured upon a motor-car, a trolley-arm support pivoted to said base upon a horizontal pivot, said trolley-arm having a rigid finger 25 extended below its pivot, which, when the trolley-arm is in operative position, engages with a slot in the base, thereby preventing lateral movement of the trolley-arm, but which is disengaged when the trolley-arm is 30 drawn down, whereby the trolley-arm support may be turned on its pivot one hundred and eighty degrees to reverse the position of the trolley-arm.

It also consists in the more specific com-35 bination of parts hereinafter described, and pointed out definitely in the claim.

In the drawings, Figure 1 is a side elevation of what is perhaps the best embodiment of the invention. Fig. 2 is a plan view there-40 of. Fig. 3 is a side elevation; and Fig. 4 is a side elevation, partly in section, of an alternative construction. Fig. 5 is a rear elevation of same.

Referring to the parts by letter, A repre-45 sents the base, which is adapted to be secured to the top of the car, B a trolley-arm support, which is pivoted on a vertical axis to the base, and C a trolley-arm, which is pivoted on a horizontal axis to the support B. 50 A finger c is rigid with the trolley-arm and extends below its pivot and engages in a slot or slots in the base into which said finger

projects when the trolley-arm is in service and from which it is withdrawn when the

trolley-arm is drawn down.

In the embodiment of the invention shown in Figs. 1 and 2 a vertical cylindrical stud b' on the trolley-arm support passes through a cylindrical hole in the base and serves as the vertical pivot for said support. A nut 60  $b^2$ , which screws onto the lower end of this stud, prevents the removal of the support.  $b^3$   $b^3$  represent two parallel vertical ears between which the lower end of the trolley-arm projects and to which it is pivoted by the 65 pin  $c^4$ . Two fork-arms  $c^5$   $c^5$  are rigidly connected with the trolley-arm outside of the ears  $b^3$ , and two contractile coil-springs D D, which are connected at their ends with these fork arms  $c^5$  and with two arms  $b^4$   $b^4$ , which 70 are rigid with the support B, exert their force to move the outer end of the trolley-arm upward and into contact with the conductor. When the trolley-arm is in service, it stands, preferably, at an angle of about forty-five de-75 grees to the car, and when in this position the finger c enters the slot formed between the two ears a' a' on the base. When the trolley-arm is drawn down, the finger is withdrawn from said slot a and the support may be turned 80 upon its vertical axis. When it has been turned one hundred and eighty degrees, the trolley-arm may be allowed to rise and the finger c will enter another slot  $a^2$ , diametrically opposite to slot a and between two 85 other ears  $a^3$   $a^3$ . When the finger is in either slot—and it is in one or the other when the trolley is in service—the support cannot turn.

In the embodiment of the invention shown in Figs. 3, 4, and 5 the base is provided with 90 a cylindrical stud  $a^4$ , which passes through the bottom of the support and projects between the two ears  $b^3 b^3$ . In the top of this stud is a slot  $a^5$ . The finger c on the trolleyarm enters this slot when the trolley is in serv- 95 ice, is withdrawn therefrom when the trolley-arm is drawn down, and again enters the small slot when the support has been turned one hundred and eighty degrees on its vertical axis.

In the construction shown in Figs. 3, 4, and 5, inclusive, the trolley-arm, which lies between the ears  $b^3$ , is secured by a set-screw  $c^8$  to a shaft  $c^9$ , which is free to turn in said

ears  $b^3$ . The fork ends  $c^5$  are secured by a set-screw  $c^{10}$  to the ends of this shaft.

The particular construction described in the last paragraph may be varied at will with-5 out departing from the invention.

Having described my invention, I claim— The combination of a base having a slot,

a trolley-arm support pivoted to the base on a vertical axis, a trolley-arm pivoted to the 10 support on a horizontal axis, and a finger rigid with said arm and extended below its

axis and adapted to enter said slot when the trolley-arm is in service, but to be withdrawn therefrom when said arm is drawn down, substantially as and for the purpose specified. 15

In testimony whereof I affix my signature

in presence of two witnesses.

SIDNEY H. SHORT.

Witnesses:

E. L. THURSTON, ALBERT H. BATES.