No. 739,326. PATENTED SEPT. 22, 1903.

S. S. LEONARD.

STEP FOR TELEGRAPH POLES OR THE LIKE.

APPLICATION FILED DEC. 29, 1902.

NO MODEL.

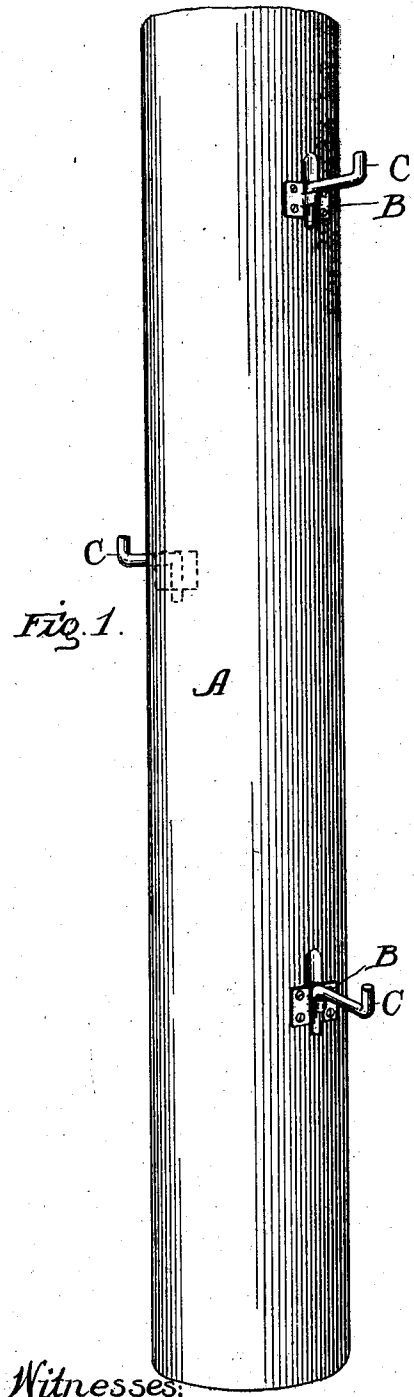


Fig. 1.

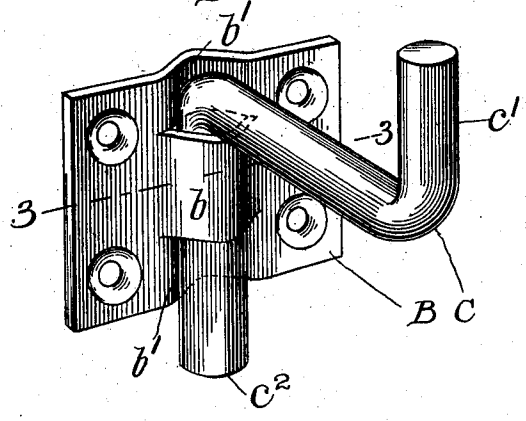


Fig. 2.

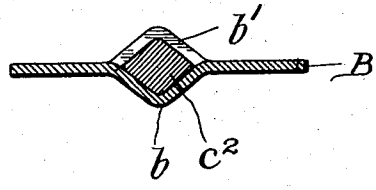


Fig. 3.

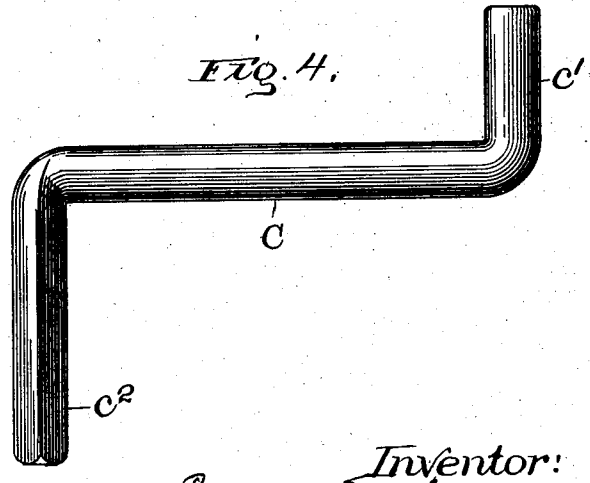


Fig. 4.

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No. 739,326. Patented September 22, 1903.

UNITED STATES PATENT OFFICE.

SYLVESTER S. LEONARD, OF CHICAGO, ILLINOIS.

STEP FOR TELEGRAPH-POLES OR THE LIKE.

SPECIFICATION forming part of Letters Patent No. 739,326, dated September 22, 1903.

Application filed December 29, 1902. Serial No. 137,012. (No model.)

To all whom it may concern:

Be it known that I, SYLVESTER S. LEONARD, a subject of the King of Great Britain, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Steps for Telegraph-Poles or the Like, of which the following is a specification.

My invention relates to certain new and useful improvements in steps for telegraph-poles and the like.

In almost all large cities there is an ordinance prohibiting the use of the ordinary projecting step made in the form of a large spike within eleven feet of the ground on telegraph, telephone, and electric-light poles. It is therefore necessary in such places for the linemen to carry with them ladders or else to use climbing-irons in order to reach the lowest permanent step on the post.

It is the object of my invention to provide a step one part of which may be permanently fastened upon the pole and the other placed in position thereupon by the linemen as they ascend and can be removed as they come down and which shall be comparatively light and easy to carry about.

To these and certain minor ends my invention consists in certain novel features of construction, which are fully illustrated in the accompanying drawings and described in the following specification.

In the aforesaid drawings, Figure 1 is a perspective of a telephone or telegraph post provided with a series of my improved steps. Fig. 2 is a perspective of the supporting-bracket and the step in place. Fig. 3 is a horizontal section in the line 3 3 of Fig. 2, and Fig. 4 is a side elevation of one of the steps removed from the bracket.

Referring to the drawings, A is the post. At intervals on opposite sides of the post are placed supporting-brackets B, these brackets being spaced at the ordinary distances at which the steps on similar posts are spaced. The bracket B is preferably made of a single sheet of comparatively heavy sheet metal. Two slits are cut in the sheet of metal, and the web between these slits is bent forward to form a yoke b, while the two webs immediately outside the two slits are upset backward to form two yokes b' b'. This construction results in a plate which in top elevation is like the section in Fig. 3, the passage through the center, which is formed by the upset yokes, being roughly in the form of a parallelogram and being obviously non-circular.

C is one of the steps, it being composed of a horizontal portion, an upturned portion c', and a downturned portion c^2, which downturned portion is roughly of the same cross-section as the passage seen through the plate in top plan.

The operation of the device will be very readily apparent. A lineman goes out with four or five steps, places the first in position, as shown in Fig. 2, steps upon it, places the second one in position, and so on up the post until he reaches the permanent steps at a height of eleven feet, or thereabout, from the ground. Coming down he merely removes the steps after him and carries them down with him. It is necessary of course that the portion of the step which is embraced in the bracket shall be non-circular in cross-section or that some other equivalent means be employed to prevent such rotation of the steps in order that the step shall not swing with the lineman and subject him to the liability of falling.

I am aware that various types of removable steps of this sort have been devised heretofore. These prior devices, however, have the bracket which supports the step formed from cast or wrought metal and necessarily therefore project a considerable distance from the pole even when the step is removed. My peculiar construction, on the other hand, being made of sheet metal, is very thin and flat and lies close to the surface of the pole, so much so in fact that the rear yokes of the bracket lie behind the surface of the telegraph-pole, a groove being provided in the pole to permit it to receive these yokes and to permit the ready removal of the step. Inasmuch as the object of steps of this kind is to render the pole practically unscalable when the steps are removed, my device is particularly desirable.

I claim as new and desire to secure by Letters Patent—

1. The combination with a pole and a plurality of brackets secured thereto, each of

said brackets consisting of a single plate of sheet metal having one portion stamped into a yoke extending in one direction from the plane of the plate and having two other portions stamped into yokes extending in the opposite direction from the plane of the plate, said yokes inclosing between them a substantially vertical passage, non-circular in cross-section, of a plurality of steps adapted to extend horizontally from the pole, each of said steps having a non-circular downturned portion formed to be embraced by said yokes and non-rotatably held in position.

2. The combination with a pole and a plurality of brackets secured thereto, each of said brackets consisting of a single plate of sheet metal having one portion stamped into a yoke extending in one direction from the plane of the plate and having two other portions stamped into yokes extending in the opposite direction from the plane of the plate, said yokes inclosing between them a substantially vertical passage, non-circular in cross-section, said pole being provided with a suitable vertical groove behind said yokes whereby the backwardly-extending portion of said plate lies behind the surface of the pole, of a plurality of steps adapted to extend horizontally from the pole, each of said steps having a non-circular downturned portion formed to be embraced by said yokes and non-rotatably held in position.

In witness whereof I have signed the above application for Letters Patent, at Chicago, in the county of Cook and State of Illinois, this 24th day of December, A. D. 1902.

SYLVESTER S. LEONARD.

Witnesses:

CHAS. O. SHERVEY,

S. BLISS.