(No Model.)

J. A. BEAN & W. L. COOK.

LINE HOLDER.

No. 588,378. Patented Aug. 17, 1897.

Fig. 1.

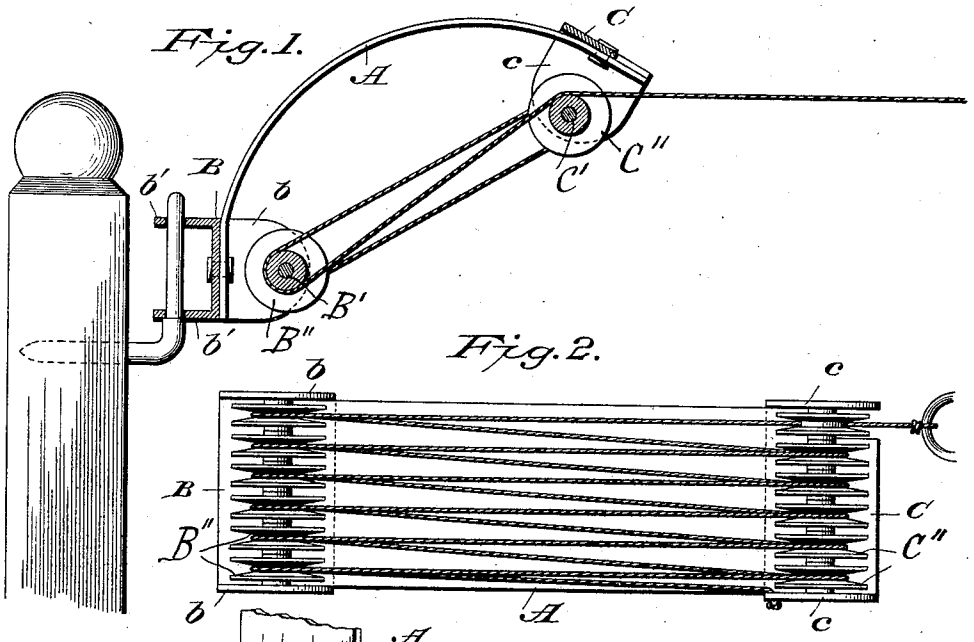


Fig. 2.

Fig. 3.

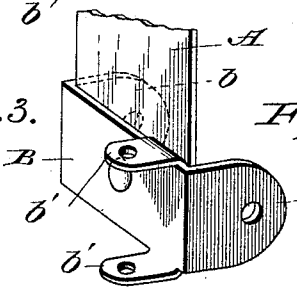


Fig. 4.

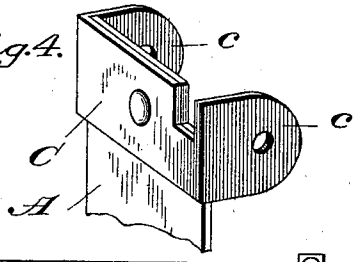
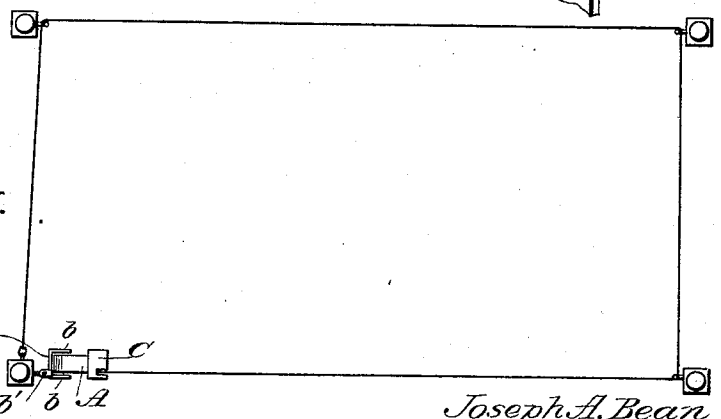


Fig. 5.



WITNESSES

L. S. Elliott,

D. L. Rice

Joseph A. Bean

William L. Cook

INVENTORS

by Eugene N. Johnson

Attorney

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

UNITED STATES PATENT OFFICE.

JOSEPH ALLEN BEAN AND WILLIAM L. COOK, OF MAHWAH, NEW JERSEY, ASSIGNORS OF ONE-THIRD TO JOHN S. GARISON, OF RAMSEY'S, NEW JERSEY.

LINE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 588,378, dated August 17, 1897.

Application filed January 20, 1897. Serial No. 619,904. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH ALLEN BEAN and WILLIAM L. COOK, citizens of the United States of America, residing at Mahwah, in the county of Bergen and State of New Jersey, have invented certain new and useful Improvements in Line-Holders; and we 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 which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in line-holders, the object being to provide a line-holder and take-up of such construction that it will provide means upon which the line is held and automatically taken up when one end is released, the slack also being taken up when in use, the same being designed especially as a clothes-line holder, though obviously adapted to many other uses.

The invention consists of an automatic line-holder and take-up which is made up of a strut-spring the terminals of which carry rolls over which the line passes; also, in a combination, with a strut-spring, of the rolls, line, and means for securing one end of the device to a supporting-post.

The invention further consists in the combination, with a flat strut-spring, of plates attached to the terminals thereof, which are shaped to form supports for shafts, each of which carries a series of grooved rolls, of a line which is attached to one of the plates and is passed over each of the rolls, and means for connecting the device to a support.

The invention further consists in the particular construction and combination of parts, as will be hereinafter fully set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a longitudinal section showing the invention applied, the spring being partially bent. Fig. 2 is an inverted plan view. Figs. 3 and 4 are detail perspective views illustrating the construction of the plates which are attached to the ends of the spring; and Fig. 5 is a view showing the device applied to a post, the line extending therefrom and engaging with hooks carried by other posts and with the post by which the line-holder is supported.

In the drawings, A refers to a stout spring, the same being made up of a flat plate of metal of suitable thickness, width, and length, preferably of spring steel or brass, and to the ends of this spring A are attached by any suitable means or in any suitable manner plates B and C, each being struck up or bent to provide integral ears or lugs *b* and *c*. The plate B has integral projections *b'*, which extend at right angles to its upper and lower edges, and said projections have perforations therein, as shown. The ears or lugs *b* and *c* are formed by bending the ends of the plates at right angles, and carry shafts B' and C', upon which are mounted a series of grooved rolls B'' C'', each roll having on each side adjacent to its center a shoulder. The line is passed over the rolls, one end being suitably attached to one of the plates, and the other end is passed through a cut-away portion or recess in the plate C. The free end of the line carries a ring or is looped. It will be noted that the spring is of substantially the same width as the distance between the ears *b* and *c* of the plates B and C, so that said plates can be securely attached to the ends of the spring by a single rivet.

The supporting-post to which the device is applied carries a cylindrical hook having a shoulder, as shown, upon which one of the lugs *b'* bears when the lugs are placed thereon, and the other posts are provided with hooks of any suitable form.

In practice such a length of line is carried by the device that when the ring or loop on the end of the line abuts against the plate C the strut-spring will have a slight curve or bend sufficient to hold the line taut and insures the bending of the spring when the line is drawn upon. The length of line carried by the device depends upon the length of the spring and number of the rolls or times the line is passed over the same. It will be noted that the line lies within the ends of the spring and that said spring is positioned above the line and rolls, so that in use the spring not only effects its function as a strut-spring, but also serves as a guard or protector for the

line and rolls from the weather, and when the device is applied to a post the line is housed beneath the spring and will be effectively protected, as in case of wind and rain the wind-pressure will turn the device upon the hook after the manner of a weather-vane. The line lying close to the spring will be effectively shielded.

When the line is extended, the rolls will be moved adjacent to each other, and the spring-pressure is sufficient to prevent the line sagging when clothes are hung thereon. This device is designed and intended primarily as a clothes-line holder, though it is obvious that the structure which forms the gist of our invention may be applied to other purposes, and we do not limit ourselves to the precise construction of the parts, as they may be varied without departing from the spirit of our invention.

What we claim as new, and desire to secure by Letters Patent, is—

1. A line-holder, consisting of rolls connected to the ends of a strut-spring, and means for connecting the line-holder to a support.

2. In a line-holder, the combination of a strut-spring, rolls carried by the ends thereof, and a line which passes over the rolls.

3. In a line-holder, the combination of a strut-spring, plates attached to the ends of the spring, and rolls carried by the plates.

4. The combination with a strut-spring, of plates attached to the ends thereof, said plates having ears or lugs, shafts carried by the ears or lugs and a series of rolls mounted on each shaft; together with a line which engages with the rolls.

5. The combination with a strut-spring, of plates carried by the ends thereof, each of said plates supporting rolls, one of the plates having projecting portions with apertures for engagement with supporting means, the opposite plate being cut away or recessed to provide a passage for the line; together with a line one end of which is secured to one of the plates, the other end having a ring or loop, substantially as shown and for the purpose set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

JOSEPH ALLEN BEAN.
WM. L. COOK.

Witnesses:
W. H. PULIS,
JOHN J. WHITBY.