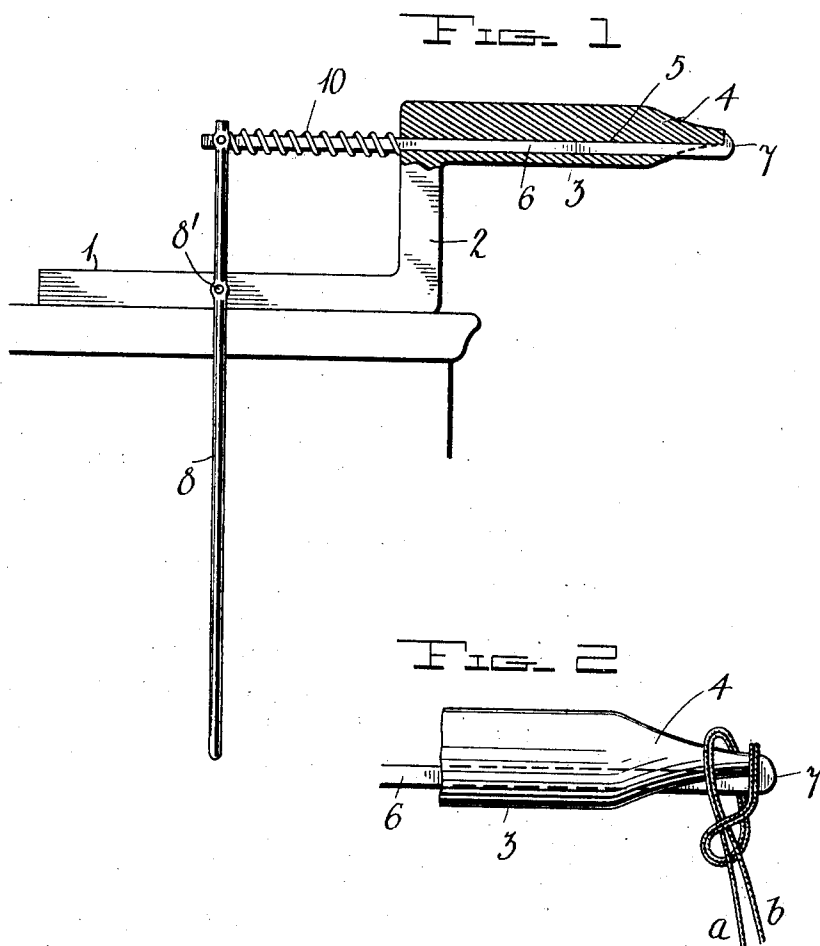


No. 829,569.

PATENTED AUG. 28, 1906.

L. S. CARDEN.
DEVICE FOR TYING KNOTS.
APPLICATION FILED AUG. 10, 1905.



Witnesses
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UNITED STATES PATENT OFFICE.

LEVI SILVESTER CARDEN, OF ORANGE COUNTY, NORTH CAROLINA,
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DEVICE FOR TYING KNOTS.

No. 829,569.

Specification of Letters Patent.

Patented Aug. 28, 1906.

Application filed August 10, 1905. Serial No. 273,636.

To all whom it may concern:

Be it known that I, LEVI SILVESTER CARDEN, a citizen of the United States, residing in the county of Orange and State of North Carolina, have invented certain new and useful Improvements in Devices for Tying Knots; and I do 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.

My invention is an improved knot-tying device adapted for use in tying cord used for wrapping parcels; and it consists in the construction, combination, and arrangement of devices hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a knot-tying device embodying my improvements, partly in section; and Fig. 2 is a detail view showing the mode of operation of the same.

The base 1 is adapted to be secured on a table or counter, near one edge thereof, and is provided at its outer end with an upwardly-extending standard portion 2, from the upper end of which projects an outwardly-extending former 3, which terminates in a truncated cone 4. Said former is provided at a suitable distance from its lower side with a longitudinal bore 5, which is angular in cross-section and in which operates a similarly-shaped rod 6, which is provided at its outer end with a hook 7. The inner end of the said rod projects beyond the inner end of the said former to a suitable extent and is pivotally connected to the upper end of a lever 8, which lever is fulcrumed, as at 8', to the base and extends downwardly therefrom, so that it may be readily operated by the foot or knee of the operator. A spring 10 is employed to normally move the rod 6 inwardly. Said spring is here shown as an extensile spring placed on said rod and bearing between the inner end of the former and the upper end of the said lever. The function of the said spring is to normally engage the hook 7 with the outer end of the former-cone.

In the operation of my knot-tying device the two strings *a b* are caught near one end between the finger and thumb of the left

hand. With the right hand the operator passes the string below the coned or tapered end of the former, around the same, back and upwardly over the same, and then to the front. The operator then presses the lever by his foot or knee to cause the hooked end of the rod to protrude from the end of the conical or tapered former, and the ends of the string in the left hand are moved over the strings and placed so that the hook, by means of the spring, is caused to hold the ends of the string between said hook and the reduced end of the former. The strings are then passed by the right hand around to a position at right angles to the axis of the former to form a loop which slips over the end of the former and also over the hook, thereby forming a knot. The spring-pressed hook coacts with the outer end of the former to hold the ends of the string until the knot has been tightened, after which the ends of the string are released from the hook.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A knot-tying device comprising a former, a longitudinally-movable hook-rod, a spring to normally close the hook of the rod against the outer end of the former, and a lever to move said hook-rod against the tension of the said spring.

2. A knot-tying device comprising a base having a standard portion and a former projecting outwardly from said standard portion, said former having a tapered outer end and provided with a longitudinal bore, a longitudinally-movable rod in said bore having a hook at its outer end to engage that of the former, a lever fulcrumed to the base and connected to said rod, and a spring to move the rod in the direction required to close said hook against the outer end of the former.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

LEVI SILVESTER CARDEN.

Witnesses:

H. H. PATTERSON,
J. M. MARKHAM.