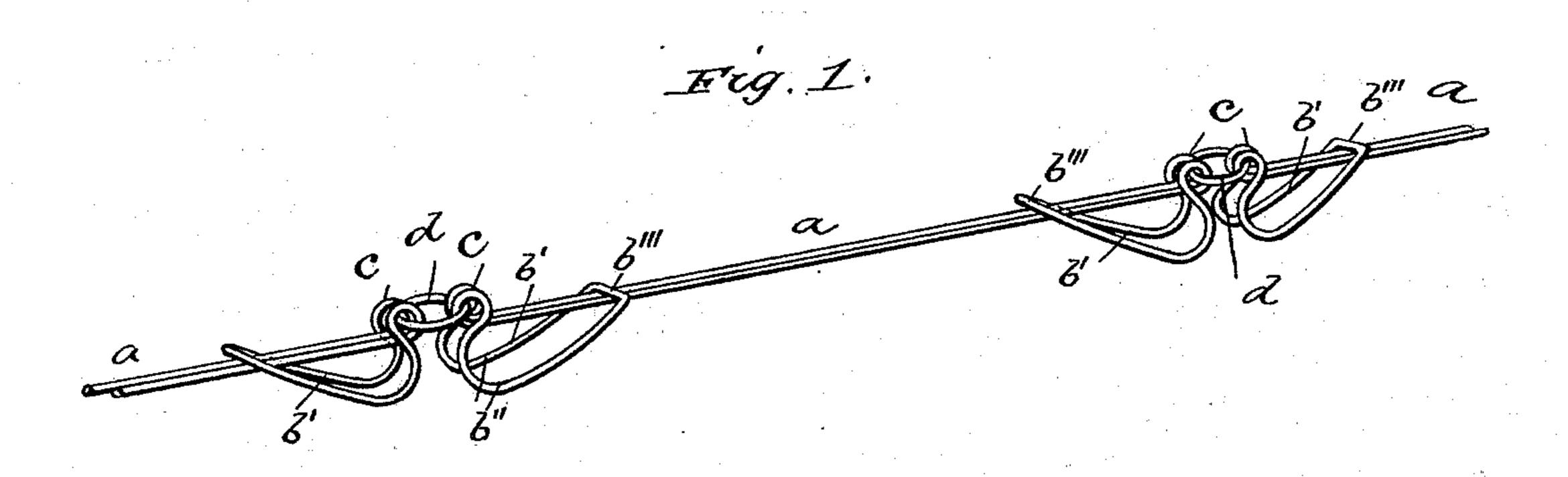
(No Model.)

F. G. LANE.
CLOTHES LINE.

No. 497,248.

Patented May 9, 1893.



F'cg. 2.

Witnesses Mily. Alberievell. Inventor. I. G. Cane, By Alexander Dams, Ottorneys

United States Patent Office.

FERNANDO G. LANE, OF AUSTIN, TEXAS, ASSIGNOR OF TWO-THIRDS TO JOHN W. KELLY AND FRED STERZING, OF SAME PLACE.

CLOTHES-LINE.

SPECIFICATION forming part of Letters Patent No. 497,248, dated May 9, 1893.

Application filed January 21, 1893. Serial No. 459,095. (No model.)

To all whom it may concern:

Be it known that I, Fernando G. Lane, a citizen of the United States, residing at Austin, in the county of Travis and State of Texas, have invented certain new and useful Improvements in Clothes-Lines, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to a new and useful to improvement in pinless clothes lines, and it relates particularly to improvements on the device covered by an application filed by me and John W. Kelly on the 20th day of October, 1892, and serially numbered 449,480, and 15 it has for its object to provide improved means for connecting the wire sections whereby they will be held more nearly in horizontal alignment when erected and whereby the tension on the line will be prevented from increasing 20 the pressure of the clamping loops, so that all the clamping loops on the line will exert the same degree of pressure, thereby enabling the articles to be readily attached and detached, irrespective of the length of the line, as will 25 fully appear in the course of this specification.

In the drawings:—Figure 1 is a perspective view of one form of my line. Fig. 2 is a similar view of a modification thereof.

Referring to the various parts by letters, α designates the main portion of the section of my line, each of which sections consists preferably of a single piece of spring wire of a suitable thickness bent upon itself, its ends 35 meeting and forming a double wire section the strands of which are parallel and close together for a greater portion of their length. Clamping fingers are formed at the ends of each section by bending the doubled ends 40 downwardly and inwardly to form the loops b', each of said loops being formed with the spring arms or sides b'' and the looped end $b^{\prime\prime\prime\prime}$, said end bearing resiliently down on the upper side of the main portion of the section 45 as clearly set forth in the application above referred to. The strands of wire which form each section are bent to form small loops or eyes c at the ends of the horizontal portion of each section, preferably at the point I vented.

where the arms of the spring loops start to 50 curve downwardly to form the spring-loop. These eyes or coils c may be formed by coiling the portions of the wire above the main portion of the section thereby forming them on the exterior of the spring-loops, as shown 55 in Fig. 1 of the drawings, or they may be formed by bending the wire as shown at c' in Fig. 2, thereby forming said eyes below the main portion of the wire, and within the loops b', as the exigencies of the case may require. 60

The adjacent sections of my improved line are loosely connected by means of closed rings or links d which pass through the eyes c on the ends of the adjoining sections of the line, these loose connections permitting them to be 65 folded over upon each other when not in use. It will thus be seen that as the connecting links d will be retained in the eyes c, and as said eyes are unyielding in a longitudinal direction, the line cannot sag or be stretched 70 by the weight of the articles placed thereon, therefore the sections will be supported more nearly in straight line than would be the case if the connecting links were engaged loosely in the loops b' as in the application 75 above referred to. It will also be manifest that the spring arms of the loops b' will be entirely relieved of the strain of supporting the line and the articles thereon (the eyes cand links d receiving said strain) and that 80 therefore the pressure of the ends $b^{\prime\prime\prime}$ of said loops against the main portion of the section will not be affected by said tension.

I wish it understood that I do not limit myself to the form of eyes c or the number of 85 them shown, as their form and number may be varied as desired without departing from the scope of the invention. It will also be observed that forming the eyes c in the arms of the spring loops, in the manner shown, increases the elasticity of the loops as said eyes act in the manner of coil-springs, and it will be further observed that by this manner of connecting the sections the connecting links or rings will be held in their proper places, 95 whether the line bestretched or folded, whereby entangling of the sections will be prevented.

Having thus fully described my invention, what I claim is—

A pinless clothes-line formed of metallic sections, each section being formed of spring wire, bent to form the main portion and the end clamping loops, eyes, carried by the main section at the ends thereof, and links for connecting the sections, said links passing

through said eyes, substantially as described and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

FERNANDO G. LANE.

Witnesses:

CHARLES D. DAVIS, FRED STERZING.