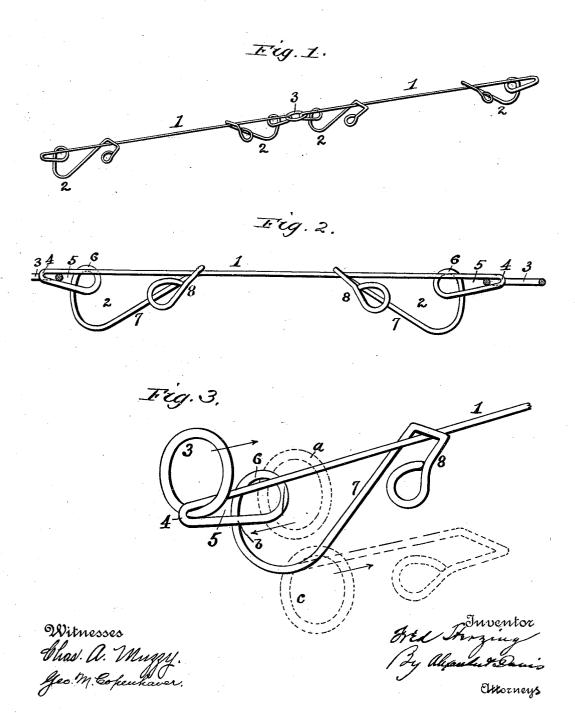
(No Model.)

F. STERZING. PINLESS CLOTHES LINE.

No. 561,142.

Patented June 2, 1896.



UNITED STATES PATENT OFFICE.

FRED STERZING, OF AUSTIN, TEXAS.

PINLESS CLOTHES-LINE.

SPECIFICATION forming part of Letters Patent No. 561,142, dated June 2, 1896.

Application filed October 25, 1895. Serial No. 566,887. (No model.)

To all whom it may concern:

Be it known that I, FRED STERZING, a citizen of the United States, residing at Austin, in the county of Travis and State of Texas, 5 have invented certain new and useful Improvements in Pinless Clothes-Lines, of which the following is a specification, reference being had therein to the accompanying draw-

In the drawings, Figure 1 is a perspective view of a portion of my improved line; Fig. 2, a side elevation of one section thereof, the connecting-links being shown in section; and Fig. 3 is a perspective view of the end of one 15 of the sections, showing more particularly the manner of threading on the connecting ring or link.

This invention relates to that class of pinless clothes-lines consisting of a series of wire 20 sections connected loosely together at their adjacent ends by means of rings or links, each section having formed on its ends suitable spring-clamps to engage the articles of apparel hung on the line; and it has for its ob-25 ject to provide improved means whereby any intermediate section of the line may be readily removed to shorten the line and whereby the weight of the line and the articles thereon will be utilized to increase the clamping ac-30 tion of the clamps, as more fully hereinafter set forth.

Referring to the drawings by numerals, 1 designates a wire which forms the main portion of each section and which is bent at each 35 end into a spring-clamp 2, these clamps being connected by closed links 3, and as each clamp is formed like the others I will only describe in detail one of them. To form the clamp, the wire is bent acutely at 4 and turned 40 under the main wire and extended downward and inward a short distance to form the wedge-shaped eye 5. The wire is then coiled upward and outward toward the bend 4 and carried down past the lower part of the eye 5, 45 thereby forming a closed coil 6, which is substantially round or oblong and which extends up to or beyond the main wire on one side thereof and serves to close the eye 5. The wire is then curved downward and inward 50 and then formed into an upwardly-inclined | upward to near the main wire and serving to 100

spring-arm 7, which is provided with a hook portion 8 to engage over the main wire a suitable distance inward from the closed coil 6. It will be observed that the coil 6 not only serves to close the eye 5, but also serves to 55 give the desired elasticity to the clampingarm 7, causing the same to normally tend to swing downward to the position shown in dotted lines in Fig. 3. To insert the rings into the eyes 5, it is simply necessary to thread 60 them on the clamping-arms 7 and over the coil 6, forcing them in between said coil and the main wire, the elasticity in the wire being amply sufficient to permit the rings to be thus forced past the eye 5, even should the same 65 be in contact with the main wire; and to detach the ring from the section it is simply necessary to slip it back on the main wire, as shown by the arrow in Fig. 3, past the coil 6, then lower it, as shown in dotted lines at a, 70 and pass it forward again over said coil until it bears in the corner b, formed at the intersection of the lower part of eye 5 and the curved part of the arm 7, from whence it may be turned down over the bent end 4 and 75 slipped off the spring-arm, as shown in dotted lines c in Fig. 3. This capability of readily threading on the ring and removing it from the eye is very advantageous, in that it not only enables solid closed rings to be employed, 80 but also permits any one of the intermediate sections to be removed to shorten the line. these advantages having in practice been found to be important.

The object in making the acute bend at 4 85 to give the wedge shape to the eye 5 is that the strain on the rings will cause the same to have a wedge-like action, thereby spreading the eyes and increasing the clamping action of the spring-arms, whereby the clamping ac- 90 tion will increase in strength in proportion to the weight of the articles placed on the line.

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

A section for a pinless clothes-line, con- 95 sisting of a wire having formed on one of its ends a wedge-shaped eye 5, the point of said wedge-shaped eye being directed outward in line with the section, a spring-coil extending

close said wedge-shaped eye, and a spring-arm formed of a continuation of said spring-coil and curved downward and inward and en-gaged over the main wire to form the clothes-clamp, and a ring threaded on said arm and over said spring-coil into the wedge-shaped eye, as and for the purposes set forth.

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

FRED STERZING.

Witnesses:

R. C. SHELLEY, J. E. SHIPMAN.