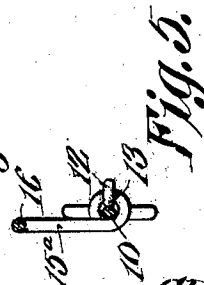
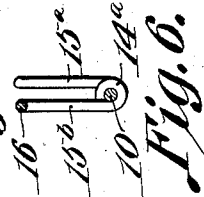
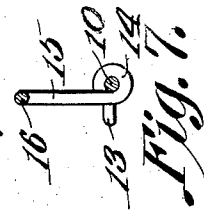
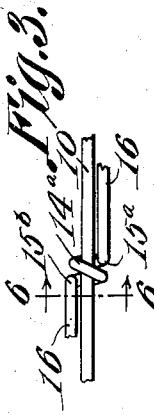
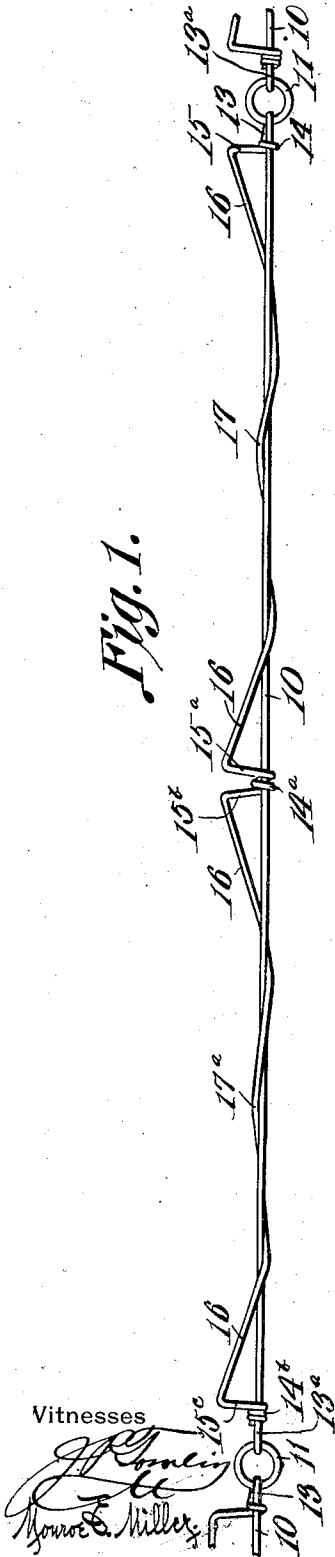


1,057,119.

Patented Mar. 25, 1913.



Witnesses

James E. Miller

Charles Cochran
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UNITED STATES PATENT OFFICE.

CHARLES COCHRANE, OF CINCINNATI, OHIO.

PINLESS CLOTHES-LINE.

1,057,119.

Specification of Letters Patent.

Patented Mar. 25, 1913.

Application filed May 22, 1912. Serial No. 699,043.

To all whom it may concern:

Be it known that I, CHARLES COCHRANE, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Pinless Clothes-Line, of which the following is a specification.

This invention relates to clothes lines, and contemplates a clothes line made up of a plurality of wire sections, which embody means for engaging the clothes and other textiles or fabrics, the sections being adapted to be folded together or collapsed when the line is not in use in order that the same may be stored away within a small compass.

The present invention also aims to provide an improved line of the character indicated wherein the sections are constructed in a novel manner, each section embodying a straight draft strand which receives the entire tension of the line as a whole, and means cooperating with the said strand for receiving and clamping the clothes, textiles, fabrics or the like.

To the above and other ends, the invention resides in the novel construction and combination of parts hereinafter set forth and particularly pointed out in the appended claim, reference being had to the accompanying drawing wherein the invention is illustrated, and wherein:

Figure 1 is an elevation of a portion of a clothes line constructed in accordance with the present invention. Figs. 2, 3 and 4 are segmental views in plane of one section of the line. Figs. 5, 6 and 7 are sectional views taken on the lines 5-5, 6-6 and 7-7 of Figs. 2, 3 and 4, respectively. Fig. 8 is a side elevation of a modified form of a line section.

Referring specifically to the drawings, wherein corresponding reference characters have been employed to denote similar parts, each section of the line is constructed of a single length of wire of suitable quality and gage, and which may be plated, oxidized or otherwise finished for purpose of appearance and to prevent corrosion. Each of the sections embodies a straight draft strand 10 of suitable length which is bent back at its ends to form eyes, the bent back portions being designated by the numerals 13 and 13^a and the bent back portion 13^a constituting one terminal of the wire. The wire from the bent back portion 13 is wound

tightly around the strand 10 at intervals along the length thereof to provide the wound portions 14 and 14^b, respectively, adjacent the ends of the strand 10 and the intermediate wound portion 14^a, and from the said wound portions, the wire is directed radially or upward from the strand 10, the wound portions 14 and 14^b having the respective single fingers 15 and 15^c projecting therefrom and the intermediate wound portion 14^a having the two complementary fingers 15^a and 15^b projecting therefrom in a direction similar to that of the aforementioned fingers. The intermediate or clamping strands connecting the free ends of the respective pairs of fingers 15-15^a and 15^b-15^c are twisted around the strand 10 intermediate the fingers of the respective pairs, the respective strands connecting the said pairs of fingers being designated by the numerals 17 and 17^a. These strands 17 and 17^a are wound once and a half around the strand 10, so as to provide long intermediate turns loosely embracing the draft strand, while it is understood that the said strands 17 and 17^a may be wound around the strand 10 any suitable number of times. The portions of the strands 17 and 17^a which connect the twisted portions thereof with the respective fingers 15, 15^a, 15^b and 15^c have been designated by the numeral 16, these portions 16 and the corresponding fingers forming loops with the strand 10. The bent back portion or terminal 13^a of the wire has the other terminal wound around same and over the strand 10, the latter terminal constituting the wound portion 14^b, and the bent back portion or terminal 13^a is hooked over the wound portion 14^b, as designated by the numeral 12. The adjoining eyes 13 and 13^a of the sections are connected by rings 11.

In use, the line may be supported by the means of the endmost rings 11, and it will be noted that the entire strain or tension of the line is received by the straight strands 10 of the sections, thus providing for a substantial line which will not yield under the weight of the clothes or textiles. The clothes or textiles may be clamped to the strand 10 by inserting portions thereof through the loops formed by the portions 16 with the corresponding fingers and then drawing the same between the strand 10 and the twisted and yielding portions of the strands 17 and 17^a, the twisted portions or

turns being adapted to yield throughout their lengths. When the clothes or textiles have been received by the strands 10 and the twisted strands, the same will be supported from the line in an effective and convenient manner without the assistance of the usual clothes pins or other clips. When the clothes are inserted between the clamping strands and the draft strand, the respective pairs of fingers are designed to flex toward each other due to the separation of the clamping strands from the draft strand, which is desirable in order to prevent the bending or twisting of the draft strand, the fingers being flexible to return the clamping strands against the draft strand after the clothes have been removed. If desired, the twisted portions of the strands 17 and 17^a may be opened relative to the strand 10 by pressing the portions 16 toward the strand 10 so that the clothes or textiles may be readily received between the twisted strands and the strand 10. Inasmuch as the entire strain or draft of the line is on the strands 10, the strands 17 and 17^a will be relieved from any strain or draft to which the line is subjected and serve solely to clamp the clothes or textiles to the strands 10.

When the line is not in use, the same may be readily folded or collapsed by swinging the various sections together, this being expedited by means of the rings 11 which connect the sections together so that the sections 12 may readily fold together in a small compass without twisting, bending or otherwise distorting any of the sections.

A clothes line constructed in accordance with the present invention will be substantial as well as convenient in use, and provides a desirable substitute for the ordinary clothes line and clothes pins.

In the form shown in Fig. 8 the section is of slightly modified form but embodies the same principles, there being three of the strands 17, 17^e and 17^b provided which merely pass under the strand 10 but which are capable of receiving and clamping the clothes and textiles in the same manner as the foregoing form.

Having described the invention what is claimed as new is:—

A clothes line link fashioned from a length of wire to provide a straight draft strand having eyes at its ends, a finger attached rigidly to the draft strand adjacent each eye, complementary fingers attached rigidly to the draft strand at an intermediate point, the fingers all projecting in one direction, and clamping strands connecting the outer ends of the end fingers and the outer ends of the respective intermediate fingers, each clamping strand having intermediate long turns loosely embracing the draft strand in order that the turns of the clamping strands may yield throughout their lengths.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

CHARLES COCHRANE.

Witnesses:

A. F. MORRISON,
OTTO SPANGENBERG.