

No. 815,849.

PATENTED MAR. 20, 1906.

C. M. MARTIN.  
WIRE CHAIN LINE.

MODEL.

APPLICATION FILED MAY 26, 1904.

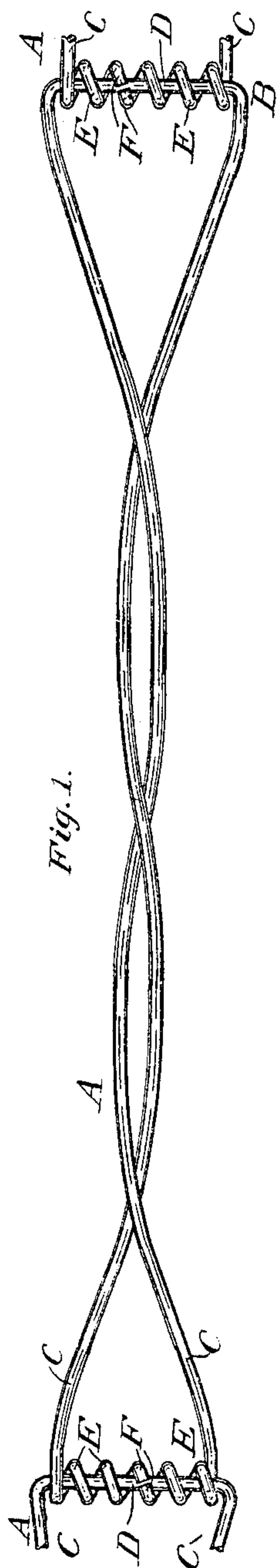


Fig. 1.

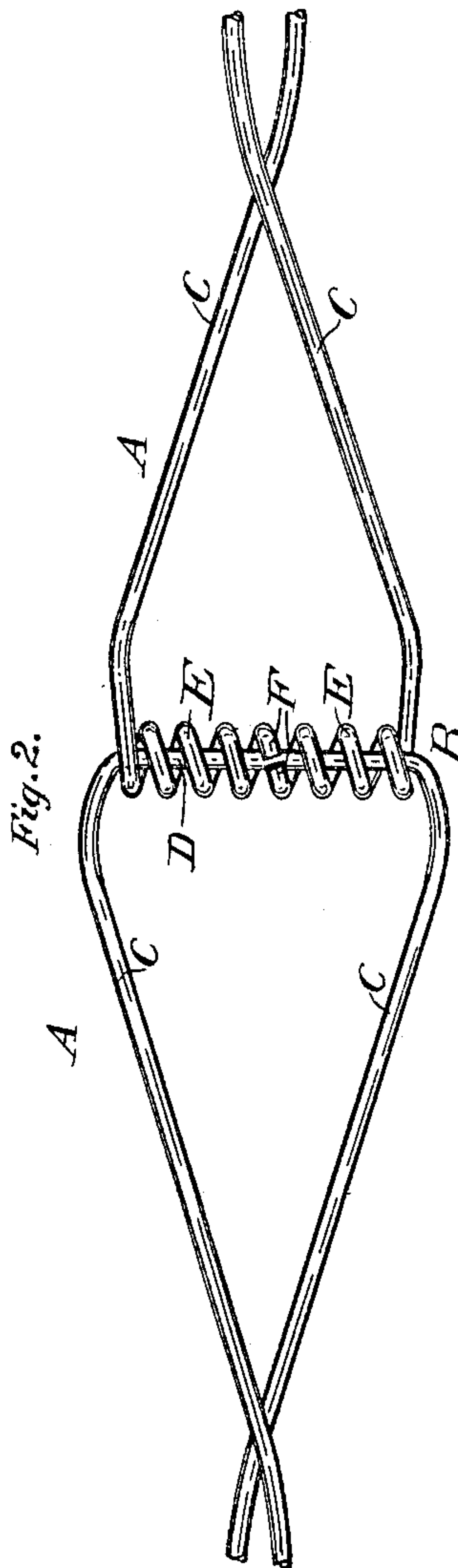


Fig. 2.

Witnesses.  
William Whaley  
Carrie A. Ivy.

Inventor,  
Columbus M. Martin  
per  
Cyrus Kehr  
Attorney.

# UNITED STATES PATENT OFFICE.

COLUMBUS MILLS MARTIN, OF FOREST CITY, NORTH CAROLINA.

## WIRE-CHAIN LINE.

No. 815,849.

Specification of Letters Patent.

Patented March 20, 1906.

Application filed May 26, 1904. Serial No. 209,988. (Model.)

*To all whom it may concern:*

Be it known that I, COLUMBUS MILLS MARTIN, a citizen of the United States, residing at Forest City, in the county of Rutherford and State of North Carolina, have invented a new and useful Improvement in Wire-Chain Lines, of which the following is a specification.

My invention relates particularly to wire chains to be used as clothes-lines.

10 The object of my improvement is to provide a clothes-line which may be cheaply manufactured and which is adapted to convenient folding and unfolding and which is adapted to securely hold clothes without the use of pins.

15 In the accompanying drawings, Figure 1 is a side view of a link and portions of two adjacent links of a chain clothes-line embodying my improvement. Fig. 2 is a detail view of one of the hinge-joints of the line.

20 The line is composed of a series of connected links A A. Said links are joined to each other by transverse hinge-joints B B. All said links are identical in construction and arrangement.

25 Each link consists of a transverse member or portion D, two equal longitudinal members C C, and two spirals E E, embracing the transverse portion D of the adjacent link. 30 The portion D is perpendicular to the axis of its link. Each such link preferably consists of a single piece of wire. The links may be formed by bending a straight piece of wire at two points at opposite sides of and away from the middle of the wire a distance equal to one-half the length of the portion D, the two bends being in the same direction and at approximately right angles to the portion of the wire which is to become the portion D and forming the ends of said wire into spirals directed toward each other at approximately right angles to the members C C and preferably on an axis parallel to the axis of the portion D of the same link and closely surrounding the portion D of the adjacent link A.

45 The spirals E E are preferably so formed as to cause the extreme ends F F of the two spirals to meet or stand opposite each other in the same spiral line, as shown in the drawings, in order that said ends may be to the least extent exposed and that the portion D may be to the greatest extent surrounded by said spirals.

It will be observed that the two spirals E E together form a tube surrounding the portion D, and said portion may be regarded as the pintle and the two spirals as the knuckle of a hinge upon which adjacent links A turn for the folding of the chain. Each link in the form shown in the drawings is loosely twisted 60 by relatively turning the ends thereof one and one-half times on the axis of the link. This may be accomplished by holding one of said ends and turning the other. Said end might be turned only once around or it might be turned more than one and one-half times; but turning it one and one-half times when the links are twelve inches long forms the members C C into spirals engaging each other in proper manner for satisfactorily holding the ends or edges of clothes drawn between said members by inserting them toward the opposite end of the link. By giving said link full turns or exact half turns, the hinge-joints remain in common planes and the chain is adapted to convenient and accurate folding accordion fashion. By making the portion D relatively long and directing the spirals E E toward each other the members C C are materially separated at each end 80 of the link, and the twisting of the link inclines them toward each other from the hinge toward the middle of the link, whereby said members assume the form and nature of braces and impart stability to the link and prevent the movement of the links upon each other in any other direction than that for which the hinge-joint provides. Thus the line is adapted to permanently maintain its form, although the links may not be composed of heavy or highly-rigid wire. The links do not become bent nor entangled. Furthermore, this arrangement leaves an opening at each end of the link for the easy insertion of the ends or edges of pieces of clothing between the two members C C.

Obviously my improved chain line may be made of links of various sizes and weights and may be put to various uses.

I claim as my invention—

100 A chain line formed of wire links, each link consisting of a single wire comprising a transverse portion, D, two longitudinal members, C, C, terminating in two spiral coils, E, E, directed toward each other on an axis parallel to the transverse portion, D, of said link and 105



fitting closely around the transverse portion,  
D, of the adjacent link, the ends of said wire  
being opposite each other in the same spiral  
line, and said longitudinal members, C, C, be-  
5 ing separated at their ends and loosely twisted  
upon each other between their ends, sub-  
stantially as described.

In testimony whereof I have signed my  
name to this specification in the presence of  
two subscribing witnesses.

COLUMBUS MILLS MARTIN.

Witnesses:

G. P. REID,

CHARLIE B. CROWELL.