

No. 652,336.

Patented June 26, 1900.

R. L. F. STRATHY.
WIRE FENCE.

(Application filed June 30, 1899.)

(No Model.)

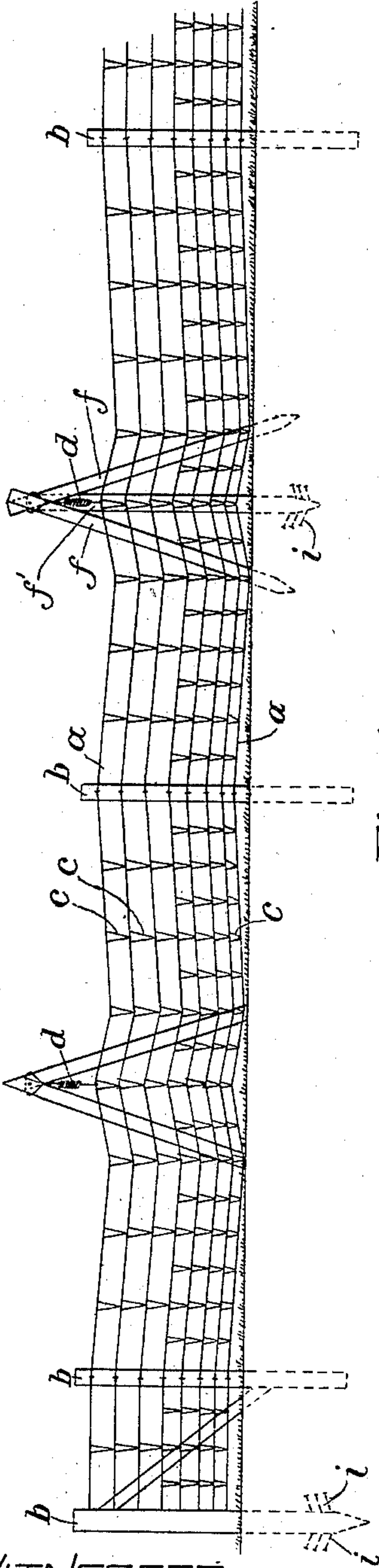


Fig. 1

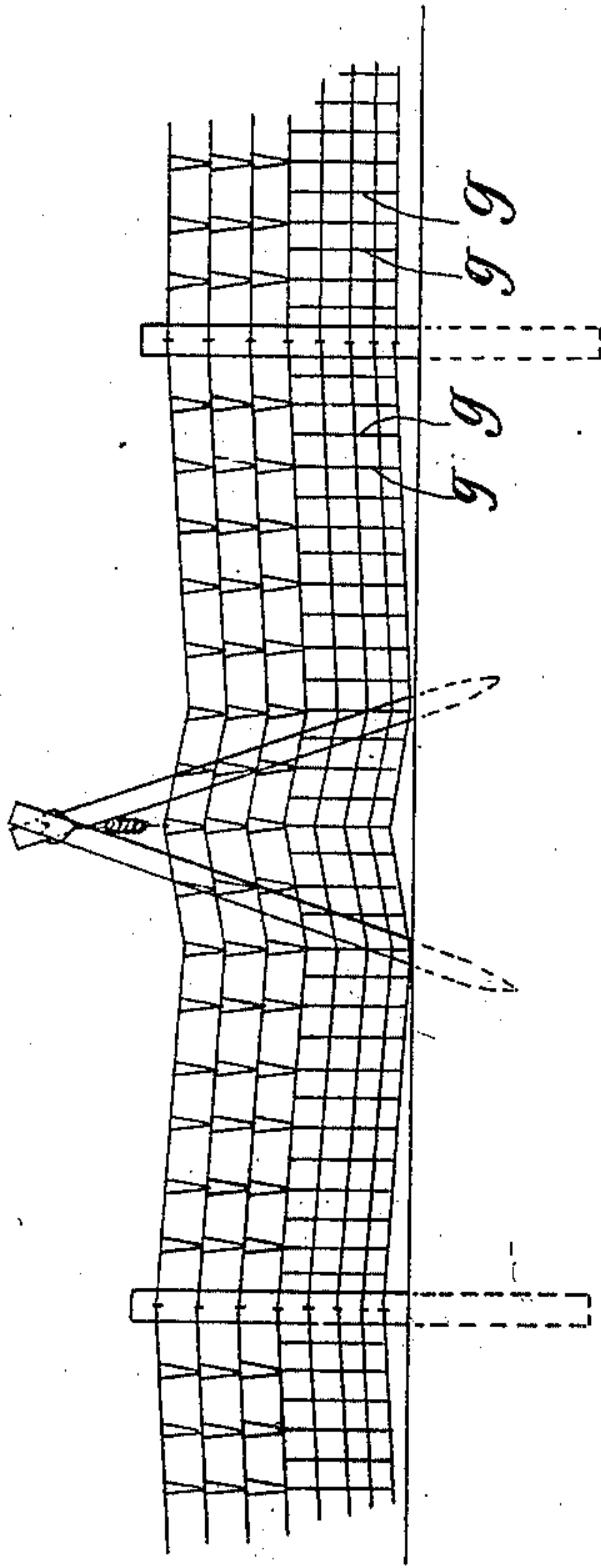


Fig. 2

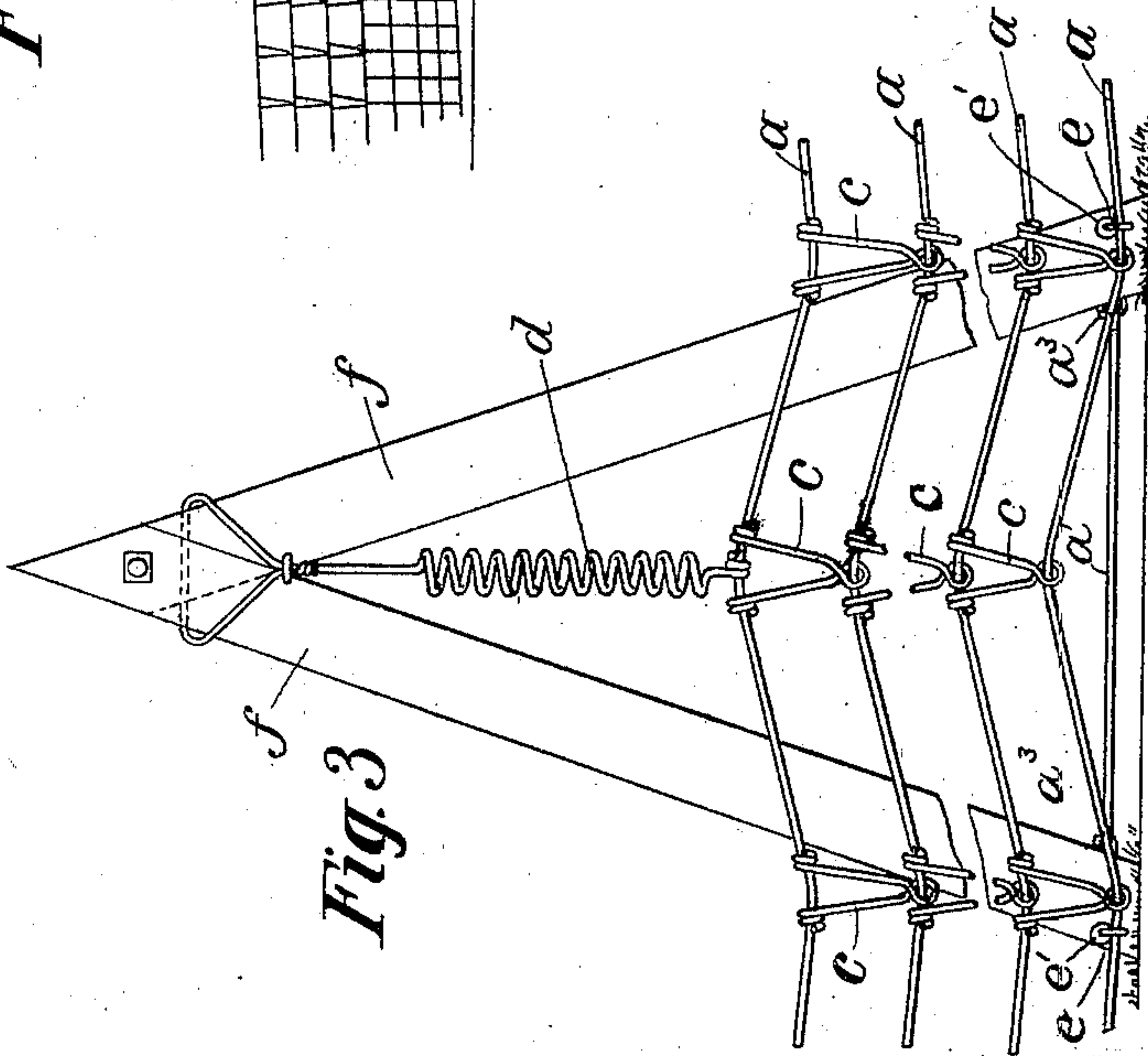


Fig. 3

WITNESSES.

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UNITED STATES PATENT OFFICE.

ROBERT L. F. STRATHY, OF YARMOUTH, CANADA.

WIRE FENCE.

SPECIFICATION forming part of Letters Patent No. 652,336, dated June 26, 1900.

Application filed June 30, 1899. Serial No. 722,372. (No model.)

To all whom it may concern:

Be it known that I, ROBERT L. F. STRATHY, a subject of the Queen of Great Britain, residing at Yarmouth, in the county of Yarmouth, Province of Nova Scotia, Canada, have invented certain new and useful Improvements in Wire Fences, of which the following is a specification.

This invention relates to wire fences composed of longitudinal strands suitably supported upon posts or uprights and stays or links connecting the strands, the strands being usually made in sections of considerable length and provided with means for compensating for expansion and contraction of the wire of which they are made, so that in the event of contraction the slack of the strands may be automatically taken up, the strands being at the same time enabled to contract without being subjected to undue strain. Heretofore in fences of this character springs have been employed to compensate for the expansion and contraction of the strands, a separate spring being employed for each strand, and the series of springs being arranged to connect the series of strands with a post or other fixed support. This arrangement involves a separate spring for each strand-section, and therefore a great multiplicity of springs in a fence of any considerable length.

My invention has for its object to reduce to a minimum the number of springs required to compensate for expansion and contraction of the longitudinal strands of a wire fence; and to this end the invention consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a side elevation of a wire fence embodying my invention. Fig. 2 represents a view similar to Fig. 1, showing a somewhat-different construction as regards the connection between the strand-wires at the lower portion of the fence. Fig. 3 represents an enlargement of a portion of Fig. 1.

The same reference-letters indicate the same parts in all of the figures.

In the drawings, *a a* represent a series of longitudinal strand-wires supported by posts or uprights *b b*. The strand-wires are or may

be connected with the posts so that they are free to move endwise, the preferred connection being by means of staples driven into the posts, the strand-wires passing loosely through the staples. The strand-wires are suitably connected with each other from top to the bottom of the fence, the connections here shown being V-shaped stays *c c*, which are preferably constructed and arranged as shown in Letters Patent No. 599,024, granted to me February 15, 1898.

In carrying out my invention I provide a series of supports adjacent to the strand-wires and adapted to sustain springs *d d*, each of which is engaged with one of the strand-wires and is arranged to exert a lateral pull upon the strand-wire with which it is engaged and through the connecting-stays *c c* a similar pull upon all the strand-wires of the series, thus compensating for expansion and contraction of the strand-wires, the said springs laterally displacing the portions of the strand-wires in their immediate vicinity when the wires are expanded. I prefer to confine the displacement of the strand-wires to a limited length or portion of the fence, this limitation being suitably accomplished by means of fixed guides or staples *e e*, engaged with one of the strand-wires, preferably the lower one, the said guides being arranged at opposite sides of the line of draft or pull exerted upon the strand-wires by the spring *d*, as shown in Fig. 3. This arrangement limits the lateral displacement of the strand-wires to the distance between the guides or staples *e e*. The said guides *e e* are preferably provided with antifriction-rollers *e' e'* to permit the free longitudinal movement of the strand-wire which passes through said guides. To close the opening which may be formed between the guides *e e* by the displacement of the strand-wires, I provide a strand-section *a'*, connected at its ends to fixed supports *a³ a³* between the guides *e e*.

I prefer to make the support for the spring *d* by uniting two posts *f f* to form an inverted-V-shaped structure, the upper end of the spring being suspended from the apex of said structure, as indicated in the drawings. If desired, the posts *f f* may be braced by a third post *f'*, extending laterally from their meeting ends and outwardly from one side of

the fence. I do not limit myself to the location of the springs *d* here shown, as said springs may be connected with any suitable part of the fence and may be arranged to exert a downward instead of an upward pull. Neither do I limit myself to the means above described for connecting the strand-wires *a a*.

In Fig. 2 I have shown the strand-wires at the lower portion of the fence connected by transverse stay-wires *g*, which may be interwoven with the longitudinal wires or otherwise attached thereto, the transverse wires *g* being substitutes for the stays *c* above referred to. The portion of the fence that is composed of the strand and the stay wires *g* may be woven by machinery, and constitutes what is known as a "factory-woven" fence, which has the advantage of cheapness and closeness of construction, preventing smaller animals from passing through the fence. The upper portion of the fence, composed of the strand-wires and the stays *c*, loosely jointed to the strand-wires, permits the upper strands to swing or sway independently when subjected to the weight of a person crossing the fence, so that the fence is not liable to be injured when a heavy weight is brought to bear on its upper strand or strands.

To insure a firm engagement of the posts of the fence with the ground, I drive spikes *i i* into the lower portions of said posts, the spikes being inclined upwardly and firmly anchoring the posts in the ground. The spikes resist the lifting or withdrawal of the post from the ground and enable the post to be driven into the ground from time to time, as may be required, after upheaval of the post by the action of frost.

The springs *d* may be applied at as frequent intervals as may be desired, it being preferable to use a spring for each panel of fence, the support for the spring being located at about the middle of the panel. This arrangement insures a uniform tension of the strand-wires throughout the entire fence. The strand-wires may be rigidly secured to all the posts *b* when each panel is provided with a spring.

The inverted-V-shaped structures or posts constitute substitutes for the ordinary posts, enabling the latter to be placed farther apart

than would otherwise be advisable. As said V-shaped posts can be cheaply constructed, it follows that my improvement does not increase the expense of the fence, but, on the other hand, tends to reduce the same.

I claim—

1. A fence comprising longitudinal strands, link connections fitted to unbroken portions of said strands, said links being in line with each other, a support adjacent to the fence, and a spring connected with the support and with one of the strand-wires and arranged to exert a lateral pull simultaneously on all of the strands.

2. A fence comprising longitudinal strands, suitable connections between the strands, a support adjacent to the fence, a spring connected with the support and with one of the strand-wires, and arranged to upwardly deflect all of the strands in the same direction, and means for limiting the length of the portions of the strands which are displaced by the action of said spring.

3. A fence comprising longitudinal strands, suitable connections between the strands, a spring connected with one of the strands and adapted to exert a lateral pull on the same, connections between the strands whereby the pull of the spring is imparted from strand to strand, and fixed guides for one of the strands located at opposite sides of the line of pull of the spring, whereby the length of the strands displaced by the spring is limited.

4. A fence comprising longitudinal strands, transverse connections between the strands, a supporting structure of inverted-V shape beside the fence and projecting above the upper strand, a spring connected with the upper portion of said support and the upper strand, and guides attached to the base of the supporting structure and engaged with a strand at or near the bottom of the fence, the said strands being vertically connected in line with the line of pull of the spring.

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

ROBERT L. F. STRATHY.

Witnesses:

H. L. ROBBINS,
C. F. BROWN.