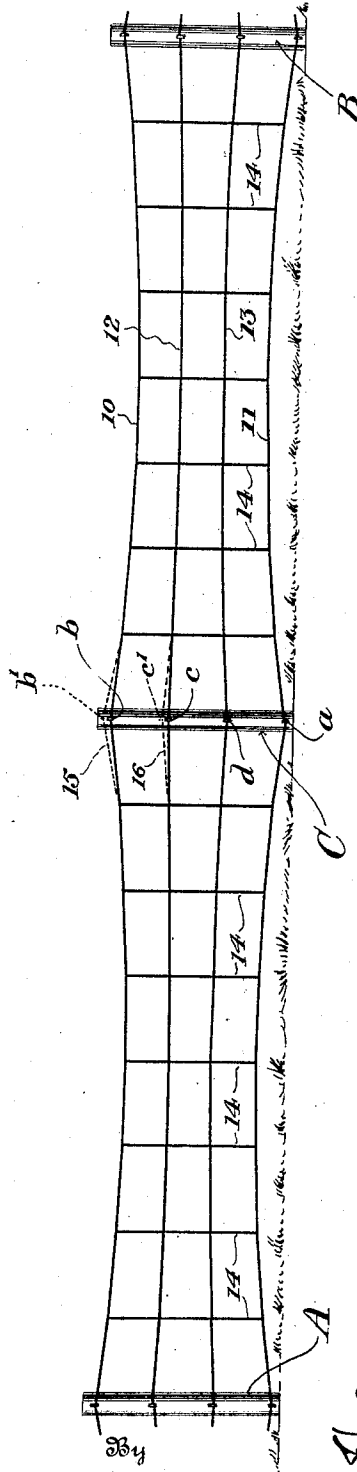


G. L. SMITH.  
WIRE FENCE.  
APPLICATION FILED MAY 3, 1919.

1,393,176.

Patented Oct. 11, 1921.



Witness  
*[Signature]*

Inventor  
*George L. Smith*  
*Henry D. Knight*  
Attorney

# UNITED STATES PATENT OFFICE.

GEORGE L. SMITH, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR TO UNITED STATES ORDINANCE COMPANY, OF WASHINGTON, DISTRICT OF COLUMBIA, A CORPORATION OF VIRGINIA.

## WIRE FENCE.

1,393,176.

Specification of Letters Patent.

Patented Oct. 11, 1921.

Application filed May 3, 1919. Serial No. 294,513.

*To all whom it may concern:*

Be it known that I, GEORGE L. SMITH, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Wire Fences; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable those skilled in the art to which it appertains to make and use the same.

My invention relates to wire fences and particularly to wire fence fabrics.

It is my purpose to provide an improved construction of wire fence fabric which will require no special rigging to stretch the same taut and thereby facilitate the erection of the fence; which can be adjusted with facility any time after erection to take up slack which might arise at points in the fence structure; in which all the vertical wires will be tensioned longitudinally during erection by relative up and down pull of the horizontal wires at securing points with the result that a straight and neat fence is produced which will effectively resist the bending of the wires by any outside pressure; and which will serve as a marker for the correct placement of the supporting posts.

I will describe my invention in the best form known to me at present, but it will be apparent that it is susceptible to changes in forms and proportions and to desirable additions without departing from the spirit thereof.

In describing my invention reference will be had to the accompanying drawing wherein is illustrated a view in elevation of a wire fence embodying my improved fabric.

Referring to the drawing A and B are the anchor posts of the fence and C an intermediate post. My improved fabric comprises upper and lower longitudinal wires 10 and 11 respectively and intermediate longitudinal wires 12 and 13. These longitudinal wires are connected by transverse tension wires 14 which serve to complete the fabric. The transverse tension wires are disposed in spaced series and the wires of each series increase in length from the central transverse wire or wires outwardly in either direction whereby an inward curvature of the portions of the wires 10 and 11 associated with each series of transverse wires

is produced. The lengths of the portions of the transverse wires between the longitudinal wires 12 and 13 also increase, although in a more restricted manner, from the central transverse wire or wires of each series outwardly and in this manner an inward curvature of the longitudinal wires 12 and 13 is produced although such curvature is not so pronounced as the corresponding curvature of the wires 10 and 11. It will be noted however that while the curvature of the intermediate longitudinal wires is preferable and desirable it could be dispensed with without materially impairing the utility of the structure as previously described. Such condition could arise in the construction of farm fences where excessive neatness is not required. In this case the wires 12 and 13 can still be made taut by pulling up on the former and down on the latter when stapling them to the posts.

Adjacent series of transverse wires 14 are separated by a space relatively greater than the space between the adjacent vertical wires of a given series so as to afford workable lengths of longitudinal wires between the series, thereby facilitating manual securing and stretching during erection, such placement of the series of vertical wires also determining the points of greatest width of the fabric and the location of the fence posts prior to erection, as well as permitting slight variation in the spacing of posts where necessary to avoid interference with rocks or ledges.

To erect the fabric unroll the wire along the ground and stretch hand taut. Drive posts opposite points of greatest width of fabric. Secure wire 10 with staple to post C at point *b*, leaving wire free to slide through the staple. Next, secure the ends of the fabric to anchor posts A and B. Then staple the wire 11 at *a* on post C, pulling down sufficiently to tauten wires. Finally, staple the two middle wires 12 and 13 to post C at *c* and *d*, pulling up on the former and down on the latter when the erection of the fence is complete. By this operation the longitudinal wires which are in normal curvature tend to straighten out and this in turn places and holds all the vertical or transverse wires in longitudinal tension without the necessity of providing any securing means between the fabric and ground and as a result the fence holds its

shape and presents a neat appearance. If the erected fabric should become slack at any time the desired tautness can be easily restored by pulling up a little on the wires 10 and 12, as indicated at 15 and 16 in dotted lines, and stapling at *b'* and *c'*. In this operation it would not be necessary to raise the wires 10 and 12 at every intermediate post, unless the fabric is very slack, as this procedure for every second or even every third post would be sufficient.

While I have illustrated and described a fabric having two intermediate longitudinal wires it will be obvious that the number of these intermediate wires can be increased as desired or they may be dispensed with altogether and in the latter instance the curvature of the wires 10 and 11 would serve to place the transverse wires in tension, the number of said transverse wires of course being increased with the wires of each series placed closer together. The fabric may be of any desired length and constituted by

successive repetitions of the series of transverse brace wires, but for the purpose of clearly disclosing my invention the illustration and description of a length of fabric embodying two series of transverse brace wires and two intermediate longitudinal wires is deemed sufficient.

I claim:—

A fence section interposed between two posts having the upper and lower longitudinal members thereof bent gradually toward each other from either end of said section and held in this relation by a plurality of parallel transverse members, said members increasing in length from the center of the section to its outer ends.

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

GEORGE L. SMITH.

Witnesses:

A. Y. LEECH, Jr.,  
EDITH STOWELL.