

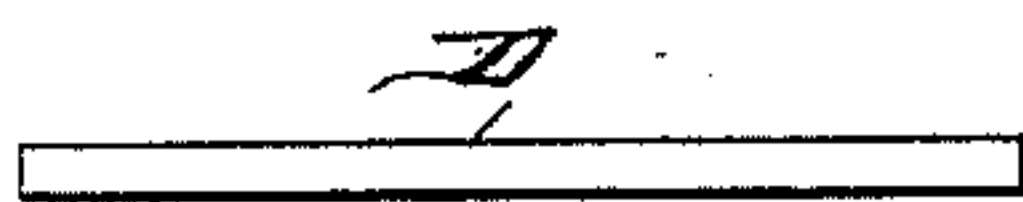
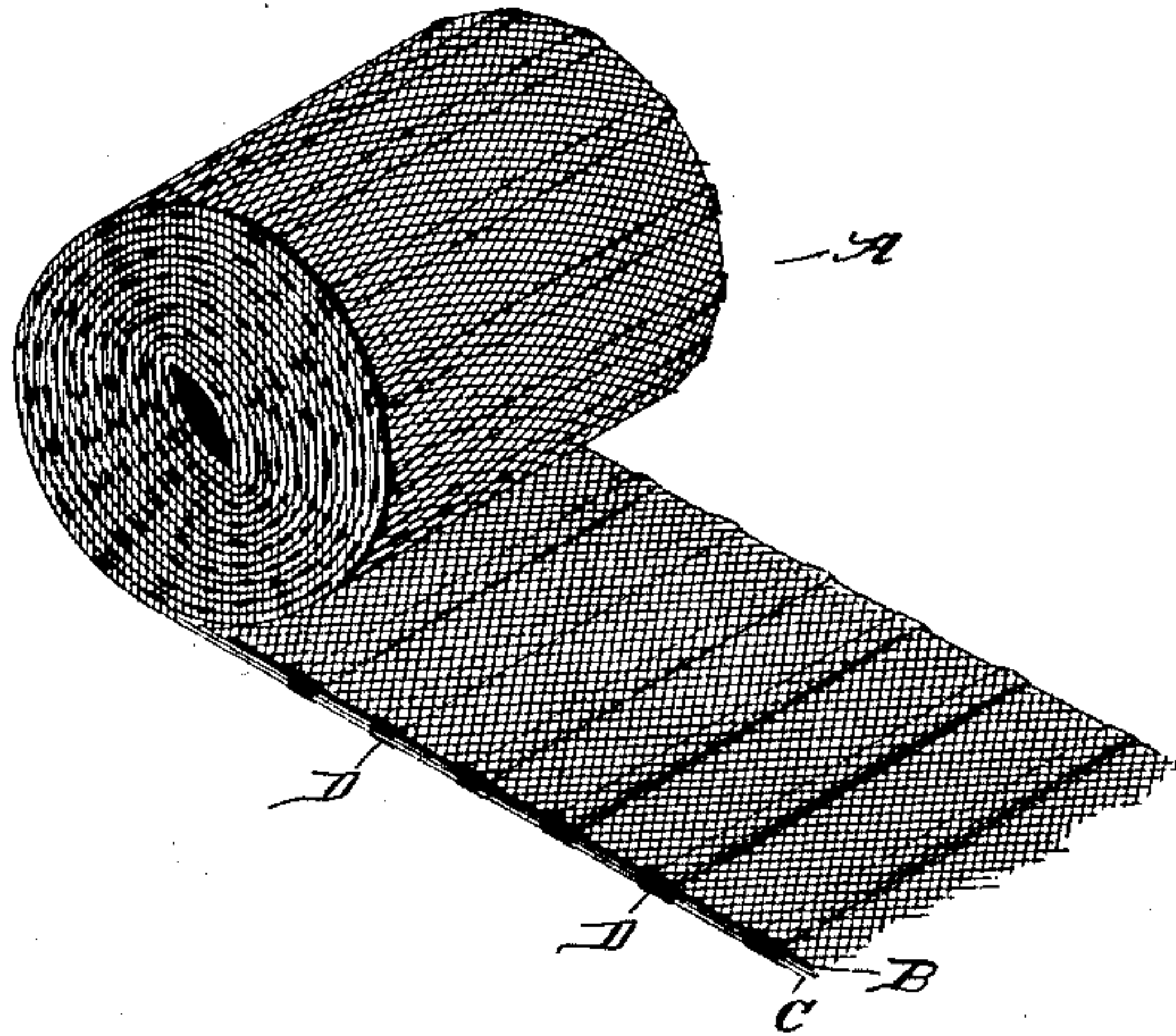
(No Model.)

L. T. HADLEY.  
STIFFENING FOR COLLARS, &c.

No. 435,929.

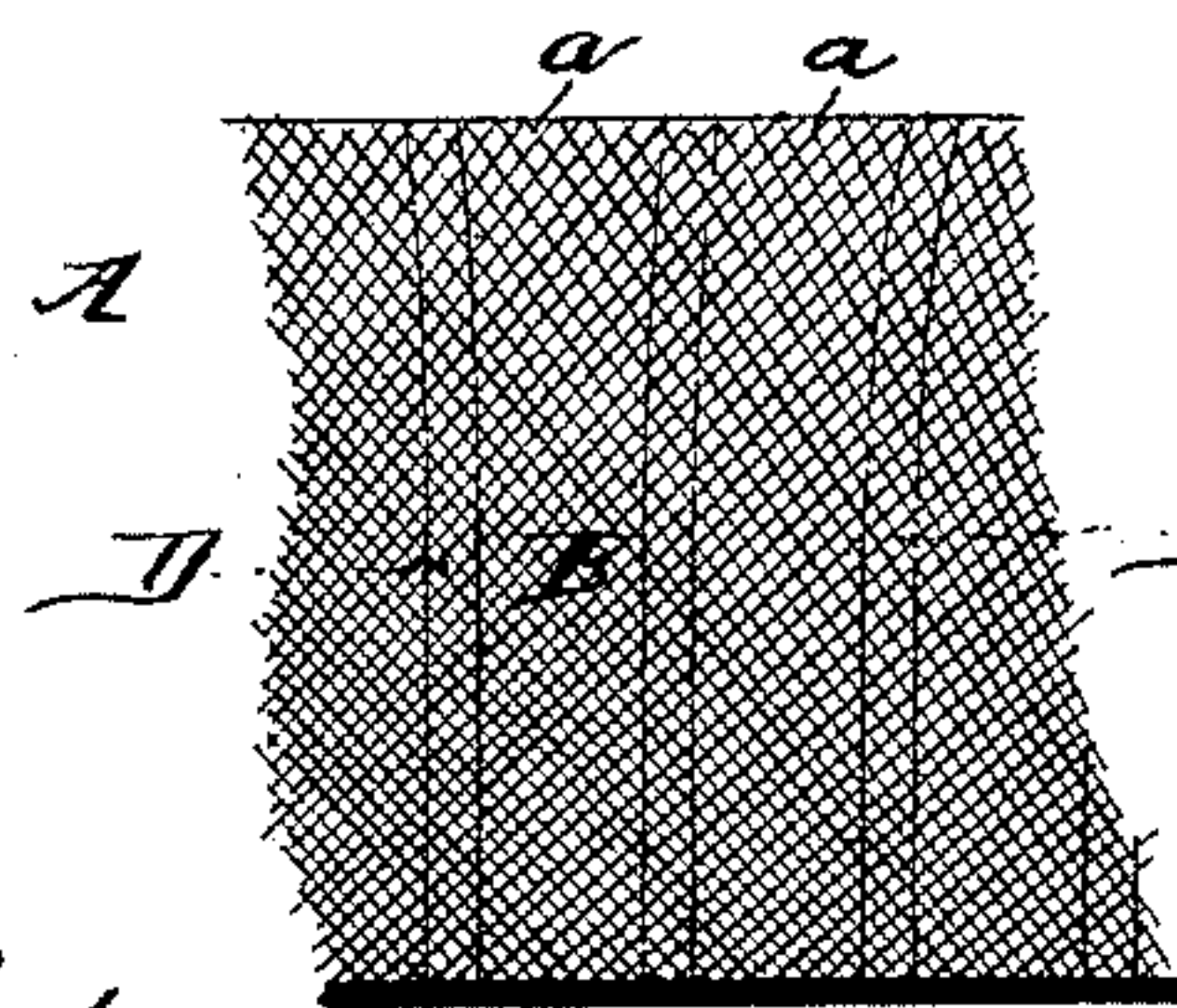
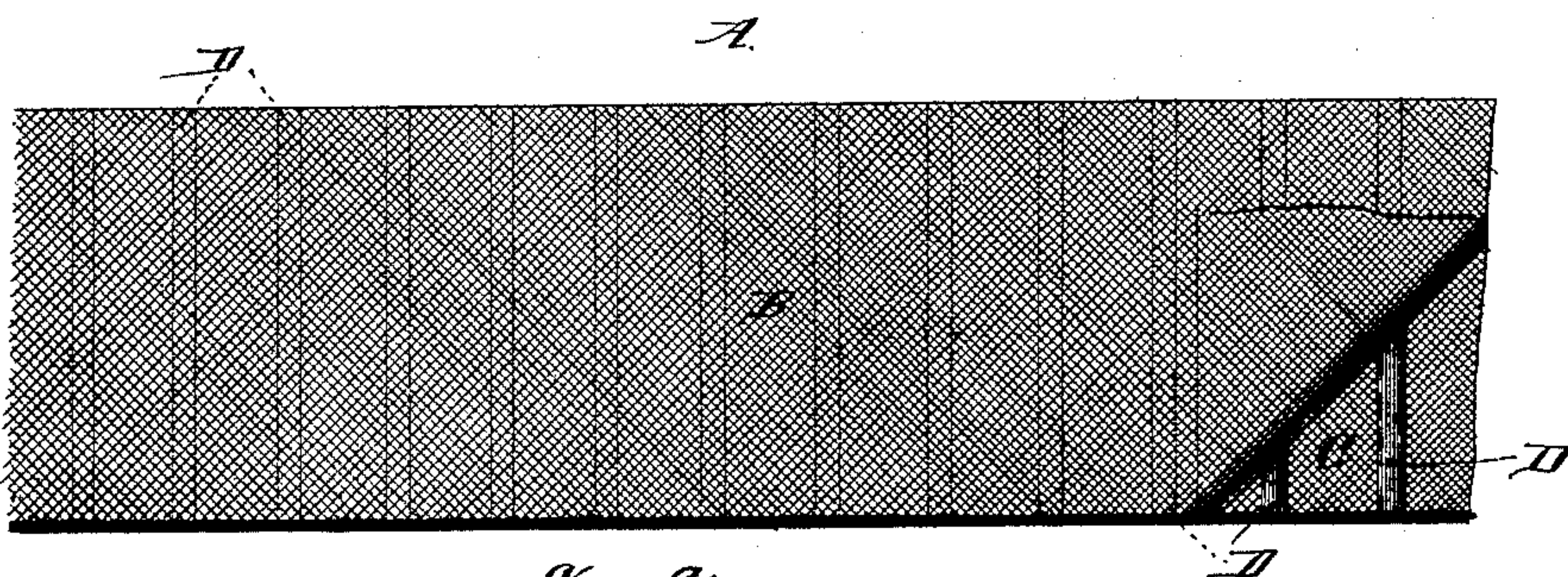
Patented Sept. 9, 1890.

*Fig. 1.*



*Fig. 4.*

*Fig. 2.*



*Fig. 3*

Witnesses  
*Geo. Y. Thayer*  
*R. C. Johnson*

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*Lizzie T. Hadley.*  
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*Sheldon & Sheldon.*



# UNITED STATES PATENT OFFICE.

LIZZIE T. HADLEY, OF KANSAS CITY, KANSAS.

## STIFFENING FOR COLLARS, &c.

SPECIFICATION forming part of Letters Patent No. 435,929, dated September 9, 1890.

Application filed July 5, 1890. Serial No. 357,747. (No specimens.)

*To all whom it may concern:*

Be it known that I, LIZZIE T. HADLEY, of Kansas City, Wyandotte county, Kansas, have invented certain new and useful Improve-  
5 ments in Stiffening for Collars and Cuffs, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in  
10 the combination of fabrics with strips of bone or horn to be used for stiffening or lining collars and cuffs and other parts of garments usually worn by women which may need stiffening, and will be more fully set forth and  
15 described hereinafter, and particularly pointed out in the claim, reference being had to the drawings, in which—

Figure 1 is a perspective view of a roll of the goods prepared ready for use according  
20 to my invention.

It will be observed that the invention consists of three different parts—a netting made of any suitable material, and narrow strips of bone or horn about one-eighth of an inch  
25 in width and one-sixteenth of an inch in thickness, stuck together with paste made of starch or flour, placed parallel about one and one-fourth of an inch apart. The netting is cut in strips nine and one-half inches wide diagonally or bias across the cloth. It is then  
30 saturated with starch or paste. Ordinary glue will not answer the purpose, it being too stubborn when dry and will not admit of flexibility.

Fig. 2 is a sectional view of the stiffening 35 prepared with the upper portion of one corner turned over, bringing clearly to view the strips of bone in position situated between the two layers of netting. Fig. 3 is a shorter section of the stiffening, showing that the material is sufficiently flexible to admit of expansion and contraction at its edges, and by this  
40 means can be made to fit any desired curve that is necessary in making collars and cuffs or any other wear for which it will suitably adapt itself. Fig. 4 is a detail view of one of the bones or strips thus referred to.

A represents the stiffening prepared.

B is the upper layer of the netting.

C is the lower layer of the netting. 50

D is the strip of bone.

a a show the edge of the stiffening expanded.

Having thus fully described my invention, what I claim as new, and desire protection in  
by Letters Patent of the United States, is— 55

A stiffening material consisting of two layers of netting, each of the said layers being formed of a suitable strip of netting cut bias, strips of bone between the said layers and at right angles to the length thereof, and paste  
60 securing the said layers together, as described.

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

LIZZIE T. HADLEY.

Witnesses:

J. E. HIGDON,

H. E. PRICE.