No. 621,435. Patented Mar. 21, 1899.

H. W. STRUSS.

RIBBON WIRE.

(Application filed Feb. 24, 1898.)

(No Model.)

Fig. 1.

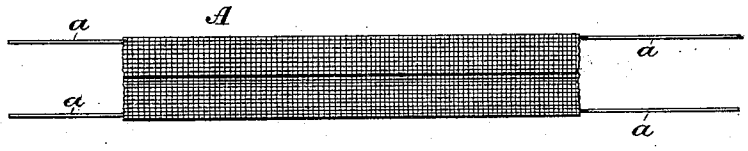


Fig. 2.

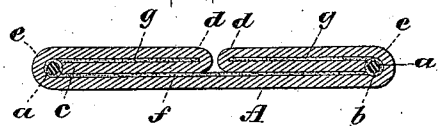
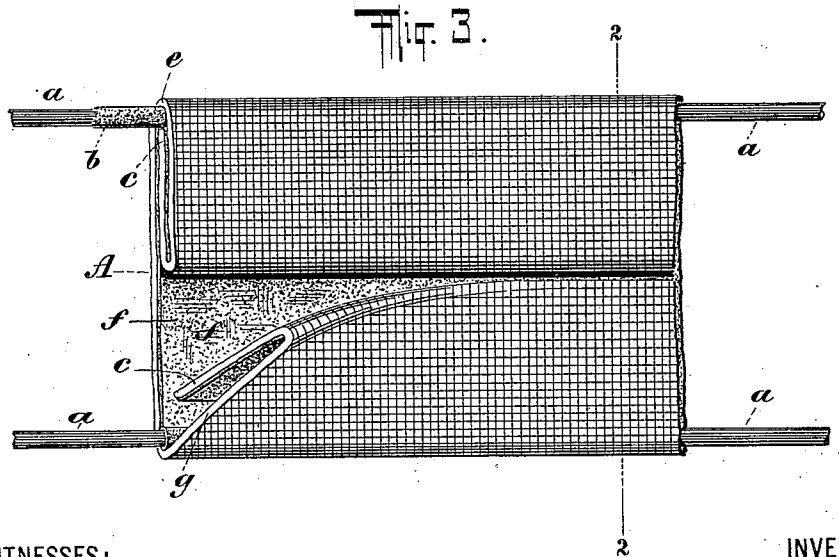


Fig. 3.



WITNESSES:

Gustave Dieterich.

Wm. E. Smith

INVENTOR

Henry W. Struss.

BY Briesen & Knauth

ATTORNEYS

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HENRY W. STRUSS, OF NEW YORK, N. Y.

RIBBON-WIRE.

SPECIFICATION forming part of Letters Patent No. 621,435, dated March 21, 1899.

Application filed February 24, 1898. Serial No. 671,441. (No model.)

To all whom it may concern:

Be it known that I, HENRY W. STRUSS, of the borough of Manhattan, in the city, county, and State of New York, have invented certain new and useful Improvements in Ribbon-Wire, of which the following is a specification.

My invention relates to what is known as "milliners' ribbon-wire;" and it consists of a plurality of non-resilient wires covered with fabric. The purpose of this ribbon-wire is to maintain ribbons or other hat-trimmings to which it is attached in the position in which the wire is bent. Heretofore it has been customary to make milliners' ribbon-wire upon braiding-machines, and it was found necessary to first cover the individual wires with thread and afterward incorporate them in the loosely-laid braid in the course of manufacture thereof. A flimsy, unsubstantial, and unreliable product with little body was the result of this construction.

The object of my invention is to produce a simple, durable, and efficient ribbon-wire which will have none of the disadvantages of milliners' ribbon-wire heretofore made, which will present a neat appearance, and which can be manufactured at small cost.

To these ends my invention consists in a ribbon-wire of the construction hereinafter described and claimed.

In the accompanying drawings, Figure 1 represents a plan view of a section of ribbon-wire embodying my invention. Fig. 2 is an enlarged detail transverse sectional view of the same on the line 2 2 of Fig. 3. Fig. 3 is an enlarged plan view with a section of the fabric turned back to better illustrate the construction.

The ribbon-wire of my invention is made in continuous strips and may be made upon a suitable machine in the following manner: The non-resilient wires *a* are continuously fed from a suitable source of supply and are preferably coated with paste, as indicated at *b*, in their passage to the point where they are incorporated with the covering fabric A. This covering fabric is preferably folded in the manner indicated in Fig. 2 of the drawings, wherein each of the edges *c* is indicated as being brought adjacent to a wire *a* after the fabric has been folded toward the center of the article and laid upon the body portion thereof, as indicated at *d*. By these means a wire-receiving pocket or channel is provided within the bight *e* of the fabric at each edge of the completed ribbon-wire, and each of the wires *a* is surrounded upon all sides by the fabric A, so as to prevent lateral movement of the wire. In order to secure the parts together, I prefer to employ a layer of paste on the fabric, as indicated at *f g*, so that when the fabric is folded in the manner indicated in Fig. 2 the parts may be secured together. The fabric is by preference pasted in its passage from the source of supply to the point where the folding is done.

It will be observed that by my invention I am enabled to employ a closely-woven fabric in the construction of the ribbon-wire and that an even, durable, and finished article may be produced, wherein the paste employed coöperates with the fabric to stiffen and give body to the article. It will likewise be seen that by my invention I am enabled to provide three layers of closely-woven fabric in the construction of the article and that the incorporation of the wires *a* need not lend additional thickness to the article, since at the pocket-receiving portions only two layers of fabric are employed, whereas three layers of fabric are employed throughout the rest of the structure.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A ribbon-wire, comprising a strip of fabric the edges of which are turned upon the body of the strip to form a plurality of folds so as to provide wire-receiving pockets at the edges of the article, non-resilient wires confined within said pockets and means for maintaining the folds in the position in which they are laid.

2. A ribbon-wire, comprising a strip of fabric the edges of which are turned upon the body of the strip to form a plurality of folds so as to provide wire-receiving pockets at the edges of the article where bights in the fabric are formed, non-resilient wires confined within said pockets, and layers of paste in-

terposed between the folds of the fabric for maintaining the folds in the position in which they are laid.

3. A ribbon-wire, comprising a strip of fabric laid in a plurality of folds so as to provide wire-receiving pockets at the edges of the article, non-resilient wires confined within said pockets, each of the free edges of said fabric being brought adjacent to a wire so as to confine the wires within said pockets, and means for maintaining the folds of the fabric in the position in which they are laid.

HENRY W. STRUSS.

Witnesses:
CHARLES E. SMITH,
HANS V. BRIESEN.