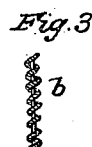
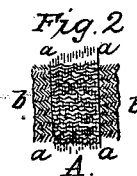
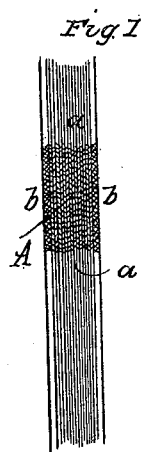


L. HULL.  
Elastic Webbing.

No. 54,167.

Patented April 24, 1866.



*Witnesses.*  
*W. H. Hale Jr.*  
*G. H. Washburn*

*Inventor*  
*Lireras Hull.*  
*by his attorney*  
*R. H. M. L.*

# UNITED STATES PATENT OFFICE.

LIVERAS HULL, OF CHARLESTOWN, MASSACHUSETTS.

## IMPROVED ELASTIC WEBBING.

Specification forming part of Letters Patent No. **54,167**, dated April 24, 1866.

### *To all whom it may concern:*

Be it known that I, LIVERAS HULL, of Charlestown, in the county of Middlesex and State of Massachusetts, have made a new and useful Invention having reference to Elastic Webbing composed in part of strands of caoutchouc; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a representation of a piece of my improved elastic braided band in the extended state in which it is woven. Fig. 2 exhibits it in a contracted state and having a frill of braid at each of its edges. Fig. 3 is an edge view of it.

In the said drawings, *a a*, &c., denote the series of elastic strands of caoutchouc, arranged parallel to each other and covered and connected together by a series of threads braided on and between them, so as to form an elastic band, *A*.

In carrying out my invention the braiding of the threads is to be continued beyond the series of elastic bands each way, so as to form braids *b b*, each of which, on contraction of the elastic bands, will be contracted or corrugated, so as to have the appearance of a ruffle or frill.

I am aware that an elastic band composed of caoutchouc warps and linen, cotton, or silk

threads has been made with frills at its edges by the common process of weaving warp and woof threads together, in which case the warps were laid between the elastic strands, the woof-threads being made to cross them in being woven into the warps. I do not claim this fabric.

The frills of my improved fabric or manufacture are composed of braided threads, or threads crossed diagonally on each other in the process of braiding them together, by which they are rendered far better than frills of warp and woof threads—that is, they are firmer and of better form and appearance, and thereby render the whole fabric better in character and wear.

I claim as my invention—

The new or improved manufacture, fabric, or band as composed not only of a series of caoutchouc strands, but of a series of linen, cotton, or silk threads so braided on and beyond the caoutchouc strands, when stretched or extended lengthwise, as to form, by the construction of the latter, frills of braiding at the opposite edges of the band, as explained.

LIVERAS HULL.

Witnesses:

R. H. EDDY,  
F. P. HALE, Jr.