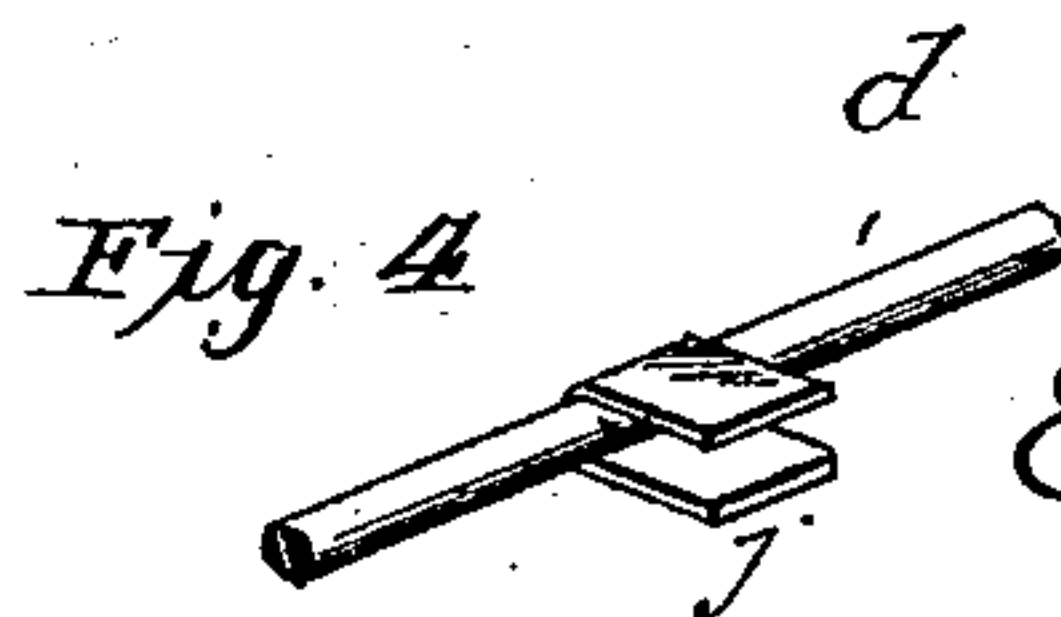
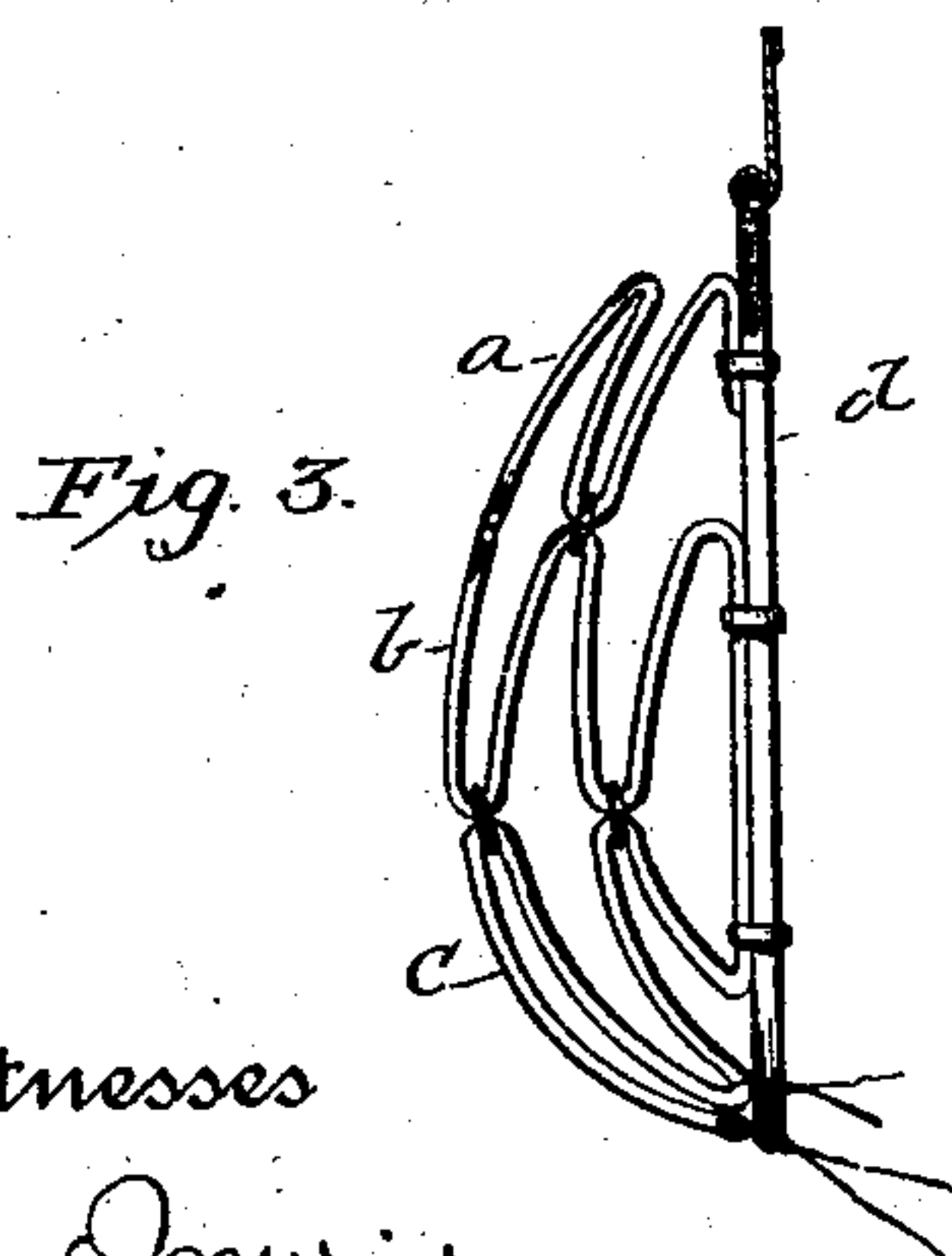
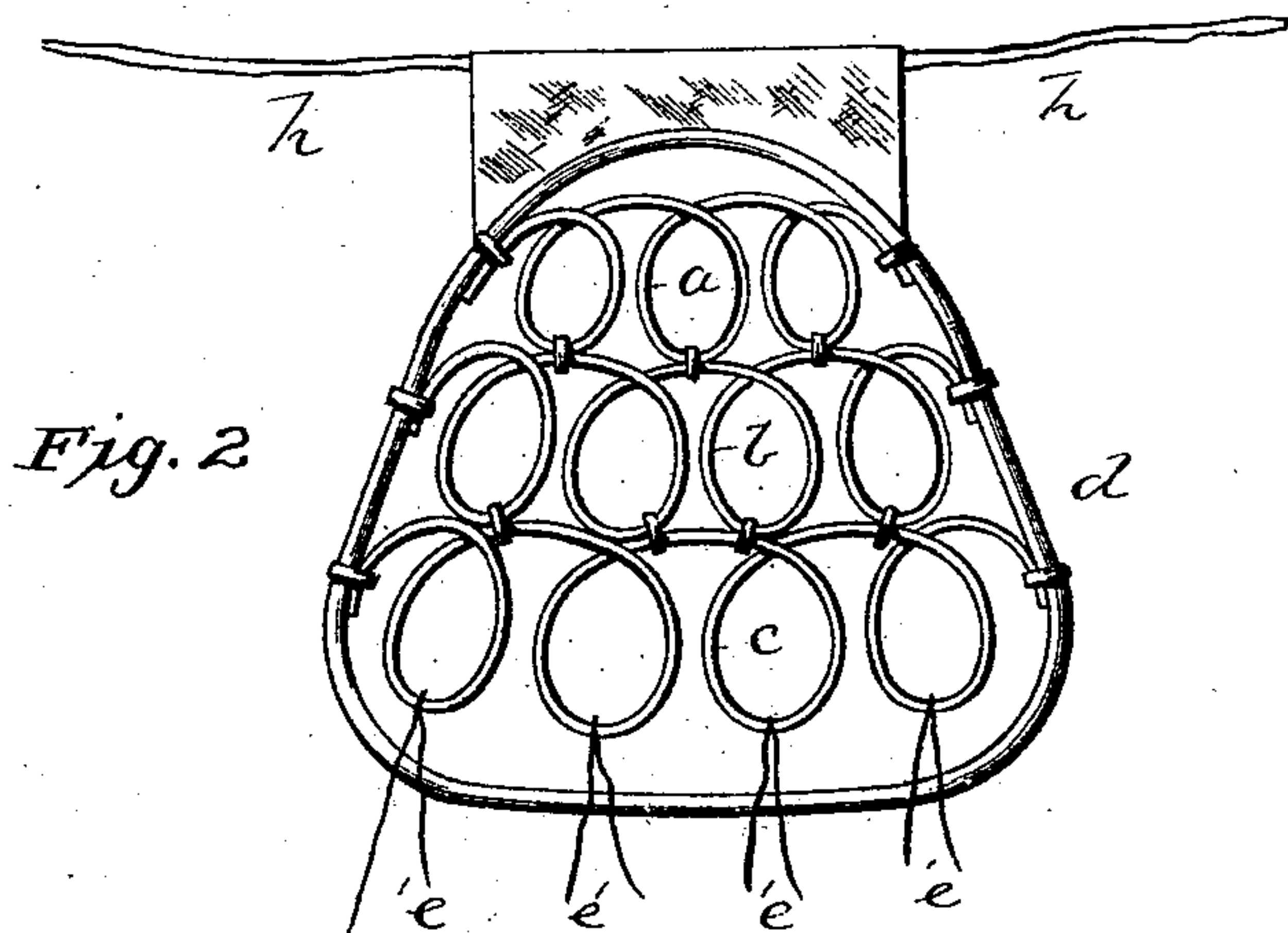
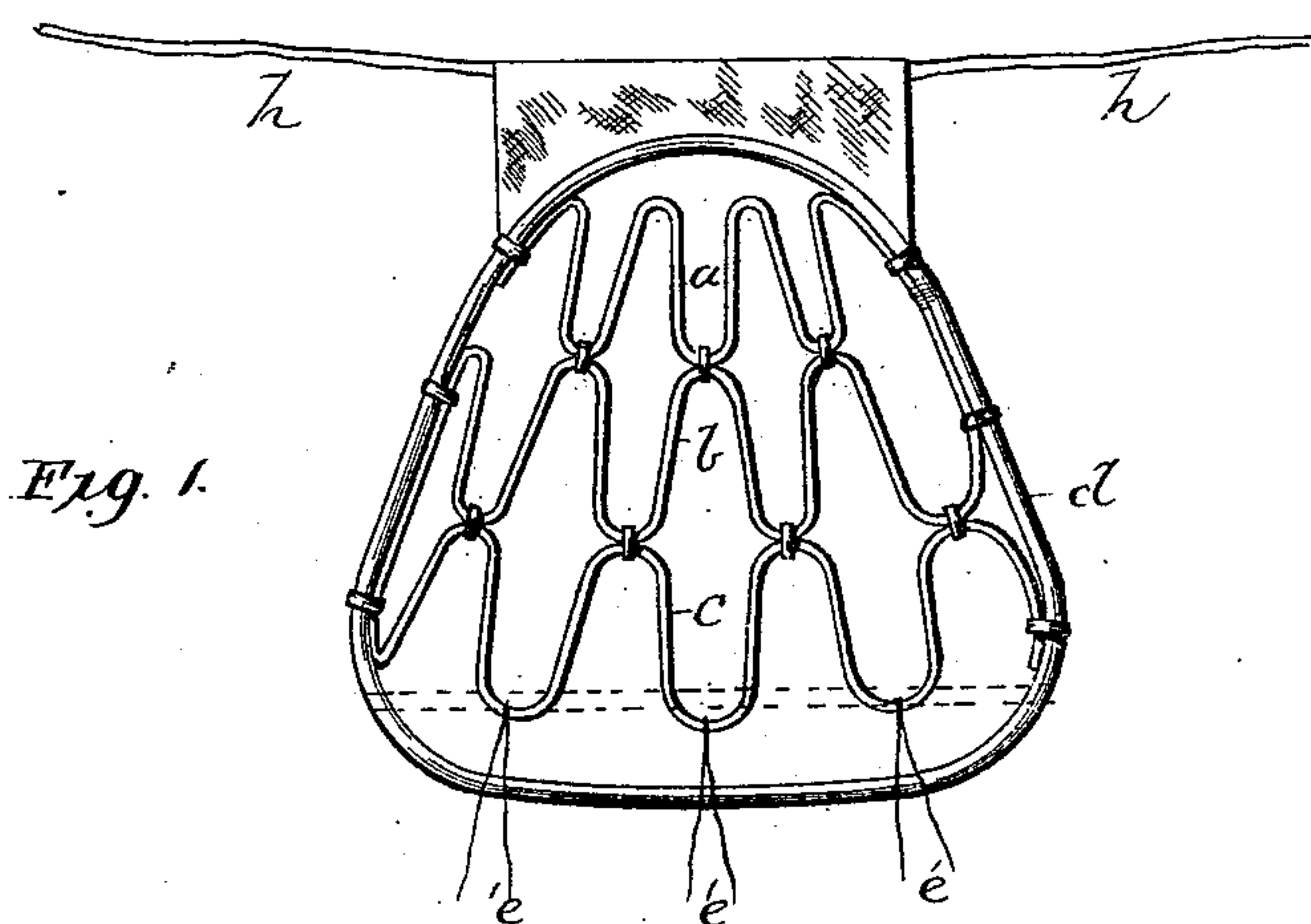


(No Model.)

E. CASE.  
BUSTLE.

No. 517,434.

Patented Apr. 3, 1894.



Witnesses  
John Murie  
Alex. Mahon

Estella Case  
Inventor  
By John L. Hyer  
Attorney



# UNITED STATES PATENT OFFICE.

ESTELLA CASE, OF NEW YORK, N. Y.

## BUSTLE.

SPECIFICATION forming part of Letters Patent No. 517,434, dated April 3, 1894.

Application filed October 6, 1893. Serial No. 487,310. (No model.)

*To all whom it may concern:*

Be it known that I, ESTELLA CASE, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Bustles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in a bustle; and the objects of my invention are, first to provide a bustle constructed of springs disposed in a spherical surface without the aid of a cloth covering to hold the springs in place; second to provide for the use of horizontal springs without the aid of a vertical spring or stay to hold said springs in position; and, third, to provide the means for adjusting the fullness of said bustle. I attain these objects by the means illustrated in the accompanying drawings in which—

Figure 1. is an elevation showing my bustle in which the springs are crimped, and also showing other proposed improvements. Fig. 2 is an elevation showing the springs coiled in flat coils instead of crimped. Fig. 3 is a vertical section of my bustle. Fig. 4 is a detail of the supporting frame of my bustle.

Similar letters refer to similar parts throughout the several views.

My invention consists of a rigid supporting frame *d*, Fig. 1, a number of horizontal springs *a*, *b*, *c*, comprising a series of loops, disposed in a spherical surface of sufficient length to be forced out in a curve as shown in Fig. 3, by spring *c*, and supporting frame *d*, said springs to be constructed of any firm elastic material, such as spring wire, guttapercha, rattan, or whalebone formed spirally or corrugated by crimping as shown in Fig. 1, or by coiling in flat coils as shown in Fig. 2, thus allowing them to contract when subjected to pressure.

My springs may be made separately or of one continuous length of material as shown in Fig. 1. I connect the adjoining parts of my springs in a number of places as shown by *i i i i i* in Figs. 1 and 2, to hold them in position and thus dispense with the use of a vertical spring or stay which would otherwise be needed. I prefer to use small metal clamps in making the said connections, but as it is evident that other means such as cloth, leather, rubber, or wire, might be used I do

not confine myself to that means. I also employ the same means for securing my springs to my supporting frame.

I prefer to construct my supporting frame of metal and solder or rivet the clamps in place ready to receive the edges of the springs as shown in Fig. 4, at *j*, thus making a stationary fastening for said springs, but a covered frame may be used which would prevent the fastenings slipping also bent wood or rattan in which case the clamps may be held in place by grooves being cut or pressed in the frame to receive the clamps.

In constructing my supporting frame I prefer an endless band, but it may end at the lower part of the sides of the bustle, tapes as shown by dotted lines in Fig. 1. I also provide the lower spring of my bustle with one or more tapes or cords as shown by *eee* Figs. 1, 2, and 3, to be used in tying the spring down to supporting frame *d*, as shown in Fig. 3, at *g, g, g*, thus reducing the fullness of the bustle and making it adjustable. I complete my bustle by adding waist-band *h, h*, and a covering of some light fabric.

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

1. As an improved article of manufacture, a bustle comprising an approximately circular supporting frame and a series of spring bows within said frame, secured to each other and to the frame, the said bows comprising a series of loops disposed in a spherical surface, the loops of the respective bows being secured together at their points of approximate contact, substantially as described.

2. As an improved article of manufacture, a bustle comprising an approximately circular supporting frame and a series of spring bows within said frame, secured to each other and to the frame, the said bows comprising a series of loops disposed in a spherical surface, the loops of the respective bows being secured together at their points of approximate contact, the lower series of loops having depending tapes, substantially as described.

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

ESTELLA CASE.

Witnesses:

L. LEWELLEN JOHNSON,  
GEO. W. MANKIN.