

No. 756,596.

PATENTED APR. 5, 1904.

E. M. DHALE.
DRESS OR CORSET SPRING.
APPLICATION FILED JULY 8, 1902.

NO MODEL.

Fig. 1

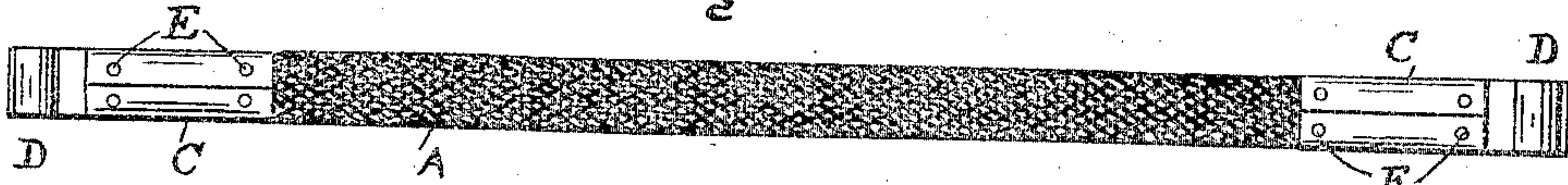


Fig. 2

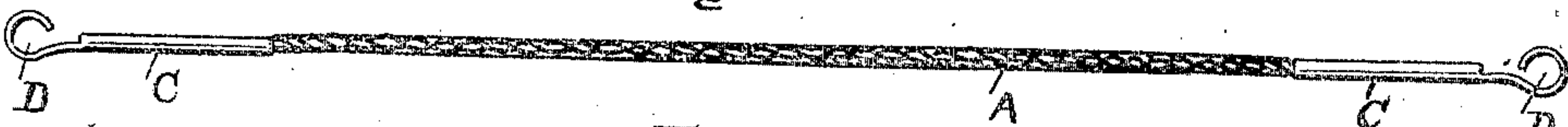


Fig. 3

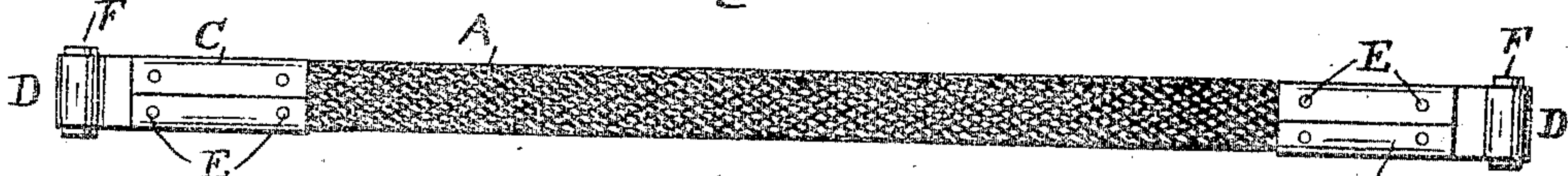


Fig. 4

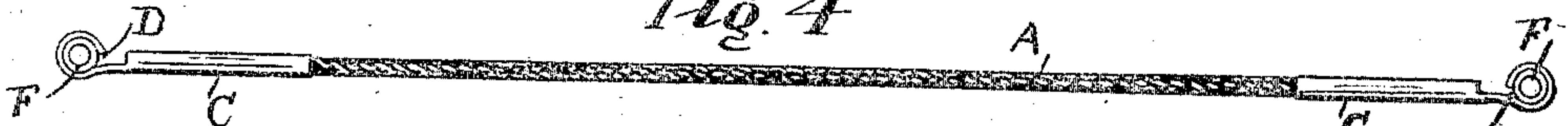


Fig. 5

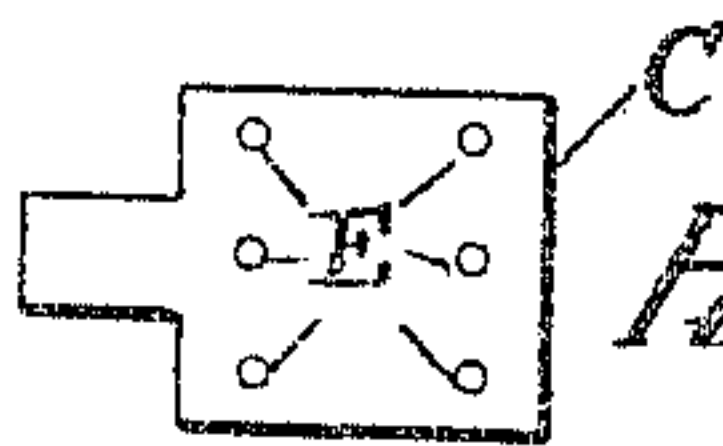


Fig. 6

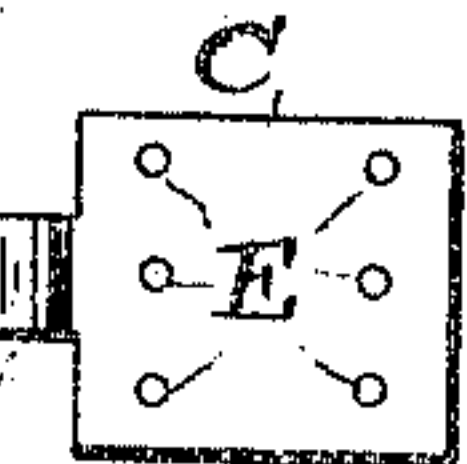


Fig. 7

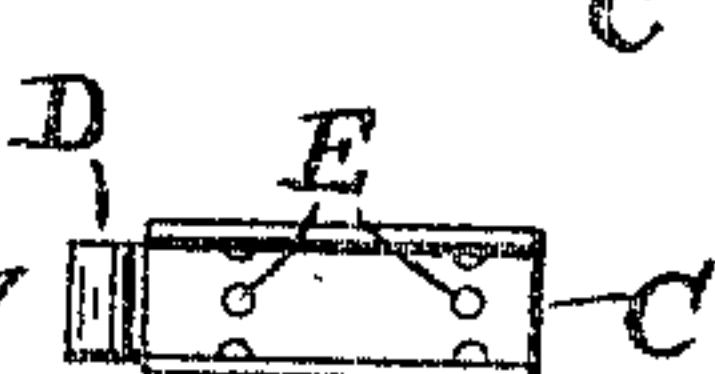


Fig. 8

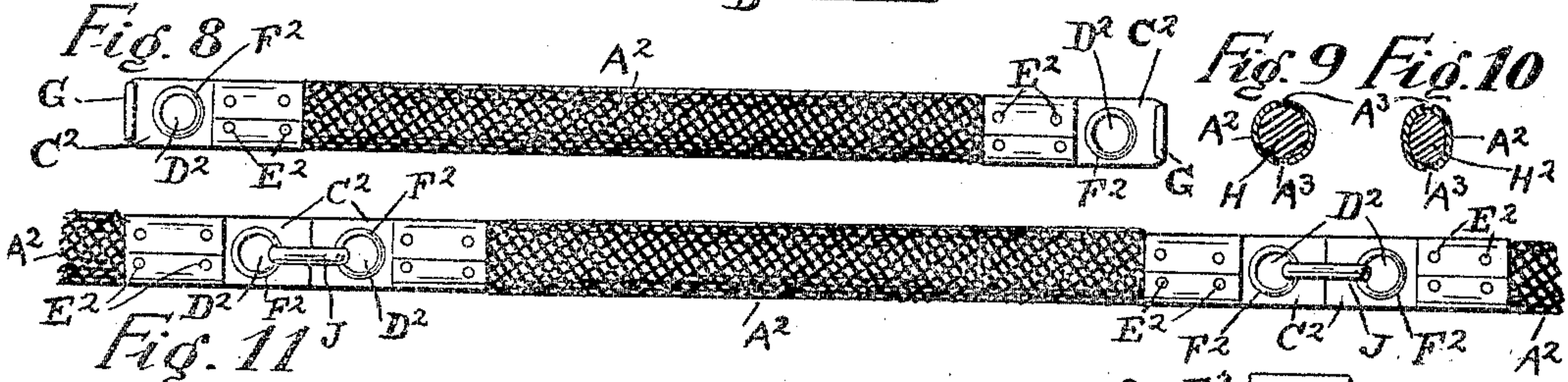


Fig. 11

Fig. 12

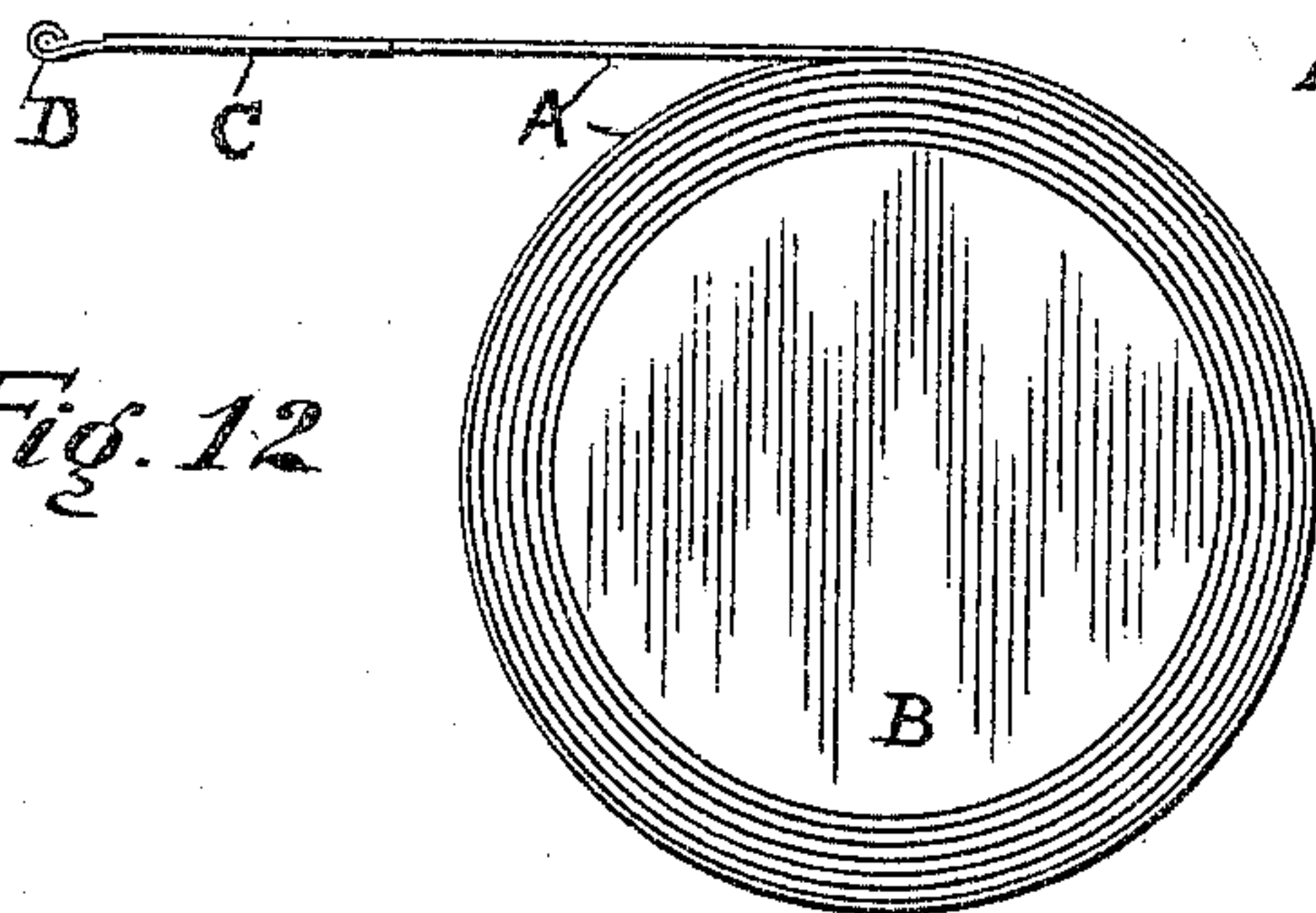


Fig. 13

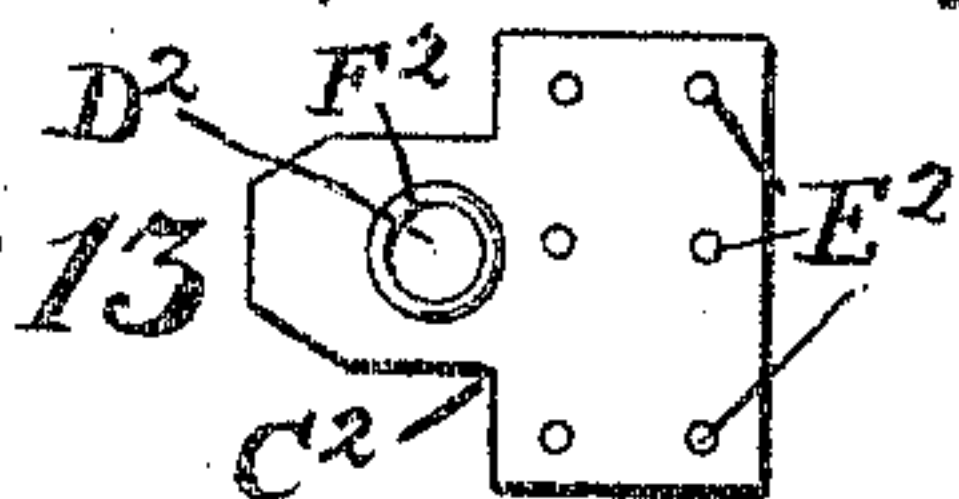


Fig. 14

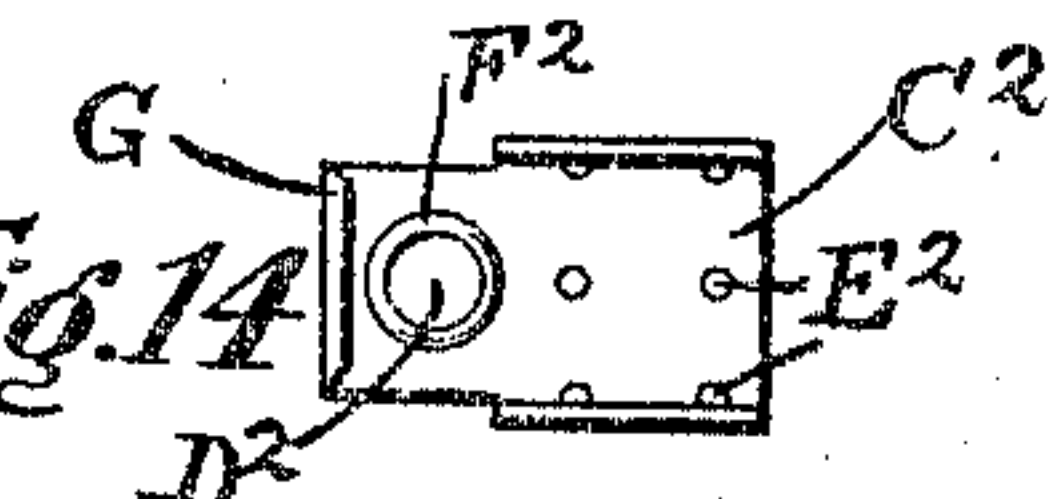
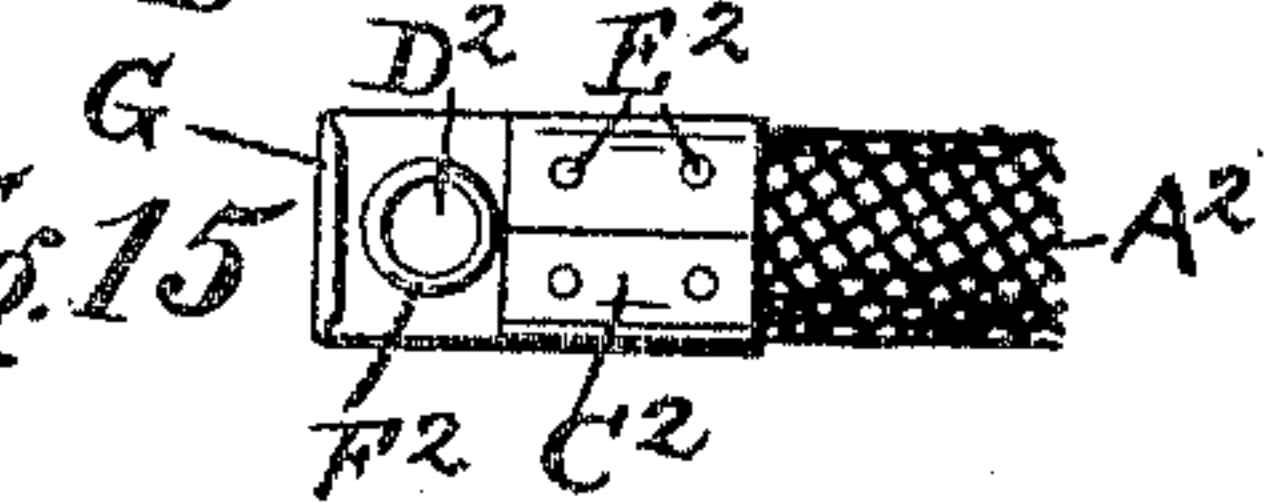


Fig. 15



WITNESSES:

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att'y

UNITED STATES PATENT OFFICE.

ELIZABETH M. DHALE, OF OAKLAND, CALIFORNIA.

DRESS OR CORSET SPRING.

SPECIFICATION forming part of Letters Patent No. 756,596, dated April 5, 1904.

Application filed July 8, 1902. Serial No. 114,812. (No model.)

To all whom it may concern:

Be it known that I, ELIZABETH M. DHALE, a citizen of the United States of America, and a resident of Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Dress or Corset Springs, of which the following is a specification.

This invention consists of a wire braid or web and mountings therefor primarily devised as a convenient means to impart a pliable elasticity to articles of ladies' apparel and to certain parts of garments in general.

The accompanying drawings, in which like reference characters indicate like parts in the several figures, are integral herewith as a medium of illustration.

Figures 1 and 2 are respectively a plan and an edge view showing a compressed or flattened form of my wire braid or tape adapted for use as a corset-stay and comprising end clips or mountings. Figs. 3 and 4 are similar views to Figs. 1 and 2 augmented by a more or less elongated eye inserted within each clip or end mounting. Figs. 5, 6, and 7 illustrate the development and formation of the clips shown in the preceding figures. Fig. 8 is a plan of a laterally-hinged tubular form of the invention, showing also a modified form of clip. Figs. 9 and 10 are cross-sections illustrating how this tubular form can be varied by the use of cores of different shapes. Fig. 11 illustrates a link to be used in my invention for connecting finished springs of either one of the forms shown herein. Fig. 12 is a side elevation illustrating the flattened form of my wire-spring web mounted upon a spool or roller. Figs. 13, 14, 15 illustrate the development and formation of the clip shown in Figs. 3 and 11.

Since completing my invention, I have become aware that somewhat similar means for the same purpose have heretofore been devised; but the fact that they have not received commercial approval speaks against their construction, convenience, and efficiency, all of which I believe my invention remedies. I shall therefore claim my device as an improvement on what already exists.

Having tested various constructions, forms, and materials of wire tapes and other metallic webs, I find that the most efficient form is a more or less flattened tubular web of closely and diagonally plaited or woven fine semi-elastic and yieldably flexible wire; but since my invention will be used for various inner and outer garments of ladies' apparel and parts thereof, to give spring and also protection from abrasion against the shoes to the bottoms of gentlemen's pantaloons, to impart what I might call a "pliant" and an "elastic" expansibility to the sleeves of various garments, both at their insertion and at the wrist, and also to the collars and margins of coats and pockets of all garments, likewise for the margins of hats and caps, both at the rim and at the crown, as well as at their conjunction, for the bifurcate or buttonhole ramifications of gentlemen's suspenders, for ladies' belts, and in every case where a wire braid or wire stiffener can be utilized, my wire web therefore will be of different transverse forms and dimensions and of course will be composed of wire of various grades and degrees of flexibility and elasticity.

The metallic web illustrated in Figs. 1, 2, 3, 4, 8, 11, and 15, necessarily for drawings, shows meshes or intervening spaces between the wires; but it is intended for the most part that my wire web will be so closely woven as to have scarcely any appreciable meshes or interstices at all. This compact interlacing of wires of the proper grade, flexibility, and elasticity and on account of their capability to slide upon and against each other both transversely and longitudinally each upon each admits of sufficient lateral yieldability and elasticity for all purposes for which each particular grade of web is constructed.

For the compact commercial packing and convenience in retailing of my tapes and braids except when made in distinctly tubular form I provide them of indefinite lengths wound web-like upon spools or rollers, as illustrated by Fig. 12; but when the form and comparative rigidity demand it I furnish them in sections of proper lengths and conformations.

The letter A in the drawings indicates the corset-stay form of web, and B, Fig. 12, the roller upon which it is coiled.

A² designates the web of tubular form.

5 To secrete the sharp wire ends of sections of my tape or braid and to provide desirable means of securing the webs in place functionally, I supply the clips or mountings illustrated in all figures of the drawings. These
10 mountings are seen in the drawings as hook or eyelet tips and are therein marked C C². Although I have shown them only as tips, yet it is to be understood that I can dispose them centrally or at intervals along any section of
15 tape for the same securing or other purpose, in which case, of course, the mounting would assume a correspondingly-modified form, but constructed on the same principle. As shown or suggested by the developments, Figs. 5, 6,
20 7 and 13, 14, 15, the mountings C C² consist each of a centrally-shanked or somewhat T-shaped piece of thin flexible metallic plate whose shank extends forward substantially in the plane of one side when the tip is completed
25 and is rolled up or perforated to provide a retaining-aperture D D², either lateral or transverse, and the cross portion of which is impressed with any desired number of center punchings E E². These center punchings are
30 for the convenience of rapidly mounting severed portions of the tape or web.

The development, formation, and application of the mountings C are indicated in Figs. 1 to 7, inclusive, thus: Fig. 5 illustrates the
35 T-shaped plate (marked C) with its shank and center-punched cross-piece both outspread or flattened. Fig. 6 (and also Fig. 7) shows the shank of this plate curved, so as to form the laterally-opened part D, (seen in plan in Figs.
40 1 and 3 and in elevation in Figs. 2 and 4,) and Fig. 7 illustrates the sides of the center-punched cross portion turned up ready to clasp and compress upon a section of tape or web, as is seen in its completed aspect illus-
45 trated in Figs. 1, 2, 3, 4, and 12. In Figs. 3 and 4 a more or less elongated eye or bead F is inserted within the edgewise opening D of clip C, in which a slightly-depressed portion of the said eye or bead is more or less loosely
50 held to allow the swiveling of these parts, and thus adapt them to purposes of utility and of ornamentation as well. This clip C, with its inserted eye F, is quite suitable and will be claimed for both the webs A and A², although
55 to avoid burdening the drawings with an unnecessary number of figures I have shown on the web A² only the modified form of mounting C², to which a brief reference will now be made.

50 Figs. 13, 14, 15, and also Figs. 8 and 11 illustrate the above-mentioned modified clip or mounting C², of which Fig. 13 shows its full development. This development is identical to that illustrated for clip C by Figs. 5, 6, and
65 7, except that in the one case we have the shank

of the clip rolled to form an endwise aperture D, while in the other the aperture D² is transverse and punched through the shank. As in clip C, the aperture D² of clip C² is made to hold an inserted eye F², preferably swiv-
70 eling, as the eye F, for similar purposes. Fig. 14 shows this clip C² with its edges turned up preparatory to applying it to the web A or A². Figs. 8, 11, and 15 show its application.
75

The webs A A² and clips C C² (including their inserted eyes or beads F F²) can be furnished in highly-polished and plated grades for exterior uses and for uses other than as
80 garment-stiffeners. The clips when furnished separate are properly bent up at the edges and previously center-punched, so that all the retail vender or user has to do is to hammer
85 into place the turned-up portions, whereupon the center-punchings force asunder the interlaced wires of the web and embed themselves therebetween, thus constituting an immovable
90 mounting. As shown for C² in Figs. 8, 11, 14, and 15, these clips may be fortified indefinitely by flanges G and ornamented by other
95 impressions.

By preference the tubular web A² is made of two thicknesses of the single web A, which are flexibly joined or hinged at the edges by
any suitable means—for instance, by single
95 wires A³ passing through meshes or loops laterally projecting from each thickness of the web. This flexible joint admits of the insertion of differently-shaped cores, such as H
H², Figs. 9 and 10, thereby varying the form
100 of the web transversely to suit any particular case.

For uniting mounted sections of my metallic web A or A², I furnish the link marked
J in Fig. 11.
105

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a device of the kind described, a severable wire braid and centrally-punched
110 mountings inclosing the opposite ends of the sections, the free ends of the mountings having a flange forming an interlocking means for the contiguous sections.

2. The combination, in a device of the kind
115 described, of a wire braid, an apertured mounting therefor, and an inserted eye swiveling within the mounting's aperture; substantially as set forth.

3. In a device of the kind described, the
120 combination with a wire braid, and a mounting therefor comprising a plate having flanges arranged to engage the braid and an outwardly-extended portion having a retaining-aperture, of a link passing through said aperture and
125 adapted to connect sections of said braid together; substantially as set forth.

4. In a device of the kind described, a severable wire braid and apertured mountings
therefor, combined with swiveling eyes in-
130

serted in the mounting's apertures, and one or more links joining one section of braid to another through the eyes in said mountings; substantially as set forth.

- 5 5. A tubular wire braid composed of sections flexibly joined together at their sides and inclosing a core of desired shape; substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

E. M. DHALE. [L. s.]

Witnesses:

A. H. STE. MARIE,
CHAS. T. STANLEY.