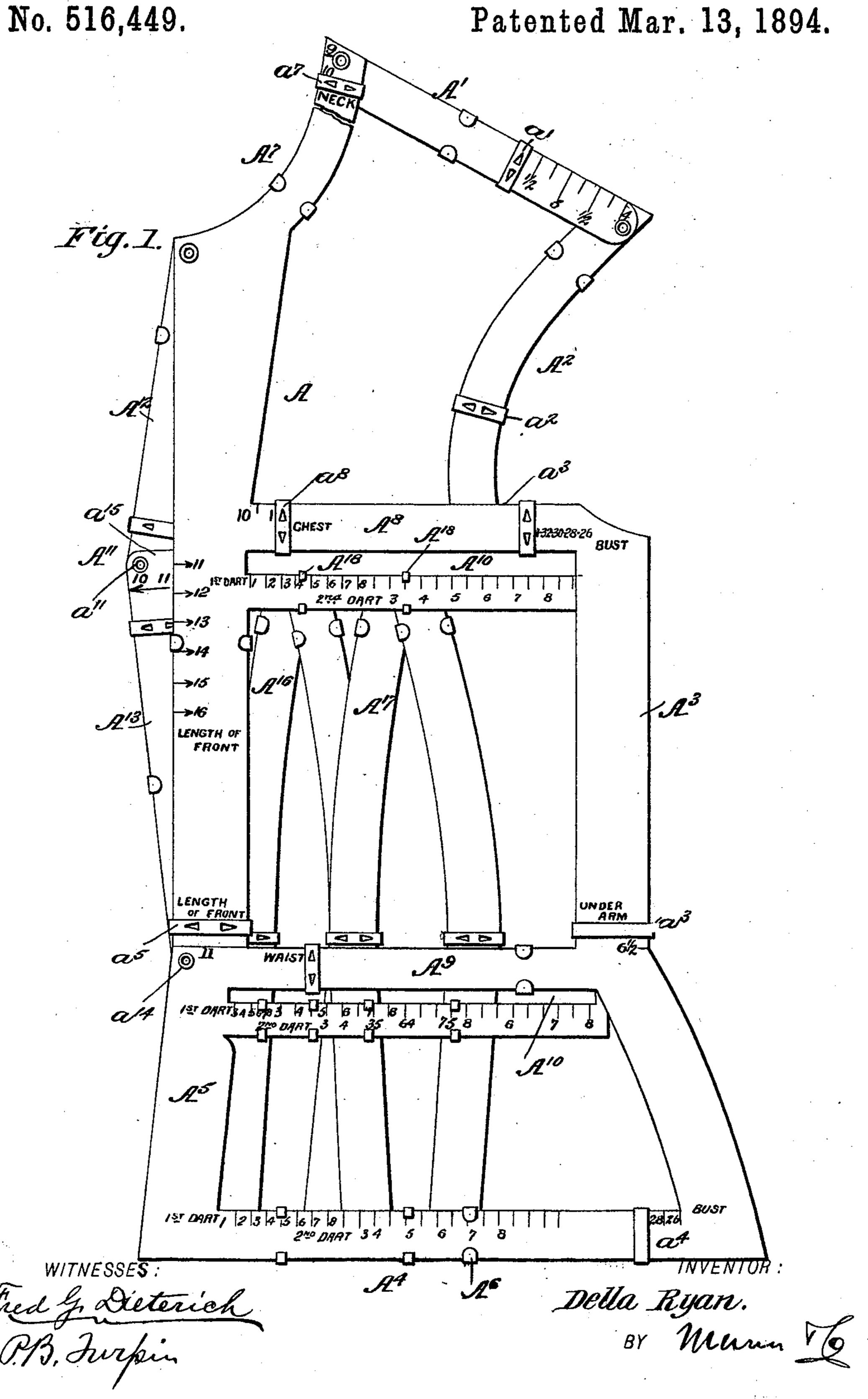
### D. RYAN.

#### PATTERN FOR DRAFTING GARMENTS.

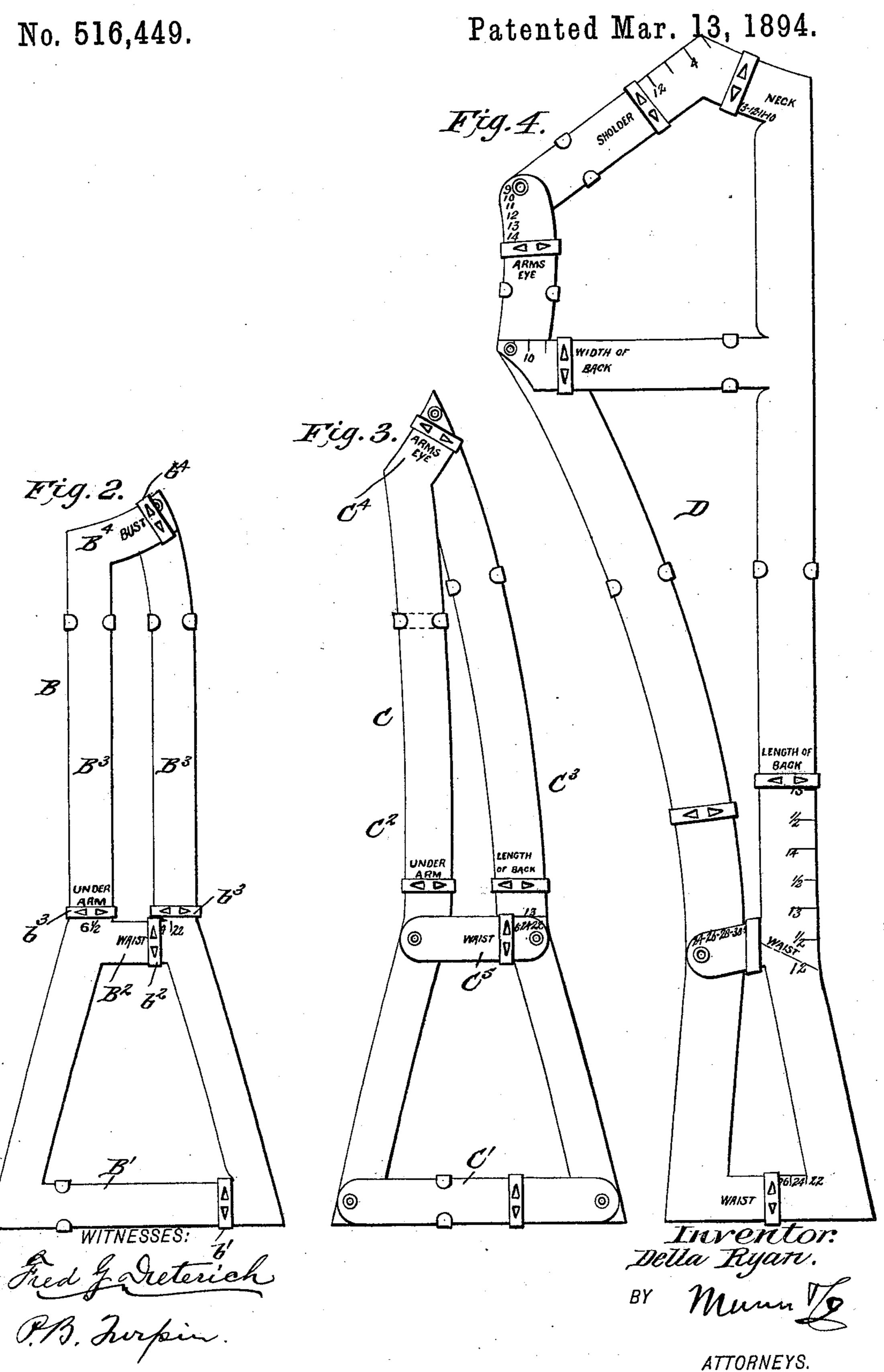


ATTORNEYS

(No Model.)

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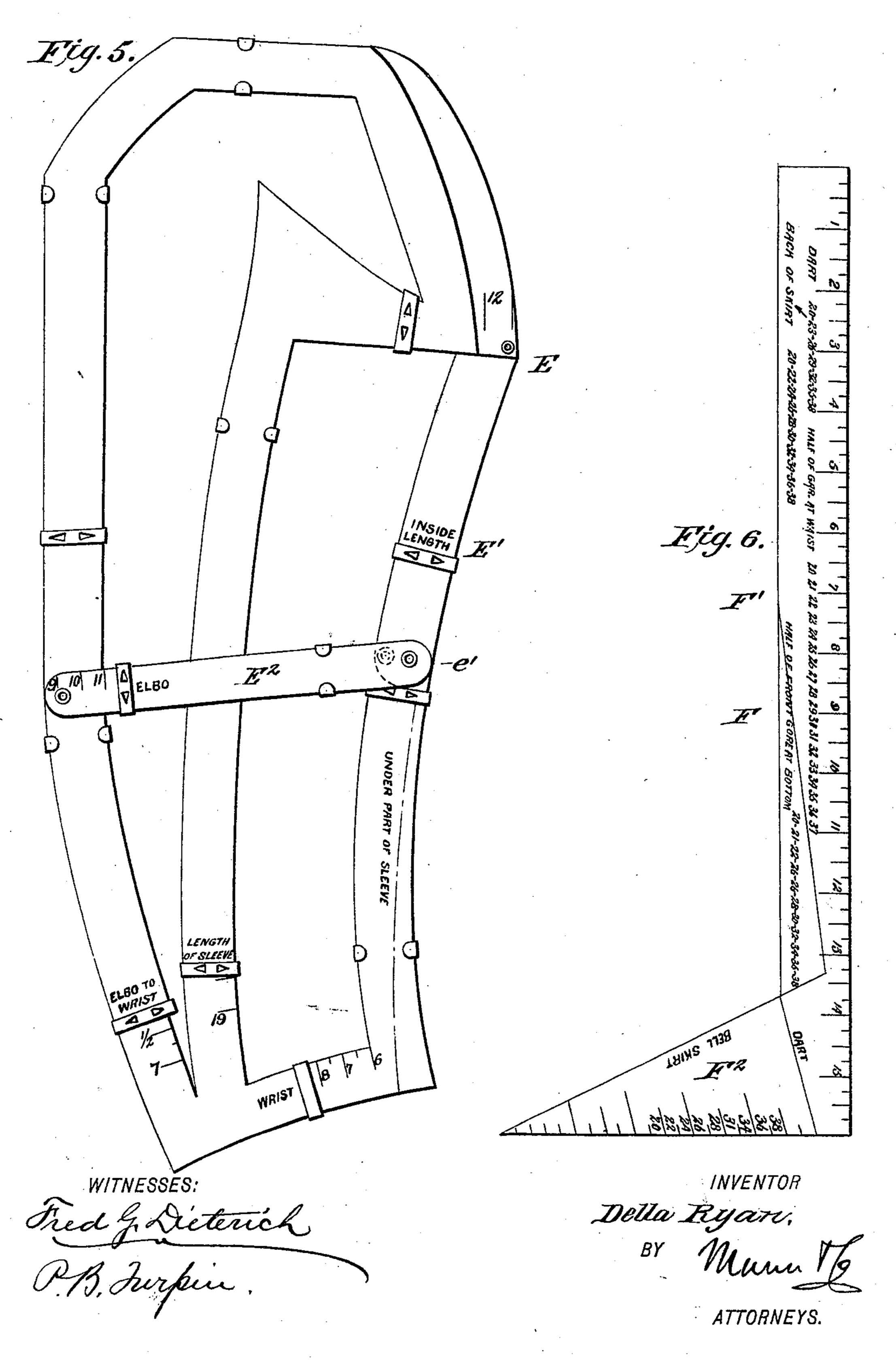
### PATTERN FOR DRAFTING GARMENTS.



# D. RYAN. PATTERN FOR DRAFTING GARMENTS.

No. 516,449.

Patented Mar. 13, 1894.



## United States Patent Office.

DELLA RYAN, OF OWOSSO, MICHIGAN.

### PATTERN FOR DRAFTING GARMENTS.

SPECIFICATION forming part of Letters Patent No. 516,449, dated March 13, 1894.

Application filed February 6, 1893. Serial No. 461,286. (No model.)

To all whom it may concern:

Be it known that I, DELLA RYAN, of Owosso, in the county of Shiawassee and State of Michigan, have invented a new and useful Improve-5 ment in Patterns for Drafting Garments, of which the following is a specification.

This invention is an improvement in that class of patterns formed of a number of pat-

terns or parts each of which is adjustable so 10 it may be adjusted to the measures of the part it represents and the invention seeks among other improvements to furnish a simple, novel construction capable of convenient enlargement or reduction in the direction of all meas-15 ures, and the invention consists in the novel construction, combination and arrangement

of parts as will be hereinafter described and pointed out in the claims.

In the drawings—Figure 1 is a face view of 20 the front piece or pattern. Fig. 2 is a face view of the under arm piece or pattern. Fig. 3 is a face view of the side form piece. Fig. 4 is a face view of the back piece or pattern. Fig. 5 is a face view of the sleeve piece or pat-25 tern and Fig. 6 is a face view of the skirt

piece or pattern.

The front piece A is formed with the top or shoulder bar A' which is formed in the sections having a sliding connection at a', the arm 30 piece A<sup>2</sup> formed in the sections having a sliding connection at  $a^2$ , and the under arm bar A<sup>3</sup> formed in the sections having a sliding connection at  $a^3$ . At its lower end the lower section of the bar A<sup>3</sup> has an arm a<sup>4</sup> which 35 forms one section of the base A4 the other section of said base A<sup>4</sup> being extended from the opposite side piece A<sup>5</sup> and the two sections having a sliding joint or connections at A<sup>6</sup> as shown. The side A<sup>5</sup> is formed in sections 40 having a sliding connection at  $a^5$  and the upper section of said side A<sup>5</sup> connects with one section of the neck piece A<sup>7</sup> the other section of which connects with the shoulder and both said neck pieces having an adjustable or slid-45 ing connection at  $a^7$ . The opposite side parts or pieces are joined by two connections A<sup>8</sup> and A9 which may be termed respectively the bust and waist connections. The bust connection is formed in sections connected at  $a^8$ 50 to slide and the lower end of the arm piece A2 is provided at its lower end with a piece  $a^3$ having a sliding connection with the part A<sup>8</sup>.

The parts  $A^8$  and  $A^9$  are formed in upper and lower sections separated by longitudinal slots or openings  $A^{10}$  and upon the lower ones of 55 said sections are produced graduations and one or the other of the other sliding parts or

sections are graduated as shown.

To the side piece A<sup>5</sup> is connected the improved chest piece A<sup>11</sup> which is formed in two 60 parts  $A^{12}$  and  $A^{13}$  which are pivotally connected at their meeting ends to each other at  $a^{11}$  and at their opposite ends to the piece  $A^5$ at  $A^{14}$   $A^{14}$ . At their joint  $a^{11}$  one of the parts is provided with a transversely elongated 65 portion  $A^{15}$  which is graduated and is registered by the front edge of the side piece  $A^5$ . Each of the parts  $A^{12}$  and  $A^{13}$  is formed in sections having adjustable or sliding connections. It will be noticed that the point of the 70 improved chest always comes half way from neck to waist.

The dart pieces  $A^{16}$  and  $A^{17}$  are formed in pairs their upper members being pivoted together and having a sliding connection at  $A^{18}$  75 with the bust connection. The upper members of the darts are formed in sections connected to slide upon each other and at their lower ends the upper members are pivoted to the lower members which latter slide upon 80 the waist connection and end piece as shown. It will be noticed that the darts may be adjusted sidewise at their ends and may be spread or contracted between their ends to secure any desired form or size of dart desired. 85

It will be noticed that the front piece is entirely smooth on all outside edges in all its adjustments so that when set it can be placed upon the goods and traced entirely around, there being no projecting parts to require the 90 tracer to be lifted.

The under arm piece B shown in Fig. 2 has the base B' formed in sections having connections at b', the intermediate connection  $B^2$ having a sliding connection at  $b^2$ , the uprights 95  $B^3$  having sliding connections at  $b^3$  and the curved top under arm piece B4 formed in sections having a sliding connection at  $b^4$ .

The curved piece or side body pattern C shown in Fig. 3 has the base C', the sides C<sup>2</sup> 1co C<sup>3</sup>, the curved top C<sup>4</sup> and the intermediate connection C<sup>5</sup> the several parts being formed in sections having sliding joints or connections.

The back piece or pattern D shown in Fig. 4 is formed of the several pieces having sliding joints or connections so the pattern can be adjusted in all directions to suit the shape desired.

The pattern E for the sleeve piece is formed of the several pieces having sliding connections and the slide piece E' is formed in two members each being adjustable longitudinally and being pivoted together at e' at their meeting ends where they join the cross or connecting bar E<sup>2</sup> at the elbow joint. This pivot e' and the sliding bar E<sup>2</sup> permit the pattern to be expanded or contracted at this middle point independent of the transverse adjustment of its ends.

The pattern F for the skirt is formed with the upright piece F' and the base piece F<sup>2</sup> extended laterally and is provided with the dart marks and graduations as shown.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

1. An adjustable pattern, for the front piece provided at its front edge with the adjustable 25 chest piece composed of the sections connected together pivotally at their meeting ends and having their opposite ends connected pivotally with the body of the pattern substantially as set forth.

2. An adjustable pattern for the front piece provided at its front edge with the chest piece formed in upper and lower members pivoted together at their meeting ends and at their outer ends to the pattern and each formed of 35 sections adjustable longitudinally substantially as set forth.

DELLA RYAN.

Witnesses:

NATHAME BALL, ADÈLE BALL.