No. 812,874. PATENTED FEB. 20, 1906.

E. L. PHELPS.

GARMENT DESIGNING CURVE RULE.

APPLICATION FILED NOV. 10, 1904.

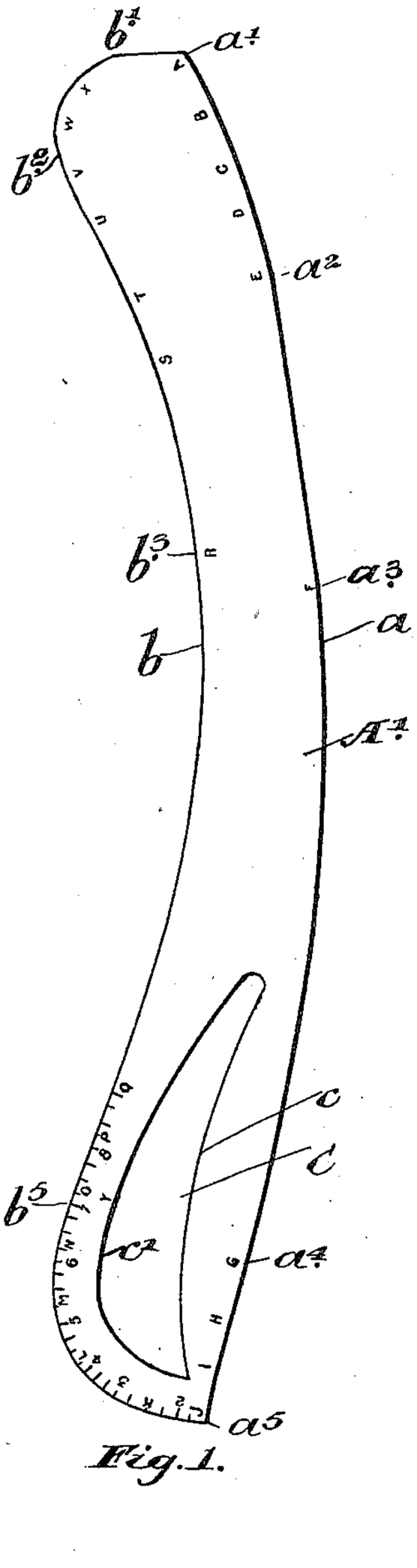

Fig. 1.

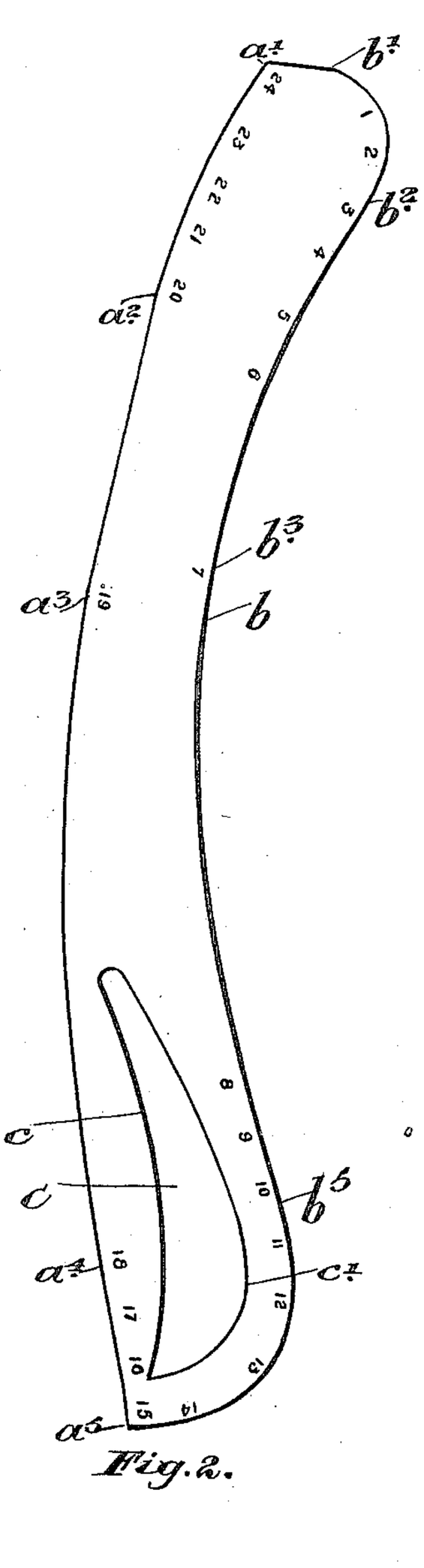

Fig. 2.

Witnesses.
H. V. S. Young
[illegible] Sheffield

Inventor.
E. L. Phelps.
by Fred. B. Fetherstonhaugh Atty.

UNITED STATES PATENT OFFICE.

ERNEST LESLIE PHELPS, OF TORONTO, CANADA.

GARMENT-DESIGNING CURVE-RULE.

No. 812,874. Specification of Letters Patent Patented Feb. 20, 1906.

Application filed November 10, 1904. Serial No. 232,152.

To all whom it may concern:

Be it known that I, ERNEST LESLIE PHELPS, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Garment-Designing Curve-Rules, of which the following is a specification.

My invention relates to improvements in garment-designing curve-rules; and the object of the invention is to design a curve-rule the different parts of which may be utilized to draw the proper shapes for the patterns of any and all garments, whether for man, woman, or child—that is, for different sizes and shapes—with equal facility; and it consists, essentially, of a curve-rule having one edge formed beginning at the smaller end with a curve, which extends into a reverse curve almost straight and then extends into a simple curve, flatter than the first curve mentioned, and then into a reverse simple curve, making a double compound curve from end to end, and the other edge of a straight portion from which extends a quick curve, which passes onwardly into a flatter curve ending in a reverse curve, thus forming a compound curve, which ends at the lower end in a simple curve ending at the opposite side, thereby forming from the top straight portion to the bottom two compound curves, the inner portions of which are comparatively flat curves, and a central opening formed of two simple curves meeting at one end at a point and at the opposite end in a curve, the end portions of the rule on both sides being provided with index-points and the flat curves in the center on each side being provided with index-points intermediate of their length, the said index-points being arranged in rotation starting at one end and passing down along one side and then up the other side, and the bottom end of the rule being preferably divided on the swiftly-curved side into inches, as hereinafter more particularly explained.

Figure 1 is a plan view of my curve-rule, showing one side thereof. Fig. 2 is a plan view showing the opposite side.

In the drawings like letters of reference indicate corresponding parts in each figure.

A′ is the rule. It will be noticed that the rule A′ on one edge a and from the point a' to the point a^2 is formed of a simple curve rather flat, and from the point a^2 to the point a^3 of a simple curve very flat and slightly reversed, making actually a compound curve from a' to a^3. From a^3 to a^4 I form the rule with a comparatively flat curve and from a^4 to a^5 with a comparatively flat reverse curve, thereby forming from a^3 to a^5 a flat compound curve. From the point a' to the point b' of the opposite edge b is formed a straight portion. From the point b' to the point b^2 is formed a quick curve, and from the point b^2 to the point b^3 is formed a moderately-flat curve, and from the point b^3 to the point b^5 a quick curve. One side from a to a^2 the rule is preferably indexed at desired distances apart, as follows: A B C D E. At the point a^3 the index F is preferably provided. From the point a^4 to the point a^5 the indexes G H I J are provided, and from the point a^5 to the point b^5 the indexes K L M N O are provided and the indexes P and Q past this point. At the point intermediate of the length of the curve from b^2 to b^3 an index R is provided, and approaching the point b^2 and extending to the point b' the indexes S T U V W X are provided at desired distances apart. From the point a^5 to a point past the point b^5 on the side b the rule is further indexed off into inches and parts of inches. The opposite side of the rule is indexed at exactly the same points, but instead of being lettered the index-points are numbered from "1" to "24."

C is an opening, one side of which is formed of a simple curve c and the opposite side of a simple curve c', ending in a curve c^2. The curve c', especially at the bottom, is designed for cutting the armhole in garments.

The different lengths of curves necessary in designing the garment are indicated by the distances from one index-point to another. This of course is explained in the book of instructions, for which I am applying for a copyright.

Such a rule as I describe and which has been the subject of years of study on my part I find in practice will serve to lay out the pattern for any garment, whether for man, woman, or child.

What I claim as my invention is—

1. A curve-rule having one edge formed with an outward bend made up from end to end of two flat compound curves and the opposite edge formed at one end with a straight portion and a continuing comparatively quick curve and the opposite end of a comparatively quick curve, both of which curves are joined by a comparatively flat curve having an inward bend as and for the purpose specified.

2. A curve-rule having one edge formed with an outward-curved bend made up from end to end of two flat compound curves and the opposite edge formed at one end with a straight portion and a continuing comparatively quick curve and the opposite end of a comparatively quick curve, both of which curves are joined by a comparatively flat curve having an inward bend, both edges being provided with indexing-points at and toward each end at desired distances apart on both sides of the rule and intermediate indexing-points, one near each edge and on both sides of the rule as and for the purpose specified.

3. A curve-rule having one edge formed with an outward bend made up from end to end of two flat compound curves and the opposite edge formed at one end with a straight portion and a continuing comparatively quick curve and the opposite end of a comparatively quick curve, both of which curves are joined by a comparatively flat curve having an inward bend and an opening at the larger end of the rule formed of two simple curves meeting at the outer end in a point and having the opposite end rounded as and for the purpose specified.

ERNEST LESLIE PHELPS.

Witnesses:
B. BOYD,
C. B. SHEFFIELD.