Feb. 9, 1937. L. E. PILLA 2,070,410

EFFICIENCY GRADED PATTERN

Filed July 15, 1935 3 Sheets-Sheet 1

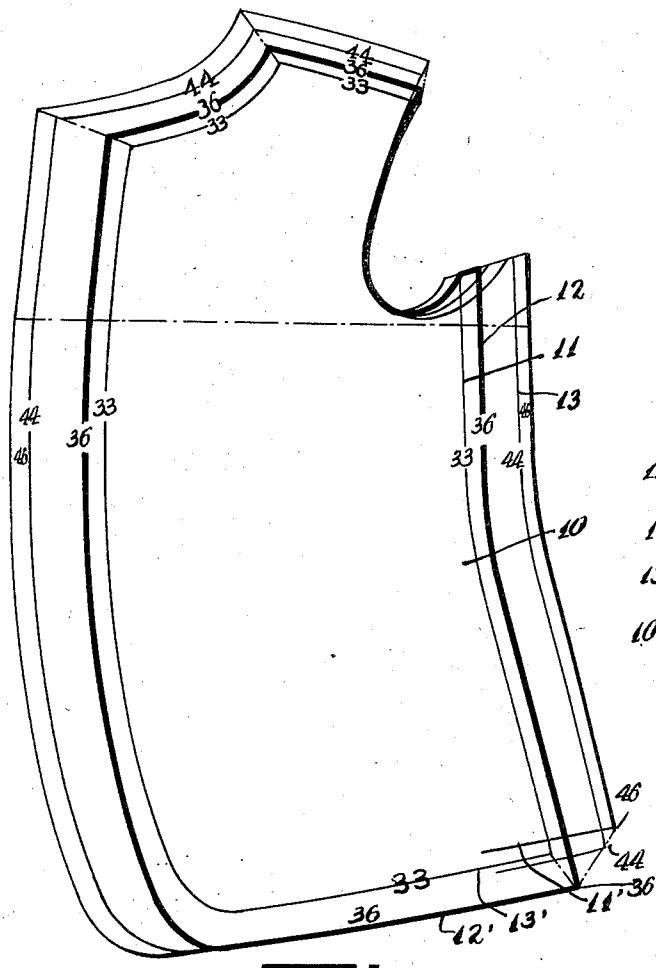


Fig. 1

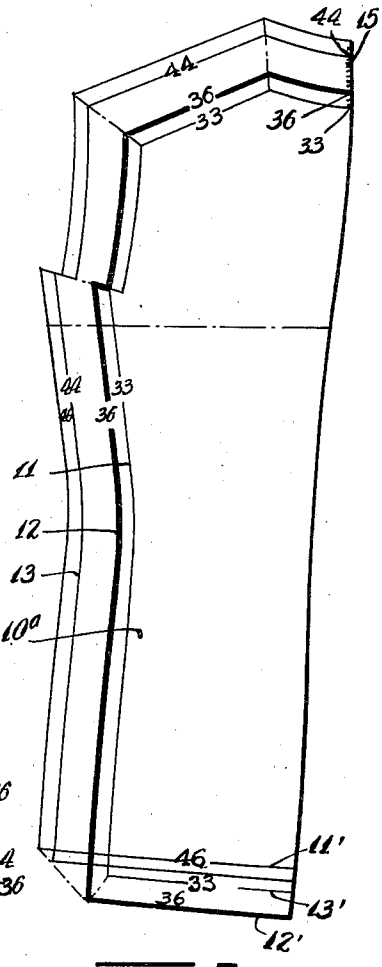


Fig. 2

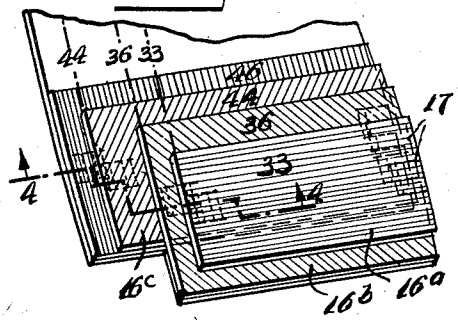


Fig. 3

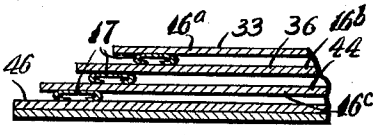


Fig. 4

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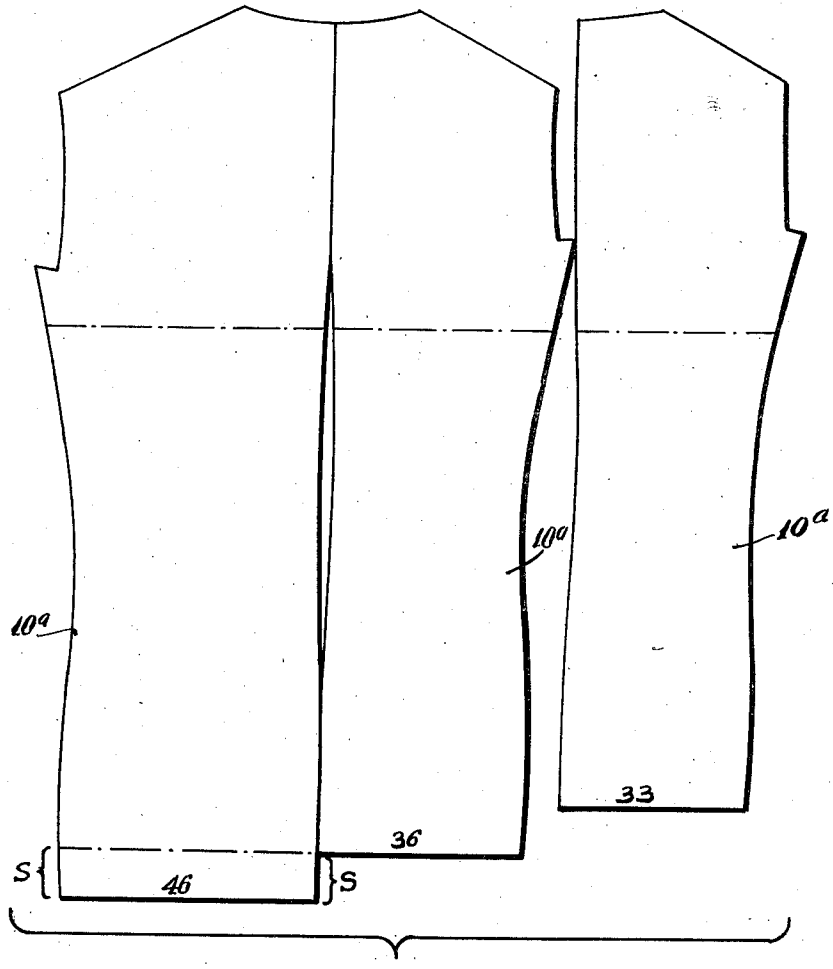


Fig. 5.

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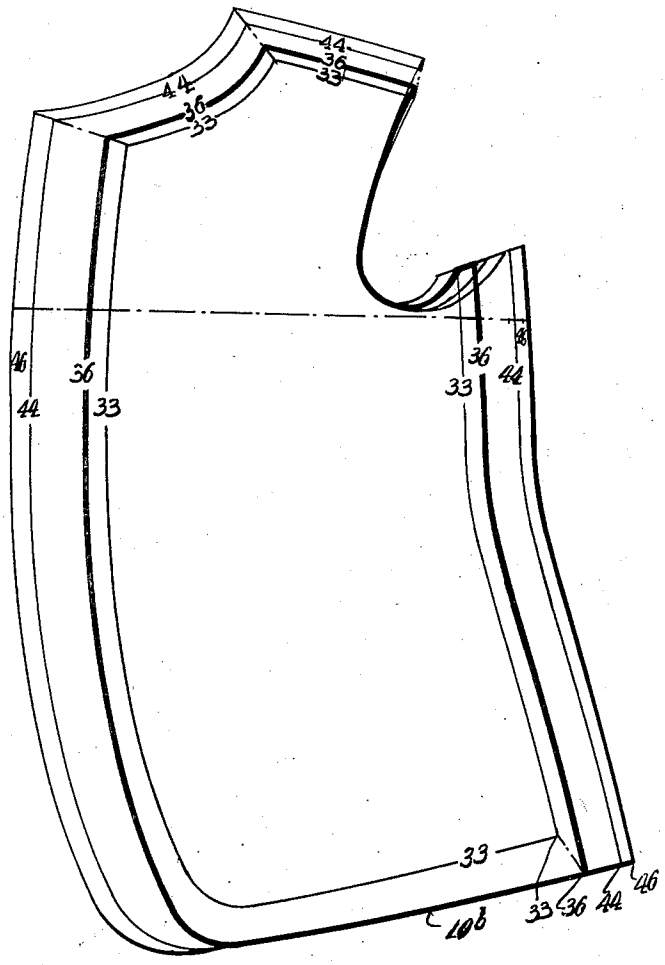


Fig. 6.

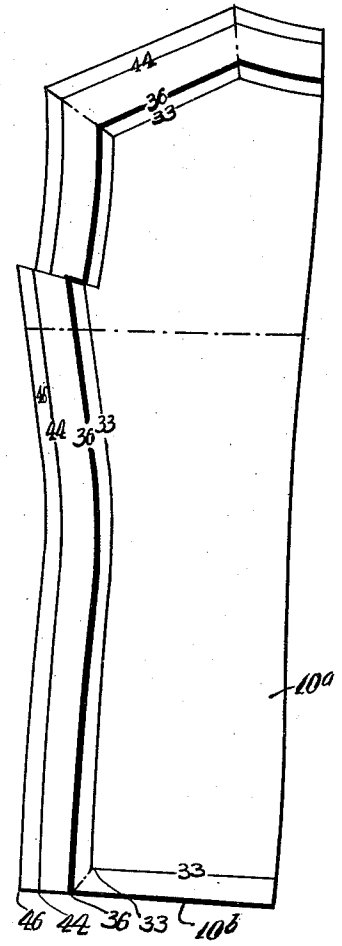


Fig. 7.

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UNITED STATES PATENT OFFICE

2,070,410

EFFICIENCY GRADED PATTERN

Lucian E. Pilla, New York, N. Y.

Application July 15, 1935, Serial No. 31,381

3 Claims. (Cl. 33—12)

This invention relates to new and useful improvements in graded patterns for men's, ladies' and military style garments.

The invention has for an object the construction of an article as mentioned which is characterized by its ability to save cloth material when compared with present day similar patterns.

It is customary to construct graded patterns which consist of a pattern with a plurality of lines printed along the sides and top thereof to indicate pattern pieces of different sizes. In these prior constructions it is customary to use a common bottom side for each of the different pattern sizes. Thus, the lengths of the pattern pieces are not graded and, consequently, during the manufacture of garments of different lengths and designs, it is necessary that after the cloth pieces have been cut from the pattern that additional portions be cut off the bottom of the cloth pieces in order to produce the correct fitting garment and the removed portion is wasted.

This invention contemplates grading bottom sides of the patterns in addition to the present grading. In order to grade the bottom sides of pattern pieces it is necessary that a plurality of lines be inscribed along the bottom edges, but arranged according to design rather than according to size. Thus, a size 33 may be located between a size 36 and a size 44. Different designed clothes take a different shaped piece of material, hence, a size 33 suit of one design may have a longer coat than a size 44 suit of a different design, and the cutting line of the size 44 suit would precede the line of the size 33 suit on the lower edge of the pattern, while the other size lines may come in sequence. At the sides and top the different sizes will be in sequence, but at the bottom this rule is not true. It is for this latter reason that heretofore the bottom edges of the pattern pieces are not graded.

As a further object of this invention it is proposed to provide a plurality of superimposed differently colored pieces detachably mounted upon the bottom portion of the pattern piece to indicate the contour of different sizes, the top pieces being removable to fully expose the lower pieces.

Another object of the invention is the contruction of a device as described which is simple and durable and which may be manufactured and sold at a reasonable cost.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

Fig. 1 is an elevational view of a pattern piece with grading according to this invention.

Fig. 2 is an elevational view of a fragmentary portion of another pattern piece with grading according to this invention.

Fig. 3 is a perspective view of the lower portion of a pattern piece graded according to this invention.

Fig. 4 is a fragmentary enlarged sectional view taken on the line **4—4** of Fig. 3.

Fig. 5 is a face view of three pieces of cloth cut according to the pattern of this invention and adjacent each other for comparison.

Figs. 6 and 7 are similar views to Figs. 1 and 2 but illustrating the patterns generally used at the present time.

The graded patterns according to this invention, comprise a pattern **10** with a plurality of lines **11**, **12**, **13**, etc., printed along the sides and the top to indicate pattern pieces of different sizes, and lines **11'**, **12'**, **13'**, etc., printed along the bottom thereof to indicate lengths for the different sizes. Preferably, the size 36 should be inscribed in heavy or full lines, while the other lines may be either light lines or broken lines. The purpose of this is to readily make size 36, which is the model size, easily discernible. The lines indicating the different sizes have size notations thereon, such as **33**, **36**, **46**, etc., to indicate the different sizes.

Particular attention is called to the fact that at the sides and at the top of the pattern piece, the lines indicating the sizes are arranged in sequence. While only three sizes are shown it should be understood that all intermediate and other sizes follow in the proper sequences. In the old patterns the bottom edges **10b** are not graded for sizes of garments larger than size 36, as clearly shown in Figs. 6 and 7. A feature of the invention is the arrangement of the grading at the bottom of the pattern pieces in which the sizes are not arranged according to sequence but according to design. It is pointed out that a short person may require a shorter length than a tall person of the same size. The length of a design is not taken into consideration in size. Lengths are roughly indicated at the present time by short, stout, etc. With pattern pieces, according to this invention, it is possible to save thousands of dollars a year by properly cutting the cloth according to a pattern which is graded

at all sides and which takes into consideration different designs and lengths of garments.

In Fig. 2 a different pattern 10a is illustrated which is graded according to this same invention. The scale 15 at the top corner of the figure indicates intermediate sizes to those shown by the lines. This pattern is graded identically to the one previously described, and similar parts may be recognized, by the same reference numerals.

In Fig. 5, three patterns similar to that shown in Fig. 2 but of different sizes are indicated adjacent to one another to clearly illustrate the savings on goods. In patterns in common use now the bottom edge of the pattern is not graded and it is customary to use a common bottom line and before sewing the garment the bottom is cut to size and design (Fig. 5 S—S) and the piece cut off is wasted. This application for a pattern cutter overcomes this waste by grading the lower edge. This savings is indicated by the zones S—S for a size 46 garment.

In Figs. 3 and 4 a further modified form of the invention has been disclosed in which an arrangement is provided whereby it is comparatively simple to follow the contours of the various sizes at the bottom of the pattern pieces. Since at the bottom the sizes are not arranged in sequence it is very easy to cut along the wrong line during the cutting of pattern pieces from the sides and the top to the bottom.

More specifically, the contrivance consists of a plurality of differently colored pieces 16a, 16b, 16c, etc., one piece for each size and having their edges following the contours of the lines indicating the different sizes on the pattern piece. Each of the pieces is correctly indicated with a number specifying the size, indicated by their contour. Small stickers 17 with bent in ends are used to detachably maintain the superimposed pieces upon each other and upon the pattern piece. It is very simple to disconnect the superimposed pieces by merely cutting or tearing the holding stickers 17.

Particular attention is called to Fig. 3 wherein it should be noted that the lower edges of the different sizes are not in sequence, but rather according to design. For example, the lower edge of the piece 16c, indicating size 44, is located above the lower edge of the piece 16a indicating the size 33, while the lower edge of the piece 16b indicating the size 36 is arranged beneath the lower edge of the piece 16a. This modification provides for a number of patterns for different sized and shaped garments to be extended one on another and held in position by stickers 17 so that any one pattern may be removed from the group, by breaking the sticker and using the desired pattern to cut the piece of garment.

Graded patterns of this kind result in savings of large quantities of goods when sizes of garments above size 36 are cut, since the average man develops regular proportions between sizes 33 and 36. When he reaches his natural height, he develops in width only and therefore the sizes of his garments increase only in width and not in height.

It is to be understood that the style of the garment may be changed as desired and that the bottom grading according to this invention may be used for the various types of garments.

While I have illustrated and described the preferred embodiment of my invention, it is to be understood that I do not limit myself to the precise construction herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

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

1. A graded pattern, comprising a pattern with a plurality of lines printed along the sides and top to indicate pattern pieces of different sizes, and lines printed along the bottom thereof to indicate lengths for the different sizes, and a plurality of superimposed distinctive pieces detachably mounted on the bottom portion of the pattern piece to indicate contours of the different sizes, the top pieces being removable to fully expose the underneath pieces when desired, destructible stickers connecting the superimposed pieces and the pattern pieces serving to constitute the detachable mounting of said pieces.

2. A graded pattern, comprising a pattern with a plurality of lines printed along the sides and top to indicate pattern pieces of different sizes, and lines printed along the bottom thereof to indicate lengths for the different sizes, and a plurality of superimposed distinctive pieces detachably mounted on the bottom portion of the pattern piece to indicate contours of the different sizes, the top pieces being removable to fully expose the underneath pieces when desired, destructible stickers connecting the superimposed pieces and the pattern pieces serving to constitute the detachable mounting of said pieces said stickers being substantially of a form with bent in ends.

3. A graded pattern, comprising a plurality of superimposed distinctive pieces indicating different sizes of garments, and a means for releasably connecting said pieces to allow a choice of pattern when it is desired to make a garment of a certain size, comprising destructible stickers having bent in ends connecting the said superimposed pattern pieces.

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