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METHOD OF MARKING MATERIALS.

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1,374,329. Patented Apr. 12, 1921.

Fig. 1

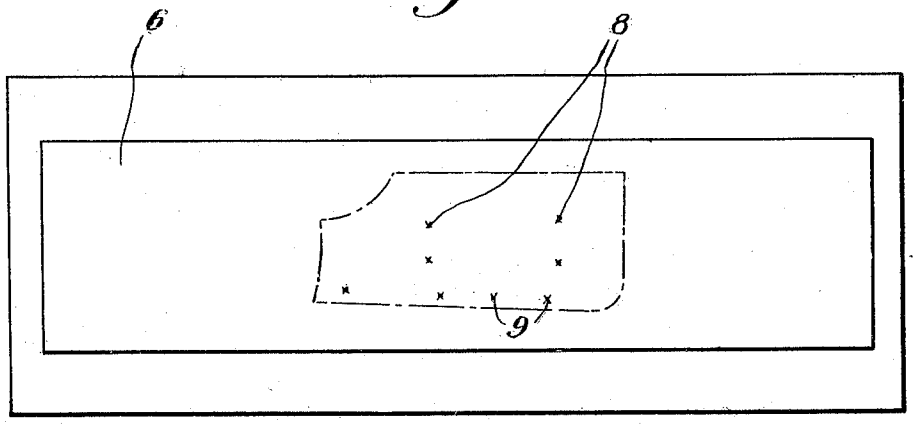
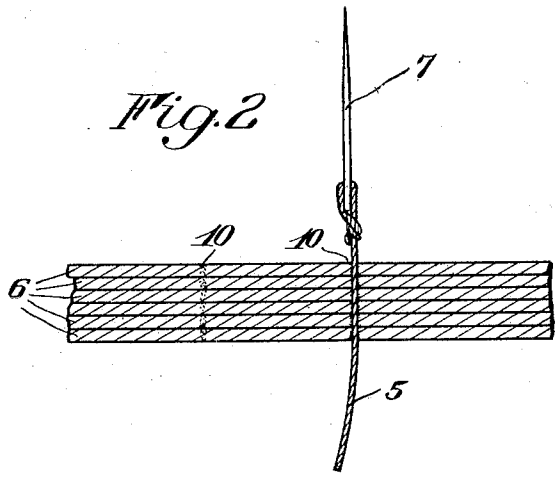


Fig. 2



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METHOD OF MARKING MATERIALS.

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To all whom it may concern:

Be it known that I, NATHAN SMITH, a citizen of the United States, residing at New York, in the county of Bronx and State of New York, have invented certain new and useful Improvements in Methods of Marking Materials; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the reference-numerals marked thereon.

This invention has to do with the manufacture of fabric and similar materials into apparel and other articles, and, more particularly with the marking of patterns and other lines and points upon the material for guiding the worker in cutting out the desired forms and otherwise making up the articles, the chief object of the invention being to provide a rapid, economical and effective method of marking the material.

Another object is to provide a method for marking the material which effects a saving in labor and in materials used, while securely placing upon the material a mark which can be readily removed when its purpose is accomplished. To these and other ends the invention consists in certain improvements and combinations of parts all as will be hereinafter more fully described, the novel features being pointed out in the claims at the end of the specification.

In the drawings:

Figure 1 is a top plan view of a plurality of layers of cloth with a pattern indicated thereon and showing the marking of the cloth.

Fig. 2 is a sectional view of a portion of the same illustrating the method of marking the cloth.

Similar reference characters throughout the several views indicate the same parts.

In the manufacture of articles in quantity from the whole material of which they are composed, as, for example, in the manufacture of wearing apparel, it is frequently found convenient to superimpose a pattern for a portion of the garment or other article upon a whole piece of cloth and to mark the cloth at various points of the pattern, thus forming an outline of the pattern on the cloth, so that the latter may be cut in the desired shapes. Also in finishing operations such as marking the articles for buttons, button holes, pockets and other trimmings it is convenient to mark the cloth at the point where such finishing operations are to be made, and for the purpose of rapid production of the articles in quantities it is a practice to superimpose a pattern on a plurality of layers of material placed one above the other and to mark all of the layers at the same time from a single pattern.

One method of accomplishing this result has been to run a needle having a long thread through all of the layers of cloth, leaving the thread in the cloth and then slightly separating the layers and clipping the thread between them, so that a short length of thread is left in the cloth at each point to be marked, which threads are visible when the layers are separated for operation thereon. This work is rather delicate and requires skilled operatives and is otherwise expensive in that a very considerable quantity of thread of good quality is consumed. Furthermore the short portions of thread are liable to be inadvertently removed from the cloth so that the mark on the latter is destroyed. Other methods of accomplishing the desired result have been used, but have been characterized by the above as well as other objectionable features which this invention overcomes.

The present invention comprises the marking of the material, in as many layers thereof as it is convenient to use at one time, with a substance which is not removed by the necessary operations on the material, such for example as wetting or steaming or heating the cloth, but which may however, be readily removed when its function has been accomplished by the use of common volatile solvents.

To this end use is made of an adhesive plastic or waxy substance, such for example, as petroleum or other waxes or mixtures thereof with which is incorporated an inorganic, water-insoluble salt such as calcium carbonate, or other inert material, the mixture being preferably put up in a carton or other container convenient in form for applying the substance to a thread either by the hands or by drawing the thread through the substance. The calcium carbonate being white, produces a substance having a white color contrasting with that of most materials, but of course, other coloring matter may be employed if desired, the object

in this respect being to provide a substance contrasting in color with the material being used.

The thread, indicated at 5, Fig. 2, having been coated or impregnated with the substance, is then run through the one or more layers 6 of material being used, by means of a needle 7 or other instrument, to outline the pattern thereon, or to mark certain portions thereof, as for example the pockets 8 and buttons or button holes 9, Fig. 1, and the substance is deposited by the thread on the material wherever it passes through the latter, as indicated at 10, Fig. 2. Owing to its adhesive waxy nature, the substance can be applied by the thread to quite a number of layers of material each time the thread is coated, and the thread is, of course readily recoated when its supply of the marking substance becomes exhausted. The latter is of a very inexpensive nature and a single thread may of course be used to mark a great deal of material so that the cost of the operation in materials expended is very low. The marking is thus quickly and economically effected and without further operations, such for example as the clipping of the thread referred to above, which materially reduces the labor costs.

The substance used, as that described above, is insoluble in water and water vapor or steam and is not removed by heat so that the marking is unaffected by the various operations of moistening, steaming and ironing the material performed during the processes of manufacture nor is it removed by rubbing or other manipulation of the material. This method is particularly convenient not only for cutting the material in the desired shapes but also for marking cloth for wearing apparel for the application thereto of buttons, button holes, pockets and other trimmings and finishing operations, and when the articles have been completed and the marks have accomplished their function, they may be readily removed by common volatile solvents, such for example as benzene, ether, chloroform and the like, at such points at which the marks would be observed if left on the garment.

The marking in this manner may be accomplished on a large number of layers of material, simultaneously, accurately and in an effective manner requiring very little expense either for materials and for skilled labor.

I claim as my invention:

1. A method of marking material for operations to be performed thereon which consists in superimposing a plurality of layers of the material, coating a thread with an adhesive substance substantially unaffected by water, water vapor or heat and contrasting in color with the material, and drawing said thread through the layers of material and thereby leaving a portion of said substance visible on each layer at a point to be marked.

2. A method of marking material for operations to be performed thereon which consists in superimposing a pattern on a plurality of layers of material, coating a thread with a plastic substance contrasting in color with the material and insoluble in water or water vapor and unaffected by heat, and drawing said thread through said layers of material at a plurality of points on the pattern and thereby leaving a portion of said substance visible on each layer of material at points outlining said pattern.

3. A method of marking material for operations to be performed thereon which consists in coating a thread with a substance substantially insoluble in water or water vapor and unaffected by heat, such as calcium carbonate, and contrasting in color with the material, drawing said thread through the material and thereby leaving a portion of said substance visible on the material at a point to be marked, and subsequently removing said substance from the material by a volatile solvent such as benzene.

NATHAN SMITH.