

No. 704,564.

Patented July 15, 1902.

C. NAYLOR.

PICTURE OR DESIGN AND METHOD OF MAKING SAME.

(Application filed July 3, 1901.)

(No Model.)

Fig. 1.

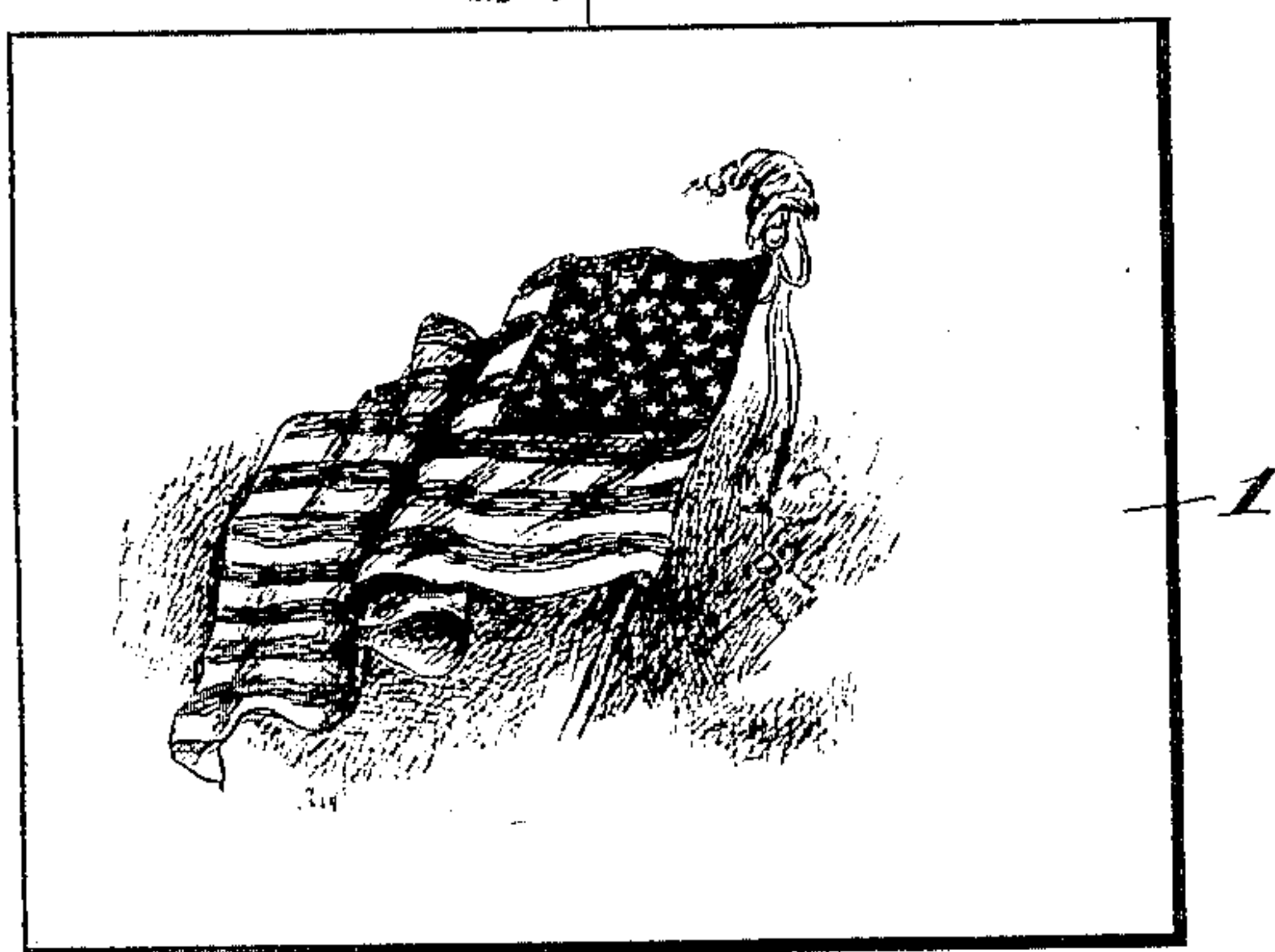


Fig. 2.

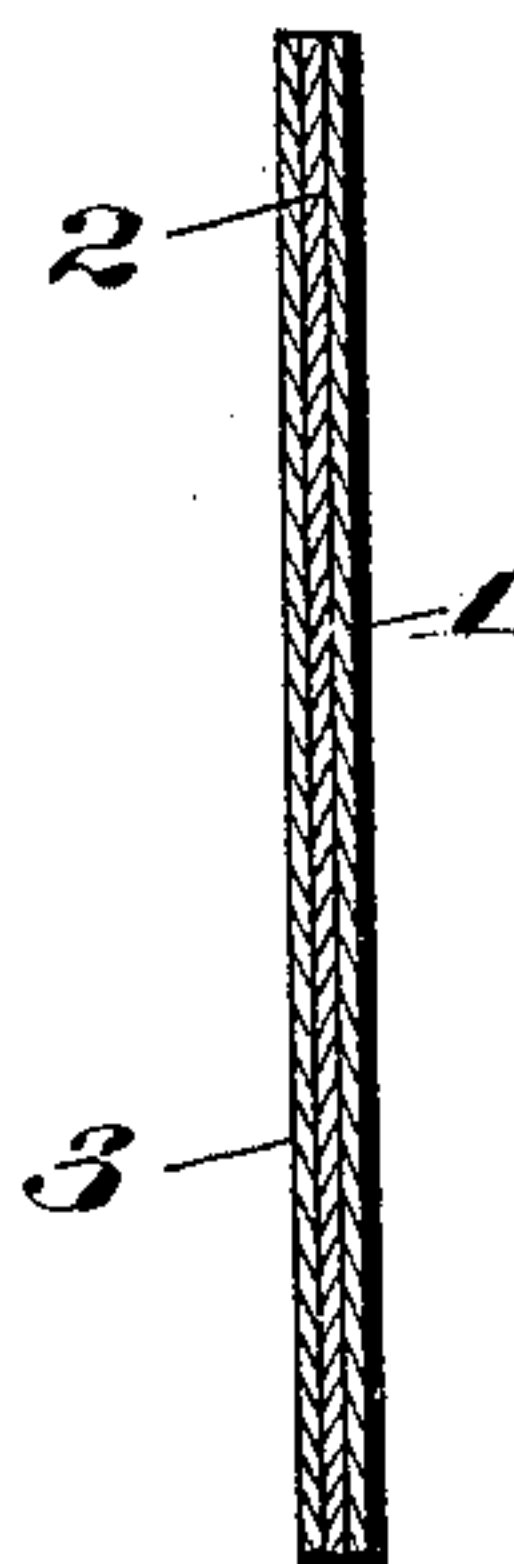
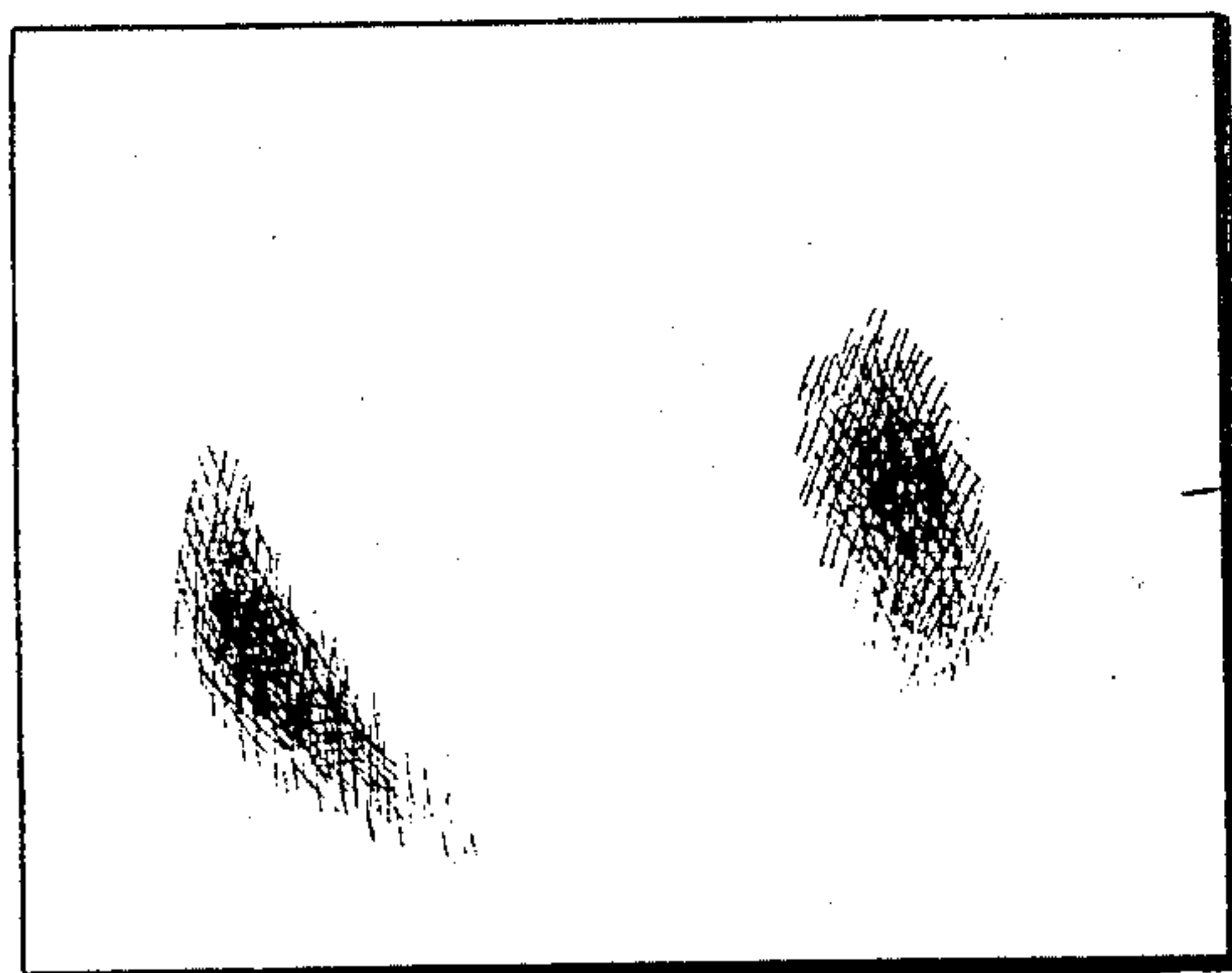
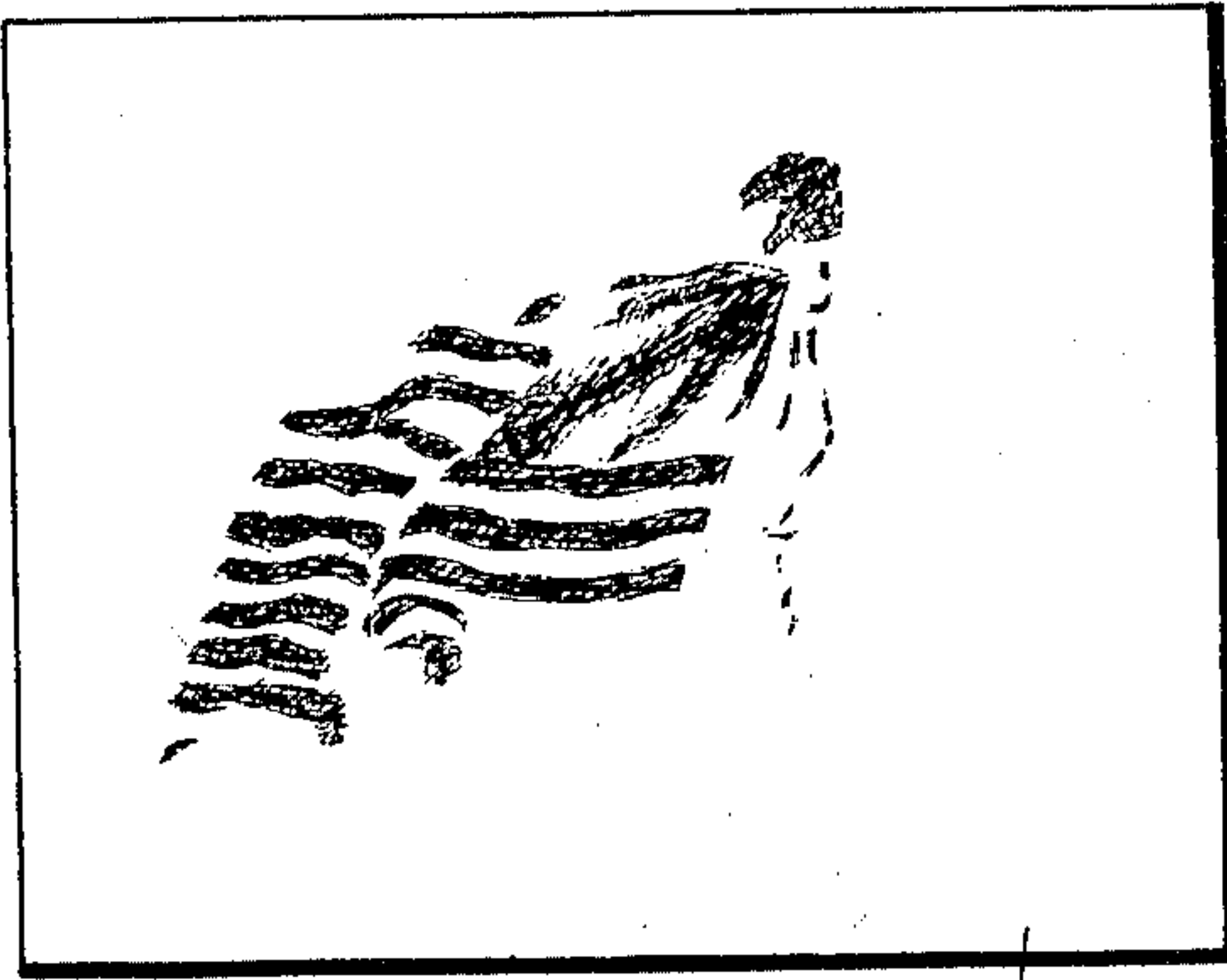
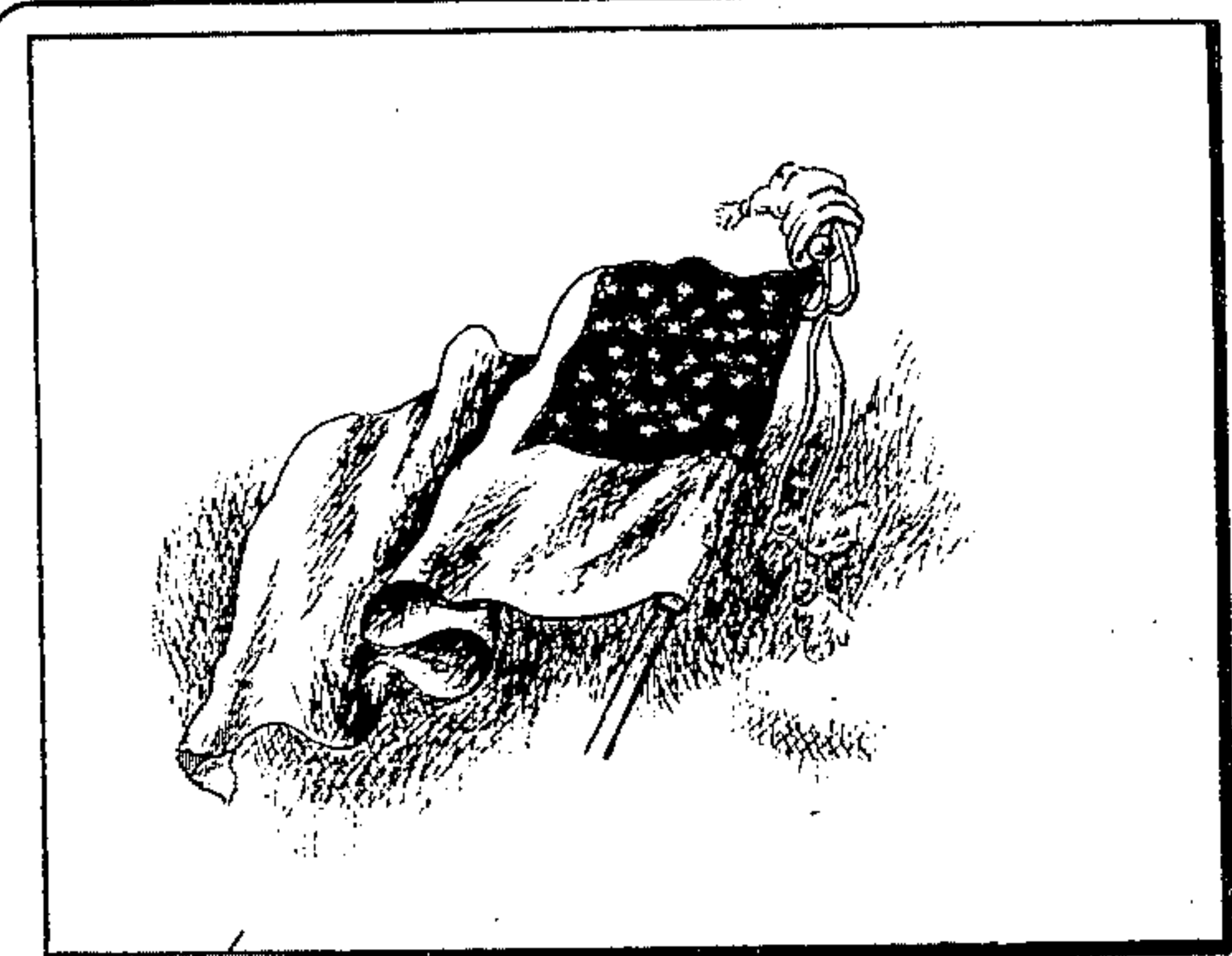


Fig. 3.



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UNITED STATES PATENT OFFICE.

CHARLES NAYLOR, OF MEXICO, MEXICO.

PICTURE OR DESIGN AND METHOD OF MAKING SAME.

SPECIFICATION forming part of Letters Patent No. 704,564, dated July 15, 1902.

Application filed July 3, 1901. Serial No. 67,070. (No model.)

To all whom it may concern:

Be it known that I, CHARLES NAYLOR, residing in the city of Mexico, in the Republic of Mexico, have invented certain new and useful Improvements in Pictures or Designs and Methods of Making the Same; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a picture or design and to a method of making and transferring the same.

The invention consists of a transferable picture, design, or transparency consisting of a plurality of transparent sheets laid one behind or upon the other, each sheet having deposited thereon a different-colored insoluble translucent pigment toned or blended by transmitted light into one image forming the figure, the said sheets being formed of soluble material, whereby the picture is made transferable upon bringing the pigmented sides of the sheets into contact with the surfaces to which the colors are to be transferred by dissolving and floating off the sheets and leaving the colors adhering to said surfaces.

The invention further consists of the method or process of making the pictures or prints above described, as will be hereinafter specifically set forth and claimed.

By the use of my method the pigments and sheets being composed of special substances will permit the drawing to be transferred upon stone for lithographic printing or to metal by which a cliché may be made for typographical printing. Then by using inks of the same color as the pigments used for making the drawing and printing each transfer one above the other upon the same surface of any material or by printing them singly upon separate sheets and afterward placing them together in their required positions a print will be made similar to the original picture.

The aim of my invention is to place in the hands of the artist the means of reproducing his own designs by the process of printing, so that while he is making his picture he is simultaneously making transfers, which when utilized according to orthodox methods may

be printed from, thereby dispensing with the labor of the copyist.

A further aim of the invention is to produce a picture, design, or transparency which may be cheaply made and provides a neat and attractive article having a highly-artistic finish.

In the drawings hereto annexed and forming a part of this specification, Figure 1 is a plan view of a picture, design, or transparency made in accordance with my invention. Fig. 2 is a sectional view of the same, and Fig. 3 is a plan view showing the several translucent sheets separated.

In carrying my method into practice the artist or operator selects the requisite number of colors for his subject and makes his picture or design by depositing a separate translucent pigment upon a separate transparent or substantially transparent sheet, so that when the pigmented sheets are placed in juxtaposition either before or behind each other in the special registered position required by the composition of the picture or subject and are placed before the eye and the light permitted to pass through them all collectively each color will be seen either individually or toned or blended into one image, which will constitute the picture.

In the drawings I have shown a picture, design, or transparency formed by depositing three separate translucent pigments on three separate sheets 1, 2, and 3 of transparent material, such as gelatin, mica, and the like. The picture, drawing, or design shown in the present instance represents the American flag, the blue pigment being deposited upon sheet or film 1 to form the body, stars, staff, &c., and the red pigment upon sheet 2 to form the stripes, while a ground color, such as yellow, is deposited upon sheet 3 to properly ground or back the colors upon sheets 1 and 2.

I prefer to make the material upon which the pigment is deposited or the "sheets" referred to in the foregoing description in the following manner: They are made of gelatin roughened by any means whatsoever to form a bur for the purpose of catching the pigment when passed over its surface at a little pressure. A sheet of ordinary gelatin

may be ruled with a sharp point in parallel lines from one hundred to two hundred lines per inch or may be ruled by crossed lines with a roulette, or it may be cast by pouring
 5 gelatin dissolved in hot water upon a roughened or grained surface of any material, such as ground glass or ruled or figured metal, so that when the gelatin is dry it may be stripped off and will be a cast of the surface upon
 10 which it laid. In fact, any method will answer the purpose if the bur upon the surface of the gelatin is capable of receiving the pigment which is to be passed over it.

The pigments referred to may be made thus:
 15 Make a mixture of wax, (bees,) twenty; caustic potash, five, and stearin, five. Melt all together and then add anilin colors. When mixed, put into molds and cast into convenient shape for use.

20 The method of using the above-described sheets or films is similar to that of the photographic retoucher or stained-glass artist. The sheets of roughened gelatin are placed between the eye of the artist and the light
 25 and the image is drawn upon them with a pigment by the assistance of the light passing through the films. The artist first decides upon the requisite colors to be used in his composition. He then takes the same number of sheets, one for each color, and proceeds to make his picture. The sheet upon which the drawing is commenced is placed in position upon pins supported by a frame for the purpose of keeping the sheet in one fixed
 35 position. (A sheet of glass may be used as a support for the sheet and also for resisting the pressure upon the pigment.) The artist then commences his drawing upon this sheet with one of the pigments. Having made sufficient of the drawing with the one pigment,
 40 he places a second sheet upon the first one, selects another pigment and draws upon it in the same manner as upon the first. By virtue of the respective transparent and translucent properties of the films and pigments the marks and forms made by the pigment upon the first sheet may be plainly seen through the one which is placed above it, thus enabling the artist to draw and blend upon
 45 the second sheet in accordance with and in register with that part of the design which is upon the first sheet. Other films may then be placed upon the pins and drawn upon, respectively, by pigments of different colors until the requisite effect is obtained. Of course each sheet may be taken from the register-points and worked upon separately or in conjunction with all or a part of the number of films which are used for the drawing. Thus
 50 the picture is drawn in the same manner as a stained-glass window—namely, by the light passing through the sheets from behind—and may be termed a “transparency.”

Now the materials of which the pigments
 65 and films are composed are of such a nature that they will permit of the transparency being used as a transfer suitable for printing

purposes and may be used in the following manner: The stone, metal, or any other material upon which the transfer is to be made
 70 is polished and cleaned. The surface is then wetted with a solution of alcohol, four parts; water, one. One of the films of which the transparency is composed is laid down with its pigmented side nearest to the surface of
 75 the stone or metal. The film is again wetted with the same solution. A sheet of tissue-paper is then placed upon the film and both are rolled with a rubber roller for the purpose of squeezing out the superfluous moisture and also for the purpose of pressing the transfer in contact with the surface upon which it lies. The tissue and film are then well wetted with water for ten minutes. A sheet of blotting-paper is then placed upon it
 80 and over all several thicknesses of flannel. Warm water at a temperature of 55° centigrade is poured upon the flannel for the purpose of dissolving the gelatin. When the gelatin is nearly melted, the flannel, blotting
 85 and tissue papers may be stripped from the transfer. The gelatin which remains upon the surface must then be carefully floated away by water of the same temperature, (without rubbing.) The pigment will remain adhering to the surface and may be used
 90 for any of the methods of printing of the present day.

This is a description of the technical method by which my idea is carried into practice; but of course the details may be modified or entirely changed.

My aim is, as I have stated before, first, to utilize the artist's original colored drawing as a means of reproduction, and, second, to
 105 simplify the process and reduce the cost of reproduction. These two important aims are effected in this manner:

The artist while drawing his design is at the same time making the transfer from which the print is made, thus dispensing with the labor of the copyist. Its claim of improvement from an artistic standpoint is based upon the fact that the print will be a reproduction directly from the hand of the artist
 110 and is made without the mediation of the copyist or camera. The drawing being itself the transfer necessarily insures a faithful copy when printed.

The method of drawing upon transparent
 120 mediums by translucent crayons and inks is more perfect than upon paper, because the grain of the paper creates minute shadows which mingle with the colors and dulls them considerably. Furthermore, a more perfect
 125 gradation and adjustment of color may be obtained from a limited number of colors.

Of course the artist necessarily occupies more time in making his design, but to compensate the expense of copying being dispensed with will enable him to make a more finished design.

There are many more advantageous points which might be enumerated.

Pictures, designs, transparencies, &c., made in accordance with my invention either in the original form or as reproductions are characterized by their pleasing appearance and highly-artistic finish produced by the peculiarly-distinctive gloss or glaze of the colored pigments imparted to them by the face-surfaces of the transparent sheets or films. The reproductions are also easily made and may be sold at small cost. It will of course be understood that the sheets or films of the picture, design, or transparency may be clamped in a frame or suitably united, as by pasting them together near their edges, so that the paste will be concealed by the frame when the sheets are fitted therein.

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

1. A transferable picture, design or transparency consisting of a plurality of transparent sheets laid one behind or upon the other, each sheet having deposited thereon a different-colored insoluble translucent pigment, toned or blended by transmitted light into

one image forming the picture, the said sheets being formed of soluble material whereby the picture is made transferable upon bringing the pigmented sides of the sheets into contact with the surfaces to which the colors are to be transferred, by dissolving and floating off the sheets and leaving the colors adhering to said surfaces, substantially as described.

2. The herein-described method of making pictures which are transferable for reproduction, which consists essentially in depositing separately upon different transparent soluble sheets different translucent insoluble colors forming parts of the picture, and assembling the sheets one behind or upon the other so that said colors will be toned or blended by transmitted light into one image forming the picture, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHARLES NAYLOR.

Witnesses:

A. J. ZICHINEKI,
LIC L. A. JHUSTIN.