May 17, 1955 R. A. WALSH 2,708,647

METHOD OF TRANSFERRING IMPRESSIONS OF LINES OR CHARACTERS

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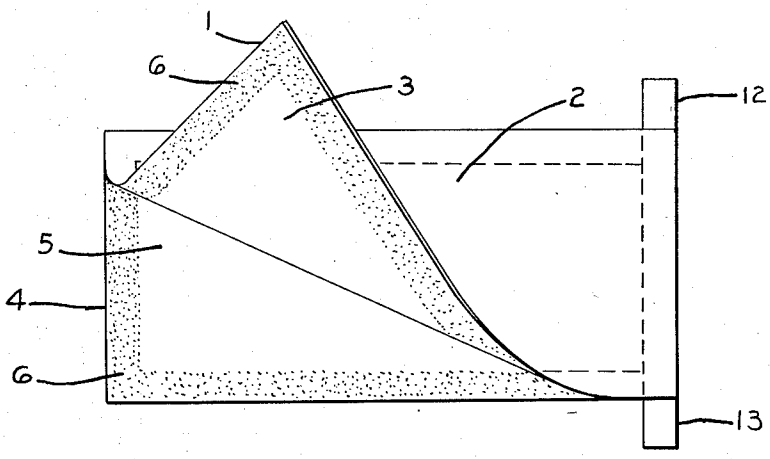


FIG. 1

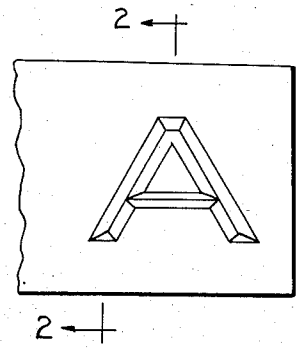


FIG. 2

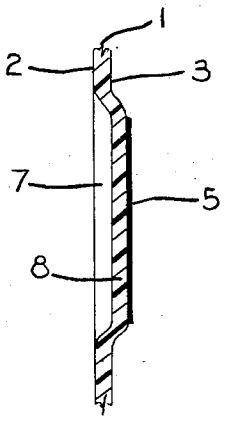


FIG. 4

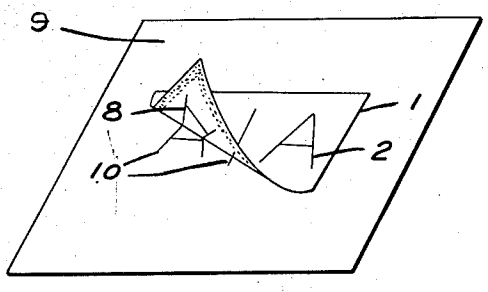


FIG. 3

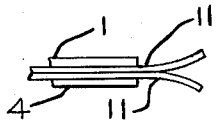


FIG. 5

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METHOD OF TRANSFERRING IMPRESSIONS OF LINES OR CHARACTERS

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5 Claims. (Cl. 154—95)

This invention relates to a method of transferring duplications of impressions of lines or characters from one surface to another surface.

In the art as it now exists, duplications of lines or characters on another surface or object is accomplished by transferring impressions of the lines or characters through the medium of a transfer sheet coated with a transferring element in direct contact with the surface upon which it is desired to transfer duplications of the lines or characters, at the time the lines or characters are originaly inscribed upon the opposite surface of the transfer sheet.

This method of transferring impressions of lines or characters is limited in its application, to such extent, that the actual transferring element must always be in direct contact with the object, upon which the lines or characters are to be duplicated, at the time such lines or characters are originally impressed upon the opposite side of the sheet.

It is the object of my invention to overcome these limitations and objections by providing a method of transferring duplications of impressions of lines or characters, that will permit the transferring of duplications of lines or characters from one surface to another by the application of pressure upon the transfer sheet over the lines or characters.

It is an object of my invention to provide for transferring duplications of impressions of lines or characters, which may be designated as a two-ply laminated structure, consisting of an arrangement of parts in a manner that a duplicating substance can be transferred to a transfer sheet for subsequently transferring impressions of lines or characters to a surface distinct from the transfer sheet.

It is a further object of my invention to provide for transferring impressions of lines or characters to curved, planar or uneven surfaces.

It is also an object of my invention to provide for transferring impressions of lines or characters, which lines or characters were caused to be formed upon the reverse surface of a transfer sheet by an instrument, such as a pen, pencil, stylus or typewriter key, or other suitable instrument, by applying direct pressure by means of such instrument against its front surface.

It is the further object of my invention to provide for transferring duplications of impressions of lines or characters, formed by a backing up sheet coated with a duplicating substance of such body and consistency that lines or characters inscribed on the front side of the transfer sheet will cause the rear surface to pick up a sufficient quantity of the duplicating substance to allow impressions of the lines or characters to be duplicated upon another surface when impressed upon it and pressure is applied to the front surface of the transfer sheet over the lines or characters.

In the following description I will describe a preferred application of my invention. It is to be understood, however, that my invention can be practiced and used

with multiples of one of the structures herein set forth.

In the accompanying drawings—

Figure 1 is a plan view of sheet 1 and 4 of a structure by which my invention may be practiced with sheet 1 turned back.

Figure 2 is a partial section of an embossed character.

Figure 3 is a view illustrating the application of sheet 1 on a surface.

Figure 4 is a section on line 2—2 of Figure 2.

Figure 5 is a view showing the arrangement of the ribbon runners.

Referring to the drawings, I provide a thin flat impressible transfer sheet 1 composed of flexible material, comprising sides 2 and 3. To the reverse side 3 of sheet 1, I attach a removable two-sided backing sheet 4 of substantially equal area, partially coated with an adhering duplicating substance 5. Using a tacky adhesive substance 6 common to both surfaces located on the outer margins, I hold said duplicating substance 5 in contact with side 3 of sheet 1. By using a suitable instrument I inscribe lines or characters upon side 2 of sheet 1 applying sufficient pressure to cause pressure as indicated at 7 on the surface of sheet 1 resulting in duplication 8 of said lines or characters on side 3. The pressure I apply in forming said lines or characters causing said duplicating substance 5 to adhere to said lines or characters 8 in such amount and consistency to allow said duplicating substance 5 to be transferred to a subsequent surface 9 when said backing sheet 4 is removed from contact with sheet 1. I then remove said backing sheet 4 from contact with said lines or characters 8 on sheet 1, bringing said transfer sheet 1 to bear upon a surface 9 upon which I desire to transfer impressions of said lines or characters 8, I then apply direct pressure to side 2 on said transfer sheet 1 over said lines or characters 8, transferring exact duplications 10 of said lines or characters 8 to said surface 9. For preservation of the texture of the material forming said duplicated lines or characters I leave sheet 1 in place over said lines or characters 10 after transferring said impressions. To facilitate separating and handling sheet 1 and 4, I insert uncoated continuous flat ribbon runners 11, backed up in contact along an edge, including extensions 12 and 13 located on both sides of sheet 1 and 4.

The invention is not limited to the material of sheet one. If the incribing is by way of pen, pencil or typewriter ribbon, the sheet may be opaque. However, film may be employed such as cellulose film, regenerated cellulose, glassine or cellophane may be employed, particularly where a stylus or noninked type is employed.

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

1. The method of marking a surface with characters which includes the step of inscribing with the application of pressure such characters on the front face of a transfer sheet, simultaneously producing an image of such characters on the rear face of such sheet by the same application of pressure accompanying such inscribing, said image being in pressure transferable material, applying said sheet to said surface with said rear face in contact with said surface and thereafter applying pressure to the front face thereof for transferring said image to said surface.

2. The method of marking shipping instructions on the surface of a package which includes the step of inscribing with the application of pressure such instructions on the front face of a transfer sheet, simultaneously producing an image of such instructions on the rear face of such sheet by the same application of pressure accompanying such inscribing, said image being in pressure transferable material, applying said sheet to the said surface with said rear face in contact with said surface and

thereafter applying pressure to the front face thereof for transferring said image to said surface.

3. The method of marking a surface with characters which includes the step of inscribing with the application of pressure such characters on the front face of a transfer sheet of film material, simultaneously producing an image of such characters on the rear face of such sheet by the same application of pressure accompanying such inscribing, said image being in pressure transferable material, applying said sheet to said surface with said rear face in contact with said surface and thereafter applying pressure to the front face thereof for transferring said image to said surface.

4. The method of marking shipping instructions on the surface of a package which includes the step of inscribing with the application of pressure such instructions on the front face of a transfer sheet of film material, simultaneously producing an image of such instructions on the rear face of such sheet by the same application of pressure accompanying such inscribing, said image being in pressure transferable material, applying said sheet to the said surface with said rear face in contact with said surface and thereafter applying pressure to the front face thereof for transferring said image to said surface.

5. The method of marking a surface with characters which includes the step of arranging a sheet bearing pressure transferable material on one face thereof with such face in contact with the rear face of a transfer sheet, inscribing by the application of pressure, characters on the front face of said transfer sheet and thereby simultaneously producing an image of such characters in the transferable material of the first mentioned sheet on the rear face of the transfer sheet, removing said first mentioned sheet from said transfer sheet, applying said transfer sheet to said surface with said rear face in contact with said surface and thereafter applying pressure to the front face of said transfer sheet for transferring said image to said surface.

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