

Jan. 12, 1971

M. R. DOCK

3,554,848

MATERIAL FOR EXPANDING AND ASSEMBLING COMPONENTS USED
IN THE CREATION OF BAS-RELIEF ART
Filed June 9, 1969

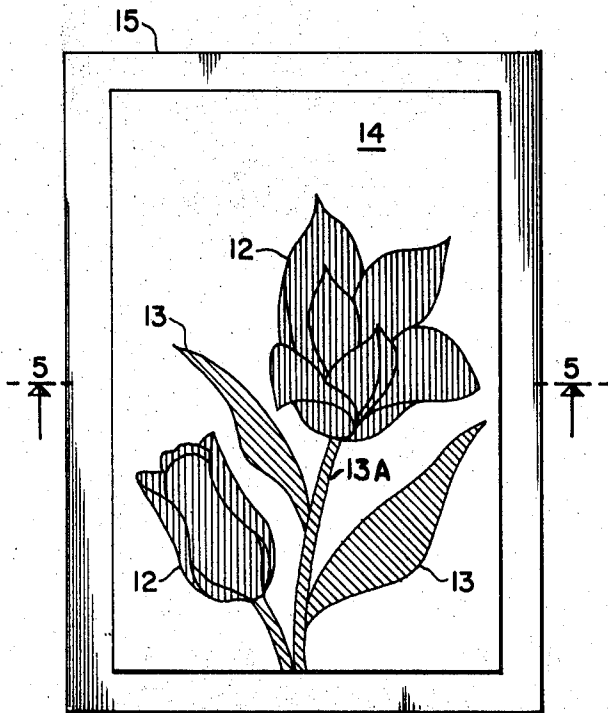


Fig. 1.

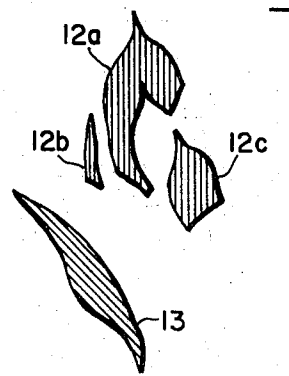


Fig. 2.

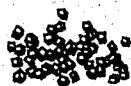


Fig. 3.

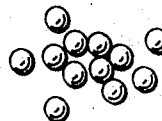


Fig. 4.



Fig. 5.

INVENTOR,
MORTIMER R. DOCK
BY *John W. Boney*
ATTORNEY

1

3,554,848

MATERIAL FOR EXPANDING AND ASSEMBLING COMPONENTS USED IN THE CREATION OF BAS-RELIEF ART

Mortimer R. Dock, 26 Broadway,
New York, N.Y. 10004

Continuation-in-part of application Ser. No. 663,427,
Aug. 25, 1967. This application June 9, 1969, Ser.
No. 831,341

Int. Cl. B44f 7/00

U.S. Cl. 161—18

4 Claims

ABSTRACT OF THE DISCLOSURE

This invention relates to new and improved materials and methods for their assembly in the creation of decorative articles, by the application of absorbent material moistened by the rupture of water-containing members intermixed therewith, said material thus moistened being adhesively attached to an adhesive-coated surface.

This invention constitutes an improvement over my co-pending patent application Ser. No. 663,427, filed Aug. 25, 1967, and is a continuation-in-part thereof.

In the said presently pending patent application, there was contemplated the use of compressed, water reactive absorbent and expensable material divided into pieces of suitable configuration or finely divided particles, in combination with a water-reactive adhesive base for adherence of such compressed material thereto, and application to said material of water in the form of a fine spray, thus causing said material to expand and simultaneously reactive the adhesive base and cause said material to adhere thereto.

In the present application, it is contemplated that the moisture will be applied by means of water encapsulated in rupturable containers, and the base may be coated either with a water-reactive glue or a type of adhesive of the class generally known as "pressure sensitive" adhesives. The water-reactive adhesive may be applied at the time of constructing the decorative art, by spreading as with a brush or spatula, or may be previously applied and permitted to dry, and then be reactivated when ready for use, by the application of water thereto. Such surface will retain the compressed material and permit the application of moisture to cause the expansion of the compressed sponge material.

In the present invention, there is proposed a backing surface such as a semirigid paperboard or plastic, having upon one side thereof an adhesive coating; and for application thereto, in a desired pattern, pieces either of selected configurations or finely divided particles of compressed sponge such as that made by General Mills, together with rupturable bodies, such as capsules made of a paraffinic or wax-like material and containing water or other suitable fluid.

In order to set forth more clearly the nature of this invention, reference is made to the drawings forming a part of this application, in which—

FIG. 1 shows a backing sheet having thereon the outlines of a picture;

FIG. 2 shows pieces of compressed sponge material cut into configurations to fit certain areas in the design on the backing sheet;

2

FIG. 3 indicates a quantity of said sponge material cut into finely divided particles for use in certain other areas of the design of FIG. 1;

FIG. 4 shows a quantity of rupturable capsules; and

FIG. 5 is a cross-section taken on line 5—5 of FIG. 1 after rupture of the capsules and consequent expansion of the sponge material.

Referring more particularly to the drawings,

FIG. 1 shows the design of a tulip including flowers 12, leaves 13 and stem 13A, intended to be shown with a background 14, mounted on a backing sheet 15.

FIG. 2 shows petals 12a, 12b, and 12c, and one of leaves 13, cut from compressed sponge material in configurations matching the outlines on the backing sheet.

FIG. 3 shows finely divided particles of compressed sponge material, which is intended to be spread upon the remaining surface of the backing sheet, indicated by the numeral 14, and being of small size, said particles upon expansion, when moistened, will produce a lesser thickness in those areas than is produced by the sheet sponge forming the floor petals and leaves, thus creating a bas-relief effect wherein the flower—blossoms and leaves—projects from the background.

In FIG. 4 the capsules are shown, the same being substantially filled with an aqueous solution which may be colored, in some of the capsules, to provide shadings of the sponge material in selected portions of the picture or design.

In FIG. 5, there is shown the bas-relief effect of the variously expanded compressed sponge. If desired, the depth of the expanded material can be controlled by varying the number of capsules disposed on those areas and thus using more or less moisture in combination with the sponge material.

In creating the bas-relief of the decorative article, the backing sheet is first prepared, either by removing a protective covering from the pressure sensitive adhesive or, where a water-reactive adhesive is used, by reactivating a previously applied coating of glue or, alternatively, by applying a fresh coating of glue or other suitable adhesive. The cut-out pieces of compressed sponge are then applied in the spaces indicated on the outline of the design; and these are pressed firmly onto the backing sheet. Where finely divided particles are used for other areas of the design, these particles are then pressed onto the surface. Moisture is applied by placing over a part or all of the surface, water-containing capsules and, for ease of application, a covering sheet (not a part of the invention) of the water repellent material such as waxed paper, plastic, or similar flexible, non-permeable material. Pressure applied upon the covering sheet will rupture the capsules and release their content into the compressed sponge. When the moisture has been evenly distributed, the covering sheet is removed, permitting full expansion of all pieces and particles of the compressed sponge. When dried, the pieces and particles of expanded sponge adhere to the backing sheet, forming a bas-relief for decorative purposes.

As a person becomes more adept at the use of this art, the rupturable bodies may be applied singly, thus assuring the desired amount of expansion of the sponge in various areas, and with bodies having colored fluid content being selectively disposed for intricate shadings.

It is to be understood that the form of the invention herein shown and described is to be taken as a preferred

3

example of the same, and that various changes may be made within the scope of the subjoined claims.

What is claimed is:

1. A form of bas-relief art comprising an adhesive coated base and compressed, absorbent, expansible sponge material; and adjacent to and intermixed with said sponge material, rupturable bodies having an aqueous fluid content, said bodies being ruptured by compression exerted thereon to release the contents thereof into said sponge material, thus causing the latter to become moistened, expanded, and adhesively attached to said coated base.

2. The invention of claim 1, wherein said sponge material is in part cut into configurations to form a pattern on the backing surface.

3. The invention of claim 1 wherein said sponge material is in part cut into finely divided particles.

4

4. The invention of claim 1, wherein said rupturable bodies are substantially filled and with an aqueous solution having a coloring agent added thereto.

References Cited

UNITED STATES PATENTS

1,802,547	4/1931	Allen	117—25
2,952,462	9/1960	Planin	161—12X
3,306,747	2/1967	Haas	252—316X

JOHN T. GOOLKASIAN, Primary Examiner

H. F. EPSTEIN, Assistant Examiner

U.S. Cl. X.R.

161—7, 40, 41, 87, 116, 160, 167, 168, 410