## UNITED STATES PATENT OFFICE.

ALLSTON ADAMS AND ARTHUR BOTT, OF ALBANY, NEW YORK.

IMPROVEMENT IN MANUFACTURE OF MARBLEIZED PAPER AND CARD-BOARD.

Specification forming part of Letters Patent No. 212,582, dated February 25, 1879; application filed January 30, 1879.

To all whom it may concern:

Be it known that we, Allston Adams and Arthur Bott, of the city and county of Albany, and the State of New York, have invented certain new and useful Improvements in the Manufacture of Marbleized or Granite Paper and Card-Board, of which the following is a full and exact description.

The object of our invention is to produce on paper and card-board all the beautiful effects which are found in marble or granite, and for which purpose we use the following novel

method:

We prepare a ground color, consisting of the usual ingredients—viz., blane fixe, clay, cremnitz-white, satin-white, black, cardinal-red, or any other lake or pulp color used in the manufacture of glazed, plated, or enameled papers; fasten these colors with glue, shellac, or any other binder, and add to those colors which in their composition are heavy and dry rapidly milk and glycerine, to prepare and keep the ground color in a liquid state long enough to allow the second and third layers of color to intermingle, flow into and radiate with and into the ground color, and, respectively, with the second layer.

The color for the second layer is similarly prepared as the first, only with less body, so as to enable it to blend and flow into the

ground color more readily.

The peculiar vein, the characteristic of the different kinds of granite or marble, we obtain by the third or last layer, prepared and applied like the ground or second layer, but with less consistency than the colors that preceded it.

The process of bringing the characteristic colors and tints of granite or marble into bold relief by the successive application of the different colors and tints has never been at-

tempted before.

To make the imitation more perfect, and to give greater prominence to the second, and, respectively, still more to the third, color, we add to these, in an increased proportion, those

ingredients which are usually employed by paper-stainers to give luster to the finish—as wax, glycerine, paraffine, &c:

The finishing is done between zinc or steel plates through a calender or flat press usually

employed for that purpose.

It is obvious that in finishing the second and third layers they are exposed to a greater pressure than the ground color, and that the application of the colors successively gives these papers their peculiarly characteristic effect and luster.

The paper thus produced is a new article first manufactured by us, and has the following among other characteristics, which will distinguish it from other ornamented paper heretofore known as "marble-paper:" that our article, when interposed between the light and the eye, will show different thicknesses of coating, which are readily discernible by the degree of opacity that is presented to the vision.

What we claim as our invention is—

1. The method herein described for coloring paper so as to imitate marble, granite, or other veined stones, which consists in applying the ground and subsequent layers of color one after the other, each being kept moist till blended with the next succeeding layer, substantially as specified.

2. The method herein described for giving relief to colored papers in imitation of marble and other materials by applying successive coats of color, in the order and manner sub-

stantially as herein described.

3. As a new article of manufacture, veined or ornamental paper and card-board, substantially such as herein described, having the colors applied so as to give relief to the figure and design, as set forth.

ALLSTON ADAMS. ARTHUR BOTT.

Witnesses:

F. A. MANNING, S. W. ROSENDALE.