UNITED STATES PATENT OFFICE.

JOSEPH ALFRED MEGINN, OF LIVERPOOL, COUNTY OF LANCASTER, ENGLAND.

GRAINING.

SPECIFICATION forming part of Letters Patent No. 304,440, dated September 2, 1884.

Application filed August 17, 1883. (Specimens.)

To all whom it may concern:

Be it known that I, JOSEPH ALFRED MEGINN, of Liverpool, in the county of Lancaster, in the Kingdom of England, have invented certain new and useful Improvements in Graining or Ornamenting Painted or Colored Surfaces, of which the following is a specification.

Graining by hand requires skilled labor, and is very frequently done in an ugly conventional manner, resembling very remotely the grain of natural wood. Many attempts have been made to grain by machinery or templet, but hitherto with, I believe, little success. Some have been based on the principle of allowing the paint to set, and then eating it off in parts to a pattern or templet. Others depend on the action of a roller or plate pressed against the wet surface and licking off or pressing to one side the superfluous material. This involves constant cleaning or wiping of the roller or plate and the joining up of the various areas covered by the plate or passed over by the roller; and the graining of the ends of the panels, in the case of rollers, where the roller cannot get, owing to its circular contour, requires skilled labor and neutralizes all advantage gained from the mechanism. Now, my invention is based on the principle of absorbing this surplus material, instead of pressing it aside or rubbing it off, and my graining avoids all joining, each sheet being equal in size to the surface to be grained.

My invention consists in forming the pattern in relief on an absorbing-surface of any suitable material; but I prefer absorbent paper similar to blotting-paper, but thicker, made, say, twelve yard lengths. These sheets, having first been cut to size, are laid on the freshly-colored surface pattern side downward, and pressure applied to the back by means of a roller or pad. On withdrawing the paper it will be found to have absorbed the wet graining or other color below the relief portion of its surface, thus by a single application graining the entire surface of the panel at one operation. By using several different patterns, or even by inverting the same pattern, considerable variety can be introduced. The papers can be used several times in immediate succession before their pores become too clogged to grain a fresh surface.

Though paper only has been mentioned hitherto, I do not confine myself to that. On the contrary, wood pulp not too strongly pressed, straw-board, or any other absorbent material sufficiently flexible or capable of being molded to the required form will do, and the sheets or strips can be either made entirely of the absorbent material or have a backing of cloth or other material. It can be embossed in any desirable manner; but I prefer passing the wet absorbent material between cylinders engraved or indented with the desired pattern, so that the sheets shall not be hollow on the back; and, if desired, both sides can be embossed, and thus twice the number of applications can be made from one sheet than can be obtained from one single-sided sheet. This double-sided plan is only applicable, without special precautions, to small or very fully worked-up patterns destitute of large broad blanks.

I claim as my invention—

1. The method of forming grained surfaces, which consists in forming sheets of bibulous or absorbent flexible material, embossing the same with the pattern or graining required, so that the pattern shall stand out in relief, cutting these sheets to the size and shape of the surface to be grained, covering the surface to be grained with wet paint, color, or varnish, and pressing the said sheets on the said even surface, whereby the paint under the embossed parts is absorbed, leaving a grained pattern, substantially as described.

2. The improvement in the process of manufacturing grained, painted, or colored surfaces, which consists in forming the pattern in low relief upon sheets of highly-absorbent flexible material capable of being cut to the size of the surfaces to be grained, substantially as described.

3. The improvement in the process of making grained surfaces, which consists in coating them with the wet paint, color, or varnish, and then applying sheets of embossed absorbent material to it with pressure sufficient to cause the embossed surface to press against the wet paint or other material and absorb most of that portion that comes in contact with the raised part of the surface of the absorbent material, substantially as described.

4. The improvement in the method of graining surfaces mechanically without unsightly joints, which consists in cutting out from em-

bossed absorbent paper a piece the same size and shape as the surface to be grained, covering the surface with fresh graining color or paint, and then pressing the piece of absorbent paper against the same, so as to absorb the color or paint beneath the embossed parts.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH ALFRED MEGINN.

Witnesses:
WM. P. THOMPSON,
I. OWDEN O'BRIEN.