## $\begin{array}{c} \textbf{N. HARW00D.} \\ \textbf{Paper Chair-Seat and Back.} \end{array}$

No. 204,667.

Patented June 11, 1878.

Fig.1

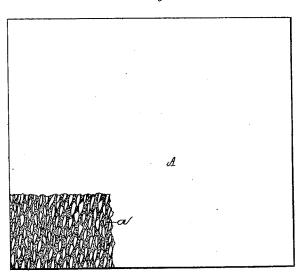


Fig. 2.

S. er. Piper L. n. Miller Investor

Nahum Harwood

By his attorney

R.U Jasy

## UNITED STATES PATENT OFFICE.

NAHUM HARWOOD, OF LEOMINSTER, MASSACHUSETTS, ASSIGNOR TO J. A. AND N. HARWOOD, OF SAME PLACE.

## IMPROVEMENT IN PAPER CHAIR SEATS AND BACKS.

Specification forming part of Letters Patent No. 204,667, dated June 11, 1878; application filed March 14, 1878.

To all whom it may concern:

Be it known that I, NAHUM HARWOOD, of Leominster, of the county of Worcester and State of Massachusetts, have invented a new and useful manufacture for use in making chair seats or backs or various other articles; and do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which-

Figure 1 is a top view, and Fig. 2 a trans-

verse section, of a piece of the article.

In making the article, I take a sheet of pasteboard or leather-board, of about one-sixteenth of an inch in thickness, and dip it in a bath or solution of aniline or other proper color, after which I run the sheet between a pair of squeeze-rollers, in order to express the surplus liquid from and even the color in it. Should the color not be sufficiently deep and even, I repeat, as often as may be necessary, the process of dyeing by the bath and expressing by the rollers. Such not only effects the coloring of the fabric, but greatly improves it for another part of the process of manufacture, which consists in pebbling or embossing the sheet by a figuring roller or rollers, the sheet being run between the rollers, and such embossing being in close imitation of the pebbled surface of Russia, Turkey, or Morocco leather. Before the sheet is thus embossed, it is to be dipped in a bath of gelatine, and afterward allowed to nearly dry. Its surface will then be prepared for being embossed. The embossing having been completed, the opposite surfaces of the sheet are to be covered with an alcoholic solution of shellac or a suitable varnish, which may be applied by means of a brush or by dipping the sheet into the solution. The sheet is next to be allowed to dry, and is complete.

In the drawings, the sheet is shown at A, the embossing at a, and the shellac covering

at b and c.

I would remark that I do not claim coloring, varnishing, and embossing paper, such being an old process long used in making ornamental papers; nor do I claim the application of glycerine to paper to render it pliable, such

being old and well known, or having long been in use.

In carrying out my process, I do not use glycerine, my object not being to make a very pliable, but a stiff article, such as may be used to advantage for chair backs or seats.

My process, although somewhat analogous to that described in the British patent No. 339 for 1857, differs therefrom in important particulars, as I do not coat the board with any membranous, filamentous, or waterproofing material prior to or while coloring it; nor do I apply any dry powdered color to it while it is in a moist state; nor do I use flour-paste in

connection with glue.

I color the board by a bath, and subsequently run the board between rollers to even the color and properly condense the board while it is wet. This condensing the board and removing the surplus color not only evens the color, but prepares the board or improves it for the gelatine bath and the subsequent operations. Such is not done by the process described in said patent, in which the board is not compressed or calendered until after the application of the flour-paste and glue. Furthermore, I pebble the board before treating it with shellac or varnish. Therefore,

1. My improved method, substantially as described, of preparing pasteboard or leatherboard, such consisting in coloring it by a bath, and subsequently running it between rollers to even the color and express the surplus liquid, and afterward dipping it in a bath of gelatine and pebbling or embossing it, and treating it with shellac or varnish, all being substantially as described.

2. As a new or improved manufacture, pasteboard or leather-board evenly colored, coated with gelatine, pebbled or embossed, and shellaced or varnished, all being substantially as

set forth.

NAHUM HARWOOD.

Witnesses: R. H. EDDY. JOHN R. SNOW.