

United States Patent Office.

CARLETON B. HUTCHINS, OF ANN ARBOR, MICHIGAN.

Letters Patent No. 112,045, dated February 21, 1871.

IMPROVEMENT IN THE MANUFACTURE OF PAPER AND LEATHER-BOARD.

The Schedule referred to in these Letters Patent and making part of the same.

I, CARLETON B. HUTCHINS, of Ann Arbor, in the county of Washtenaw, in the State of Michigan, have invented an Improvement in Producing Leather-Board and Paper of various kinds.

The nature of my invention consists in mixing the various kinds of animal hair with the different kinds of pulps used in the manufacturing of leather-board so called; also in the manufacturing of all kinds of paper, either separate or combined with the different kinds of pulp; also in mixing potatoe pomace with the various kinds of pulps used in the manufacturing of leather-board, and with all other pulps used in the manufacturing of paper, not granted to said CARLETON B. HUTCHINS, in a previous patent, dated November 29, 1870. These pulps also can be used separate or combined with the different kinds of pulps. The hair and pomace can be worked together for paper and other uses, or they can be worked separate in the manufacturing of leather-board and all kinds of paper.

I mix the hair in the engine after the other ingredients are pulped, in quantities according to what I wish to make, from three to six pounds to each one hundred pounds of pulp. I raise the irons and brush the hair in in the engine until thoroughly mixed, which will require about an hour.

I add the pomace in the same way as I do the hair, as neither require pulping. For leather-board I use from ten to twenty-five per cent.; for other papers I refer you to my patent of November 29, 1870, for a more detailed statement.

These ingredients have many advantages of all others now in use. They require no pulping, the hair serves to strengthen all the pulps, and renders the leather-board strong enough to hold the stitch and peg; also suitable for belting, &c. The gluten on the hair serves to make the structure more water-proof.

The great advantages of the starch pomace are also set forth in a previous patent.

Claims.

I claim as my invention—

1. Hair in the manufacturing of leather-board and paper, substantially as herein described.
2. The combination of hair and potato pomace in the manufacturing of paper and leather-board, substantially as set forth.

CARLETON B. HUTCHINS

Witnesses:

R. J. MEIGS,
L. P. WILLIAMS.