## United States Patent Office.

## CARLETON B. HUTCHINS, OF ANN ARBOR, MICHIGAN.

Letters Patent No. 109,621, dated November 29, 1870.

## IMPROVEMENT IN THE MANUFACTURE OF PAPER.

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 Paper of various kinds.

The nature of my invention consists in mixing the potato pomace which comes from the manufacturing of potato-starch with the various kinds of pulps manufactured from the different kinds of straw, grass, hay, rags, and junk, either separate or combined, in the manufacturing of paper.

I add the pomace after the other pulp is prepared, in quantities substantially as follows:

For straw-board, I use half each of straw and pom-

For wrapping paper, I use one-quarter pomace, oneeighth hard stock or junk, so called, and the balance in either of the pulps made from straw or grasses.

For other kinds of paper I vary the quantity according to the kind of paper I may wish to make.

If I wish to make white paper, I bleach the pomace as other pulps are treated.

I am careful not to grind the pomace much in mix-

ing, as it is pulped enough when it comes from the grater.

I use the pomace either green or dried. The dried will readily soak up and become the same as when green.

The introduction of this pomace saves a great expense, in pulping, over all other kinds of pulp now in use.

It also serves to make the coarser papers lighter colored and of equal strength of straw, and can be produced in large quantities from the potato-starch mills, and dried and preserved for future use.

What I claim as my invention, and desire to secure by Letters Patent, is—

The fibrous ingredients, as set forth in the foregoing specification, for the manufacturing of paper, as before named.

CARLETON B. HUTCHINS.

Witnesses:

R. J. Meigs, Jr., Wm. F. Mattingly.