UNITED STATES PATENT OFFICE.

JOHN F. JONES, OF MARCELLUS FALLS, NEW YORK.

IMPROVEMENT IN THE MANUFACTURE OF PAPER-PULP.

Specification forming part of Letters Patent No. 158,611, dated January 12, 1875; application filed November 25, 1874.

To all whom it may concern:

Be it known that I, John F. Jones, of Marcellus Falls, Onondaga county, New York, have invented a new and useful Manufacture of Paper-Pulp suitable for coarse or heavy papers, mill-board, and the like, of which the

following is a specification:

The cost and outlay for stock for the manufacture of wrapping-papers, thick papers, board, and the like being very considerable, I have discovered a method of greatly reducing the expense, which method forms the subject of my present invention, and consists in the employment, in the green state, of any of the grasses or fibrous plants of the field, roadside, or swamp, without drying, boiling, or chemically preparing, by which a great saving of fuel and other expenses is effected.

To make paper by my new device I take the above-named materials directly from the fields, and grind them in the ordinary rag or grinding engine of a paper-mill, either alone, or with any other paper-stock combined, depending upon the purpose for which it is to be used. After grinding properly I run it into

paper without other preparation, in the ordinary way. I propose sometimes to bleach this stock, as with other kinds; but for ordinary purposes I use it in its natural state, without boiling or other preparation, which has been found necessary in using straw and like materials of which paper has been heretofore made. If the green materials have dried they are steeped before use.

In the above-described manufacture of pa-

per, I claim—

1. The process of making paper or board direct from the grasses, weeds, and the like, by grinding in the stock-grinder, and running the stock into paper direct, without boiling or chemical disintegration, as herein specified.

2. The pulp or stock for the manufacture of paper, &c., composed of grasses, weeds, and the like, ground fine in the stock-grinder, without boiling or other chemical process in its preparation.

JOHN F. JONES.

Witnesses:

PETER B. McLennan, T. Jones.