

UNITED STATES PATENT OFFICE.

CYRUS D. GORDON, OF GRAND CROSSING, ILLINOIS.

PROCESS OF MANUFACTURING LINSEED-OIL.

SPECIFICATION forming part of Letters Patent No. 275,642, dated April 10, 1883.

Application filed March 22, 1882. (No specimens.)

To all whom it may concern:

Be it known that I, CYRUS D. GORDON, of Grand Crossing, in the county of Cook and State of Illinois, have invented or discovered certain new and useful Improvements in an Improved Process of Manufacturing Linseed-Oil, of which the following is a description that will enable others to understand and use the same.

10 This invention relates to an improvement in a process for extracting oil from oleaginous seeds, and is more especially applied in the manufacture of linseed-oil; and it consists in heating the seed or meal immediately after
15 the same has been crushed and before it passes into the percolator or oil-extracting reservoir to such a degree of temperature as to expel all or nearly all of the moisture that may be contained in the seed or meal, as will be here-
20 inafter more fully set forth in detail.

The flaxseed is crushed between rollers in the usual manner, and is then passed through a suitable drier, heated to a proper degree of temperature, for expelling the watery moisture
25 from the seed or meal before it passes into the percolator. Care must be taken not to heat the meal in the drying process to such a degree as to bake the same, as that would have a tendency to lessen the yield and injure the
30 quality of the oil extracted. The seed or meal is next passed into the percolator and treated with naphtha in the usual manner.

35 In wet seasons the seed is often received in a very damp condition, and is ordinarily passed directly from the crushing-rollers into the percolator without being first subjected to a drying process for the purpose of expelling the watery moisture from the meal, and the result

is that the glutinous matter in the meal, together with the moisture and naphtha, or equivalent hydrocarbon, causes it to form into lumps, having a glazed or filmy surface, which has the effect of retaining the naphtha in these lumps, and which cannot be expelled from the same by the action of the steam forced into the percolator after the liquid oil and naphtha have been drained off. The naphtha absorbed and retained by these lumps of meal represents so much loss, and also produces a disagreeable effect upon the workmen in the drying-room where these lumps are broken up, as the vaporizing naphtha escaping from these lumps intoxicates their senses while employed in drying and sacking the meal after the oil has been extracted.

55 Another great advantage resulting from this process of first drying the meal before it passes into the percolator is that it shortens the time usually required to dispose of the contents of each percolator by some six hours, thereby economizing in time, fuel, and other attending expenses. This process also increases the yield of oil, as practical tests have proven.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

In the hydrocarbon process of manufacturing linseed-oil, the improved step herein described, which consists of subjecting the crushed seed or meal to a drying process before the same passes into the percolator, substantially as and for the purpose set forth.

CYRUS D. GORDON.

Witnesses:

CHAS. F. JONES,
JAMES BECK.