

# UNITED STATES PATENT OFFICE.

DARIUS S. ROBINSON, OF CLEVELAND, OHIO.

IMPROVEMENT IN PAINT-OIL COMPOUNDS AND PROCESSES OF PREPARING THE SAME.

Specification forming part of Letters Patent No. **159,710**, dated February 9, 1875; application filed November 10, 1874.

*To all whom it may concern:*

Be it known that I, DARIUS S. ROBINSON, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and Improved Oil for Paint and Process for Compounding the Same, of which the following is a full and complete description:

The nature of my improvement relates to a drying-oil compound for paints, varnishes, and to be used with lead, zinc, and other pigments, when being ground. The elements or ingredients composing the said compound, and the process of making the same, will be hereinafter specified more fully, the principle feature of the invention being to render cotton-seed oil a vehicle or drier for paints.

I take crude cotton-seed oil as it is expressed from the seed, or after it is clarified, to which is added a preparation for the purpose of causing the oil to dry, and to prevent it from becoming thick or chilled.

The said preparation is composed of the following elements or ingredients, and in or about the proportions hereinafter specified: Linseed-oil, seven and one-half pounds; black oxide of manganese, four pounds; sugar of lead, one-fourth pound; soda-ash, one-fourth pound; borax, one-eighth pound, or their equivalents. These parts are all mixed together in a suitable vessel, and then heated to about 400° of heat. The next step is to allow this heated mass to settle, and then take one gallon of it, and add to about sixty-seven gallons of cotton-seed oil, which is then thoroughly combined together. Of this last mixture take two gallons and mix it with about one bushel of flaxseed and one pint of water, the whole of which is then put under millstones or chasers for mixing the several parts of the compound together, and when thoroughly mixed the entire mass is put into a heater or retort, where it is subjected to the heat of steam, or its equivalent, from 75° to 100°—that is, the de-

gree of steam heat applied to the retort holding the mixture. There is no steam admitted from the outside to the interior of the retort to come in contact with the preparation therein. When it has attained this degree of heat the mass is then taken out of the retort and put into bags or sacks, and placed under a suitable press, and the oil expressed out from the compound in the sacks. It is then ready for use, and may be employed as a vehicle for paints and varnishes of various kinds for which linseed-oil is used, and may be used for grinding lead, zinc, and other pigments.

In case unrefined cotton-seed oil is used it becomes clarified by this process, so that my improved oil compound may be employed in paints of the most delicate tints and colors, and by this means described the cotton-seed oil is rendered as available as a drier for pigments as linseed-oil, the said compound taking the place of linseed-oil for all general purposes.

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

1. The described process of making an oil compound for paints, by first combining cotton and linseed oils with the oxide of manganese, sugar of lead, soda-ash, and borax, by heating the mass, and next mixing said compound with cotton-seed oil, flaxseed meal, and water, in a retort, subject to the action of steam heat, and then expressing the oil from the mass, substantially as and for the purpose set forth.

2. The paint-oil compound composed of cotton and linseed oils, black oxide of manganese, sugar of lead, soda-ash, and borax, substantially as and for the purpose set forth.

DARIUS S. ROBINSON.

Witnesses:

W. H. BURRIDGE,  
A. F. CORNELL.