UNITED STATES PATENT OFFICE.

DARIUS S. ROBINSON, OF CLEVELAND, OHIO, ASSIGNOR OF ONE-HALF HIS RIGHT TO ASBURY M. SEARLES, OF SAME PLACE.

IMPROVEMENT IN PAINT-OIL COMPOUNDS.

Specification forming part of Letters Patent No. 167,622, dated September 14, 1875; application filed March 13, 1875.

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 new and Improved Paint-Oil Compound, and process of preparing the same, being additional improvements in a certain oil compound and process for which a patent was granted to me February 9, 1875. No. 150 710

ruary 9, 1875, No. 159,710.

The nature of my invention relates to a compound to be used as a substitute for linseed-oil in paints, varnishes, and in the grinding of pigments, &c.; and the process relates to the mode of treating cotton and flax seed together by crushing or grinding into meal and combining them with a drying compound, then subjecting the mass to heat in suitable retort or vessel preparatory to expressing the oil therefrom, substantially as hereinafter more fully set forth.

The chief object of my invention is to intimately mix cotton-seed oil with linseed-oil at the moment they are being expressed from the meal produced by grinding a mixture of the cotton-seed with linseed, or, in other words, to mix or compound the two oils in their nascent state, when they will combine better than when the oils are separately expressed and then mixed in the usual way. By my improvement I not only obtain a clearer mixture than usual, and one that dries better, but I also prevent the mixture from chilling at the usual temperature, and avoid the common odor of cotton-seed oil.

My invention consists, first, in the process of making a mixed oil by grinding a mixture of cotton-seed and linseed; and, second, in a compound for paint, made by treating said mixed oil with certain chemicals, which will be fully described in this specification.

The mode or process of making said oil, and the materials used in preparing the same, are as follows: As one example, take about one bushel of flaxseed and the same amount of cotton-seed, which are mixed together and then crushed into meal by means of rollers. This meal is then ground under stones or chasers. To this ground meal is added about one gallon of water, and a drying compound

made of the following materials, and in about the following proportions, viz: Sulphate of zinc, half pound; sugar of lead, half pound; india-rubber, one pound; black oxide of manganese, eight pounds, all of which is placed in a proper vessel or retort and heated until it attains about 400° of heat. The compound, as soon as it cools and settles, is then fit for use.

Of this mixture take about one-half pound and mix with the meal and water under the chasers before stated. After the said meal, water, and drying compound have been worked under the chasers for about thirty minutes it is then passed into a proper vessel or retort and there subjected to about 150° of heat. The material remains in the retort subject to this heat for about ten or fifteen minutes, and then removed and put into bags, which bags are placed in boxes or hoops and then subjected to the action of a suitable press to force out the oil compound from the said mass or material.

This oil, when mixed with the drying compound above referred to, in about the following proportions—viz., one pound of said drier to four gallons of the said oil compound—produces a self-drying oil without change of color, and suitable for the most delicate tints and colors, and by boiling the said oil compound to about 300° of heat produces a fine drying-oil for painting and other purposes.

What I claim as my invention, and desire

to secure by Letters Patent, is—

1. The above-described process of making a mixed oil by grinding a mixture of cotton-seed and linseed, and then expressing the oil from the meal thus made, substantially in the manner and for the purposes set forth.

2. The above-described paint-oil compound, consisting of the oil obtained by the above-claimed process, sulphate of zinc, sugar of lead, india-rubber, and black oxide of manganese, substantially as described.

DARIUS S. ROBINSON.

Witnesses:

GEO. JUDSON, J. H. BURRIDGE.