

# UNITED STATES PATENT OFFICE

ALBERT RIEDER, OF ALLEGHENY CITY, PENNSYLVANIA.

## IMPROVEMENT IN COMPOUNDS RESEMBLING LINSEED-OIL.

Specification forming part of Letters Patent No. **168,108**, dated September 28, 1875; application filed July 26, 1875.

*To all whom it may concern:*

Be it known that I, ALBERT RIEDER, of Allegheny City, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Compound Linseed-Oil; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to a compound of linseed and petroleum oils, intended more especially for mixing paints, but capable of being used, in the majority of cases, where linseed and like oils are now employed. It consists in a compound formed of petroleum and linseed oils, gum-shellac, and litharge, together with such proportions of bichromate of potash and rosin, or their equivalents, as will give the required gravity and color to the compound, the mass being so treated and admixed as to disguise or remove the petroleum odors, whereby a compound oil is obtained having the gravity and color of linseed-oil.

I will now proceed to describe my invention so that others skilled in the art may apply the same.

To one barrel of linseed-oil, which will average forty-five gallons, I add litharge, about two (2) pounds; gum-shellac, about three (3) pounds; rosin, about ten (10) pounds; bichromate of potash sufficient to give the desired color, and about a handful of feathers. These ingredients I heat together until the oil attains a temperature which will scorch the feathers, and the mass gives off the peculiar odor of burning feathers, by which time the rosin, shellac, &c., are thoroughly dissolved, and the oil may be allowed to cool, the scorched or charred feathers being removed from the oil. This compound, for the purpose of reference, I will call No. 1.

I next take petroleum oil, generally the crude oil, and add thereto enough acid to separate the tar—say about three (3) carboys of sulphuric acid to every one hundred (100) barrels of oil. This is allowed to settle, and the oil is then drawn off and treated with caustic soda or potassa to neutralize the free acid—say about twenty (20) pounds of caustic soda

to the hundred (100) barrels of oil—and finally washed in the usual way. The product thus obtained is about thirty-six gravity, and upon the gravity and color of this oil will depend to a great extent the amount of rosin and bichromate of potassa added to the first compound. This compound I designate No. 2.

Having obtained compounds Nos. 1 and 2, I admix them in about the proportions of one part No. 1 (or linseed-oil compound) to three parts No. 2, (or petroleum,) the compound No. 1 being, preferably, in a heated state at the time No. 2 is added, so as to drive off any light vapors.

This produces a compound oil which I term "raw oil," having the color, gravity, and most if not all of the qualities of linseed-oil, and one that is useful for paint-oils, and generally where such oils are employed.

When a drying-oil is required, I increase the amount of litharge and shellac in compound No. 1, in the proportion usually used in making drying-oils.

Though I prefer to use bichromate of potash as a coloring matter, and rosin to obtain the proper specific gravity, yet it is evident that the proper color and gravity may be obtained by other and similar agents.

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

1. A compound oil resembling linseed-oil, composed of linseed-oil, crude petroleum oils, treated as described, litharge, and gum-shellac, together with bichromate of potash and rosin, for giving the proper color and gravity to the oil.

2. The method herein described of disguising or removing the petroleum odor, consisting in scorching feathers in the oil or its admixtures.

In testimony whereof I, the said ALBERT RIEDER, have hereunto set my hand.

ALBERT RIEDER.

Witnesses:

F. W. RITTER, Jr.,  
W. N. PAXTON.