

UNITED STATES PATENT OFFICE.

CHARLES L. BORGMEYER, OF RAHWAY, NEW JERSEY.

PYROXYLINE SOLVENT AND ITS COMPOUND.

SPECIFICATION forming part of Letters Patent No. 504,905, dated September 12, 1893.

Application filed May 29, 1893. Serial No. 475,951. (No specimens.)

To all whom it may concern:

Be it known that I, CHARLES L. BORGMEYER, a citizen of the United States, residing at Rahway, county of Union, State of New Jersey, have invented certain new and useful Improvements in a Pyroxyline Solvent and its Compound; and I do hereby declare that the following is a clear, full, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

The object of my invention is to extend the list of active solvents of soluble pyroxyline by investigation among the classes of artificial or synthetical essential oils as distinguished from the natural essential oils. I have found that the following artificial essential oils are active solvents of soluble pyroxyline when used each by itself: artificial oil of tansy, artificial oil of peppermint. Each of these oils is also solvent when used in conjunction with either fusel oil or grain alcohol. I have also found that artificial oil of red thyme and artificial oil of sassafras when used in conjunction with grain-alcohol are each actively solvent of soluble pyroxyline, but are not thus solvent when used alone or in conjunction with fusel oil.

I am aware that natural oil of sassafras has been claimed as an active solvent of pyroxyline, but I do not find it to be so, or if so at all, not comparable in active solvency with the artificial oil, when this is used in connection with grain or ethyl-alcohol. But the artificial oil of sassafras is in no way the true oil of sassafras, being prepared by a secret process from safrol (which is obtained from oil of camphor) and turpentine. Neither is the artificial oil of red thyme in any way the true oil of red thyme, being prepared from thymol dissolved in oil of camphor and oil of

turpentine. The artificial oil of peppermint is prepared by distillation from the herbs, *Mentha pulegium* (European pennyroyal) and *Mentha crispa* (common curled leaved mint) with lemon peel; it has none of the chemical construction of the true oil of peppermint. I consider the oils I have enumerated the practical equivalents one of the other except as distinguished by the difference in their action on pyroxyline in connection with fusel oil. All these oils are manufactures of recent date. They are uniformly more potent in their action upon soluble pyroxyline than the natural oils, and produce a solution that dries more quickly. Again the quantity necessary to produce such a solution is less than of the natural oils for the same purpose, and the prices of all the artificial oils are much less than those of the natural oils and are not subject to fluctuation.

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

1. The active solvent of pyroxyline which consists of artificial oil of peppermint, in solution in amyl alcohol.

2. The compound of pyroxyline which consists of pyroxyline dissolved in artificial oil of peppermint.

3. The compound of pyroxyline which consists of pyroxyline dissolved in an amyl-alcoholic solution of artificial oil of peppermint.

4. The compound of pyroxyline which consists of pyroxyline dissolved in a conjoint combination of the artificial oils of tansy, peppermint, red thyme and sassafras.

CHARLES L. BORGMEYER.

Witnesses:

EUGENE TURTON,
M. A. HILLOCK.