

UNITED STATES PATENT OFFICE.

CHARLES L. BORGMAYER, OF RAHWAY, NEW JERSEY.

PYROXYLINE SOLUTION OR COMPOUND.

SPECIFICATION forming part of Letters Patent No. 503,402, dated August 15, 1893.

Application filed May 25, 1893. Serial No. 475,465. (No specimens.)

To all whom it may concern:

Be it known that I, CHARLES L. BORGMAYER, a citizen of the United States, residing in the city of Rahway, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Pyroxyline Solutions or Compounds; 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 and combinations of active solvents of pyroxyline by investigation among the classes of essential oils. I have found that the following are active solvents of pyroxyline: oil of sandal-wood, oil of cubebs, oil of ginger, oil of bay, oil of clove-buds, oil of citronella; and I have found these oils related as solvents of soluble pyroxyline by the common property that their individual solvent action upon pyroxyline is retarded by the addition to either of them, of fusel oil or commercial amyl alcohol. I have found also that in connection with grain alcohol (commercial ethyl alcohol), the oil of ginger, oil of bay, oil of clove-buds, and oil of citronella is each an active solvent of pyroxyline; but that with grain-alcohol the oil of sandal-wood, and oil of cubebs is each non-solvent of pyroxyline.

I am aware that the oil of cloves has been claimed as a latent solvent of pyroxyline,

from which oil of clove-buds differs in being a distinct product and an active solvent. Oil of cloves has the disadvantage of separating out from many pyroxyline solutions, which oil of clove-buds does not do. Oil of clove-buds requires no heat to develop its active solvent power.

I find that the oil of cubebs and the oil of citronella are not active solvents of such complete solvent power as the others I have named, but are still to be included in the class of active solvents. These oils are miscible each with the other and all together, and as such mixtures are active solvents of pyroxyline. In view of the described common properties of these oils I deem them equivalents the one of the other, and because with the exceptions with grain-alcohol as described one can be substituted for the other.

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

1. A pyroxyline solution or compound which consists of pyroxyline dissolved in oil of clove-buds.

2. A pyroxyline solution or compound which consists of pyroxyline dissolved in an ethyl-alcoholic solution of oil of clove-buds.

CHARLES L. BORGMAYER.

Witnesses:

M. A. HILLOCK,
E. M. SHIELDS.