

UNITED STATES PATENT OFFICE.

JEAN BAPTISTE GERMEUIL BONNAUD, OF OSTEND, BELGIUM.

PYROXYLIN COMPOUND.

SPECIFICATION forming part of Letters Patent No. 697,790, dated April 15, 1902.

Application filed November 11, 1901. Serial No. 81,940. (No specimens.)

To all whom it may concern:

Be it known that I, JEAN BAPTISTE GERMEUIL BONNAUD, a citizen of the French Republic, residing at 60 Rue Louise, Ostend, in the Kingdom of Belgium, have invented certain new and useful Improvements in Processes of Making Pyroxylin Compounds; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in a process of making pyroxylin compounds. It is well known that such compounds when employed in the liquid form for coating or varnishing objects or for similar purposes become hard when dried; and my invention has for its object the manufacture of a pyroxylin compound which will remain flexible and waterproof even after it has become dry and which has a surface which may be polished or left dull, as desired.

In carrying out my invention I dissolve nitrocellulose in any of its well-known solvents, preferably in methylated alcohol and camphor, in the following proportions: one gallon of alcohol, one pound of camphor, and one pound of pyroxylin or nitrocellulose. To this solution I add gum-copal dissolved in boiling castor-oil, and this is the important and distinguishing feature of my invention. Preferably I further add sugar of lead, litharge, white copperas, and vanillin in very small quantities. I find that the following proportions answer well in practice: I dissolve from two to six parts of gum-copal in one hundred and eighty parts of boiling castor-oil and add to this solution a mixture composed of from one to four parts of sugar of lead, litharge, and white copperas mixed in equal quantities. I then add from ten to thirty parts of this solution to one hundred and eighty parts of the nitrocellulose solution in which I have previously dissolved a very small quantity of vanillin. The particular value of gum-copal is that it prevents the too-rapid evaporation

of the constituents of the solution of drying, since gum-copal is insoluble in cold castor-oil. The use of vanillin is to prevent a disagreeable smell. When ordinary fabrics are treated with a solution such as above described, there is a disagreeable smell until the carrier has completely evaporated. The vanillin prevents this disagreeable smell from being noticed and substitutes therefor a pleasant odor.

The solution described may be employed for coating and impregnating paper, textile fabrics, and the like for walls, ceiling and floor coverings, for coating stone, wood, marble, and for similar purposes.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The process of making pyroxylin compounds which consists in adding to a pyroxylin solution, a solution made by dissolving gum-copal in boiling castor-oil.

2. The process of making pyroxylin compounds which consists in adding to a solution of pyroxylin, a solution composed of gum-copal dissolved in boiling castor-oil, mixed with sugar of lead, white copperas, and litharge.

3. The process of making pyroxylin compounds, which consists in adding to a pyroxylin solution, a solution composed of gum-copal dissolved in boiling castor-oil, sugar of lead, white copperas, litharge, and a small quantity of vanillin.

4. The process of making pyroxylin compounds which consists in dissolving nitrocellulose in methylated alcohol and camphor, and adding to the solution thus obtained, a solution composed of gum-copal dissolved in boiling castor-oil, and of sugar of lead, litharge, white copperas, and adding a small quantity of vanillin.

In testimony whereof I affix my signature in presence of two witnesses.

JEAN BAPTISTE GERMEUIL BONNAUD.

Witnesses:

A. E. VIDAL,

A. BROWNE.