

# UNITED STATES PATENT OFFICE.

WILHELM PICKHARDT, OF NEW YORK, AND HERMANN ENDEMANN, OF  
BROOKLYN, ASSIGNORS TO SAID PICKHARDT AND ADOLF KUTTROFF,  
OF NEW YORK, N. Y.

## BENZOATE OF CHINOLINE.

SPECIFICATION forming part of Letters Patent No. 256,445, dated April 11, 1882.

Application filed February 24, 1882. (Specimens.)

*To all whom it may concern:*

Be it known that we, WILHELM PICKHARDT and HERMANN ENDEMANN, both citizens of the United States, said WILHELM PICKHARDT residing at New York, county and State of New York, and HERMANN ENDEMANN residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Medical Compounds, of which the following is a specification.

This invention relates to a medical compound which is obtained by the action of benzoic acid on chinoline.

In carrying out our invention we take, by preference, the chinoline of Skraup, or we prepare such chinoline according to the Patent No. 241,738, granted to Zdenko H. Skraup May 17, 1881, and then we free the same from the impurities mixed therewith by treating it with tartaric acid, whereby a tartrate of chinoline is obtained, and then we liberate from this salt the chinoline by treating its aqueous solution with caustic alkalies. If desired, however, chinoline produced in any other manner may be used for our purpose.

For preparing our new compound we take about one hundred and twenty-two parts of pure benzoic acid and dissolve the same under application of heat in one hundred and twenty-nine parts of chinoline. The mixture may be brought into a retort and distilled, when the benzoate of chinoline is obtained in the form of an oil. Water in the mixture produces, on distillation, a partial dissolution. The substances used in the manufacture of our benzoate of chin-

oline should therefore be dry, if it is contemplated to distill the oil. The oil when cooled by a freezing-mixture becomes very thick, while on the application of heat it becomes thinner. The boiling-point of our benzoate of chinoline corrected is 253° centigrade. One drop of the oil mixed with some hydrochloric acid becomes almost solidified from liberated benzoic acid, so that the vessel containing it may be turned over without losing any of its contents. If sufficient hydrochloric acid be added to decompose the benzoate completely, the chinoline, together with some benzoic acid, will go into the solution, and when sufficient water has been added the chinoline may be separated from the undissolved benzoic acid by filtration. The solution gives the reactions of chinoline, while in the residue the benzoic acid may be found by the reactions known to chemists.

Our compound may be used with advantage for medical purposes.

What we claim as new, and desire to secure by Letters Patent, is—

As a new article of manufacture, the benzoate of chinoline herein described, and having the characteristics above set forth.

In testimony whereof we have hereunto set our hands and seals in the presence of two subscribing witnesses.

WM. PICKHARDT. [L. S.]  
HERMANN ENDEMANN. [L. S.]

Witnesses:

W. HAUFF,  
E. F. KASTENHUBER.