## UNITED STATES PATENT OFFICE.

JAMES H. STEBBINS, JR., OF NEW YORK, N. Y.

IMPROVEMENT IN COLORING-MATTERS OBTAINED FROM SALICYLIC ACID.

Specification forming part of Letters Patent No. 221,118, dated October 28, 1879; application filed April 23, 1879.

To all whom it may concern:

Be it known that I, JAMES H. STEBBINS, Jr., of the city, county, and State of New York, have invented a new and useful Improvement in Coloring Matters, which improvement is fully set forth in the following specification.

This invention relates to a coloring-matter which I call "salicylidine," and which is obtained by the reaction of diazo-benzole nitrate on salicylic acid.

In carrying out my invention a quantity of salicylic acid is dissolved in alcohol, and this alcoholic solution is treated with an aqueous solution of diazo-benzole nitrate.

The proportion in which the various ingredients are used is about as follows: Ten ounces of salicylic acid are dissolved in about one hundred ounces of alcohol, one ounce of diazobenzole nitrate is dissolved in about one hundred ounces of water, and these solutions are poured together.

As soon as the solution of diazo-benzole nitrate is added to the solution of salicylic acid the mixture turns ruby-red, and after a short time a large number of dark-brown crystals make their appearance. These crystals are

collected on a filter and dried, and, if desired, they may be purified by recrystallization. They form my new coloring-matter. This coloring-matter dissolves readily in alcohol, but is only sparingly soluble in water; but by converting it into a soda-salt or sulpho-salt it becomes soluble in water.

It dyes silk of an orange-red color without mordants. Wool is dyed of a salmon color with a tannic-acid mordant. Silk, if mordanted with muriate of tin, is dyed red.

What I claim as new, and desire to secure

by Letters Patent, is—
As a new manufacture, the coloring-matter or dye-stuff obtained from the reaction of diazobenzole nitrate on salicylic acid, substantially in the manner set forth, or by any other method which will produce a like result.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 19th day of April, 1879.

JAMES H. STEBBINS, Jr. [L. S.]

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.