UNITED STATES PATENT OFFICE.

E. FREEMAN PRENTISS, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVED MORDANT.

Specification forming part of Letters Patent No. 54,203, dated April 24, 1866.

To all whom it may concern:

Be it known that I, E. FREEMAN PRENTISS, of the city of Philadelphia, and State of Pennsylvania, have invented a new and useful Mordant Applicable in the Dyeing of Wool and Woolen Fabrics; and I do hereby declare that the following is a full and exact description of the same.

The colors for which this mordant is used are black and any desired shades of mulberry.

This mordant is a triple sulphate, in the form of crystals, which consist of seven hundred and forty-six parts of the sulphate of iron, two hundred and fifty-four parts of the sulphate of copper, and one hundred and ten parts of the sulphate of zinc. These proportions may be slightly varied without material injury.

For dyeing black: for one hundred pounds of wool or woolen goods, seven pounds of the mordant, two and a half pounds red tartar. Boil the wool or goods in this two hours. Next day finish with fifty-five pounds of logwood, seven pounds of fustic. Boil one and a-half

hour. Put into the wool, after boiling, two buckets of urine, or, in place of urine, put in one quart of ammonia, (single f,) then boil one-granter of an hour.

quarter of an hour.

For dyeing mulberry: for one hundred pounds of wool or woolen goods, thirty-five pounds of cam-wood. Boil wool or goods in this one and a half hour, making a new liquor with clean water, three and a half pounds of the mordant, one pound of red tartar. Boil in this one and a half hour. Next day finish off with ten pounds of logwood.

You can change the shade and make it much lighter, if desired, by using the logwood.

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

The mordant composed substantially as and for the purpose described.

E. FREEMAN PRENTISS.

Witnesses:

GEO. BUCKLEY, I. E. SHAW.