

United States Patent Office.

EDWARD B. HECKEL, OF VINCENT, PENNSYLVANIA.

Letters Patent No. 102,118, dated April 19, 1870.

IMPROVED MINERAL PAINT.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, EDWARD B. HECKEL, of Vincent, in the county of Chester and in the State of Pennsylvania, have invented certain new and useful Improvements in Mineral Paint; and do hereby declare that the following is a full, clear, and exact description thereof.

My invention has for its object the production of a cheap and durable paint for out-door work, and, to this end,

It consists in combining the hereinafter-described silician mineral with linseed or other oil.

In most of the mineral paints in use, iron, in some of its forms, exists in so large a proportion as to prevent the durability of the paint, and render it nearly useless as a protection to wood or metals.

These objections do not exist in my paint, which is made from a brown silician rock, of exceeding softness, found in Chester county, Pennsylvania, which, upon analysis, is found to contain the following elements:

Silex, 60; alumina, 23; peroxide of iron, 8; oxide of manganese, .50; magnesia, .30; and organic matter and water, 8.20.

The above mineral is first ground dry, and bolted, and then ground in oil, after which suitable pigments are added to give the paint the desired color and shade.

It will be observed that, in the above-described

mineral, silex is in excess of all other elements combined, which fact gives a reason for the exceedingly hard surface acquired by the paint after a short exposure to the weather, and insures it durability.

It has been found that the color of this paint, whether natural or obtained by the use of pigments, does not change, and is, apparently, as fixed and permanent as the paint itself, in which the only change produced by the weather is an increased hardness of surface.

In addition to the above advantages, the ease with which the mineral can be mined and prepared enables the furnishing of said paint at a smaller cost than any of a corresponding quality now in use.

Having thus fully set forth the nature and merits of my invention,

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

The combination of the hereinbefore-described brown silician mineral with linseed or other oil, substantially as and for the purpose specified.

In testimony that I claim the foregoing, I have hereunto set my hand this 27th day of December, 1869.

E. B. HECKEL.

Witnesses:

ISAAC BUCKWALTER,
DAVID Y. CUSTER.