## United States Patent Office.

WILLIAM S. SMITH, OF LOCK HAVEN, PENNSYLVANIA.

## COMPOSITION FOR ROOF-COATING.

SPECIFICATION forming part of Letters Patent No. 452,086, dated May 12, 1891.

Application filed September 1, 1890. Serial No. 363,709. (No specimens.)

To all whom it may concern:

Be it known that I, WILLIAM S. SMITH, of Lock Haven, in the county of Clinton, in the State of Pennsylvania, have invented new and useful Improvements in Compounds for Roof-Coatings, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to a compound for

ro treating shingle, tin, or iron roofs.

My object is to produce a composition of ingredients which when mixed and commingled together and applied to a shingle, tin, or iron roof will expand and contract with the shingles or iron, and thus not crack or flake off, as is common with most roof-coatings, and also to provide a coating for roofs with great body, and thus afford permanent protection to such roofs from the elements.

My invention consists in mixing and commingling the several ingredients hereinafter described, and set forth in the claims hereto annexed. I take about twenty per cent. each of gas-tar, gum-asphaltum, and rosin, which are heated thoroughly and mixed together, which I call the "base," and to this base I add about twenty per cent. pulverized slate and fifteen per cent. Venetian red. To this compound I add muriatic acid in sufficient

quantities to make the compound into a liquid, 30 so that it may readily be applied with a brush.

I have found by making repeated experiments that the addition of Venetian red serves not only to give the compound color, but, uniting with the various ingredients thereof, makes 35 the same elastic, so that it may expand and contract with the heat and cold without cracking. I also find that by the addition of muriatic acid the inflammability of the tar and asphaltum is neutralized and renders the same 40 fire-proof. It is not necessary to adhere strictly to the above proportions, as it may be readily seen that different proportions may be used without departing materially from the spirit of my invention.

What I claim as my invention, and desire

to secure by Letters Patent, is—

A composition for roof-coating, consisting of gas-tar, gum-asphaltum, and rosin heated and mixed together, to which is added pulverized 50 slate, Venetian red, and muriatic acid in sufficient quantities to make a compound liquid.

In witness whereof I have hereunto set my hand this 22d day of August, 1890.

WILLIAM S. SMITH.

In presence of—
J. W. Fleming,
JAMES A. WENSEL.