

UNITED STATES PATENT OFFICE.

LUCIUS S. STIMSON, OF LOWELL, MASSACHUSETTS, ASSIGNOR TO HIMSELF
AND NELSON F. LIBBY, OF SAME PLACE.

IMPROVED COMPOSITION FOR ROOFING.

Specification forming part of Letters Patent No. **93,245**, dated August 3, 1869.

To all whom it may concern:

Be it known that I, LUCIUS S. STIMSON, of Lowell, in the county of Middlesex and State of Massachusetts, have invented and produced a new composition of matter for roofing and other purposes, which I term "Elastic Roofing;" and I do hereby declare that the following is a full and exact description thereof.

The nature of my invention and production consists in a new composition of matter for roofing, &c., which consists of the following ingredients, viz: powdered or pulverized soap-stone, rosin, and petroleum-oil, either in its crude state or the solid oil after it has been deodorized.

To enable others skilled in the art to make and use my invention and production, I will proceed to describe its several parts, how prepared and compounded.

The soap-stone is prepared to a given degree of fineness—the finer the grade the better composition is made. The oil, when used in its solid state, after being deodorized and the benzine taken from it, has to be again returned to the same, which gives to the composition the required drying ingredient, which, by its evaporation, leaves the same in a complete solid elastic state; and when crude oil is used, in either case the required quantity is put into a suitable vessel, and to it is added the required quantity of rosin. This composition is then heated to 197° Fahrenheit, or thereabout, and, when in this heated state and the rosin and oil become thoroughly mixed together, the required given quantity of powdered soap-stone is added, which is properly stirred with a suitable instrument, thoroughly mixing the same to the consistency of mortar. The composition is then in condition to be worked or applied to roofs of any angle, or for other purposes.

The operator takes the composition in the required quantity, either in a vessel or hod, and deposits the same on the roof to be covered. He then, with a trowel or similar instrument, after dipping the same in oil, spreads the composition over the roof in any thickness desired, and, during the entire operation of spreading the same, the trowel or in-

strument used has to be dipped into oil occasionally; otherwise the composition in this heated state would stick to the same, rendering it impossible to be worked at all.

After this composition has been spread on the roof, it dries corresponding with the cooling of the same, and when cold becomes hard.

The object of the soap-stone is to give the required body to the composition.

The rosin, or any like vegetable matter, when mixed with petroleum oil, gives the required elasticity to the same, and also holds the particles together.

The body of this composition also being a non-conductor of heat, the oil impervious to freezing, the greatest summer heat has no material effect of softening, it being put on at a high temperature of heat, of 197°, or thereabout, Fahrenheit, which is nearly one hundred per cent. higher temperature than summer heat. This renders the roof perfectly tight in all kinds of weather and degrees of temperature, requiring no overlaying with gravel or sand to prevent the intense summer heat from melting it or the cold weather from cracking it; also, the nature of the composition being such that it is adhesive, and will adhere to either metal or wood or other substances, and can be applied to roofs of any angle, however steep, without difficulty and danger of being disturbed by rain or any kind of weather; and, also, this composition is applicable and of great importance to the manufacture of pressure and drain pipes.

The proportions of the above composition and sixty-seven per cent. of soap-stone, twenty-two per cent. of rosin, and eleven per cent. of petroleum-oil, either in its crude or solid state, although these proportions may be varied to suit the user.

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

The composition of soap-stone, rosin, and petroleum, substantially in the proportions and in the manner herein specified.

LUCIUS S. STIMSON.

Witnesses:

R. T. RAWSON,
GEO. E. PEVEY.