Anited States Patent Pffice.

GEORGE O. SMITH AND J. H. SMITH, OF CHICAGO. ILLINOIS.

Letters Patent No. 70,478, dated November 5, 1867.

IMPROVED ROOFING COMPOUND.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that we, George O. Smith and J. H. Smith, of Chicago, in the county of Cook, and State of Illinois, have invented a new Roofing Compound; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the sample ingredients accompanying this specification, in which—

No. 1 is sand and gravel; No. 2, common coal tar; No. 3, ground limestone; No. 4, ground coke.

The object of our invention is to provide a roofing compound which can be successfully applied to common sheeting, and make a cheap and durable roof without the use of felt or paper-cloth; and its nature differs essentially from any roofing material, in the fact that coke is employed as the most solid absorbent of coal tar of any material convenient for use, considering its cost, and as it is comparatively indestructible, a great advantage is gained, not only in solidity, but in the durability of the roof when put on; second, the use of ground limestone is important in filling the pores or spaces between the gravel and sand, and, when used in combination with the other ingredients, hereinafter described, forms a roof almost as hard as stone, and yet sufficiently elastic to prevent cracking in cold weather.

In order to give a correct understanding of our invention, we will now give the process in full.

We usually take two parts of ground limestone, one part ground coke, and one part of sand and coal tar, and mix them together, after which the compound is ready to spread on the sheeting; after which the roof should be covered with as much sand or gravel as the composition will hold, and the roof, after having time to get dry, will become hard and turn water similar to roofs laid with felt and common composition. One thing should be attended to, which is the jointing of the sheeting, so as to leave but small opening between the planking, otherwise the composition may be wasted or the roof defective. A heavy coat of material should be used, and made of such consistency as will readily fill all of the cracks and joints in the sheeting, whereby a roof may be made which is both water-tight and durable.

We are not particular as to the proportions of tar, sand, and ground limestone used as a first coating, the object being to form a cement of the greatest strength, and of such consistency as can be readily spread on sheeting or other covering, and not crack in cold weather nor run in warm.

Having thus described our roofing compound, what we claim, and desire to secure by Letters Patent, is—A roofing, composed of the ingredients herein named, substantially as set forth.

GEO. O. SMITH, J. H. SMITH.

Witnesses:

GEO. L. CHAPIN, A. HAYWARD.