

UNITED STATES PATENT OFFICE

CARLETON B. HUTCHINS, OF ANN ARBOR, MICHIGAN.

IMPROVEMENT IN ROOFING COMPOSITIONS.

Specification forming part of Letters Patent No. **172,321**, dated January 13, 1876; application filed June 26, 1875.

To all whom it may concern:

Be it known that I, CARLETON B. HUTCHINS, of Ann Arbor, county of Washtenaw and State of Michigan, have invented a new and Improved Composition for Covering Roofs and various other uses, of which the following is a specification:

The nature of my invention consists in mixing melted rosin, indurated pine-tar, paraffine oil or rosin oil, either separate or combined, with wheat-bran, coarse middlings, fine middlings, cattle's hair or tow, ground mineral paints produced from Brandon, Vermont, or ground stone and pulverized alum, in a manner hereafter set forth, either to be increased or diminished, as may be wished.

To prepare the roofing I take equal parts of melted rosin and tar, or either of the oils, to the amount of ten gallons each; add to this one pound of cattle's hair or tow, sixteen quarts wheat-bran, sixteen quarts coarse middlings, twenty quarts fine middlings, and ground stone or mineral paint enough to make the compound of suitable thickness to spread well.

To prepare the composition to be used as a paint or top-dressing, I increase the oils or indurated tar, and reduce all of the other ingredients enough to render the composition suited to apply with a brush.

To make either of the compositions fire-proof I add from three to five pounds of pulverized alum.

The combination of bran and middlings with the other ingredients fills the composition with innumerable air-cells, which renders it a great non-conductor of heat. The top-dressing of paint covered with bran makes the surface of a lightish color when embedded in the paint, which serves to throw off the rays of the sun and preserve the compounds, and not overload the roof, as when covered with gravel.

I claim as my invention—

The composition fabric roofing and roofing-paint, of the ingredients and in the proportions substantially as set forth.

CARLETON B. HUTCHINS.

Witnesses:

H. B. HUTCHINS,
C. H. HUTCHINS.