Anited States Patent Office.

SAMUEL KINGAN, OF NEW YORK, N. Y., ADMINISTRATOR OF THE ESTATE OF JAMES ANDERSON, DECEASED.

Letters Patent No. 103,199, dated May 17, 1870.

IMPROVEMENT IN THE MANUFACTURE OF ROOFING-FELT.

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

To all whom it may concern:

Be it known that James Anderson, deceased, late of Ballymacairett, in the county of Down, in Ireland, did during his lifetime invent certain Improvements in the Manufacture of Felts; and I, Samuel Kingan, of city, county, and State of New York, administrator of the estate of the said James Anderson, do hereby declare that the following is a full, clear, and exact description thereof.

This invention relates to felt fabrics for roofing and analagous purposes, and consists in a process of preparing sheets of felt, whereby its fibers will be caused to cohere firmly, while moisture will be entirely excluded.

Asphaltum is first purified by boiling, or in any other suitable manner, and then intermixed with the melted product or hot fluid thus obtained, twenty to twenty-five per cent. of oil or tar.

The object of this is to lessen the stiffness and consistency, while it assists in producing a perfect repellant of water.

The composition thus formed is then applied to the fibrous material used in felting at the time or just before the felting operation takes place.

The sheet then consists of a felt body, purified asphaltum, and oil, thoroughly intermixed throughout the mass. It is of uniform quality in every part, and can be relied on for its perfect adaptation to the purpose in view, and for its great durability.

It is well known that asphaltum, bitumen, or mineral pitch, and similar substances have been used for excluding moisture, and forming water-tight pipes; also, that felt has been used in sheets for roofing and other purposes; and also that tar and oily substances have been employed upon roofs to exclude water; but none of these is specifically claimed as forming any part of this invention.

What is esteemed as the invention of the said James Anderson, deceased, and desired to be protected by Letters Patent, is—

1. The process above described for forming roofing sheets, which consists in saturating fibrous material with a mixture of purified asphaltum and oil, or tar, at or immediately before the felting operation.

2. Sheets for roofing or similar purposes, formed of a felt body, whose fibers are held firmly together and rendered impervious to moisture by means of a mixture of oil and purified alphaltum.

The above specification of the invention of JAMES ANDERSON, deceased, signed by me this 25th day of February, 1870.

SAMUEL KINGAN,
Administrator of estate of James Anderson,
deceased.

Witnesses:
GEO. W. MABEE,
ALEX. F. ROBERTS.