

UNITED STATES PATENT OFFICE.

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FELT PAPER.

1,328,267.

Specification of Letters Patent.

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No Drawing.

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To all whom it may concern:

Be it known that I, CLARENCE P. COWAN, a citizen of the Dominion of Canada, residing at Pont Rouge, in the Province of Quebec, Dominion of Canada, have invented certain new and useful Improvements in Felt Paper, of which the following is a specification.

This invention pertains to an improved felt paper, and has for its object the production of a material which is comparatively light in weight and at the same time porous, the paper being especially adapted, by reason of its porosity, and open fiber, for use in the manufacture of roofing felt.

The life and quality of roofing felt are dependent, to a great extent, upon the degree of saturation which may be effected, and a felt made up as hereinafter set forth may be readily and thoroughly saturated or impregnated.

I have found that the employment of peat moss, of the species *Drepanocladus Kneiffii* (Sch.) Warnst, which is quite abundant in certain Canadian Provinces, is very desirable in the production of an open, porous stock. Such material in quantities of, for instance, from 15% to 20%, is combined with rags, say, 60%, and mixed papers, or folded newspapers, as the case may be, to the extent of from 20% to 25%.

The moss in its natural state, is placed in a beater, with the other ingredients, and beaten up in accordance with the usual practice. A sheet formed from the stock which results from such operation will, as above set forth, be found to be highly open and porous, and will take up most readily the impregnating material which is employed, such, for instance, as asphalt. Furthermore,

but a slight expenditure of power is required to get the moss into proper condition for making the paper. In addition to this advantage, the moss adds very much to the thickness of the felt for a given weight.

Again, the use of the moss materially lengthens the life of the paper or felt, as it does not readily decompose with age.

While I have specified certain proportions as producing the best results, I do not desire to be limited thereto, as the amount of moss employed, in relation to the other component elements, may be varied, depending, of course, upon the degree of porosity desired and the weight of the felt for a given thickness thereof.

Having thus described my invention, what I claim is:

1. Felt stock, composed of a mixture of disintegrated peat moss, rags and paper.

2. As a new article of manufacture, felt paper composed of disintegrated peat moss, rags and paper, the moss being present to the extent of at least 15%, with the rags in excess of the paper.

3. As a new article of manufacture, felt paper composed of from 15% to 20% disintegrated peat moss, 20% paper, and 60% rags.

4. As a new article of manufacture, felt paper suitable for roofing purposes, composed of a mixture of disintegrated peat moss, rags and paper, said paper being impregnated with asphalt.

5. A prepared roofing comprising a felt containing disintegrated peat moss waterproofed with a bituminous substance.

In testimony whereof I have signed my name to this specification.

CLARENCE P. COWAN.