ALIEN PROPERTY CUSTODIAN

PROCESS FOR MANUFACTURING SHEETS, FELTS AND MATS OF GLASS FIBRES BY THE WET PROCESS

Secondo Marocco, Milan, Italy; vested in the Alien Property Custodian

No Drawing. Application filed November 20, 1939

The processing of the glass wool obtained by various means, has been heretofore conducted, as far as my knowledge goes, exclusively in the dry way, on machines like or similar to those used in the textile branch, or else exclusively by hand. 5

According to the wet process for manufacturing sheets, felts, mats of glass wool, the fibres are immersed in water properly mixed so as to obtain a suspension of the various fibres which are fabrics or other convenient surfaces; once the wet mat is obtained it is strained and dried. Due to the fact that the fibres are setting freely, a perfectly uniform layer is obtained, which can be adjusted both in relation to the quantity of 15 water used and to the quantity of mixture subjected to filtration.

During the suspension in water the fibres of glass may be mixed with glueing materials, or with fibres of a different nature, or with colour- 20 ing matter, or with any other desired ingredient, to the object of altering even substantially the appearance of the product.

The advantages of the wet process consist in the fact that:

- (a) All the processing is conducted mechanically, which avoids serious and antihygienic conditions of work for the operators, as every dry manipulation of the fibres is eliminated, which manipulation causes a considerable amount of glass powder and short fibres which remain in suspension in the air and cause painful wounds to the naked hands.
- (b) A greater regularity in the manufacture then filtered through metal wire netting, woven 10 of felts, which may be obtained in any thickness desired, and absolutely uniform, offering the means of reproducing at any time the characteristic features of a product manufactured at other times
 - (c) The felts and mats have a specific gravity which is lower than that of the same product made by hand.
 - (d) A lower heat transmission factor and higher antiacoustic features, other conditions being equal, than the same product hand-made, due to the fact of a more regular deposit or setting of the fibres.

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