

UNITED STATES PATENT OFFICE.

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COMPOSITION FOR MARKING SHEEP AND OTHER ANIMALS.

993,348.

Specification of Letters Patent.

Patented May 30, 1911.

No Drawing.

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To all whom it may concern:

Be it known that we, ROBERT WHITELEY COLLINSON and CLIFFORD WHITELEY COLLINSON, subjects of the King of Great Britain, residing at Norwich and Bradford, England, respectively, have invented certain new and useful Improvements in Compositions for Marking Sheep and other Animals, of which the following is a specification.

This invention relates to an improved soluble sheep mark, that is to say, an improved composition for marking sheep and similar animals for the purpose of identification.

The object of the invention is to provide a mark which will withstand climatic influences and weathering but which will still be easily removed when the wool or hair is washed prior to carding, combing and the like, by the wool being simply immersed in the usual bath used in washing and submitted to the usual treatment.

A further object of the invention is to provide a mark or composition which is non-inflammable, which is very cheap to manufacture, which can be made up in a form ready for use or concentrated, which when concentrated can be simply thinned down and which when too thick can always be brought to its desired consistency by the addition of water.

In carrying out the present invention the basis of the mark consists of a fatty matter, grease or fatty acid and this is rendered soluble in and capable of being mixed with water by the addition to it or to the water with which it is to be mixed of a small amount of alkali (preferably ammonia) in solution. As a fatty constituent it is found that wool fat either in the pure or the impure state such as is obtained as a by product of the wool washing industry forms a very good ingredient. When wool fat is used as the basis of the mark it is preferably used with fixing agents such as fats like stearin, fatty acids, ordinary resin or gum resin such as gum thus. A coloring matter must of course be added to the mark and for this

purpose a coloring matter must be used that has no dyeing or tendering properties and one which will not have any properties which will tend to decompose or otherwise injuriously act either chemically or physically upon the other constituents of the sheep mark. If desired carbonate of lime, earthy matter or other substances inert as regards the other constituents of the mixture or of the washing bath may be added to give the mixture greater covering power and more drying surface.

For the better comprehension of the invention the following example may be given: Wool fat 25 parts by weight, stearin $7\frac{1}{2}$ parts by weight, resin $2\frac{1}{2}$ parts by weight, ultra marine or lamp black 40 parts by weight, 10% ammonia $5\frac{1}{2}$ parts by weight, water 430 parts by weight.

The method of preparation of a sheep mark formed with the above ingredients is as follows: Melt and mix the wool fat, stearin and resin and pour the hot melted compound slowly with constant stirring into a homogeneous mixture of the ultra marine or lamp black, ammonia and one third the amount of water finally used maintained at a temperature of 40 degrees centigrade. The resulting compound if allowed to dry will form a concentrated composition. If it be desired to form the composition in a condition ready for use the remainder of the water is stirred in after the thorough incorporation of the above mixture, in either a cold or lukewarm state.

If desired the proportions of the fatty constituent, the resin and (or) stearin may be largely varied from those set forth above while the resin may, if desired, be omitted altogether. The amount of coloring matter will naturally vary with the depth of shade required and with the actual color to be employed.

If it be desired to obtain the sheep mark in a very concentrated form none of the water except such quantity as is necessary to produce the required alkaline solution need be added till just before use. The term "sheep mark" must be taken to include and

apply to compositions for marking any animals for the purposes of identification which yield wool, hair or the like for manufacturing purposes.

5 We declare that what we claim is:—

1. A soluble sheep mark consisting of wool fat, a small amount of alkali in solution, stearin, resin, coloring matter and water substantially as described.

10 2. A sheep mark consisting of wool fat, stearin, resin, coloring agent, ammonia in solution and water substantially as described.

In testimony whereof we affix our signatures in presence of witnesses.

ROBERT WHITELEY COLLINSON.

CLIFFORD WHITELEY COLLINSON.

Witnesses to the signature of Robert Whiteley Collinson:

RICHARD BURNS PALMER,
JOHN BASELEY HALES.

Witnesses to the signature of Clifford Whiteley Collinson:

HUBERT PUMPHREY,
LUCY RANEY.