

UNITED STATES PATENT OFFICE.

JABEZ GADSDEN, OF MELBOURNE, VICTORIA, AUSTRALIA.

METHOD OF WATERPROOFING AND RENDERING IMPERVIOUS TO DUST, BAGS, SACKS, AND THE LIKE.

1,258,104.

Specification of Letters Patent.

Patented Mar. 5, 1918.

No Drawing.

Application filed July 6, 1917. Serial No. 179,051.

To all whom it may concern:

Be it known that I, JABEZ GADSDEN, a subject of George the Fifth, King of Great Britain and Its Dependencies, residing at 572 Lonsdale street, Melbourne, Victoria, Australia, have invented certain new and useful Improvements in Methods of Waterproofing and Rendering Impervious to Dust, Bags, Sacks, and the like, of which the following is a specification:

In bagging and sacking of finely powdered or granulated articles it has been found to be a serious defect that the article placed within the bag or sack percolates through the fabric of which the bag or sack is made while the same is being handled or in transit with the result that the finely divided dust is raised and permeates the atmosphere making it very injurious to the health of the persons compelled to work therein. It is found advantageous if the bag or sack can be made more or less waterproof. In the following description I shall describe the bagged article as cement or superphosphates although it is to be distinctly understood that the article may be any finely divided or pulverized material which is bagged or sacked for market.

Various methods have been tried in the trade of bag and sack making to remedy this serious evil with more or less success. For example, one method is to apply a composition to the fabric before making it into the bag or sacks. Another method is to attach to the inside of the bag or sack, by any suitable means, paper or other material through which the dust will not sift. In both these methods as will be observed the cloth has to be treated and dried in the piece before being made up into bags or sacks. This renders the making up of the material into bags or sacks more difficult and retards it considerably. It is also found that bags and sacks treated by these methods have to be made larger in size to contain the same quantity as a bag which is made from fabric that has not been treated because they are dry and unpliable, also when being filled with material the composition or paper lining cracks and breaks away thus nullifying to a great degree the purpose for which they were treated.

The foregoing is described in order to

specify the present state of the art of waterproofing and rendering impervious to dust, bags and sacks. To overcome these objections I have successfully achieved the object of the title given this invention.

In carrying my invention into practical effect the bags or sacks are manufactured from the usual fabric. The packer, say the cement or superphosphates merchant, before packing or sacking the article sprays or coats by any suitable means the inside of the ready made-up bag with any suitable adhesive fluid or composition.

While the inside of the bag or sack is in a wet condition the article to be bagged is placed into the bags or sacks. The cement or superphosphates which first comes into contact with the adhesive fluid spread on the inside of the bag attaches itself thereto and forms as it were a coating or crust while at the same time it closes or clags the interstices of the fabric.

This closing or clagging prevents the entrance of foreign matter into the bag or sack and at the same time prevents the exit of finely pulverized dust of the bagged article into the surrounding atmosphere.

When it is required to make the bag or sack proof against the deteriorating effect of acidulated powders, the ravages of insects or damp proof, any chemical which will produce the desired result is added to the adhesive fluid.

I claim:

An improved method or process of bagging or sacking dusty materials so as to render the bags or sacks dust or waterproof, consisting in spraying the interior of the bags or sacks with any suitable adhesive fluid just before filling them with the dusty materials so that the fluid and dust coming into contact become incorporated or combined and form a coating which fills up the interstices of the fabric substantially as herein described.

In witness whereof I have signed this specification in the presence of two witnesses.

Dated this 28 day of May, 1917.

J. GADSDEN.

Witnesses:

G. A. CALL,

C. W. GADSDEN.