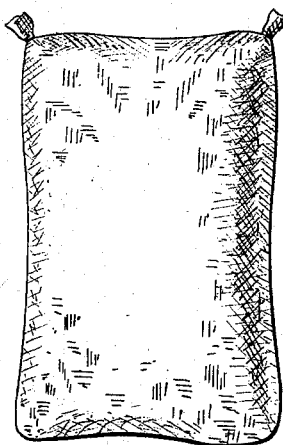


(Model.)

W. H. HORNER & F. HYDE.
BAG FOR HOLDING PHOSPHATES, &c.

No. 263,907.

Patented Sept. 5, 1882.



Witnesses:

W. B. Masson
J. J. Gamus.

Inventors:

W. H. Horner & Francis Hyde

By E. M. Johnson
Atty.

UNITED STATES PATENT OFFICE.

WILLIAM H. HORNER AND FRANCIS HYDE, OF BALTIMORE, MARYLAND.

BAG FOR HOLDING PHOSPHATES, &c.

SPECIFICATION forming part of Letters Patent No. 263,907, dated September 5, 1882.

Application filed July 27, 1882. (Specimens.)

To all whom it may concern:

Be it known that we, WILLIAM H. HORNER and FRANCIS HYDE, citizens of the United States of America, residing at Baltimore, in the county of Baltimore and State of Maryland, have invented a new and useful Improvement in Textile Fabrics or Bags for Holding Phosphates, &c., of which the following is a specification.

This invention relates more especially to textile fabrics—such as are known as “bur-lap” or “bagging” material—which are treated with a composition which will render the fabric stronger and acid-proof to a certain extent, whereby the fabric is enabled to resist for a greater length of time the action of such acids as exist in phosphates, guanos, and commercial fertilizers.

The annexed drawing represents an acid-proof bag made of fabric treated in accordance with our invention.

In carrying out our invention we employ a composition made up of rosin, paraffine-oil, or other mineral oil, grease or oil, alkali, and water, the essential elements of the composition being the rosin, which is assimilated with paraffine-oil, which makes an acid-proof composition; and in order that these ingredients may be cheaply and effectively applied to the fabric or bag we make use of an alkali and water. This composition is applied to the fabric or bagging material either before it is manufactured into bags or afterward, which fabric or bag, from its acid-proof qualities, is especially adapted for transportation and storing phosphates, guanos, fertilizers, or other substances containing acid.

A composition consisting of the ingredients is used in about the proportions stated, to wit: rosin, ten pounds; paraffine-oil, ten pounds; grease, two and one-half pounds; alkali, two and one-half pounds, and water twenty-five pounds. These proportions may be varied without departing from the spirit of our invention. The ingredients of the composition are united by boiling the same together. In this composition the rosin and paraffine or

other mineral oil are acid-proof as far as acid phosphates or fertilizing substances are concerned, and the alkali, grease, and water, when added to the same, render them liquid, in which condition they can be more readily applied to the fabric.

The hereinbefore-described composition is applied to fabric or bagging material or to the manufactured bags in a liquid heated condition by submerging the fabric or bags therein until the same become thoroughly saturated and impregnated with the composition, which forms an acid-proof coating on and around the threads or fibers of the fabric from which the bag is made. The fabric or bags, after being coated with the composition, are passed through rollers or wringers, by means of which the surplus quantity of the composition is pressed from the fabric or bag, which is then dried, and when dried is ready for use.

This composition, besides rendering the fabric acid-proof and of a greater textile strength, does not impair its pliability, and when made into bags they can be handled and sewed with the same readiness as the untreated bagging material now in use.

No claims are made in this application for the process or method of treating bags and similar articles, nor to the composition, as they will form the subject-matter of separate applications.

What we claim in this application is—

As a new article of manufacture, a bag or integument for inclosing phosphates, guanos, fertilizers, or substances containing acids, treated with a composition consisting of rosin, paraffine or mineral oil, and soap or saponified grease, substantially as described.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

WILLIAM H. HORNER.
FRANCIS HYDE.

Witnesses:

CLIFFORD C. ANDERSON,
HENRY F. ROBERTS.