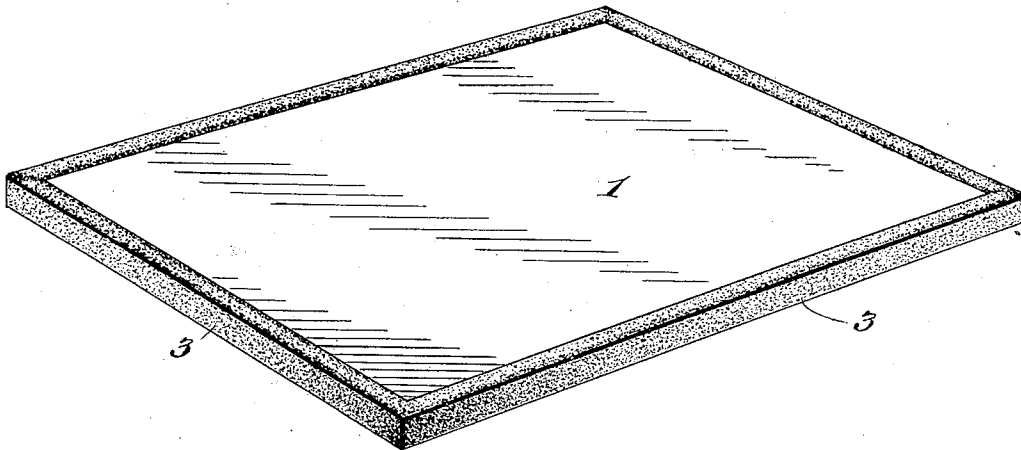


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METHOD OF SOAKING SHEET FIBER.  
APPLICATION FILED NOV. 11, 1908.

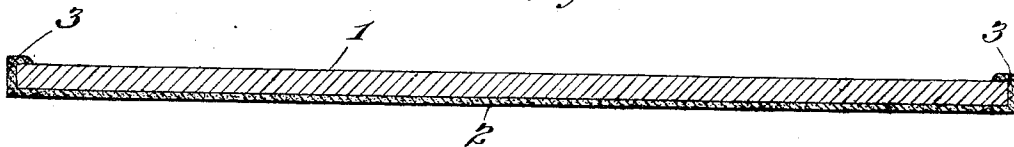
930,205.

Patented Aug. 3, 1909.

*Fig. 1.*



*Fig. 2.*



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Witnesses  
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# UNITED STATES PATENT OFFICE.

ISRAEL W. MARSHALL, OF YORKLYN, DELAWARE.

## METHOD OF SOAKING SHEET FIBER.

No. 930,205.

Specification of Letters Patent.

Patented Aug. 3, 1909.

Application filed November 11, 1908. Serial No. 462,099.

*To all whom it may concern:*

Be it known that I, ISRAEL W. MARSHALL, a citizen of the United States, residing at Yorklyn, in the county of Newcastle and State of Delaware, have invented certain new and useful Improvements in Methods of Soaking Sheet Fiber, of which the following is a specification.

My invention relates to a method of soaking indurated sheets of fiber where a series of fabricated sheets are combined indissolvably into one, and more particularly to improve upon the method set forth in the Patent No. 897,759, granted to me September 1, 1908.

The object of the invention is to provide a method by which the chemical solution for partially gelatinizing or albuminizing the fibers causing them to coalesce or unite, can be extracted by soaking the sheets in water without causing the sheets to blister or separate at the edges. This is accomplished in the present method by rendering one side and the edges of the sheet water-proof, thus compelling the sheet to take the water through one side only. This prevents blistering and also the water-proofing on the edges of the sheets prevents any entrance of the water at the edges and therefore prevents any separation of the sheets at the edges.

With these objects in view the invention consists in certain novel steps in the method which will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings Figure 1, is a perspective view, and Fig. 2, is a view in section illustrating a sheet having a coat of water-proofing for carrying out my invention.

In carrying out my invention I take a sheet of fiber made up of a series of fabricated sheets formed in any well known manner by gelatinizing or albuminizing the fibers, and then applying the water-proof coat to one face and the edges as clearly shown.

1 indicates a sheet and 2 the coating for one side of the sheet, and 3 the coating at the edges. This water-proof coating may be of a great many different materials and applied in any desired manner. One coating which I have found to be very efficacious is a liquid tar pitch, such as the ordinary gas tar pitch which can be applied to the side and edges of the sheet with a brush, but I do not of course restrict my method to the use of

any particular water-proofing composition. To prevent any possibility of the water passing between the coating at the edge and the edge of the sheet, I extend the coating slightly over the exposed face of the sheet.

When the sheet is coated as above described, it is subjected to the action of water against the exposed surface, and this may be done in various ways not necessary to set forth. In fact, the sheet may be simply dropped into a tank of water, and the water cannot of course enter the sheet at any place except at the exposed side or face. By this method the water will slowly permeate the entire sheet to extract the chemicals therefrom, and blistering and separation of the sheets is absolutely prevented, as the water-proof edges of the sheet will absolutely preclude any possibility of the water entering at the edges, thereby preventing the splitting of the sheets.

It is evident that various slight changes might be made in the method without departing from my invention.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

1. In the manufacture of fiber, the method herein described of extracting the chemicals from sheets of fiber consisting of covering the edges of the sheet with water-proof material, and then exposing but one side of the sheet to water.

2. In the manufacture of fiber, the method herein described of extracting the chemicals from sheets of fiber consisting of covering one side and the edges of the sheet with a water-proofing material, and then exposing the other side of the sheet to the water.

3. In the manufacture of fiber, the method herein described of extracting the chemicals from sheets of fiber consisting in applying an adhesive water-proofing composition, to one side or face and to the edges of the sheet, and then subjecting the sheet to the action of water.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ISRAEL W. MARSHALL.

Witnesses:

S. W. FOSTER,  
J. A. L. MULHALL.