

UNITED STATES PATENT OFFICE.

MOSES B. DISKIN, OF NEW YORK, N. Y.

PAPER-BOARD.

No. 881,098.

Specification of Letters Patent.

Patented March 3, 1908.

Application filed September 27, 1907. Serial No. 394,934.

To all whom it may concern:

Be it known that I, MOSES B. DISKIN, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Paper-Board; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to the art of making paper and paper board and more particularly to the art of manufacturing paper and paper board of more or less strength, thickness and rigidity, which will be found particularly desirable and efficient for making boxes and, in fact, all kinds of receptacles, as well as for providing building material and many other purposes, as will be hereinafter clearly set forth.

The prime object of my invention, among others, is to utilize, for the purpose above set forth, a raw material, which has heretofore been completely ignored and so treat said material and manipulate the same that it will present a finished product of the character set forth, which will be found very valuable and thoroughly efficient.

My invention, therefore, consists in a process of treating the raw material in such manner that said material will be brought to a condition suitable to be fashioned into a board of any desired thickness and strength, all offensive odors and undesirable features being entirely eliminated.

In carrying out my invention, I take as raw material, the offal from stables, commonly designated under the generic term of stable manure and which usually consists of straw, hay, husks, etc. This raw material I place into a suitable tank filled with water and having any preferred kind of agitating devices, as rollers, or the like, mounted within the same and the contents of the tank are thoroughly agitated for three hours, more or less, it being understood that I first add to the water within the tank, two ounces carbolic acid to each gallon of water, more or less, to destroy all offensive odors. After the contents of the tank have been agitated for the time stated, the water is then drawn off, leaving the washed substance within the tank. I then subject the washed contents of the tank to a heavy pressure of live steam for a period of three hours, more or less and

this treatment of the steam removes all remaining odors and also destroys or neutralizes the odor of carbolic acid.

It will be understood that while the steam process is under way, the contents of the tank are thoroughly agitated as during the washing process. After treating the contents of the tank for three hours, more or less, as above stated, the contents are removed to any suitable pulping machine or grinder, and to the contents within the grinder I add five pounds of camphor, more or less, to each ton of the substance. This treatment of the pulp insures that the camphor will be thoroughly incorporated with the pulp and that all articles made from the pulp, as boxes, or the like, will be entirely vermin proof. It therefore follows that boxes and all other receptacles made from the pulp thus treated, will be a complete protection against moths and all manner of microbes and that such receptacles will be very valuable for the use of manufacturers and others in preserving furs, woollens, silks, satins, cloths and plush goods.

Inasmuch as there is a loss of thousands of dollars annually, due to the ravages of moths, microbes, etc., it will be found that my board for boxes, etc., will prove very valuable and important. My improved board will also be found valuable and important as used for building material in keeping away roaches, bugs, and other vermin.

Since the raw material from which my improved board is manufactured can be secured without cost, my board can be manufactured at a minimum cost.

In order to add strength and pliability to the finished product, I cover each surface thereof with fibers or other substances, as rags, wood fibers, etc. I thus re-inforce each surface of my improved board with the strengthening fiber prior to the final pressure thereof.

In order to render the board indestructible by worms, or other vermin, when used as building material, I add to the pulp during the process of grinding the same, a suitable quantity of corrosive sublimate or other insecticide.

It will thus be seen that I have provided a valuable commercial article by the utilization of a substance which is now an incumbrance and a disadvantage until removed and which, moreover, proves a menace to the health of the public in cities, unless promptly

removed or sterilized. By my treatment of the substance, I am enabled to fashion it into a straw board of superior quality, it being understood that after the pulp is formed, it is then passed through heated rollers in the usual manner, which will impart to the pulp the requisite amount of pressure and heat to insure that a suitable surface will be given to the finished straw board and that a proper degree of density thereof will also result.

It will be clearly apparent that since there is a great scarcity of material for making paper, thus adding greatly to the cost of such product, it follows that the discovery of a raw material, such as I now propose to use will form a very important addition to the art of paper making, thereby making it possible to produce a substance of great commercial value at the lowest possible charge. It is further obvious that this raw material is found in great quantities in almost every locality throughout the United States.

What I claim is:

1. The herein described process of making paper and paper board from manure, com-

prising the preliminary washing of the raw material with the addition of carbolic acid to destroy the odor and then subject the washed residuum with live steam under heavy pressure and a treatment of the product with camphor and a suitable insecticide during the process of pulping the same and finally pressing the pulp into boards of any desired thickness.

2. The herein described process of making paper and paper board from manure comprising the preliminary washing of the raw material with the addition of a suitable deodorant and then subjecting the washed residuum with live steam, and a treatment of the product with camphor and a suitable insecticide during the process of pulping the same and finally pressing the pulp into desired shape.

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

MOSES B. DISKIN.

Witnesses:

BLANCHE NEFF,
J. EDWIN BURCH.