

No. 813,731.

PATENTED FEB. 27, 1906.

J. MURMANS.
AERATING DEVICE FOR MATTRESSES.
APPLICATION FILED MAY 15, 1905.

Fig. 1

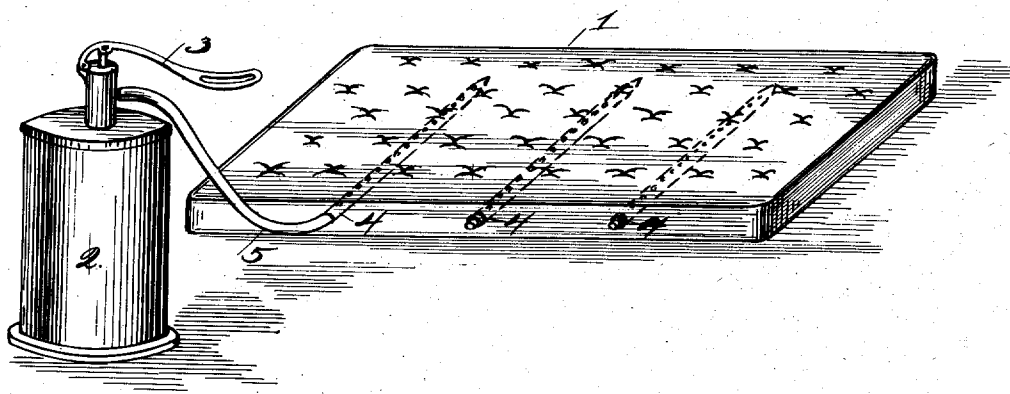


Fig. 2.

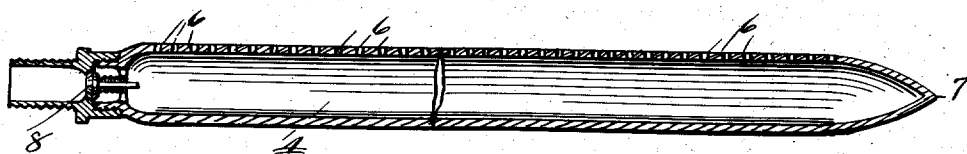


Fig. 3



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN MURMANS, OF CLEVELAND, OHIO.

AERATING DEVICE FOR MATTRESSES.

No. 813,731.

Specification of Letters Patent.

Patented Feb. 27, 1906.

Application filed May 15, 1905. Serial No. 260,553.

To all whom it may concern:

Be it known that I, JOHN MURMANS, a citizen of the United States, and a resident of Cleveland, county of Cuyahoga, State of Ohio, have invented certain new and useful Improvements in Aerating Devices for Mattresses, of which I hereby declare the following to be a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention has for its objects to provide simple and efficient means for aerating and disinfecting the mattresses employed for general use without opening the mattresses or removing them from the beds, and also to sterilize and purify mattresses employed for patients having contagious diseases, as in hospitals.

Heretofore in private homes or in hospitals where there are many patients and all mattresses are in constant use the loss of time in opening up and renovating them and in restoring them to their proper condition for use is a most objectionable feature regardless of the labor and expense involved. With this improved appliance, however, any bed can be thoroughly disinfected and renovated with little loss of time and very little labor.

The invention comprises a tubular perforated appliance or appliances for introducing volatile disinfecting fluids or gases under pressure into the mattress, where they are readily distributed throughout the mattress, and also has reference to means for injecting the mattresses with fresh and pure air to renovate them. In this manner formaldehyde or other volatile germicides can be introduced and all interior parts of the mattress made sterile and sanitary.

The invention consists, primarily, in a flexible tube provided with perforations in its periphery, and in the accompanying appliances of a receptacle for the fluid or gas and in a force-pump with which to apply the fluid or gas, and in the details of construction and combination and arrangement of parts, as hereinafter described, shown in the accompanying drawings, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a mattress in which the

tubes are inserted, showing a force-pump and disinfecting fluid or gas receptacle. Fig. 2 is a transverse section of a mattress, showing a longitudinal central section of the delivery-tube with its stop-valve. Fig. 3 is a transverse section of containing-tube.

In the views, 1 is the mattress.

2 is a receptacle containing the disinfecting or renovating fluid or gas. 3 is a force-pump connected therewith.

4 is a tube or fluid container closed at the inner end and having its outer extremity communicating, by means of a tube 5, with the contents of the receptacle. This tube is perforated upon the periphery at 6 with numerous small openings, so that the fluid can evaporate and the gases produced by volatilization can permeate the mattress. If the fluid volatilizes very quickly or if the disinfectant is in the form of a gas, openings can be made in the tube at the sides or bottom; but with fluids it is desirable that the tube should be able to retain a quantity of the fluid for slow evaporation, so that the action is of a longer duration and the effect thereby greater. The inner extremity of the tube is pointed at 7, so that it can readily be inserted into the mattress, and in such cases as hospital-beds, requiring constant disinfecting, the tube can be left in its position, where it can be connected up for use with the pump and receptacle whenever desired. The outer end of the tube is provided with a stop or check valve 8, which permits the fluid to enter, but prevents it from flowing back into the receptacle when the pressure is removed.

As many tubes may be employed as may be required to thoroughly distribute the disinfecting fluid or air, so that all portions of the interior of the mattress will be thoroughly treated.

Having described the invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a device for the purpose described, the combination with a mattress, of a tube adapted to be inserted therein for permanent use, the said tube being perforated throughout its length, a check-valve in the outer end of said tube, and means for supplying said tube with a volatile disinfectant, substantially as described.

2. The combination with a mattress of a

fluid or gas container embedded therein, and adapted to contain a sterilizing fluid or gas, the said fluid-container being provided with perforations in its upper wall, means for forcing fluid therein under pressure and a check-valve in the outer end of the fluid-container, substantially as described.

In testimony whereof I hereunto set my hand this 10th day of April, 1905.

JOHN MURMANS.

Witnesses:

WM. M. MONROE,
GEO. S. COLE.

Correction in Letters Patent No. 813,731.

It is hereby certified that the name of the patentee in Letters Patent No. 813,731, granted February 27, 1906, for an improvement in "Aerating Devices for Mattresses," was erroneously written and printed "John Murmans," whereas the said name should have been written and printed *John Meermans*; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 17th day of April, A. D., 1906.

[SEAL.]

F. I. ALLEN,
Commissioner of Patents.

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