

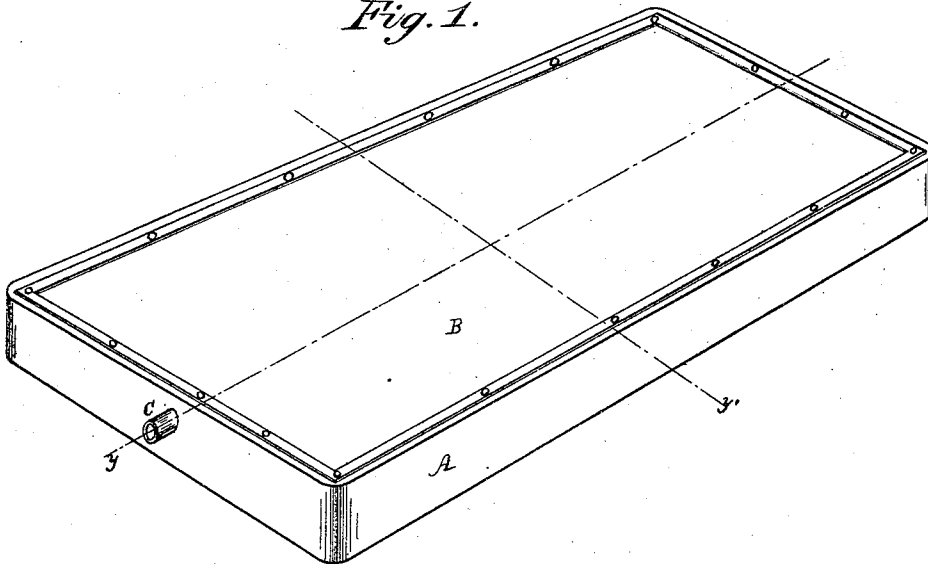
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Improvement in Bed-Bottoms.

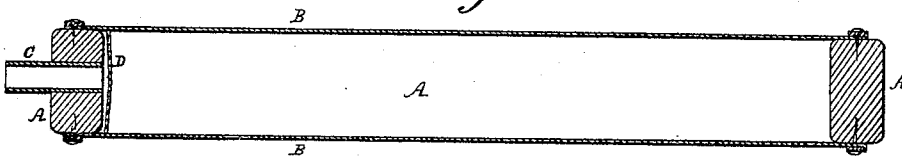
No. 133,093.

Patented Nov. 19, 1872.

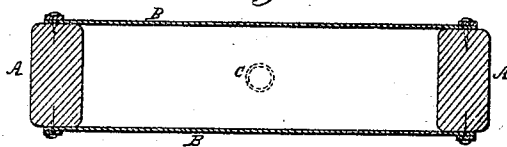
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Witnesses.*

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# UNITED STATES PATENT OFFICE.

WILLIAM GRAHAM, OF SHARPSBURG, PENNSYLVANIA.

## IMPROVEMENT IN BED-BOTTOMS.

Specification forming part of Letters Patent No. **133,093**, dated November 19, 1872.

*To all whom it may concern:*

Be it known that I, WILLIAM GRAHAM, of Sharpsburg, in the county of Allegheny and State of Pennsylvania, have invented a certain new and useful Improvement in Bed-Bottoms; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of my invention consists in a bed-bottom so constructed that it can be filled with air and husks, and be elastic and buoyant, thereby serving the double purpose of bed and life-preserver.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawing, which forms part of my specification, Figure 1 is a perspective view of my improvement in bed-bottoms; Fig. 2 is a longitudinal section of the same at line *y* of Fig. 1; and Fig. 3 is a transverse section at line *y'* of Fig. 1.

In the accompanying drawing, A is the frame of the bed-bottom, and is constructed of wood, care being taken to have the joints of the frame perfectly air-tight and well oiled, and then varnished with an article of varnish which is impervious to water. B represents the canvas of the frame, which is constructed of India rubber or "gum-cloth," or other elastic and water-proof material, the texture of which will not allow air to pass through it. The canvas B is secured to the frame A by nails or screws, care being taken to coat the edges of the frame A with an adhesive cement which is impervious to water and which will dry quickly. In one of the end pieces of the frame A is secured a short tube, C, and on the inside of this end piece is secured a strip, D, of India rubber, which is nearly equal in length and width to the inside length and width of the end piece. This strip D acts

as a valve for closing the inner end of the tube C communicating with the interior of the bed-bottom.

Having secured one sheet of the canvas B to the frame, and the end piece, being provided with the elastic valve D, the frame is filled loosely with husks or other material used for filling in bed-bottoms; then the other sheet of canvas is secured to the frame A in the manner above described.

The construction of the bed-bottom is then completed; but prior to using it it is filled with air, which is done in the following manner: A suitable apparatus is connected to the tube C for forcing air into the bed-bottom, so as to fill the interstices between the husks or other material used as a filling. As soon as a sufficient pressure of air is forced into the bed-bottom the strip D will so press against the inner end of the tube C as to perfectly close it and prevent the escape of air from the bed-bottom, and the weight of the person or persons using the bed will cause the strip D to press harder against the tube C, and thereby, if possible, more perfectly close the tube. It will be observed that the strip D acts automatically in opening and closing, the pressure of air from the outside opening it, and the pressure on the inside closing it.

Bed-bottoms constructed as hereinbefore described will be found to be soft, cool, and elastic, and when used on river or sea-going vessels will answer the purpose of a life-preserver.

Having thus described my improvement, what I claim as of my invention is—

A bed-bottom, consisting of the frame A, canvas B, tube C, and strip D, combined with a husk-filling and air-tight chamber, all constructed and operating as herein described, and for the purpose set forth.

WILLIAM GRAHAM.

Witnesses:

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JAMES J. JOHNSTON.