

W. H. PACK & J. S. VANHORN.

Improvement in Life-Preserving Mattress.

No. 132,686.

Patented Oct. 29, 1872.

Fig. 1.

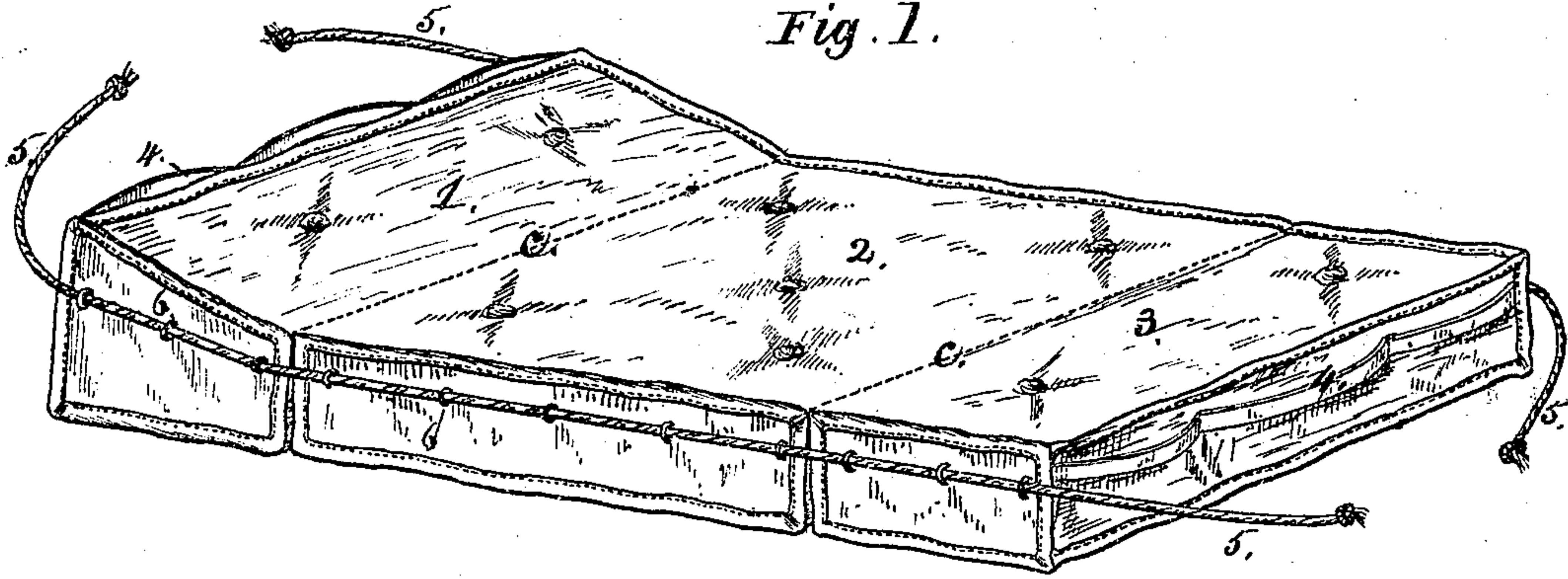


Fig. 2.

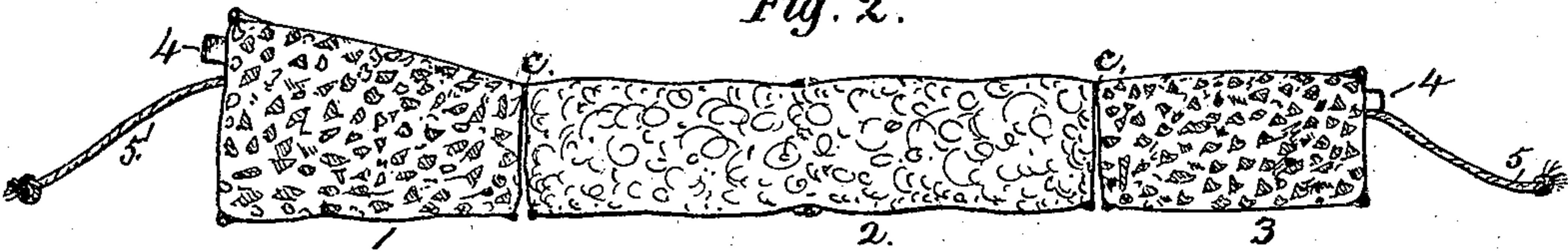


Fig. 3.

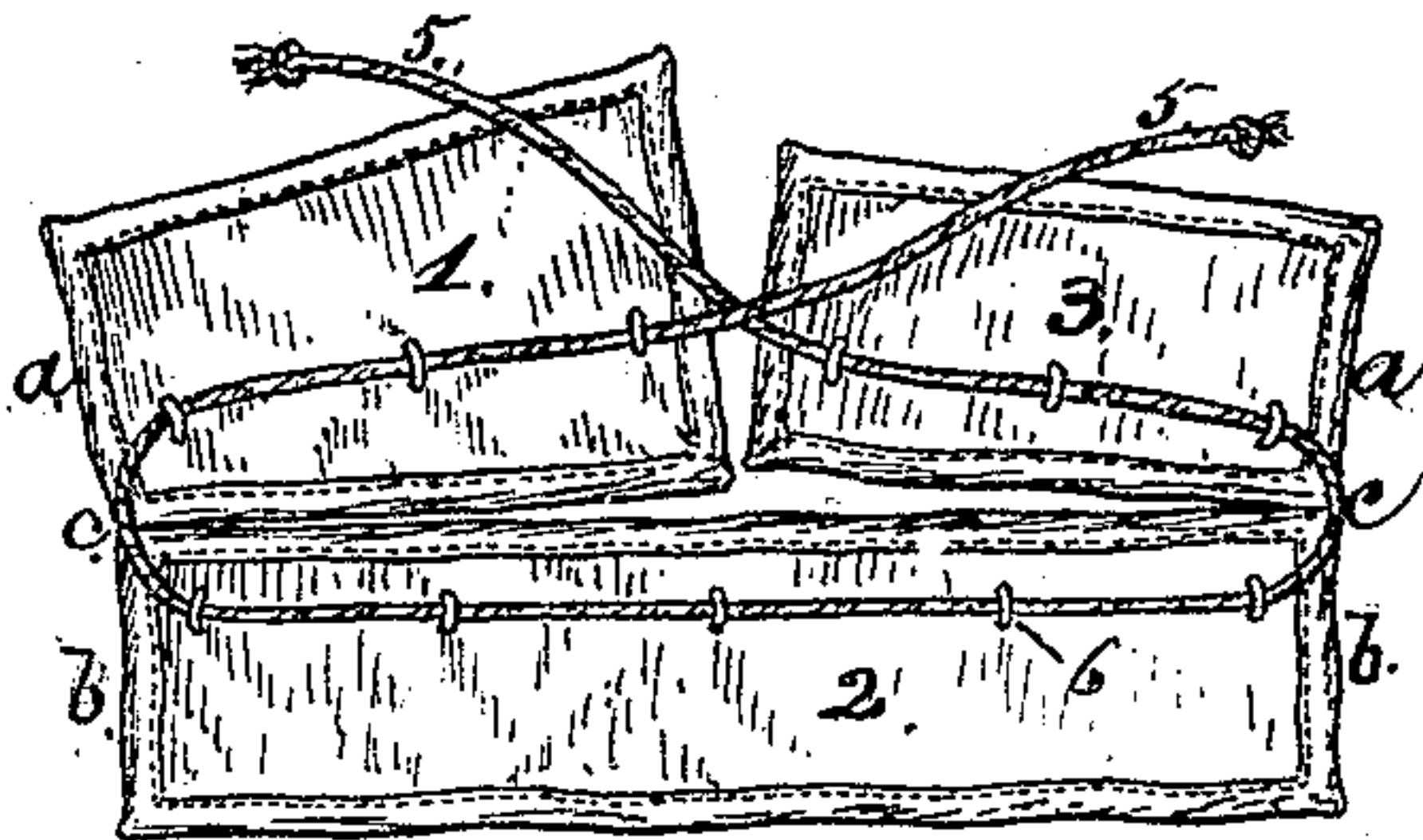
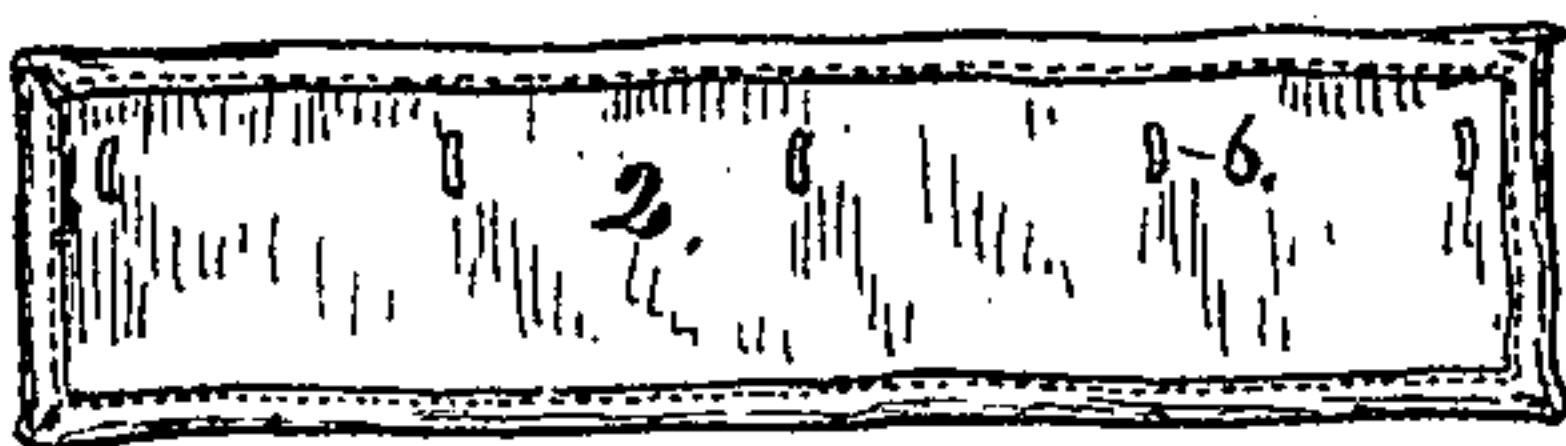


Fig. 4.



Witnesses.

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UNITED STATES PATENT OFFICE.

WILLIAM H. PACK AND JOSEPH S. VANHORN, OF JERSEY CITY, N. J.

IMPROVEMENT IN LIFE-PRESERVING MATTRESSES.

Specification forming part of Letters Patent No. 132,686, dated October 29, 1872.

To all whom it may concern:

Be it known that we, WILLIAM H. PACK and JOSEPH S. VANHORN, of Jersey City, in the county of Hudson and State of New Jersey, have invented an Improved Marine Life-Preserving Mattress; and we do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of our invention sufficient to enable those skilled in the art to practice it.

Figure 1 is a perspective view of our improved marine life-preserving mattress. Fig. 2 is a longitudinal section of the same. Fig. 3 is an elevation of the mattress folded up. Fig. 4 represents, separately, the central transverse section.

Life-preserving mattresses have usually been made with a rigid frame and with a small central opening, suitable to admit, when afloat, the body of the person; and when in use as a mattress this opening is filled with a corresponding section of bed or mattress filled with hair, all the rest or the bulk of the mattress being filled with cork. This, while useful as a life-preserver when afloat, is next to useless as a mattress for sleeping purposes, being nearly all of cork, and therefore nearly as hard as a board, excepting only at a small part of its center. All mattresses having any kindred construction are also so bulky and unwieldy that, in times of danger, and especially if the passengers be excited, frightened, or weak, it is next to impossible to get them out of the state-rooms and get them afloat in time to save life. To remedy these and other defects in existing mattresses designed for life-saving and marine uses, I have devised an improved one, made in three transverse sections, the central section, 2, on which mainly the body of the sleeper reposes, being for its whole length and breadth preferably filled with light buoyant vegetable fiber, such, for instance, as moss, California sea-grass, or moss known in the market as "Eureka," fine-threaded shavings of white wood, wild poplar, &c., known in the market as "Excelsior," or southern moss, corn-husks, &c. This portion may, however, be filled in whole or in part with hair. Sections 1 and 3 we fill with cork, to insure all the additional lightness and buoyancy required.

These sections, it will be seen, will, when the whole is in use as a mattress, give but little, if any, inconvenience to the sleeper, because the head-piece will come beneath the bolster or pillow, and the foot-piece will be at the extreme foot, where but little weight of the body comes—most persons, in fact, sleeping with their feet more or less drawn up. By these means all the cork required for buoyancy is used as filling, while practically the sleeper is not annoyed by it, and that part of the bed proper with which he is most concerned in seeking repose is stuffed with soft agreeable material, which is also in itself buoyant in water. These three sections thus stuffed are united on one side only of the mattress, so that each end piece may be folded upon the central one, as seen in Fig. 3. This folding reduces the area and length one-half, and makes the mattress easy to handle and carry from the state-room in case of wreck or fire, its lightness also contributing much to this facility of being handled. Ladies and children can thus make use of them to save life where they would be utterly powerless to avail themselves of the bulky, full-sized, non-folding ones, however valuable they might be when once in the water. I prefer to have the ticking or material which forms the top of the mattress in a continuous piece, thus serving also for the top of each of the sections, and to use also a continuous piece for the bottoms and infolding parts *a b* of the three sections, these two pieces being united by stitches in the line of junction and folding at *c*; but they may be otherwise covered and connected. At the outer ends of both end pieces we attach strong straps 4 4, which may serve both to hold on by or to connect together two such mattresses when afloat. The sides are also provided with ropes or cords 5 5 running through loops 6, and having sufficient length to permit the tying together of two mattresses at their sides. By means of these appliances it will be seen that any number of similar mattresses may be lashed together and form a raft of considerable size. By turning upward the end pieces (the person occupying the center-piece) and then fastening these end pieces in an upright position a sort of rude boat is formed, the passenger being thus provided with bulwarks to prevent him from be-

ing washed away. Any material the equivalent or nearly the equivalent of cork for buoyancy may be used instead of it; but we deem this the best material for the purpose known to us. The three sections might be made entirely separate from each other and then connected, or arranged by straps or cords to be readily tied or lashed together when wanted for life-preserving. This would make their carriage from a berth or state-room more easy, but would render them liable to become permanently separated.

The transverse sectional construction is also a valuable feature in storing, packing, and transporting, and also in making up the beds daily, as they are so readily handled. The head-piece we make of gradually-increasing

thickness toward its outer end, so that a bolster may be dispensed with, if desired.

We claim—

A marine life-preserving mattress made of three transverse sections, the head and foot sections being filled with cork or equivalent buoyant material, and the larger or central portion being filled with light, buoyant, vegetable fiber, or any material generally used in the construction of mattresses, all substantially as shown and described.

WM. H. PACK.

J. S. VANHORN.

Witnesses:

M. COLEMAN,
J. C. HARVEY.