M. Thompson, Tr. Jife Preserving Seals Patented Oct 18-1853.

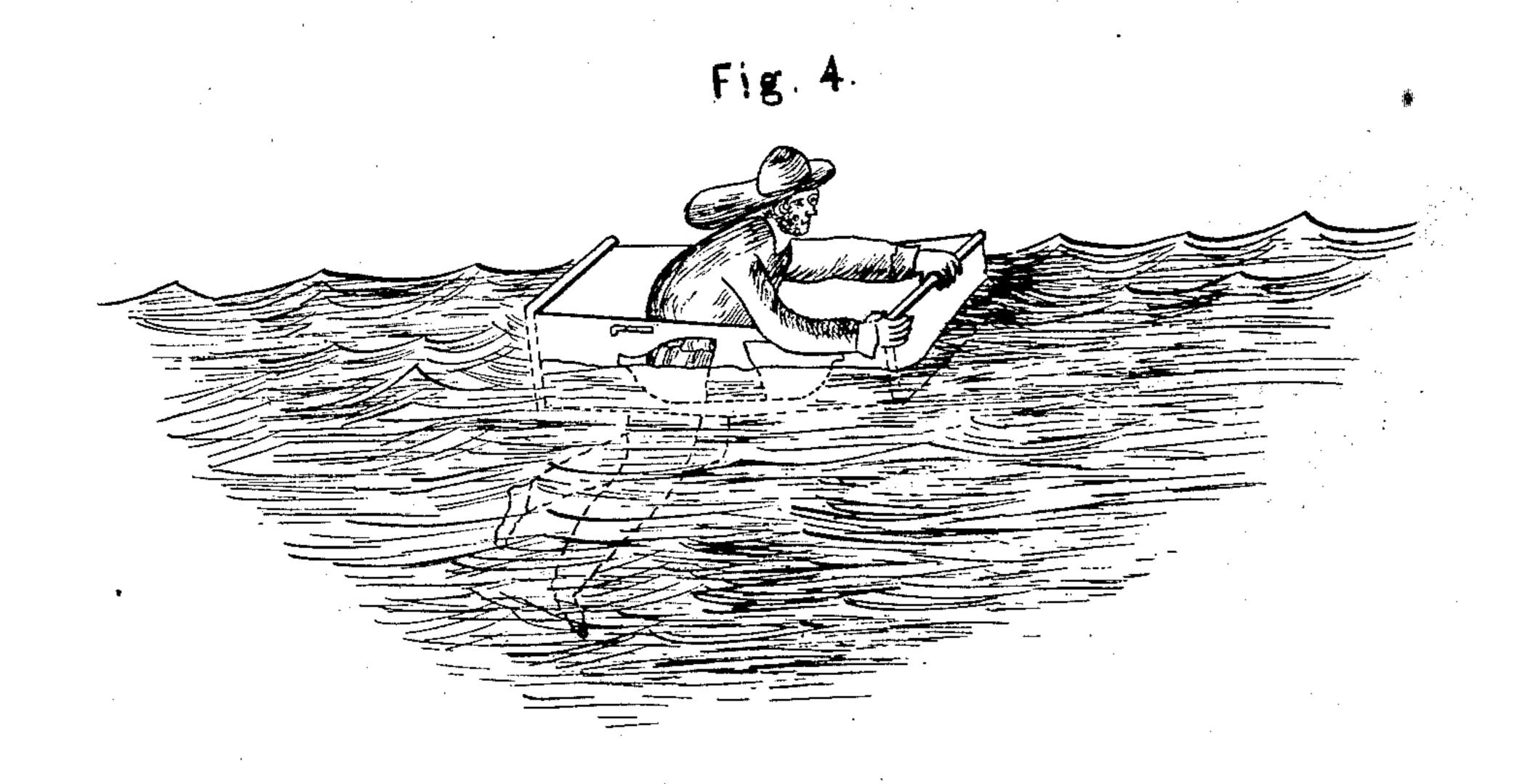


Fig. 5.

Fig. 6.

Fig. 7

N. Thompson, Jr. Life Preserring Seals. Palented Oct 18, 1853.

Fig. 1.

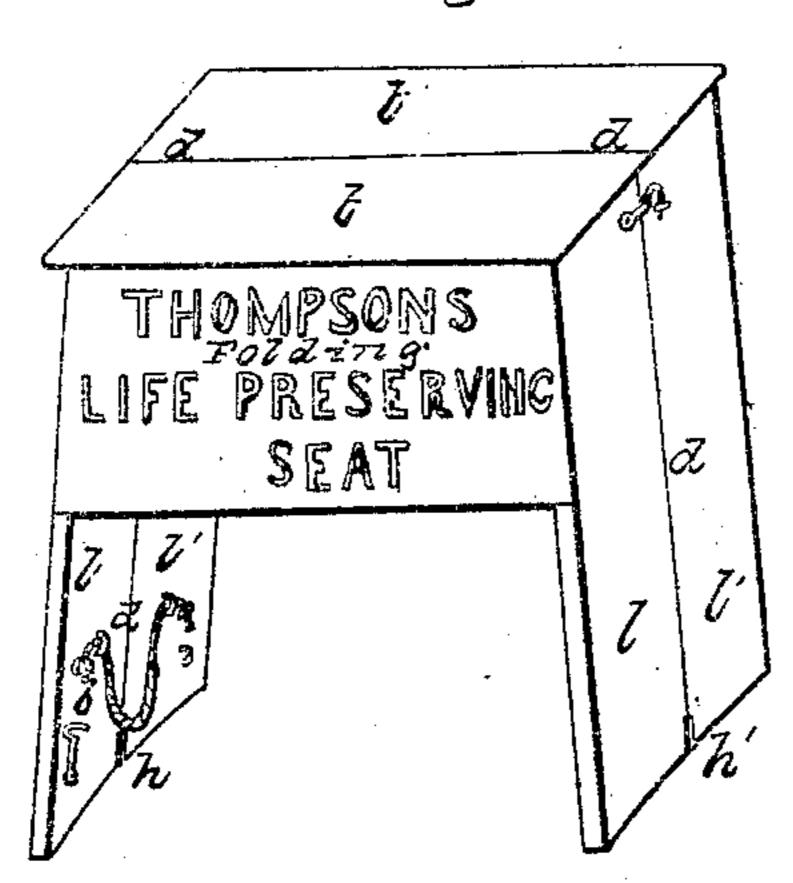


Fig. 2.

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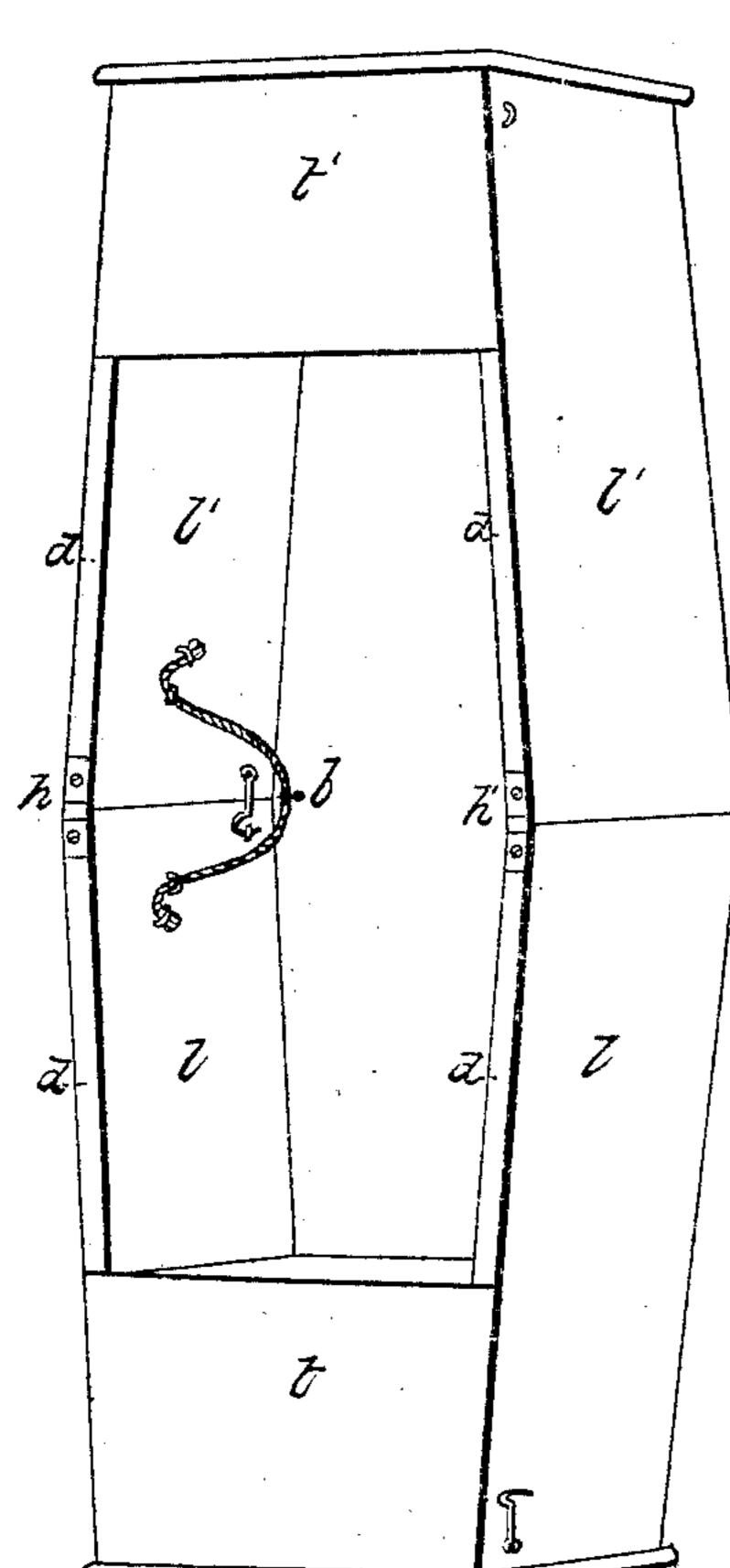
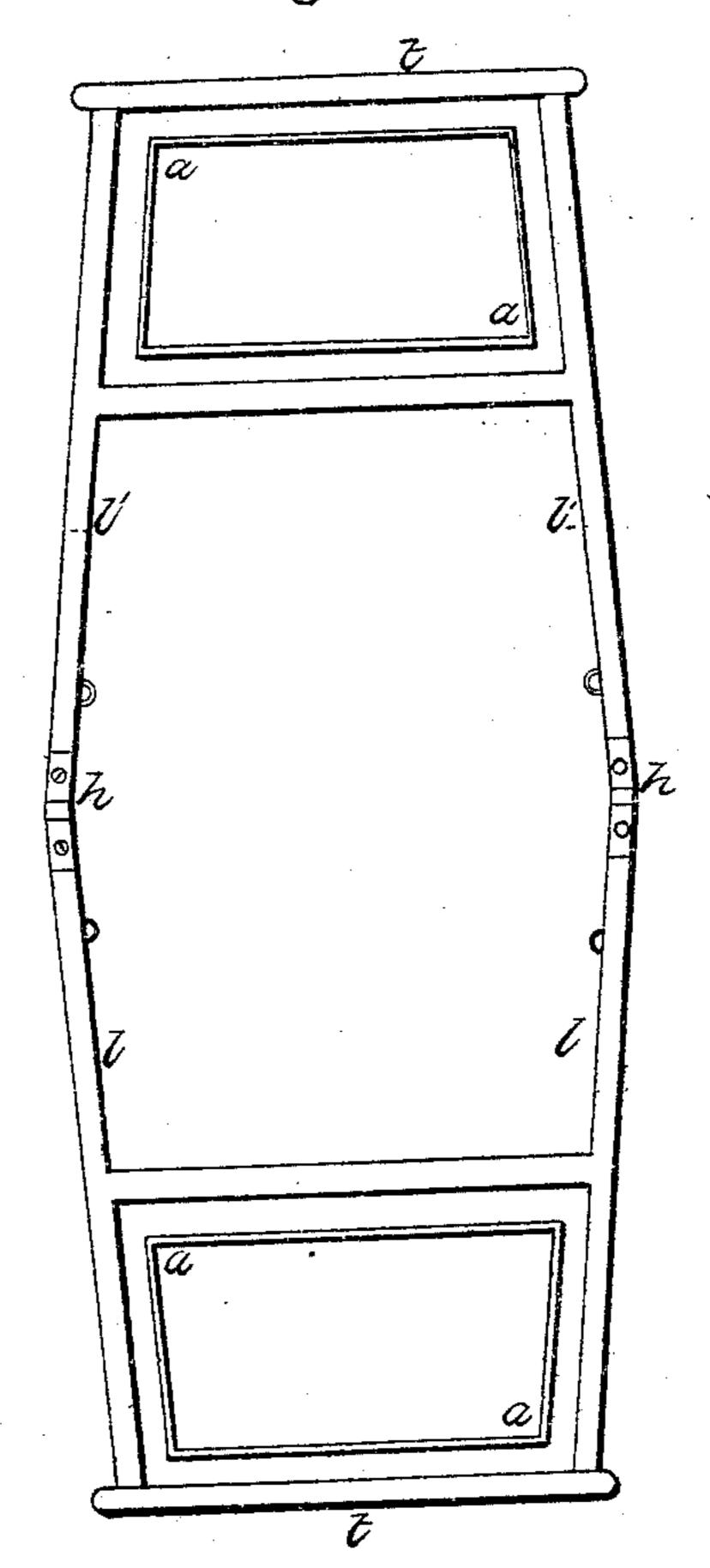


Fig. 3



United States Patent Office.

NATHAN THOMPSON, JR., OF WILLIAMSBURG, NEW YORK.

IMPROVED LIFE-PRESERVING SEAT.

Specification forming part of Letters Patent No. 10,141, dated October 18, 1853.

To all whom it may concern:

Be it known that I, NATHAN THOMPSON, Jr., of Williamsburg, Kings county, New York, have invented a certain new and useful article which I have denominated "Thompson's Folding Life-Preserving Seat;" and I do hereby declare that the following specificaion, taken in connection with the drawings, is a

full and fair description thereof.

Figure 1 is a perspective view of the article when ready for use as a seat. Fig. 2 is a perspective view thereof when unfolded or opened and ready for use as a life-preserver. Fig. 3 is a top view thereof with certain portions removed, so as to show the buoyant cases or chambers and the method of fitting them. Fig. 4 is a view of the article in the water, in position for use as a life-preserver, with a person supported thereby. Fig. 5 is a side view of the article when unfolded and secured in position by the self-acting coupling. Fig. 6 is also a side view of the article when folded up for use as a seat, secured in that position by the self-acting coupling; and Fig. 7 is a view of the spring-catch which retains the coupling in its proper place while the article is in the form of a seat.

The idea of fitting a stool or chair with hermetically-sealed metal cases is not new with me, as both stools and chairs fitted with such cases or with cork floats, in such manner that in time of need they may be employed as lifepreservers, are now in daily use. It is almost impossible, as experience proves, for a person to sustain himself upright in the water with one of these articles. They possess ample buoyancy, but the article, when caught by either leg or by the arms or back, invariably rolls over, always keeping the hand of the user below the surface. When these same articles, or even the hour-glass stool lately patented, which is a decided improvement thereon, are fitted with lines or beckets, the one to pass around the neck and the other to encircle the waist of the user, supporting the stool upon his breast, they are still imperfect. Actual practice proves that when thus applied the user is upset in rough water and must lie on his back with the stool uppermost. In this position the stool does not immerse sufficiently to take its whole buoyancy, and the user is, to say the least, in an uncom-

fortable position, even if he retains his presence of mind. If he does not, his head drops, is now and then immersed, and he finally drowns, even though his neck and chest are supported at the water's edge. A certain portion of time is also required for the proper adjustment of the article and for securing the beckets previous to jumping into the water. To obviate these difficulties is the object of my invention, while I at the same time furnish an article capable of use both as a seat

and as a life-preserver.

To this end the nature of the first part of my invention consists in applying under the divided top of a stool or chair two or more cans or other buoyant articles and in so arranging the seat that it can be opened longitudinally and held together when opened by hinges or their equivalents in such manner that when open it is capable of inclosing the body of a person, the legs forming the sides and seat the two ends of a species of rectangular frame; and the nature of the second part of my invention consists in a certain clasp or coupling so constructed and applied that it serves the purpose of holding the two halves of the stool either in position for use as a seat or as a life-preserver.

The same letters refer to the same parts in

all the figures.

In the drawings, tt' represent the divided top, and l l' the legs, of a stool divided vertically at d and provided with hinges at h h'. Under each half of the seat is secured one or more sheet-metal cases packed in cork and completely surrounded with wood, so as to prevent injury thereto. Small hooks g are so fitted as to hold the article either closed when in use as a seat or open when employed as a life-preserver; or any known catch or coupling may be used in place of said hooks. A preventer-becket b is fitted from one leg to the other, so that the two halves shall not separate even if the hinges be broken. These hooks or any of the catches known to me are liable to be wrenched or torn off, and they, moreover, occupy too much time in hooking and unhooking. I have therefore invented the coupling clearly shown in Figs. 5, 6, and 7, in which z z represent an oblong ring of metal so fitted as to inclose portions of both legs of the stool, in which apertures are cut

of the shape represented in the drawings, the faces w and y thereof being of necessity substantially the same in shape as represented, but the face v may be cut or curved according to fancy. The face y inclines backward from the division d or inner edge of each leg as it ascends toward the top of the seat and the face w inclines upward as it extends outward. I, however, usually prefer to make a slight knuckle thereon, as shown at o, in order that the clasp z may have no tendency to rise when the article is in use as a life-preserver.

The faces y and w must be so shaped that the distance from m to m is equal to the reach of the clasp when the stool or seat is unfolded and that the distance between m' and m' shall be same when the stool is folded up. The other parts of the faces w and y must be so shaped that the clasp is free to slide from the one position to the other, as shown in the drawings, while folding or unfolding the article.

The clasp by its own weight retains its place while in use for keeping the stool unfolded, but must be held up when employed for retaining the two halves folded or in position as a seat. For this purpose the small spring-catch, clearly shown in the drawings and in edge view at Fig. 7, is employed. A pin or bolt, or some such contrivance, may, however, be employed for this purpose.

The sheet-metal cases are clearly shown at a a, Fig. 3, with their cork packing and wooden covering. In the other figure the

covering hides the cases.

The drawings clearly illustrate the use of the article, both as a seat and as a life-preserver. In the latter case it is applied either by passing it down over the shoulders and turning it one-quarter round, so as to take the position shown in Fig. 4, so that the buoyant chambers come in front and rear of the person using it, or else it may be stepped into and lifted up under the armpits. In either manner it is in place in an instant and requires neither skill nor presence of mind for its proper adjustment. Moreover, when the party is in the water he is nicely balanced and held upright by the buoyant chambers, cannot possibly be upset, and is able to propel easily through the water reclining on his back or breast at pleasure. He can also change and shift his position in a very material degree, and will therefore be enabled to sustain for a longer time the fatigue always consequent upon immersion in the water. The hooks must be drawn out of the staples and rehooked again when the article is either folded or unfolded; but when the clasp is used all that is necessary is to press upon the catches while the stool is folded, releasing the clasp, and then to unfold it when the clasp of itself takes the position shown in Fig. 5, holding the seat open. When it is desired to reconvert the preserver into a stool the clasp must be lifted from its seat, the stool folded up, and the clasp raised l

again until it is supported by the catches. One clasp only serves a good purpose, but it is better to employ two, one on each set of legs.

The advantages usually obtained by the use of life-preserving stools are all retained in mine, and these are economy of space and of cost, as one article is used for two distinct purposes, and also the immediate propinquity of the article in case of emergency, as each person may instantaneously convert his seat into his boat.

The manner in which the herein-described life-preserver is constructed appears to me to present many advantages on the score both of economy and durability, as the whole case is formed of thin boards and the chambers are perfectly protected, while the article, as a whole, is light, strong, and cheap. This construction may, however, be variously modified without departing from the principles of my invention so long as there is buoyant power at the two ends, when open, connected by legs, and the whole is so arranged that when folded up it may be used as a seat, proper hinges or their equivalents being employed for this purpose.

A cork stuffing or two solid blocks of light wood without the two metallic cases, or two india-rubber bags inclosed in the boxes might be substituted for the cases and their cork packing, or the packing alone might be dispensed with. I intend sometimes also to construct the whole top of two metal boxes without using any wood and to apply thereto either wooden legs or those formed of sheet-metal tubing. I may also use the ordinary form of stool-legs, applying supernumerary legs to support the hinges or else secure these latter upon a divided cross-bar arranged near the bottom of the legs. I moreover intend sometimes to apply my invention to that form of stool known as the "X" or camp stool, all that is necessary being to fit it with a divided buoyant top and with hooks, catches, or clasps to hold it shut and ready for use as a seat or open when employed as a life-preserver. The hinge in this case is represented by the pin or bolt, which passes through the legs at their point of junction. The seat may also be provided with a back or with arms, and many other modified methods of constructing it will no doubt suggest themselves to the ingenious mechanic; but they will come within the scope of my invention so long as they embrace the buoyant divided top, the hinges, and clasps.

All the appurtenances by some deemed requisite for life-preservers may, if required, be applied to my folding life-preserving seat. Paddles may be secured to the legs, water-bottles and provision-bags to the seat, and a mariner's compass might be fitted on one of the divisions of the top. I however deem such fittings immaterial and only mention them to show that they may be applied, if required.

Having thus fully described my invention

and some of the mere modifications of which it is susceptible, I would state that I do not claim a life-preserving stool or seat in the general, as such have been for a long time in ordinary use; but

I do claim as of my own invention and desire to secure by Letters Patent of the United

States—

1. The folding life - preserving seat with a buoyantdivided top, constructed substantially in the manner herein described.

2. The clasp, in combination with the sur-

faces on which it slides, constructed substantially as described, and operating to hold the stool either shut or open, substantially as described.

In witness whereof I have hereunto subscribed my name on this 24th day of Septem-

ber, A. D. 1853.

NATHAN THOMPSON, JR.

In presence of— H. C. Banks, A. C. Dunn.