

(No Model.)

J. C. LEE.

WATERPROOF ENVELOP FOR PROTECTING CHARTS, &c.

No. 596,300.

Patented Dec. 28, 1897.

Fig. 1.

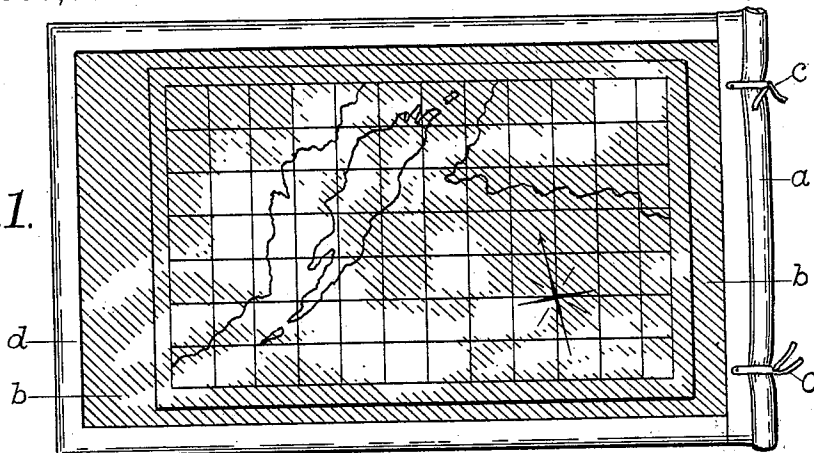


Fig. 2.

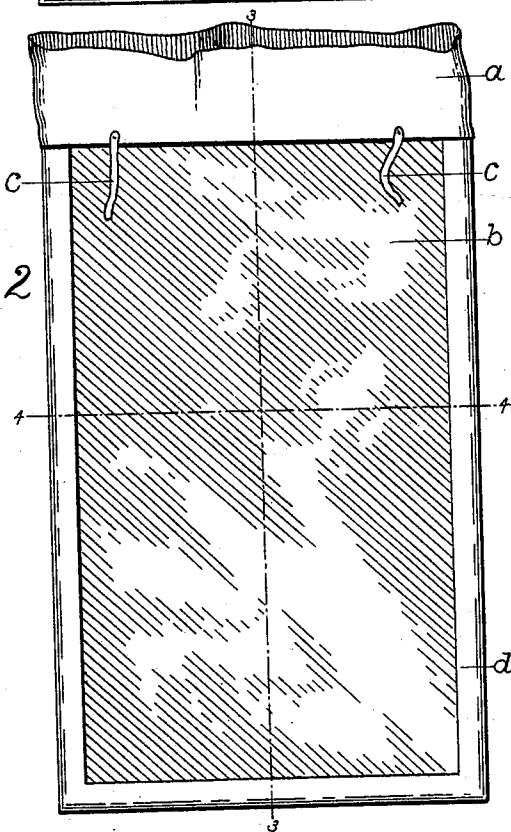


Fig. 3.

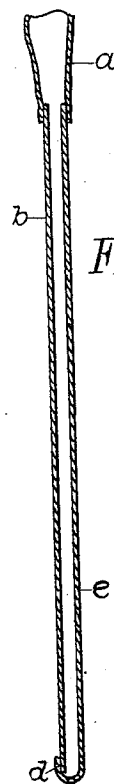
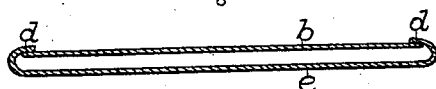


Fig. 4.



Witnesses.

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WATERPROOF ENVELOP FOR PROTECTING CHARTS, &c.

SPECIFICATION forming part of Letters Patent No. 596,300, dated December 28, 1897.

Application filed May 29, 1897. Serial No. 638,687. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. LEE, of Brookline, in the county of Norfolk and State of Massachusetts, have invented a new and useful Improvement in Waterproof Envelops for Protecting Charts, &c., of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to means for protecting a chart, map, drawing, and similar articles against damage by water, dampness, dirt, &c., and at the same time allowing the chart, map, &c., to be freely consulted.

It is the object of my invention to provide a highly-efficient transparent protector for charts, &c., which can be made and sold as an article of manufacture at a low price and which will be so light and portable as to be useful under all conditions of service.

My invention consists of a protecting-envelop comprising in its construction a rectangular sheet or plate composed of a transparent waterproof substance, such as celluloid, forming the front of the protector, having cemented or otherwise united at three of its edges a waterproof substance covering one side, forming the back of the protector. At one end of the protector the edges of the front and back are left unsecured for the admission of a chart, map, drawing, or the like. To the unsecured edges of the protector is attached an extension, of flexible waterproof material, which may be folded upon itself in such a way as to form a waterproof seal for this portion of the protector.

To make my invention more clear, reference is to be had to the accompanying drawings.

Similar letters refer to similar parts throughout the several views.

Figure 1 is a front view of my invention complete, showing a chart in place ready for use. Fig. 2 is a view of the invention, showing it with the fastenings untied and the flexible waterproof material at the end unfolded ready for the reception of a chart, map, drawing, or the like. Fig. 3 is a vertical sectional view taken on line 3 3 of Fig. 2. Fig. 4 is a horizontal sectional view taken on line 4 4 of Fig. 2.

In Figs. 1 and 2 a complete envelop is shown, consisting of a transparent front *b* with a wa-

terproof back the edges of which are folded over and securely attached to the transparent front.

a represents the flexible extension, which is secured to the front and back, and *c c* are lacings fastened to the front and back for the purpose of holding down the flexible extension when folded, as illustrated in Fig. 1.

In Fig. 1 a chart is shown in place ready for use, and the flexible extension *a* of the protector is folded up and tied by the lacings *c c*, so as to exclude moisture, dirt, &c.

In Fig. 2 the lacings *c c* are shown untied and the flexible end *a* unfolded preparatory to inserting the map or chart to be protected.

Fig. 3 shows more in detail the construction of the envelop. The transparent front is illustrated at *b*, the waterproof back at *e*, with its overlapping edges at *d*, where it is united to the transparent front. The flexible end *a* overlaps the front and back, as shown, and is fastened thereto by means of waterproof cement. The overlapping of the edges *d* of the front and back are shown more clearly in Fig. 4.

A very efficient and preferred form of my invention may be made with a transparent face or front composed of celluloid, a back of rubber-coated cloth stiffened with cardboard, and thin rubber cloth for closing the opening for the admission of charts.

It will be understood that my invention may be made in a variety of ways, and I do not limit myself to the fastenings and materials herein described.

I am aware that heavy and cumbersome frames with glass fronts and similar arrangements have been made for holding charts which are not perfectly waterproof or portable. My invention overcomes the disadvantages inherent in these devices, its advantages being that it is portable, unbreakable, is waterproof under all conditions of service, and is inexpensive.

My invention is particularly useful on small boats without cabin facilities. For example, it frequently happens when a boat of this description is exposed either to spray or rain that it is absolutely necessary to use a chart to steer a proper course. Under these conditions the paper of the chart is extremely liable to become wet, and consequently soft

and pulpy, rendering it almost impossible to handle the chart without obliterating the printed matter, thus rendering it useless and endangering life and property. In just such
5 a situation as I have cited my waterproof chart-protector would prove invaluable. By its use the mariner would be relieved of anxiety regarding his chart and therefore the better able to guide his craft on a safe course.
10 Having thus described my invention, what I claim is—

1. A waterproof envelop having a transparent front, an end of said envelop being provided with means for forming an adjustable joint, substantially as described.

15 2. A portable waterproof chart-case consisting of an envelop of rubber or similar material, the front of which is formed of flexible, non-breakable material such as celluloid

or the like, and provided with an opening 20 capable of being temporarily sealed to prevent the entrance of moisture &c., substantially as set forth.

3. In a waterproof envelop the combination of a transparent front of non-breakable 25 material secured in place by water-tight joints, and the opening of the envelop so arranged as to be sealed against the admission of moisture substantially as herein set forth.

In testimony whereof I have signed my 30 name to this specification, in the presence of two subscribing witnesses, on this 26th day of May, A. D. 1897.

JOHN C. LEE.

Witnesses:

ARTHUR D. FOSS,

H. N. SWEET.