Crossman & Quimby. Life Preserving Mattress. Patessted Feb. 16, 1858. V -19,350. a H D.Fig.1. Fig:2 B B. B. B d Ĉ, Ĉ. C. G B В. Г. B B Ъ С. Ъ. С B B B B. B. cЪ 13 ħ 7

.

## UNITED STATES PATENT OFFICE.

## C. P. CROSSMAN AND E. M. QUIMBY, OF WARREN, MASSACHUSETTS.

## LIFE-PRESERVING MATTRESS.

Specification of Letters Patent No. 19,350, dated February 16, 1858.

To all whom it may concern:

Be it known that we, C. P. CROSSMAN and E. M. QUIMBY, both of Warren, in the county of Worcester and State of Massa-

- chusetts, have invented a new and Improved Life-Preserving Mattress or Bed for Ships and other Navigable Vessels; and we do hereby declare that the following is a full. clear, and exact description of the same, ref-10 erence being had to the annexed drawings,
- making a part of this specification, in which

Figure 1 is a longitudinal, vertical and central section of our improvement. Fig. 2 15 is a horizontal section of ditto, taken in the

line (a) (a) Fig. 1. Similar letters of reference indicate cor-

responding parts in the two figures.

- This invention consists in placing a suit-20 able number of springs, such as are generally used for upholstery purposes, between plates or slabs formed of cork, the several springs with the cork attachments being connected together and inclosed within a
- proper case formed of strong cloth and having straps or ropes attached to its sides, the whole being so arranged that an elastic and flexible as well as buoyant mattress is obtained, and the several mattresses con-
- 30 tained in a vessel rendered capable of being quickly secured together in case of accident, so that the whole will form a raft of large dimensions capable of sustaining all the passengers with a requisite quantity of food 35 and other necessaries

To enable others skilled in the art to fully understand and construct our invention we will proceed to describe it.

- A, represents a series of wire springs of 40 spiral and double-conical form such as are generally used for upholstery purposes. These springs are secured between two cork plates or slabs B B of suitable thickness. The cork plates or slabs B, may be of quad-
- 45 rilateral form and they are connected by cords or straps (a) which are attached to loops (b) said loops passing entirely through the corks one at the center of each side as shown clearly in Fig. 2. Four cords
- 50 or straps (a) therefore are used for each spring, but more may be employed if neces-sary. The cords or straps prevent the springs from being unduly distended, and at the same time allow a requisite degree of 55 flexibility to the mattress. The springs A
- with their cork attachments B B, are placed

side by side, any proper number being used according to the size of the mattress, and the springs and corks are permanently secured together by means of cords or straps 60 (c) which pass transversely and longitudinally along the outer surfaces of both the upper and lower corks B, and through the loops (b), the cords or straps (c) being tied in or to each loop, and also tied where they 65 cross each other as shown at (d). By this means the several springs and corks are firmly secured together. The springs A, and corks B, are covered all around with a layer C, of cotton or other light material 70 and this layer C, is incased by a covering D, of strong cloth or any suitable fabric which may be provided with one or more pockets E, to receive bags F, made of water proof material to contain provisions or other 75 articles necessary to be protected from wet.

Through the mattress, cords or straps G, pass both transversely and longitudinally. These cords or straps, project a suitable distance from the covering D, and they are tied 80 to the cords (a) as shown at  $(a^{\times})$  Fig. 1, so that they cannot be drawn out or separated from the mattress. Spring hooks H, having straps I attached may be connected to any part of the casing or covering D. 85

The several parts constructed and arranged as above described form a flexible and elastic mattress answering such purpose equally as well as any other at present manufactured, and the corks B, are to be of 90 sufficient dimensions to give the mattress a requisite degree of buoyant power so that in case of necessity they will form efficient life-preservers to keep persons afloat until succor arrives. In the latter capacity all or 95 several of the mattresses contained in a vessel may be connected together by the cords or straps G, forming one large or several smaller rafts, capable of sustaining all the passengers, with their valuables, food, &c. 100

The bags F, will be retained in their pockets by the pressure of the springs A, and the springs and corks being connected by the net-work of cords as previously described the invention is rendered extremely 105 durable.

By means of the spring hooks H, articles may be expeditiously attached to the mattress that cannot well be placed on it, and persons may also be sustained in that way 110 when a mattress or several mattresses comprising a raft is filled.

We are aware that cork has been used in mattresses for the purpose of rendering them buoyant, and to serve in case of necessity the purpose of life-preservers, but we

5 are not aware that springs and corks have been arranged and connected as herein shown so as to produce a flexible and elastic as well as a buoyant mattress capable of serving in either capacity mentioned, equally

10 as well as articles constructed solely for each purpose. We do not claim therefore the employment or use of cork, nor do we claim separately or apart from the whole any of the parts herein described; but

Having thus described our invention what 15

we claim as new and desire to secure by Letters Patent, is-

The springs A and corks B, connected by the cords or straps (a) (c) encompassed by the filling or layers C, and inclosed by the 20 case or covering D, provided with pockets E, and straps G, the whole forming a new and useful article of manufacture for the purpose specified.

> C. P. CROSSMAN. E. M. QUIMBY.

Witnesses:

JAMES S. DAVIS, ELIAS S. LEMON.