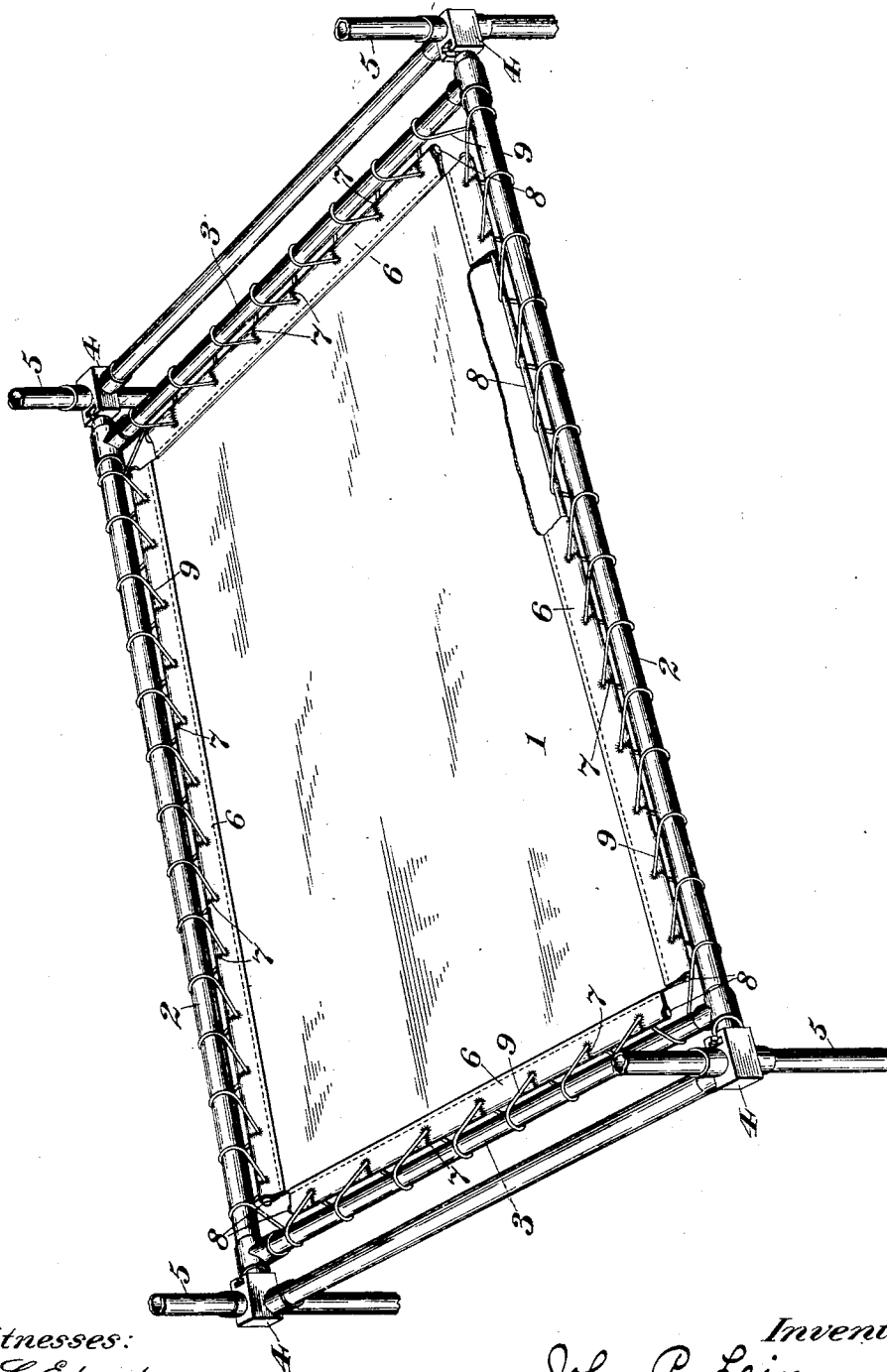


No. 733,405.

PATENTED JULY 14, 1903.

J. P. LEIN.
BUNK OR MATTRESS FRAME.
APPLICATION FILED JAN. 28, 1902.

NO MODEL.



Witnesses:
J. L. Edwards
Ralph Jonas.

Inventor:
John P. Lein
By C. W. Edwards.
Attorney.

UNITED STATES PATENT OFFICE.

JOHN P. LEIN, OF NEW YORK, N. Y.

BUNK OR MATTRESS-FRAME.

SPECIFICATION forming part of Letters Patent No. 733,405, dated July 14, 1903.

Application filed January 28, 1902. Serial No. 91,567. (No model.)

To all whom it may concern:

Be it known that I, JOHN P. LEIN, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Bunks or Mattress-Frames, of which the following is a full, clear, and exact specification.

My invention relates to bunks or mattress-frames such as are in common use in transport-ships and the like and which embody in their construction a web of canvas or similar material.

My object is to provide means for stretching the canvas of the bunks upon the frame so that the bunk may sustain considerable weight and rough usage without danger of destruction or stripping the canvas from the frame.

The means heretofore employed in attaching the canvas to the frame of the bunk has been to provide the edges of the canvas with eyelets at intervals and to wind a cord through these eyelets and around the frame. With this arrangement the strain upon the bunk is unequally distributed upon the canvas, being concentrated upon the eyelets, and thus upon a very small area of the canvas at intervals, and the great difference in the weight of the occupants or the force with which an occupant will throw himself upon the bunk or other rough usage soon tears an eyelet loose, thus throwing so much additional strain on the adjacent eyelets and soon destroying that side of the bunk and rendering the whole useless. I propose to overcome this objection by providing a flexible frame for equally distributing along the entire length of the edges of the canvas all such strains as may be put upon the canvas.

The drawing accompanying this specification is a perspective view of a bunk provided with my improvements.

1 represents the canvas or other suitable fabric stretched within a rectangular rigid frame composed of side pieces 2 2 and end pieces 3 3. The frame may be of any construction and may be supported from any suitable support. In the drawing I have illustrated one well-known arrangement for the purpose—i. e., the extremities of the side

pieces 2 are keyed in sockets in the brackets 4 4, carried by vertical posts 5 5, the latter being ordinarily braced between decks of a vessel. The ends and sides of the frame are rigidly joined, as shown, and the whole bunk can be readily lifted from the brackets and packed away or used as a stretcher. A square piece is cut out of each corner of the canvas, leaving a flap 6 on each of the four sides, which flap is folded over and sewed down to form pockets along the edges. At intervals along this fold and transversely the length of the pockets I cut slots 7 7, running back about half the depth of the fold, and suitably bind or stitch the slot to prevent the fabric from fraying. The slots may of course be cut and bound before the flap is turned over. This, however, is a matter which will be determined by convenience. In the pocket formed by the fold is inserted a rod of wood or metal 8 8. These rods form a flexible frame and are equal in length to the respective sides and ends of the canvas and are placed in the folds before the operation of lacing the canvas to the frame begins, or the cord may be loosely wound about the main frame and the web be then placed in position by passing the loops of the lacing through the various slots in the edge of the web and then passing the slats through the pockets in the web and the loops of the lacing at the same time. It will thus be seen that the web may be removed and replaced without unwinding the lacing-cord from the main frame.

The usual lacing-cord 9 is used to stretch the canvas to the frame, it being passed through the slot back of the rod 8, carried over the side or end pieces of the frame, down and under the canvas, and up through the next slot. This operation is continued through each slot until the canvas is laced to the frame, the cord always being passed around back of the rod, drawing it toward its adjacent side of the frame.

It will be seen that the strain must equalize itself along the whole side of the canvas and that if unevenly laced it will readily adjust itself. In case it is desired to quickly remove the canvas from the frame the rods may be simply withdrawn, leaving the cord

wound around the frame so loosely as to be readily taken off.

This device is as readily constructed as the old method, it is as cheap, and the weight is
5 no greater.

I do not confine myself to the use of the slots shown in the folds of the canvas. Any form of hole may be used for the lacing-cord, provided it can be passed around the rod.
10 Various modifications of the construction herein shown may also be adopted without departing from the spirit of the invention.

It will also be understood, of course, that instead of using the lacing-cord any convenient means may be employed for supporting
15 the rods from the side frames.

Having thus described my invention, I de-

clare that what I claim as new, and desire to secure by Letters Patent, is—

In a cot, the combination with a rigid frame, 20 of a web attached thereto by a flexible frame composed of rods, said web having a continuous pocket along each edge, transverse slots cut through the pockets from the edges, said rods inserted in said pockets, and cords passed 25 through the slots around the rods and attached to the rigid framework, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN P. LEIN.

Witnesses:

C. V. EDWARDS,

RALPH JONAS.