

No. 633,424.

Patented Sept. 19, 1899.

C. CALLIANO.
DEVICE FOR PREVENTING SEASICKNESS.

(Application filed Feb. 18, 1898.)

(No Model.)

Fig. 1.

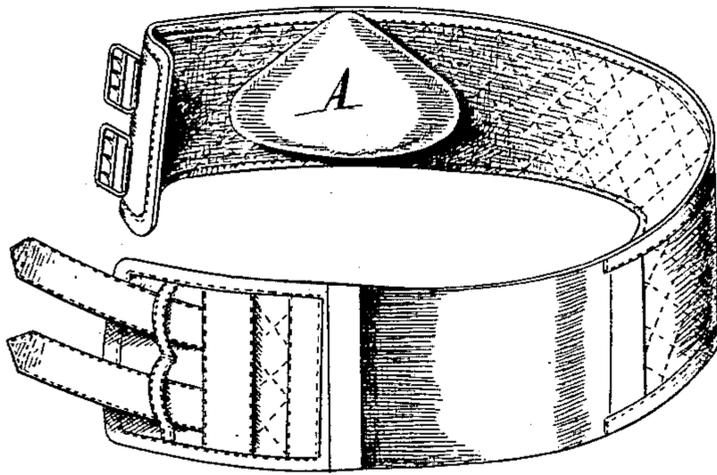
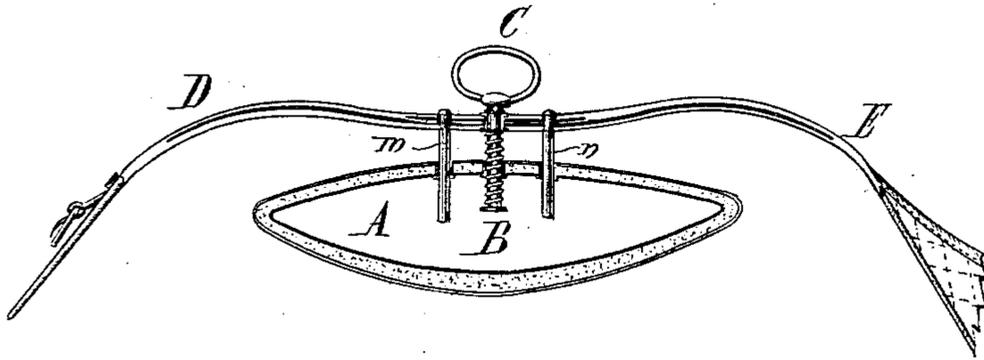


Fig. 2.



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UNITED STATES PATENT OFFICE.

CARLO CALLIANO, OF TURIN, ITALY.

DEVICE FOR PREVENTING SEASICKNESS.

SPECIFICATION forming part of Letters Patent No. 633,424, dated September 19, 1899.

Application filed February 18, 1898. Serial No. 670,834. (No model.)

To all whom it may concern:

Be it known that I, CARLO CALLIANO, doctor and surgeon, a subject of the King of Italy, residing at Turin, in the Province of Turin, Italy, have invented certain new and useful Improvements in Devices for Use in Preventing Seasickness and Like Disturbances of the Human System; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has for its object to provide means for preventing the morbid gastric sensations, generally followed by vomiting, to which many people are subject when exposed to undulatory movements—such, for example, as occur on board ship, in swings, and even in railway or road carriages. I have found that a gradual compression all over the gastric region will dissipate the said morbid sensation and prevent the distressing effects of nausea as well as vomiting, which is usually the consequence. After long study and numerous experiments I have arrived at the conclusion that seasickness is a reflex phenomenon owing to a condition of acute stimulation of the nervous center known as the “celiac or stomachic plexus,” which is located deeply under the epigastric region, and I have found that properly-directed pressure upon this nervous center will prevent or cure seasickness. To effect this compression, I provide a belt, which I will describe with reference to the accompanying drawings.

Figure 1 shows in perspective a belt made in accordance with my invention, and Fig. 2 a horizontal section of part thereof.

The belt consists of a band of strong fabric, which is partly elastic and is provided with an inflated cushion A of triangular or approximately triangular figure in side view, the internal side conforming in shape to the anatomic organization of the gastric region, so as to be capable when pressed against the body of arresting independent movement of the organs and of exerting a gradual pressure upon the celiac plexus.

The cushion A appears like an isosceles triangle, with the corners somewhat rounded,

having, when in place, its apex upward, directed toward the sternum. The sides of the triangular cushion when in place are parallel to the two lowest ribs, and comprise, consequently, an angle equal to the epigastric angle—viz., about one hundred degrees—the angles at the base of the triangle being about forty degrees each.

The particular shape and arrangement of the cushion with the apex upward are characteristic and important, because with a differently-shaped cushion the belt could not have the same effect of compressing the celiac plexus.

The belt is provided with buckles or fastenings, by which it can be tightly fastened around the body. It is important to provide means to either increase or decrease the pressure against the body after the belt has been fastened, according to the greater or less violence of the undulatory movements experienced or according to the intensity of the morbid sensations felt. For this purpose a supplementary device is employed, which is represented in Fig. 2. It consists of a screw-hole provided in the cushion, in which hole a screw C engages, the said screw passing through holes in the outer wall of the cushion and in the belt and being operated by a handle situated outside the belt, the part of the screw which passes through the belt being grooved and engaging with and being capable of turning freely in a spring-metal strip D E, embedded in the belt. To this metal strip rods *m n*, parallel with the said screw, may be fixed, these passing through holes in the outer wall of the cushion A. On turning the screw C in one or the other direction the cushion A is either moved toward or away from the belt, the rods *m n* serving as guides for the cushion and preventing it from turning abnormally relatively to the belt.

The aforesaid metal strip D E is connected to the belt either by inserting it between the material thereof or by sewing it between a leather band and the belt or in any other convenient manner.

After the belt has been secured in place on the body the distance between the belt and

the cushion A can be increased or diminished by turning the screw C so that the pressure of the cushion can be adjusted.

The belt described may without inconvenience or injury be worn continually in any kind of weather irrespective of whether the want be felt or not, it being efficient both as a preventive of seasickness and as a preventive of the analogous feeling occurring in swings, on rocking-horses, or road or railway carriages, and even for preventing vomiting due to purely nervous conditions.

Men can easily adjust the belt in place without undressing by fastening it between the waistcoat and the shirt; but women should of course place it underneath their stays.

Under ordinary circumstances a pressure sufficient to prevent seasickness from coming on is obtained by moderately tightening the belt; but should symptoms of seasickness afterward occur the pressure of the cushion may be easily increased by giving a few turns to the screw.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. A device for preventing seasickness and analogous morbid sensations, consisting of a belt or band, an approximately triangular pressure-cushion carried by the belt and having when in position its apex directed upward toward the sternum, an adjusting device whereby the distance between the belt and the cushion and consequently the pressure can be varied, and means for preventing the

cushion from turning relative to the belt, while being adjusted, substantially as described.

2. A device for preventing seasickness and analogous morbid sensations, consisting of a belt or band, a pressure-cushion, a screw engaging said cushion and mounted to turn freely at its outer end in said belt, and guide-rods connected with the belt and loosely engaging said cushion, whereby the cushion may be moved toward and from the belt without turning relatively thereto, substantially as described.

3. A device for preventing seasickness and analogous morbid sensations consisting of a belt or band having a metal strip connected therewith, a hollow pressure-cushion approximately triangular in shape; a screw engaging a screw-hole in the outer wall of the cushion and extending at its outer end through the belt and metal strip, the said screw having a handle at its outer end, the part of the screw passing through the belt being grooved and engaging with and turning freely in the metal strip, and parallel guide-rods connected with the metal strip and passing through openings in the outer wall of said cushion, whereby the cushion may be moved toward and from the belt without turning relative thereto, substantially as described.

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

CARLO CALLIANO.

Witnesses:

SELICO BORETTA,
SAN CIPIENG.