(No Model.)

E. D. MOORE.

LIFE SAVING DEVICE.

No. 384,923. Patented June 19, 1888.

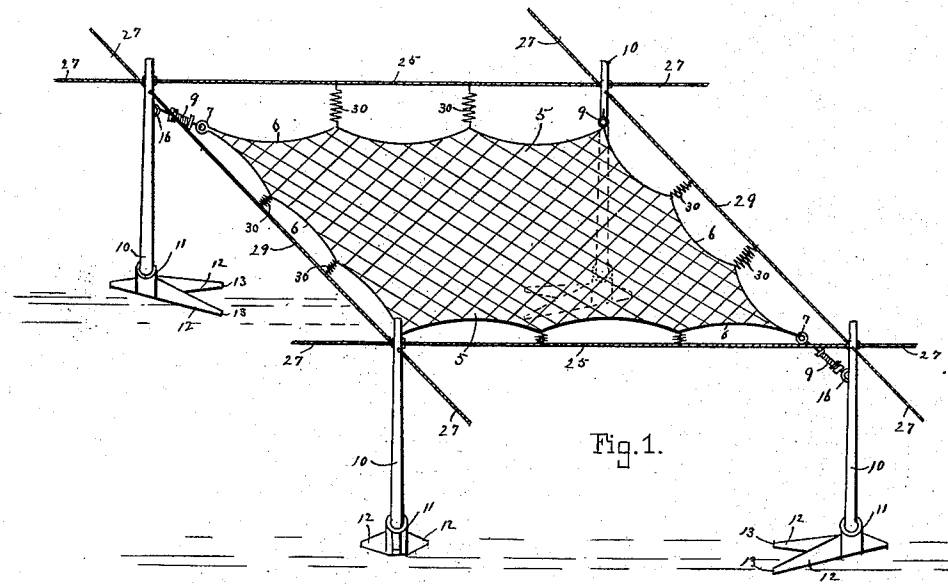


Fig. 1.

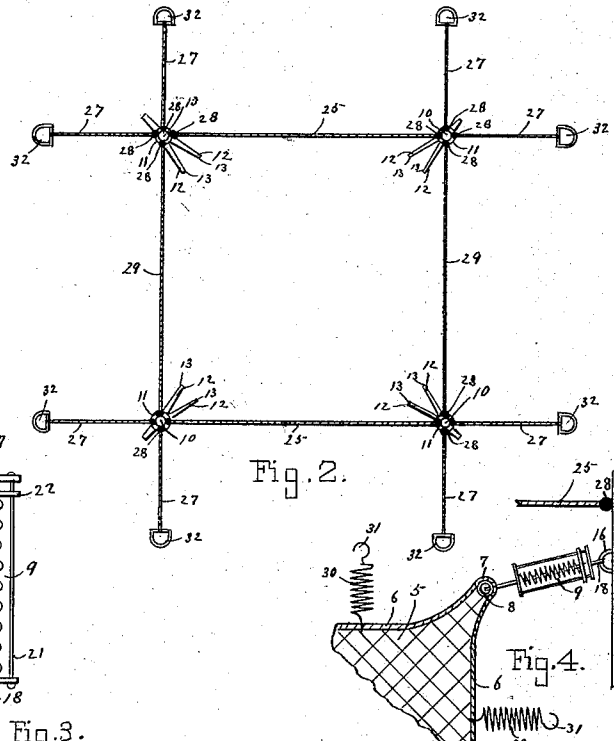


Fig. 2.

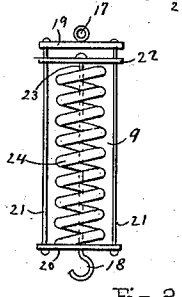


Fig. 3.

Fig. 4.

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UNITED STATES PATENT OFFICE.

EVERETT D. MOORE, OF BALTIMORE, MARYLAND, ASSIGNOR TO THOMAS C. CHAPPELL, OF SAME PLACE.

LIFE-SAVING DEVICE.

SPECIFICATION forming part of Letters Patent No. 384,923, dated June 19, 1888.

Application filed December 22, 1887. Serial No. 258,685. (No model.)

To all whom it may concern:

Be it known that I, EVERETT D. MOORE, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Life-Saving Devices; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in life-saving devices wherein are employed nets, beds, or such like devices for receiving the weight of a falling body and lessening the shock thereto; and it consists in suspending the said net or receiving device by a suitable vibrating combination from stanchions or poles, or it may be supported by hand and readily and quickly placed in the desired position and securely held thereat by manual force, as hereinafter described, whereby the momentum of a body falling in the said net or receiver will be gradually overcome and injury thereto prevented, the construction of the device being such that it may be folded for convenient storage or transportation and convenient for instant use.

In the further description of my invention reference is had to the accompanying drawings, in which—

Figure 1 is a perspective view of the device suspended from the stanchions. Fig. 2 is a detailed view, looking down on the stanchions and ropes which may be employed in the invention. Fig. 3 is a detailed view of the vibrator. Fig. 4 is a detailed view of one corner of the net or receiver, showing the construction thereof.

The same figures refer to the same or similar parts throughout the several views.

The figure 5 denotes the receiver, which may be made of netting, canvas, rubber cloth, or such like material, the drawings showing the netting, which is considered the most suitable for the purpose, and is made in the form of a perfect square, preferably, that any corner thereof may be secured to any one of the stanchions when they are employed, and thus avoid confusion in the adjustment of the device when required for use.

In order that the receiver 5 might be employed without the stanchions 10 and the ropes thereon, and that it may readily be moved from one place to another to catch the falling body, the vibrators 9 have the hooks 18 thereon, Fig. 3, of convenient size to be held in the hand, the springs or other vibrators, 30, likewise terminating in a convenient handle, 31, Fig. 4, for the same purpose, whereby the desired force to support the receiver 5 may be applied by manual strength. In order to render sufficient strength to the receiver 5, it is constructed with a lacing-line, 6, therearound, to which is secured in some substantial manner the said receiver 5, each corner of the said lacing-line forming an eye, 7, in which is a thimble, 8, Fig. 4, for securing therein the vibrator 9.

The stanchions 10, which are employed when time will admit of their adjustment, are made of either iron or wood, preferably of the latter, in which case the lower end thereof is provided with the iron shoe 11, which has thereon the feet 12, that are turned inward toward the receiver when in position for use, whereby additional leverage will be formed for the said stanchions 10 by the toe 13 thereof becoming a fulcrum should there be sufficient strain on the receiver 5 to incline the said stanchions inward. At a proper height on the stanchions 10, and on the same side with the feet 12, is secured an eyebolt or staple, 16, into which is secured the end 18 of the vibrator 9, the other end of the said vibrator being secured to the eye 8 in the receiver 5, the said vibrator being provided to lessen the shock of the person falling and to ease the strain which will be brought upon the persons supporting the receiver, and consists of the plate 19, which has connected thereto the bottom plate, 20, by means of the rods 21, an eye or hook, 17, swiveled to the said plate 19, for attaching to the stanchions or net, or for supporting by hand. Moving freely on these rods 21, which serve as a guide therefor, is the movable plate 22, to which is attached the rod 23, that moves freely through the bottom plate, 20, and terminates with an eye or hook, 18, for securing to the receiver or stanchions. Placed under

the movable plate 22 is a spring, 24, the bottom plate, 20, forming a backing therefor when a tensile strain is put on the vibrator.

In order that the stanchions 10 may be quickly placed in position for use and the receiver 5 suspended therefrom and securely held in the extended position, the lanyards 25 and 29 are secured to the stanchions in the manner following, referring to Figs. 1 and 2. A rope, 25, is passed through adjacent stanchions, holes being made therein for that purpose, and sufficient spare end 27 provided at each stanchion for holding on when the device is in use, a knot or stop, 28, Fig. 4, being formed on the rope 25 on each side of the stanchion 10 to prevent the said rope from being pulled through the stanchion from either direction and to insure the said stanchions being placed at proper distances to receive the receiver 5. In like manner the rope 29 passes through the other adjacent stanchions 10, terminating in the spare ends 27, and knotted and stopped for the purpose described. Instead of securing these ropes 25 and 29 to the stanchions 10 in the manner just described, they may be secured thereto by staples or some device of that description, which, however, would not prevent the ropes from becoming twisted, as in the case where the ropes and spare ends are in one piece and knotted, as described.

To aid in keeping the receiver 5 in the extended position and assist in relieving the shock thereto, the additional springs or vibrators 30 are employed, which may be of the common spiral form, and are secured at intervals along the side of the net or receiver 5, terminating in the hooks 31, by which they may be either secured to the lanyards 25 and 29 or for a convenient handle for supporting by hand. For convenience of holding on, the spare ends 27 can be provided with the handles 32, as shown in Fig. 2.

The manner of operating is as follows: The receiver 5 and the stanchions are rolled up separately, in case it should be desired to use the receiver alone, which, as described, may be readily held in position from the vibrators thereon and quickly moved from one position to another and receive the falling body, the said vibrators relieving the shock of the fall to the falling person and to those supporting the receiver. When time will afford the employment of the stanchions, they are placed in position and the lanyards 25 and 29 are drawn taut by means of the spare ends 27, and the receiver is suspended therefrom by the vibrators 9 and 30, in the manner described. When sufficient number of persons have hold of the spare ends 27 to exert the required force, the device is ready to receive the falling person, it having been placed in a convenient position for a person to jump in the receiver thereof, when the vibrators 9 and 30 will yield to the first strain brought upon the receiver 5 and gradually lessen the force of the fall, the stanchions 9, with the resistance applied thereto through the lanyards, being sufficient to resist the strain brought to bear upon the receiver by the momentum of the falling body, the feet 12 affording additional leverage to the said stanchions should the force of the fall be sufficient to incline the stanchions toward the center.

Having described my invention and the manner of operating, what I claim, and desire to secure by United States Letters Patent, is—

1. In a life saving device, the combination of a flexible landing-net provided at its outer edge with flexible vibrators, said vibrators being connected to handles suitable to be grasped by the hands of persons supporting the net, substantially as described.

2. In a life-saving device, the combination of a flexible landing-net provided at its outer edge with flexible vibrators, said vibrators being connected to lanyards which are provided with handles at their extremities suitable to be grasped by the hands of persons supporting the net, and stanchions to which said lanyards are secured between the handles and the vibrators, substantially as described.

3. In a life-saving device, the combination of a receiver, 5, the stanchions 10, the lanyards 25 and 29, secured to the said stanchions, the rope ends 27, secured to the said stanchions, and vibrators supporting the said receiver and secured to the said stanchions, for the purpose set forth.

4. In a life saving device, the combination of the receiver 5, the stanchions 10, the vibrators 9, connecting said receiver with the stanchions 10, the lanyards 25 and 29, provided with the stops 28 thereon, the said lanyards terminating in the spare ends 27 and being so rove through the stanchions that thereby the said stanchions 10 will be mutually supported, and when placed in position for use will insure the proper adjustment for attaching thereto the receiver 5, and the vibrators 30, connecting the said receiver with the lanyards 25 and 29, for the purpose set forth.

5. In a life-saving device, the combination of the receiver 5, the stanchions 10, the shoes 11, provided with the feet 12, attached to the said stanchions, the vibrators 9, connecting the said receiver to the stanchions 10, the lanyards 25 and 29, provided with the stops 28 thereon, the said lanyards terminating in the spare ends 27 and being so rove through the stanchions 10 that thereby the said stanchions will be mutually supported, and when placed in position for use will insure the proper adjustment for securing thereto the receiver 5, and the vibrators 30, connecting the said receiver with the lanyards 25 and 29, for the purpose set forth.

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

EVERETT D. MOORE.

Witnesses:
WM. L. BAILIE,
JNO. T. MADDOX.