

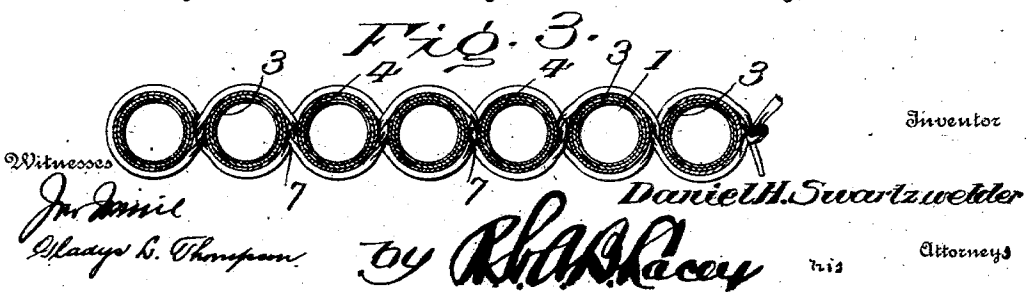
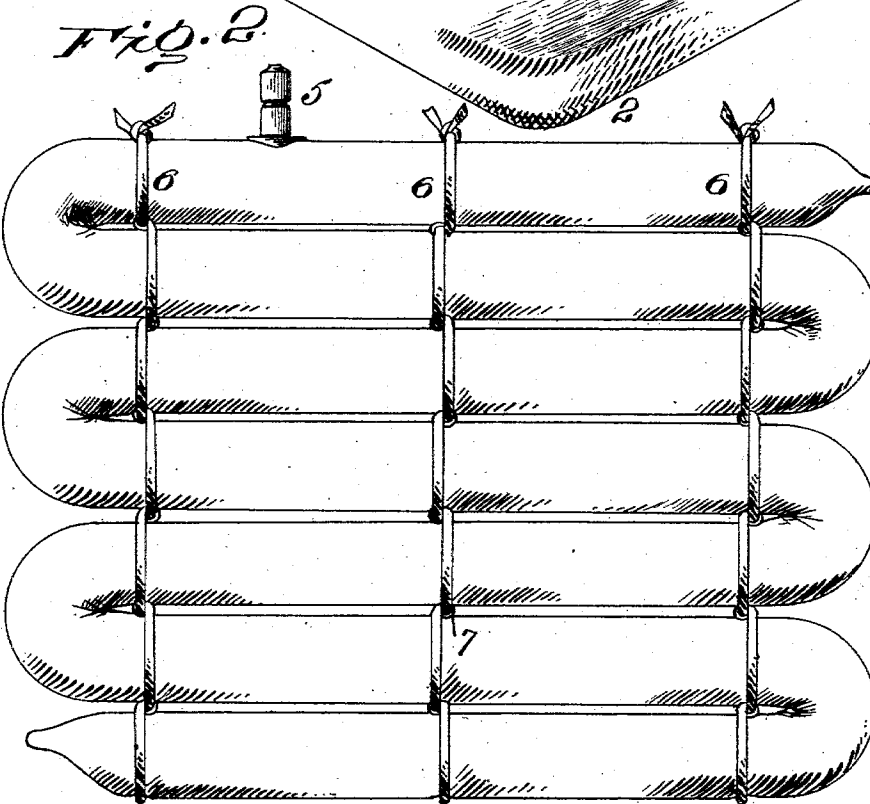
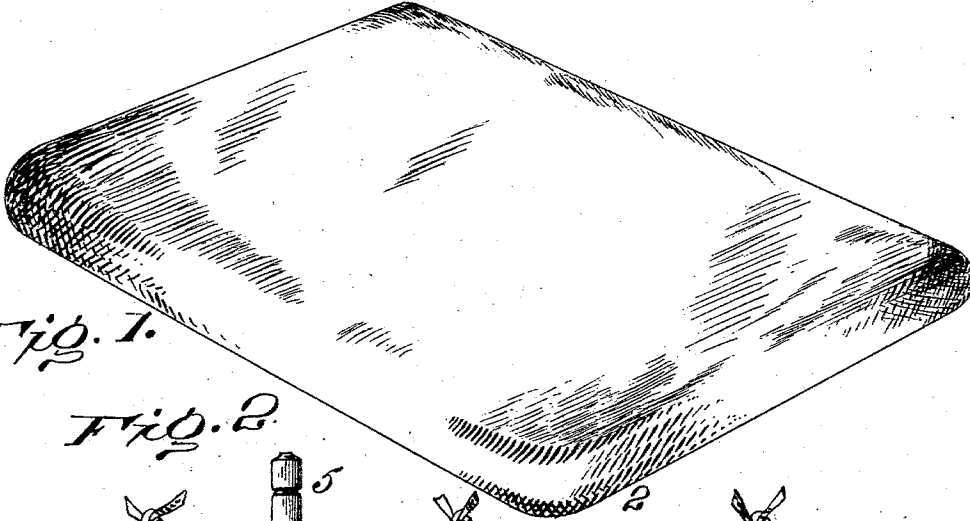
No. 633,968.

Patented Sept. 26, 1899.

D. H. SWARTZWELDER.
MATTRESS.

(Application filed June 22, 1899.)

(No Model.)



UNITED STATES PATENT OFFICE.

DANIEL H. SWARTZWELDER, OF CHARLESVILLE, PENNSYLVANIA, ASSIGNOR
OF ONE-HALF TO CHARLES A. HUNT, OF SAME PLACE.

MATTRESS.

SPECIFICATION forming part of Letters Patent No. 633,968, dated September 26, 1899.

Application filed June 22, 1899. Serial No. 721,460. (No model.)

To all whom it may concern:

Be it known that I, DANIEL H. SWARTZWELDER, a citizen of the United States, residing at Charlesville, in the county of Bedford and State of Pennsylvania, have invented certain new and useful Improvements in Mattresses; 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.

The purpose of this invention is to provide a support—such as a mattress, seat, pillow, cushion, rest, or upholstering—which will be light, easily regulable to the weight to be imposed thereon, capable of being packed in a small space, and which is particularly well adapted for outdoor life either for the soldier or the sportsman, as it precludes the transmission of dampness when placed on the ground and can be reduced to a small package and is exceedingly light.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and the drawings hereto attached.

While the essential and characteristic features of the invention are necessarily susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a mattress constructed in accordance with the principles of the invention. Fig. 2 is a plan view of the inflatable coil. Fig. 3 is a detail section at right angles to the length of the elements of the coil.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The device comprises an inflatable coil 1 and a covering 2, the latter forming a case, into which the coil is placed. The coil is composed of a tube 3, of rubber, and a sheath or outer tube 4, of textile, to strengthen the inner tube and prevent overexpansion thereof when inflating. The tube 3 has a valved stem

5 for attachment therewith of an air-pump or inflating device. This tube is bent into a series of folds, which lie in the same plane in parallel relation and which are held in fixed relation by warp connections 6, preferably of tape. The woof elements are spaced apart a slight distance and are formed by the folds or return portions of the tube.

The number of warp connections will depend in a great measure upon the length of the woof elements and will be disposed at intermediate and extreme points, so as to hold the woof elements or folds together. The warp connections 6 cross between each two folds and are intertwisted or knotted, the latter being in the form of a simple overhand knot, as shown at 7. By thus crossing and connecting the warp connections the relative positions of the folds of the tube are fixed.

When deflated, the device can be rolled into a small bundle, so as to be conveniently stored, packed, and handled. When required for use, it is only necessary to inflate the tube, the degree of inflation controlling the softness and elasticity of the mattress or other rest to which the invention may be adapted.

The body of the mattress being formed of a single continuous tube folded upon itself inflation and collapsing can be easily and quickly effected, as the air is admitted through a single port when expanding and exhausted through the same port when deflating the tube. For outdoor life the sportsman, soldier, and traveler has at hand a rest for the body which will afford all the advantages of ease, comfort and hygiene provided by a couch or bed, and which is, moreover, portable, light, and capable of being reduced to a compact form for convenience of handling and transportation. By having the companion warp-strands connected by knots between the woof elements they are not liable to displacement when the device is collapsed. Moreover, the closed ends formed by the folds prevent outward disengagement of the warp connections.

By having the body of the mattress formed of a single tube folded upon itself, about as shown, the weight imposed thereon will be equally distributed and the mattress will

readily conform to the shape of the person reclining thereon, whereby undue pressure upon any one portion of the body than another will be obviated. Again, the ties generally provided in mattresses are enabled to be dispensed with.

Having thus described the invention, what is claimed as new is—

1. A device of the nature set forth consisting of a single length of flexible tube formed into a coil and provided with a valved stem for attachment thereto of an inflating device, and warp-strands connecting the folds of the tube, and a casing receiving the coil, substantially as described.

2. In a device of the character described, a single length of flexible tube formed into a coil and provided with a valved stem for attachment therewith of an inflating device, and warp-strands connecting the folds of the

tube and interlocked between adjacent folds or woof elements, substantially as set forth.

3. The herein-specified device for the purpose set forth, the same consisting of a single length of flexible tube provided with a valved stem for attachment therewith of an inflating device, a sheath receiving the tube, the tube and sheath being formed into a coil, warp-strands connecting the folds at and intermediate of their ends and connected between adjacent strands and prevented from outward displacement by the terminal folds, and a casing receiving the device, substantially as described.

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

DANIEL H. SWARTZWELDER. [L. S.]

Witnesses:

JESSE PERDEW,

CHARLES A. HUNT.