W. H. HORTON. MATTRESS AND CUSHION.

No. 169,442.

Patented Nov. 2, 1875.

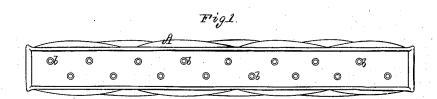
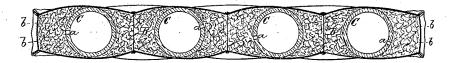
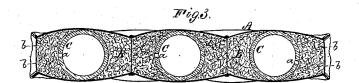


Fig.2.





Witnesses. S. W. Offer L. N. J. Bo'ller

milliam H.Horton.

by his attorney RUEddy

UNITED STATES PATENT OFFICE.

WILLIAM H. HORTON, OF CHELSEA, MASSACHUSETTS, ASSIGNOR TO HIMSELF, WILLIAM BOSSON, AND NORRIS NICHOLS, OF SAME PLACE.

IMPROVEMENT IN MATTRESSES AND CUSHIONS.

Specification forming part of Letters Patent No. 169,442, dated November 2, 1875; application filed March 15, 1875.

To all whom it may concern:

Be it known that I, WILLIAM H. HORTON, of Chelsea, of the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Mattresses or Cushions; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is an edge view, Fig. 2 a longitudinal section, and Fig. 3 a transverse section, of a cushion or mattress made in accord-

ance with my invention.

In carrying out such invention, I arrange within the covering or case A of a mattress or cushion, and at suitable distances apart, and in the mass B of curled hair or other matter used for the stuffing, a series of hollow elastic bulbs or balls, C C C, each being provided with a hole, a, through its shell. These elastic bulbs or hollow balls are to be made of vulcanized india-rubber or other proper elastic material, the same being in order that on each bulb being compressed the air within it shall be expelled from it through the opening a, and when the force of compression is removed from the bulb the inherent elastic force of the bulb shall cause it to expand and draw air into it through its hole a. The said bulbs or elastic hollow and perforated balls are used not only to aid in giving elasticity to the mattress or cushion, but to ventilate it or cause currents of air to be drawn and forced through the stuffing and covering. To facilitate the ingress of air into the mattress to the bulbs, and the expulsion of it therefrom by them, I usually make the case or covering

A with a series of holes in each of its sides, or insert therein a series of eyelets, b bb; but in case the covering may be a loosely-woven fabric, such will not be necessary, as the air will pass through the meshes; but with tight woven coverings, I prefer to have the holes or eyelets. Thus, when a person may sit, or lie, or press upon a mattress or cushion so made, more or less of the bulbs will be compressed, and air will be expelled from them into and through the stuffing, and when he may leave the mattress or cushion, the bulbs, by expanding, will draw air into the mattress and thence into themselves, thereby producing a ventilation of the mattress or cushion, useful in a sanitary point of view, as well as otherwise.

I am aware that it is not new to put into cushions or mattresses a series of air-tight elastic balls or hollow spheres; and, therefore, I make no claim to such, for they do not operate as perforated elastic bulbs or balls do, which, while in use in a mattress, operate like air-pumps, to draw air into and force it through the stuffing.

I claim as my invention or improvement in mattresses or cushions, or upholstered work of like character—

The combination of a series of perforated hollow elastic balls or bulbs, C, with the case A and its stuffing B, all being substantially as and for the purpose or objects as set forth.

WM. H. HORTON.

Witnesses:

R. H. Eddy, J. R. Snow.