Oct. 25, 1966 F. G. ERIKSSON 3,280,515

INDIVIDUALLY ADJUSTABLE ADDITIONAL BOTTOM FOR BEDS WITH SPRING-MATTRESSES

Filed April 17, 1964

FIG.1

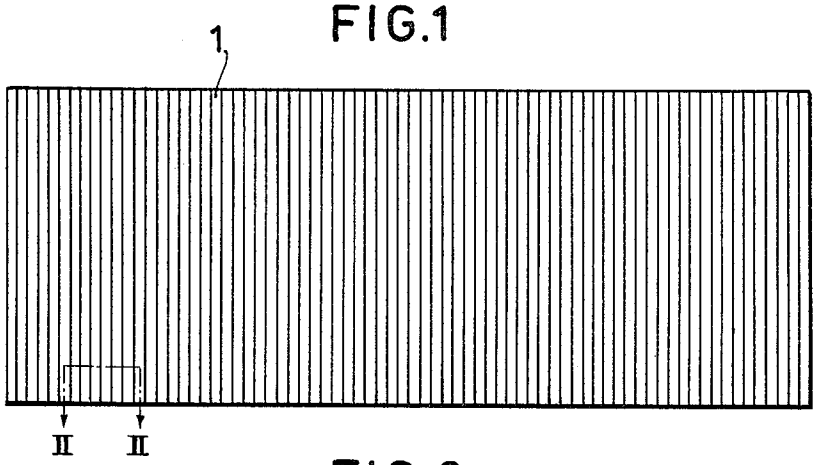


FIG.2

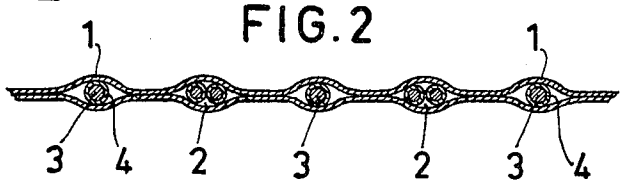


FIG.3

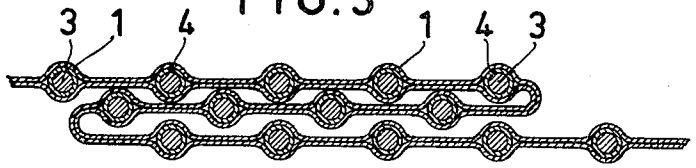
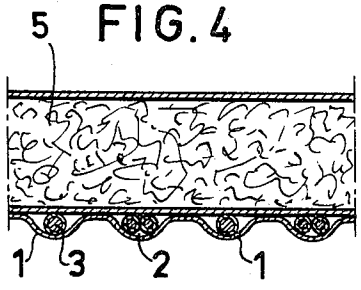


FIG.4



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INDIVIDUALLY ADJUSTABLE ADDITIONAL BOTTOM FOR BEDS WITH SPRING-MATTRESSES

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This invention releates to an additional bottom for beds with spring-mattresses or the like which is adapted to be placed between the spring-mattress and a mattress for adjusting the springing of the spring-mattress and comprises a body of fabric, plastics or the like provided with pockets into which straight resilient staves or rods, for example of steel, glass fibre or the like are inserted.

The said pockets according to the invention are arranged in transverse direction of the bottom. The rods are easy to introduce and take out of the pockets, thus rendering it possible to adjust the springing of the additional bottom and thus also of the spring-mattress in different points of the length by removing and/or displacing the rods and/or by folding the said body. According to the invention, the mattress and the additional bottom can be combined to form a unit.

The additional bottom according to the invention, thus, has as its object to solve the old problem of supporting a human body in lying state in such a manner, that a complete relaxing of all muscles is obtained. Previous attempts carried out with mattresses filled with air or liquid and spring-mattresses pressing against the central part of the human body with different degrees of hardness, did not prove fully satisfactory with respect to the muscles about the spinal column. After one-sided, tiring working positions during the day, the night rest, thus, could not remove the cramps in the back muscles. The only way of removing the cramps was heretofore a strong stretching of the body. When such cramps are not removed for a longer time, they will cause heavy sufferings, such as disc rupture.

The additional bottom according to the invention provides a new possibility for every human being to increase or decrease after one's own demand the supporting pressure of a spring-mattress, so that soreness and cramp troubles are removed quickly. Experiments have proved that the greater the troubles with the back muscles, the harder the counterpressure to be chosen. Later-on, when the suffering has ceased, the pressure can be reduced.

The invention will be described in the following, reference being had to the accompanying drawing showing a preferred embodiment of the additional bottom.

FIG. 1 shows a horizontal view of the invention subject matter.

FIG. 2 shows a section along the line II—II in FIG. 1.

FIG. 3 shows part of the additional bottom, the body of the bottom being folded.

FIG. 4 shows part of the additional bottom, combined with a mattress to a unit.

As appears from FIGS. 1 and 2, a body 1 having a length and width of about normal bed dimensions and preferably made of fabric, plastics or the like is provided with a plurality of pockets 2 extending in the transverse direction of the bottom.

Into said pockets straight resilient staves or rods 3 of steel, glass fibre or another suitable material are inserted, either in certain or all of the pockets. The pockets and

rods may also be dimensioned such, that every pocket can receive several rods. The rods are easy to introduce and take out of the pockets, thus rendering it possible to adjust the springing of the additional bottom and thereby also of the spring-mattress in different points by removing and displacing the rods. When in certain points a specially stiff support is desired, this can also be achieved by introducing several rods into every pocket in the area concerned (FIG. 2) or by folding the body of the bottom (FIG. 3).

Rods of metal, for example steel or the like may be enveloped by a casing 4 of plastics, rubber or the like preventing corrosion or noise when the bottom is being used.

In FIG. 4 it is shown how the additional bottom can be combined to form a unit with the mattress 5 below which the bottom is placed, in which case the lower surface of the mattress may form one surface of the body 1. Even in this embodiment several rods may be inserted into each pocket 2, or rods may be removed. The pockets may even be arranged centrally in the mattress.

When the body of the bottom is of relatively weak material, the additional bottom can be rolled and requires, thus, due to the transversal direction of the rods, only a minimum of space which is particularly of advantage on journeys.

It is, of course, also possible to imagine in other embodiments of the invention than the one shown, without leaving the scope of the inventive idea.

What is claimed is:

1. A supplemental support for a bed mattress adapted to be placed beneath the mattress, comprising a body composed of upper and lower sheets of a flexible, foldable material, means connecting said sheets together in parallel spaced areas in the transverse direction of the mattress so as to form a plurality of transverse pockets, said pockets being open at at least one of their ends and of sufficient size readily to receive therein at least two straight resilient rods, thereby rendering it possible to adjust the springiness of said supplemental support locally and, thus, the mattress at different locations along the length thereof by altering the number of said rods in any selected area of said support.

2. A supplemental support for bed mattresses comprising a sheet of a flexible material, connected in parallel spaced areas to the underside of a mattress in the transverse direction of the mattress so as to form a plurality of transverse pockets, said pockets being open at at least one of their ends and of sufficient size readily to receive a plurality of resilient rods, thereby rendering it possible to adjust the springiness of said supplemental support locally and, thus, the mattress at different locations along the length thereof by altering the number of rods in any particular area of the mattress.

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