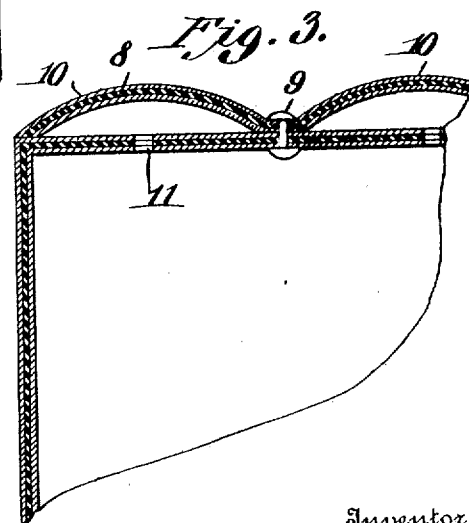
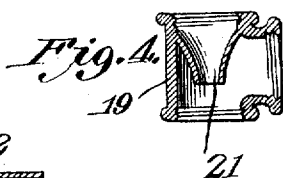
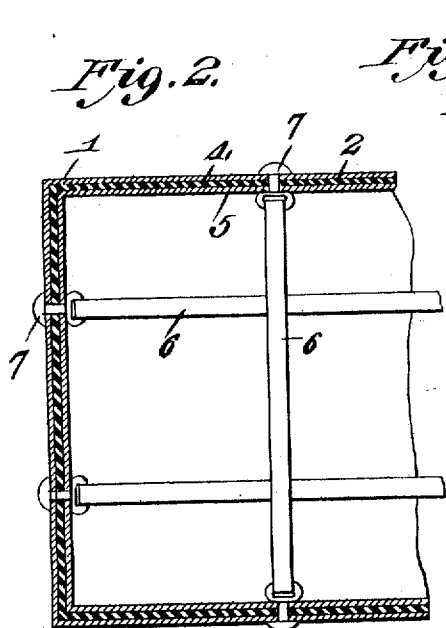
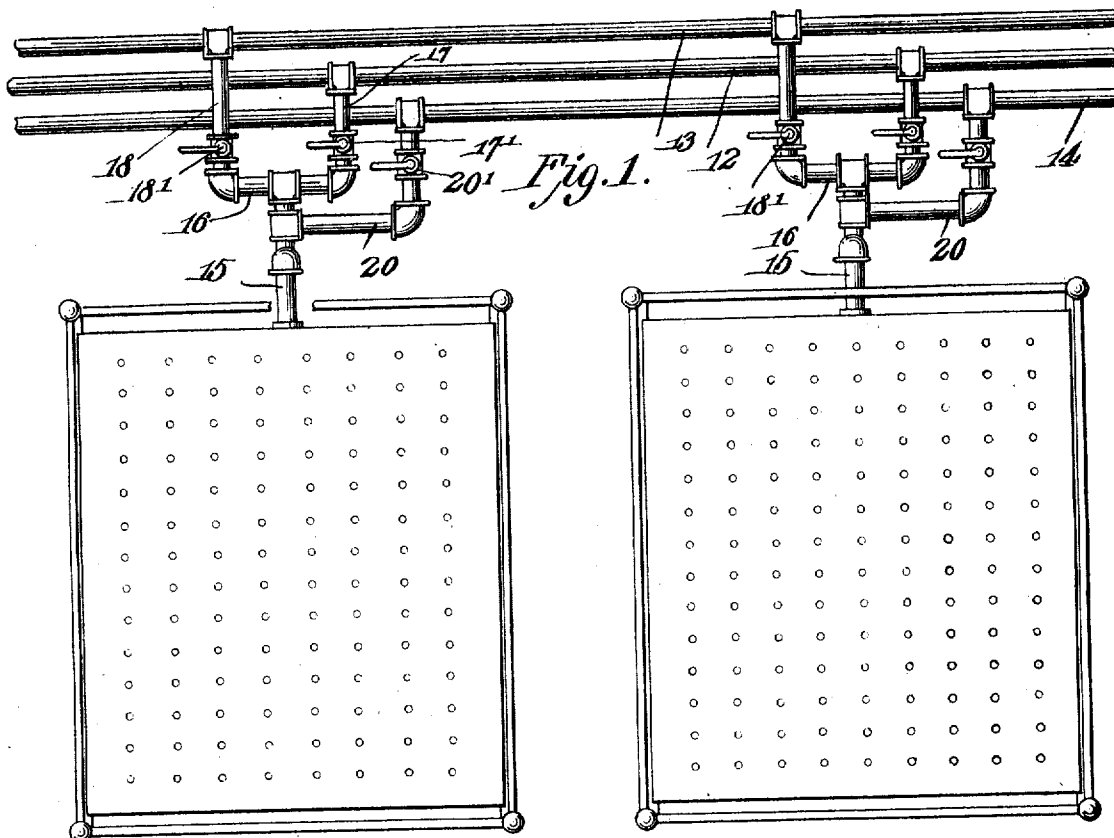


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MATTRESS.
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954,284.

Patented Apr. 5, 1910.



Witnesses

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UNITED STATES PATENT OFFICE.

FREDERICK J. HECHT, OF MCGILL, NEVADA.

MATTRESS.

954,284.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FREDERICK J. HECHT, a citizen of the United States, residing at McGill, in the county of White Pine and State of Nevada, have invented new and useful Improvements in Mattresses, of which the following is a specification.

This invention relates to inflatable mattresses, the main object of the invention being to provide a mattress of this character which is simple of construction, comparatively inexpensive of production and will preserve its form.

A further object of the invention is to provide means for inflating one or more mattresses with either warm or cool fluids, to maintain the same at a comfortable temperature.

With these and other objects in view, the invention consists of the features of construction, combination and arrangement of parts hereinafter fully described and claimed, reference being had to the accompanying drawing, in which:—

Figure 1 is a top plan view showing a pair of my improved mattresses arranged upon adjacent bedsteads and the means for feeding and exhausting air or other fluid thereto and therefrom. Fig. 2 is a horizontal transverse section through a portion of one of the mattresses. Fig. 3 is a vertical longitudinal section of the same. Fig. 4 is a detail sectional view of the coupling connection between the feed and discharge pipes.

Referring to the drawing, 1 designates the mattress, which may be of ordinary form, and consists of a hollow structure embodying bottom, top, side and end walls, each of said walls consisting of a central ply 2 of rubber and outer and inner plies 4 and 5 of fabric or other suitable material. These outer and inner plies allow sufficient elasticity of the rubber body 2, while protecting the same from disintegration under atmospheric influences, and at the same time strengthening the rubber to prevent undue stretching thereof under pressure. The end walls and the side walls are connected by suitable stays, consisting in the present instance of straps 6 extending longitudinally and transversely within the hollow body of the mattress and connected at their ends to fastening devices 7 passing through the plies of the respective walls and headed at their inner and outer ends, the

inner heads being formed with slots to receive the straps. The top wall of the mattress is preferably provided with a cushioning layer 8 constructed in the same manner and secured thereto at intervals by buttons 9, forming throughout a series of tufts or elevated hollow cells or portions 10, acting in the nature of a plurality of cushions, which are adapted to be inflated through openings 11 in the top wall of the body of the mattress.

The mattress may be inflated and deflated in any preferred manner, and its mode of construction and bracing connections between its walls adapted to preserve its shape under the different pressures and last for a practically indefinite period. By inflating the mattress with warm or cool air or other fluid the temperature of the bed may be raised or lowered as circumstances may require to maintain a comfortable temperature.

If desired, a single mattress or a plurality of mattresses may be supplied with the desired fluids from a storage reservoir or source of supply through suitable connections whereby, if desired, the mattresses of a large number of bedsteads arranged in the rooms of a hotel or in the dormitories of schools and other similar structures may be simultaneously supplied. As shown in the drawing, conducting pipes 12, 13 and 14 may be arranged in parallel relation for respectively supplying warm air and cool air and discharging the air from the mattresses. Each mattress is provided with an inlet pipe 15 which is connected by a union 16 with branches 17 and 18 leading to the pipes 12 and 13, by which air from either pipe may be supplied to the mattress. These pipes are provided with controlling valves 17' and 18', by which the flow from either one or both may be cut off and the amount of air supplied from either to the mattresses regulated. Upon closing the valve 18' and opening the valve 17', heated air will flow from the pipe 12 to the mattress, while upon closing the valve 17' and opening the valve 18' cool air may be supplied to the mattress. Hence it will be understood that either warm or cool air or a suitable admixture of both to regulate the temperature may be caused to flow into the mattress to inflate the same and increase or diminish the temperature as the occasion may require. Arranged in the connection 15 be-

tween the mattress and the union 16 is a coupling 19 to which is connected a branch 20 leading to the vent pipe 14, in which pipe is a valve 20'. Upon closing the valves in the supply branches and opening said valve 20' the air contained within the mattress may be exhausted through the vent pipe, and fresh air then supplied thereto through one of the other connections. The coupling 20 is provided with a conical nozzle or baffle 21 in line with the passage from the supply branches so as to guide the fluid on its inflow and prevent the formation of currents at the point of intersection of the passages liable to retard the flow of air.

By arranging the pipes around a building any number of mattresses may be connected up in the manner described so that

they may be conveniently inflated with air at any prescribed temperature.

I claim:—

An inflatable mattress comprising a hollow elastic body, fastenings passing through the side and end walls of the body, bracing straps extending between said fastening devices on the interior of the body, and an elastic cushion upon one of the walls of the hollow body formed to provide a plurality of cells, each communicating with the interior of said body.

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

FREDERICK J. HECHT.

Witnesses:

J. L. LOWE,

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