

UNITED STATES PATENT OFFICE.

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MATTRESS.

No. 929,449.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, PAUL KLIMOWICZ and JOHN S. WORZALLA, citizens of the United States, and residents of Stevens Point, in the county of Portage and State of Wisconsin, have invented a new and Improved Mattress, of which the following is a full, clear, and exact description.

The invention has in view a mattress on which a person will be able to sleep in the most comfortable and healthful position with both shoulders thrown back, thus permitting the chest to fully expand in the act of breathing. To this end the mattress is constructed with an approximately transverse groove or depression in which the shoulder is adapted to sink, and a number of substantially longitudinal grooves or depressions intersecting the transverse depression and adapted to receive the forearm, and a loose covering over the depressions.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a plan of a double mattress constructed in accordance with our invention; Fig. 2 is a longitudinal section through the same, taken substantially on the line 2—2 of Fig. 1; Fig. 3 is a cross-section of the mattress on the line 3—3 of Fig. 1; and Fig. 4 is an edge view of an ordinary mattress having our improvements applied thereto in the form of a separate device or attachment.

Any conventional type of mattress may be employed in the application of our improvements, the mattress 5 shown in Figs. 1, 2 and 3, tapering for the greater portion of its length, with the thickest part arranged at the head. At or near the head the mattress is constructed with a transverse groove or depression 6, the bottom of which slopes upwardly at each side. At each end of the transverse groove 6 is a longitudinal groove or depression 7 having the greater part of its length on that side of the groove 6 adjacent to the head of the mattress and extended slightly to the opposite side in the form of a V 8, as shown in Fig. 1, with the outer edge thereof straight or in alinement with the remaining portion of this edge of the groove. The bottoms of the grooves 7 in longitudinal section slope upwardly toward each end, with that end adjacent to the head of the mattress gradu-

ally inclining and at the opposite end relatively steep, as is best shown in Fig. 2. The bottoms of these grooves or depressions also slope or curve upwardly at opposite sides in cross-section, as is shown in Fig. 3. If the mattress is relatively wide, in addition to the longitudinal grooves 7 at the ends of the transverse groove 6, a further longitudinal groove 7^a intersecting the groove 6 is preferably also provided, and has a general form and construction the same as the grooves 7, the V point 8^a at the foot end of this groove corresponding to the points 8, inclining at both sides of the longitudinal center. All of the grooves are filled with feathers or other relatively soft material, especially in the high grade mattresses, and are confined by a loose covering 9, the same being secured at the edges to the mattress cover by any suitable means. When a person sleeps on a mattress thus constructed, and lies in the normal position, that is on the right or left side of the body, the shoulder sinks deep into the groove 6 and finds support on its padded bottom. The forearm likewise rests, when raised, in the upper portion of one of the grooves 7, and when this part of the arm is hanging toward the foot of the mattress it lies in one of the V points, whereas on a common flat mattress the shoulder in a like position is always pushed forward, thus pressing on the chest and making breathing difficult for the reason that the weight of the whole trunk cannot rest on the narrow side of the shoulder. With our mattress the shoulder is drawn back, which insures full expansion of the chest and deep breathing, in addition to insuring comfort by reason of the weight of the body being distributed evenly on all surfaces of the side and shoulder. The slanting or tapering of the mattress may or may not be dispensed with, as desired; if provided, however, a comfortable position of the forearm is insured. A single or double thickness of pillows can be used in connection with the mattress according to the build of the sleeping person, and if they have the proper elevation above those portions of the mattress between the longitudinal grooves 7 and 7^a on which they rest, the head will fall in the same relative position as if the person was standing up, without any bending of the neck.

In Fig. 4 we have illustrated our invention constructed in the nature of an attach-

ment which is to be used with an old form of mattress. In this form of the invention the several grooves are made in a separate head portion 10, which is preferably of
5 tapering form and extending approximately two-thirds of the length of the mattress, with the ends of the head portion having extended flaps or covers 11 and 12 respectively
10 opposite ends of the mattress. By reason of these flaps the weight of the body will operate to keep the auxiliary cushioned or head portion in place.

Having thus described our invention, we
15 claim as new and desire to secure by Letters Patent:

1. A mattress having a transverse depression, a longitudinal depression intersecting the transverse depression, a filling in said
20 depressions relatively softer than the mattress filling, and a loose covering secured to the mattress over said depressions.

2. A mattress having a transverse depression in the head portion thereof, and a longitudinal depression intersecting the trans-

verse depression, with the bottom of said longitudinal depression gradually sloping upwardly in passing toward the head of the mattress and relatively steep in passing toward the foot of the mattress. 30

3. A mattress having a transverse depression for receiving the shoulder, and longitudinal depressions intersecting the transverse depression at opposite ends, for receiving the forearm, with the foot end of each
35 longitudinal depression extended slightly beyond the transverse depression and having a V form, and with the bottom of each longitudinal depression at one end gradually sloping toward the head of the mattress and at the opposite end having a relatively
40 greater inclination.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

PAUL KLIMOWICZ.
JOHN S. WORZALLA.

Witnesses:

F. J. BRZESKI,
W. J. BRANTA.