F. ROEVER. UPHOLSTERED BOTTOM.

APPLICATION FILED DEC. 31, 1910. Patented Apr. 11, 1911. 989,053.

## UNITED STATES PATENT OFFICE.

FREDERICK ROEVER, OF SHEBOYGAN, WISCONSIN.

## UPHOLSTERED BOTTOM.

989,053.

Patented Apr. 11, 1911. Specification of Letters Patent.

Application filed December 31, 1910. Serial No. 600,217.

To all whom it may concern:

Be it known that I. FREDERICK ROEVER, a citizen of the United States, and resident of Sheboygan, in the county of Sheboygan 5 and State of Wisconsin, have invented certain new and useful Improvements in Upholstered Bottoms; and I do hereby declare that the following is a full, clear, and exact

description thereof.

10 My invention refers to furniture upholstery and has for its object to provide a simple and durable resilient bottom for beds, chairs or analogous articles, the bottom being primarily of basket-weave type composed of 15 flexible members, so constructed and arranged that all of the members are supported by a frame, the ends of each member being in yielding connection with an auxiliary frame, whereby tension of the bottom 20 is obtained.

Another object of my invention is to provide a rectangular frame for the woven members, the oppositely disposed supporting rails of the frame being upon different 25 elevations, whereby the woven members as a whole, when subjected to spring tension, will present more or less of a convexed sup-

porting surface.

With the above objects in view the inven-36 tion consists of certain details of construction and combination of parts as hereinafter set forth with reference to the accompanying drawings and subsequently claimed.

In the drawings Figure 1 represents a 35 side elevation of a bed embodying the features of my invention, with parts broken away and parts in section to more clearly illustrate certain structural features; Fig. 2, a plan view of the same with parts broken 40 away and parts in section, and Fig. 3, a cross-section of the bed as indicated by line

3-3 of Fig. 1.

Referring by characters to the drawings, 1 and 1ª represent pairs of posts having se-45 cured thereto a horizontally disposed rectangular main frame, which frame is composed of pairs of side and end rails, 2, 2a, and 3, 3a, respectively, the rails being preferably circular in cross-section. The side and end ov rails of the main frame are secured together by corner unions 4 having vertically disposed sleeves 4ª that are fitted about the posts and held at a predetermined adjusted elevation by set-screws 5. The side-rails 2, 55 2ª, of the frame are preferably inclined or

bowed upwardly from an intermediate point to the head end rail 3, whereby the latter is elevated upon a slightly higher plane than the bottom end rail 3a. By this construction an imaginary straight line running from the 60 head to the bottom end rail will thus be upon a higher plane throughout than the side rails, the height of which plane gradually diminishes in either direction from the point of intersection between the straight 65 and inclined portions of the side rails.

Longitudinal and transverse members, preferably flat tapes 6, 6ª interlocking in the form of a basket weave and having their terminals extending over the end and side 70 rails respectively are provided. The ends of these two series of tapes are fitted with reinforced apertured stays 7 for the reception of individual coiled springs 8, the opposite ends of which springs are secured by eye- 75 bolts 8a to an auxiliary frame 9. The auxiliary frame is rectangular in shape and conforms approximately to the contour of the main frame, the corresponding members 10, 10<sup>a</sup>, and 11, 11<sup>a</sup>, of said auxiliary frame 80 being connected at their intersecting corners by vertically apertured brackets 12, which brackets are secured thereto by suitable rivets, the apertured brackets being loosely mounted upon the posts.

The auxiliary frame 9 is arranged to be adjusted upon the posts by means of nuts 13 that engage threaded sections 14 of said posts, the nuts being adapted to impinge against the upper face of the brackets 12, 90 whereby the auxiliary frame is forced downward in opposition to the spring-controlled tapes 6 and 6a. Thus the entire series of transverse and longitudinally disposed sets of flexible tape members are drawn taut 95 over their respective pairs of main frame rails, it being apparent, owing to the difference in elevation of said frame members, that when the strips are tightened they will present a greater or less degree of convexity 100 in cross-section upon the upper face of the weave, as clearly shown in Fig. 3.

By the described mechanism it will be seen that an upholstery support which is flexible, cool and sanitary, is obtained, there 105 being no boxing or the like into which dust may accumulate and, owing to the individual spring-connections of the woven fabric, it will readily vield and accommodate itself to the contour of a body thereon, 110

the resiliency being adjusted in proportion to the load by raising or lowering the aux-

iliary frame.

In practice the main frame can readily be slipped from the posts as well as the auxiliary frame and the several parts shipped knocked-down, and while I have shown and described a specific means for adjusting the auxiliary frame, it should be understood that this adjusting means may be varied

10 that this adjusting means may be varied within the knowledge of skilled mechanics without departing from the spirit of my invention.

I claim:

15 1. An upholstered bottom comprising a rectangular frame, supporting posts for the frame, two series of interwoven tapes supported upon the frame, the ends of one series being extended over the side members of the frame and the ends of the other series being extended over the end members of said frame, an auxiliary frame mounted upon the posts, screw-threaded sections carried by the posts, nuts engaging the screw-threaded sections adapted to impinge against the auxiliary frame whereby the

same is adjusted, and coiled springs connecting the auxiliary frame and tape-ends of each series.

2. An upholstered bottom comprising a 30 rectangular frame, supporting posts for the frame, two series of interwoven tapes supported upon the frame, the ends of one series being extended over the side members of the frame, and the ends of the other 35 series being extended over the end members of the frame, an auxiliary frame mounted upon the posts and under the rectangular frame, means in connection with the posts for adjusting the auxiliary frame with relation to said rectangular frame, and coiled springs connecting said auxiliary frame and tape ends of each series.

In testimony that I claim the foregoing I have hereunto set my hand at Sheboygan, in 45 the county of Sheboygan and State of Wisconsin, in the presence of two witnesses.

FREDERICK ROEVER.

Witnesses:

CHAS. ZEINEMANN, EWALD F. PEWSAT.