May 10, 1960 E. F. KAUFMANN 2,936,025

COMBINED CHEST AND BENCH

Filed Sept. 23, 1957

Fig. 1

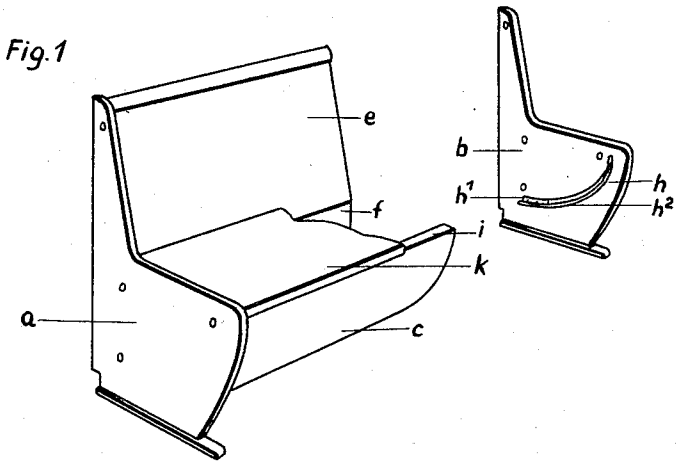


Fig. 2

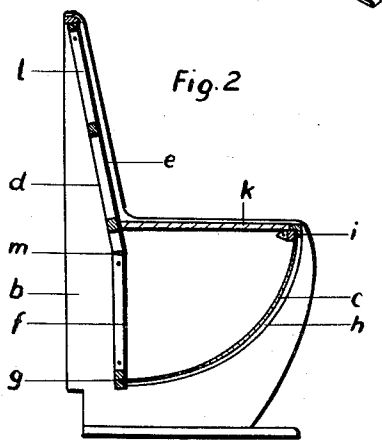


Fig. 3

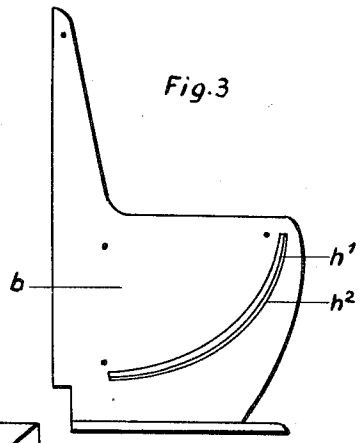
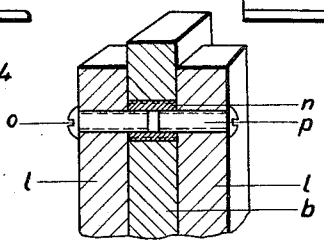


Fig. 4



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United States Patent Office 2,936,025 Patented May 10, 1960

2,936,025

COMBINED CHEST AND BENCH

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Application September 23, 1957, Serial No. 685,699

Claims priority, application Germany September 29, 1956

3 Claims. (Cl. 155—114)

The invention relates to a combined chest and bench in which the front wall and the bottom of the chest are in one piece and made from a material such as plywood plate which is bent into curved shape.

In the known chest-benches the curved plate of material is held in grooves in the side walls of the bench. The formation of the grooves represents a relatively complicated operation. These grooves in the two side walls of the bench must be exactly alike both as regards their position and their shape, because if this were not the case the inserted curved plate of material would be subjected to considerable torsional stresses.

Consequently the subject matter of the invention is a further development of the known bench wherein the curved plate of material constituting the front wall and bottom of the chest rests on supporting ledges on the side walls of the bench. It has actually been found that, due to its curvature, the wall plate bears against the supporting ledges under such tension that it is sufficient to guide this plate on the underside by means of the supporting ledges and that guiding on the upper side, which can be attained by means of grooves, is unnecessary. As a result the advantage is attained that the curved grooves can be dispensed with and it is only necessary to fix two supporting ledges one on each of the side walls of the bench. For this purpose it is advisable to use supporting ledges which are of angular cross-sectional shape.

The lower edge of the wall plate can advantageously be slipped into a groove in the back wall of the chest-bench.

The rear wall of the combination extends upwards from the seat of the bench at an incline towards the rear thereof. If, however, this inclination is continued in the region below the seat of the bench, the capacity of the chest will be reduced to an undesirable extent. It is therefore advisable to make the rear wall of the chest vertical. To avoid the necessity of building up the back of the combination from an upper rearwardly sloping part and a vertical lower part, another feature of the invention consists in making this back from a single continuous piece of material which forms the back rest of the bench and the back wall of the chest, the two parts being arranged at an angle to each other so that the back rest of the bench slopes backwards and the rear wall of the chest is vertical. At the same time the piece of material is, according to the invention, provided with reinforcing strips extending from the top to the bottom of the piece and provided with notches or saw-cuts at the point where the two parts form the angle so that these strips can be broken or buckled at this point to the required angle.

Other advantages and features of the invention are hereinafter explained with reference to the accompanying

drawing which illustrates diagrammatically and by way of example one possible form of construction.

Fig. 1 being a part perspective view of a chest-bench with one side wall removed;

Fig. 2 a cross-section of Fig. 1;

Fig. 3 an elevation showing the inner side of one of the side walls, and

Fig. 4 a section on a larger scale showing the connection of three adjacent parts.

The chest-bench combination consists substantially of two side walls *a* and *b*, a curved plate *c* forming the front wall and bottom of the chest, and a back part *d* forming at the same time the back rest *e* of the bench and the back wall *f* of the chest.

The plate *c* engages at *g* in a groove in the back wall *f* of the chest. Its convex side bears against supporting ledges *h* one of which is provided on each of the side walls *a* and *b* of the bench. These ledges are of angular cross-section, the angle wall h^1 serving to fix the ledge to the side wall and the angle wall h^2 for supporting the curved plate *c*.

A reinforcing bar *i* on the upper edge of the plate *c* stiffen the front wall of the chest and also ensures that the plate *c* bears against the supporting ledges *h*. This bar also serves as a support for the lid *k* of the chest which is secured to the back rest *e* of the bench by means of a hinge or similar means not shown in the drawing.

The back part *d* consists of a continuous plate of material forming the back rest *e* of the bench and the back wall *f* of the chest. This plate is reinforced by several strips *l* extending from top to bottom of the back part *d*. At least two such strips are provided on the side edges of the plate *e*, *f*. These strips are buckled or bent at an angle at the point *m* by means of a small incision or the like. It is thus possible to bring them and the plate *e*, *f* into the folded position shown in Fig. 2 so that it is not necessary to build up the back part *d* from two separate parts, namely a back rest *e* for the bench and a back wall *f* for the chest. When it is a question of joining together two chest-benches or of a chest-bench with a corner piece for forming a corner bench, one of the side walls of the bench, for example the wall *b*, and two reinforcing strips *l* can be located side by side as shown in Fig. 4, with one of the reinforcing strips on the chest-bench and the other on the corner piece of the corner bench. To enable these parts to be united in a simple manner a screw-threaded sleeve *n* is fitted in the middle member, that is in the side wall *b* and into this sleeve two screws *o* can be introduced from the opposite ends. Consequently only a sleeve with a female thread is necessary for connecting the three parts.

I claim:

1. A chest-bench combination including side walls comprising a pair of parallel spaced apart vertically extending sheet members, a curved upwardly projecting ledge on each member extending forwardly and upwardly from a position near both the rear and bottom to near the front and top on each member with the concavities thereof uppermost, a curved plate member forming the front wall and bottom of the chest, conforming to the shape of the ledges with its side edges supported thereon, an integrally-formed combined back-rest and rear chest wall having a horizontally extending groove in its forward surface for supporting the rear edge of the curved plate member and extending a substantial distance above the top edge thereof and secured to the side walls, and a seat member sup-

ported between the rear wall and front edge of the curved plate to form a lid for the chest.

2. A chest-bench combination in accordance with claim 1 in which the combined back-rest and rear chest wall has at least that portion which is above the seat member rearwardly inclined at an angle to the bottom portion.

3. A chest-bench combination in accordance with claim 2 further including a plurality of integrally formed reinforcing strips secured to the rear surface of the combined back-rest and rear chest wall.

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