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ADJUSTABLE SHELF CONSTRUCTION

Filed Oct. 14, 1957

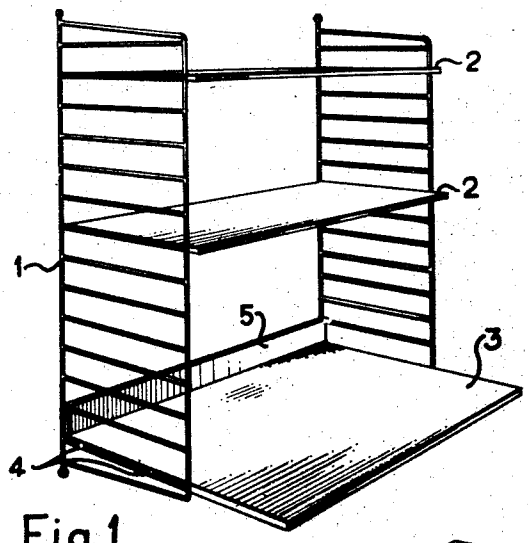


Fig. 1

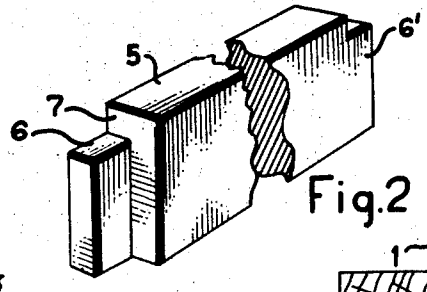


Fig. 2

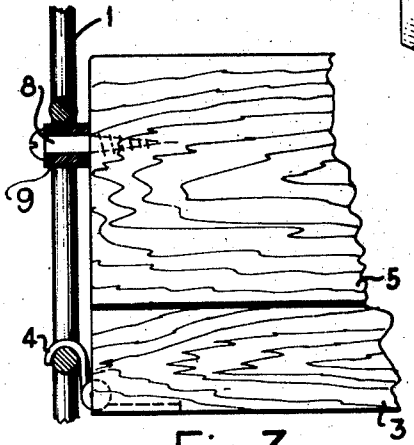


Fig. 3

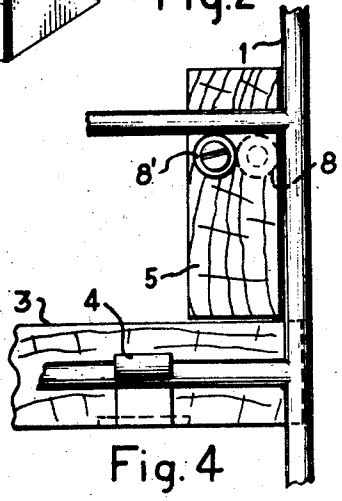


Fig. 4

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ADJUSTABLE SHELF CONSTRUCTION

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6 Claims. (Cl. 211—147)

This invention relates to adjustable shelf constructions of the type having a pair of main brackets or supports in the form of ladders, the rungs of which support the shelf boards. More particularly the invention is directed to shelf constructions of said type adapted to be secured to a wall, as shown in the Design Patent 165,118.

The invention has for its purpose to broaden the field of use of such shelf constructions by providing a shelf board which can be used as a writing desk or the like and is easy to place in any desired position between the ladder-like brackets and to remove therefrom.

To this end, according to the invention, the shelf construction is provided with a shelf board having substantially greater width than that of the brackets and of the ordinary shelf boards, said shelf board, hereinafter called desk board, being held at its rear edge by a locking bar, abutting the rung on each bracket situated immediately above the desk board. According to a simple embodiment of the arrangement the locking bar is longer than the desk board, the ends thereof forming reduced integral projections engaging the underside of each rung for fixing the locking bar against upward movement as well as shoulders engaging the inner sides of the brackets in order to fix the locking bar longitudinally.

According to another embodiment of the arrangement, the locking bar has the same length as the desk board and is provided at the ends with separate abutting members projecting under the rungs for securing the locking bar. Conveniently there is some play between the ends of the locking bar and the innersides of the brackets. Preferably the projections or the abutting members are at one end in staggered relationship with respect to the projections or abutting members at the other end in such a way that adjacent projections or abutting members do not interfere with each other when a number of locking bars are mounted in alignment with each other. The abutting members are preferably covered with a resilient material.

The invention will be described more in detail with reference to the accompanying drawing.

Fig. 1 is a perspective view of an adjustable shelf construction according to the invention. Fig. 2 is a perspective view of a locking bar. Fig. 3 is a front view of a part of a shelf construction with another form of locking bar and Fig. 4 shows the same part from the side.

Referring to Fig. 1 the shelf construction consists of two main brackets **1** in the form of ladders with rungs supporting two ordinary shelf boards **2**. Below said boards is mounted a shelf board **3**, having a substantially greater width than that of the ladder-like brackets **1** and of the ordinary shelf boards **2**. Said shelf board **3** can thus be used as a writing desk or the like.

The wider desk board **3** is in the same manner as the ordinary shelf boards **2** supported by the rungs by means of hooks **4**. In order to prevent the rear edge of the desk board **3** from being raised when pressure is applied on the front edge or the front part of the desk board **3**, a locking bar **5** is placed along the rear edge of said board.

The locking bar is according to Fig. 2 in its simplest form a bar with rectangular cross section having a somewhat greater length than that of the desk board. At the ends the bar is provided with integral projections or extensions **6**, **6'** having a somewhat smaller cross section than the remaining upright body portion of the bar, thus forming shoulders **7**, engaging the innerside of each main bracket **1** in order to fix the bar longitudinally. The projections **6**, **6'** engage the underside of the rung situated immediately above the desk board **3**, so that the latter is prevented from tilting.

According to Figs. 3 and 4 the locking bar **5** is of the same length as the desk board **3** and is provided with separate abutting members or finger-like extensions **8**, **8'** at the ends engaging the underside of the rungs situated immediately above the desk board. In the embodiment shown the abutting members are screws fixed in the ends of the locking bars. As shown more clearly in Fig. 4 the abutting members **8**, **8'** like the projections **6**, **6'** on the locking bar according to Fig. 1 are arranged in staggered relationship with respect to each other so that adjacent abutting members do not interfere with each other when mounting several desk boards in alignment with each other. The projections or abutting members could of course also be situated at different heights.

The abutting members are covered with a resilient material for instance by screwing them through sleeves **9** of plastic material or the like. In this way the abutting members do not damage the rungs, which usually are coated with a plastic material or the like. Further the sleeves **9** contribute to a better securing of the desk board by providing a resilient frictional engagement. The locking bar **5** also serves as a protection for the wall so that same will not be damaged by objects placed on the desk board **3**.

What we claim is:

1. A knock-down and adjustable shelf construction comprising, in combination, a pair of laterally spaced side support uprights having vertically spaced cross-pieces arranged in a ladder-like arrangement, a plurality of shelf boards each removably supported between oppositely disposed, corresponding cross-pieces on said support uprights, each of said boards having a length less than the distance between said uprights, means on said boards for removably supporting the boards on said corresponding cross-pieces, one of said shelf boards having a width substantially greater than the width of said support uprights, a part of said one shelf board extending unsupported outwardly from between said support uprights, means for releasably holding the wide shelf board in a firmly fixed position between the uprights comprising, a removable, elongated upright locking piece positioned overlying a back marginal edge portion of said wide shelf board and having longitudinal extensions on opposite ends thereof for releasably engaging the underside of corresponding cross-pieces oppositely disposed on said side support uprights immediately above said wide shelf board.

2. A knock-down and adjustable shelf construction according to claim 1, in which said locking piece has an upright body portion overlying said wide shelf board back marginal edge portion substantially the full length thereof and in which said extensions on opposite ends thereof comprise integral extensions of said body portion having less width and height than said body portion and disposed for releasably engaging the underside of said corresponding cross-pieces immediately above the wide shelf board.

3. A knock-down and adjustable shelf construction according to claim 2, in which said extensions are disposed in a staggered relationship each having at least a major portion thereof on opposite sides of a plane extend-

ing longitudinally through a longitudinal axis of said locking piece.

4. A knock-down and adjustable shelf construction according to claim 1, in which said locking piece has an upright body portion overlying said wide shelf board back marginal edge portion substantially the full length thereof and in which said extensions on opposite ends thereof comprise, on each end of said body portion a finger-like extension for releasably engaging the underside of said corresponding cross-pieces disposed immediately above the wide shelf board.

5. A knock-down and adjustable shelf construction according to claim 4, in which said finger-like extensions are disposed on opposite sides of a plane corresponding with the longitudinal axis of said lock piece.

6. A knock-down and adjustable shelf construction according to claim 4, in which each finger-like extension is provided with a resilient sleeve disposed circumferentially thereof to provide frictional engagement with said cross-pieces engaged.

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