A. HEAL & H. T. SMITH.

DOMESTIC FURNITURE.

APPLICATION FILED FEB. 11, 1916.

1,254,499.

Patented Jan. 22, 1918.

4 SHEETS—SHEET 1.

Fig. 1.

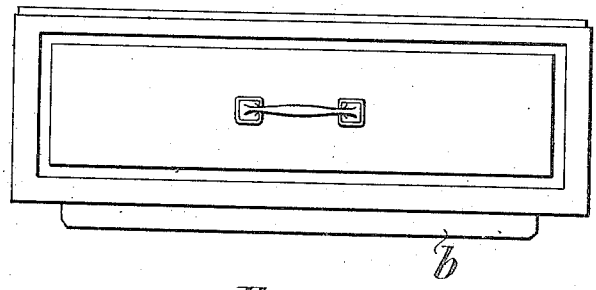



Fig. 2.

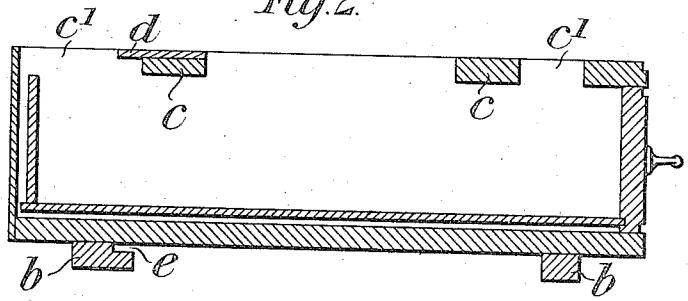
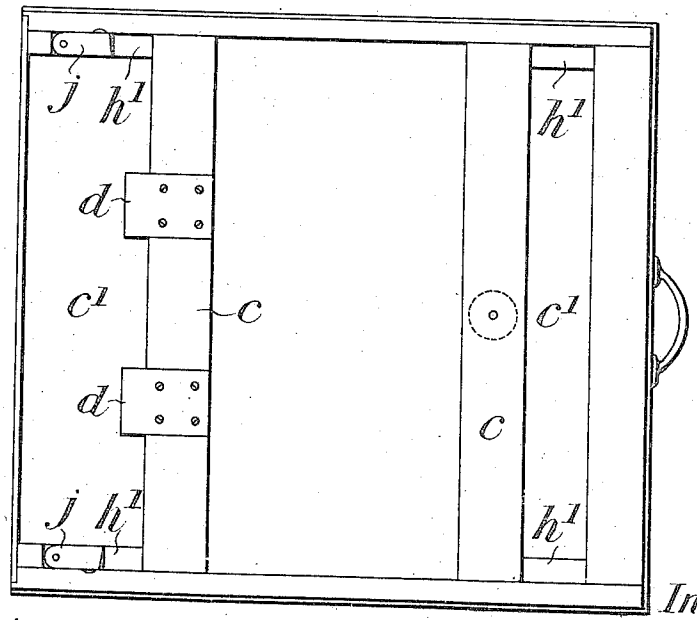



Fig. 2a




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4 SHEETS—SHEET 2.

Fig. 3.

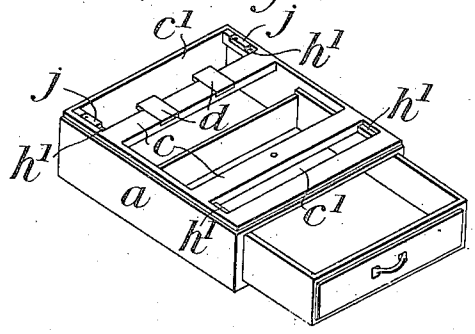



Fig. 4.

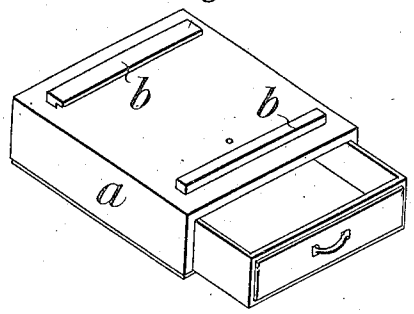
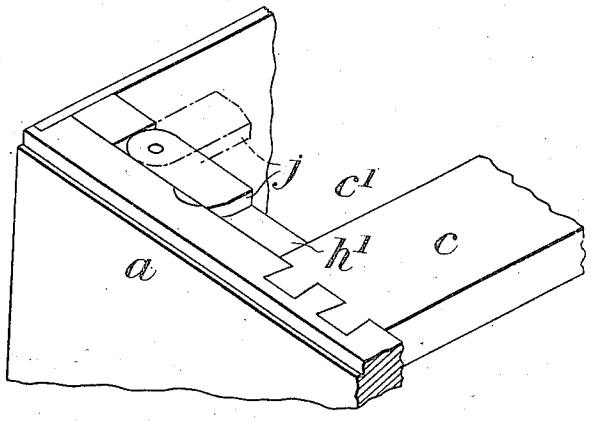



Fig. 5.




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4 SHEETS—SHEET 3.

Fig. 6.

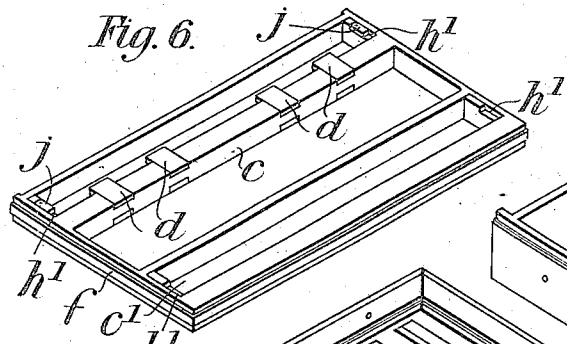



Fig. 7.

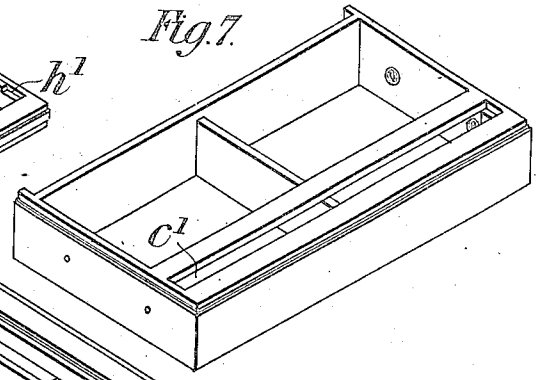



Fig. 8.

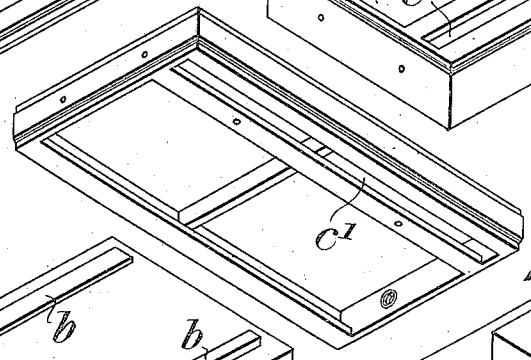



Fig. 11.

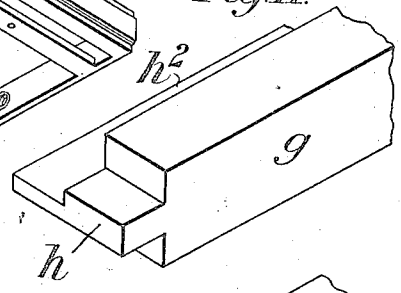



Fig. 9.

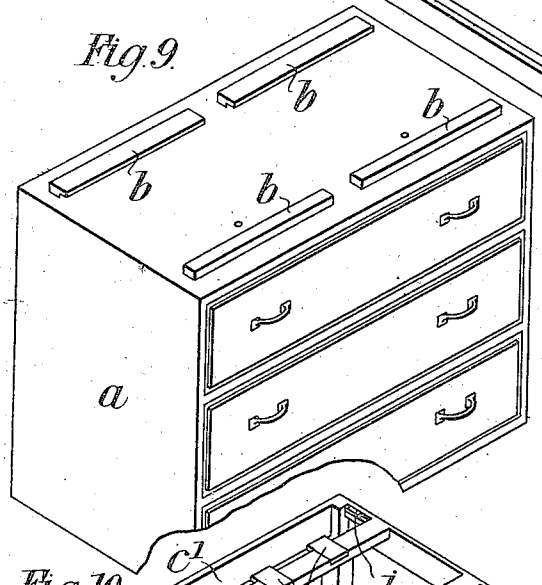



Fig. 12.

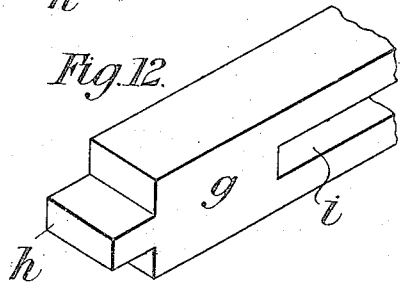



Fig. 10.

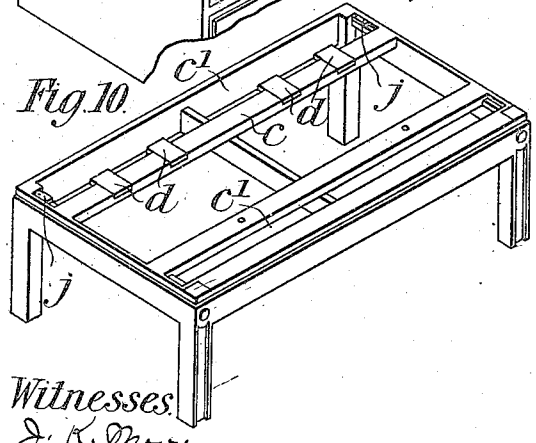
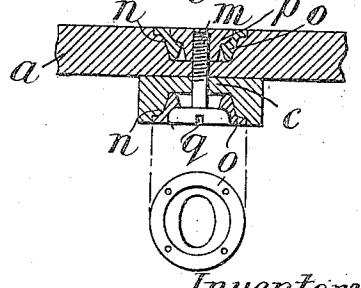



Fig. 13.




Witnesses.

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4 SHEETS—SHEET 4.

Fig. 14.

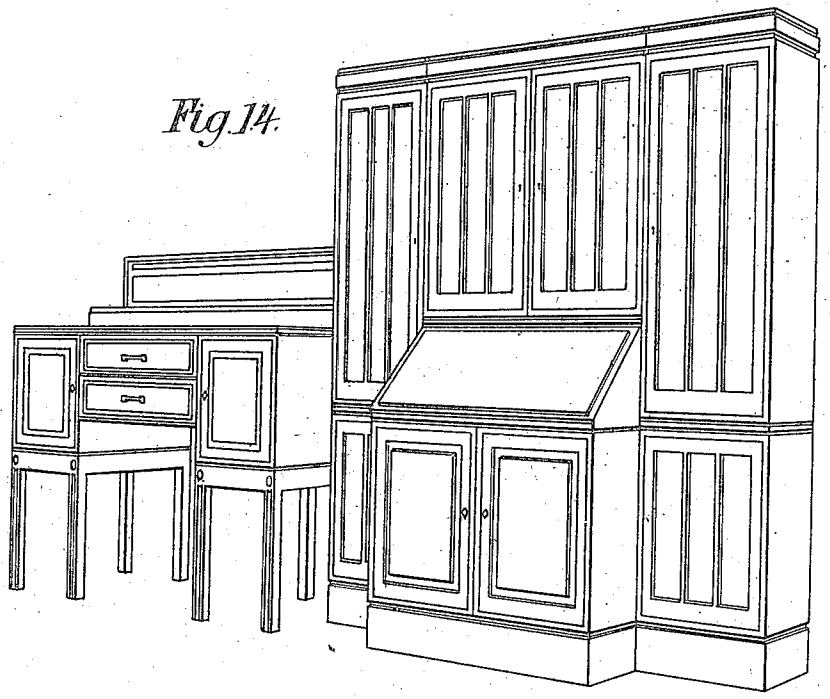
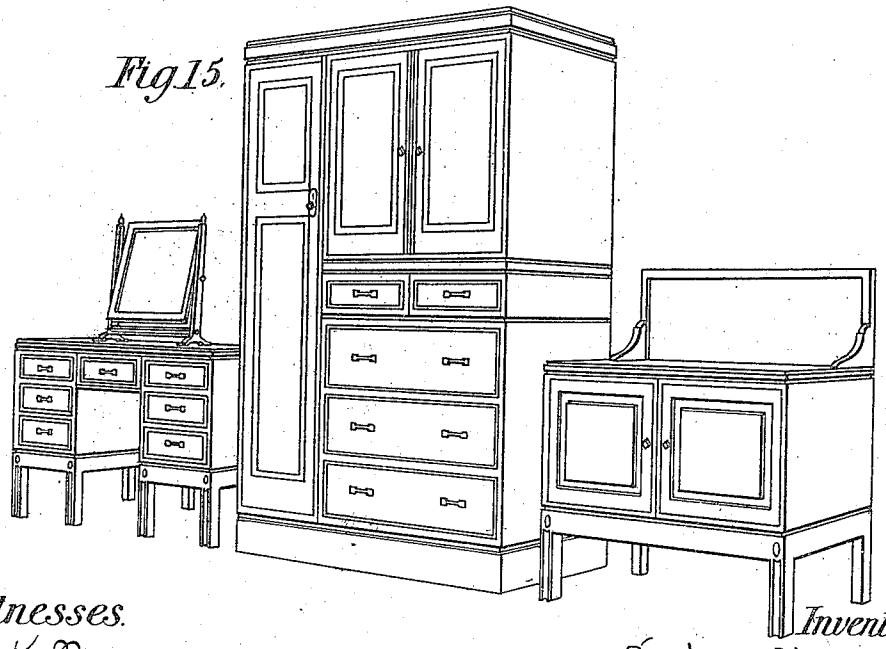


Fig. 15.



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# UNITED STATES PATENT OFFICE.

AMBROSE HEAL, OF LONDON, AND HAMILTON TEMPLE SMITH, OF BROCKLEY, ENGLAND.

## DOMESTIC FURNITURE.

1,254,499. Specification of Letters Patent. Patented Jan. 22, 1918.

Application filed February 11, 1916. Serial No. 77,650.

*To all whom it may concern:*

Be it known that we, AMBROSE HEAL and HAMILTON TEMPLE SMITH, both subjects of the King of Great Britain, and residing, respectively, at 196–198 Tottenham Court road, London, England, and 32 Breakspears road, Brockley, Kent, England, have invented new and useful Improvements in Domestic Furniture, of which the following is a specification.

This invention relates to that class of domestic furniture such as wardrobes, dressing-tables, washstands, sideboards, cabinets, writing-tables and the like built up of interchangeable units or sections in such a way that the said sections can be combined to form different articles of furniture as may from time to time be required and the invention consists in the provision of means whereby various elements or units may be connected together in a better manner than hitherto.

With sectional book-cases it has been proposed to provide one element with a batten adapted to engage in a slot or opening in another element the units being sometimes bolted together.

According to our invention we make use of several standard units or sections of ordinary dimensions which are determined with a view to the various sections combining to form pieces of furniture conforming to the proportions established by common usage and convenience and which are not multiples or sub-multiples of any theoretic dimensions as has already been proposed. The principal units such as cupboards, chests of drawers and the like are preferably made as sections and are provided with a batten or battens across the top or bottom respectively adapted to engage with other elements, such as sections, plinths, stands, cornices or tops, having rails forming slots to receive the battens, the slot rails being provided with a tongue or tongues adapted to engage in a rabbet on the rear batten of the sections. Our invention further consists in various details of construction which will be hereinafter described.

To enable the invention to be fully understood, we will describe the same by reference to the accompanying drawings, in which:—

Figure 1 is an elevation of a drawer unit constructed according to our invention.

Fig. 2 is a longitudinal vertical section of Fig. 1.

Fig. 2ª is a plan thereof.

Fig. 3 is a perspective view of a drawer unit or section.

Fig. 4 is a perspective view of a modified form of drawer section.

Fig. 5 is a detail of the section shown in Fig. 1.

Fig. 6 is a perspective view of an intermediate piece.

Fig. 7 is a perspective view of a plinth.

Fig. 8 is a perspective view of a cornice.

Fig. 9 is a perspective view of a chest of drawers unit.

Fig. 10 is a perspective view of a stand.

Figs. 11 and 12 are perspective views of loose battens.

Fig. 13 is a sectional view of the arrangement for locking two units together.

Fig. 14 is a view showing a number of pieces of furniture assembled to resemble a continuous fitment.

Fig. 15 is a view of three pieces of furniture each comprising several units locked together.

In the embodiment illustrated in Figs. 1, 2, 2ª and 5, the principal units or sections *a* such as cupboards, chests of drawers and the like are preferably made as sections having solid bottoms provided with battens *b* which extend transversely across the case near its front and back, as shown, and the rear batten is provided with a rabbet *e* for a purpose hereinafter described. The top of the section is provided near the front with a rail *c* which extends transversely across the section, and is spaced away from the front of the section to form a slot *c'* of a width equal to substantially twice the width of the front batten *b*, so that when one section is superposed upon another the front batten *b* of the upper section will rest and be movable in the slot *c'* of the lower section. Another rail *c* extends across the top of the section near the back of the same, and this last mentioned rail is provided with a plurality of rearwardly extending tongues *d*, which when one section is placed upon another, enter the rabbet *e*. A slot *c'* is also provided between the rail carrying the tongues *d* and the back of the section to permit the rabbeted batten *b* of another section to be inserted and then pushed forward to lock the tongues *d* in the rabbet *e*, and secure engagement of the front batten *b* with the front rail *c*. It will be seen from Figs. 2ª, 3 and 5 that the slots *c'* merge into recesses *h'* and mounted in these

recesses are pivoted latches *j* which when closed will securely lock the rabbeted batten *b* to the rail carrying the tongues *d*. Single drawer sections are formed with a batten or battens *b* on the top or bottom and a corresponding slot or slots *c* on the bottom or top (Figs. 3 and 4), so that such sections are reversible and may, in building up a series, be placed either above or below a section fitted with battens, as may be desirable. Furthermore, when a single-drawer section is made use of, the sliding drawer is made reversible in the section.

In building up a series of units it sometimes happens that two units *a* must be placed together in such a way that the battens on the bottom of one unit are in juxtaposition with the battens on the top of the other unit. To interlock two sections thus juxtaposed we make use of what we term an intermediate section which comprises an open frame *f* (Fig. 6), the external shape and dimensions of which correspond to those of the unit section and which is provided with rails *e* forming slots $c^1$ to receive the battens *b* of a section, the said intermediate unit or section being of a thickness not less than twice the thickness of a batten, so that when it is placed in position between the two said units the slots which are formed in it receive the battens of both units and so serve to interlock the same.

On the other hand it may be desirable to place together two units having slots, in such a way that the slots of the one are in juxtaposition with the slots of the other. For interlocking two such units we employ loose battens *g*, Figs. 11 and 12, which are placed in the slots and being of a thickness sufficient to engage the slots in both units simultaneously they serve to interlock the said units. To prevent these battens from falling through the slots, in the top of the lower of two such units, we provide at each end of such a batten a short tongue or tenon *h* which engages in a groove or notch $h^1$ suitably provided at the end of the slot to receive it. The front one of such loose battens is rabbeted throughout its upper half as at $h^2$ leaving a part equal in width to the front batten of an ordinary section as shown in Fig. 11. The rear batten is made narrower than an ordinary rear batten and is provided with a central slot or slots *i*, extending horizontally throughout the greater part of its length, the said slot or slots being equal in depth to twice the thickness of the tongues *d* on the rear rails of the open units. In interlocking the units the rear batten is dropped into the groove or notch as above described and is slid forward into position on the tongues; it is then fixed in this position by means of pivoted latches *j* provided in the notches as shown in Fig. 5. The front batten is then dropped into position and the upper unit is fitted on as in the case of an ordinary section with battens.

In order to further secure the units together in the vertical direction we advantageously make use of a bolt and nut fastening as shown in Fig. 13. *m* is a bolt which passes through holes in the top and bottom respectively of two superposed units each of the said holes being made with a countersink *n* to receive a metal bush or cup *o* recessed to receive a nut *p* having an oval boss which engages an oval hole in the said recessed portion of the bush. With this construction the nut *p* is placed in the upper bush or cup and the bolt is passed up through the bottom bush or cup and engaged with the said nut so as to lock the two units together. To enable the bolt to be turned its head is made with a nick or nicks *q* of suitable shape to receive the edge of a coin or the like. Where an intermediate section is employed the bolt must be of sufficient length to pass through this section in addition to the top and bottom respectively of the superimposed units.

In practice the unit sections are preferably made without any external projections whereby a number of pieces of furniture can be assembled to resemble a continuous fitment as shown in Fig. 14.

Where it is desired to unite in a horizontal direction two or more upright series of units to form one piece of furniture such as a two- or three-section wardrobe, pedestal, dressing-table or the like as shown in Fig. 15, the various upright series may be advantageously interlocked by the employment of a single plinth and cornice, in the case of wardrobes, or a single top in the case of dressing-tables, of a width equal to the combined widths of the said upright series or small cornices, or plinths may be joined horizontally by means of bolts in the manner above described.

Claims:

1. An interlocking sectional structure comprising a plurality of sections, one of which is provided with a front batten and with a rear batten having a rabbet, another section having a front rail which is spaced away from the front of the same to provide a slot of substantially twice the width of the front batten and in which the front batten is adapted to be inserted and moved forward until it abuts against the front of the last named section, and a rear rail spaced from the rear of the second section and provided with tongues which engage the wall of the rabbet in the rear batten, when said rear batten is inserted in the space between the rear rail and the back of the second section, and moved forward.

2. An interlocking sectional structure comprising a plurality of sections, one of which is provided at its bottom with a front batten

and a rear batten having a rabbet, another section provided at its top with a front rail which is spaced away from the front of the same to provide a slot of substantially twice the width of the front batten and in which the front batten is adapted to be inserted and moved forward until it abuts against the front of the last named section, and a rear rail provided on the top of the second section and spaced away from the rear of the same and provided with rearwardly extending tongues which engage the wall of the rabbet in the rear batten, when said rear batten is inserted in the space between the rear rail and the back of the section, and moved forward.

3. An interlocking sectional structure comprising a plurality of sections, one of which is provided at its bottom with a front batten and a rear batten having a rabbet, another section provided at its top with a front rail which is spaced away from the front of the same to provide a slot of substantially twice the width of the front batten and in which the front batten is adapted to be inserted and moved forward until it abuts against the front of the last named section, a rear rail provided on the top of the second section and spaced away from the rear of the same and provided with rearwardly extending tongues which engage the wall of the rabbet in the rear batten, when said rear batten is inserted in the space between the rear rail and the back of the second section, and moved forward, and independent means for preventing the rails and battens from moving relative to one another.

4. An interlocking sectional structure comprising a section provided at its upper end with a front rail which is spaced away from the front of the section and a rear rail which is spaced away from the back of the section and is provided with rearwardly extending tongues, another section superposed upon the first section and provided on its bottom with a front batten which rests in the space between the front rail and the front of the other section, and with a rear batten which rests between the rear rail and the back of the other section and is provided with a rabbet in which the tongues rest, and pivoted latches provided on the first section for preventing movement of the battens relative to said rails.

5. An interlocking sectional structure comprising a plurality of sections, rails forming slots in such sections, tongues upon one of such rails and a section having battens designed to enter the slots in the open elements, a bolt adapted to pass through holes in the top and bottom of two superposed sections, each of said holes having a countersink, a metal bush or cup fitting therein, and a nut having an oval boss engaging an oval hole in said bush.

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**Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."**