P. MORRISON.

KNOCKDOWN ARTICLE OF FURNITURE.

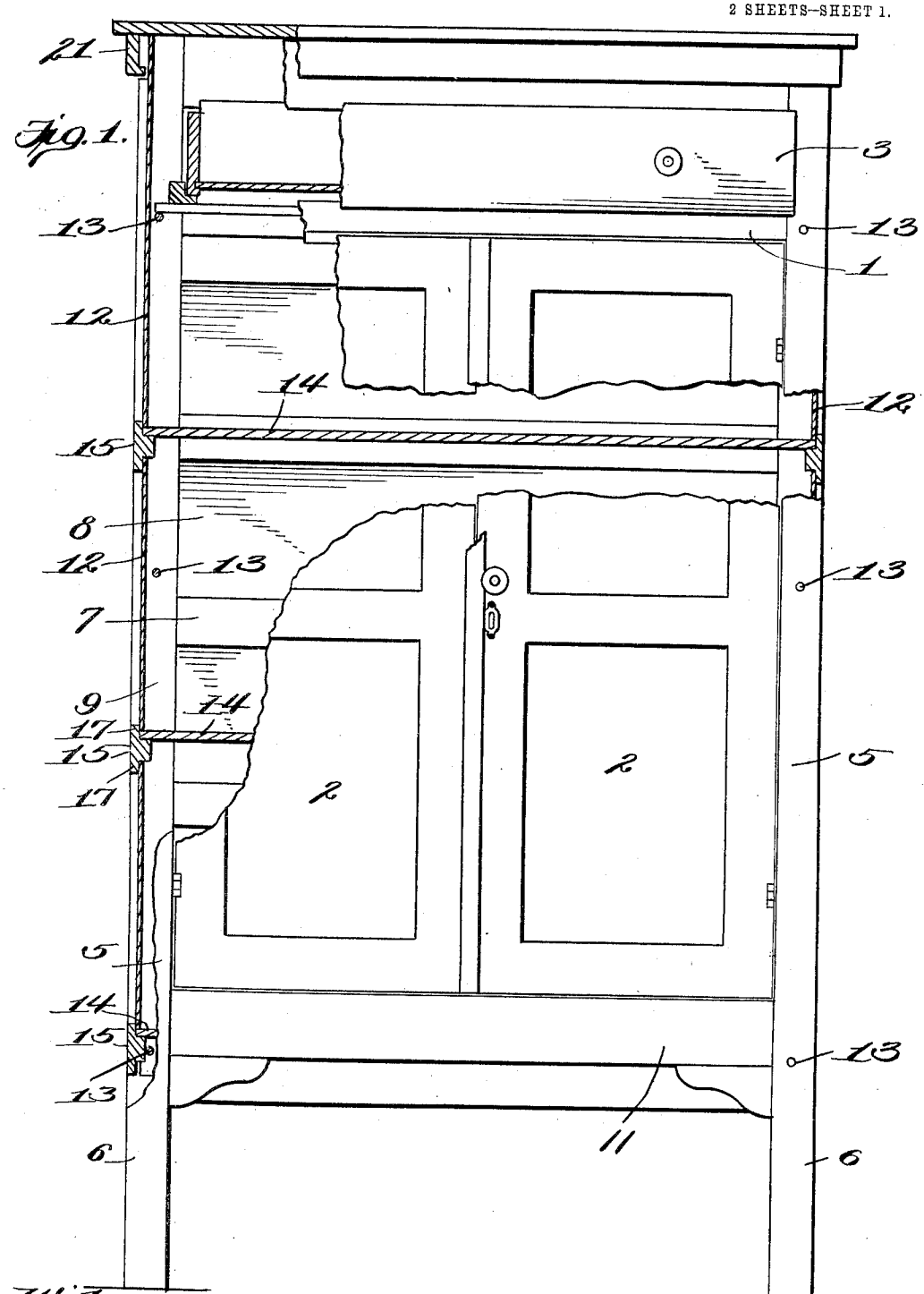
APPLICATION FILED MAY 19, 1911.

1,083,850.

Patented Jan. 6, 1914.

2 SHEETS—SHEET 1.

Fig. 1.



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Inventor
Putnam Morrison
by Louis L. Morris & Atty.

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

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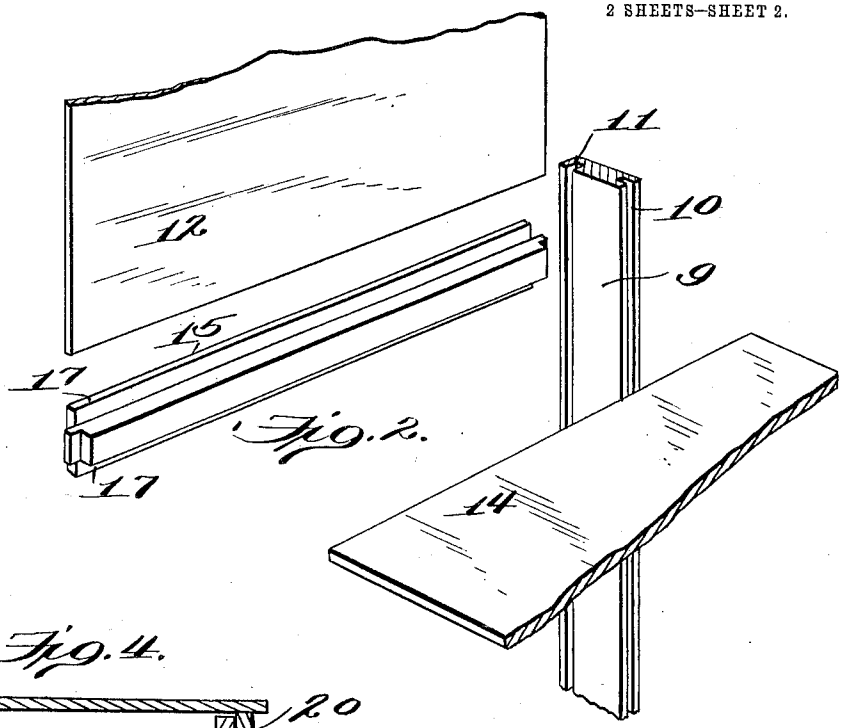


Fig. 2.

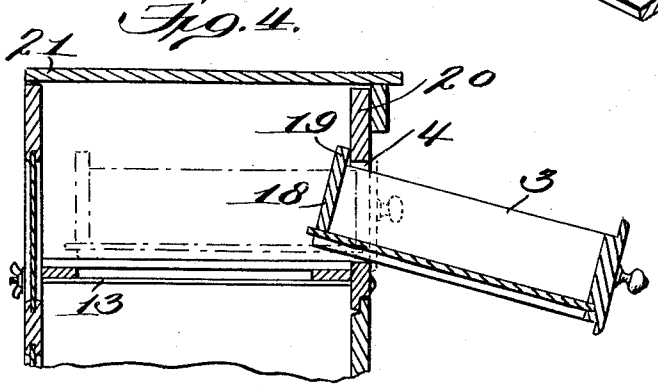


Fig. 4.

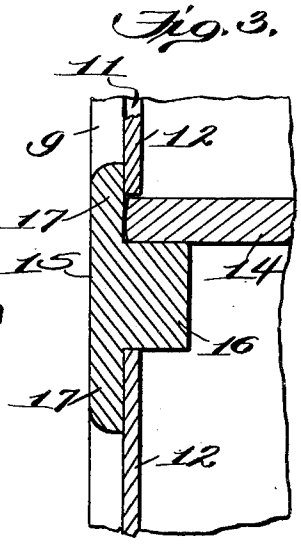


Fig. 3.

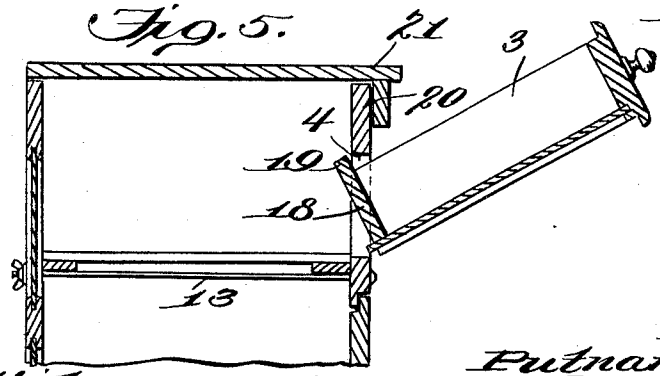


Fig. 5.

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UNITED STATES PATENT OFFICE.

PUTNAM MORRISON, OF CHATTANOOGA, TENNESSEE.

KNOCKDOWN ARTICLE OF FURNITURE.

1,083,850. Specification of Letters Patent. Patented Jan. 6, 1914.

Application filed May 19, 1911. Serial No. 628,174.

To all whom it may concern:

Be it known that I, PUTNAM MORRISON, a citizen of the United States, residing at Chattanooga, in the county of Hamilton and State of Tennessee, have invented new and useful Improvements in Knockdown Articles of Furniture, of which the following is a specification.

This invention relates to knockdown articles of furniture and the like, such as kitchen safes, wardrobes, bookcases and other analogous structures, and the primary object of the same is to improve the structures disclosed by my prior Patents Nos. 894,033, July 21, 1908, 906,909, December 15, 1908, and 918,352, April 13, 1909, and whereby the general organization of elements is more effective in the production of a strong and durable safe or like device.

A further object of the invention is to so arrange the different members or elements and particularly the shelves and end panels as to positively support the same and protect and inclose the end edges and maintain the latter against displacement when assembled and also reinforce them against shrinkage.

A further object of the invention is to provide a drawer as a part of the organization of the safe and so construct said drawer as to permit it to tilt when opened either in a downward direction without liability of separation from the article of furniture to render the contents of the drawer readily accessible or to permit the drawer to be tilted upwardly to such an extent as to conveniently disengage the same from the article of furniture for cleaning purposes and in like position reassemble the drawer with the article of furniture. The several parts of the improved knockdown article of furniture are also replaceable at a small cost and may be originally produced at a minimum expense with obvious commercial advantages and without detracting from the necessary strength and durability of the article of furniture.

In the accompanying drawings and as an illustration of one embodiment of the features of the invention a knockdown kitchen safe is shown, but it is understood that the same principles may be utilized in other analogous devices.

In the drawings: Figure 1 is a front elevation of a safe broken away in parts and shown in section to illustrate the features of the invention. Fig. 2 illustrates perspective views of the parts of the safe, a portion of the parts being shown in section. Fig. 3 is an enlarged detail section of portions of the safe shown assembled and particularly illustrating the shelf end and panel extremity support and concealing means. Fig. 4 is a transverse vertical section through the upper portion of the safe showing a drawer therein in open position and tilted downwardly. Fig. 5 is a view similar to Fig. 4 showing the drawer tilted upwardly.

The numeral 1 designates a front frame having openings for doors 2 and for an upper drawer 3, the opening 4 for the drawer 3 having materially greater vertical extent than the height of the sides of the drawer for a purpose which will be presently explained. The doors 2 will be of any suitable design and arranged to suit the taste and convenience of the maker in accordance with the design of the safe desired to be produced. The particular arrangement of the front frame 1 is not essential and may be varied at will. The front frame includes corner posts 5 which extend the full height of the safe and project below the bottom of the latter to provide front legs 6. Associated with the front frame 1 is a back frame 7 made up of suitable panels 8 and intersecting mullions as may be desired and also having corner posts 9 which are duplicates in construction of the posts 5 and similarly projected at their lower extremities to provide back legs. The front and back frames are suitably secured to the posts 5 and 9, the latter being suitably grooved at their inner edges, as shown by Fig. 2, as at 10 to receive the edges of the structural elements or members of the two frames. The inner opposing sides of each pair of posts are also formed with grooves 11, one in each, to receive the side edges of sliding panels 12, and the posts are also transversely bored for the insertion therethrough of headed tie rods 13. These tie rods 13 are used to draw the parts of the safe in firm assembled relation and may be readily withdrawn or inserted in place, or when applied may be tightened to take up looseness of the several parts of the safe or other device.

At regular intervals throughout the vertical extent of the safe or at different distances apart, as may be desired, shelves 14 are disposed and rendered accessible through the medium of the doors 2, the panels 12 being arranged between the shelves. The

structure thus far described, with the exception of the opening 4 and the relative proportions of the sides of the drawer 3, is disclosed by my prior patents hereinbefore noted. The most essential feature of the present improvement is a means for supporting the shelves and the lower ends of the panels and concealing the shelf and panel ends and at the same time separating adjacent ends of the panels so as to relieve said panel ends of direct contact and supporting pressure. This means consists of a concealing strip or batten 15, shown in detail by Fig. 2 and in enlarged section by Fig. 3. As shown by Fig. 1, three of these combined concealing or supporting strips or battens 15 are used, but it is obvious that their number may be varied in accordance with the number of shelves used in the safe or other article of furniture. Each strip or batten 15 has an inwardly projecting ledge 16, the outer portion of the strip extending above and below the ledge in the form of covering or concealing flanges 17. The ends of the shelves 14 are disposed on the upper edges of the ledges 16 and the lower edges of the panels 12 are caused to bear on the upper portions of the extremities or ends of the shelves 14. The upper ends of the panels 12 bear against the lower edges of the ledges 16 and by this means the ends of the panels and shelves are fully concealed and positively supported, and, furthermore, the shelves at their ends are held firmly in contact with the ledges 16 and prevented from warping or becoming displaced. Likewise the ends of the panels are strengthened by the interposition between the same of the ledges 16 of the strips or battens 15 and after the several parts of the safe or other article of furniture are tightened up through the medium of the tie rods 13, the ends of the panels will also be held against warpage. Another advantage of this improved structure is that any one of the shelves may be removed and permit the panel ends adapted to engage the same to bear directly upon the upper edge of the ledges of the corresponding strips or battens 15 without in the least impairing the organization and allowing the user to obtain more space between shelves as may be desired.

As shown, the bottom shelf 14 will serve as the bottom closure for the safe and instead of having the said bottom shelf resting upon the lowermost tie rod 13, the pressure and weight strain thereon are imposed upon the ledges of the lower strips or battens 15, in turn supported by the legs of the front and back frames.

The opening 4 in the upper front portion of the frame 1 has a greater vertical extent than the sides of the drawer 3 as hereinbefore specified, but the back 18 of the drawer is formed with an upper extension or provided with a top guard 19 which materially increases the vertical extent of the back part of the drawer and gives it a height greater than the height of the said opening 4 so that when the drawer is pulled out, the guard 19 will strike an upper cross-strip 20 on the front frame and prevent the drawer from being fully withdrawn but permit it to tilt downwardly owing to the greater vertical extent of the opening 4 relatively to the vertical extent of the sides of the drawer. By this means the contents of the drawer are rendered easily accessible and the drawer is less liable to jam or stick. The drawer may be removed for cleaning purposes by tilting the same upwardly, as shown by Fig. 5, so as to cause the guard 19 or extended portion of the back 18 to clear the cross-strip 20, and in reassembling the drawer with the safe it will be in like manner disposed at an upward inclination so as to permit the extension or guard 19 of the back 18 to be inserted through the opening 4.

In assembling the parts of the safe the same operation is pursued as disclosed in my patents hereinbefore noted with the exception that the strips or battens 15 are introduced at intervals between the panel and shelf ends, the tie rods being left loose until the panels 12, strips or battens 15, and shelves 14 are regularly introduced, and then the said rods are tightened up to draw all the parts in close engagement and tight assemblage.

A removable top 21 is used in connection with the safe shown, said top being in all particulars similar in construction and arrangement to that shown by my Patent No. 906,909, December 15, 1908.

In the event that any of the parts of the safe become broken or injured they may be readily replaced at a minimum expense. The form of safe described is also advantageous in that it may be shipped or stored in knockdown condition and assembled when desired with facility without requiring the services of a skilled mechanic.

What is claimed as new is:

A knockdown article of furniture comprising front and back frames, end panels slidably inserted and readily movable between the opposite sides of the front and back frames and forming end closures for the article of furniture, a plurality of shelves having the opposite ends thereof projecting outwardly between the opposing ends of the panels, the shelves being shiftable into different positions within the article of furniture to modify the space between adjacent shelves, the panels having their lower ends bearing directly upon the upper surfaces of the opposite ends of the shelves, and supporting strips loosely and removably interposed between the ends of the panels and shelves to permit adjustment of the

shelves, the supporting strips having inwardly projecting ledges extending full length of the transverse distance of the article of furniture between the front and back frames, the uppermost ends of the panels bearing directly against the lower sides of the ledges of the strips and the shelves having the lower surfaces of their end portions bearing directly upon the upper surfaces of the said ledges so as to remove the weight strain of the shelves at their ends directly from the upper ends of the panels beneath the same, the panels being held against vertical movement when the parts of the article of furniture are assembled and the shelves adjusted by means engaging the upper portions of the uppermost panels, the outer portions of the supporting strips completely covering the joints between the shelves and panel ends.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

PUTNAM MORRISON.

Witnesses:
E. H. CARNES,
A. M. CAROTHERS.

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