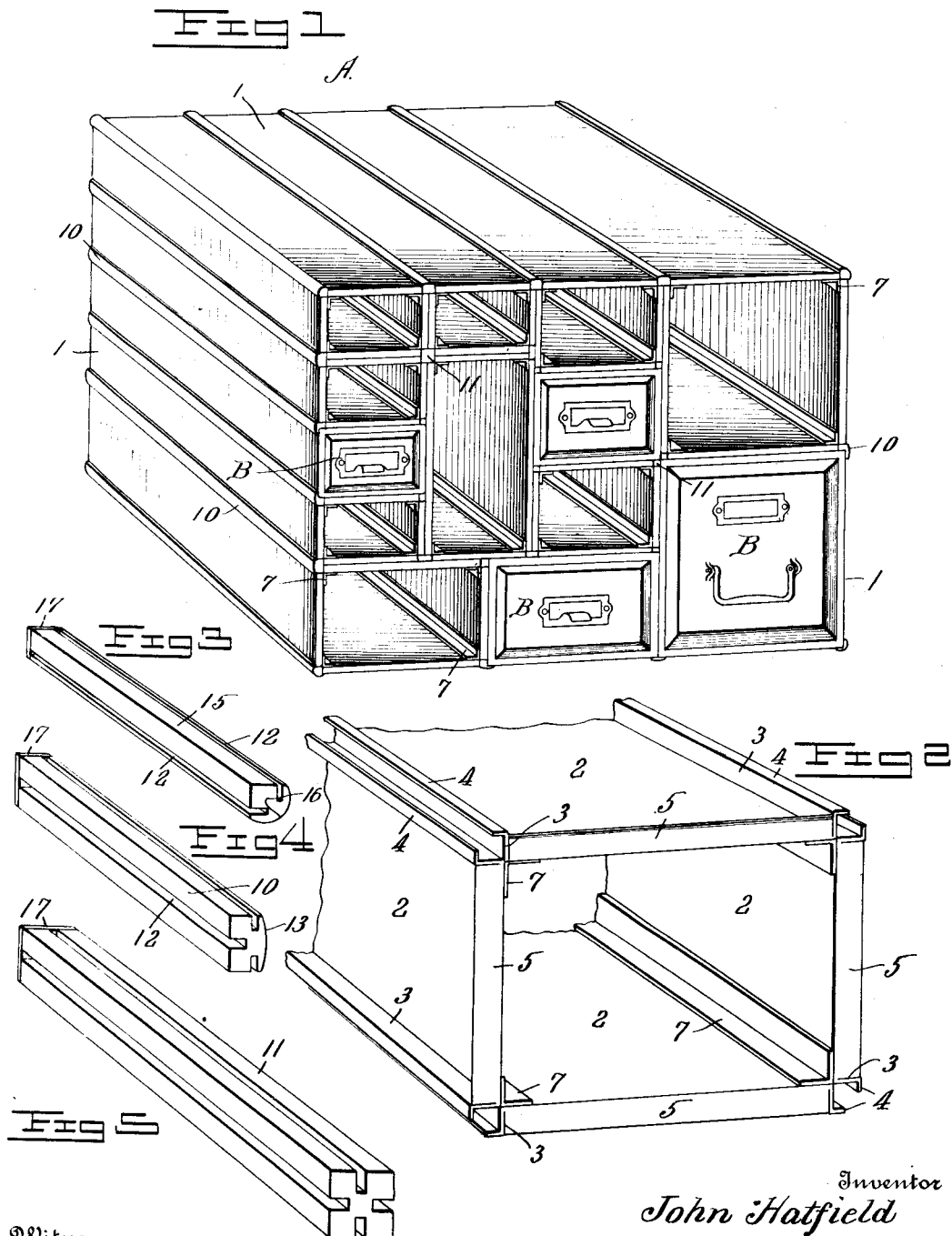


J. HATFIELD.
UNIT FILING CABINET.
APPLICATION FILED JUNE 26, 1911.

1,076,116.

Patented Oct. 21, 1913.

2 SHEETS—SHEET 1.



Witnesses
H. C. Polinetta
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Inventor
John Hatfield

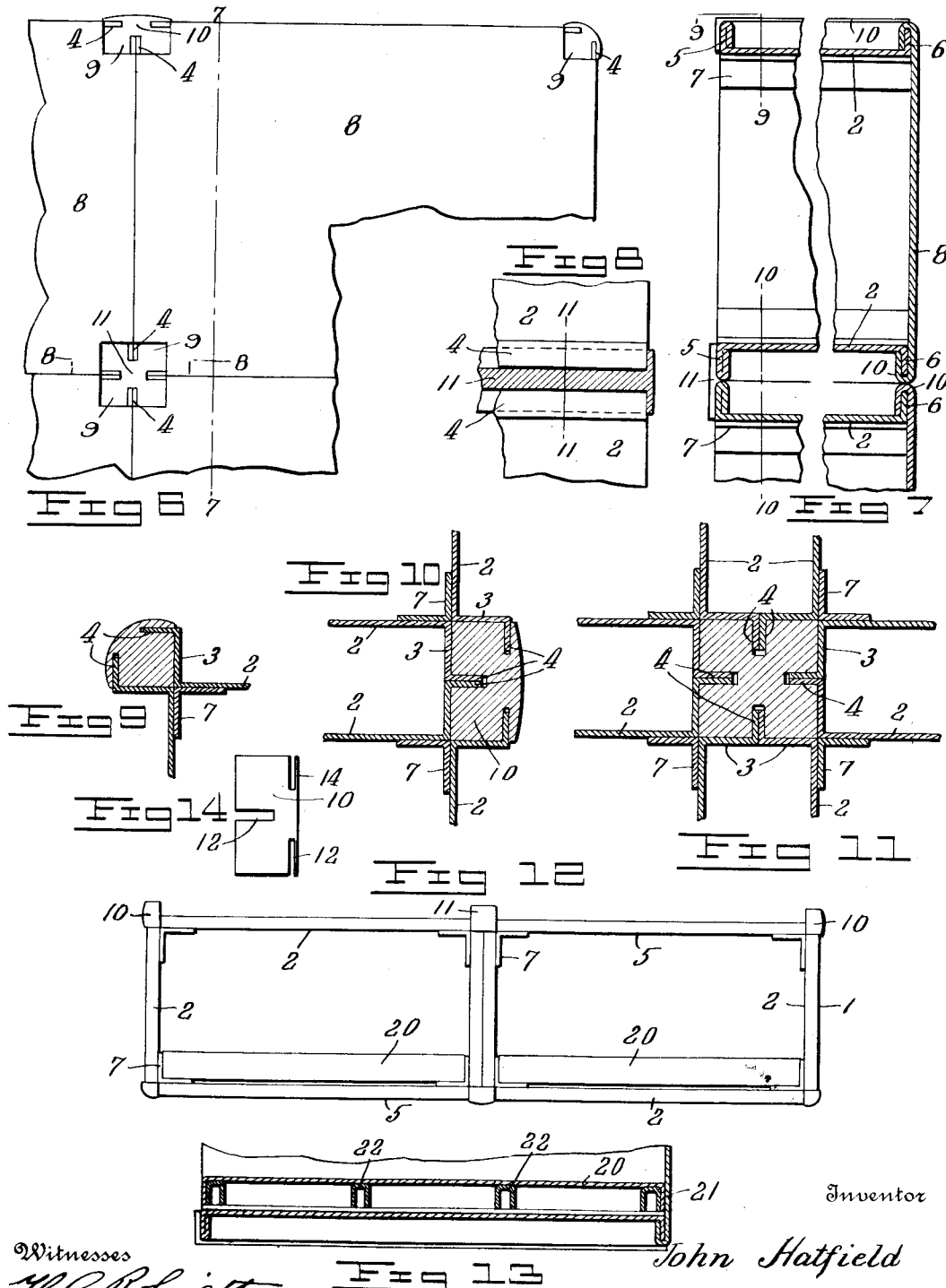
By Messrs. Cushman & Co.
Attorney

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Fig 15

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UNITED STATES PATENT OFFICE.

JOHN HATFIELD, OF BROOKLYN, NEW YORK.

UNIT FILING-CABINET.

1,076,116.

Specification of Letters Patent.

Patented Oct. 21, 1913.

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To all whom it may concern:

Be it known that I, JOHN HATFIELD, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Unit Filing-Cabinets, of which the following is a specification.

This invention relates to cabinets, cases, and similar office and store fixtures of the "sectional" or "elastic" type, wherein a plurality of casings or receptacles, each complete in itself for the reception of a file, drawer, box or the like, may be placed side by side or one upon another and preferably connected together at their corners in a secure, simple and efficient manner to form, as a whole, a neat, attractive and convenient article of furniture, particularly suitable for office and library use, and as shelving for mercantile purposes.

To this end the invention comprises a number of units or sections formed in a novel manner of sheet metal, preferably rectangular in shape and closed at one end, and provided with locking flanges or tongues on each corner, extending the length of the section, which flanges abut against similar locking flanges on adjacent units or sections, and interlocking metal bars grooved in their faces, with which grooves said locking flanges engage and by means of which engagement the units or sections are securely held together, the sections or units and the metal bars forming of themselves a complete self-supporting structure.

The principal objects of the invention, therefore, reside in the novel construction of the units or sections; the grooved or channeled interlocking bars, and in the structure as a whole consisting only of a number of such sections or units and interlocking bars for firmly, yet separably, connecting said sections together.

With these and other objects in view the invention further consists in the arrangement and combination of parts hereinafter described in detail and pointed out in the appended claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a filing cabinet, constructed in accordance with the present invention, Fig. 2 is a similar view enlarged, of one of the sections which forms a part of the cabinet. Figs. 3, 4 and 5 are perspective views of three forms of connecting members or interlocking bars with which

the corners of the sections or units engage. Fig. 6 is a rear elevation of a portion of the cabinet showing the individual plates forming the backs of each unit section. Fig. 7 is a sectional view on the line 7—7 of Fig. 6, Fig. 8 is a similar view on the line 8—8 of the same figure. Figs. 9 and 10 are sectional views on the line 9—9 and 10—10, respectively, of Fig. 7. Fig. 11 is a sectional view on the line 11—11 of Fig. 8. Fig. 12 is a front elevation of two unit sections arranged to serve as a book-case and provided with shelves for supporting books. Fig. 13 is a cross-sectional view on the line 13—13 of Fig. 12, showing the construction of the book shelf. Fig. 14 is an end view of a modified form of the interlocking bar illustrated in Fig. 4.

In the drawings in which like numerals of reference are used to indicate like parts in all the figures, the numeral 1 designates the individual unit sections of a sectional or elastic filing cabinet, book case or a like article of furniture A, all of which sections may be of the same size or of various dimensions as desired, separable but firmly connected together in a manner hereinafter described.

Each section or unit 1 is made in the present instance of rectangular form, its sides, top and bottom being each a separate metal plate 2, the opposite side edges of which are bent outwardly at right angles to the plate for a short distance to form flanges, as at 3, and bent again forwardly to form what will be hereinafter called ledges 4, which lie in a plane parallel to the side plate 2, as clearly shown in Figs. 2, 9, 10 and 11. The front and rear ends of the plates 1 are also bent to form stiffening ribs 5 and 6, which, in connection with the flanges 3 and ledges 4, greatly stiffen the plates and prevent them bending and buckling under excessive pressure or strain to which they may be subjected. The stiffening ribs 5 on the front edges of the plates are preferably bent inwardly upon themselves, as in Fig. 7, to increase their strength and make a neater finish on their exposed edges.

The sides, top and bottom plates 2, rolled, stamped or otherwise shaped, are placed in position as represented in Fig. 2 to form a rectangular box-like structure, and inseparably connected at the corners by metal angle strips 7 extending the length of the unit section 1, and preferably spot-welded

to said plates. By this construction the strips 7 form narrow run-ways or guides for drawers or filing cabinets B, which enter the sections and are movable in and out with little friction. Each section or unit 1 is closed at its back by a metal plate 8 formed with notched corners 9 and folded as at 10 over the rear flanges 6 of the top and bottom plates, and also over similar flanges on the side plates, if thought necessary.

The sections or units 1, constructed as above described are formed into a cabinet or other office fixture by assembling said sections close together, so that the ledges 4 of adjacent corners will abut, as shown in Figs. 10 and 11. The sections, as previously stated, may be arranged in a horizontal row, a vertical row or stack, or grouped to suit the user's taste or necessities as in Fig. 1. In whatever order the unit sections are arranged the abutting ledges 4 of adjacent corners are connected together by grooved or channeled interlocking bars 10 and 11. These interlocking bars are made of metal, preferably solid, and substantially rectangular in cross-section with a groove or channel 12 formed in two or more of their sides, extending throughout their length and of a width equal to the thickness of two ledges 4. The channels 12 may be formed in the bar by cold rolling, or sawing kerfs therein as most convenient. In manufacture, these bars will be made of indefinite length and cut up into short sections of the required size; the expense of manufacture therefore, is slight.

Two forms of interlocking bars are used in connecting the sections together, the bar 10 with a groove or channel in three sides and the bar 11 with four sides grooved. The bar 10 is used when two unit sections only are to be connected, as on the outside of the cabinet, and at the inter-section of a large section with two smaller ones, see Figs. 1 and 10, while the bar 11 is employed whenever the corner flanges of four sections are grouped, as in Fig. 11. The outer or exposed side 13 of the bars 10 are slightly curved or otherwise finished to present an attractive appearance and are not grooved. When these bars are used to connect two sections next the side of a larger section intermediate the corners thereof, the side 13 of the bar is preferably cut away or otherwise reduced so as to leave only a thin fin 14 on the outside of the opposed grooves 12, clearly shown in Fig. 14, to enable the front flange 5 on the side of the larger section fitting neatly in place.

The corners of the cabinet which are free corners of the outermost sections are finished by engaging with the ledges 4 on said corners a bar 15, having a groove 12 in two of its sides and rounding the outer surface 16 of the bar as in Figs. 1 and 3. The

bars 15 on the bottom corners as well as the bars 10 connecting the lowermost sections serve as feet or supports for the cabinet. The front end of each bar 10, 11 and 15 is finished by soldering, brazing or otherwise attaching thereto a plate 17, which serves both to cover the exposed ends of the grooves 12, and also as a stop to prevent the bars being moved too far rearwardly while the cabinet is being assembled or afterward.

The cabinet is set up by grouping the unit sections in the desired order or arrangement with their ledges 4 in contact, and connecting the same by means of the interlocking bars 10 and 11, which bars after their grooves have engaged said ledges, are pushed rearwardly until the plates 17 or their front ends lie against the front of the sections. It is to be noted that the flanges 3 of one section rest on or bear against corresponding flanges on adjacent sections, so that there is a firm direct support for the various sections throughout the height and breadth of the cabinet. It is to be further noted that the sections support themselves and are not dependent on the locking bars for sustaining any weight which the cabinet has to carry, the locking bars merely serving to connect the sections and prevent them from separating.

Another novel feature of this cabinet is the fact that it can be erected and the various sections thereof locked together from the front, so that when erecting a cabinet composed of a number of sections, the sections can be assembled in position where the cabinet is to stand, and the locking bars slid into position from the front of the cabinet. The interlocking bars can be inserted between the corners of the sections very quickly, and as soon as this has been done and the corner bars 15 placed in position the cabinet is ready for use.

Filing cabinets made in the manner above described are much cheaper, stronger, and more "elastic" than others of a like class. The sections as previously described, are each made of four plates with upturned and flanged side edges the flanges forming between them an angular space to receive the interlocking bar. These plates are all of the same length and have similar flanged edges which enables them to be readily formed into shape by die stamping. The angle strips 7, which unite the corners of the sections can be cut from lengths formed by rolling or stamping, and are easily and quickly welded to the side plates by machinery, thus forming a strong, light and cheap section.

When the sections are to be used to form a book-case or other receptacle, the articles supported therein may be placed on the bottom plates 2, if desired, but it is preferred to place within each section a shelf, such as

20, see Figs. 12 and 13, made of sheet metal having downwardly turned flanges 21 on its edges and stiffened by channel pieces 22 running longitudinally of the shelf. These
5 shelves rest at their ends on the angle strips 7 in the corners of the sections and thus relieve the bottom plates 2 of said sections of the weight of the superposed articles.

Having thus fully described my invention
10 what I claim as new is:—

1. The combination in a sectional cabinet, of unit sections, projections at the corners of each section which abut and transmit directly from one to another the strains of
15 the assembled sections, and removable means engaging said projections to lock the sections against displacement.

2. The combination in a sectional cabinet, of unit sections, a projection at the corners
20 of each section which abuts and transmits directly from one to another the vertical and lateral strains of the assembled sections, and removable means engaging said projections to lock the sections against vertical or lateral
25 displacement.

3. The combination in a sectional cabinet, of unit sections each having flanges projecting therefrom substantially in line with the walls thereof, ledges on said flanges which
30 abut throughout the cabinet and transmit directly from one to another the strains of the assembled sections, and a ledge-engaging bar to lock the sections against displacement.

4. The combination in a sectional cabinet, of unit sections each having substantially L-shaped abutting flanges projecting ver-

tically and laterally from the corners thereof to transmit directly from one to another the strains of the assembled sections, and
40 an interlocking bar engaging said flanges to lock said sections against vertical and lateral displacement.

5. The combination in a sectional cabinet, of unit sections each having two offset
45 flanges on each corner extending the length thereof and abutting like flanges on adjacent sections to transmit directly from one to another the vertical and lateral strains of the assembled sections, and an interlocking
50 bar formed with grooves in its sides, each of said grooves engaging a pair of abutting flanges to lock the sections against displacement.

6. An interlocking bar for sectional cabinets, of substantially rectangular form in cross section, two sides of which are at a right-angle to each other and provided each with a narrow straight longitudinal groove perpendicular to its side, and a stop at one
60 end of the bar for the ends of said grooves.

7. A unit for sectional cabinets having a plurality of flanges at each longitudinal corner substantially in line with the walls of the unit and forming between them an
65 angular space to receive unit interlocking means.

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

JOHN HATFIELD.

Witnesses:

LOUIS J. HALBERT,
CONRAD V. QUIST.