

(Model.)

T. KUNDTZ.

SKELETON FRAME FOR DRAWERS.

No. 362,288.

Patented May 3, 1887.

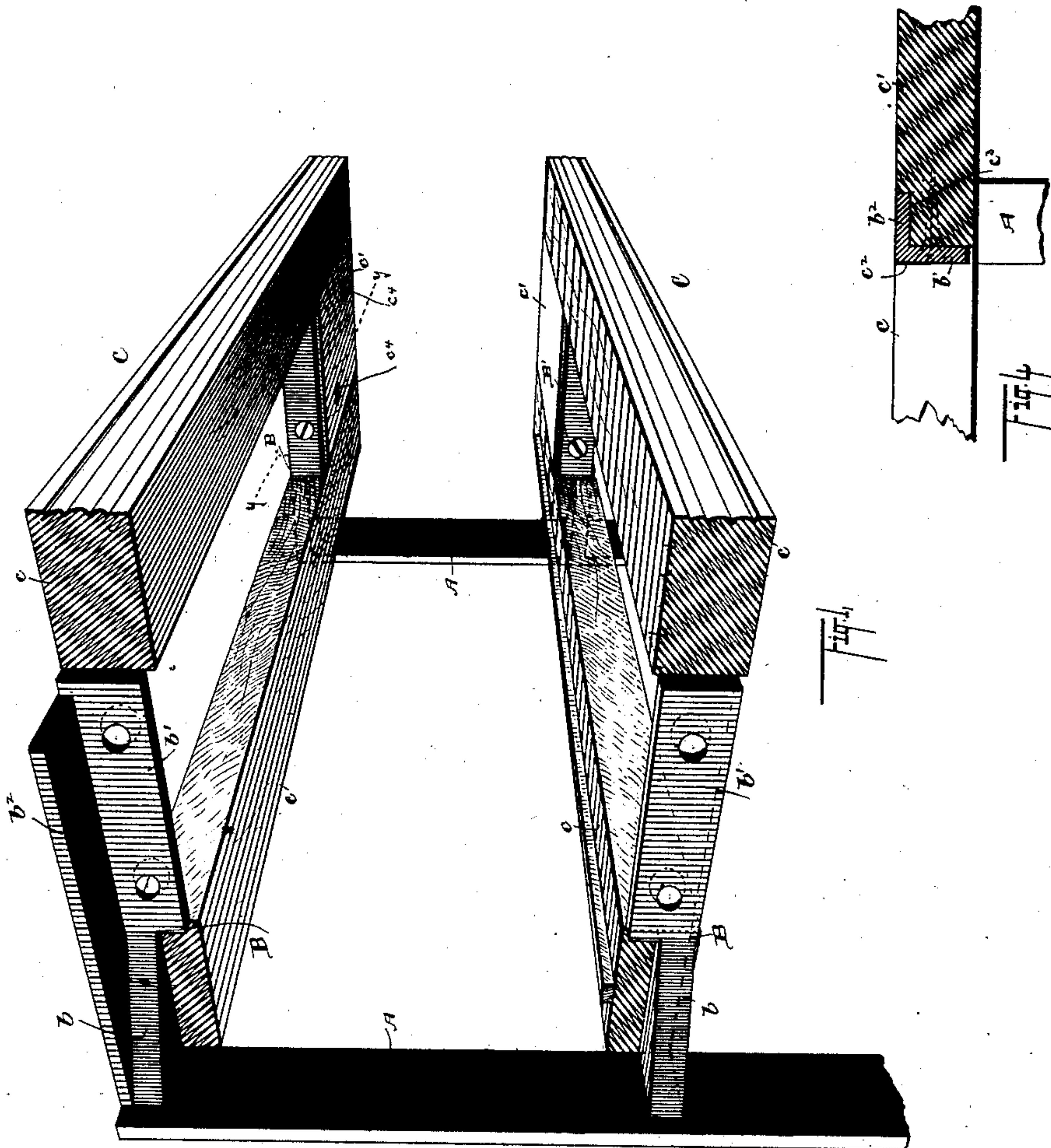


Fig. 2.

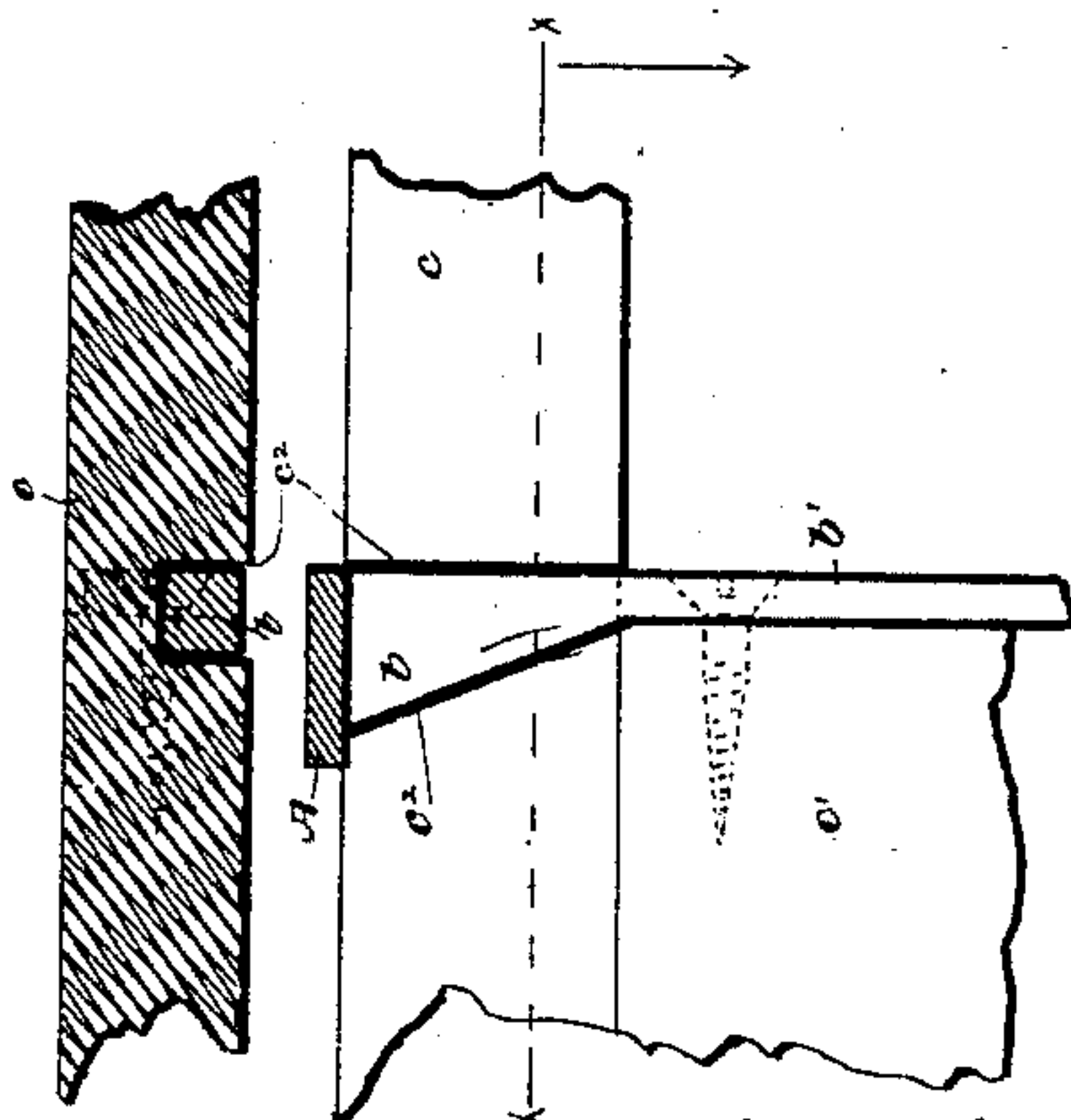


Fig. 3.

WITNESSES
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THEODOR KUNDTZ, OF CLEVELAND, OHIO.

SKELETON FRAME FOR DRAWERS.

SPECIFICATION forming part of Letters Patent No. 362,288, dated May 3, 1887.

Application filed December 6, 1886. Serial No. 220,818. (Model.)

To all whom it may concern:

Be it known that I, THEODOR KUNDTZ, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Metal Hangers for Skeleton Drawer-Frames; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

My invention relates to improvements in metal hangers for skeleton drawer-frames, designed more especially for sewing-machine tables. The hangers are provided with lateral arms for attaching to the respective skeleton shelves, on which latter the drawers rest. The arms are rectangular in cross-section, and next the hanger lie flatwise to the plane of the shelf, by reason of which only a shallow groove across the side rail of the shelf is necessary to receive the arm. Between the side rails of the shelf the section of the arm stands edgewise to the plane of the shelf, the flat side thereof lying against the inner edge of the cross-piece of the shelf, to which the arms are attached by means of wood-screws, to the end that, in assembling the parts by setting the shelves in clamps that hold them in the exact relative position required to receive the drawers, the arms of the hangers may be fastened to the shelves without any fitting being done to bring the shelves the required distance apart, thereby saving much labor and expense. In this class of work the competition is such that hand-labor must be reduced to a minimum; otherwise the manufacturer cannot sell his goods in the market except at a loss.

Heretofore where metal hangers were employed the arms thereof extended in a horizontal plane lengthwise and flatwise, and were secured, usually, to the under side of the shelf, the shelf being grooved laterally to receive the arm. The hangers were ordinary castings, and consequently were not accurate, and the cost of fitting them up to make them accurate would be such as to preclude their use. The result was that in assembling the parts some of the grooves for receiving the arm had to be made deeper, and other grooves had to be shimmed out with paper or other thin material; otherwise the drawers would not fit nicely

between the shelves. This involved so much hand-labor that the use of metal hangers in this class of work was not at all satisfactory. I have therefore devised metal hangers with lateral arms for attaching to the shelves, said arms having, respectively, sections set edgewise to the plane of the shelf, the face of such sections being attached to the edge of the shelf, by means of which, when the shelves are held in their proper relative positions to each other, the hangers may be attached without any fitting.

In the accompanying drawings, Figure 1 is an exaggerated perspective, showing hangers and parts of a skeleton drawer-frame embodying my invention, the front end portions of the shelves being broken away to show the hanger in the foreground more clearly. The hanger may be extended down indefinitely, and is therefore shown broken at the bottom. Fig. 2 is a vertical section on the line *x x*, Fig. 3. Fig. 3 is a bottom plan of one of the arms of the hanger. Fig. 4 is a vertical section on the line *y y*, Fig. 1.

A represents metal hangers, the same having lateral arms B at the top end thereof, and having any number of arms, B', more or less, according to the number of shelves required to accommodate the drawers desired, respectively, two or three drawers being the numbers most used in a frame. The shelves C are of the skeleton variety, consisting of a framework with side bars, *c*, and cross-pieces *c'*, leaving a large rectangular opening at the center of the same. The side bar *c* that is next the hanger is grooved laterally at *c''* to receive the hanger arm, the groove being made large enough to allow a limited movement of the arm in the groove in assembling the parts, and to avoid cutting away the wood too much this section *b* of the arm is made comparatively thin in a vertical direction, requiring only a shallow groove to accommodate the arm, the required strength being had by broadening this section of the arm. The outer section of the arm *b'*, that comes between the bars *c*, is rectangular in cross-section and set edgewise to the plane of the shelf, so that the flat face thereof abuts the inner edge of a cross-piece, *c'*, to which it is fastened with wood-screws. This part of the arm is less in width than the

thickness of the shelf, by reason of which the arm may be moved up or down a limited distance without projecting above or below the respective faces of the shelf. The hangers are made right and left handed, and arranged as shown, so that the arms B' set in grooves c^2 made on the under side of the shelf, and the arms B extend through grooves c^2 made on the top side of the upper shelf. With this arrangement, the top shelf being secured to the under side of the table-top, and the other shelves being so low down that only their top faces are seen when the drawers are pulled out, the grooves c^2 are out of sight, and the top shelf being secured to the under side of the table, as aforesaid, (see screw-holes c^4 , Fig. 1,) this shelf supports the hanger and the balance of the structure, and to render the device more stable the arms B are provided with laterally-projecting flanges b^2 , the latter being set into the wood flush with the top surface of the upper shelf, gains being cut in the shelf for the purpose.

In assembling the parts the shelves are set in clamps, where they are held rigidly and in the exact position required to receive the drawers between them. Next, the hangers are placed in position, and the flanges b^2 are held down to the bottom of the gains c^3 while the arms are being secured to the edge of the shelf. The sections b' of the other arms are now secured to the edges of the respective cross-bars of the shelves, and although the sections b' may not come centrally on the edges of the shelves, it is evident that the shelves, when removed from the clamp, will be held exactly in the position required to receive the drawers. The drawers are made in the main by machinery and in their dimensions are facsimiles of each other. With my improved construction of the hangers the parts may be assembled and secured at a trifling cost.

The vertical misplacement of a shelf a dis-

tance equal to the thickness of heavy paper would cause a drawer to rub or leave an unseemly crack between the drawer and shelf, either of which would render the goods unsalable, from which will be understood the difficulty of adjusting the shelves with hangers heretofore in use and the advantages of my improved hanger.

I make no claim in this application to a side drawer-case for tables, consisting of metal brackets having laterally-projecting rigid arms, shelves secured to said arms, and drawers supported on the tops of the shelves, as such construction is shown, described, and claimed in my pending application, No. 196,382, filed March 24, 1886.

What I claim is—

1. A hanger for a skeleton drawer-frame, said hanger having a series of lateral arms, each arm having a vertical face for attaching to an edge of a drawer shelf, substantially as set forth.

2. Hangers for skeleton drawer-frames, said hangers being made right and left handed, each hanger having a series of lateral arms extending in the same direction, each arm having two integral sections set, respectively, flatwise and edgewise to the plane of the contiguous drawer-shelf, substantially as set forth.

3. A hanger or skeleton drawer-frame, the same having lateral arms made in pairs, right and left handed, substantially as indicated, in combination with flanges made to extend laterally from the respective top arms, substantially as set forth.

In testimony whereof I sign this specification, in the presence of two witnesses, this 12th day of November, 1886.

THEODOR KUNDTZ.

Witnesses:

CHAS. H. DORER,
ALBERT E. LYNCH.