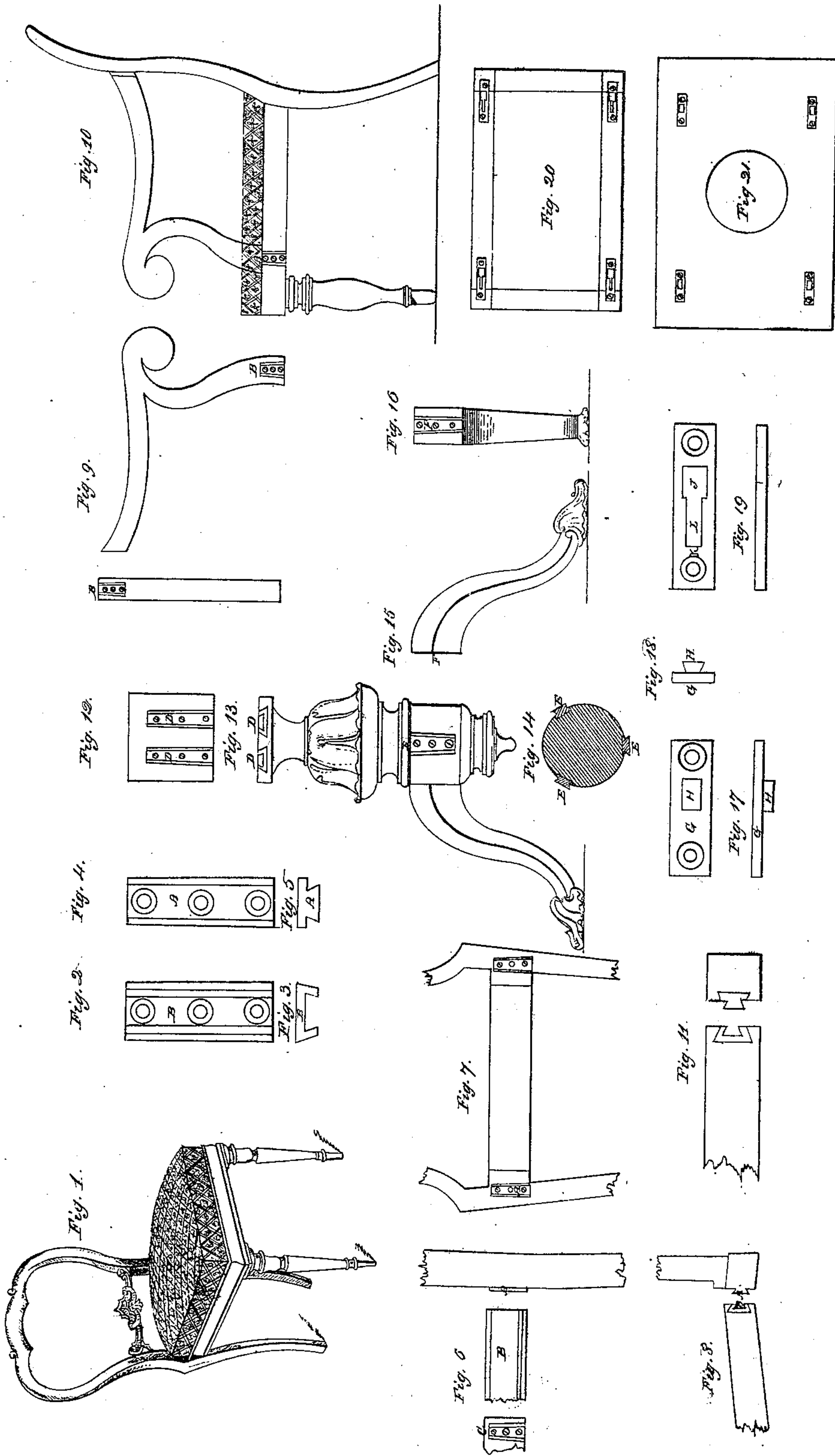


*A.D. Brown,
Making Furniture,*

SHEET 1.—2 SHEETS.

No 19, 127,

Patented Jan. 19, 1858



A.D. Brown Sheet 2. 2 Sheets

Chair.

No. 19,127

Patented Jan. 19, 1858.

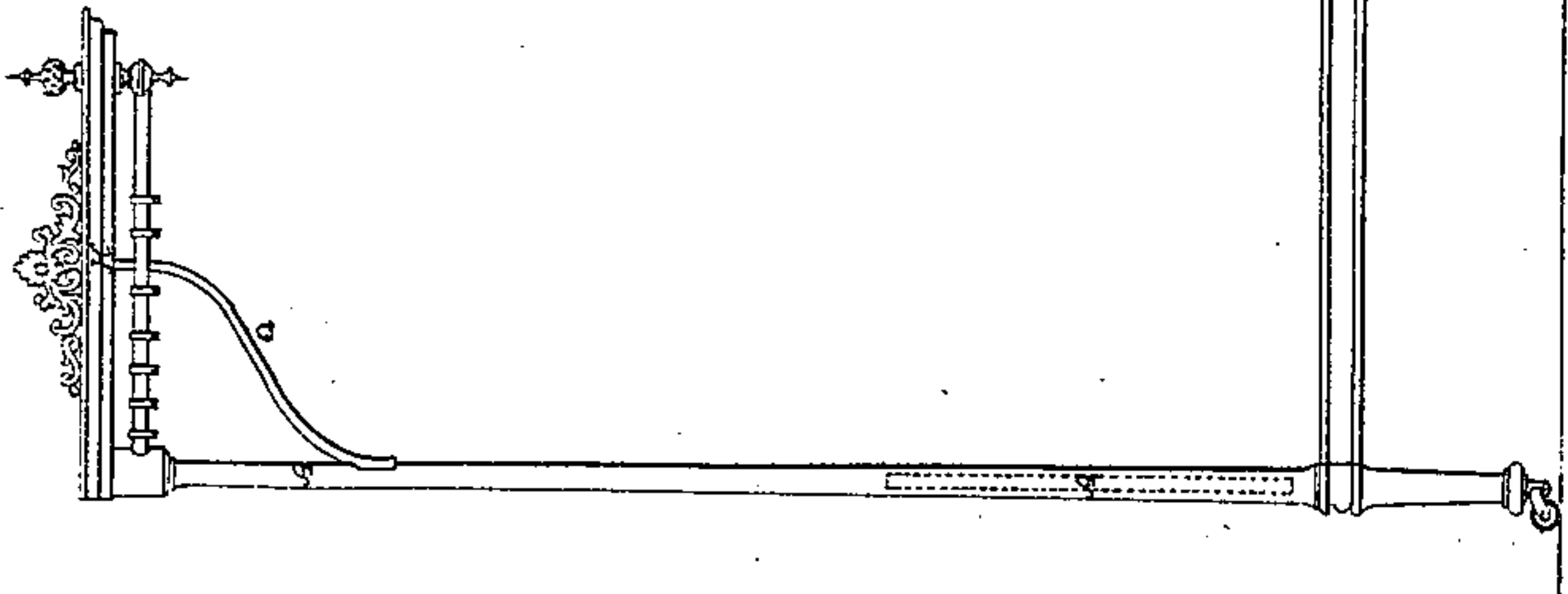


Fig. 1.

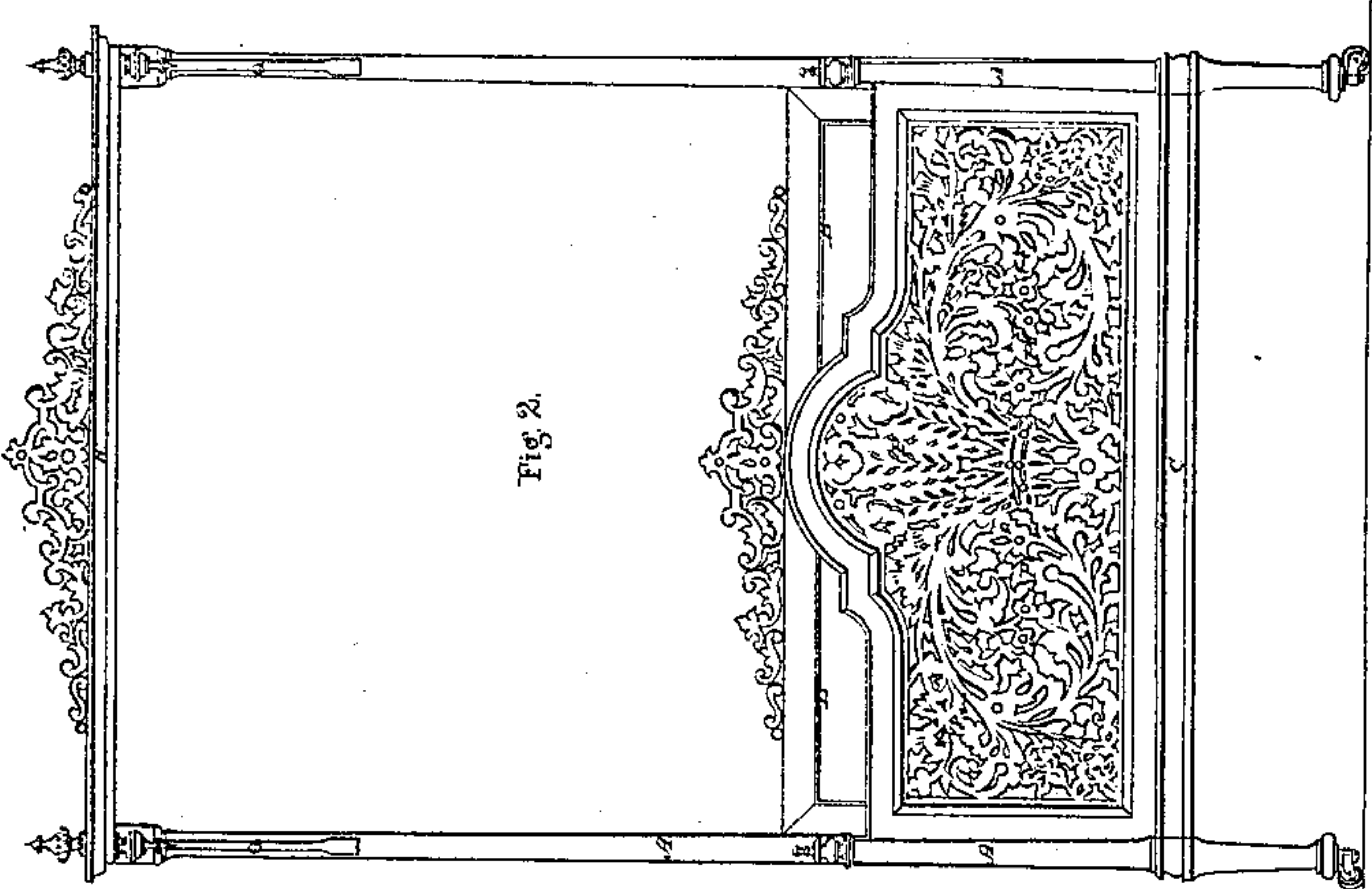


Fig. 2.

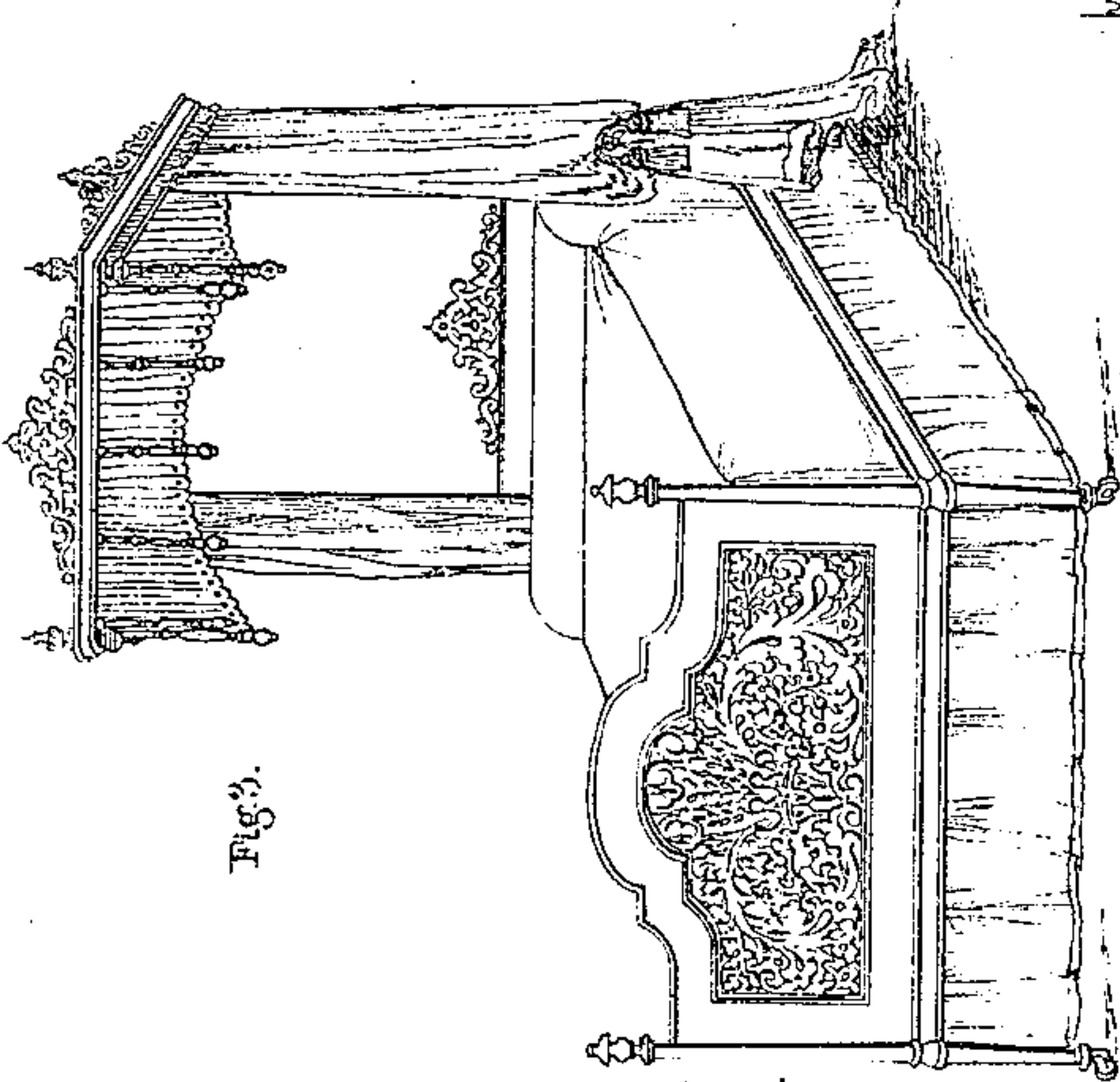


Fig. 3.

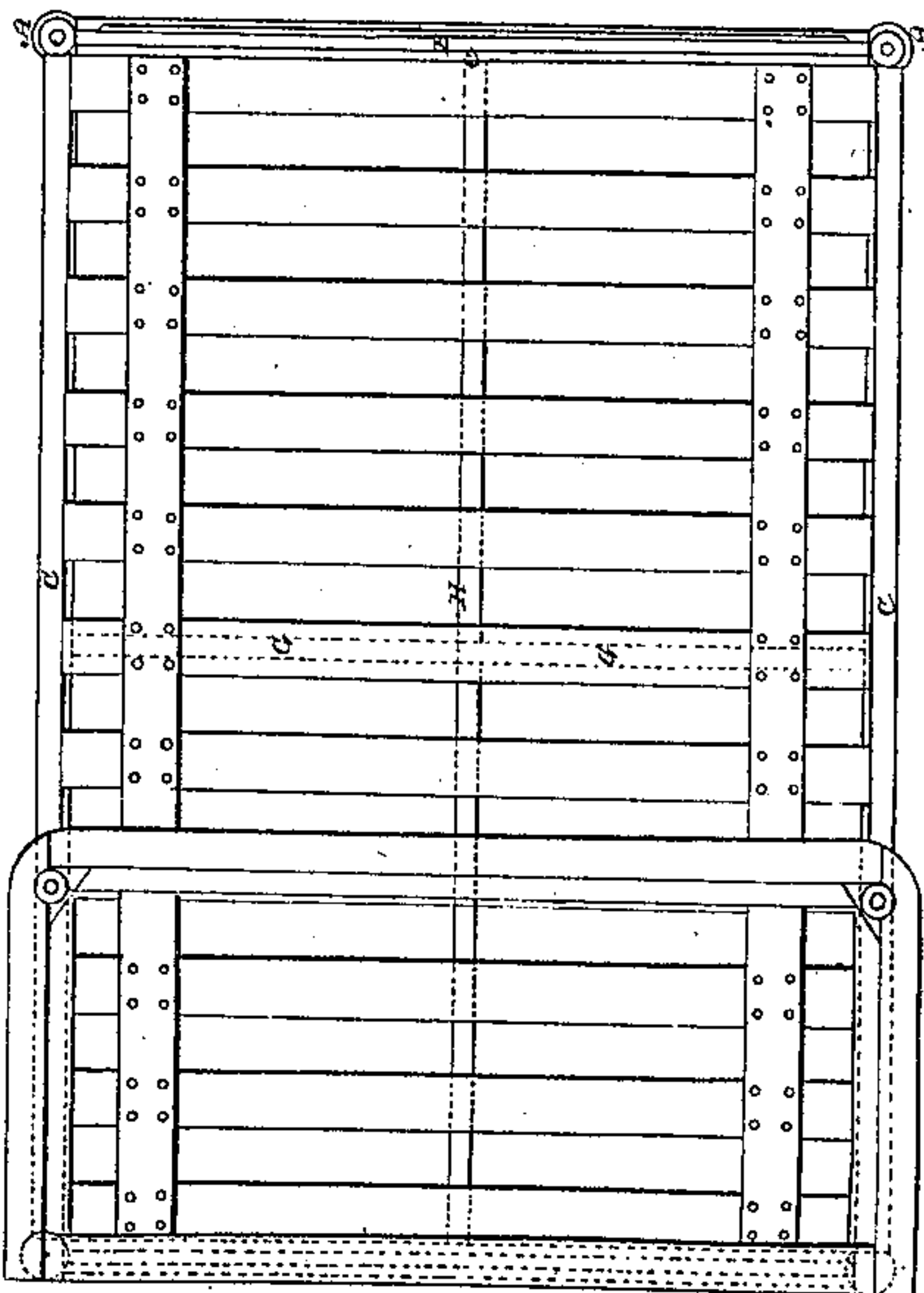


Fig. 4.

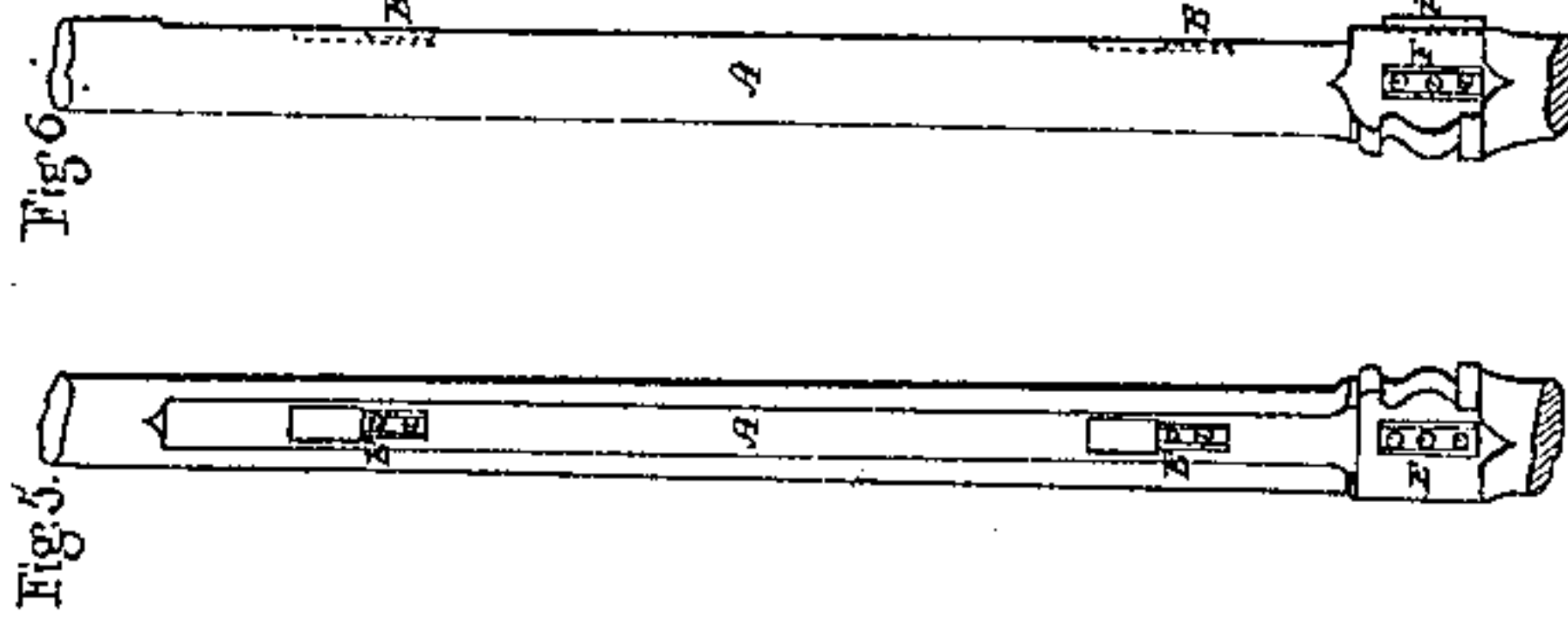


Fig. 5.

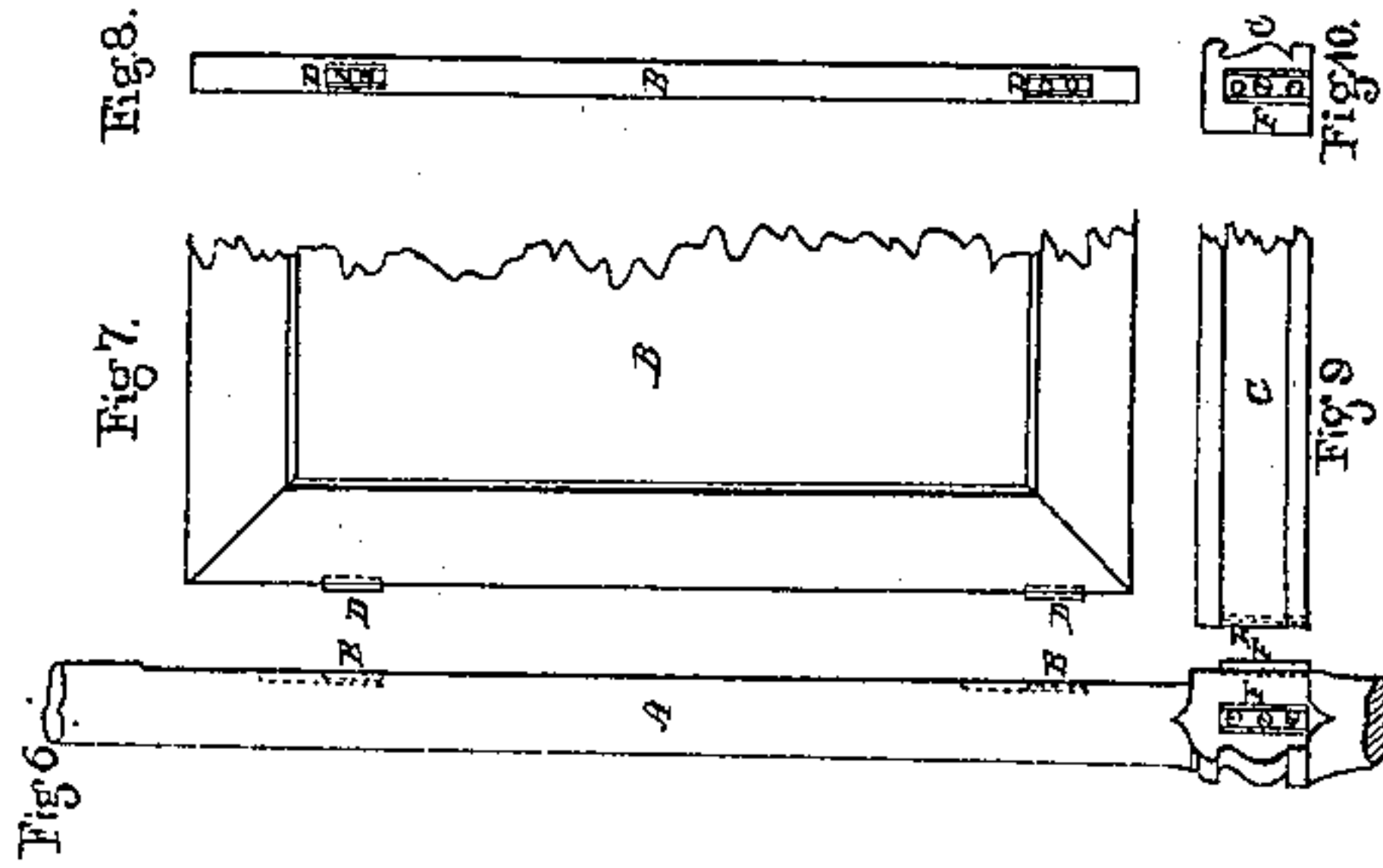


Fig. 6.

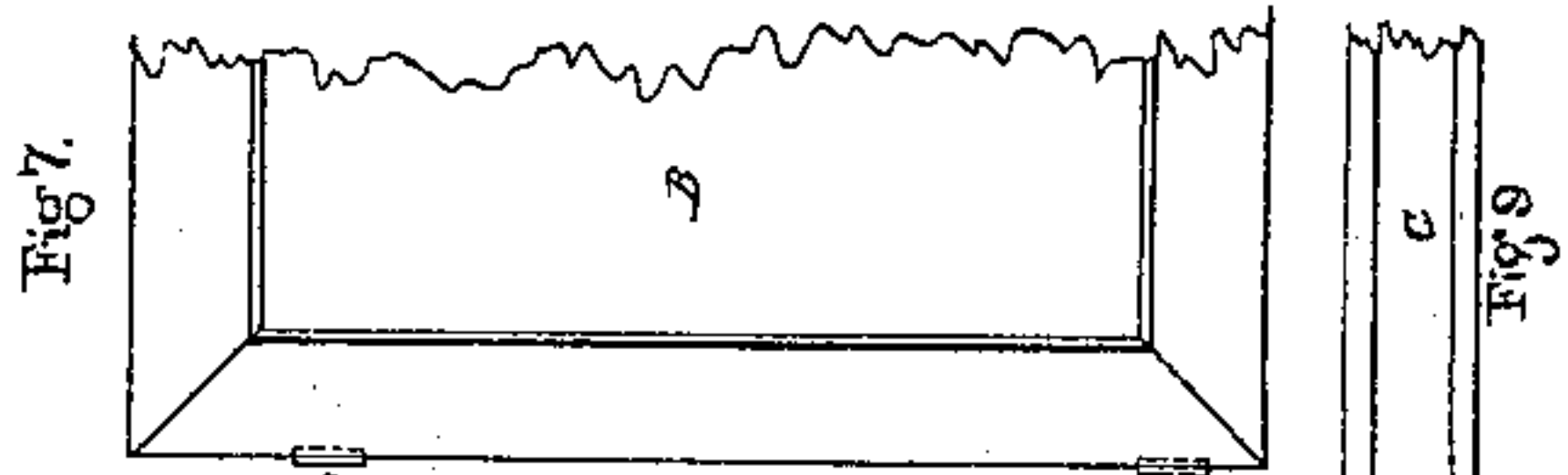


Fig. 7.

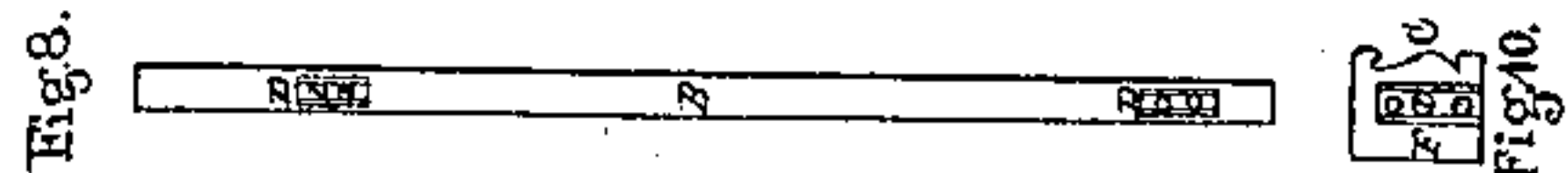


Fig. 8.

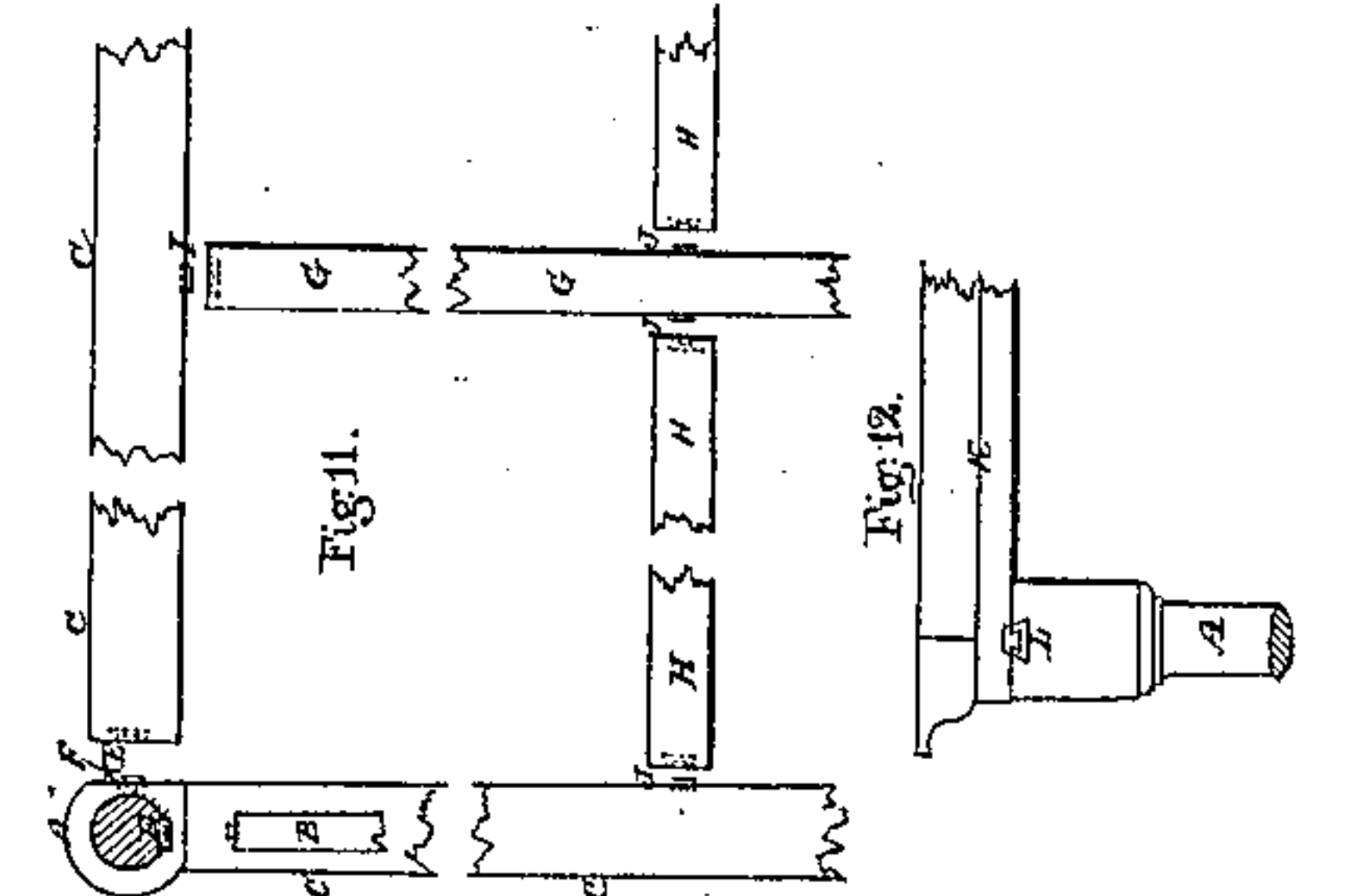


Fig. 9.



Fig. 10.



Fig. 11.

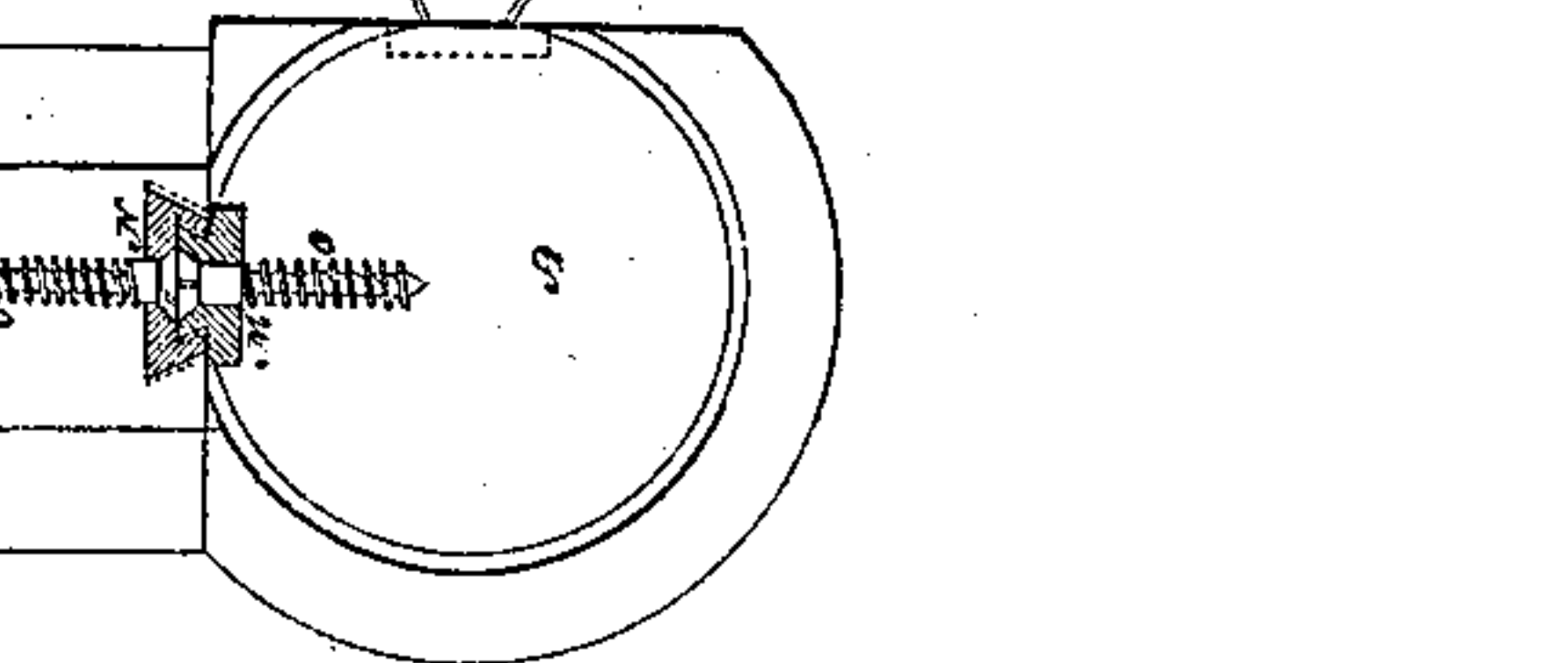


Fig. 12.



Fig. 13.



Fig. 14.



Fig. 15.

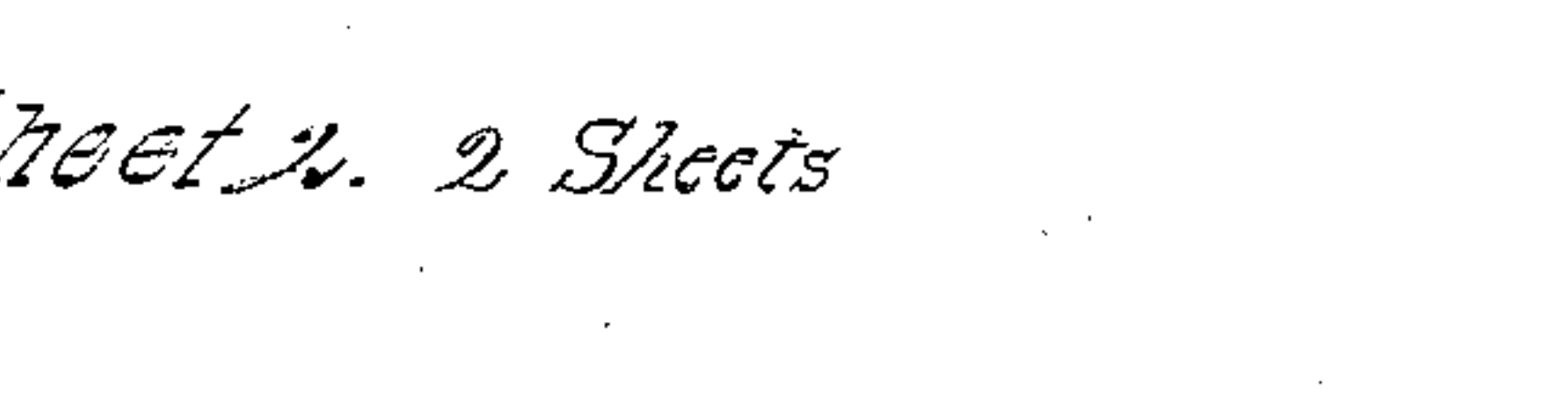


Fig. 16.



Fig. 17.

UNITED STATES PATENT OFFICE.

A. D. BROWN, OF GLASGOW, NORTH BRITAIN.

CONSTRUCTION OF FURNITURE.

Specification of Letters Patent No. 19,127, dated January 19, 1858.

To all whom it may concern:

Be it known that I, ARCHIBALD DOUGLAS BROWN, of Glasgow, in the county of Lanark, North Britain, cabinet-maker, have invented certain Improvements in the Construction of Portable Articles of Furniture, and that the following is a full, clear, and exact description of the principle or character which distinguishes them from all other things before known and of the usual manner of making, modifying, and using the same, reference being had to the drawings hereunto annexed and to the letters and figures marked thereon—that is to say:

This invention relates in the first place to the so constructing chairs and other articles of furniture that they may be packed in separate pieces within a small compass for easy stowage and conveyance; while at the same time great strength is insured at the junctions and peculiar facilities are afforded for taking down and rebuilding or fitting up at pleasure.

As applied to chairs the plan consists in the adaptation of wedges or dovetail joints or modifications thereof of metal to the junction ends of the seat, frame and tops of the legs; the socket being on one piece and the corresponding projection on the other so that a firm joint connection is easily made by slipping the corresponding surfaces into gear. The same arrangement is obviously suited for other articles of furniture such as washstands toilet-tables stools and other articles.

This invention relates secondly to the arranging and constructing beds couches sofas and other articles of furniture chiefly of wood in such manner as to secure all or most of the acknowledged advantages attending the modern system of metallic structures of this nature; at the same time peculiar portability is obtained the several component parts being easily packed in a small compass while when erected the structures possess superior strength.

In constructing a bed according to this invention the main framework is made up of thin and deep frame pieces or bars of wood jointed together at the four corners by means of wedge or dovetail joint pieces. A central longitudinal stretcher bar is passed between the head and foot bars of this frame as a stay the two ends of this stretcher being attached to the head and foot pieces of the main frame by dovetail joints also and the

frame is also additionally stayed transversely by a cross piece at the longitudinal center of the frame all the parts being connected in the same manner by dovetail joint pieces. Either the longitudinal or the transverse stretcher bar may be made in two pieces as may be convenient dovetail joints being required in such case at the point of intersection. The frame so constructed is particularly strong while it is as portable and nearly as light in appearance as an iron frame at the same time possessing all the comfort and elegance of a wooden structure. The pillars or supporting legs are dovetailed upon this frame and the head and footboards are also dovetailed in between the contiguous pillars. The head canopy or curtain supporter beside being dovetailed to the top of the pillars is also sustained by metallic or wooden brackets dovetailed to the pillars and to the canopy framing. The curtain rods or traverse surfaces are likewise dovetailed at each end to this frame. It is obvious that couches sofas and similar articles of furniture are capable of being made on this system with advantage. The dovetailed joint pieces are of brass or composition metal screwed recessed or otherwise attached to the timber details.

The several figures on the two sheets of drawings represent various details of the improved arrangements.

Figure 1 on Sheet 1 of the drawings is a perspective view of a dining or drawing room chair complete showing that the adoption of the new system does not in any way interfere with the external appearance or finish of the work. Fig. 2 is a full size elevation looking on the grooved face of one of the dovetail pieces and Fig. 3 is an end view corresponding. Figs. 4 and 5 are similar views of the corresponding dovetail projection piece. Fig. 6 is a side view of a portion of one of the back standards or leg pieces with a side and end view of one of the seat frame pieces; Fig. 7 is an internal view of a portion of the back and corresponding seat frame piece showing the dovetails for each side piece of the seat frame and Fig. 8 is a plan of one of the seat frame corners as disconnected. Fig. 9 is an internal elevation and side view of a chair arm and Fig. 10 is a complete internal elevation of an arm chair. Fig. 11 is a plan of a bed frame joint disconnected. Fig. 12 is a plan of the top of a table pedestal and

Fig. 13 is an elevation of the pedestal showing the two dovetails for the adjustment of the table top and Fig. 14 is a plan or horizontal section of the lower part of the pedestal showing the leg dovetails. One of the legs is represented as fitted in its proper position and another is entirely removed and the third is shown at Fig. 15 as just disconnected from the pedestal. Fig. 16 is an inside view of one of the legs. Fig. 17 is an inside plan and edge view of the projecting dovetails as a catch for effecting the junction of the different sections of large tables and Fig. 18 is an end view of the catch corresponding. Fig. 19 is a similar plan and end view of the recessed dovetail. Fig. 20 is a plan of the upper side of the framing for carrying the top and attaching the legs of a washhand stand and Fig. 21 is a plan of the table top reversed.

In constructing chairs in this way the tops of the front legs and the back standards have each a projecting dovetail wedge piece A of brass or other suitable metal slightly sunk into the wood and screwed down from the face. These dovetail wedge pieces are set with their narrow ends up so that their two side pieces of the frame are capable of easy connection from the top side. Each end of the side pieces has a corresponding sunk dovetail wedge piece B dovetailed also externally and sunk to its full depth in the wood and secured by screws like the others. These pieces are put into their recesses in the wood from beneath and as they do not reach quite through the frame piece as at C no mark is left on the top of the frame. The dovetail or sectional wedge thus prevents lateral separation while the longitudinal wedge admits of tightening up by pressing or gently striking the side pieces from above. This binds the whole seat frame well together when wanted for use but when wanted for conveyance the parts are easily separated into six separate details which can be stowed away with facility.

When arms are to be put on the chairs precisely the same system is pursued as shown at A B in Figs. 9 and 10 each arm having of course two dovetail connections one at each end for the seat frame and back. The bed frame joint for connecting the longitudinal to the transverse pieces in Fig. 11 is precisely similar.

In fastening the tops of tables on to their pedestals each top of the latter has one or more sunk dovetail wedge pieces D and the underside of the table has corresponding projections so that the top can be easily attached by sliding it laterally, when inserting or gearing the wedges and to attach the feet or legs the base of the pedestal is surrounded with projecting dovetails E corresponding to sunk pieces F on the upper inner face ends of the legs.

In Figs. 17, 18 and 19 I have shown my improved substitute for the common table catch. The piece of brass G which is screwed to one of the table sections has cast upon it the short projecting dovetails H which is made just long enough and wide enough at its wide face to enter the wide end J of the slot in the corresponding fastening piece K. In this way the connection is made by first entering the projection H into the slot J and sliding one of the pieces so as to bring the narrow part L of the slot into gear with the part H. This latter form is adopted in the washhand table Figs. 20 and 21 where the projection is screwed to the underside of the table top, while the frame for carrying the legs has corresponding sunk pieces. The legs are attached in a similar way and the ledge surrounding the table top is also fastened on in like manner. It will be obvious to the practical maker that various forms of these wedge dovetail connections may be used. Conical sockets and pins for example may be adopted instead of the angular pieces shown in the drawings, the essential object being the obtainment of a secure and easily adjustable wedge action for binding together the details of furniture.

Fig. 1 on Sheet 2 of the drawings is a side and Fig. 2 is a front elevation of a bedstead constructed according to this invention. Fig. 3 is a perspective elevation of the bedstead with curtains and bedding complete and Fig. 4 is a plan corresponding to Figs. 1 and 2. These 4 figures show the external appearance of the bedstead framing and its freedom from any outward indication of the mode in which the parts are jointed together.

Figs. 5 and 6 are respectively inside and front views of one of the corner posts A at the head of the bed, Figs. 7 and 8 are respectively front and edge views of the head board B at the head of the bed and Figs. 9 and 10 are front and end views of one of the horizontal bedstead frame pieces C. The head board B is secured to the two head corner posts A by means of metallic dovetail wedge pieces D which enter metallic sockets E of corresponding form fitted into recesses formed in the sides of the corner posts.

Fig. 11 is a plan representing detached portions of the horizontal framing of the bedstead. The corner posts A are squared upon two sides at the points at which the horizontal bars C are attached to them the attachment being effected by means of the metallic dovetail wedges and sockets F which are screwed into recesses formed in the junction surfaces of the frame pieces. The bedstead frame is strengthened by means of central bars G, H, and it is preferred to have the transverse bar G in a

single piece which is jointed to the longitudinal frame bars C by dovetail wedges and sockets at I. The longitudinal central bar H is in two pieces each of which is
 5 jointed to the end cross bar C and to the central cross bar G by dovetail wedges and sockets at J thus forming a very stiff frame.

In Fig. 12 is represented the manner in which the canopy frame K is affixed to the
 10 head corner posts A namely by means of metallic dovetail wedges which enter corresponding metallic sockets fitted into recesses at L in the tops of the corner posts A.

Fig. 13 is a front and Fig. 14 an end view
 15 of the metallic socket employed in the several joints of the bedstead framing and Fig. 15 is a front and Fig. 16 an end view of the metallic dovetail wedge fitting into the socket

Fig. 17 is a horizontal section through one
 20 of the corner joints of the bedstead framing and is drawn full size. Recesses are formed in the junction surfaces for the metallic wedges M and sockets N the wedges
 25 in this instance being affixed to the upright corner post A while the sockets are fixed to the horizontal frame bars C. These wedges and socket pieces are secured in their respective places by the screws O.

The cross board P at the foot of the bed
 30 is fixed to the corner posts A in the same manner as the head board B as represented in Figs. 5, 6, 7 and 8.

The canopy frame K is additionally supported by side brackets Q which may be
 35 either of wood or metal according to the degree of lightness or strength required. The brackets are fixed to the posts A by means of dovetail wedge and socket pieces;
 40 and the canopy frame K is fixed upon the

tops of the brackets and corner posts in a similar manner.

The nature of the said invention having now been described and particularly ascertained as well as the manner in which the
 45 same may be used or carried into effect it may be observed in conclusion that I am aware that the application of metallic joints to the several pieces of furniture also, that the combination of dovetails and staples and
 50 of tenons and mortises is old. I therefore disclaim the application of metallic joints to the several parts of furniture, whether they consist in dovetails and staples or tenons and mortises. But
 55

What I do claim as new and desire to secure by Letters Patent is—

Connecting together the several parts of chairs and of other articles of furniture by the employment of metallic differentially
 60 slotted dovetail pieces when the said dovetail pieces are secured into recesses in the wood or material of the furniture by means of screws passing through the bottom of
 65 said slots and the center or thereabout of the parts—in combination with wedge dovetailed projections secured also by means of screws, when said screws pass through the central line thereof, substantially in the
 70 manner as herein described.

In witness whereof I the said ARCHIBALD DOUGLAS BROWN have hereunto set my hand the fifth day of January one thousand eight hundred and fifty seven.

ARCHIBALD DOUGLAS BROWN.

Signed by the said ARCHIBALD DOUGLAS BROWN in the presence of—

J. HENRY JOHNSON,
 JOHN KENNEDY.