Sept. 25, 1923. 1,468,786

J. S. KNECHTEL

CABINET JOINT

Filed Feb. 4, 1922

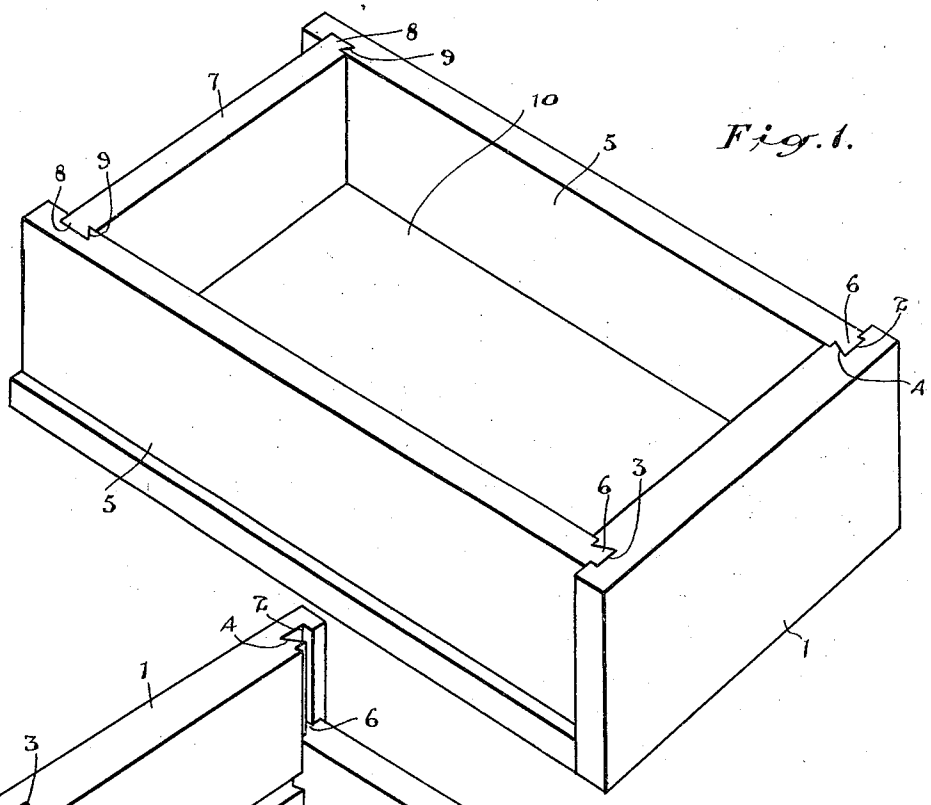

Fig. 1.

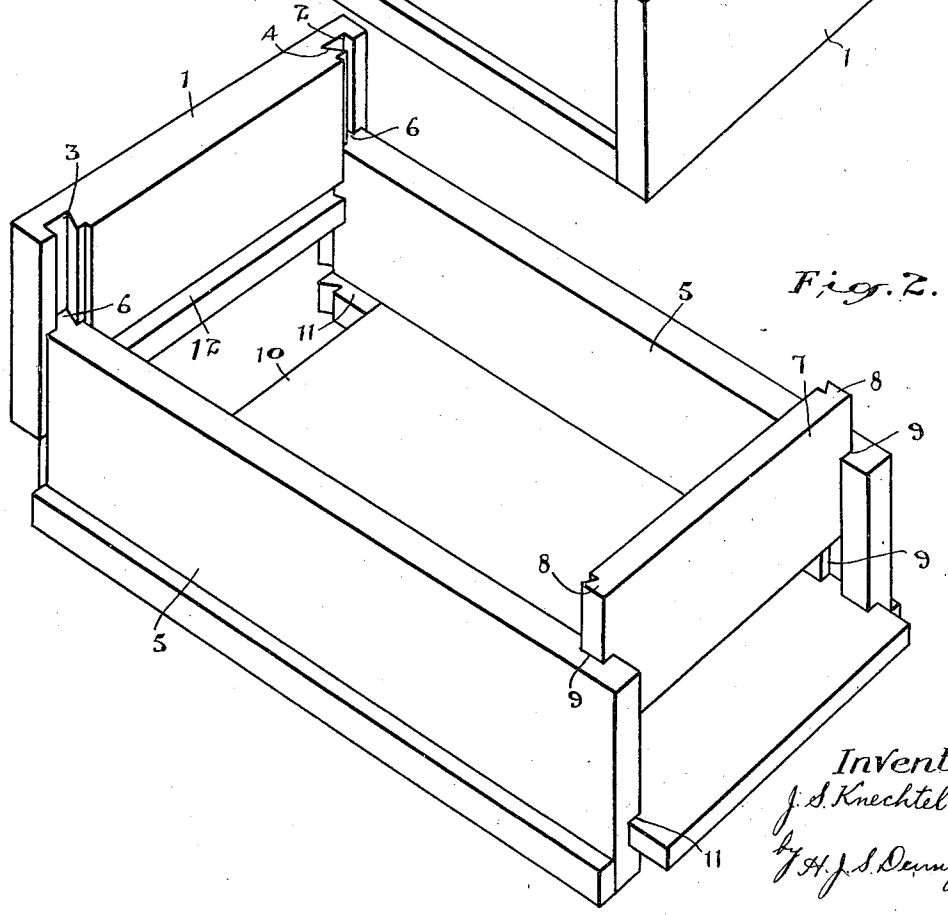

Fig. 2.

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CABINET JOINT.

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To all whom it may concern:

Be it known that I, JACOB S. KNECHTEL, a subject of the King of Great Britain, and resident of Hanover, county of Gray, Province of Ontario, in the Dominion of Canada, have invented certain new and useful Improvements in Cabinet Joints, described in the following specification and illustrated in the accompanying drawings, that form part of the same.

The principal objects of this invention are to devise a form of joint particularly adaptable for drawer construction which will be as strong and durable as the dovetailed joint and may be produced as rapidly as the ordinary rebated joint thereby effecting a very great saving in cost of manufacture of cabinet made goods.

A further object is to devise a joint which will most effectively effect the reinforcement of the outward end or exposed member and a still further object is to reduce the cost in the maintenance of tools and reduce the loss of time necessary in sharpening and replacing tools.

The principal feature of the invention consists in the novel formation of the rebate with an undercut longitudinal edge adapted to receive a projecting correspondingly shaped portion of the adjoining member to engage said member in locking contact.

In the accompanying drawings Figure 1 is a perspective view of a drawer constructed according to this invention.

Figure 2 is a perspective view showing the parts of the drawer in the process of being assembled.

On reference to the accompanying drawings it will be seen that the front member 1 of the drawer is formed with a groove or rebate 2 in the inner face extending across the grain adjacent to the outer end. This groove is formed preferably with the face 3 parallel with the outer face of the member and the inward side face 4 undercut so as to be in acute angular relationship to the face 3.

This rebate is formed in a very simple manner with rotary saws which cut in from the back face of the member and therefore cut across the grain in the usual cross cut way and the saws are therefore not subject to the very hard usage to which saws or cutters are put in cutting the end rebate which is utilized in the ordinary cheap forms of drawer structures.

The side members 5 of the drawer are formed with the tongue portions 6 of a corresponding shape to the rebates 2 and the tongues are inserted into the rebates and when so inserted it will be seen that the parts lock securely together throughout their entire length irrespective of any other element and they therefore require no other fastening.

The rear end member 7 of the drawer is preferably formed with an end tongue 8 of corresponding shape to the tongues 6 of the side members and rebates 9 are formed in the inner sides of the side members to receive such tongues and when the rear end is slipped into the sides they will be locked securely from spreading apart without the necessity of using nails or screws and the sides will therefore also be reinforced throughout their width and prevented from buckling or warping.

The bottom 10 is inserted in the grooves 11 in the inner face of the side members and the front member 10 is preferably formed with a transverse groove 12 to receive the end of the bottom.

It will therefore be seen that when the front end is placed upon the two sides in the manner shown in Figure 2 and driven into place completely closing the end the sides will be locked securely throughout the entire depth of the front and the front will be reinforced against warping throughout its entire depth by the dovetailed shape of the tongues.

The joint thus produced will be in effect much more rigid and secure than an ordinary dovetailed joint.

When the bottom is slid into place between the sides and the rear end piece 7 is inserted into the rebates in the sides and driven home, the whole structure will be securely locked together and cannot possibly come apart.

The joint will preferably be glued so as to prevent any possibility of moving but glue is not absolutely necessary nor is any other form of fastening required.

The joint thus described is extremely simple, both in the matter of the tools necessary for making it and in its actual manu-

facture and is more efficient when constructed than that form of joint which has for so many years been the accepted joint for high class cabinet work, namely the ordinary dovetailed joint.

I have shown the rear end of the drawer dovetailed according to my new method but it will be understood that I may in cheaper grades of furniture simply use an ordinary straight piece and fasten it with glue or nail it or any other desirable means of fastening the rear end may be used without in any way limiting the use to which the joint may be put. The essential feature of the invention lies in the undercut of a groove in one member to receive a correspondingly cut tongue upon the adjoining member.

I have shown the preferred form of joint with the undercut face 4 arranged in actual angular relationship to the face 3 and the face opposite to the undercut face is shown at right angles to the face 3, but it must be understood that I may also undercut the side of the groove opposing the face 4 which might further enhance the security and strength of the joint.

What I claim as my invention is:—

In a cabinet joint, a board having a groove cut thereacross in one face, the inward side of the groove being arranged at an acute angle with the said face of the board, the bottom of the groove being parallel with the face of the board and the outward side of the groove being at right angles to the bottom and parallel with and spaced from the end face and terminating intermediate of the depth of the inward side of the groove, and a board having an acute angular notch in one side at the end and a right angular notch in the opposite side at the end, the acute angular notch extending longitudinally of the board a greater distance than the right angular notch, the wood between the two notches forming a tongue to engage the groove in the mating board.

JACOB S. KNECHTEL.