Office de la Propriété Intellectuelle du Canada
Un organisme d'Industrie Canada

Canadian Intellectual Property Office
An agency of Industry Canada

CA 2317464 A1 2002/02/17

(21) 2 317 464

(12) DEMANDE DE BREVET CANADIEN
CANADIAN PATENT APPLICATION

(13) A1

(22) Date de dépôt/Filing Date: 2000/08/17

(41) Mise à la disp. pub./Open to Public Insp.: 2002/02/17

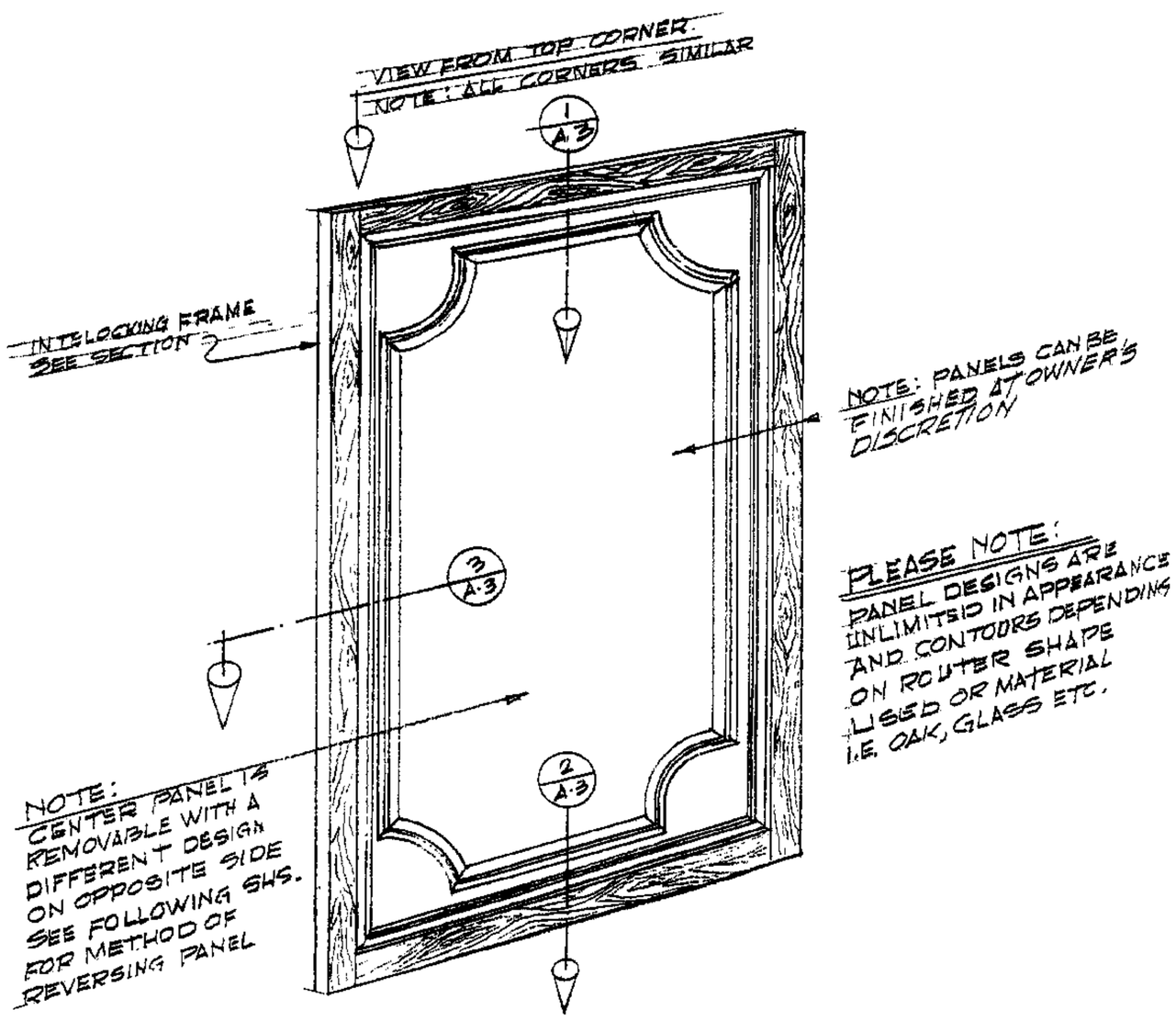
(51) Cl.Int.^{7}/Int.Cl.^{7} E06B 7/28, A47B 77/00, E06B 3/70

(71) Demandeurs/Applicants:
BIRMINGHAM, BILL, CA;
BROWN, PAUL, CA

(72) Inventeurs/Inventors:
BIRMINGHAM, BILL, CA;
BROWN, PAUL, CA

(54) Titre : ARMOIRE DE CUISINE AVEC TRAVERSES ET MONTANTS ET PORTES DE CHARGEMENT DOTEE D'UN PANNEAU EN RELIEF INTERCHANGEABLE ET REVERSIBLE

(54) Title: RAIL AND STILE KITCHEN CABINET AND UTILITY DOORS WITH INTERCHANGEABLE/REVERSIBLE RAISED PANEL



PERSPECTIVE OF INTERCHANGEABLE / REVERSIBLE CABINET & UTILITY DOOR

(57) Abrégé/Abstract:
Rail-and-stile kitchen cabinet and utility doors have a panel section, either flat or raised permanently contained (but generally free to move to accommodate humidity changes) within the rail-and stile frame. This system does not work for either rectangular raised panel doors or cathedral raised-panel doors.

Abstract

RAIL AND STILE KITCHEN CABINET AND UTILITY DOORS WITH INTERCHANGEABLE/REVERSIBLE RAISED PANEL

Rail-and-stile kitchen cabinet and utility doors have a panel section, either flat or raised permanently contained (but generally free to move to accommodate humidity changes) within the rail-and-stile frame. This system does not work for either rectangular raised-panel doors or cathedral raised-panel doors.

The applicant proposes a rail-and-stile kitchen cabinet and utility door having an INTERCHANGEABLE/REVERSIBLE-RAISED PANEL. For a door with a RECTANGULAR RAISED PANEL, interchanging/reversing would be achieved by removing the keyway embedded in the outside frame of the door, as per typical side section illustrated in cross section 3A3 on sheet A-3 in the outside frame of the door, illustrated on sheet number A-2, thus allowing the raised panel to pass freely out of the back of the door frame. Note: the top rail has a non-removable keyway, as illustrated at section 1A3 on sheet A-3 Also see sheet number A-4 (Partial Perspective of Notch) regarding description of non-removable keyway forming the notch which holds the top of the side keyways in. The bottom keyway holds the bottom of the side keyways secure.

The proposed system would allow for the insertion/removal of raised panels constructed form MDF, solid wood, glass, bevelled glass, moulded plastics. metals. or any material that can be fitted into the rail-and-stile grooves. This would provide for easy replacement of panels in the event of their damage, or to accomplish an inexpensive design and/or colour change.

WE CLAIM:

1. A door system,

said door system comprising a frame and a panel and at least one removable key for retaining said panel in said frame,

same frame comprising a top member, a bottom member and first and second side members,

one of said top, bottom and first and second side members comprising a panel slot for receiving an edge of said panel, the other of said top, bottom and first and second members including an alignment recess for receiving respective edges of said panel, and wherein the member opposite said member comprising a panel slot, having a keyway for receiving said key.

2. The door system of claim 1 wherein said system comprises at least one addition key and at least one of said top, bottom, first and second side member which is not either the member having a panel slot or the member opposite said member having a panel slot, also has a keyway for receiving said at least one additional key.

3. The door system of claim 1 wherein one of said members includes a panel slot and the other of said members include a keyway and said system includes three keys.

4. The door system of claim 1 wherein said alignment recess comprises first and second abutment surfaces.

5. The door system of claim 4 wherein said keyway comprises a slot in said second abutment surface.

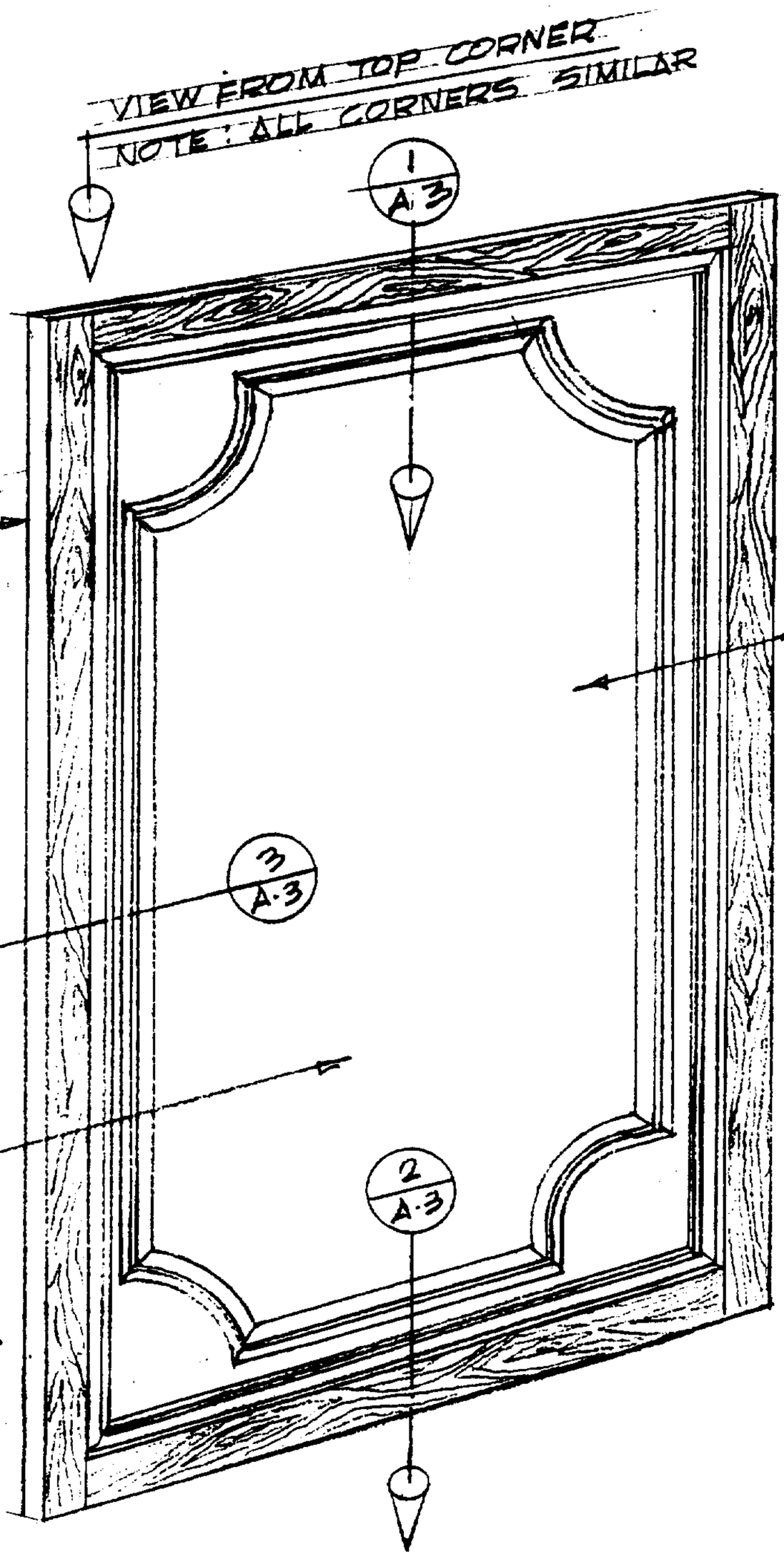
6. The door system of claim 4 wherein said keyway is located in said first abutment surface adjacent to said panel.

7. The door system of any preceding claim wherein said panel has a finished front and finished back so that said panel can be reversed.

8. The door system of any preceding claim wherein the door system comprises at least two panels and said panels are interchangeable.

9. The door system of any preceding claim wherein there is an interference fit between said key and said keyway.

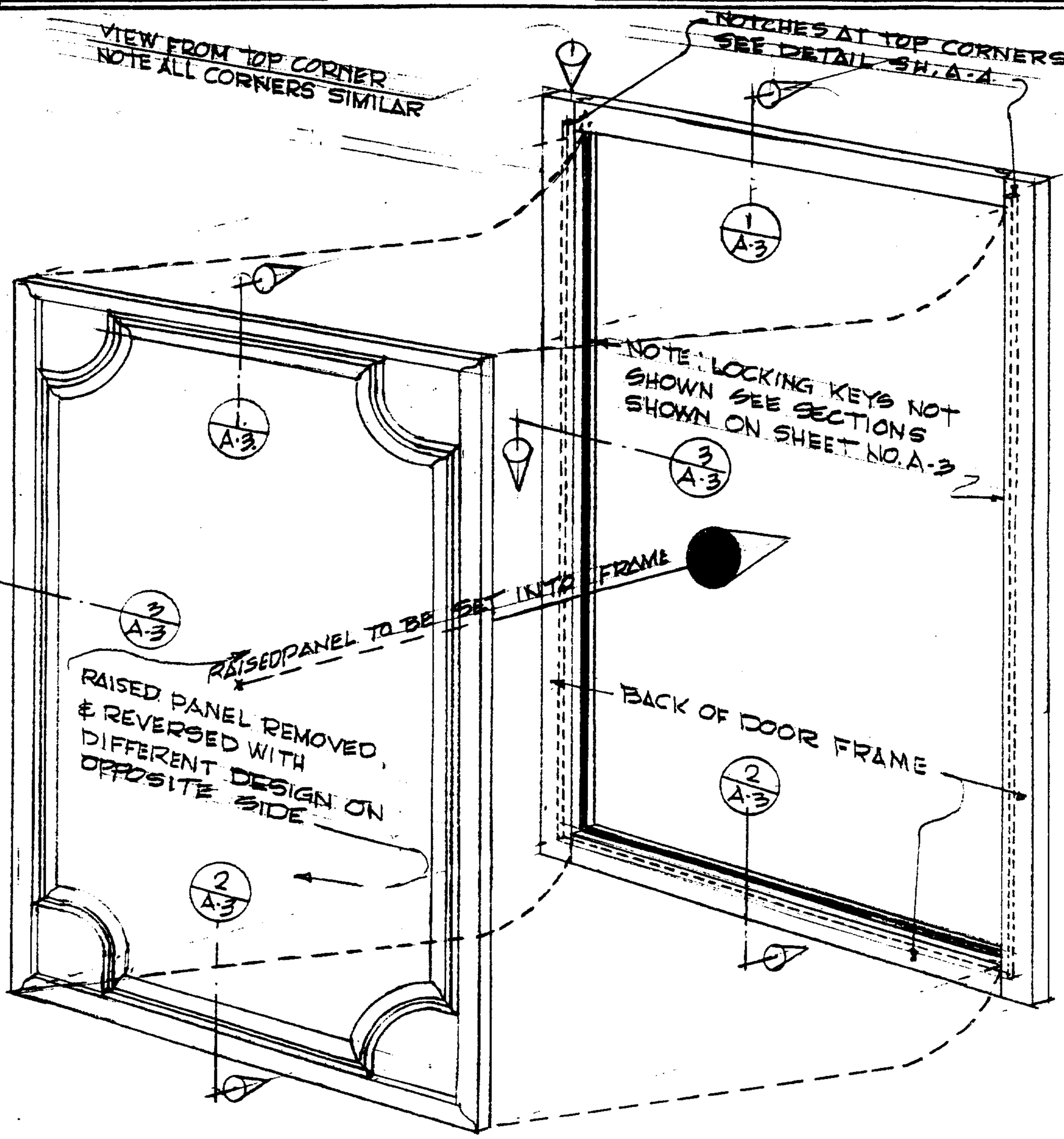
10. The door system of claim 3 wherein said panel slot is in said top member and each of said first and second side members include a notch adjacent said top member to accommodate an end of said key received within said keyway of said first and second side members.



PLEASE NOTE:
PANEL DESIGNS ARE UNLIMITED IN APPEARANCE AND CONTOURS DEPENDING ON ROUTER SHAPE USED OR MATERIAL I.E. OAK, GLASS ETC.

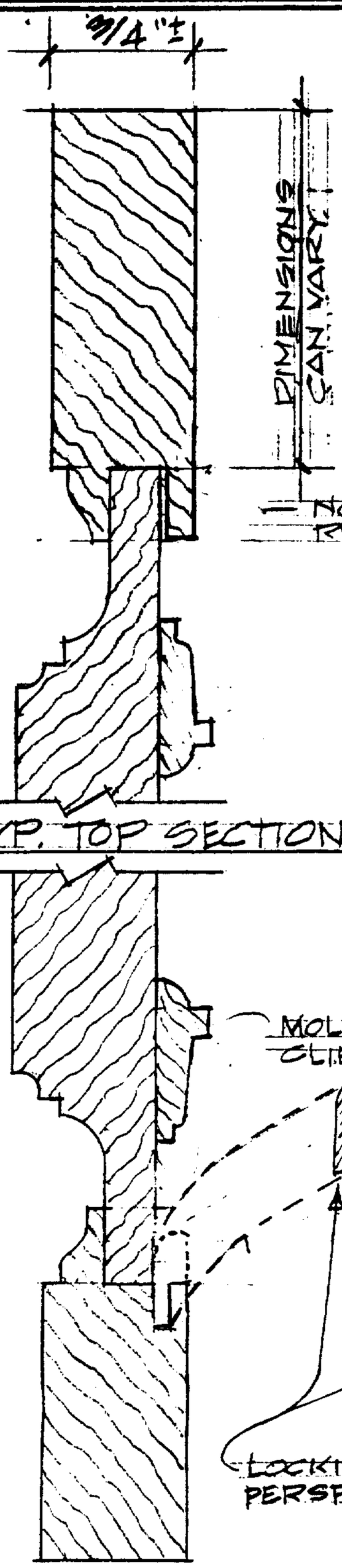
PERSPECTIVE OF INTERCHANGEABLE / REVERSIBLE CABINET & UTILITY DOOR

SHEET NO. A-1.

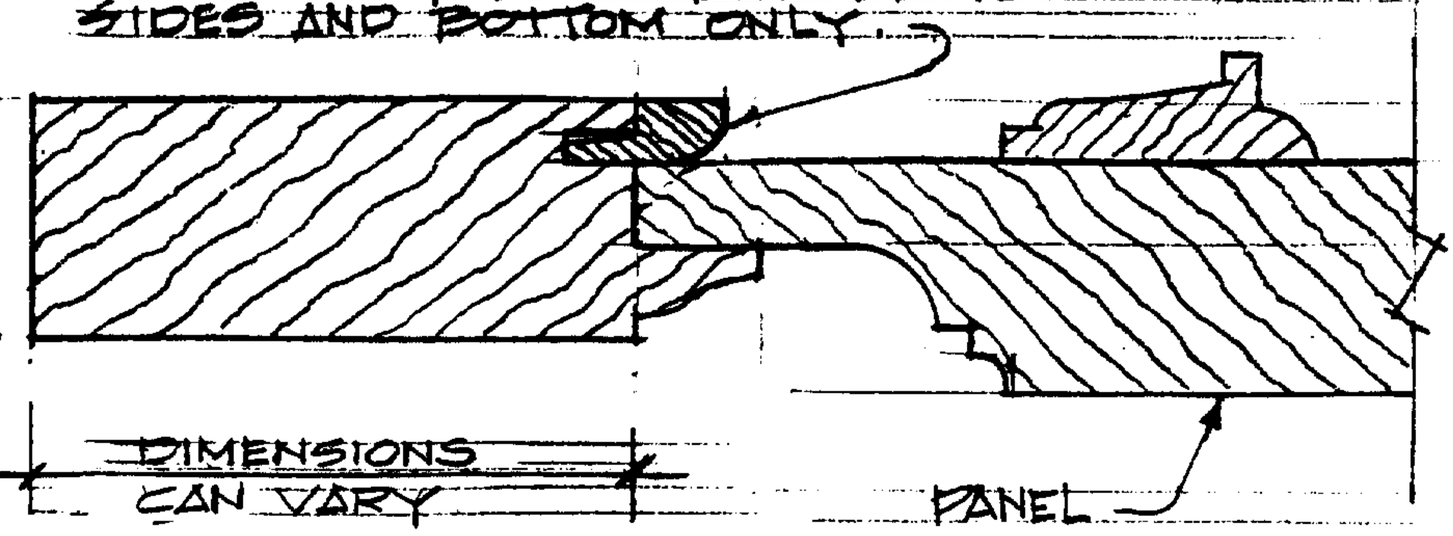


PERSPECTIVE OF RAISED PANEL REMOVED, REVERSED & READY FOR INSTALLATION INTO FRAME

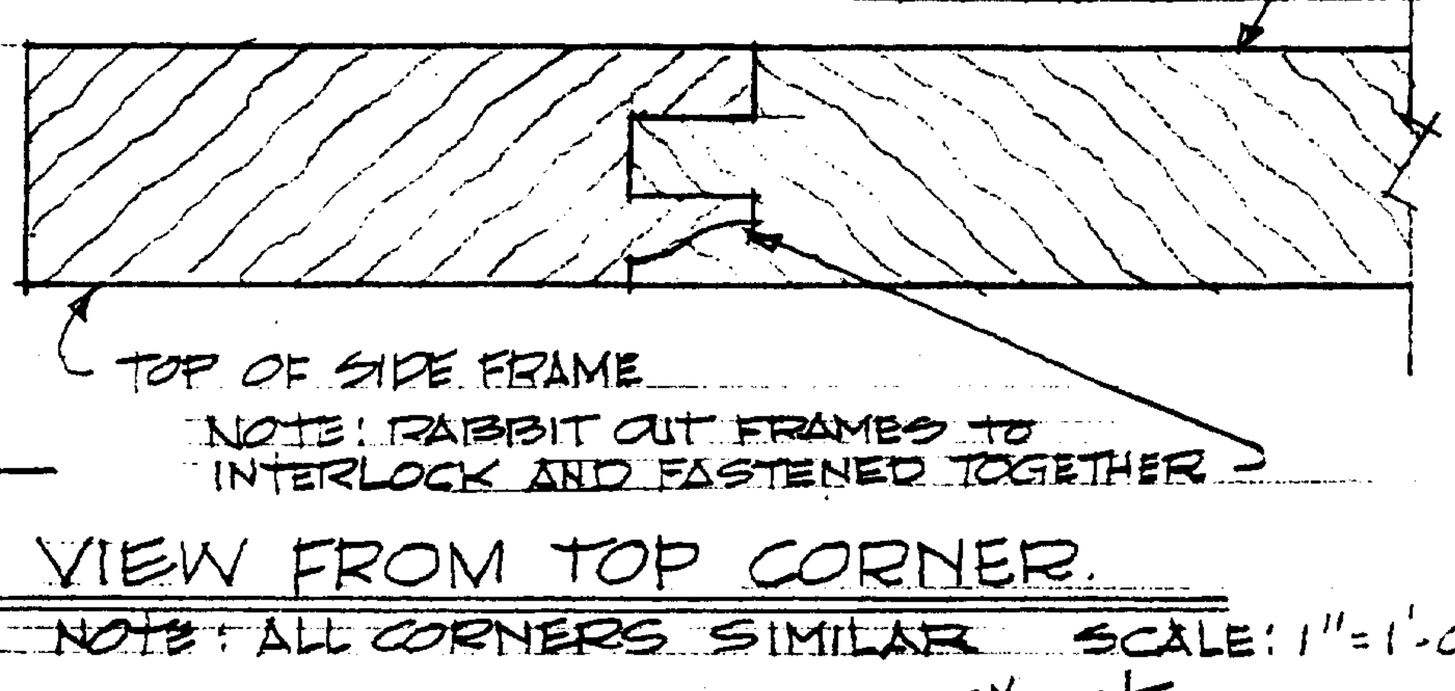
SHEET NO. A-2



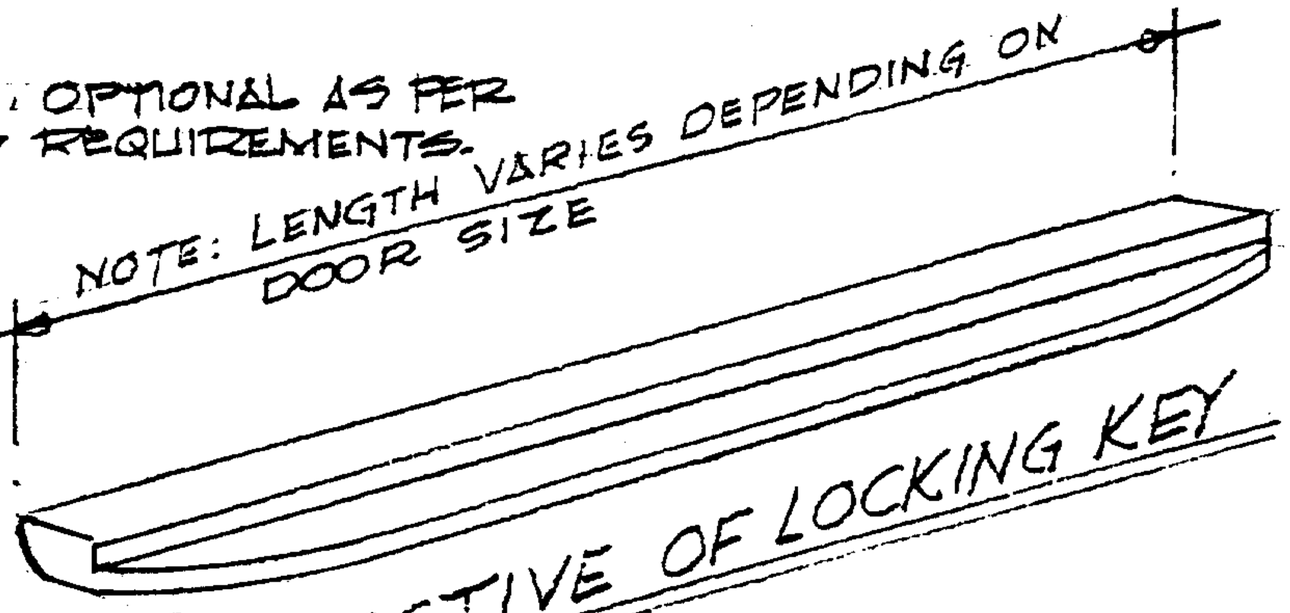
TYP. TOP SECTION (1 / A-3)



TYPICAL SIDE SECTION (3 / A-3)
SCALE: 1" = 1'-0"



VIEW FROM TOP CORNER.
NOTE: ALL CORNERS SIMILAR SCALE: 1" = 1'-0"

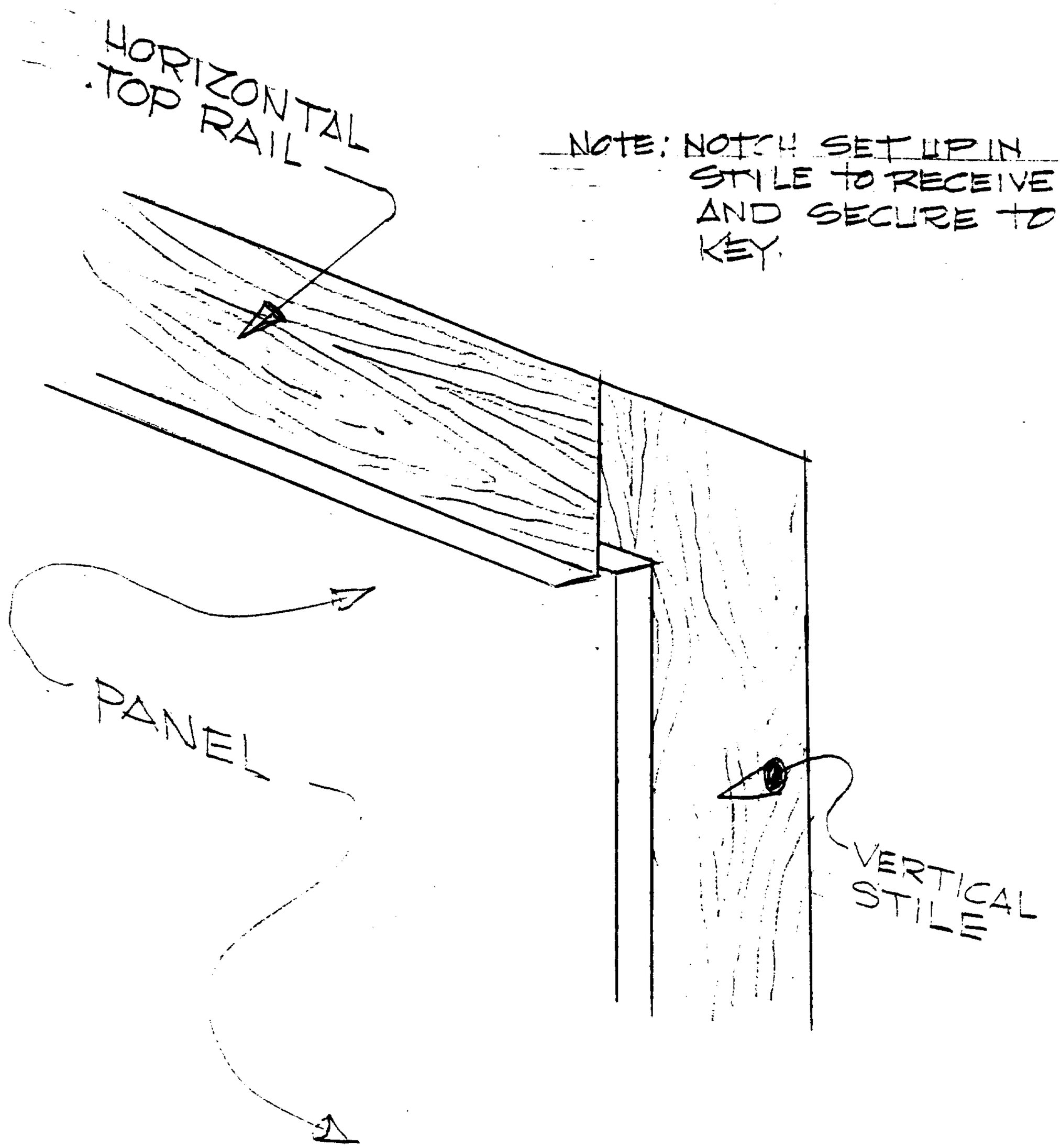


PERSPECTIVE OF LOCKING KEY

NOTE:
MATERIAL AND DESIGN OF PANELS ARE OPTIONAL AS PER CLIENTS PREFERENCES I.E. OAK, GLASS ETC

TYP. BOTTOM SECTION (2 / A-3)
SCALE: 1" = 1'-0"

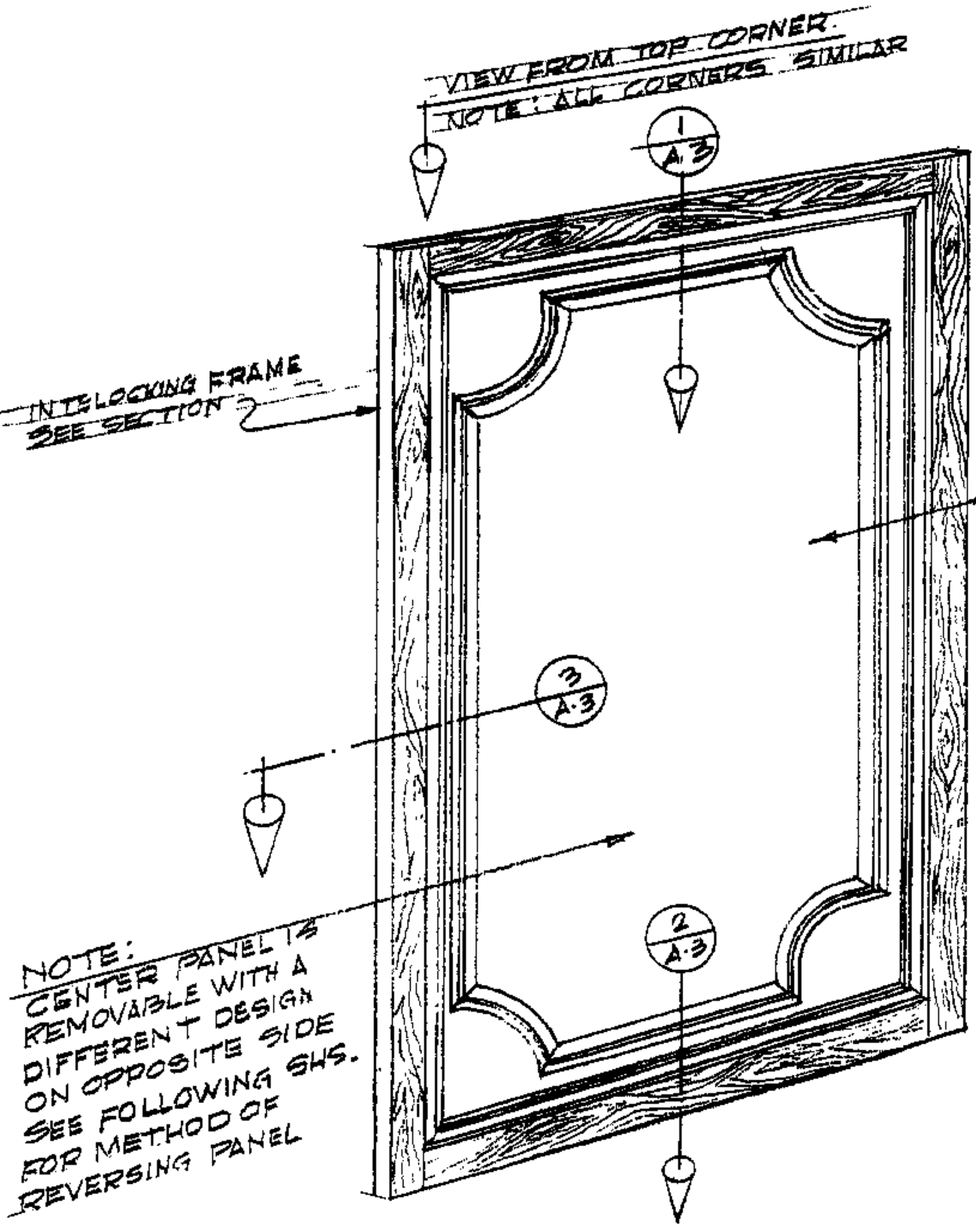
SHEET NO. A-3.



NOTE: NOTCH SET UP IN STILE TO RECEIVE AND SECURE TO KEY.

PARTIAL PERSPECTIVE OF NOTCH

SHEET NO. A-4.



PLEASE NOTE:
PANEL DESIGNS ARE
UNLIMITED IN APPEARANCE
AND CONTOURS DEPENDING
ON ROUTER SHAPE
USED OR MATERIAL
I.E. OAK, GLASS ETC.

PERSPECTIVE OF INTERCHANGEABLE / REVERSIBLE CABINET & UTILITY DOOR