

162 and 163 HANDRAIL BRACKET

IVES NO. 162 & 163 ADJUSTABLE HANDRAIL BRACKET

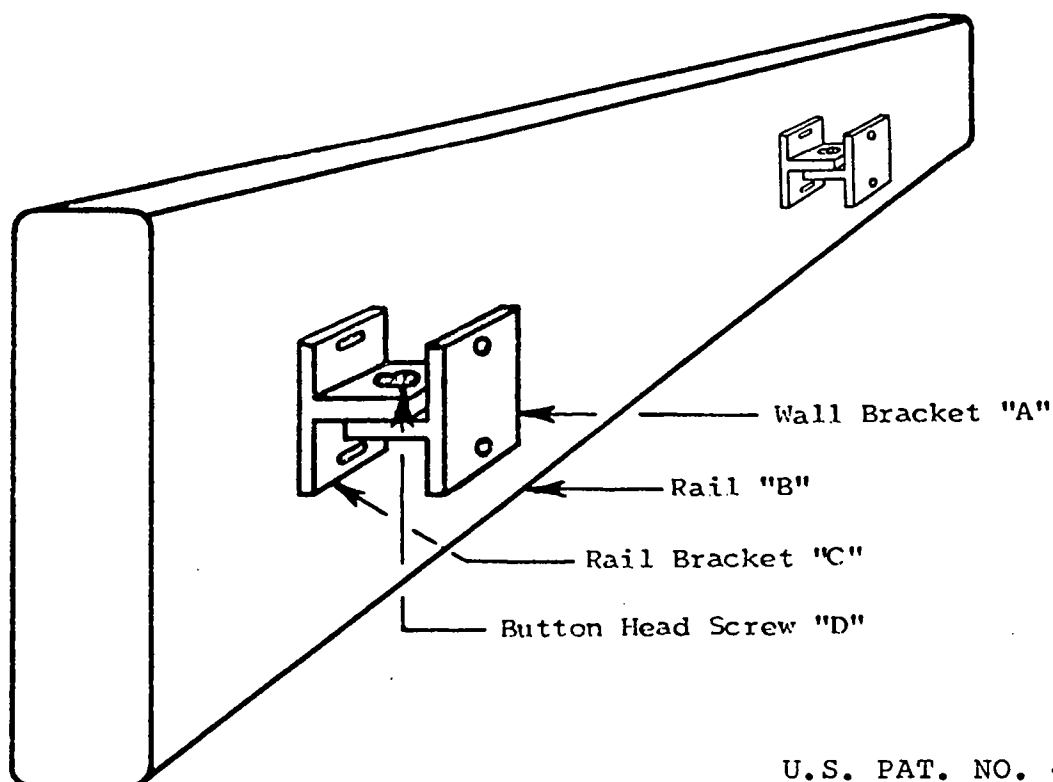
INSTALLATION INSTRUCTIONS

Tools required: 9/64" Drillbit, Hand Drill, No. 3 Point Phillips Screwdriver, 5/32" Hex Key Wrench, 1/2" Wrench, and a No. 3 Point Phillips Offset Screwdriver.

1. Place Wall Bracket "A" (with countersunk mounting holes) on wall at desired height with serrations facing up. Mark screwhole location on the wall (2-1/8" C-C) and drill 9/64" pilot holes. Screw Wall Bracket to wall using two 1-3/4 x 14 F.H. wood screws and tighten. Repeat procedure for each bracket to be used.
2. Carefully measure the distance between the Brackets on the wall and mark the same distance on the back of the Rail "B". Drill pilot holes and screw Rail Bracket "C" (with elongated mounting holes) to Rail with serrations facing down using two 1-1/4 x 14 R.H. wood screws. Tighten screws, then back off one turn.
3. Assemble Rail Bracket to Wall Bracket using one 1/4-20 x 7/8 Button Head Screw "D" and Flex Lock nut. Adjust bracket for desired wall to handrail clearance and tighten nut. Retighten rail screws with off-set screwdriver.

Notes: No. 14 shields with 1-1/4 x 14 F.H. wood screws for masonry walls and 1/4-20 x 4 F.H. toggle bolts for hollow walls are available. Tools required for alternate fasteners are: 5/16" diameter drill for shield, 11/16" diameter drill for toggle bolt and a standard screwdriver for toggle bolt screw.

Spacing between Brackets and spacing between Rail and wall is governed by architectural specifications and/or the codes that apply.



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