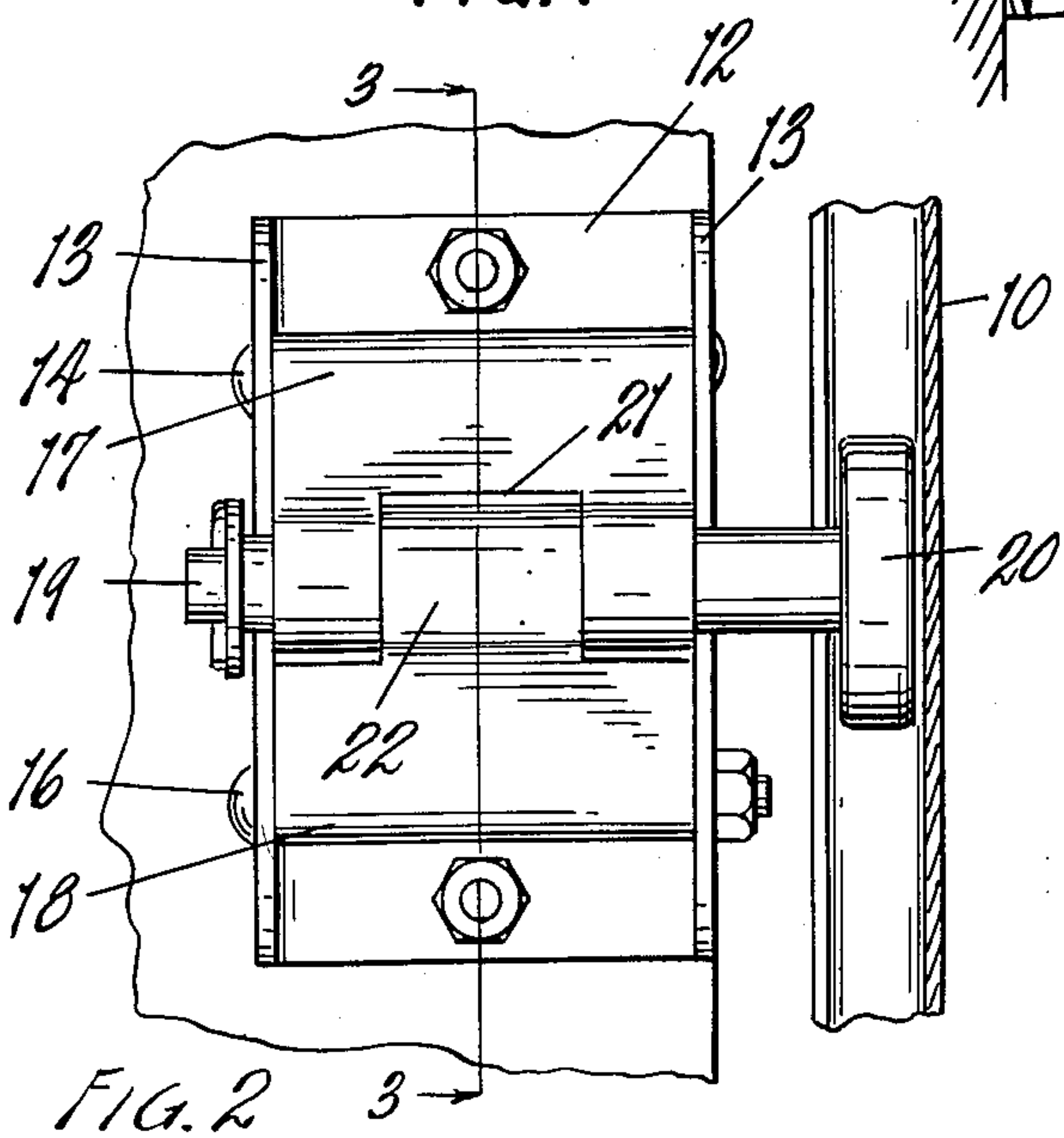
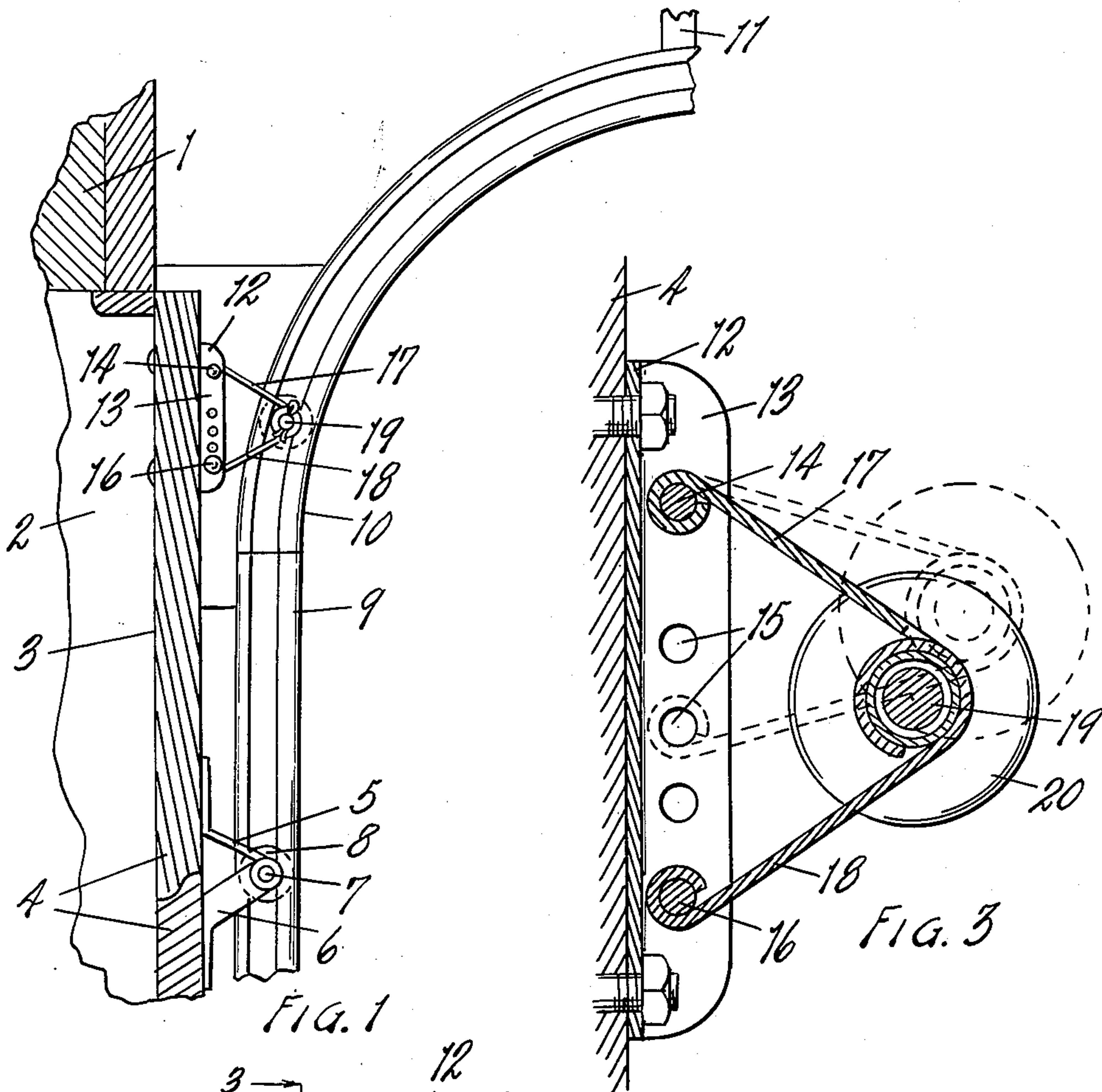


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C. C. MOLER
ADJUSTABLE ROLLER SUPPORTING BRACKET
FOR VERTICALLY MOVABLE DOORS
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ADJUSTABLE ROLLER SUPPORTING
BRACKET FOR VERTICALLY MOV-
ABLE DOORSCharles C. Moler, Hartford City, Ind., assignor
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1 Claim. (Cl. 16—97)

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This invention relates to improvements in an adjustable roller supporting bracket for vertically movable doors.

The principal objects of this invention are:

First, to provide a roller supporting bracket attachable to the top section of a vertically movable door which will permit the distance between the door and the roller to be adjusted to correspond to the distance between the door casing and the fixed guide rail in which the roller is to operate.

Second, to provide roller supporting mechanism for a vertically movable door which will permit the guide rail in which the roller is to operate to be installed more easily and with less care in determining the accuracy of its position relative to the door casing.

Third, to provide a bracket having adjustable arms for supporting a shaft or pin at variable distances from the bracket.

Other objects and advantages relating to details of my invention will be apparent from a consideration of the following description and claim.

The drawings, of which there is one sheet, illustrate a preferred form of my roller supporting bracket operatively associated with a vertically swingable door and a supporting guide rail therefore.

Fig. 1 is a fragmentary vertical cross sectional view through a door showing the mounting of the guide rail and supporting rollers therefore.

Fig. 2 is a fragmentary inside elevational view of the upper roller bracket and roller with the guide rail for the roller partially broken away in cross section.

Fig. 3 is a vertical cross sectional view through the roller supporting bracket taken along the plane of the line 3—3 in Fig. 2.

Vertically slidable horizontally hinged sectional doors for garages and other large openings are well-known and it has been common practice to support and guide the movement of these doors by providing guide rails along the sides of the door opening and curving upwardly and rearwardly within the building. Combined hinge and roller brackets have been attached to the door to support rollers which travel in the guide rails and thus support and direct the movement of the door. It will readily be appreciated that structures of this type require that the guide rail be accurately positioned with respect to the casing of the door opening if the door which is guided by the rail is to come into close abutting contact with the door casing in its closed position. The lower vertical reaches of the guide rails are quite

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easily located with respect to the door casing as it is a simple matter to provide mounting brackets for the vertical guide rail which are attached to the door casing and designed to provide the necessary distance between the casing and the guide rail to accommodate the particular thickness of door and size of hinge brackets concerned. However, the curved upper section of the guide rail which is usually supported from the roof or cross beams of the building is not so easily located with respect to the plane of the door casing and great difficulty has been encountered in mounting the upper rail sections so as to obtain a tight closure between the top of the door and the top of the door casing.

In the drawings I have illustrated a wall 1 having a door opening 2 formed therein and a vertically movable horizontally hinged sectional door 3 for closing the door opening. The sections 4 of the door are jointed together by leaves 5 and 6 with the rearwardly projecting arms of the hinge leaves connected by a hinge pin 7. The pins 7 also support rollers 8 which travel in the guide rails 9 and 10. The upper guide rail is rearwardly curved as illustrated and is normally supported within the building by means of suitable straps or hangers 11 from the ceiling of the building. The foregoing construction is well-known and is described only to indicate the structure with which my upper roller bracket is associated.

Secured near the upper edge of the upper door section 4 is a vertically extending channel-shaped bracket 12 having side flanges 13. The side flanges support an upper pivot pin 14 which may be permanently riveted in place. Toward the lower ends of the flanges 13 there are formed a series of vertically spaced bolt receiving apertures 15 which are designed to selectively receive a movable hinge bolt 16. Swingably mounted on the pin 14 as by being wrapped therearound is an upper hinge leaf 17 and swingably connected to the bolt 16 is a lower hinge leaf 18. The hinge leaves 17 and 18 are connected at their distal ends by being folded around a pintle pin 19 which forms an axle or support for the upper guide roller 20. As is best illustrated in Fig. 3, the hinge leaves 17 and 18 are cut away and overlapped in the familiar hinge fashion with the upper hinge leaf being bifurcated at 21 to embrace a tongue 22 on the lower hinge leaf 18.

By employing an adjustable bracket at the upper edge of the door the upper guide rail section 10 may be installed with only reasonable care and accuracy and without painstaking measurement and adjustment relative to the wall 1. The

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bracket 12 is then mounted on the top of the door with the lower hinge leaf 18 and removable bolt 16 disconnected from the bracket. The guide roller 20 can then be fitted to the guide rail 10 by swinging the pintle 19 and upper hinge leaf 17 on the pivot 14 until the guide roller engages the guide rail with the upper edge of the door in close abutting engagement with the casing around the door opening. With the guide roller 20 in its properly adjusted position, the lower hinge leaf 18 can then be moved to the proper set of holes 15 for holding the guide roller in its proper position and the bolt 16 then passed through the selected holes and lower leaf to complete the adjusted assembly of the bracket. It should be understood that my adjustable brackets are employed at each side of the door and in some cases may be employed intermediate of the width of very wide doors where intermediate upper guide rails are provided.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

An adjustable bracket for mounting a guide roller on a door comprising a base member of channel-shaped cross section adapted to be secured to the door with its flanges projecting therefrom, said flanges having holes formed therein at longitudinally spaced points therealong, a first support member pivotally secured

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to one end of said flanges on said base member by a pin passed through the holes at that end of said flanges, a second support member pivotally and releasably engaged with said flanges on said base member by a second pin passed selectively through other holes in said flanges, and a pintle pin connecting the distal ends of said support members and supported thereby and projecting beyond the end of the door and adapted to carry a roller.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
319,938	Swett	June 9, 1885
627,991	Ensign	July 4, 1899
649,387	Wright	May 8, 1900
667,992	Patzold	Feb. 12, 1901
707,131	Luitink	Aug. 19, 1902
855,835	Clayton	June 4, 1907
1,857,756	Headley	May 10, 1932
2,525,309	Norberg	Oct. 10, 1950

FOREIGN PATENTS

Number	Country	Date
265,331	Great Britain	Feb. 10, 1927