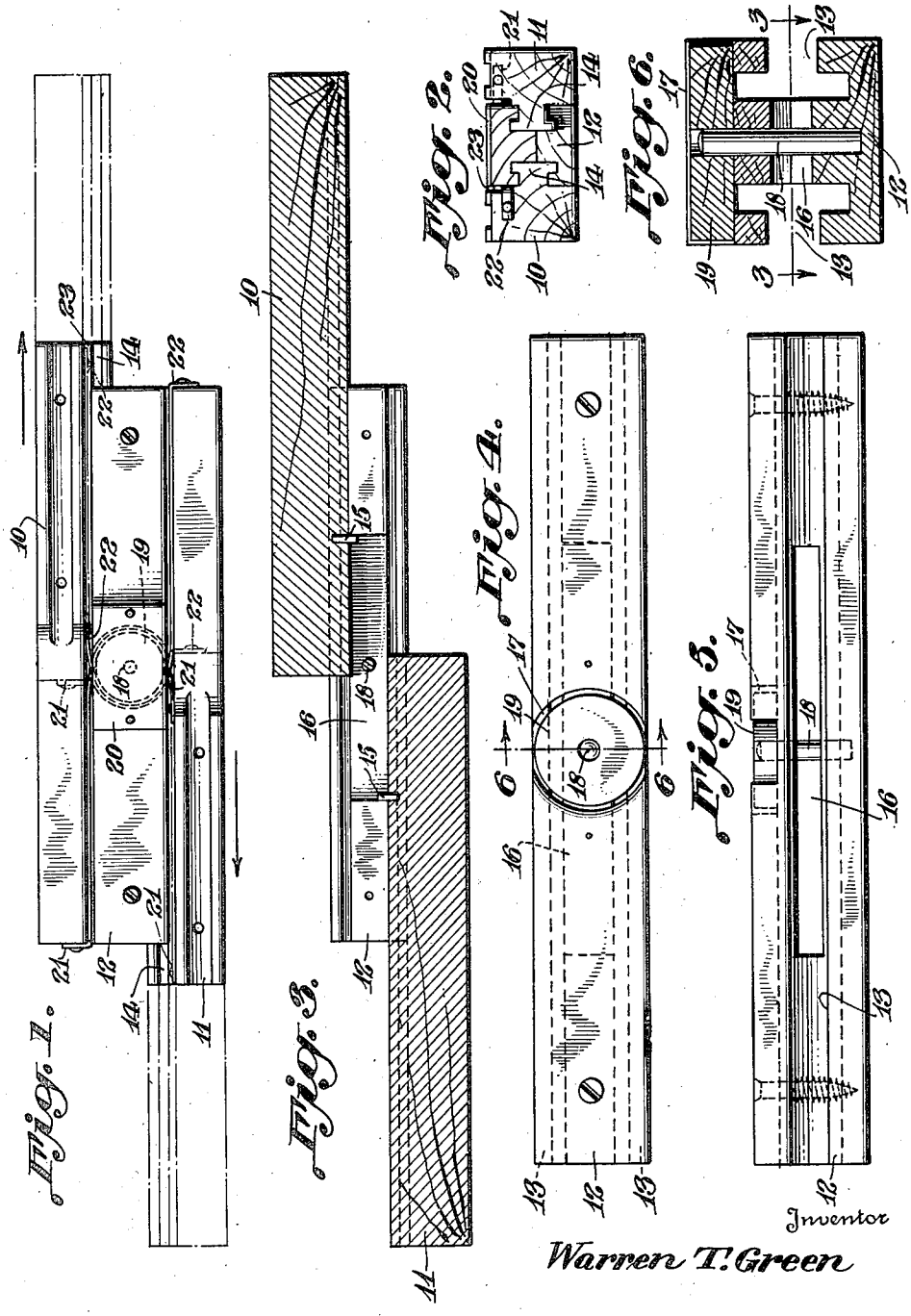
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TABLE SLIDE

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TABLE SLIDE

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This invention relates to table slides and more particularly to one having equalizing means.

Inasmuch as table slides do not form a prominent visible part of the table it is desirable that they be of inexpensive construction. However since the slides constitute an important part of the operating structure of the table it is important that they be of requisite strength and so designed as to work silently and smoothly. The purpose of the present invention is to provide a table slide which will satisfy these somewhat conflicting requirements.

One object of the invention is to provide a table slide having a slide connection coextensive with its length.

Another object is the provision of stop means which are concealed.

A further object is to provide equalizing means requiring a minimum number of parts which are so related that friction and wear will be minimized.

Other objects of the invention will appear from the following description when considered in conjunction with the accompanying drawing showing a preferred embodiment of the invention and in which:

Fig. 1 is a plan view of an assembled table slide in collapsed position.

Fig. 2 is an end view.

Fig. 3 is a section view of the assembled slide in separated position, taken on a plane corresponding to the line 3—3 in Fig. 6.

Fig. 4 is an enlarged plan view of the central rail with the cover plate removed.

Fig. 5 is an elevation of Fig. 4.

Fig. 6 is a section on the line 6—6 of Fig. 4, on a larger scale.

The table slide includes two outside rails 10 and 11 of identical shape, and a central rail 12 with which the outside rails have a sliding connection. In use, the central rail 12 may be affixed to a pedestal or other table support which is to remain stationary, and the outside rails are affixed to the separable sections of the table, in any usual manner. Ordinarily, the outside rails are affixed directly to the under sides of the sections of a table top so that their upper surfaces provide a support for removable table leaves.

The sliding connection between the rails is provided by undercut grooves 13 in the opposite vertical faces of the rail 12 with which tongues 14 formed on the rails 10, 11 coact. As here shown these tongues and grooves are T shaped in cross section but it is to be understood that the invention is not limited to this shape. It will be noted that the tongues and grooves are coextensive with the lengths of the rails so that a considerable area of contact between the sliding surfaces is provided. Because of this, wear is minimized and the parts are strengthened so that rupture and separation of the rails is resisted. To facilitate manufacture, the central rail may be made in two parts, held together by screws, as shown.

To limit movement of the rails the stop pins 15 working in slot 16 are provided. The slot 16 extends through the dividing wall between grooves 13 and its opposite end walls provide abutments to arrest the movement of the pins 15 carried by the side rails. The length of the slot 16 is so related to the location of the pins 15 that when the rails are collapsed as in Fig. 1 they will be in substantial alignment, and when separated as in Fig. 3 the side rails will have moved slightly less than half the length of the central rail.

It should be observed the slot 16, by being at the center of rail 12 does not materially weaken the rail. In the assembled slide the stop pins 15 and slot 16 are concealed from view. This stop means, moreover, does not reduce the extent of the interlocking surface contact between the rails with the result that the structure is not weakened in this respect.

Disposed centrally of the rail 12 and in an outer face thereof is a circular recess 17. This recess is of slightly larger diameter than the width of the face in which it is formed so that it opens through the vertical sides of the rail 12. A pivot pin 18 retained in place by being seated within a bore in the rail 12 projects into recess 17 axially thereof. Rotatably mounted upon the pin 18 is a roller 19 of substantially the same diameter as the thickness of the rail at this point so that there is a clearance space between the periphery of the roller and the wall of recess 17. The roller 19 is slightly less thick than the depth of the recess so that its upper surface is below the upper face of the rail. The roller is retained in place by a cover plate 20 secured to rail 12.

Passing around the roller are the oppositely looped flexible connectors 21 and 22. These may be any desired band, cable chain or cord. One end of the band 21 is secured to the rail 11 past the center thereof. Correspondingly, one end of band 22 is secured to the end of rail 11 while the other end is secured to rail 10 past its midpoint. Because of this arrangement the ends of the bands are not carried beyond the center of the roller when the rails are at the extremities of their outer travel. In order that the bands will

not interfere with each other, one is placed above the other and they are sufficiently narrow to have separate tracks upon the roller. A space 23 between the rails to receive the bands 21 and 22 should be provided, as by cutting back the inner faces of the side rails 10 and 11. This prevents the rails from binding at this point.

It should be noted that by the present arrangement of oppositely looped bands passing around a single centrally disposed roller, the forces acting upon the roller when the rails are withdrawn or urged together, are balanced. As a result the frictional resistance between the roller and its pivot pin is minimized and easier movement is made possible. Since the number of moving parts is reduced to a minimum and the operating stresses are substantially balanced, there is less wear upon the parts.

A slide constructed according to this invention has the further advantages that it operates silently and smoothly. Because the contacting surfaces are continuous and free of parts which might strike against each other, the rails will not bind or jam during their manipulation. Since the slide operates in this smooth manner it does not make objectionable sounds. Quietness of operation is a desideratum.

What is claimed is:

1. A table slide comprising a central rail and side rails, means for slidably connecting the side rails on opposite sides of the central rail, said central rail having a circular recess formed in one of its outer faces midway of the length thereof, a pivot pin carried by said central rail and projecting axially within said recess, a roller in said recess and rotatably mounted upon said pivot pin, a cover plate retaining the roller within said recess, and oppositely looped bands passing over the roller and connected at their respective ends to the respective side rails.

2. A table slide comprising a central rail and side rails, means for slidably connecting the side rails on opposite sides of the central rail, a roller carried by the central rail midway of its length, a band passing around a portion of the periphery of the roller and having its ends projecting away from the roller in substantial parallelism with said rails, one end of said band being connected to one of the side rails and the other end thereof being connected to the other side rail, and a second band passing around an opposite portion of the periphery of said roller and having its ends extending away from said roller in a direction opposite from the ends of the first named band, one end of the second named band being connected to one of the side rails and the other end thereof being connected to the other side rail, said bands lying in spaced parallel planes and occupying separate tracks upon the roller.

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