R. HOBBS & A. E. TEAL.

EXTENSION TABLE SLIDE.

APPLICATION FILED FEB. 16, 1912.

1,121,627.

Patented Dec. 22, 1914.

2 SHEETS—SHEET 1.

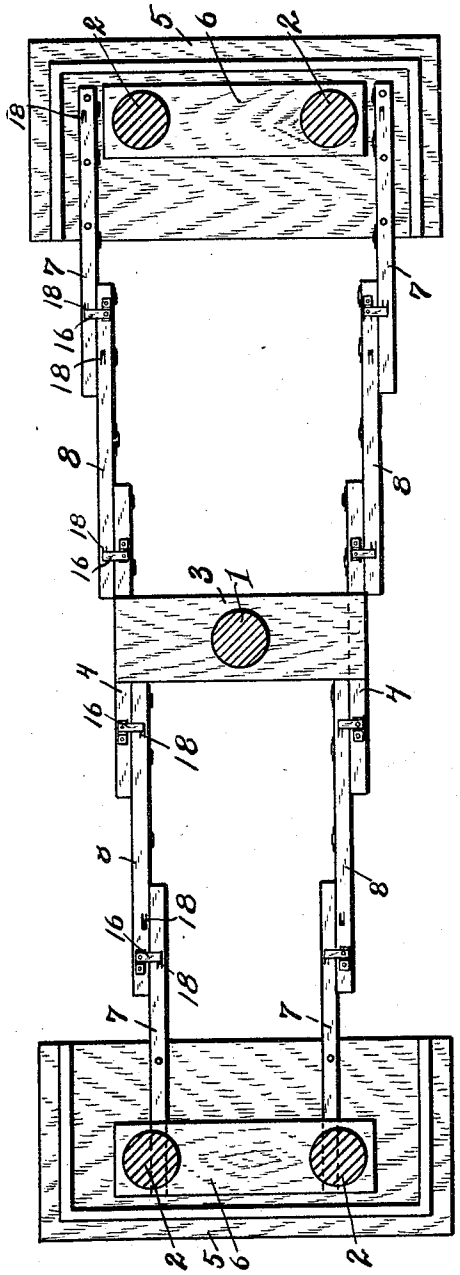


Fig. I.

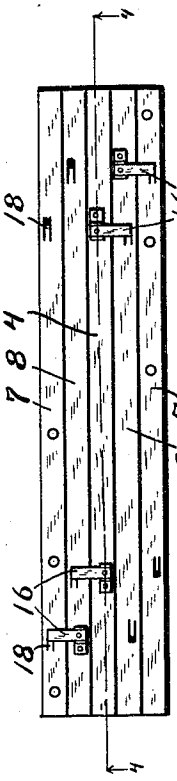


Fig. II.

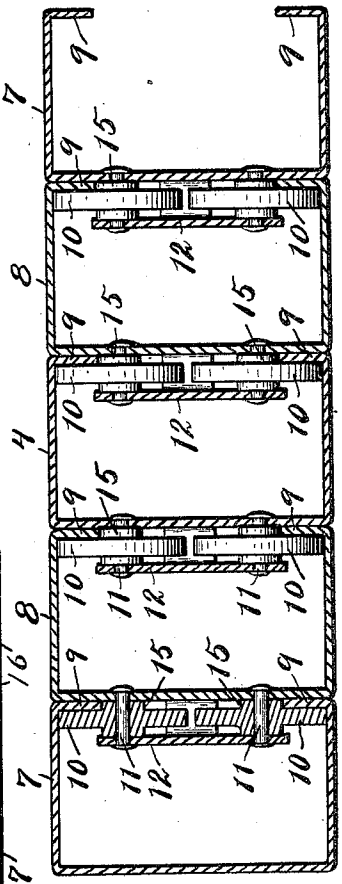


Fig. III.

Witnesses

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2 SHEETS—SHEET 2.

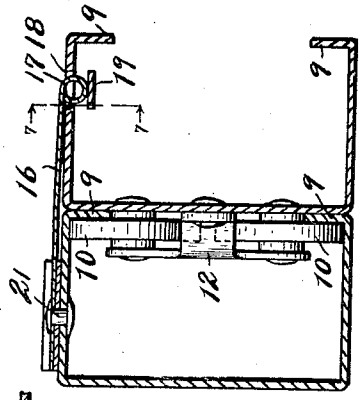


Fig. VI.



Fig. VII.

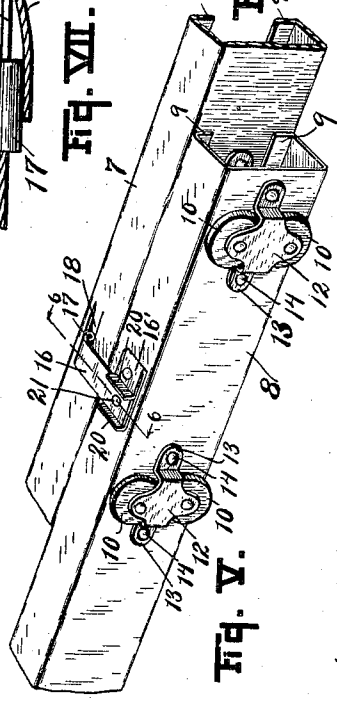


Fig. V.

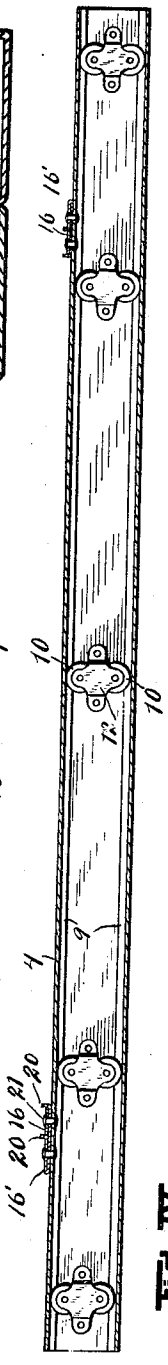


Fig. IV.

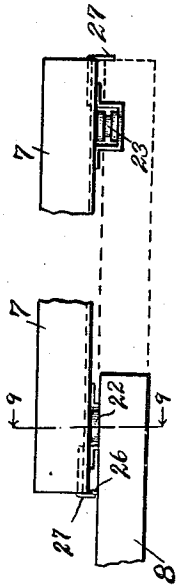


Fig. VIII.

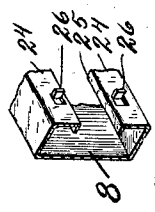


Fig. X.

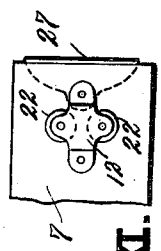


Fig. XI.

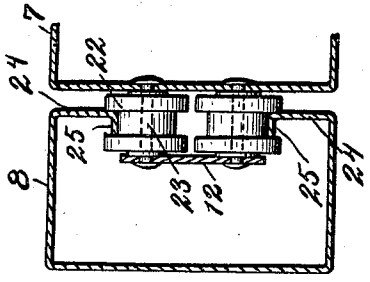


Fig. IX.

Witnesses

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UNITED STATES PATENT OFFICE.

RALPH HOBBS AND ARTHUR E. TEAL, OF GRAND RAPIDS, MICHIGAN.

EXTENSION-TABLE SLIDE.

1,121,627. Specification of Letters Patent. Patented Dec. 22, 1914.

Application filed February 16, 1912. Serial No. 678,089.

To all whom it may concern:

Be it known that we, RALPH HOBBS and ARTHUR E. TEAL, citizens of the United States, residing at the city of Grand Rapids, county of Kent, and State of Michigan, have invented certain new and useful Improvements in Extension-Table Slides, of which the following is a specification.

This invention relates to improvements in extension table slides.

The main objects of our invention are: First, to provide an improved extension table slide in which the parts are formed of metal and one in which the parts are simple and economical to produce and easily assembled. Second, to provide an improved slide for extension tables, which is very strong and durable and at the same time may be formed of comparatively light material. Third, to provide an improved slide for extension tables which is very easy to operate. Fourth, to provide in a slide for extension tables, an improved stop.

Further objects, and objects relating to structural details, will definitely appear from the detailed description to follow.

We accomplish the objects of our invention by the devices and means described in the following specification.

The invention is clearly defined and pointed out in the claims.

A structure which is a preferred embodiment of our invention is clearly illustrated in the accompanying drawing, forming a part of this specification, in which:

Figure I is an inverted view of a structure embodying the features of our invention, the legs of the table being shown in section and a portion of the table top omitted. Fig. II is a bottom view of one of the slide units collapsed. Fig. III is a transverse section through the slide unit shown in Fig. II. Fig. IV is a longitudinal section taken on a line corresponding to line 4—4 of Fig. II. Fig. V is a detail perspective view of two of the slide members showing the slide extended, with a stop in engaging position. Fig. VI is a transverse section taken on a line corresponding to line 6—6 of Fig. V. Fig. VII is a detail section taken on a line corresponding to line 7—7 of Fig. VI. Fig. VIII is a detail plan view of a slightly modified form, the slide being shown partially extended, its closed or collapsed position being indicated by dotted lines. Fig. IX is a detail section taken on a line corresponding to line 9—9 of Fig. VIII. Fig. X is a detail perspective showing the stops on one of the slide members of the modified structure. Fig. XI is a detail elevation showing the coacting stop mounted on the other slide member.

In the drawing, similar reference characters refer to similar parts throughout the several views, and the sectional views are taken looking in the direction of the little arrows at the ends of the section lines.

Referring to the drawing, the structure illustrated is of the well-known type of extension tables having a center leg 1, and outer legs 2. The center leg is provided with a lead piece 3 to which the center slides 4 are secured. The top sections 5 are secured to the lead pieces 6 of the outer legs 2. The outer slides 7 are secured to the top sections 5. In the structure illustrated, each slide has five members, the center member 4, outer members 7 and intermediate members 8. These slide members are of the same form or are duplicates and are designated as center member and intermediate for convenience in describing their coacting relation. The slide members are formed of sheet metal and are channel-shaped in cross section, the arms of the members being provided with inturned flanges 9. The slide members are arranged front to back and in the preferred construction illustrated in Figs. I to VII, with the flanges 9 in sliding engagement with the backs of the adjacent members. The members are connected for longitudinal adjustment and supported against lateral movement by wheels 10.

The journals 11 for the wheels 10 are mounted upon the backs of the slide members, the outer ends of the journals being supported by brackets 12 having attaching ears 13 at each end through which the bracket securing rivets 14 are arranged. These brackets 12 project into the facing member so that the wheels 10 may be arranged between the brackets and the back of the slide members on which the brackets are carried to engage the inner sides of the arms of the facing slide member.

The flanges 9 engage the inner sides of the wheels so that the flanges are held in sliding engagement with back of the adjacent member and the slides are supported in relation to each other for longitudinal

adjustment and against lateral movement by these wheels. The edges of the flanges engage shoulder-like or reduced portions 15 on the wheels. Thus supported and connected, the slides move very freely for longitudinal adjustment and at the same time are effectively supported against racking strains. To limit the adjustment of the slide, we provide spring stops 16 which are secured to the under side of one slide member to overlap and slidably engage the adjacent member. The stops are provided with in-turned engaging portions 17 at their free ends.

Stop slides 18 are provided to coact with the stops 16. These stop slides are formed by longitudinally slitting the arms of the slide members and striking in the slit portions thereof. These struck-in portions form inclined tongues 19 up which the stops ride on the reverse movement of the slides to disengage the stops from their coacting stop slots. (See Figs. V, VI and VII). As a convenient and effective attaching means for the stops 16 to the slides, we provide sheet metal clips 16′ having up-turned flanges 20 thereon between which the stops 16 are secured by means of rivets 21. These flanges 20 support the stops 16 against lateral movement while permitting their spring action.

In the modified construction shown in Figs. VIII to XI inclusive, the wheels 22 are provided with center reduced portions 23 with which the flanges 24 coact, the flanges being provided with laterally-turned tread portions 25 engaging the grooved or reduced portions of the wheels 22. The stops 26 are struck outwardly from the flanges 24 to coact with the stop plates 27 on the ends of the adjacent slides. While this modified form of our invention is satisfactory for some purposes, it does not have all the advantages possessed by our preferred construction shown in Figs. I to VII.

Other structural modifications are possible, but believing that with the disclosures made, they are sufficient to enable the adaptation of the invention as circumstances or taste may dictate, we have not attempted to illustrate or describe the same herein.

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

1. In a slide for extension tables, the combination of a plurality of channel-shaped slide members having inwardly projecting flanges at the edges of their arms, said members being arranged front to back with the flanges of one member in sliding engagement with the back of the adjacent member; wheel supporting brackets having offset attaching ears rigidly secured upon the back of one member and projecting between the arms of the facing member; journals supported at one end by said brackets and at the other by the back of the slide member on which the brackets are mounted; and wheels arranged in pairs on said journals between the brackets and the back of the member by which the brackets are carried, said wheels being in traveling engagement with the inner sides of both the slide member arms and in bearing engagement with the inner sides of their said flanges whereby the slide is supported against lateral movement, said wheels having reduced hub-like portions in bearing engagement with the back portions of the members by which they are carried, spacing the body portions of the wheels therefrom.

2. In a slide for extension tables, the combination of a plurality of sheet metal channel-shaped slide members having inwardly projecting flanges at the edges of their arms, said members being arranged front to back; wheel supporting brackets rigidly mounted upon the back of one member and projecting between the arms of the facing member; journals extending between said brackets and the slide member by which they are carried; and wheels arranged in pairs on said journals, said wheels being in traveling engagement with the inner sides of both the slide member arms and in bearing engagement with the inner sides of their said flanges whereby the slide is supported against lateral movement and with its flanges in sliding engagement with the back of the adjacent member, there being spacing members between the wheels and the back of the slide member on which they are mounted of substantially the thickness of the flanges.

In witness whereof, we have hereunto set our hands and seals in the presence of two witnesses.

RALPH HOBBS. [L. S.]
ARTHUR E. TEAL. [L. S.]

Witnesses:
C. C. TRAVIS,
PIERRE LINDHOUR.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."