

G. STEINGRUBER.

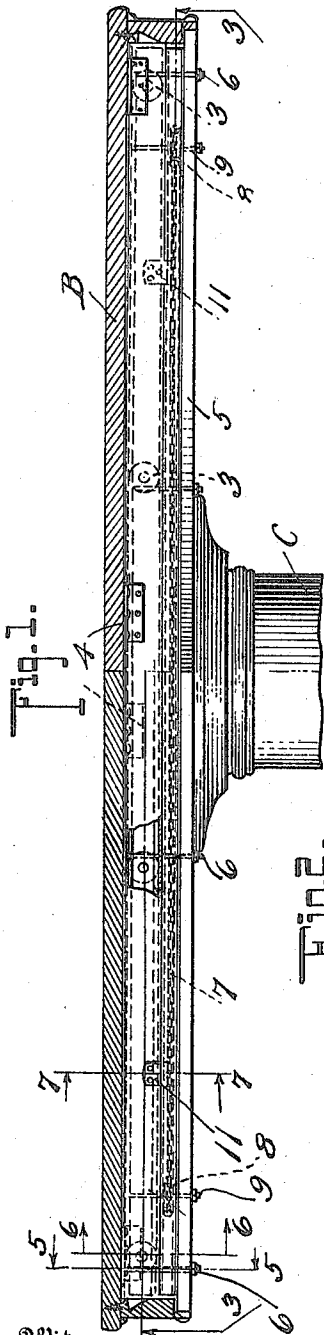
TABLE.

APPLICATION FILED JAN. 2, 1915.

1,180,201.

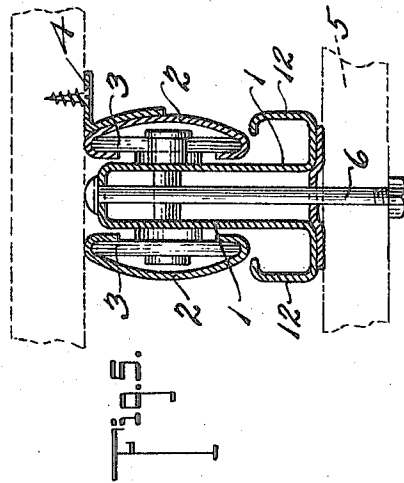
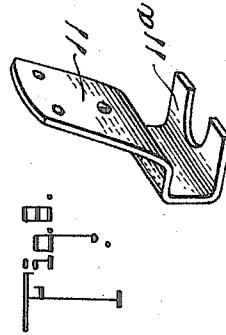
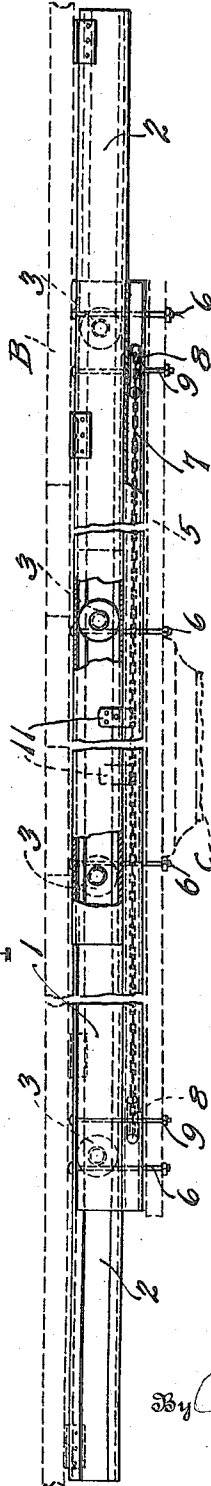
Patented Apr. 18, 1916.

2 SHEETS—SHEET 1.



Witnesses
W. Wagner
L. Compton

Fig. 2.



Inventor
George Steingruber

By *Robert Cobb*
Attorneys

1,180,201.

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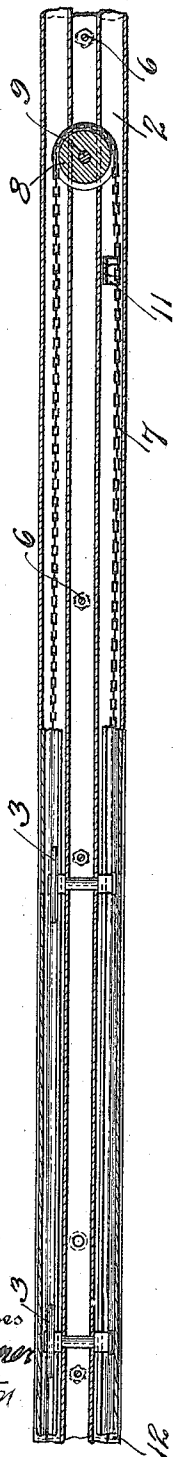
TABLE.

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2 SHEETS—SHEET 2.

Fig. 3.



Witnesses
W. Wagner
L. Compton

Fig. 4.

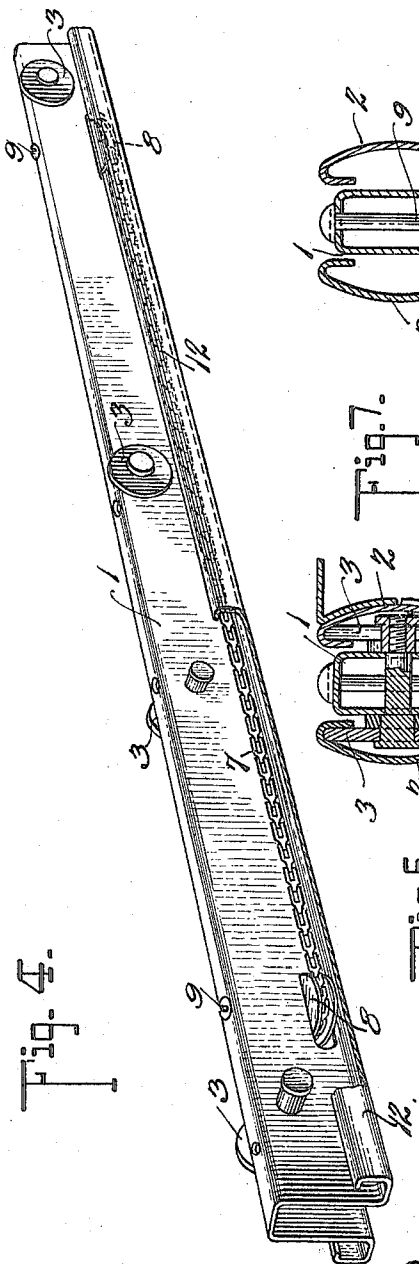


Fig. 7.

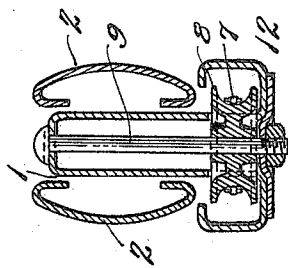
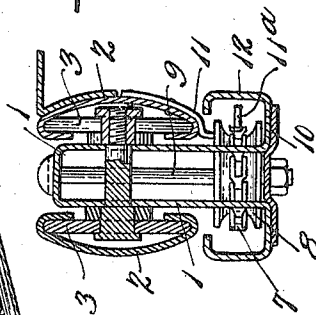


Fig. 6.



Inventor
George Steingruber

by *Robert Cobb*

Attorneys

UNITED STATES PATENT OFFICE.

GEORGE STEINGRUBER, OF HAZLEHURST, MISSISSIPPI, ASSIGNOR TO MINNIE B. STEINGRUBER, OF HAZLEHURST, MISSISSIPPI.

TABLE.

1,180,201.

Specification of Letters Patent.

Patented Apr. 18, 1916.

Application filed January 2, 1915. Serial No. 142.

To all whom it may concern:

Be it known that I, GEORGE STEINGRUBER, a citizen of the United States, residing at Hazlehurst, in the county of Copiah and State of Mississippi, have invented certain new and useful Improvements in Tables, of which the following is a specification.

This invention has relation to the art of extension dining tables.

The invention comprises essentially certain improvements in the construction of what I call extension and equalizing units for such tables, such a unit being set forth in my previous application for patent, Serial Number 763,820, filed April 26, 1913.

An especial object of the present invention has been to improve upon the detail construction of the metal parts comprising the aforesaid unit, whereby to simplify and cheapen the cost of manufacture of said parts, and to afford a somewhat more advantageous arrangement of the equalizing connection intermediate the spaced runners which are carried by and moved with the top sections of the table.

Still another object of the present improvements has been to design the runner support, at opposite sides of which the runners operate in such a way as to provide a housing for the equalizing connection continually preventing disarrangement of the latter as it operates incident to the equalizing of opposite movements of the sections of the table top, when one of said sections is actuated either by way of extending or contracting the top.

In addition to the foregoing, I provide certain minor features of construction possessing novelty in the art and particularly pointed out in the claims appended hereto, though I do not desire to be limited to the exact details of my invention as described hereinafter, since variations may be made in the construction of my invention without materially departing from the spirit of the same.

In the accompanying drawings: Figure 1 is a vertical, longitudinal sectional view of the top portion of a table having the invention applied thereto and showing the pedestal broken away. Fig. 2 is a similar view of the table partially extended however, and showing the relative positions of the runner support and runners at such adjustment, certain parts being broken away to more

fully illustrate the arrangement of the pulleys and anti-friction rollers. Fig. 3 is a horizontal sectional view taken approximately on the line 3—3 of Fig. 1, the table parts being omitted. Fig. 4 is a detail perspective view of the runner support, one of its housing flanges being broken away to show clearly the equalizing connection. Figs. 5, 6 and 7 are vertical sections taken through the equalizing and extension unit, Fig. 5 taken on the line 5—5 of Fig. 1, Fig. 6 on the line 6—6 of Fig. 1 and Fig. 7 on the line 7—7 of Fig. 1. Fig. 8 is a detail perspective view of the plate or member used to connect each runner with the equalizing member or chain.

The extension dining table illustrated in the drawings is of a conventional type comprising the top made up of the main sections A and B adapted to be pulled apart and forced together in the extending and contracting of the top of the table. The pedestal is designated C and embodies a suitable cross piece or cross pieces on which the table top is supported. Attached to said cross pieces so as to be held in position thereby are two of the extension and equalizing units of this invention, one only of which will be described from now on. The unit comprises a central longitudinal runner supporting member 1 made up of a piece of sheet metal so that the body thereof is of U-form, see Figs. 5, 6 and 7, open at the bottom, and closed at the top. The runners similar to those employed in the construction of my previous application referred to, are designated 2 and consist of plates formed with upper and lower edge flanges constituting spaced members between which the anti-friction rollers 3 operate. The rollers 3 are attached to and supported wholly by the runner support 1 and by reason of the engagement of the said rollers with the edge flanges of the runners, the latter are interlocked with the runner support 1 and prevented from lateral movement tending to separate said runners from the support. Each of the runners 2 is secured to one of the top sections B of the table and for this purpose an angle plate or similar member 4 is attached to the upper portion of each runner and may be screwed or otherwise fastened to the under side of the top section B with which the runner is to cooperate. The runner supports 1 will be secured to

the base portion of the table, or the cross pieces 5 of the present construction by fastening bolts 6 passing vertically through the body of the runner of said support and rigidly holding the support from displacement. Any suitable number of the bolts 6 may be used as they do not interfere with the operation of the equalizing connection 7 or the rollers 3. The equalizing connection 7 preferably consists of a chain cable or similar flexible member which is endless or continuous preferably and passing all around pulleys 8 mounted on the end portions of the support 1. The pulleys 8 are preferably arranged to operate in slots or openings formed in the sides of the U-shaped support 1 and to provide an axis, each pulley is mounted upon a bolt or spindle member 9 passing through an opening in the top of the support 1 and through a plate 10 disposed so as to extend across the open space at the bottom of said support, see Fig. 6. If desired, the pulleys 8 may be mounted upon the bolts such as at 6, which bolts secure the runner supports 1 in position. The equalizing connection 7 is attached at opposite points to the opposite spaced runners 2, each runner being preferably supplied with an engaging plate or member 11 that extends downward therefrom near one end and is formed with a bifurcated arm 11^a, the members of which are adapted to engage in the links of the chain or connection 7.

The side portions of the support 1 are bent outwardly and upwardly at their lower edges whereby to form housing flanges 12 which terminate slightly spaced from the runners 2 at the lower edges of the latter. These flanges 12 are so situated that the pulleys 8 are located between the same as well as disposed substantially beside the rollers 3. Therefore, when the equalizing connection 7 is arranged so as to operate about the pulleys 8 it will be apparent that said connection is disposed within the space covered by the housing flanges 12 and is, therefore, hidden from view as well as protected by means of said flanges. Furthermore, the flanges cooperate to hold the chain or connection 7 from becoming disengaged from the members of the arm 11^a of the connecting plates 11 on the runners, said plates 11 thus cooperating with the parts 12 to hold the chain or connection 7 in a proper position not interfering with the action of the rollers 3 in any way and avoiding liability of the accidental disengagement of the parts 7 and 11 during arrangement of the unit securing the same, being supplied ordinarily as a complete device ready to apply to a table.

It is notable also that the arrangement of the plate 11 with the lower portions or arms thereof engaging within the flanges 12 is

conductive to establishing a desirable positive connection between the parts 1 and 2, the members 11 constituting projections cooperative with the flanges 12 to steady the members of the equalizing and extension unit on relative movement of the same and in respect particularly to any tendency toward lateral play of the runners 2 upon the support 1.

It will be understood that when one section B of the table is pulled outwardly or pushed inwardly, as the case may be, owing to the connection of said section to the runner supports 1 of the two units employed, and the connections intermediate the runners cooperating with the said runner supports, a simultaneous equal and opposite movement of the other top section is induced. Therefore, whatever movement is imparted to the top section A of the table corresponding equal and opposite movement must be imparted to the section B, being transmitted from the actuated section through the provision of the equalizing and extension units described. The members 11^a coact with the pulleys 8 to limit the amount of extension obtainable by the separating movement of the top sections of the table.

Having thus described my invention, what I claim as new is:

1. An equalizing and extension unit for dining tables, the same comprising a runner support of approximately inverted U-form, runners mounted on the sides of said support for free sliding movement, the sides of said runner support having housing flanges projecting laterally and upwardly therefrom, pulleys mounted on the support and arranged between the upwardly extending portions of the flanges aforesaid, and an endless equalizing connection passing around said pulleys and having connection with the said runners and operating in a position in which it is housed by the said flanges.

2. In combination, an equalizing and extension unit comprising a runner support, means to secure said runner support to the base of a table, runners slidably mounted on said support, pulleys mounted on the runner support adjacent to its opposite ends, an endless connection operating about said pulleys, and members connecting said endless connection with the runners and adapted to have slidable engagement with the runner support for the purpose described.

3. In an extension and equalizing unit for dining tables comprising a central longitudinal U-shaped runner support, pulleys secured to said support adjacent to its opposite ends, an equalizing connection operating about said pulleys, runners at opposite sides of the runner support and disposed beside said equalizing connection, rollers on the opposite sides of the runner supports

engaging with the said runners, plates secured to the runners and engaging the equalizing connection, opposite sides of the runner support being formed with housing flanges arranged to incase the equalizing connection and coöperative with the plates aforesaid in the manner described.

4. In an extension and equalizing unit for dining tables, a runner support of inverted U-form having the sides thereof bent upward at their lower edges to provide housing flanges the upper edges of which are spaced from said sides, runners mounted for sliding movement on said runner support and operating above the housing flanges aforesaid, an endless equalizing connection passing through the runner support at points adjacent to its opposite ends and arranged to operate in the space between the housing flanges and the sides of the runner support so as to be practically inclosed in such space, and members connecting the equalizing connection with said runners.

5. In an extension and equalizing unit for dining tables, the combination of a runner support of substantially inverted U-form

the sides of which at their lower edges are bent outwardly, upwardly and inwardly to form housing flanges, an endless equalizing connection operating lengthwise of said support and arranged to move in the space between said flanges and the sides of the support, pulleys about which said endless connection operates disposed adjacent to opposite ends of the runner support, runners mounted at opposite sides of the runner supports above the said housing flanges, plates fixed to the runners and projecting downwardly into the space between the housing flanges and the sides of the runner supports and engaged with the endless connection aforesaid, and fastening members for connecting the runner support with a table structure forming axes for the said pulleys.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE STEINGRUBER.

Witnesses:

JNO. BAAS,

Mrs. GEORGE STEINGRUBER.

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