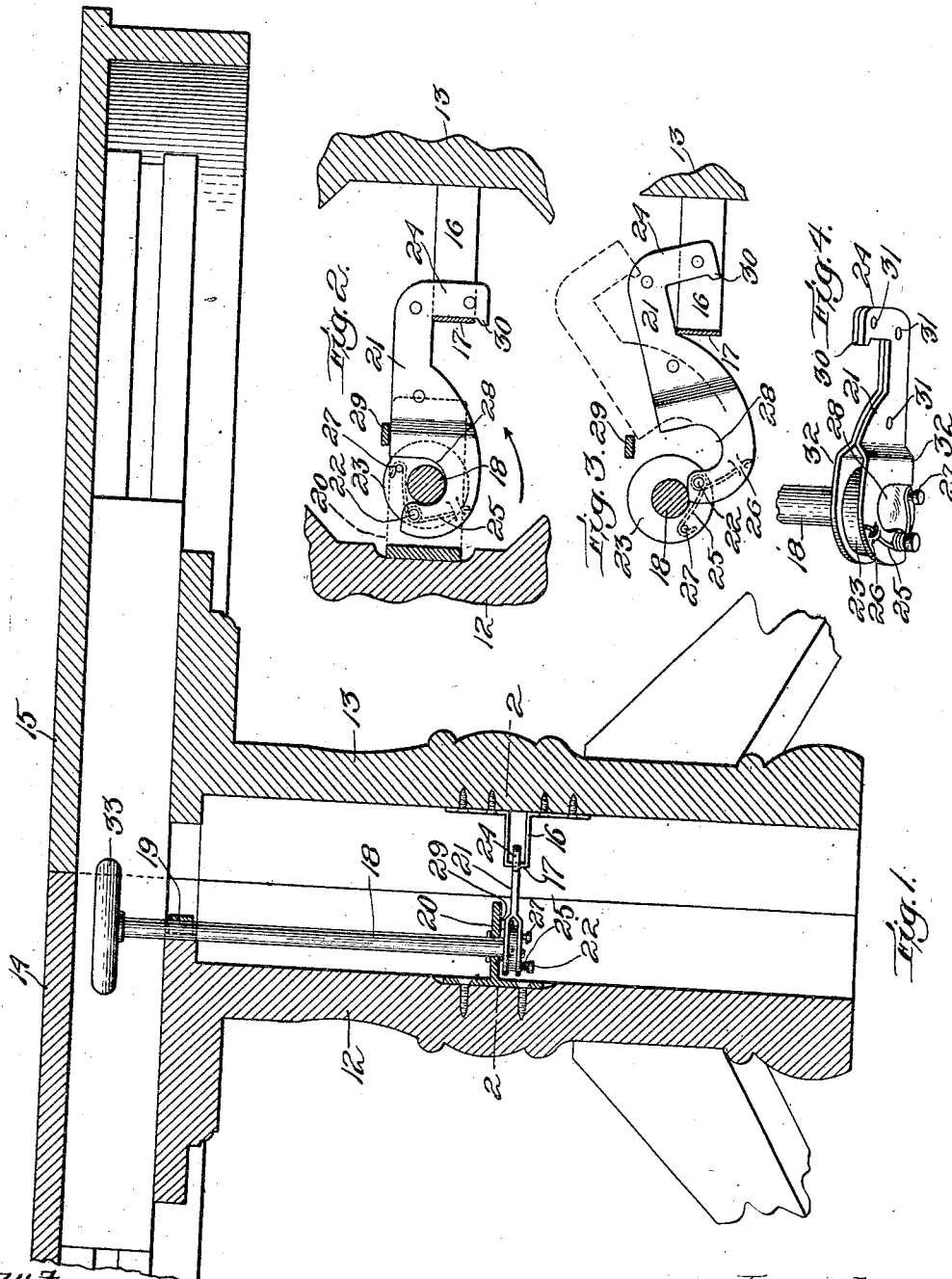


935,609.

E. L. MARSTON.
EXTENSION TABLE.
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UNITED STATES PATENT OFFICE.

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EXTENSION-TABLE.

935,609.

Specification of Letters Patent. Patented Sept. 28, 1909.

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To all whom it may concern:

Be it known that I, EDGAR L. MARSTON, of Somerville, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Extension-Tables, of which the following is a specification.

This invention has for its object to provide simple and effective mechanism for drawing into binding engagement with each other two parts of an extension table, the parts to which the embodiment of my invention here shown is particularly adapted being the sections of the pedestal of a so-called pedestal extension table, said pedestal supporting the sections of a table top, and being separable with the top sections to extend the table. The locking mechanism comprising my invention is intended to lock or bind the sections together in close contact with each other, so that when the sections are in their closed relation, there will be no unsightly crevices between them.

The invention will be hereinafter fully set forth and particularly pointed out in the claims.

Of the accompanying drawings, forming a part of this specification,—Figure 1 represents a longitudinal vertical section of a pedestal extension table equipped with locking mechanism embodying my invention, a portion of the table top being broken away. Fig. 2 represents a section on line 2—2 of Fig. 1. Fig. 3 represents a view similar to Fig. 2 showing the coupling members disconnected. Fig. 4 represents a detail perspective view of a portion of the special mechanism shown in Figs. 1, 2, and 3.

The same reference characters indicate the same parts in all the figures.

In the drawings,—12 and 13 represent the sections of a divided extension table pedestal, on which are suitably mounted the permanent sections 14 and 15 of the table top, said top sections being movable with the pedestal sections to extend the table, and also if desired, movable independently thereof to permit a limited extension of the top without separation of the pedestal sections.

16 represents a rigid coupling member attached to the pedestal section 13, and preferably formed as a loop, the neck 17 of which serves as a guide and an abutment for

the movable coupling member hereinafter described.

18 represents a vertical rock-shaft which is journaled in bearings 19 and 20 affixed to the pedestal section 12.

21 represents the movable coupling member which has an eccentric pivotal connection with the rock-shaft, and is adapted to be moved by rotary movements of the rock-shaft into and out of engagement with the fixed member 16, the construction and arrangement being such that a backward rotation of the rock-shaft throws the movable member entirely out of engagement with the fixed member, thus permitting the separation of the sections, while a forward rotation of the rock-shaft imparts to the movable member first a swinging movement into a sliding engagement with the rigid member, and then a rectilinear movement into a binding engagement therewith, the said binding engagement causing a close binding engagement between the sections connected by the coupling members.

In the embodiment of my invention here shown, the inner end portion of the coupling member 21 is connected by a pivot 22 with a flange 23 attached to the lower end portion of the rock-shaft 18, said pivot being eccentric to the axis of the rock-shaft. The outer end of the coupling member 21 is provided with a hook 24 adapted to be moved into a binding engagement with the neck 17 of the rigid coupling member.

25 represents a spring which is connected with the flange 23, and with the movable coupling member 21, and operates, as hereinafter described, to swing the movable member from its retracted position, shown by dotted lines in Fig. 3, into a sliding engagement with the rigid member 16, as indicated by full lines in said figure the spring as here shown having its central portion coiled upon the pivot 22, and its end portions engaged at 27 and 26 with the flange 23 and the movable member 21, respectively. When the coupling members have a binding engagement with each other to bind the sections 12 and 13 closely together, as shown in Figs. 1 and 2, the pivot 22 stands behind the rock-shaft 18 and at one side of the center of the latter, its location being such that the rock-shaft cannot be rotated by an outward

pull exerted on the movable member 21, the movable member being provided with a hook like finger or projection 28 spaced from the body of the coupling member to form recess 28' which receives the rock-shaft when the movable member 21 is in the position last described. The parts being in the position shown in Figs. 1 and 2, a backward rotation of the rock-shaft in the direction indicated by the arrow in Fig. 2 will move the pivot 22 to the position shown in Fig. 3. During the first part of this movement, the member 21 is given a rectilinear movement by reason of the pivot 22 and the finger 28 moving around the shaft 18, and in this manner the hook 24 is moved backwardly out of binding engagement with the neck of the rigid member 16. A continuation of the backward rotation of the rock shaft then brings the end of finger 28 into engagement with said rock shaft (see Fig. 3) whereby the member 21 is swung on its pivot into the position illustrated in dotted lines, Fig. 3, the outward movement of said member being limited by the stop 29. The sections 12 and 13 are now free to be separated.

When the rock-shaft is rotated in a forward direction opposite that indicated by the arrow in Fig. 2, the spring is immediately put under tension, and cooperates with the shaft in swinging the movable member to the position shown in full lines in Fig. 3, so that the movable member has a sliding engagement with the rigid member before the binding engagement takes place. The completion of the forward rotation of the rock-shaft moves the movable member 21 in a substantially rectilinear direction to the position shown in Fig. 2, thus causing a binding engagement between the two members, and between the sections 12 and 13.

The hook 24 is preferably provided with a lip or ear 30 formed to interlock with the neck 17 when the members are in binding engagement with each other. The stop 29 by guiding the member 21 during the first part of the backward rotation of the rock-shaft, insures the disengagement of the lip 30 from the neck 17 before the swinging movement of the movable member commences.

The movable member is preferably composed of two leaves or layers of sheet metal connected by rivets 31 at the outer end portion of the member, the leaves being separated at the inner end portion to bifurcate the latter, and enable its divisions 32 to bestride the flange 23, as clearly indicated in Fig. 4.

The rock-shaft 18 is provided at its upper end with an operating handle 33, which is preferably a hand wheel, and is located in the space between the pedestal and the under side of the table top, said handle being accessible when the top sections 14 and 15 are

separated, said sections being separable to a limited extent independently of the pedestal sections.

In another application for Letters Patent for improvement in extension tables, filed by me concurrently herewith, I have shown a locking mechanism for the permanent top sections of the table, said mechanism including a rigid coupling member attached to one of the top sections, a movable coupling member mounted on the other top section, and means cooperating with said members for imparting to the movable member, first, a swinging movement into a sliding engagement with the rigid member, and then a rectilinear movement into a binding engagement therewith, the parts being constructed with special reference to the adaptation of the locking mechanism to the top sections. Excepting as hereinafter specified in the appended claims, I do not limit myself to a locking mechanism of this character adapted only for use in an extension table pedestal, as the essential features which characterize my invention, as above defined, may be applied either to the pedestal or to the sectional top of an extension table, or to both the pedestal and top.

I claim:

1. An extension table comprising separable sections, a rigid coupling member attached to one of said sections, a rock shaft mounted in the other section and a second coupling member pivotally supported by said rock shaft in eccentric relation therewith, one end of said coupling member being constructed to engage said shaft as the latter is rocked.

2. An extension table comprising separable sections, a rigid coupling member attached to one of said sections, a rock shaft mounted in the other section and a second coupling member pivotally supported by said rock shaft in eccentric relation therewith, one end of said pivoted coupling member being provided with a finger constructed to engage said shaft as the latter is rocked.

3. An extension table comprising separable sections, a rigid coupling member attached to one of said sections, a rock shaft mounted in the other section and a second coupling member pivotally supported by said rock shaft in eccentric relation therewith, one end of said pivoted coupling member being provided with a finger constructed to engage said shaft when the latter is rocked in one direction, a recess being formed in said coupling member to receive said shaft when the latter is rocked in the opposite direction.

4. An extension table comprising separable sections, a rigid coupling member attached to one of said sections, a rock shaft mounted in the other section and a second coupling member pivotally supported by said rock shaft in eccentric relation there-

with, the pivoted end of said pivoted coupling member being provided with a surface constructed to engage said shaft as the latter is rocked.

5 5. An extension table comprising separable sections, a rigid coupling member attached to one of said sections, a rock shaft mounted in the other section and a second coupling member pivotally supported by
10 said rock shaft in eccentric relation therewith, one end of said pivoted coupling member being constructed to engage said shaft as the latter is rocked, and a stop for limiting the pivoted movement of said coupling

15 member.
6. An extension table comprising separable sections, a rigid coupling member attached to one of said sections, a rock shaft mounted in the other section and a second
20 coupling member pivotally supported by said rock shaft in eccentric relation therewith, one end of said pivoted coupling member being constructed to engage said shaft as the latter is rotated, and a spring carried
25 by said rock shaft and having one end secured thereto, the other end of said spring engaging said locking member.

7. An extension table comprising separable sections, a rigid coupling member attached to one of said sections, a rock shaft
30 mounted in the other section, and provided with a flange, and a second coupling member

pivoted upon said flange and having one end constructed to engage said shaft as the latter is rocked.

8. An extension table comprising separable sections, a rigid coupling member attached to one of said sections, a rock shaft mounted in the other section, and provided with a flange, and a second coupling member
40 pivoted upon said flange and having a finger constructed to engage said rock shaft when the latter is rocked in one direction, a recess being formed adjacent said finger to receive said shaft when the latter is rotated in the
45 opposite direction.

9. An extension table comprising separable sections, a rigid coupling member attached to one of said sections, a rock shaft mounted in the other section, and provided
50 with a flange, and a second coupling member pivoted upon said flange and having one end constructed to engage said shaft as the latter is rocked, and a spring carried by said flange and having one end secured thereto,
55 the other end of said spring engaging said pivoted coupling member.

In testimony whereof I have affixed my signature, in presence of two witnesses.

EDGAR L. MARSTON.

Witnesses:

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