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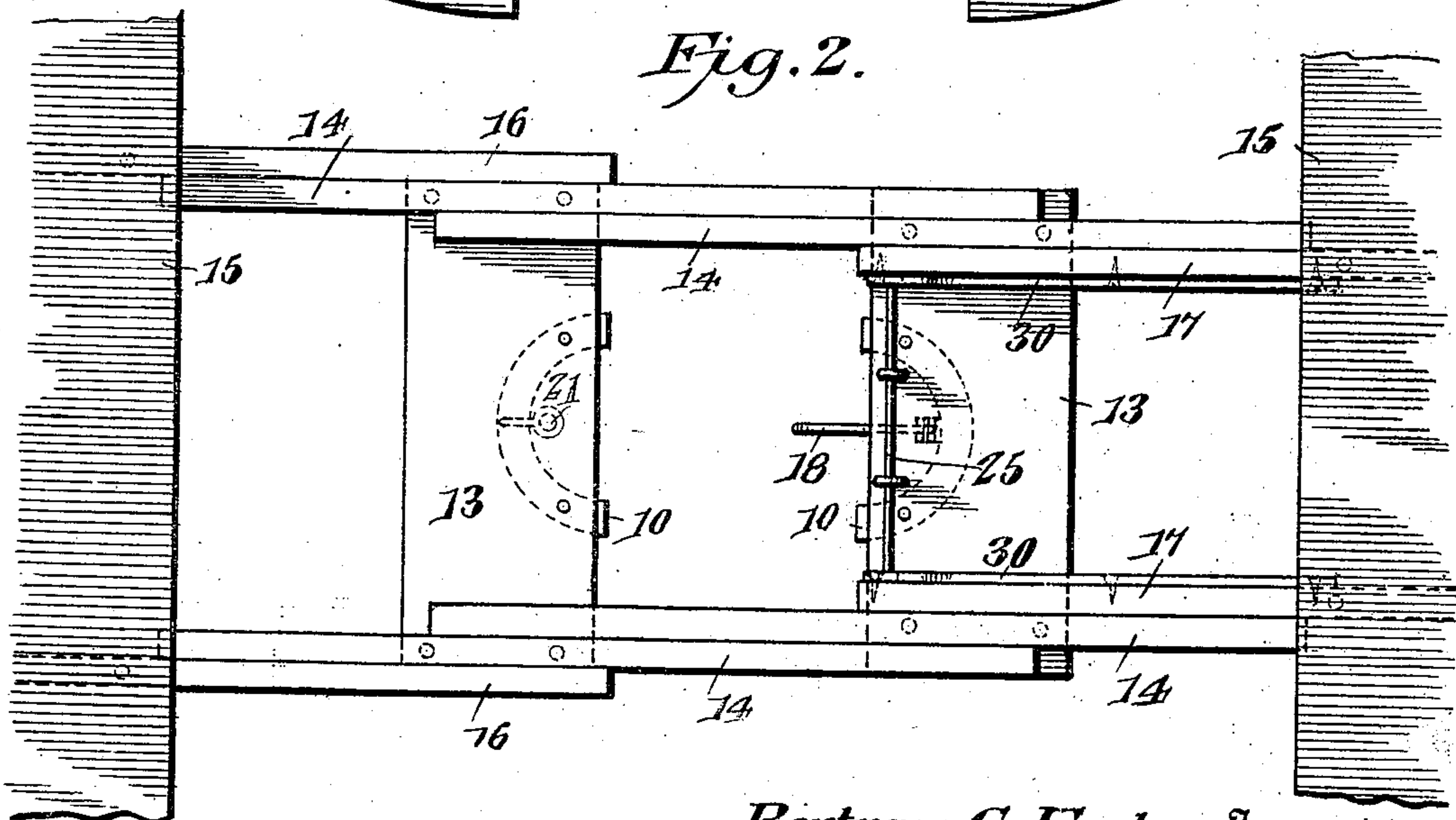
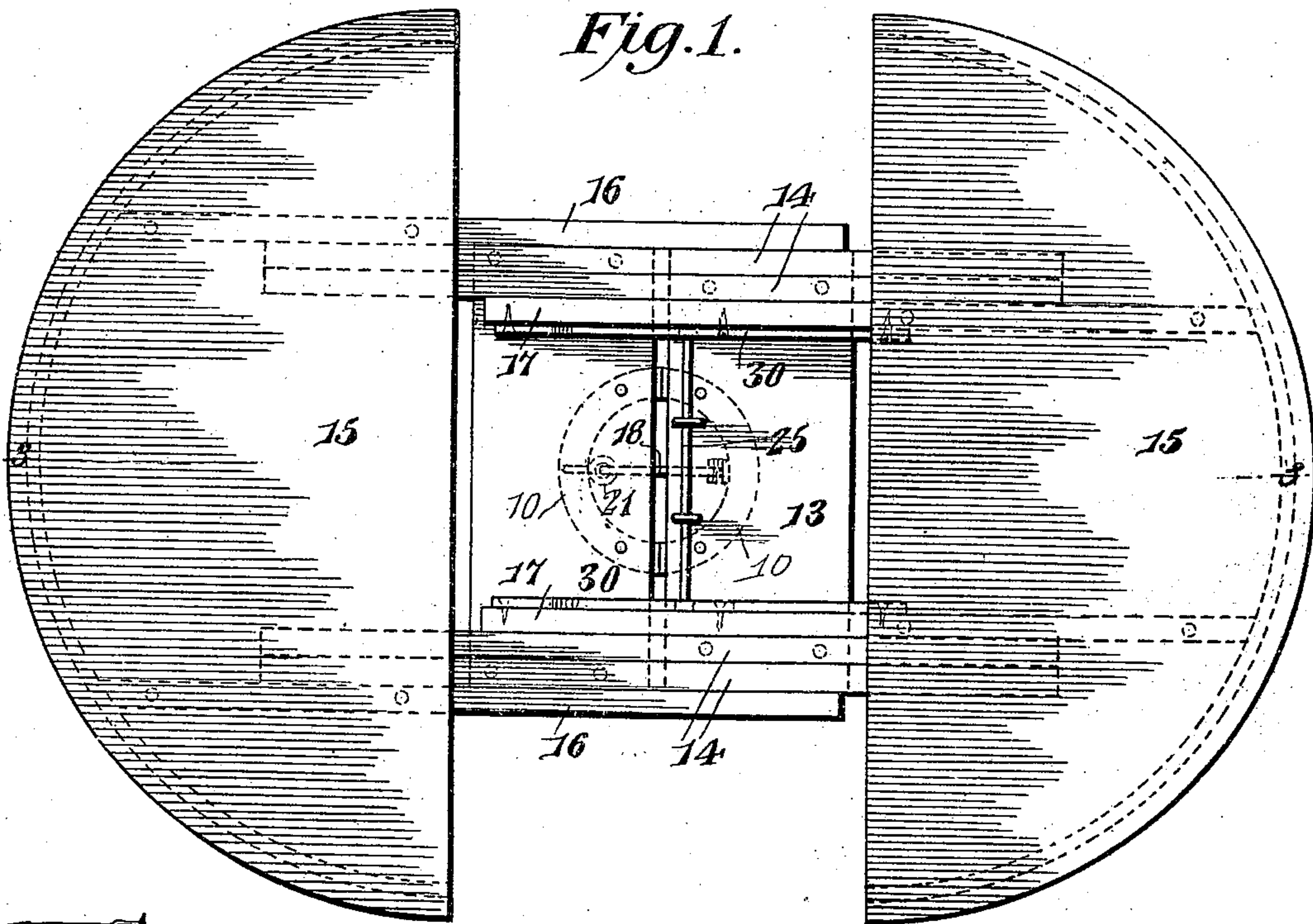
PATENTED MAR. 26, 1907.

B. G. FOSTER.

EXTENSION TABLE.

APPLICATION FILED JULY 11, 1906.

4 SHEETS—SHEET 1.



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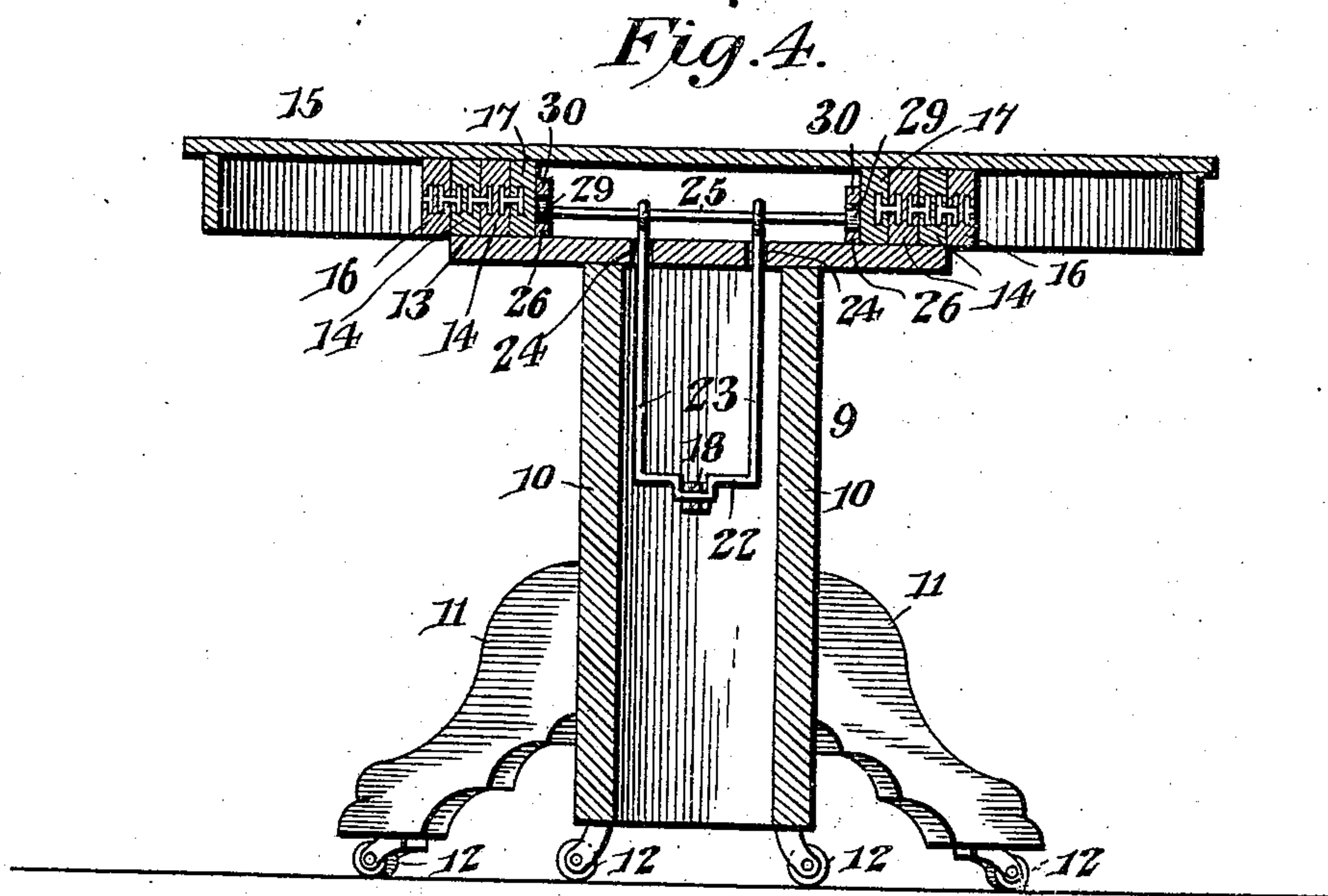
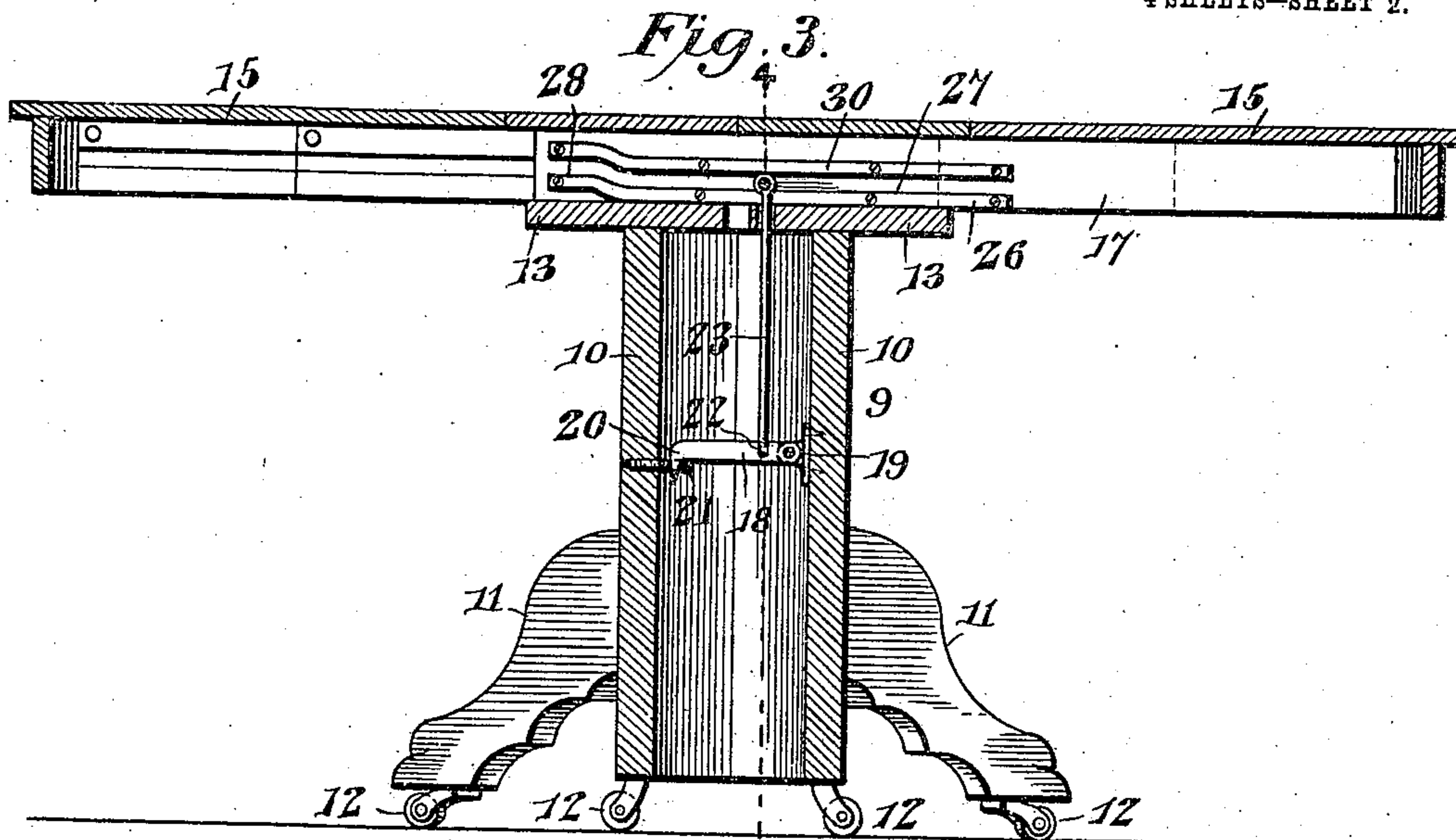
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EXTENSION TABLE.

APPLICATION FILED JULY 11, 1906.

4 SHEETS—SHEET 2.



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4 SHEETS—SHEET 3.

Fig. 5.

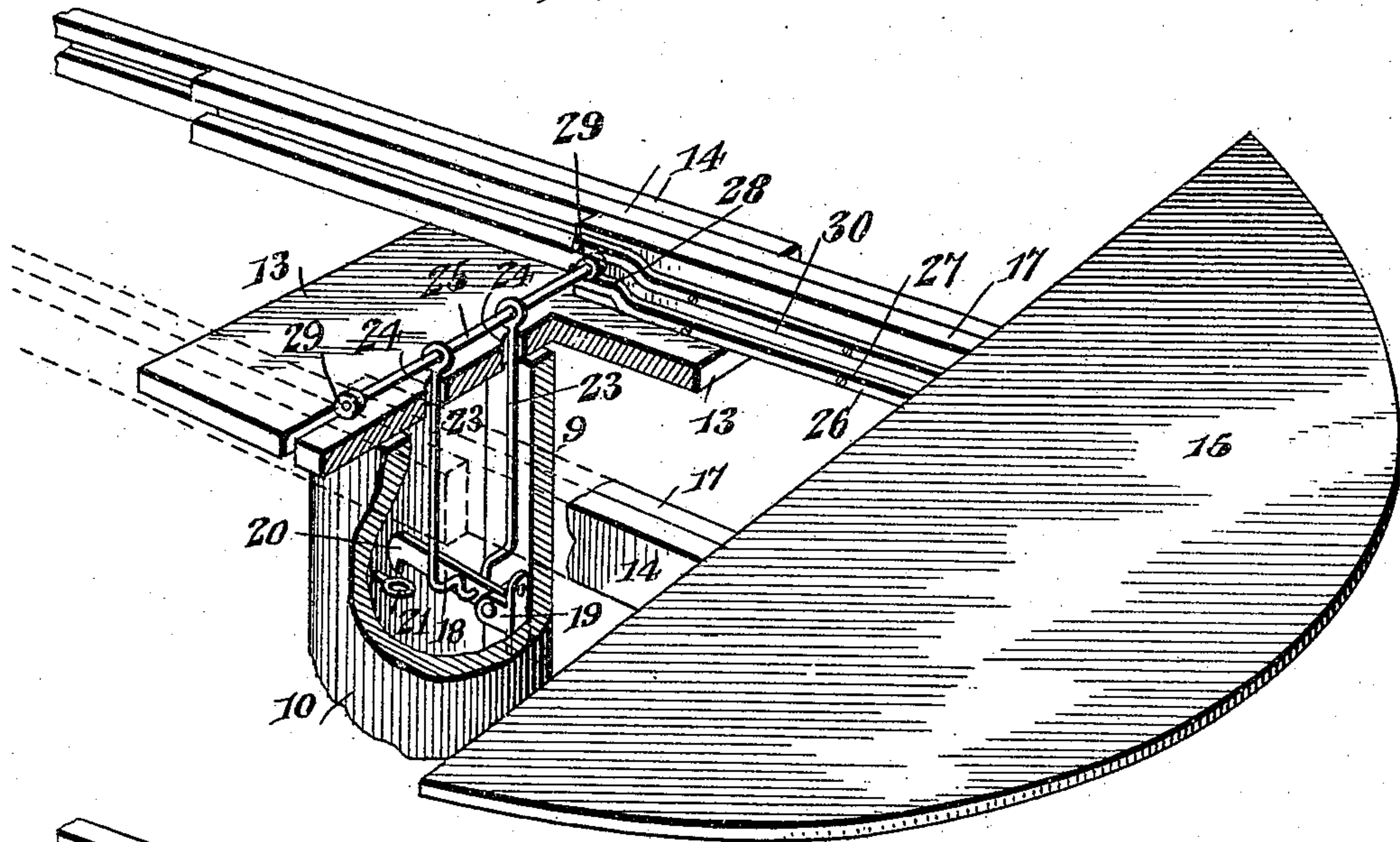
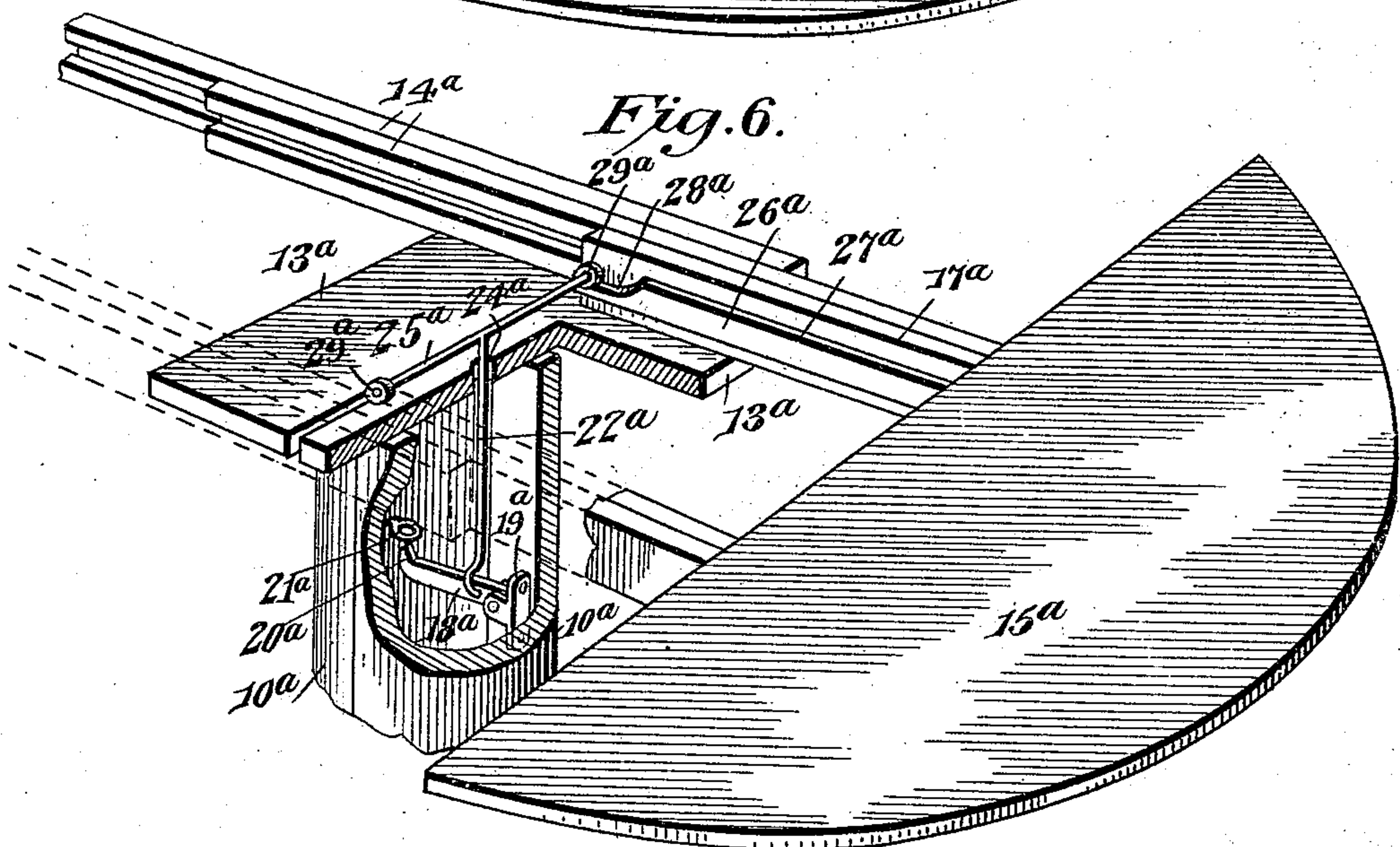


Fig. 6.



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4 SHEETS—SHEET 4.

Fig. 7.

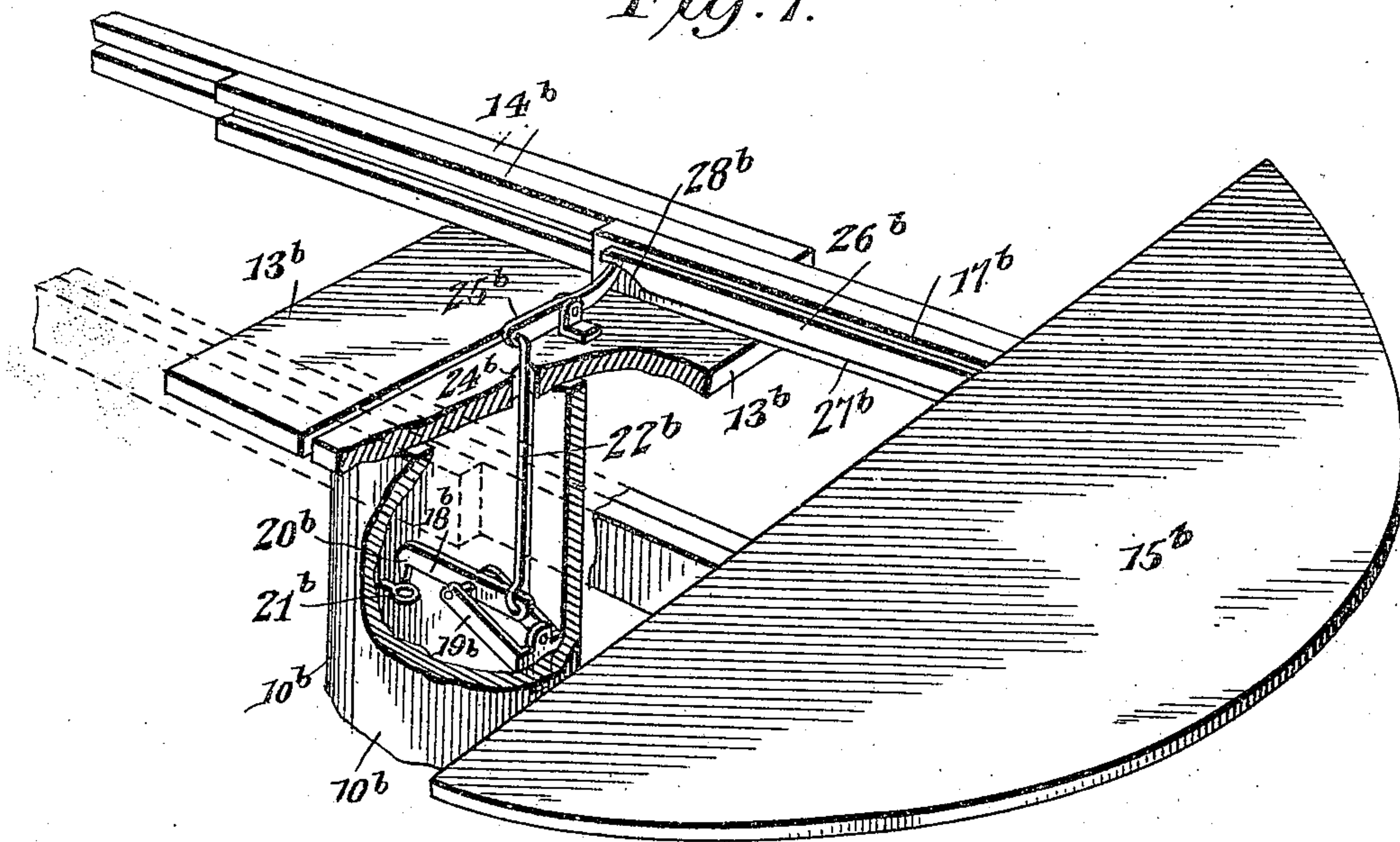
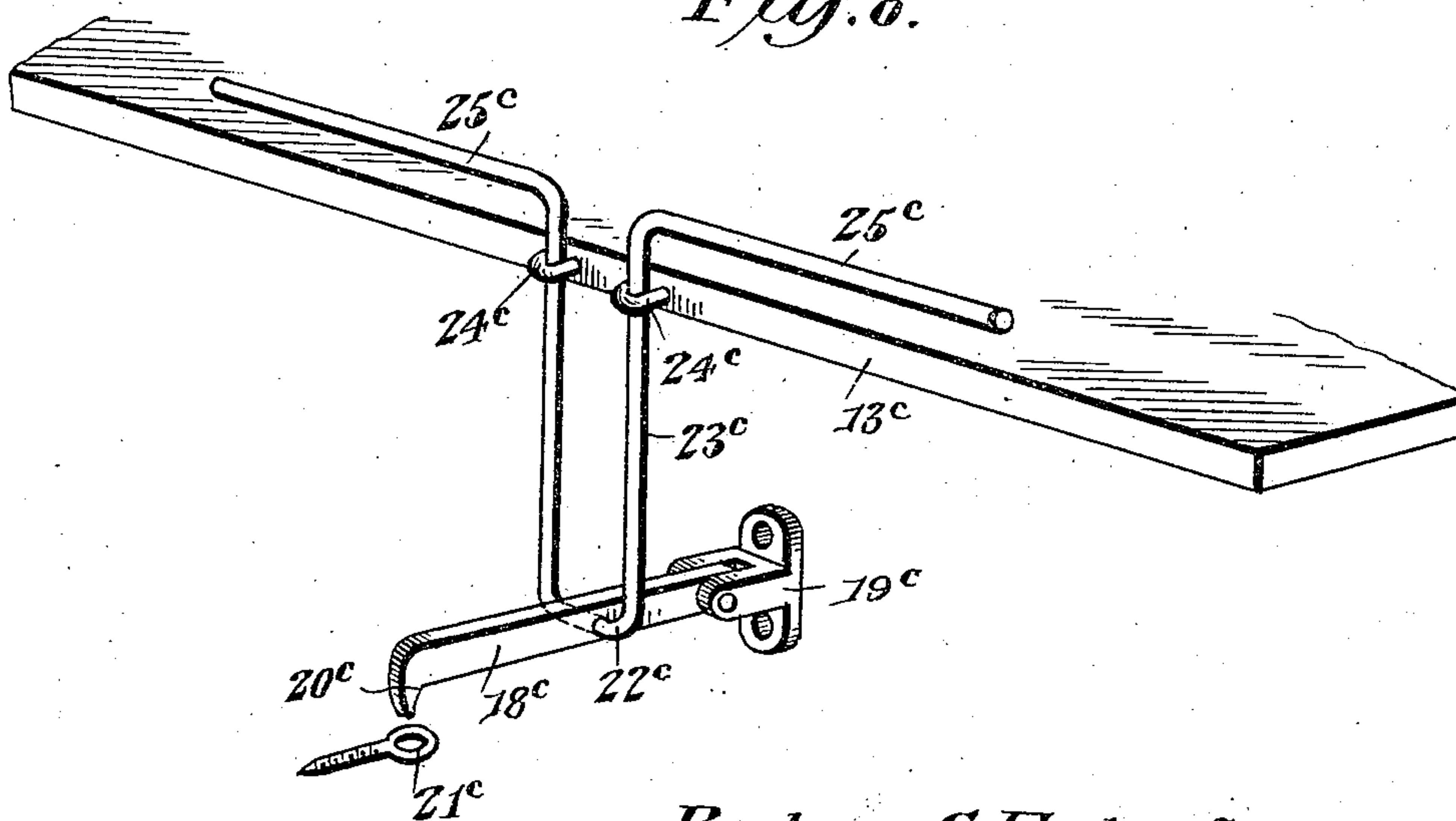


Fig. 8.



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UNITED STATES PATENT OFFICE.

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EXTENSION-TABLE.

No. 848,233.

Specification of Letters Patent.

Patented March 26, 1907.

Application filed July 11, 1906. Serial No. 325,694.

To all whom it may concern:

Be it known that I, BERTRAM G. FOSTER, a citizen of the United States, residing at Washington city, in the District of Columbia, have invented a new and useful Extension-Table, of which the following is a specification.

This invention relates in a specific sense to that type of table disclosed in a copending application made by Albert C. Long, Serial No. 316,954, though there are features that are perhaps applicable to extension-tables of other characters.

In the type of table referred to a central pedestal or support is employed that is made up of separable sections, and the top is so constructed and associated with the pedestal or support that it may be extended within certain limits and without separating the pedestal-sections. When, however, a further extension is desired, then the pedestal-sections separate in order to provide the necessary extended support for the top. It is of course advantageous to employ means for holding the pedestal-sections against separation during the said limited extension of the top; but this locking means must be made inoperative when it becomes necessary to separate the pedestal-sections.

One of the principal objects therefore of the present invention is to provide, in connection with the lock for holding the pedestal-sections together during the said limited extension of the table, novel means of a very simple nature for automatically unlocking the pedestal-sections when an extension is made beyond the said limit and automatically relocking the sections when the top is again retracted within said limits, thus doing away with the necessity of manually operating the lock and materially simplifying the operation of the table.

Several embodiments of the invention are illustrated in the accompanying drawings, wherein—

Figure 1 is a top plan view of a table, showing a limited extension of the top with the pedestal closed and with the intermediate leaves removed. Fig. 2 is a similar view, but illustrating the extension of the top with the pedestal-sections separated. Fig. 3 is a vertical sectional view on the line 3 3 of Fig. 1. Fig. 4 is a vertical cross-sectional view on the

line 4 4 of Fig. 3. Fig. 5 is a detail perspective view of a portion of the table, parts being broken away in order to illustrate the locking mechanism and operating means therefor. Fig. 6 is a similar perspective view of a slightly-modified form of construction. Fig. 7 is also a detail perspective view of still another embodiment of the invention. Fig. 8 is a detail perspective view of another form of construction.

Similar reference-numerals designate corresponding parts in all the figures of the drawings.

Referring to the embodiment illustrated in the first five figures, a support is employed in the form of a hollow pedestal 9, composed of separable sections 10, having feet 11 and mounted on suitable rollers 12. Each of these sections is provided at its upper end with a cross-bar 13, and secured to the cross-bars are slidably-associated slides 14, which thus connect the pedestal-sections and yet permit of their separation, as will be evident. Top end sections 15 are mounted on the pedestal and are movable toward and from each other in the usual manner. One of these top-sections is provided with an outer pair of slides 16, that is slidably mounted on the slides of one of the pedestal-sections. The other top-section is provided with a pair of slides 17, slidably associated with the slides of the other pedestal-section and arranged on the inner sides of the same.

A latch 18, located within the pedestal, is pivoted, as shown at 19, to one of the sections and has a free depending hooked end 20, that is arranged to engage in an eye 21, secured to the other section. A yoke or link 22, pivoted at its lower end to an intermediate portion of the latch 18, is provided with side arms 23, slidably passing through openings 24 in the cross-bar 13 of the pedestal-section to which the latch is pivoted. The upper ends of the side arms 23 are connected to a positioning shaft or rod 25, that extends longitudinally over the cross-bar 13 and transversely of the line of movement of the top-sections. The inner slides 17, carried by one of the top-sections, are provided on their inner faces with actuating-tracks 26. The upper edges of these tracks have portions 27 and 28 located in different horizontal planes. The portions 28 are slightly raised, as shown,

and are disposed at the inner ends of the slides. The terminal portions of the shaft 25 ride upon the upper edges of the tracks 26 and may be provided with rollers 29, though these rollers are not essential. Guard-strips 30 are shown in this embodiment of the invention, said strips being located over the tracks 26 and also over the rollers of the ends of the shaft.

The operation of the structure may be briefly described as follows: As long as the top-sections are moved so that their slides 16 17 will operate on the slides 14 the cross or positioning shaft 25 will be upon the lower portions 27 of the tracks 26. Consequently the latch 18 will be in its depressed position and in engagement with the eye 21, so that the pedestal or support sections will be locked together. If, however, the top-sections are drawn apart their full limits of movement upon the slides 14, then the raised portions 28 of the tracks 26 will be drawn beneath the positioning-shaft 25, elevating said shaft, raising the yoke 22, and disengaging the latch from the eye. A further separation of the top-sections will therefore carry the pedestal-sections with them, the same being slidably connected by the slides 14. In contracting the top the pedestal-sections are first moved together before the top-sections are moved thereon. As soon as the pedestal-sections are together and the movements of the top-sections are continued the elevated portions 28 of the tracks will be carried from beneath the positioning-shaft 25, and said shaft will drop upon the lower portions 27 of the tracks, thus permitting the latch 18 to reengage the eye 21 and relock the pedestal-sections against separation.

A slightly-modified form of construction is illustrated in Fig. 6, wherein the pedestal-sections are shown at 10^a, being provided with the usual cross-bars 13^a, which are connected by slides 14^a. A top-section 15^a is illustrated, said section having slides 17^a located between and slidably associated with the inner set of slides 14^a. A latch 18^a is pivoted, as shown at 19^a, to one of the pedestal-sections and has an upturned hook 20^a, that is movable upwardly into engagement with an eye 21^a, carried by the other pedestal-section, and is movable downwardly out of engagement with the same. A link 22^a, connected at its lower end to an intermediate portion of the latch, passes through an opening 24^a in the cross-bar of the pedestal-section carrying the latch 18^a and has its upper end secured to a cross or positioning shaft 25^a. The terminal portions of this shaft or positioning device ride upon tracks secured to the inner sides of the slide 17^a, one of said tracks being shown at 26^a and having the main portion of its upper edge 27^a higher than the terminal portions 28^a. The ends of the positioning de-

vice 25^a may, if desired, be provided with rollers 29^a.

It will be evident that the operation of this structure effects the same results as the embodiment already described. When the top-section is drawn outwardly as far as possible upon the slides 14^a, the cross-shaft 25^a will then rest upon the lower portions 28^a of the track, the latch will be lowered, and pedestal-sections 10^a unlocked. On the other hand, as long as the top-section is located inside said outer limit then the cross-shaft will ride upon the upper portions 27^a of the track and the latch will be held in its operative position. The first-described embodiment is believed to be somewhat better than this structure, inasmuch as the weight of the latch holds it in its locked position, and therefore no strain is necessary upon the parts to maintain it in such position. In the present embodiment of the invention, however, the lock is held elevated by the parts, as shown, and consequently more friction is liable to occur between the parts, so that the top-sections may not be moved as readily toward and from each other.

Still another form of the invention is illustrated in Fig. 7. In this structure the table-sections are shown at 10^b and have the usual cross-bars 13^b, connected by slides 14^b. An end section is shown at 15^b and has slides 17^b coacting with the slides 14^b and arranged between them. The latch (shown at 18^b) is pivoted between its ends to a bracket 19^b, fixed to one pedestal-section, one end of said latch having a depending hook 20^b arranged to engage in an eye 21^b, carried by the opposite pedestal-section. A link 22^b is pivoted to the other end of the latch and extends upwardly through an opening 24^b in the cross-bar, the upper end of said link being pivoted to one arm of a lever 25^b, fulcrumed between its ends on the cross-bar 13^b, the other arm of said lever operating against the under edge of a track 26^b, secured to one of the slides 17^b of the top-section. The track has the main portion 27^b of its edge disposed lower than the inner terminal portion 28^b. It will thus be evident that when the slides 17^b are in their outermost positions on the cross-bar the outer arm of the lever 25^b will rest against the portion 28^b of the track, so that the link 22^b will be in its lower position and the hook 20^b of the latch raised out of the eye 21^b. The pedestal-sections are thus unlocked. When, however, the top-section 15^b is moved inwardly, then the outer arm of the lever 25^b will be disposed against the portion 27^b of the track, and the hook 20^b will consequently be held in its lowermost position and in the eye 21^b.

An exceedingly simple form of the invention is illustrated in Fig. 8, wherein the cross-bar of one of the pedestal-sections is shown at 13^c. The latch 18^c is pivoted at one end

to a bracket 19°, adapted to be secured to one of the pedestal-sections, while the other end of said latch has a depending-hook 20° movable into and out of an eye 21°, that is secured to the other pedestal-section. A yoke 22°, pivoted to the latch between its ends, has side arms 23°, slidably mounted in eyes 24°, that are fastened to one edge of the cross-bar 13°. The upper ends of the side arms are bent outwardly to form elements 25°, corresponding to the positioning device already described and operating against tracks on the slides of the top-section, as will be evident.

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

1. In an extension-table, the combination with a support including relatively movable sections, of a top including a section movable on the support independently of the relative movement of the sections thereof, a lock for holding the support-sections against relative movement, and means for effecting the automatic locking movements of said lock upon the said independent movement of the top-section on the support.

2. In an extension-table, the combination with a support including relatively movable sections, of top-sections movably mounted on and movable independently of the support-sections, a lock for holding the support-sections against relative movement, and means for effecting the automatic locking movement of said lock upon the movement of the top-sections independently of the support-sections toward each other.

3. In an extension-table, the combination with a support including relatively movable sections, of top-sections mounted on the support and having a limited relative movement thereon independently of the relative movement of the support-sections, a lock connecting the support-sections for holding them against relative movement during the said limited relative movement of the top-sections, means for moving said lock to an inoperative position to permit the separation of the support-sections on the further movement of the top-sections, and means for automatically effecting the movement of the lock to an operative position upon the inward movement of the top-sections when the support-sections are together.

4. In an extension-table, the combination with a pedestal comprising separable sections, of relatively movable top-sections, each being slidable on one of the pedestal-sections, a lock for holding the pedestal-sections against relative movement, and automatic means for effecting the movement of the lock on the relative movement of the top-sections toward each other.

5. In an extension-table, the combination with a support comprising separable sections, of a top-section movable thereon inde-

pendently of the movement of the support-sections, a lock for holding the support-sections against separation, and means for transmitting motion from the top-section to the lock, whereby said lock is moved by the top-section on the movement of the said top-section independently of said support-sections.

6. In an extension-table, the combination with a support comprising separable sections, of top-sections relatively movable on the support independently of the relative movement of the support-sections, a lock for holding the support-sections against separation, and means for transmitting motion from one of the top-sections to the lock, whereby said lock is moved by said top-section on the relative movement of the top-sections independently of the support-sections.

7. In an extension-table, the combination with a support comprising separable sections, of a lock for holding the sections against separation, a top-section movably mounted on the support and movable thereon independently of the movement of the support-sections, and means carried by the top-section for transmitting motion from said top-section to the lock, whereby said lock is automatically moved by the top-section on the movement of said top-section with respect to the support-sections.

8. In an extension-table, the combination with a support comprising separable sections, of a lock for holding the sections against separation, a reciprocatory top-section movably mounted on the support and movable independently of the support-sections, and means carried by the top-section for automatically moving the lock in opposite directions upon the movement of the top-section in opposite directions independently of the support-sections.

9. In an extension-table, the combination with a support comprising separable sections, of a lock for holding the sections against separation, a top-section mounted on the support and movable thereon in opposite directions, and means carried by the top-section for transmitting motion from the top-section to the lock for automatically moving the lock to inoperative position on the movement of the top-section in one direction.

10. In an extension-table, the combination with a support comprising separable sections, of a lock for holding the sections against separation, a top-section mounted on the support and movable thereon in opposite directions, and means carried by the top-section for automatically moving the lock to operative position on the movement of the top-section in one direction.

11. In an extension-table, the combination with a support comprising separable sections, of a lock for holding the sections against separation, a reciprocatory top-section movably mounted on the support, and means carried

by the top-section for moving the lock to an inoperative position on the movement of the top-section in one direction and to an operative position on the movement of the top-section in an opposite direction.

12. In an extension-table, the combination with a support comprising separable sections, of a lock for holding the sections against separation, a top-section movable on the support independently of the movement of the support-sections, and means carried by the top-section for moving the lock both to an operative and to an inoperative position during such independent movement.

13. In an extension-table, the combination with a support comprising separable sections, of top-sections movable toward and from each other upon the support independently of the movement of the support-sections, a lock for holding the support-sections against separation, means carried by one of the top-sections to effect the locking and unlocking movements of the lock on such independent movements of the top-sections toward and from each other.

14. In an extension-table, the combination with a supporting-pedestal comprising separable sections, of top-sections, each slidably mounted on one of the pedestal-sections, said top-sections being movable toward and from each other upon the support, a latch carried by one of the pedestal-sections, an eye carried by the other pedestal-section and detachably engaged by the latch to hold said pedestal-sections against separation, and means carried by one of the top-sections to move the latch into and out of engagement with the eye on the movement of the top-sections toward and from each other.

15. In an extension-table, the combination with a supporting-pedestal comprising separable sections, of top-sections each slidably mounted on one of the pedestal-sections, said top-sections having a limited relative movement on the pedestal-sections independently of the relative movement of said pedestal-sections and having a further relative movement with the pedestal-sections, a lock for holding the pedestal-sections against relative movement during the limited relative movement of the top-sections, and means for automatically effecting the unlocking of the pedestal-sections when the top-sections move beyond said limit, and relocking said pedestal-sections when the same are together and the top-sections return to said limit.

16. In an extension-table, the combination with a supporting-pedestal comprising separable sections, of top-sections each slidably mounted on one of the pedestal-sections, said top-sections having a limited relative movement on the pedestal-sections independently of the relative movement of said pedestal-sections and having a further relative movement with the pedestal-sections,

a lock for holding the pedestal-sections against relative movement during the limited relative movement of the top-sections, and means carried by one of the sections and engaging the lock for automatically effecting the unlocking of the pedestal-sections when the top-sections move beyond said limit, and relocking said pedestal-sections when the same are together and when the top-sections return to said limit.

17. In an extension-table, the combination with a support, comprising separable sections, of a latch mounted on one section and detachably engaging the other to hold the sections against separation, a top comprising sections mounted respectively on the support-sections, the top-section that is mounted on the support-section having the latch, being movable thereon, and means carried by said movable top-section for automatically effecting the movement of the latch into and out of engagement with the support-section on the movement of said top-section.

18. In an extension-table, the combination with a support comprising separable sections, of a latch mounted on one section and detachably engaging the other section to hold said sections against separation, a top comprising sections mounted respectively on the support-sections, the top-section that is mounted on the support-section having the latch, being provided with a slide movable on said support-section, and a device carried by the slide for automatically effecting the movement of the latch into and out of engagement with said other support-section on the movement of said top-section.

19. In an extension-table, the combination with a support comprising separable sections, of a latch mounted on one section and detachably engaging the other section for holding said sections against separation, a top comprising sections mounted respectively on the support-sections, the top-section that is mounted on the support-section having the latch, being provided with a slide movable on said support-section, a positioning device connected to the latch, and an actuating element carried by the slide, said element having portions located in different planes and engaged by the positioning device on the movement of the top-section.

20. In an extension-table, the combination with a support comprising separable sections, of a latch movably mounted on one section and detachably engaging the other section to hold the sections against separation, a positioning device for said latch having an upright movement, a top comprising sections mounted respectively on the support-sections, the top-section that is mounted on the support-section having the latch, being movable thereon, and an actuating-track carried by said top-section, said track having

portions of its edges disposed in different horizontal planes and engaging the positioning device to effect its upright movement on the movement of the top-section upon its support-section.

21. In an extension-table, the combination with a support comprising separable sections, of slidable connections between the sections, a latch movably mounted on one section and detachably engaging the other sections, a top-section associated with each support-section, the top-section that is associated with the support-section having the latch mounted thereon, being provided with slides movable upon said support-section, a track carried by one of said slides, and positioning means for the latch connected to said latch and operating against the track when the top-section is moved with respect to the support-section.

22. In an extension-table, the combination with a support, comprising separable sections, of a latch movably mounted on one section and detachably engaging the other section, a top-section carried by each support-section, the top-section that is carried by the support-section having the latch, being provided with slides movable upon said support-section, tracks secured to the inner sides of said slides, and a positioning-shaft connected to the latch and having its ends operating against the tracks when the top-section is moved with respect to the support-sections.

23. In an extension-table, the combination with a supporting-pedestal comprising sections movable to and from an abutting position, of a top comprising sections movable independently of the pedestal-sections to and from an abutting position over the pedestal, a lock for holding the pedestal-sections against movement, a track movable with one of the top-sections on its movement independent of the pedestal-section, and means operating against the track and connected to the lock for moving said lock upon a predetermined relative movement of the top-sections independently of the pedestal-sections.

24. In an extension-table, the combination with a pedestal comprising sections movable to and from an abutting position, of a top comprising sections, each top-section being supported by one of the pedestal-sections and having slides that are slidably mounted thereon, a latch mounted on one pedestal-section and engaging the other to hold said sections against separation, tracks carried by the slides of the top-section that is slidably supported on the section having said

latch, and a positioning device connected to the latch and operating against said tracks when the top-section is moved with respect to the pedestal-sections.

25. In an extension-table, the combination with a supporting-pedestal comprising separable sections, of slidably-associated slides secured to the pedestal-sections, top-sections having slides that are slidably engaged with the slides of the pedestal-sections, said various slides permitting a limited relative movement of the top-sections independently of the relative movement of the pedestal-sections, said top-sections having a further relative movement with the pedestal-sections, a latch mounted on one of the pedestal-sections and detachably engaging the other pedestal-section to hold said pedestal-sections against relative movement during the said limited relative movement of the top-sections, tracks carried by the top-sections, a cross-shaft that operates against the tracks, said tracks having portions located in different planes, and a connection between the cross-shaft and the latch.

26. In an extension-table, the combination with a support comprising separable sections, of a lock for holding the support-sections against separation, a movable top-section mounted on the support, and means operated by the top-section to positively move the lock to an operative and to an inoperative position upon the opposite movements of the top-section.

27. In an extension-table, the combination with a support comprising separable sections, of a latch carried by one section and movable into and out of engagement with the other section, a movable top-section mounted on the support, and actuating means carried by the top-section for positively moving the latch both into and out of said engagement.

28. In an extension-table, the combination with a support comprising separable sections, of a latch carried by one section and movable into and out of engagement with the other section, a top-section movably mounted on and supported by the support-section having the latch, said top-section having upper and lower tracks, and a positioning device connected to the latch and operating between the tracks.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

BERTRAM G. FOSTER.

Witnesses:

JAS. K. McCATHRAN,
E. G. McCARTHY.