

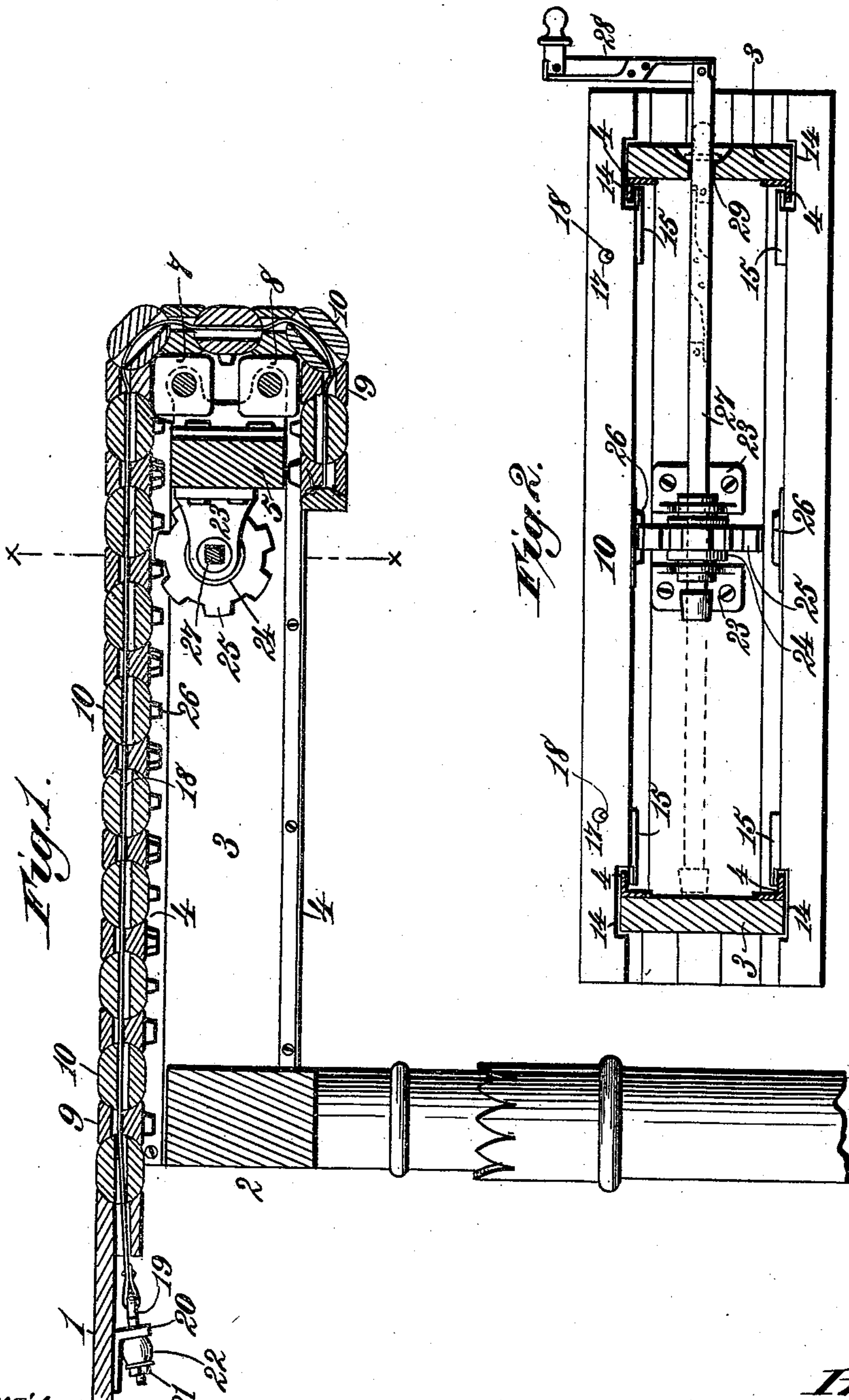
(No Model.)

3 Sheets—Sheet 1.

C. S. HOMER & W. H. PICKETT.  
EXTENSION TABLE.

No. 472,881.

Patented Apr. 12, 1892.



Witnesses,  
*Robert G. Smith,*  
*J. A. Rutherford.*

Inventors:  
*Chauncey S. Homer,*  
*William H. Pickett.*  
By *James L. Norris.*  
Atty.

(No Model.)

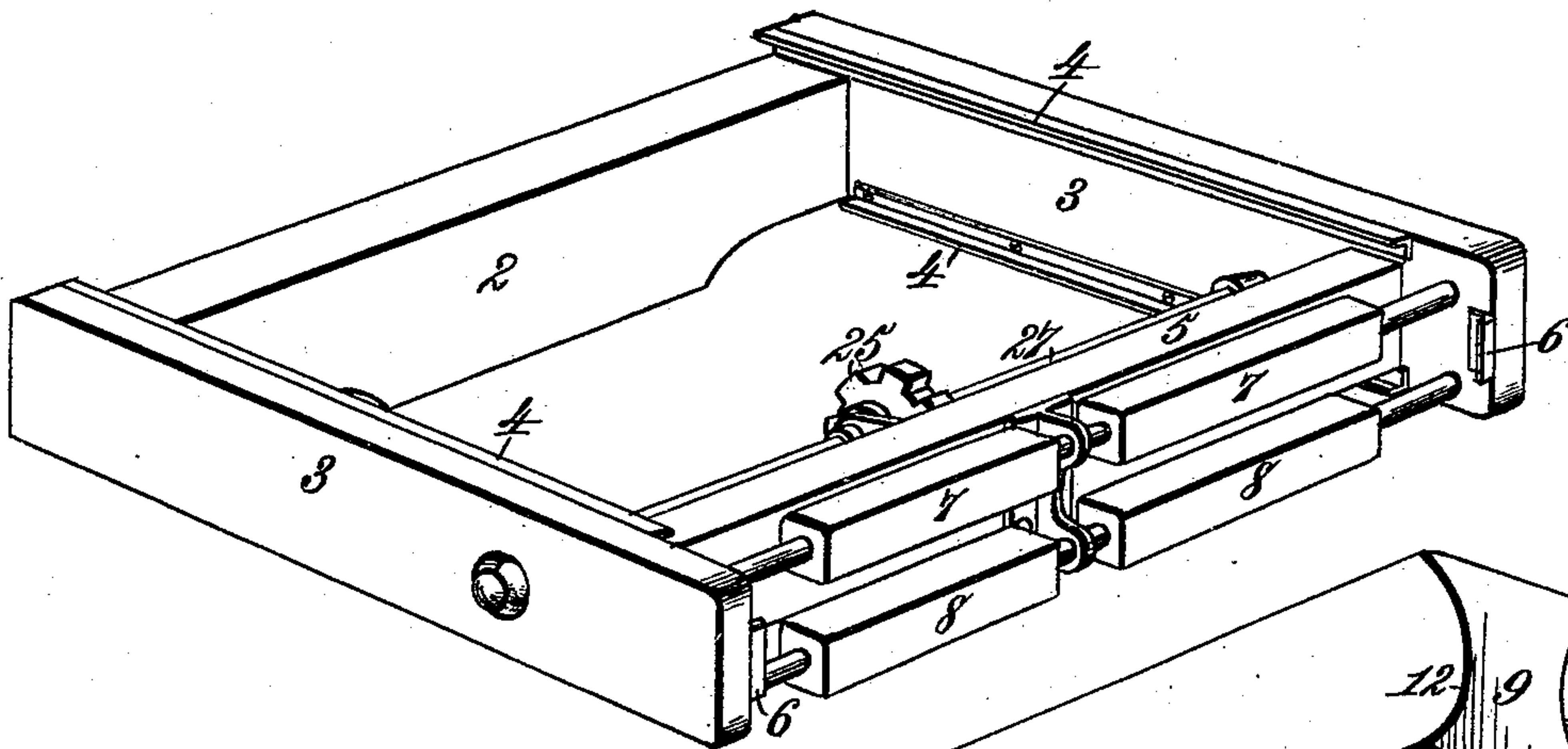
3 Sheets—Sheet 2.

C. S. HOMER & W. H. PICKETT.  
EXTENSION TABLE.

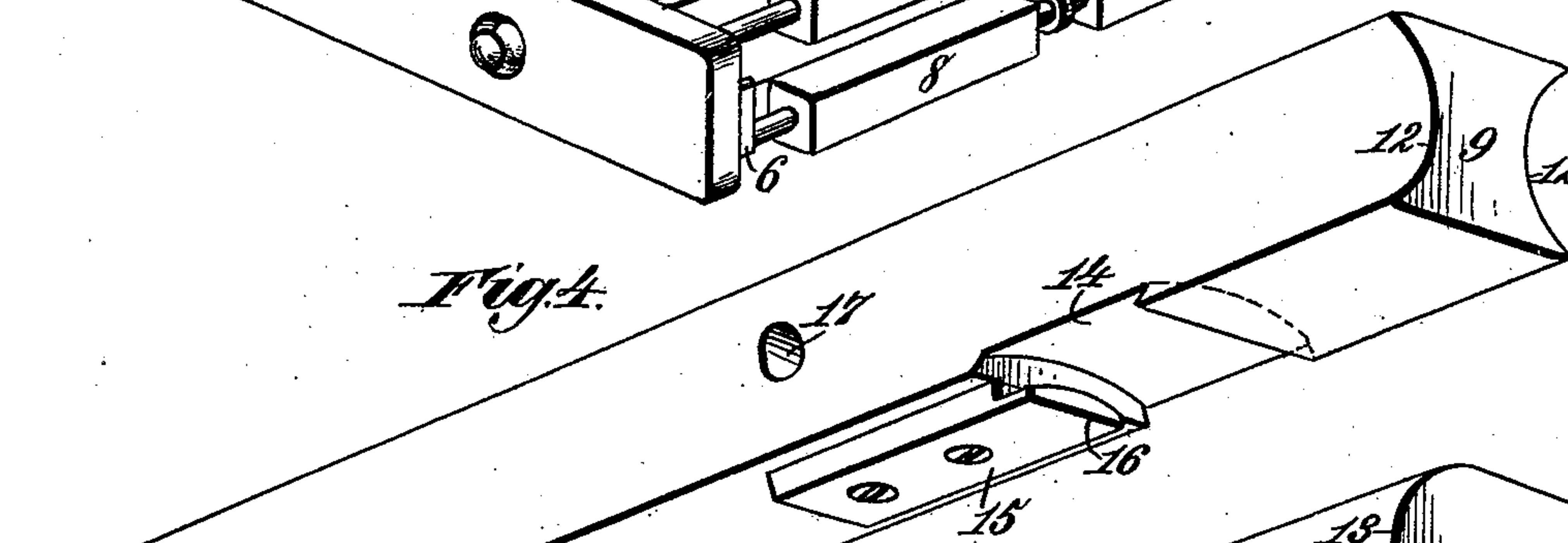
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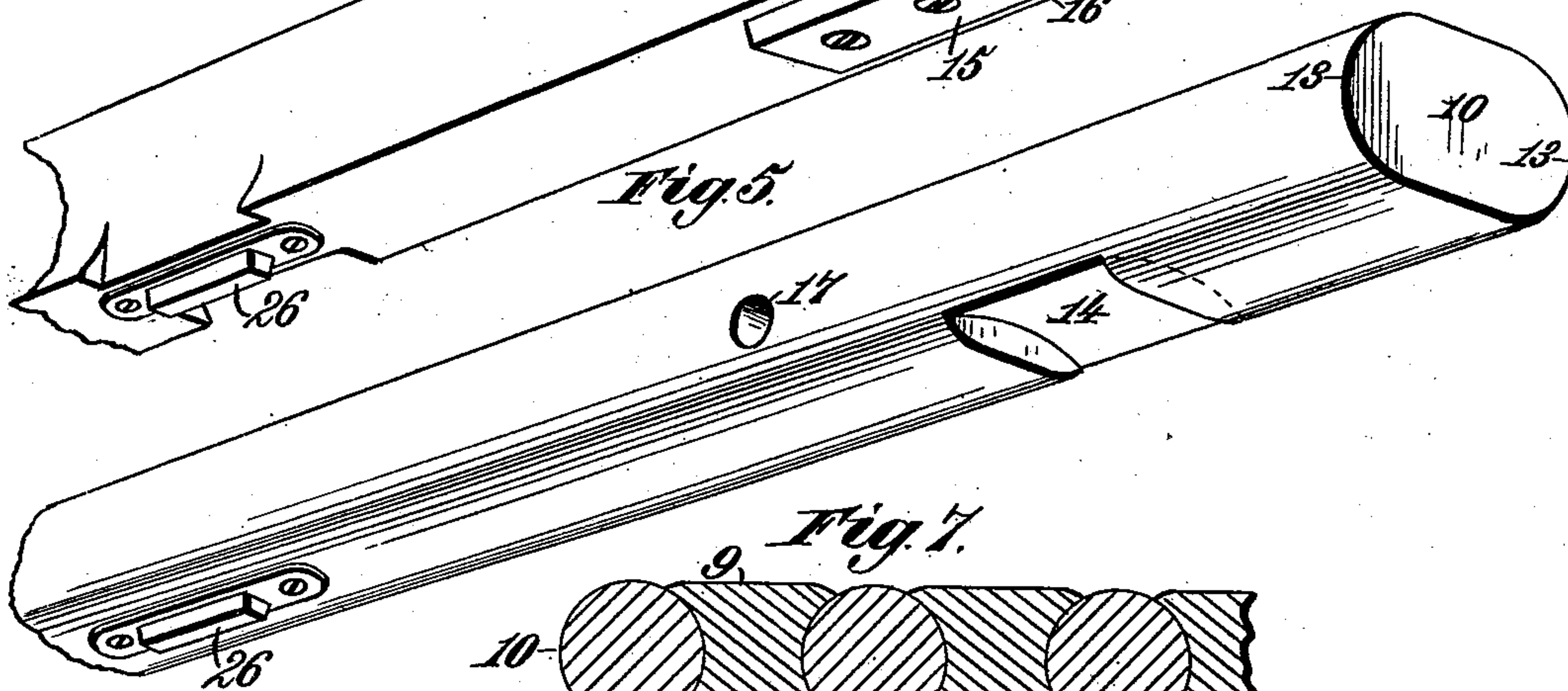
*Fig. 3.*



*Fig. 4.*



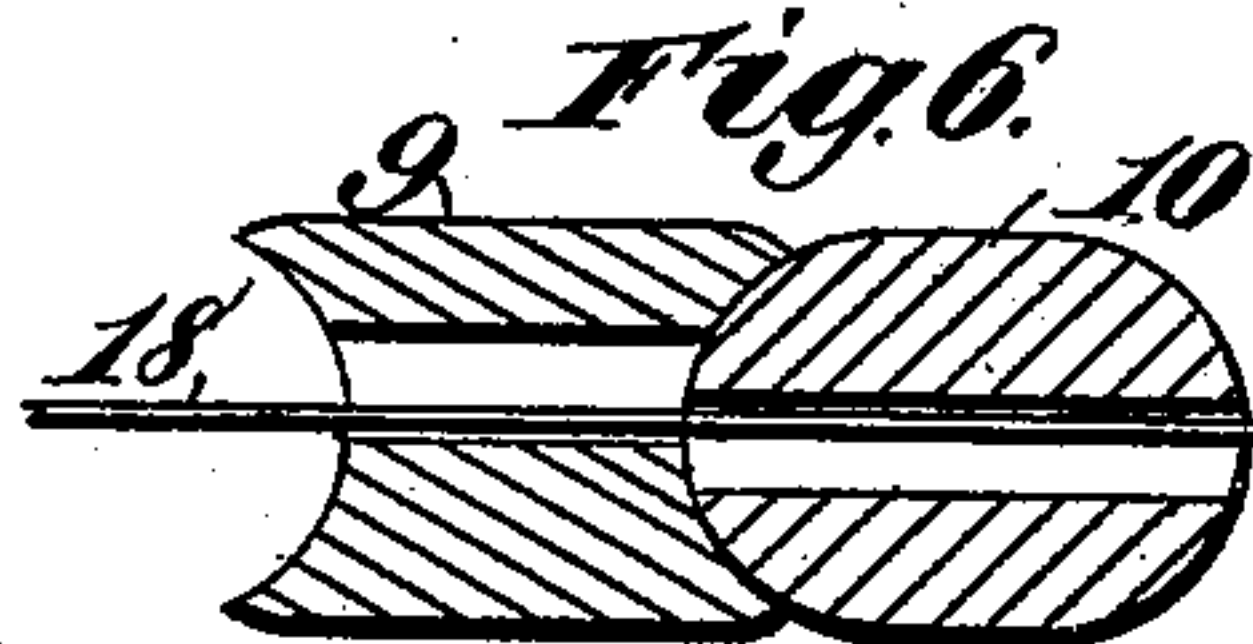
*Fig. 5.*



*Fig. 7.*



*Fig. 6.*



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(No Model.)

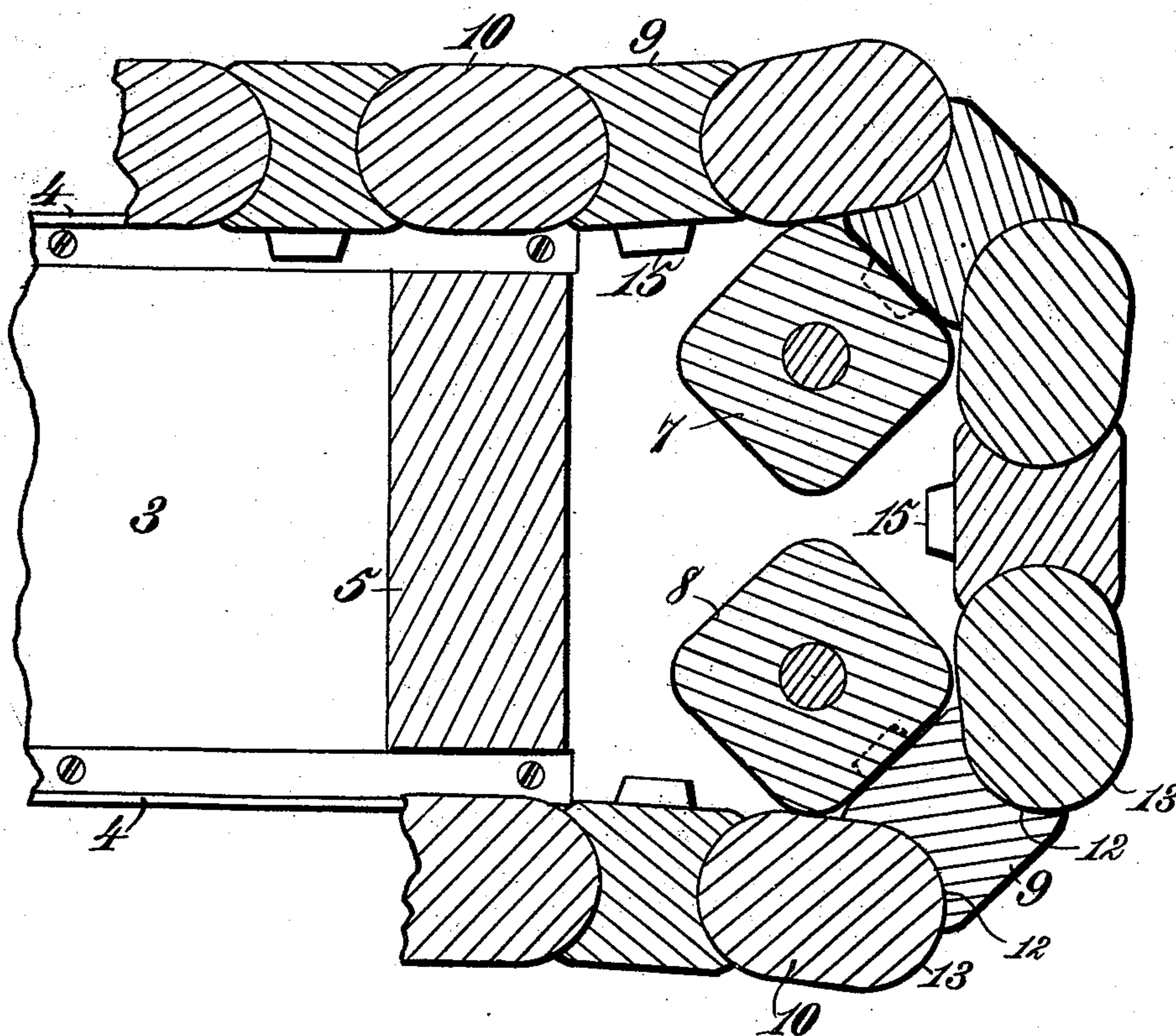
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*Fig. 8.*



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# UNITED STATES PATENT OFFICE.

CHAUNCEY SHELDON HOMER AND WILLIAM HENRY PICKETT, OF WARREN,  
PENNSYLVANIA.

## EXTENSION-TABLE.

SPECIFICATION forming part of Letters Patent No. 472,881, dated April 12, 1892.

Application filed August 12, 1891. Serial No. 402,451. (No model.)

*To all whom it may concern:*

Be it known that we, CHAUNCEY SHELDON HOMER and WILLIAM HENRY PICKETT, citizens of the United States, residing at Warren, in the county of Warren and State of Pennsylvania, have invented new and useful Improvements in Extension-Tables, of which the following is a specification.

In extension-tables having flexible top sections it is important to so construct the flexibly-connected slats that where they turn round the ends of the adjustable leg-frames they will not separate at the joints and create crevices or spaces for the accumulation of crumbs, dirt, or other foreign matter. It is also very desirable to provide an extension-table of this character whereby the corners at the ends of the table where the flexible sections turn are sharp-angled or approximately square, while the ends of the table formed by the flexible sections are perpendicular and flat, for the purpose of providing what is termed a "square-end table." To secure close joints and avoid crevices or spaces where the flexibly-connected slats turn at the ends of the adjustable leg-frames, the slats have been provided with knuckle-like joints, as in the application of William H. Pickett, filed March 3, 1891, Serial No. 383,546; but where one edge of the slat is convex and the other concave, as in the prior construction alluded to, it is necessary for the flexible sections to travel in a circular path round the ends of the leg-frames, and since the flexible section cannot be abruptly turned to a right-angular position it is impossible to produce sharp-angled or approximately square corners and perpendicular flat ends.

The object of the present invention is to provide an extension-table having a novel flexible table-top section extended and retracted by the adjustable leg-frame and so constructed as to avoid spaces or crevices at the joints where the flexibly-connected slats turn round the outer end of the leg-frame, while providing a sharp-angled or approximately square corner and a perpendicular flat end, so that what is termed a "square-end extension-table" is produced.

The invention also has for its object to pro-

vide novel means for moving the adjustable leg-frame to extend and retract the flexible table-top section and to otherwise improve extension-tables having adjustable leg-frames and flexible top sections composed of connected slats.

To accomplish all these objects our invention involves the features of construction and the combination or arrangement of devices hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1 is a detail longitudinal sectional view of sufficient of an extension-table to illustrate our invention. Fig. 2 is a sectional view taken on the line *xx*, Fig. 1. Fig. 3 is a detail perspective view of a portion of the adjustable leg-frame. Fig. 4 is a broken perspective view showing a portion of one of the slats having concaved opposite edges. Fig. 5 is a similar view of one of the slats having convex opposite edges. Fig. 6 is a detail sectional view on an enlarged scale, showing a pair of the slats articulated together. Fig. 7 is a detail sectional view showing a modified construction, and Fig. 8 is a detail sectional view showing the position of the parts as the slats are turning the corners at the end of the table.

In order to enable those skilled in the art to make and use our invention, we will now describe the same in detail, referring to the drawings, wherein—

The numeral 1 indicates a stationary table-top panel, which will be a center panel if the extension-table is adjustable at both ends, and 2 indicates an adjustable leg-frame at one end of the table. This leg-frame is provided with side bars 3, having upper and lower horizontal tracks or guide-flanges 4, terminating at the outermost cross-bar 5, and preferably composed of angle-irons. The outer ends of the side bars are supplied with guide flanges or clips 6 to guide the flexible table-top section and hold it perpendicular and flat against the vertical end portions of the side bars. The leg-frame is provided at its outer extremity with upper and lower counterpart guides and supports 7 and 8, composed of rollers, which are square or of similar shape,



angular in cross-section, and have their journals supported in suitable bearings, so that such guides and supports can rotate. The angular rollers are journaled on the leg-frame and have their axes coincident with a perpendicular line and also coincident with horizontal planes which extend between the horizontal tracks or guide-flanges 4.

The flexible table-top section is composed of a series of contiguous slats 9 and 10, the slats 9 each having their opposite longitudinal edges formed with concaved seats 12, while the slats 10 have their opposite longitudinal edges formed with convex portions 13, resting in the concaved seats 12 of the slats 9 in such manner that the concavities and convexities extend the full thickness of the slats and serve to articulate the latter together, so that they turn upon each other like the knuckles of a hinge. The several slats are provided with flattened upper and lower surfaces, and near each end the slats are provided with transverse grooves 14 in their under sides, into which project the upper edges of the side bars 3. The concaved slats 9 are provided with attached metallic plates 15, projecting under the grooved portions 14 of the slats to form tongue-pieces 16, which engage beneath the tracks or flanges 4, secured to the side bars of the leg-frame. The slats are also provided with transverse orifices 17 for the purpose of stringing them upon a flexible cable 18 of any material and construction suitable for the conditions required to permit the flexible table-top section to abruptly bend, so that one portion will stand exactly at right angles to the other portion, as exhibited in Fig. 1. The cable is secured at one extremity to the outermost slat and at its opposite extremity to a bolt 19, passing through a bracket 20, rigidly attached to the under side of the stationary panel 1. The bolt is provided with a nut 21, and between the latter and the bracket is arranged a suitable spring 22 for the purpose of enabling the slats to yield or contract or swell while the cable is maintained under tension. The orifices in the concaved slats 9 are so located as to be out of alignment with the orifices in the convex slats 10, and consequently the flexible cable 18 will bear against the upper edges of the orifices in the slats 10 and against the lower edges of the orifices in the slats 9 in such manner that the slats can accurately and abruptly turn as they traverse the square-cornered portions of the leg-frame, as will be readily understood by reference to Fig. 1. This construction and arrangement of transverse orifices 17 in the respective slats fulfill all the conditions required for the abrupt turning or bending of the flexible table-top section in order to produce an extension-table wherein the corners are sharp or approximately square, while the end of the table is perpendicular and flat.

In the modified construction, Fig. 7, the slats 10 are made in the form of true cylin-

ders; but the opposite side portions of such slats are convex and enter the concave sides of the slats 9.

The flexible table-top section as constructed can make an abrupt turn in order to produce an extension-table having a perpendicular and flat end with an approximately square corner. In this respect the present construction possesses advantages over the prior construction hereinbefore alluded to, where each slat has one edge concaved and the opposite edges convexed, because such prior flexible section requires circular portions at the outer end of the adjustable leg-frame, and therefore the prior table is not what is termed a "square-corner" and "square-end" table.

In extension-tables of the character described and shown it is desirable to provide a rack-and-pinion mechanism for sliding the leg-frame to extend and retract the flexible table-top section. Where this mechanism is employed, a transverse counter-shaft is essential in order to impart motion to the wheel that actuates the rack; but this counter-shaft as heretofore constructed is objectionable in that it is essential to provide a crank-handle, which must be removable, in order that such crank-handle can be detached after the table has been adjusted to the desired position. The removable and replaceable crank-handle is objectionable in that it is frequently misplaced and when required for use cannot be found. To avoid this objection in that type of extension-table having rack-and-pinion mechanism for moving the adjustable leg-frame, we provide the following construction and arrangement: The cross-bar 5 of the leg-frame is provided with a pair of brackets 23, between which is journaled the hub 24 of a pinion 25, having its teeth adapted to engage a rack composed of teeth 26, attached to the slats 9 and 10, as will be best understood by reference to Figs 4 and 5. The teeth constituting the rack are each composed of a separate piece secured by screws or otherwise to each slat in proper relation to each other for engagement with the teeth of the pinion. The hub of the pinion is provided with an angular or equivalent shaped orifice, through which is adapted to move lengthwise a crank-shaft 27, having at one extremity a jointed crank-handle 28, adapted to be extended into a position at right angles to the main body of the shaft, as in Fig. 2, for the purpose of imparting rotary motion to the pinion, while at the same time such crank-handle can be turned into alignment with the main body of the shaft, so that the latter can be slid lengthwise through the orifice in the pinion for the purpose of bringing the crank-handle into the position indicated by dotted lines, Fig. 2, for placing the crank-handle entirely out of the way. The crank-shaft is adapted to move through an orifice 29 in one side bar of the leg-frame, and therefore when the jointed crank is withdrawn the pinion can be oper-



ated from one side of the table to extend and retract the flexible table-top section, while if the jointed crank be pushed inward it will be removed from view and yet always be in proper position for immediate use. It will be obvious that when the pinion is rotated through the medium of the crank-shaft the teeth of the pinion by acting upon the teeth comprising the rack will cause the adjustable leg-frame to move, and thereby extend or retract the flexible table-top section. As the table-leg is moved the flexible table-top section causes the rotating guides and supports 7 and 8 to turn in their bearings, so that whenever the table is adjusted the flexible table-top section will present a sharp-angled corner and a perpendicular flat end to provide a table having a square end in contradistinction to a table having a curved or circular end.

The peculiar construction of flexible table-top section entirely avoids the possibility of the slats separating at their joints and creating crevices or spaces for the accumulation of crumbs, dirt, or other foreign matter, while it is possible to produce a table with a square end, as before explained.

Having thus described our invention, what we claim is—

1. The combination, in an extension-table, of a stationary table-top panel, an adjustable leg-frame having at its outer end upper and lower counterpart rollers angular in cross-section, connected to the stationary table-top panel, and a flexible table-top section consisting of a series of contiguous slats 9 and 10, having transverse orifices, with those in one slat arranged out of alignment with those in the adjacent slat, and said slats 9 having each edge provided with a concaved seat 12 and the slats 10 having each edge provided with a convex portion 13, a cable connected to the stationary table-top panel, extending through the transverse orifices, and bearing against the upper edge of the orifice in one slat and against the lower edge of the orifice in the adjacent slat, and means for sliding the leg-frame to extend and retract the flexible table-top section round the angular rollers, substantially as described.

2. The combination, in an extension-table, of a stationary table-top panel, an adjustable leg-frame, means for sliding the leg-frame, and a flexible table-top section connected to the stationary table-top panel and consisting of a series of contiguous slats 9 and 10, having transverse orifices, with those in one slat arranged out of alignment with those in the adjacent slat, said slats 9 having each edge provided with a concaved seat 12, coextensive with the thickness of the slat, and the slats 10 having each edge provided with a convex portion 13, coextensive with the thickness of such slat, and a cable connected with the stationary panel and extending through the transverse orifices to bear against the upper

edge of the orifice in one slat and against the lower edge of the orifice in the adjacent slat, substantially as described.

3. The combination, in an extension-table, of a stationary table-top panel, an adjustable leg-frame, means for sliding the leg-frame, a flexible table-top section connected to the stationary table-top panel and consisting of a series of contiguous slats provided with transverse orifices, with those in one slat located out of alignment with those in the adjacent slat, and a flexible cable connected to the stationary table-top panel, passing through the orifices and alternately bearing against the uppermost and lowermost edges thereof, substantially as described.

4. The combination, in an extension-table, of a stationary panel, an adjustable leg-frame, a flexible table-top section connected with the panel and engaging the leg-frame, a rack-and-pinion mechanism adapted to slide the leg-frame and the pinion having an orifice therethrough, and a lengthwise-movable crank-shaft sliding through the orifice in the pinion and extensible at one side of the table, substantially as described.

5. The combination, in an extension-table, of a stationary panel, an adjustable leg-frame, a flexible table-top section connected with the panel and engaging the leg-frame, a rack-and-pinion mechanism adapted to slide the leg-frame back and forth and the pinion having an orifice therethrough, and a jointed folding crank-shaft movable through one side of the table and sliding lengthwise in the orifice of the pinion for the purpose of extending and retracting the flexible table-top section from one side of the table, substantially as described.

6. The combination, in an extension-table, of a stationary panel, an adjustable leg-frame, a flexible table-top section composed of flexibly-connected slats provided with attached teeth, a pinion journaled in bearings on the adjustable leg-frame and having an orifice therethrough, and a lengthwise-movable crank-shaft extending through one side of the table and sliding in the orifice of the pinion, substantially as described.

7. The combination, in an extension-table, of a stationary panel, an adjustable leg-frame, a flexible table-top section composed of a series of contiguous slats having attached teeth, a cable extending through the slats and connected with the panel, a pinion journaled in bearings on the adjustable leg-frame and engaging the teeth of the slats, and a crank-shaft extending through one side of the leg-frame for rotating the pinion to slide the leg-frame back and forth, substantially as described.

8. The combination, in an extension-table, of a stationary panel, an adjustable leg-frame having its outer portion provided with an upper and lower roller, both of which are approximately square in cross-section, a flexi-



ble table-top section composed of a series of  
contiguous slats 9 and 10, the former having  
each edge provided with a concaved seat and  
the latter having each edge provided with a  
5 convex portion, a cable extending through  
the slats, and means for adjusting the leg-  
frame to extend and retract the flexible ta-  
ble-top section, substantially as described.

In testimony whereof we have hereunto set  
our hands and affixed our seals in presence of 10  
two subscribing witnesses.

CHAUNCEY SHELDON HOMER. [L. S.]  
WILLIAM HENRY PICKETT. [L. S.]

Witnesses:

H. T. BARBER,  
T. O. SLATER.