

No. 722,003.

PATENTED MAR. 3, 1903.

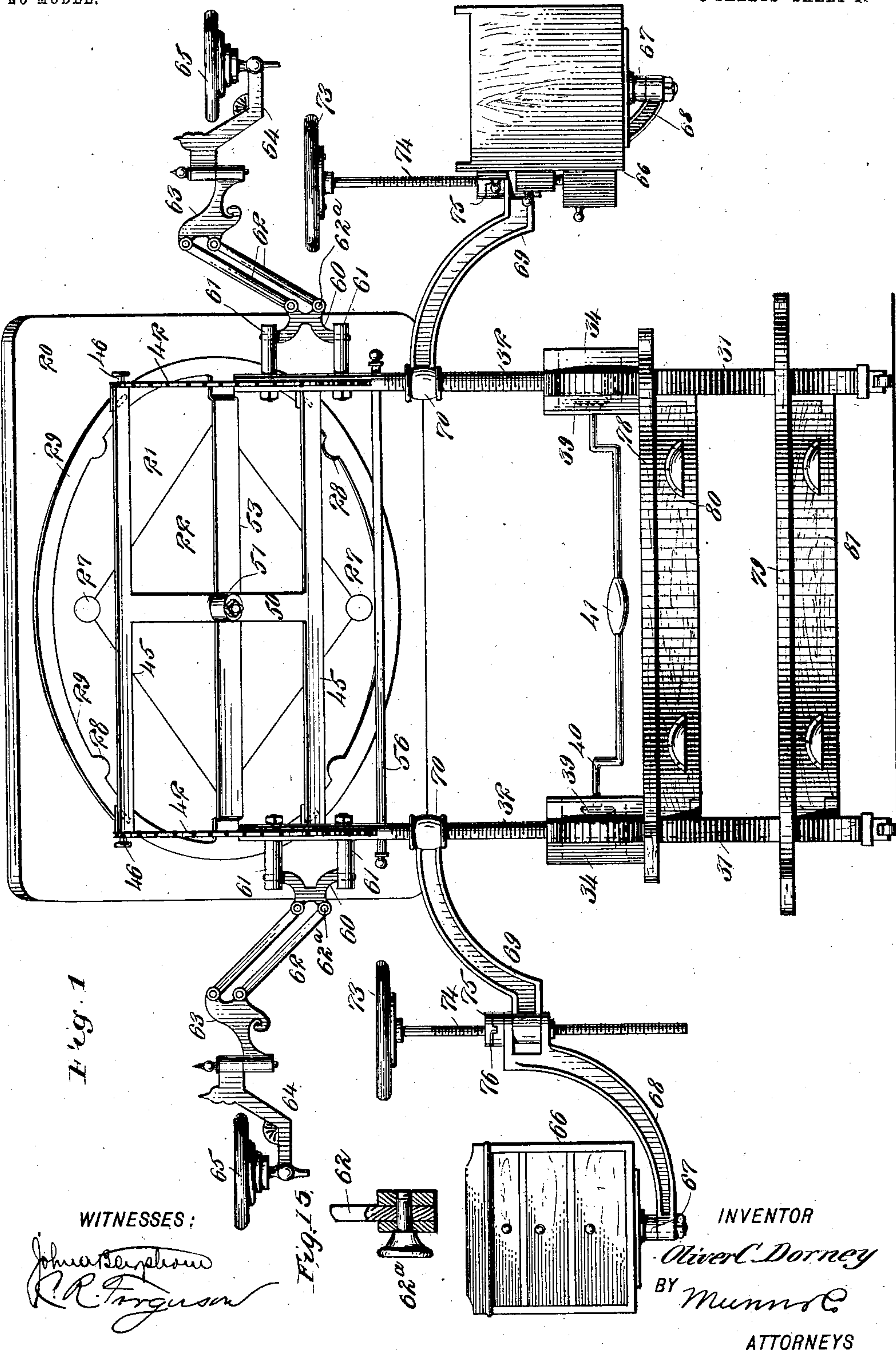
O. C. DORNEY.

TABLE ADJUSTABLE ANGULARLY AND VERTICALLY.

APPLICATION FILED SEPT. 7, 1901.

NO MODEL.

3 SHEETS—SHEET 1.



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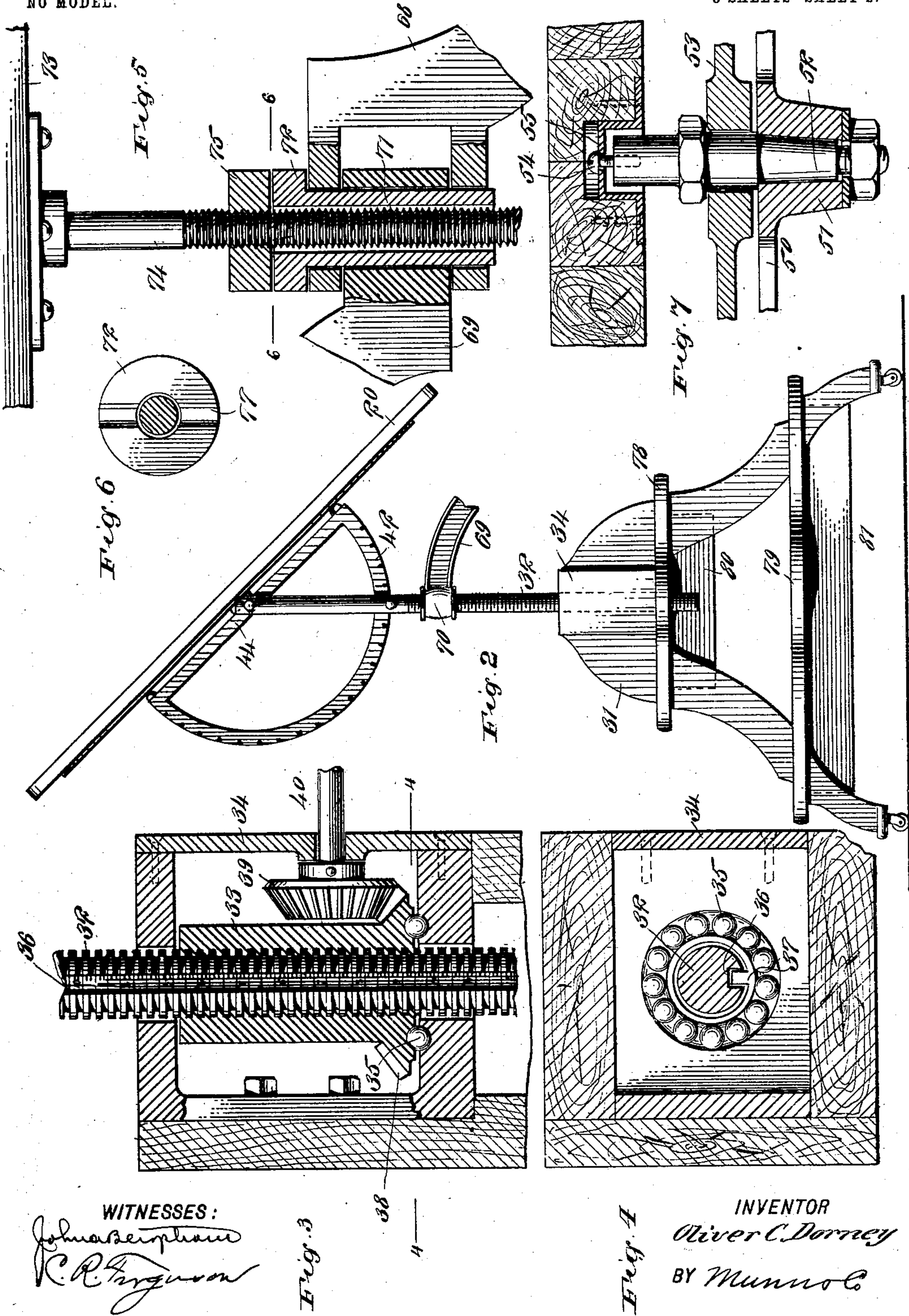
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WITNESSES:

John A. Thompson
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Fig. 3

Fig. 4

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ATTORNEYS

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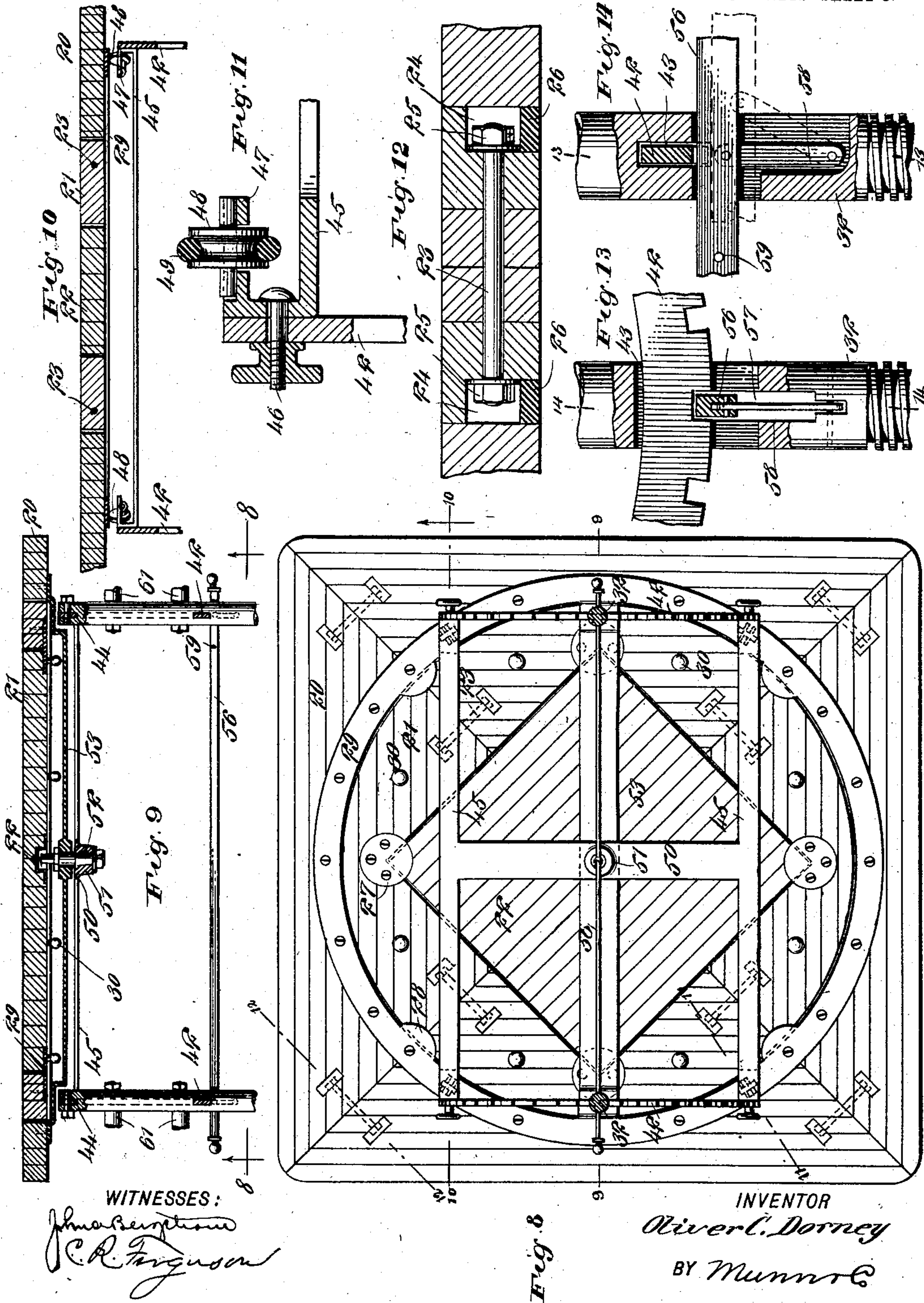
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3 SHEETS—SHEET 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

OLIVER CHARLES DORNEY, OF ALLENTOWN, PENNSYLVANIA.

TABLE ADJUSTABLE ANGULARLY AND VERTICALLY.

SPECIFICATION forming part of Letters Patent No. 722,003, dated March 3, 1903.

Application filed September 7, 1901. Serial No. 74,666. (No model.)

To all whom it may concern:

Be it known that I, OLIVER CHARLES DORNEY, a citizen of the United States, and a resident of Allentown, in the county of Lehigh and State of Pennsylvania, have invented a new and Improved Table, of which the following is a full, clear, and exact description.

This invention relates to improvements in tables particularly adapted for use by artists, architects, and the like; and the object is to provide a table that may be readily adjusted as to height and angle and having supporting devices for lamps and tools or instruments, such as brushes, drawing instruments, colors, inks, &c.

Further objects will appear in the general description.

I will describe a table embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is an elevation of a table embodying my invention and showing the several attachments thereof. Fig. 2 is a side elevation of the table. Fig. 3 is a sectional detail showing a means for raising and lowering the table. Fig. 4 is a section on the line 4 4 of Fig. 3. Fig. 5 is a sectional detail showing a means for supporting and adjusting a tool-holding stand. Fig. 6 is a section on the line 6 6 of Fig. 5. Fig. 7 is a section showing a center pivot for the table-top. Fig. 8 is a section on the line 8 8 of Fig. 9. Fig. 9 is a section on the line 9 9 of Fig. 8. Fig. 10 is a section on the line 10 10 of Fig. 8. Fig. 11 is a section on the line 11 11 of Fig. 8. Fig. 12 is a section on the line 12 12 of Fig. 8. Fig. 13 is a section on the line 13 13 of Fig. 14. Fig. 14 is a section on the line 14 14 of Fig. 13, and Fig. 15 is a sectional detail showing a clamping-screw employed.

As here shown, the table-top comprises three sections 20, 21, and 22. The outer section 20 is made square or has parallel straight edges, with which the head of a T-square may engage. This section 20 is provided with a central opening, in which the circular section 21 is designed to rotate, and this section 21 is provided with an angular or square open-

ing, within which the square section 22 is removably placed. By this construction the sections 21 22 may be readily rotated with relation to the outer section to bring the work to proper position and the section 22 may be readily removed and turned or a new one with another drawing may be put in its place. The several sections are each made of strips of material glued together at the edges. The sections 20 and 21 have their strips mitered together at the ends, and these ends are not only glued, but they are further secured together by means of fastening-bolts 23. As clearly indicated in Fig. 12, the fastening-bolts are passed through openings arranged at right angles to the mitered ends, and the ends of the bolts are projected into recesses 24, formed in the strips, so that the fastening-nuts 25 may be placed thereon and tightened. These recesses will be formed in the bottom of the table-top, and after tightening the bolts the recesses may be closed by means of plugs 26.

The center section 22 is supported on plates 27, secured, by means of screws or otherwise, to the under side of the section 21, and this section 21 is supported on inwardly-extended lugs 28 on a metal ring 29, attached to the under side of the outer section 20. While the sections 21 22 may be rotated relatively to the section 20, and for the convenience thereof I have provided the section 21 with knobs 30, the several sections are designed to rotate together and also to have a tilting movement to adjust the angle of the table-top, and the table-top is also designed to have a vertical adjustment with relation to the base or leg portion 31.

Supported by the base or leg 31 are the standards 32, which are screw-threaded for a portion of their length. These standards 32 engage with the interior thread of nuts or sleeves 33, arranged in boxings 34 on the base, and to reduce friction to a minimum I arrange antifriction-balls 35 between the lower ends of the nuts or sleeves 33 and the bottoms of the boxings 34.

It will be seen in Figs. 3 and 4 that the lower end of the nut or sleeve is provided with a raceway, as is also the upper surface of the bottom of the boxing. To prevent a rotary movement of the standards 32, I pro-

vide the same with longitudinal channels 36, into which lugs 37 on the bottom portions of the boxings extend. The inner walls of these channels 36 may be spaced off in inches 5 and properly numbered, so that the table may be adjusted accurately to the height required, the numbers of the scale showing over the upper ends of the boxings 34. The opposite nuts or sleeves 33 are provided at 10 one end, as here shown the lower end, with bevel-teeth 38, which are engaged by bevel-gears 39, the two opposite bevel-gears being connected to the ends of a shaft 40, which is in the form of a crank-shaft, having a handle 15 41 at its center. Obviously by rotating the crank-shaft 40 the standards 32 may be simultaneously raised or lowered.

Mounted to swing on each standard 32 is a segmental rack 42, these segmental racks 20 passing through openings 43, formed in the standards. The upper or connecting bars 44 of the racks are pivoted at their centers to the upper ends of the standards, as clearly indicated in Fig. 2. The ends of the opposite 25 racks 42 are connected by cross-bars 45, as here shown, by means of set-bolts 46. The ends of these cross-bars 45 have bracket portions 47, in which bearing-rollers 48 are mounted, these bearing-rollers being de- 30 signed to engage with the ring 29.

As shown in Fig. 11, the rollers 48 may be provided with annular channels to receive the rubber rings 49. The opposite cross-bars 45 are connected at the center by a center 35 bar 50, which has at its center a cup or step bearing 51 for a spindle 52, which extends upward through an opening in a bar 53, connected at its ends to the ring 29, and the upper end of the spindle is engaged, by means of 40 a screw 54, with a cup or casting 55, secured in a recess formed in the under side of the table-top section 22. This spindle serves more as a centering device for the table-top, as the main bearing of the table-top is on the 45 rollers 48. When it is desired to remove the section 22 of the table-top, the spindle will be removed with it.

The centering-racks 42 are secured in their adjusted position by means of a locking-bar 50 56, which is mounted to move longitudinally in openings 57, formed in the standards, and these locking-bars are mounted on links 58, arranged in said openings, the lower ends of the links being attached to pivots on the stand- 55 ards, while the upper ends are pivoted to the locking-bar. The ends of this locking-bar project outward beyond the outer sides of the standards, so they may be readily grasped at either end for the purpose of moving the bar. 60 Obviously by drawing the locking-bar outward the links 58 will cause it to lower and release it from the notches in the racks, so that the table-top may be readily swung to adjust its angle. After such adjustment the 65 locking-bar is to be moved to its normal position to engage in a notch in each rack. The bar is prevented from moving too far out-

ward by means of pins 59 on said bar and adapted to engage against the inner sides of the standards. 70

Supported on each standard is a bracket for holding a lamp or the like. These brackets are designed to swing transversely and also to have a vertical movement. As here shown, each bracket consists of a pivot-block 75 60, mounted to swing in a horizontal direction on pins 61, extended outward from the upper portion of the standard, and connected to this block 60, so as to swing up and down with relation thereto, are parallel links 62, 80 which at the other end have pivotal connection with an arm 63, and mounted to swing in a horizontal direction on this arm 63 is another arm 64, to which a shelf 65 is attached. By this construction it will be seen that the 85 block 60 may swing horizontally with relation to the section 63, and therefore the shelf 65 may be placed in any convenient position over the table-top or at one side thereof. The links 62 may be held as adjusted by means 90 of a set-screw 62^a, which forms the pintle for the lower end of a link. Also mounted to swing and adjustable vertically of the standards are cabinets 66, which may be made in any desired form. I have here shown the cabi- 95 nets as provided each with a set of drawers for holding brushes or other instruments. Each cabinet has a pivotal connection 67 with the end of an arm-section 68, having horizontal swinging connection with an arm-section 100 69, having an interiorly-threaded portion 70, which engages the thread of the standard.

By referring to Fig. 5 it will be seen that the pintle connection between the arm-sections 68 and 69 consists of a tubular pintle 71, 105 having a head portion 72 for engaging loosely on the top of the arm-section 69. Supported by each pintle is a shelf 73, upon which a plaster cast, model, or other device may be placed. The shelf has a screw-threaded stem 74, en- 110 gaging with a nut 75, which removably engages with the top of the head 72 of the pintle, but is prevented from rotary movement with relation thereto, as here shown, by means of a rib 76, engaging in a groove 77 in the up- 115 per surface of the head 72. Obviously this arrangement may be reversed—that is, the rib placed on the head 72 and the nut provided with the channel.

When it is desired to raise or lower the 120 shelf 73, it is only necessary to rotate it so that its stem 74 will move through the nut 75. The cabinet 66 may rotate relatively to the arm-section 68, and the arm-section 68 may swing on the pintle 71 relatively to the arm- 125 section 69, and by lifting the shelf 73, with its stem and nut, out of the tubular pintle the pintle may be removed, so as to separate the arm-sections 68 and 69, and then the arm- 130 section 69 may be rotated on the threaded standard to raise or lower it, as desired. The base portion of the table may be provided with shelves 78 and 79, under which drawers 80 and 81 are placed.

It is obvious that a table embodying my invention will be found very convenient for the use of artists or students, as it may be readily adjusted to desired positions or angles by a person without leaving his seat. By making the table-top of the strips secured together, as shown and described, it will not be subject to warping, and when the several sections of the top are together the top surfaces will all be on one plane.

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

1. In a table, a base, standards adjustable vertically with relation to the base, means for causing said adjustments, racks having swinging connection with the standards, a locking-bar movable through openings in the opposite standards and adapted to engage with the racks, swinging links supporting said locking-bar, and a table-top supported on the racks, substantially as specified.

2. A table-top comprising an outer rotary section, a section mounted to rotate within the outer section, and a section removably arranged within said last-named rotating section, the top surfaces of the several sections being on one plane, substantially as specified.

3. In a table, standards, segment-racks mounted to swing on said standards, a locking device for the segment-racks, bearing-rollers supported by the racks, a table-top supported on said rollers, and a centering-spindle for the table-top, substantially as specified.

4. A table, comprising standards, segmental racks mounted to swing on said standards, a locking-bar for said racks, bars connecting the ends of the opposite racks, rollers mounted on the ends of said bars, a table-top, a ring of metal secured to the under side of the table-top and bearing on said rollers, a cross-bar on said ring and having an opening, a center bar connecting the first-named bars and having a step-bearing, a spindle supported in said step-bearing and extending through the opening in the bar connected to

the ring, and a pivotal connection between said spindle and the table-top, substantially as specified.

5. A table-top, comprising an outer section having a circular opening, a metal ring extended around said opening and having inwardly-extended lugs, a circular section supported on said lugs within the opening, the said circular section having an angular opening, supporting-plates attached to the circular section, and an angular section supported on said plates within the opening of the circular section, substantially as specified.

6. In a table, a base, threaded standards adjustable in said base, a table-top supported on the standards, and a supporting-arm adjustable on the threaded portion of a standard, substantially as specified.

7. In a table, a base, threaded standards adjustable in the base, an arm consisting of two sections mounted to swing one relatively to the other, one of said sections having an interiorly-threaded portion for engaging the thread of a standard, and a cabinet or the like supported to swing on the outer end of the other section of the arm, substantially as specified.

8. In a table, a base, screw-threaded standards adjustable in the base, a table-top supported on the standards, arms adjustable on the standards, each arm consisting of two sections, one of the sections having an interiorly-threaded portion for engaging with the thread of its standard, a tubular pintle connecting the two sections of the arm, a nut removably engaging with said tubular pintle but held from rotary movement with relation thereto, a threaded stem engaging in said nut, and a shelf on the stem, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

OLIVER CHARLES DORNEY.

Witnesses:

EDWARD RUHE,
L. D. KRAUSE.