

Jan. 27, 1953

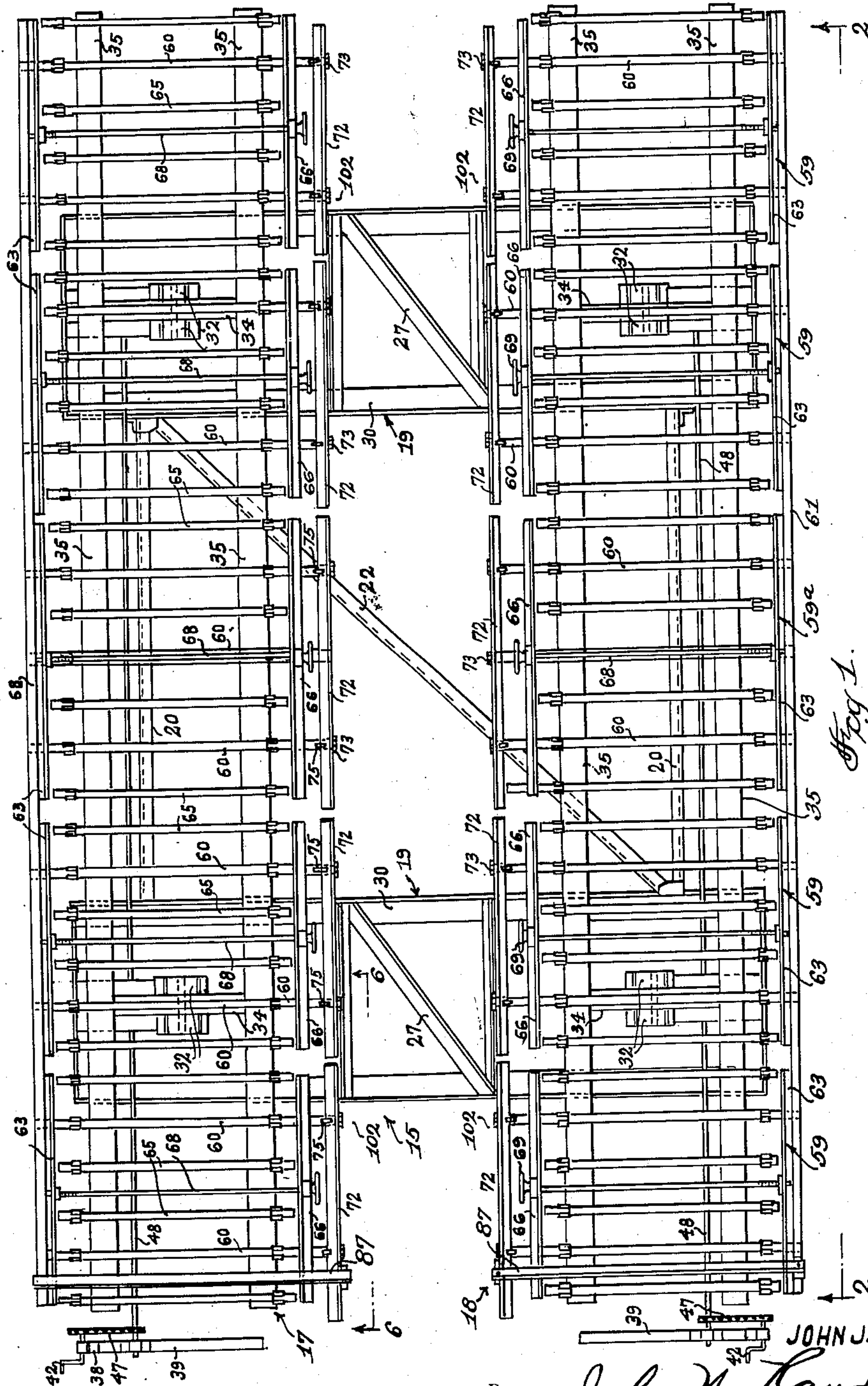
J. J. KANTZLER

2,626,643

APPARATUS FOR PRODUCING PREFABRICATED BUILDING WALLS

Filed June 21, 1950

5 Sheets-Sheet 1



Jan. 27, 1953

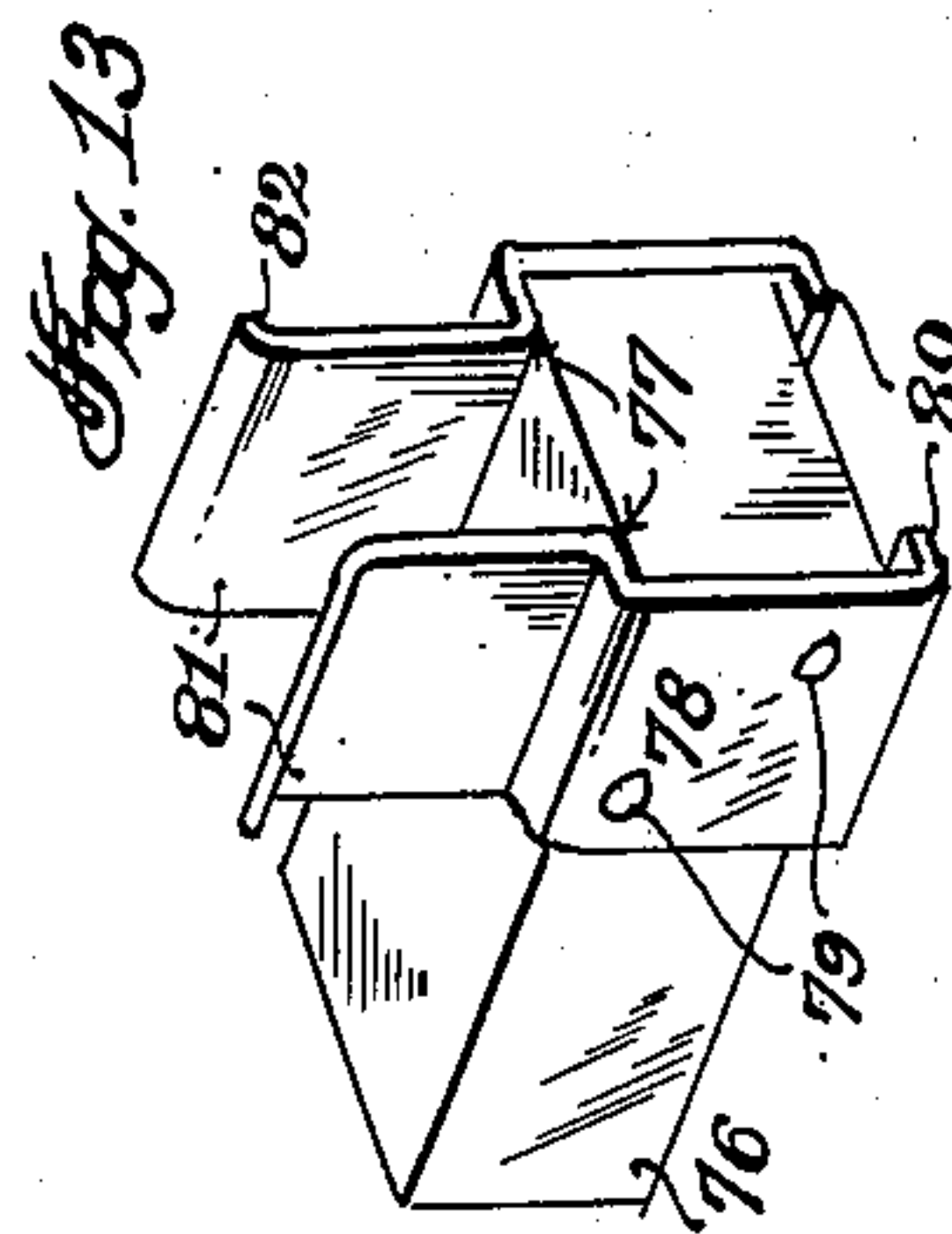
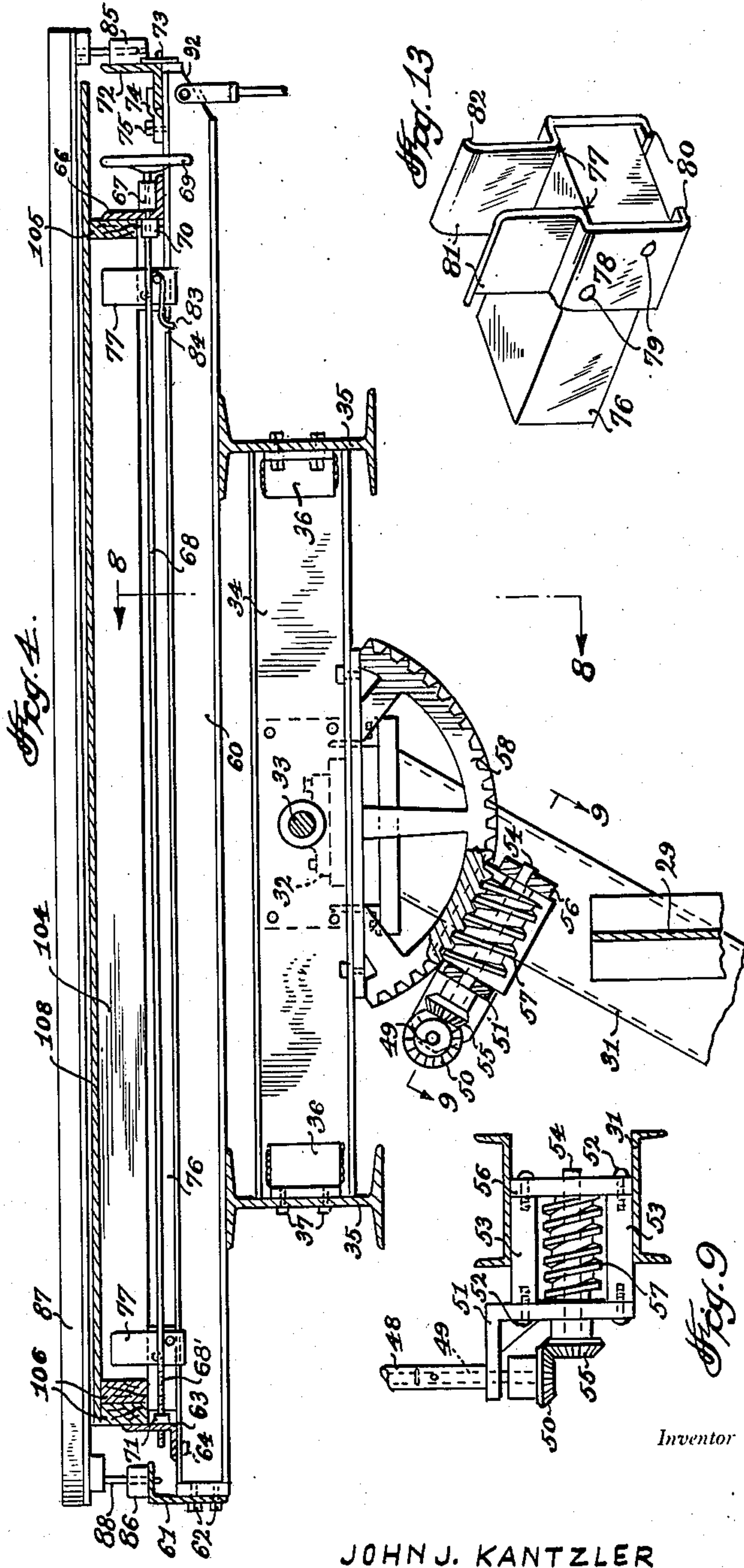
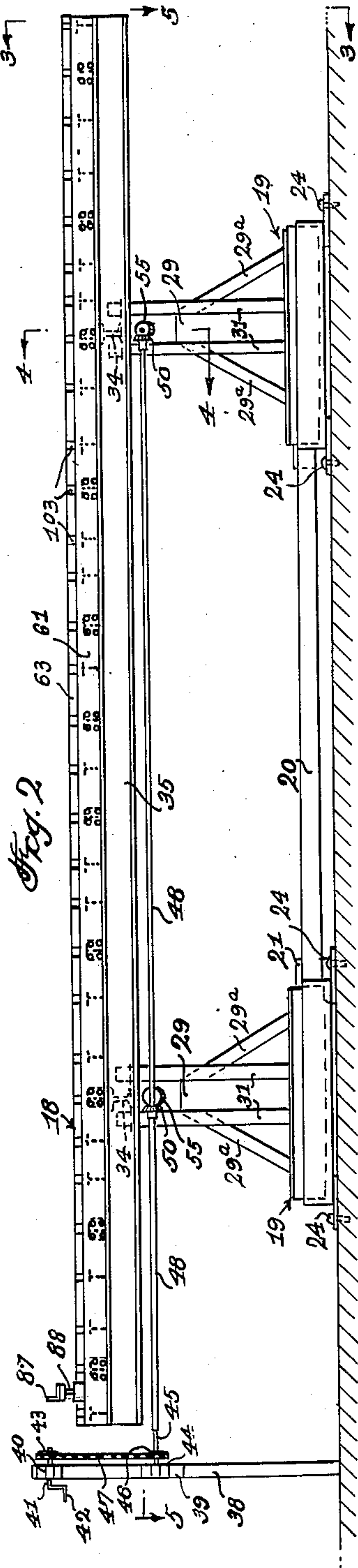
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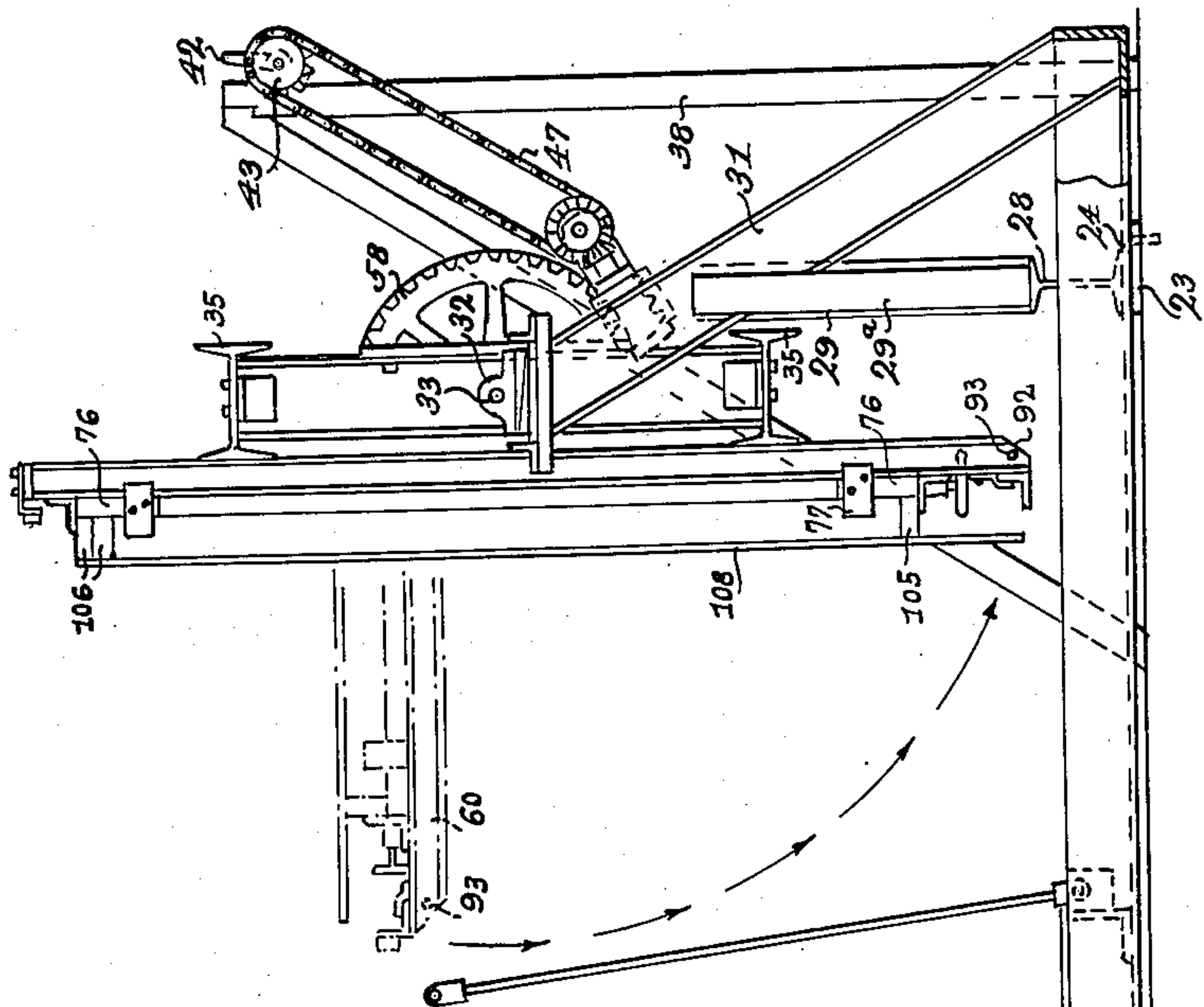


Fig. 3.

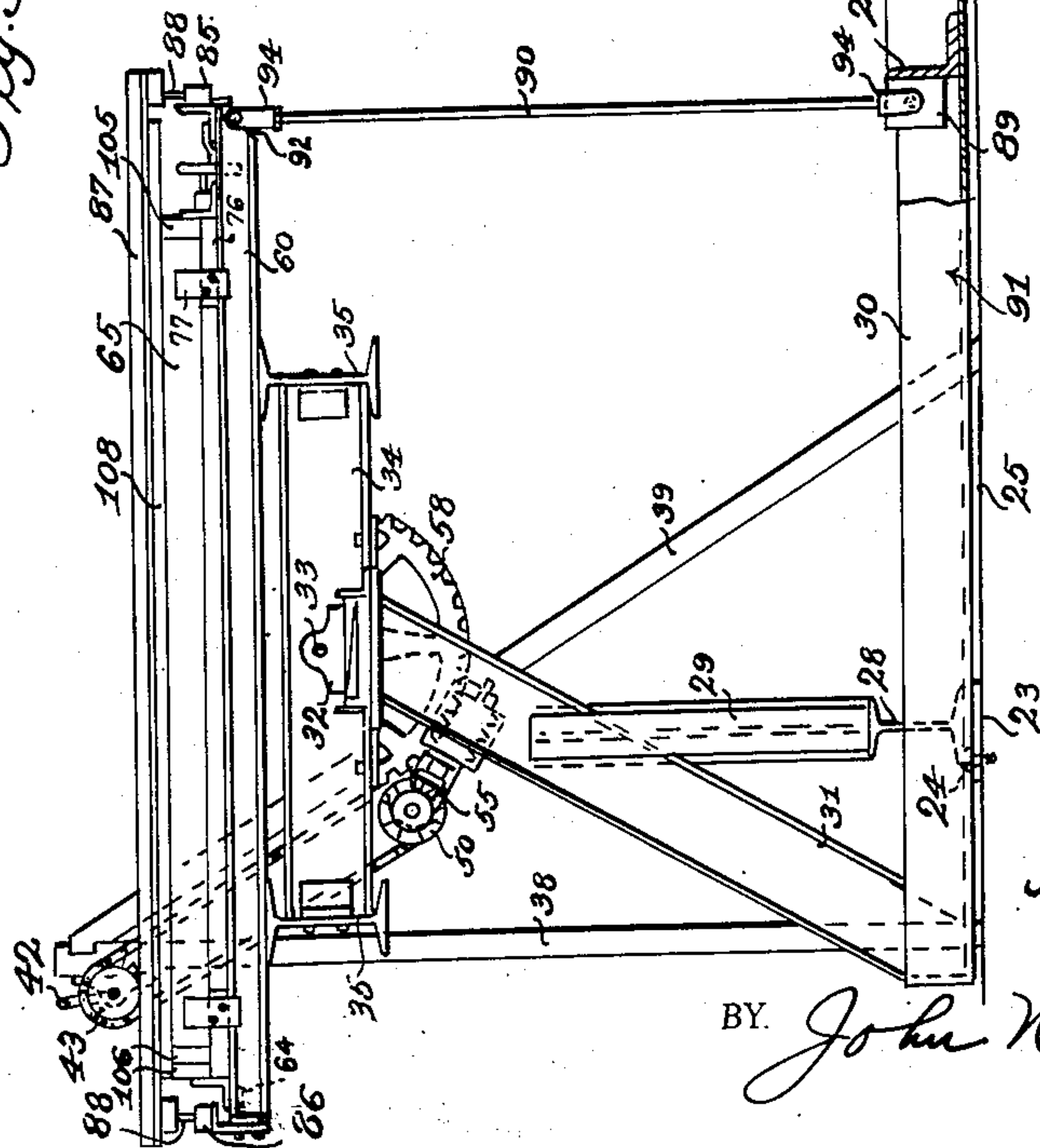
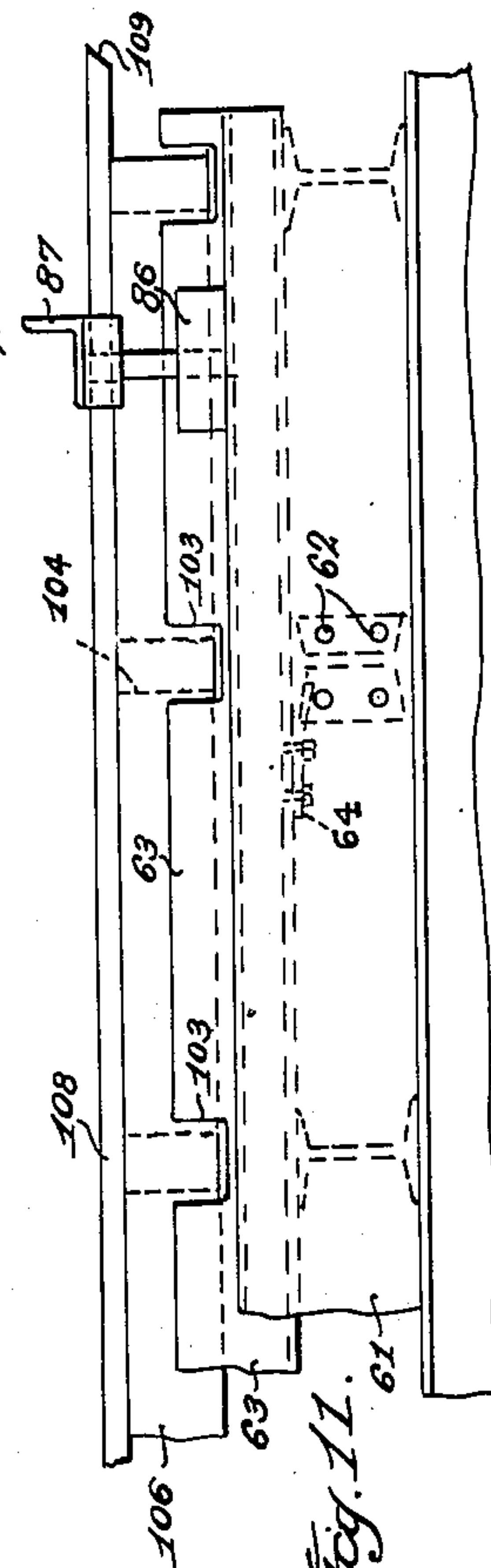


Fig. 11.



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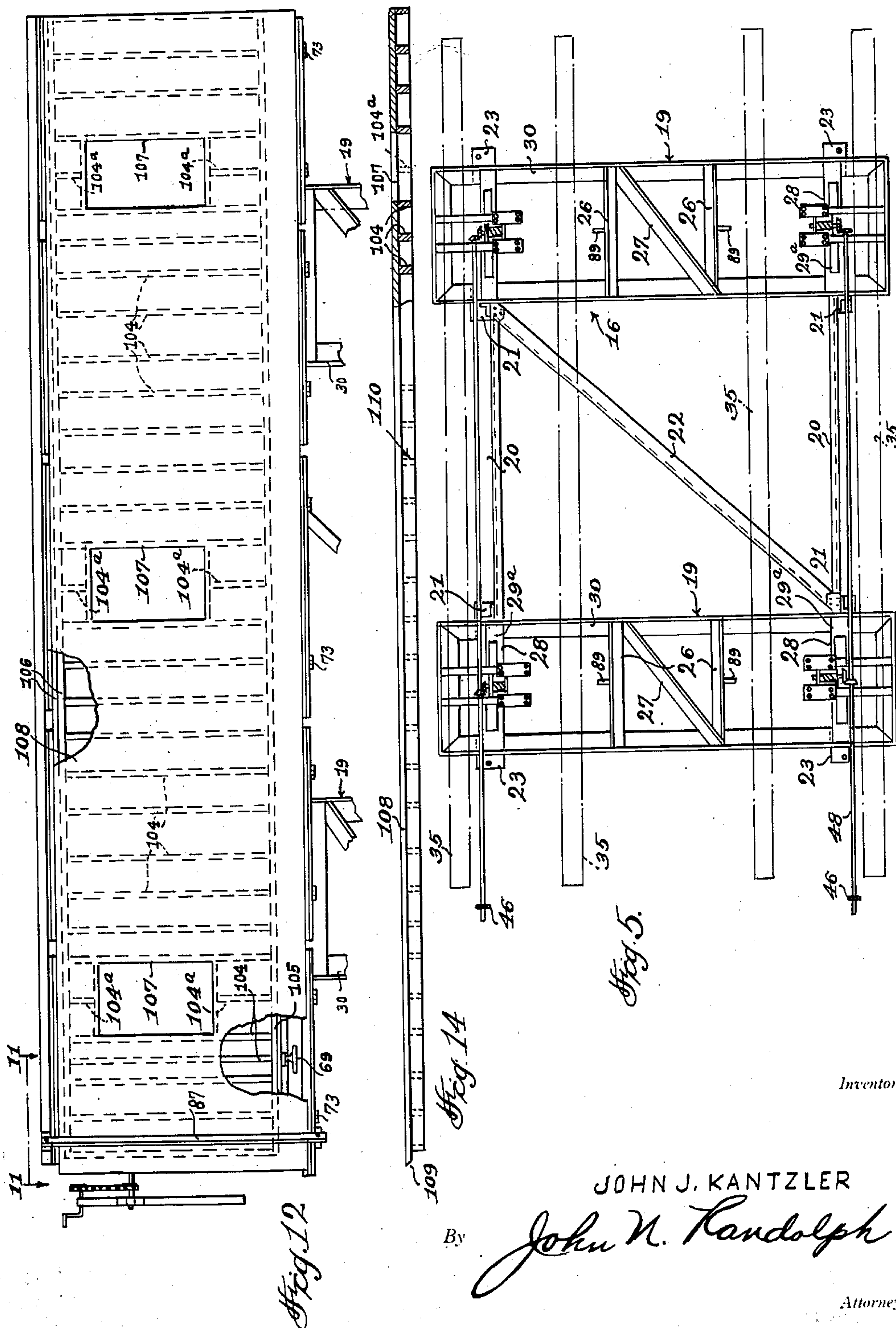
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APPARATUS FOR PRODUCING PREFABRICATED BUILDING WALLS

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5 Sheets-Sheet 5

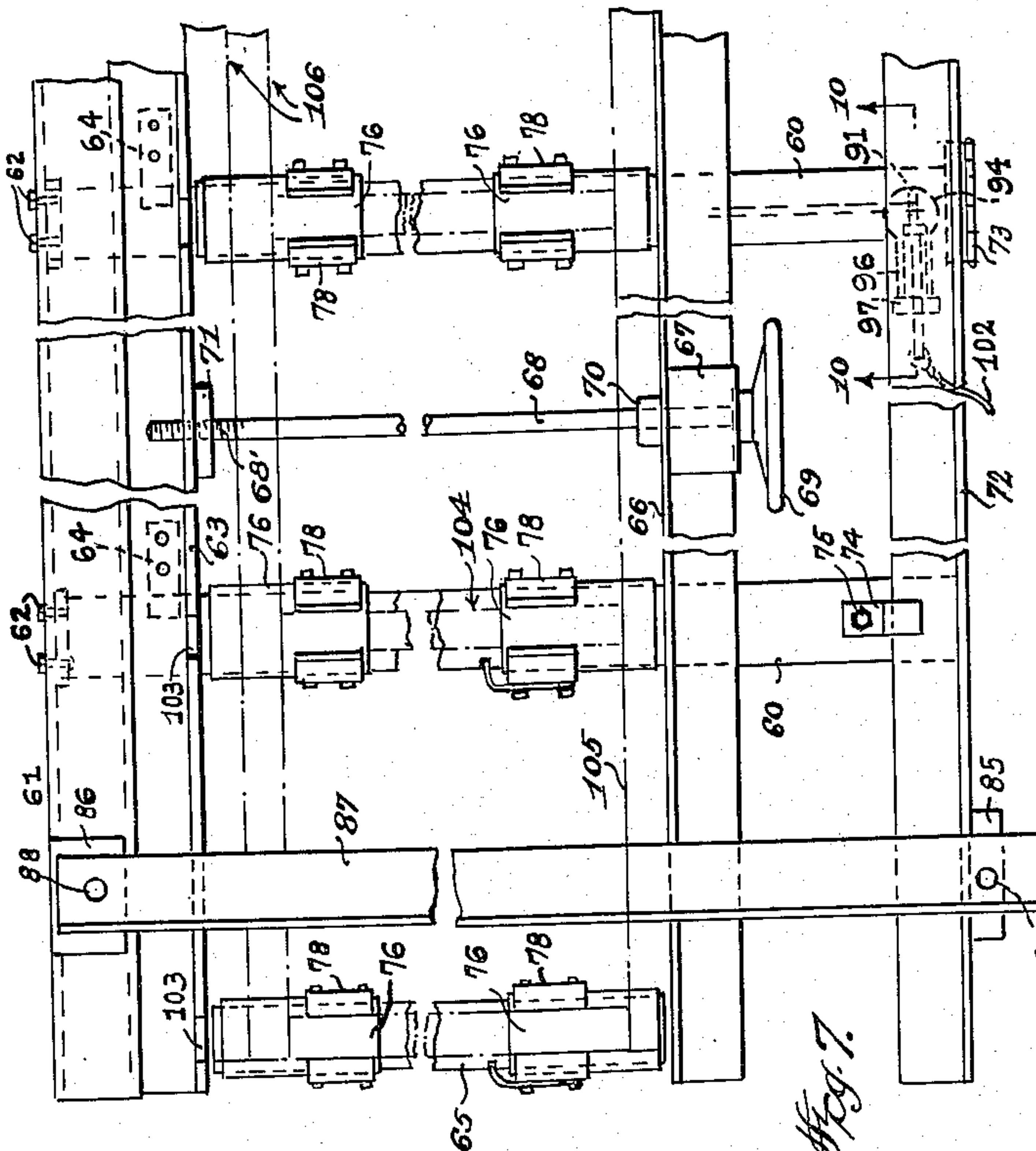


Fig. 7

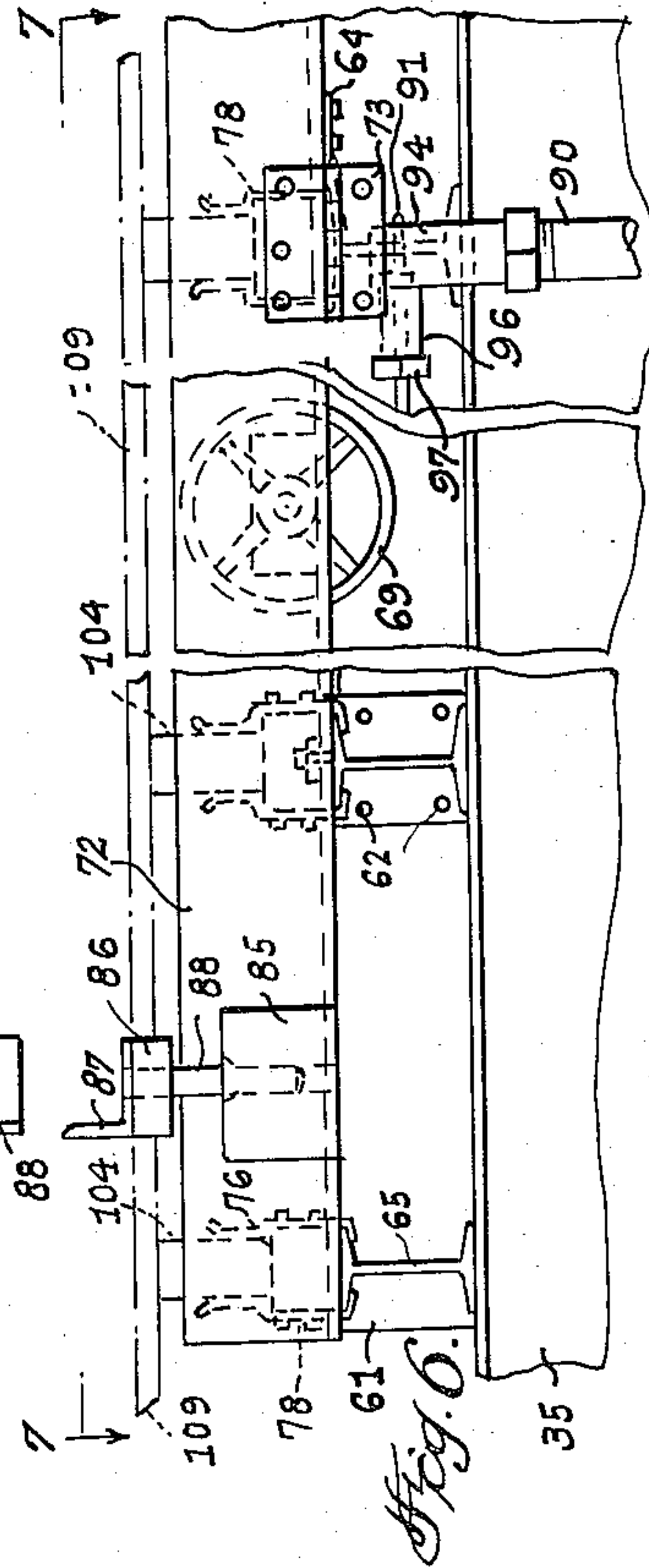


Fig. 6

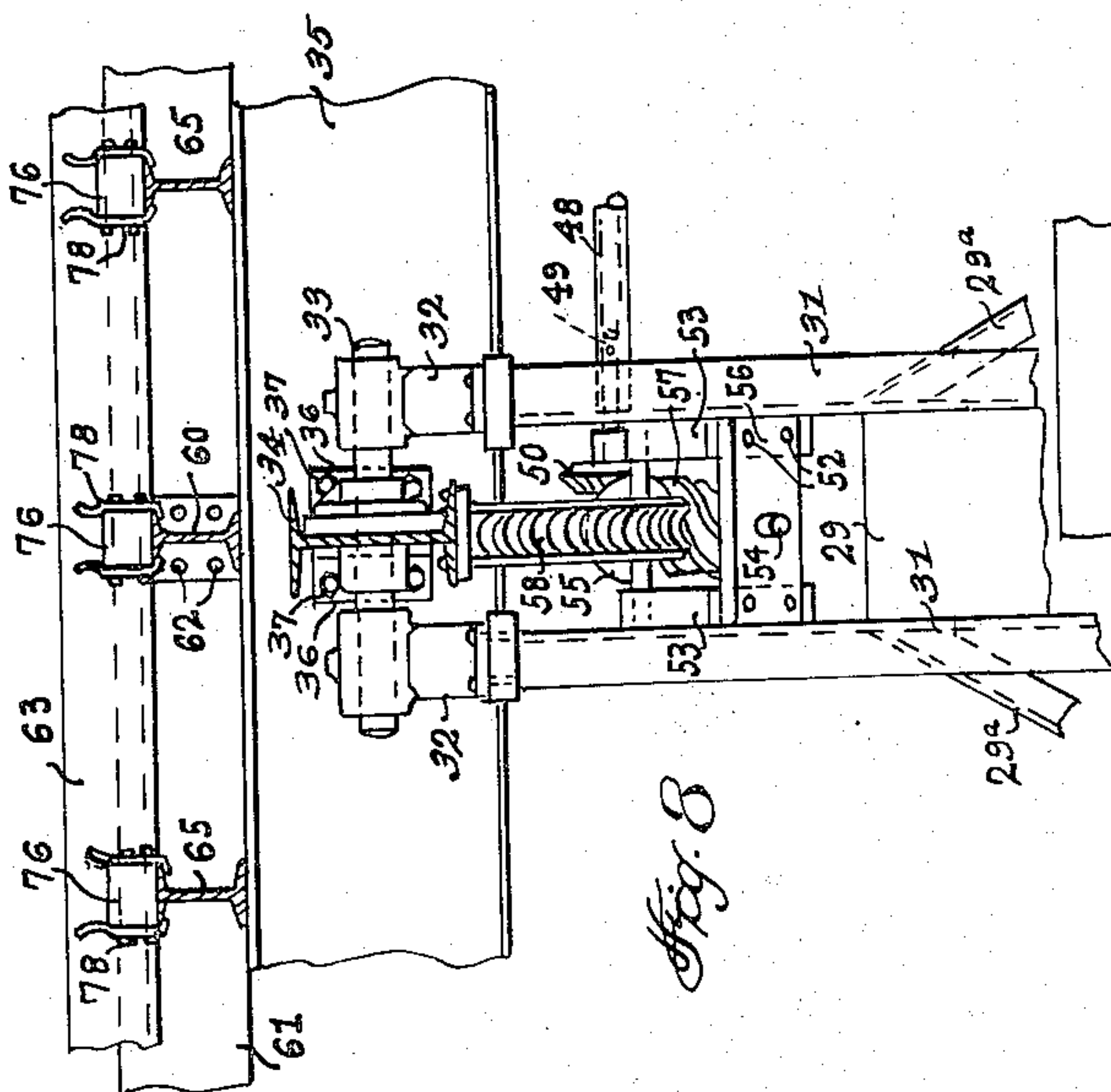


Fig. 8

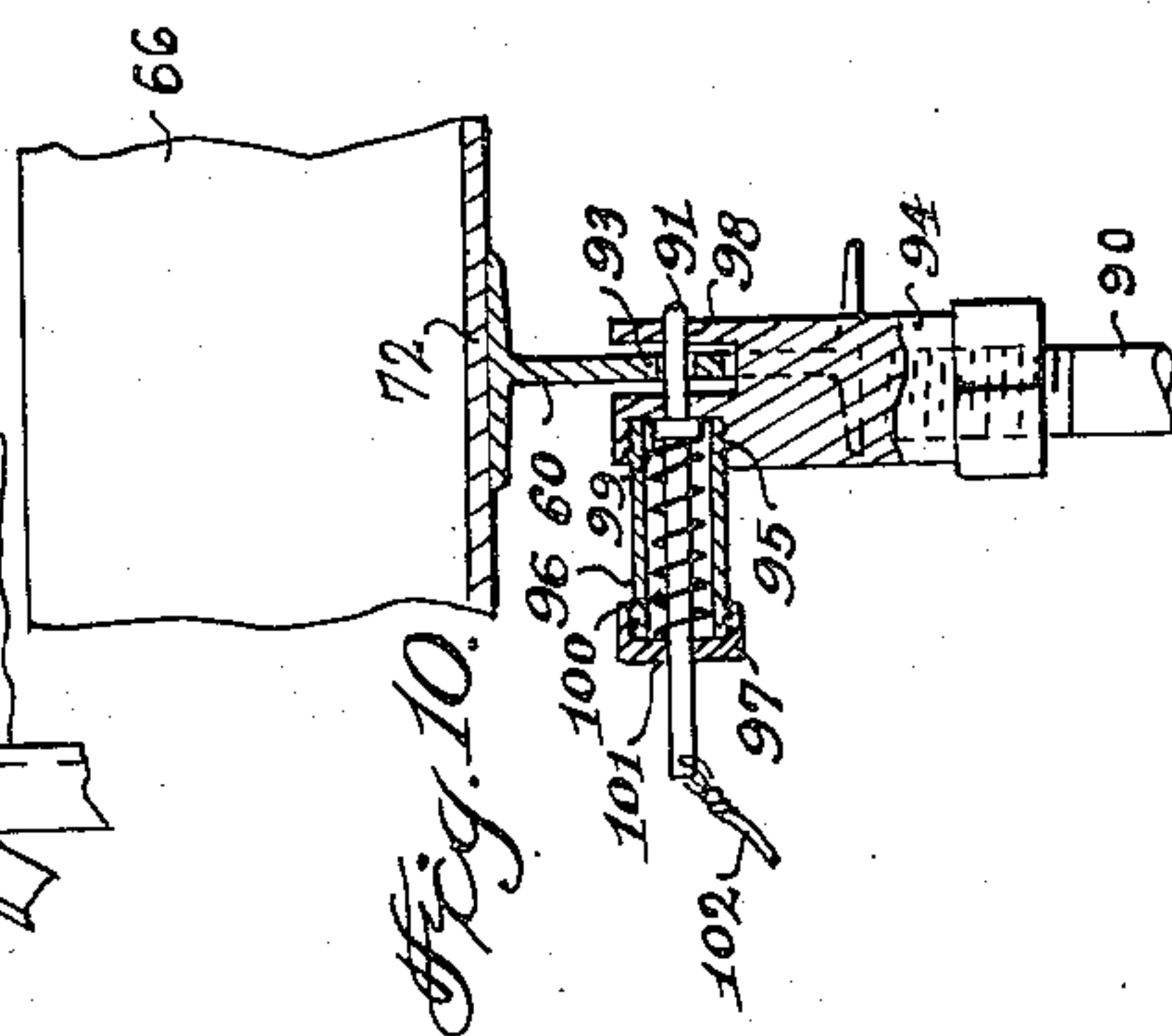


Fig. 10

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## UNITED STATES PATENT OFFICE

2,626,643

## APPARATUS FOR PRODUCING PREFABRICATED BUILDING WALLS

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Application June 21, 1950, Serial No. 169,431

5 Claims. (Cl. 144—288)

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This invention relates to a novel apparatus or machine whereby two side walls or panels of a wooden building, such as a dwelling may be completely fabricated simultaneously upon the apparatus and in a horizontal position and thereafter delivered from the apparatus in a vertical or upright position ready for use.

More particularly, it is an aim of the present invention to provide an apparatus whereby the studs and top and bottom rails of a wall or building panel may be quickly and accurately assembled and clamped together and while thus held a sheathing or siding may be applied thereto and the rails and studs secured to one another and to the siding to provide a completely prefabricated building wall or panel ready for erection as a part of a building.

Still another object of the invention is to provide an apparatus wherein window and door frames may be positioned in the wall or panel during its assembly and which apparatus is provided with saw guide means for trimming and bevelling the edges of the sheathing or siding of the panel to correct size and shape.

Still a further object of the invention is to provide an apparatus wherein the studs will be accurately located on conventional sixteen inch centers without requiring measuring and marking of the top and bottom rails or plates for correctly locating the studs.

Still a further object of the invention is to provide an apparatus having novel means for effectively clamping the frame, composed of the studs and top and bottom plates in the machine and which is likewise provided with novel means for moving the wall or panel supporting template from a horizontal to an upright position to facilitate the detachment of the wall or panel from the machine in an upright position.

Various other objects and advantages of the invention will hereafter become more fully apparent from the following description of the drawings, illustrating a presently preferred embodiment thereof, and wherein:

Figure 1 is a plan view showing the machine or apparatus with the template sections thereof in horizontal positions preparatory to prefabricating a wall thereon;

Figure 2 is a side elevational view of the apparatus looking from right to left of Figure 1 along the line 2—2 of Figure 1;

Figure 3 is an end elevational view on an enlarged scale of the apparatus taken substantially along a plane as indicated by the line 3—3 of Figure 2;

Figure 4 is an enlarged fragmentary cross sec-

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tional view through one section or template of the apparatus, taken substantially along a plane as indicated by the line 4—4 of Figure 2 and showing a prefabricated wall assembled thereon;

Figure 5 is a horizontal sectional view, on a reduced scale taken substantially along a plane as indicated by the line 5—5 of Figure 2 and illustrating the supporting framework of the apparatus;

Figure 6 is a fragmentary longitudinal vertical sectional view of a portion of one template or section of the apparatus, taken substantially along a plane as indicated by the line 6—6 of Figure 1 and on an enlarged scale;

Figure 7 is a top plan view thereof taken substantially along a plane as indicated by the line 7—7 of Figure 6;

Figure 8 is a fragmentary vertical sectional view taken substantially along a plane as indicated by the line 8—8 of Figure 4;

Figure 9 is a sectional view taken substantially along a plane as indicated by the line 9—9 of Figure 4;

Figure 10 is a fragmentary vertical sectional view taken substantially along a plane as indicated by the line 10—10 of Figure 7;

Figure 11 is an enlarged fragmentary vertical sectional view taken substantially along a plane as indicated by the line 11—11 of Figure 12;

Figure 12 is a fragmentary plan view of one section of the apparatus, partly broken away, showing a prefabricated wall assembled thereon;

Figure 13 is a fragmentary perspective view on an enlarged scale illustrating an end of one of the stud locators, and

Figure 14 is an edge elevational view, partly in section, showing a prefabricated wall after assembly on and removal from the apparatus.

Referring more specifically to the drawings, the wall or panel forming apparatus in its entirety and comprising the invention is designated generally 15 and includes a supporting frame structure, designated generally 16 and corresponding laterally spaced panel assembly sections or templates, designated generally 17 and 18.

The supporting structure 16 includes a pair of elongated, rectangular base members 19 which are preferably formed of angle iron and disposed transversely to the longitudinal axis of the apparatus 15 and parallel to one another. The base members 19 are connected adjacent their ends by a pair of longitudinally extending braces 20 which extend therebetween and which are secured at their ends to brackets 21 which are suitably fastened to and project from the inner



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sides of the base members 19. The base members 19 are also connected by a diagonal brace 22 which is secured at its ends to two of the diagonally disposed brackets 21, as best seen in Figure 5. The base members 19 are provided on their remote sides and adjacent their ends with outwardly projecting apertured ears 23 for receiving suitable fastenings 24, as best seen in Figure 3, for anchoring the supporting structure 16 to the surface 25 of a foundation.

Each base member 19 includes a pair of intermediate cross braces 26 and a diagonal brace 27 which is disposed between the cross braces 26, said braces 26 and 27 preferably being formed of angle iron. Each base member 19 also includes a pair of cross braces 28, one of which is disposed adjacent each end thereof, said cross braces 28, preferably being formed of lengths of I-beam, as best illustrated in Figure 3. The braces 26, 27 and 28 may be suitably secured to the rectangular frame 30 of the base members 19, as by welding. As best seen in Figure 3, an upright brace or standard 29 is secured to and rises from each end brace 28. The upright braces 29 are likewise preferably formed of lengths of I-beam. A pair of diagonal supporting posts 31, each formed of channel iron, is secured to and rises from each end of each of the rectangular frames 30, said posts 31 extending upwardly and inwardly with respect to the base members 19. Intermediate portions of the two posts 31 constituting each pair of posts are disposed to straddle the adjacent upright brace 29 and are suitably secured thereto. Each post 31 is also provided with a diagonal brace 29a which rises from the brace 28.

As best illustrated in Figure 8, each of the posts 31 has a bearing 32 secured on its upper end and a pin or shaft 33 extends between and is journaled in the bearings 32 of the posts of each pair. Each pin 33 extends through and is secured to the web portion of an I-beam 34, intermediate of its ends, and the longitudinally aligned I-beams 34 are secured at their ends to the web portions of a pair of longitudinally extending larger I-beams 35, as by flange brackets 36 and fastenings 37, as seen in Figure 4. The I-beams 35 constituting each pair provide the support for either the template 17 or template 18. The I-beams 35, as best illustrated in Figure 2, extend from end-to-end of the templates 17 and 18.

Beyond corresponding ends the templates 17 and 18 an upright post 38 is disposed, one of the posts 38 being arranged adjacent the outer edge of each template or form section 17 and 18. A diagonal post or brace 39 extends downwardly and inwardly from the upper end of each post 38 and said posts and braces 38 and 39 being anchored at their lower ends in the foundation 25. Each post 38 is provided adjacent its upper end with a bearing 40 for journalling a shaft 41 having a crank 42 at one of its ends and a sprocket wheel 43, fixed to its opposite end. Each brace 39 has a bearing 44 fixed thereto in which is journaled one end of a short shaft 45 to which is fixed a sprocket wheel 46. An endless chain 47 is trained over the complementary sprocket wheels 43 and 46 for driving the shaft 45 from the shaft 41 when the crank 42 is manually turned. A tubular shaft 48 has one end thereof fixed on the opposite end of each shaft 45, said tubular shafts 48 extending longitudinally of the apparatus 15 from the shafts 45. Each tubular shaft 48 is formed of sections, the adjacent ends

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of which are connected by a short shaft 49 which is disposed therein and secured thereto and to which is secured a bevelled gear 50. Another short shaft 49 is fixed in and projects from the opposite end of each tubular shaft 48 and has a bevelled gear 50 fixed thereto. As best illustrated in Figure 9, each shaft 49 is journaled in one leg of an angular bracket 51 the other leg of which is secured by fastenings 52 to a pair of bars 53 and likewise provides a journal for a portion of a shaft 54 to which is fixed a bevelled gear 55 which meshes with the adjacent bevelled gear 50. The bars 53 are suitably secured to the adjacent sides of two of the posts 31 forming a pair of said posts and a cross bar 56 is secured to the opposite ends of the bars 53 by additional fastenings 52 and provides a journal for another portion of the shaft 54. A worm 57 is fixed to each shaft 54 between the bracket 51 and bar 56 and is disposed to mesh with a worm wheel segment 58. Each worm wheel segment 58 is secured to the underside of one of the transverse I-beams 34 and extends longitudinally thereof. Accordingly, when either crank 42 is revolved it will revolve its associated shaft 45 by the sprocket wheel and chain connection 43, 46, 47 to rotate the shaft 48, 49 and the two bevelled gears 50 which are fixed thereto to thereby turn the two worms 57 which are located beneath one of the form sections or templates 17 or 18 to thereby rock the two worm wheel sections 58 in unison to swing the two transverse I-beams 34 and the two longitudinal I-beams 35, which are connected to said worm wheel segments in a vertical plane transversely of the longitudinal axis of the apparatus 15 and on a horizontal axis between a horizontal plane of the parts as illustrated at the left of Figure 3 and a vertical position of the parts as illustrated at the right of Figure 3.

Each template or wall form 17 and 18 is identical in construction and only one of said forms or templates will therefore be described in detail. Each form or template is supported on a pair of the longitudinal I-beams 35 and includes a number, preferably five clamping units including four clamping units, designated generally 59 which are identical and an intermediate clamping unit 59a of a slightly modified construction. Each clamping unit 59 and 59a includes two elongated I-beams 60 which are supported transversely on and secured to the I-beams 35. The outer ends of all of the I-beams 60 are connected by an angle bar 61 which extends from end-to-end of the templates 17 or 18, as seen in Figures 1 and 4, and which is secured by fastenings 62 to each I-beam 60. An angle bracket 63 is secured by fastenings 64 to the I-beams 60 of each clamping unit 59 and 59a, adjacent the outer ends of said I-beams 60, said angle members 63 forming stationary clamp elements. Each of the clamping units 59 also includes two shorter I-beams 65 which are disposed between and equally spaced from the I-beams 60 and two additional I-beams 65 which are spaced outwardly from the I-beams 60 of each clamping unit 59. The I-beams 60 and 65 are spaced sixteen inches apart from center thereof and the adjacent I-beams 65 of the adjacent units 59 and 59a are likewise spaced the same distance apart. A movable clamping element 66 formed of angle iron constitutes a part of each clamping unit 59 and 59a and is slidably supported on the I-beams 60 in opposed relationship to the stationary clamping elements 63 and adjacent the inner side of the template or form 17 or 18. The clamping



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elements 63 and 66 are disposed with their up-  
standing flanges in adjacently disposed relation-  
ship to one another and each clamping element  
66, intermediate of its ends, is provided with a  
bearing 67 for journalling the unthreaded, shank  
end of a feed screw 68. Each feed screw 68 is  
rotatably and non-slidably connected to its as-  
sociated clamping element 66 by a hand wheel  
69 which is detachably connected to the outer  
end thereof and which bears against the outer  
side of the bearing 67 and a collar 70 which is  
detachably connected to the feed screw 68 and  
bears against the inner side of the clamping ele-  
ment 66. Each stationary clamping element 63  
has a block 71 secured to its inner side and which  
inner side and block are provided with registering  
threaded openings to threadedly receive a thread-  
ed terminal portion 68' of the feed screw 68 so  
that when the hand wheel 69 is rotated in one  
direction the movable clamping element 66 will  
be displaced toward the stationary clamping ele-  
ment 63 or when the hand wheel 69 is revolved  
in the opposite direction, said movable clamp-  
ing element 66 will be displaced away from its  
complementary stationary clamping element 63.  
The clamping sections 59 differ from the clamp-  
ing section 59a only in that the intermediate  
clamping section 59a of each template 17 or 18  
is made longer and is provided with one addi-  
tional transverse I-beam 65 which is disposed be-  
tween the other two intermediate I-beams 65  
and the feed screw 68 of the intermediate clamp-  
ing unit 59a is disposed directly over the inter-  
mediate I-beam 65, as best illustrated in Fig-  
ure 1.

As best seen in Figures 3, 4 and 7, each clamp-  
ing unit 59 and 59a also includes an angle mem-  
ber 72 which is connected by hinges 73 to the  
opposite, inner ends of the two long I-beams 60,  
said angle members 72 extend longitudinally of  
the templates and are normally disposed with  
one flange in an upright position, as seen in Fig-  
ure 4 and the other flange extending inwardly  
from the hinges 73. A turn button 74 is swivelly  
mounted by a headed pin 75 on each I-beam 60  
to engage the inwardly extending flange of the  
associated angle member 72 for latching said  
angle member in its position of Figure 4. Obvi-  
ously, the turn buttons 74 may be swung through  
arcs of 90° for disengaging the angle members  
72 so that said angle members may be swung  
clockwise as seen in Figure 4 on the hinges 73,  
for a purpose which will hereinafter become  
apparent.

Each of the I-beams 60 and 65, except the in-  
termediate I-beam 65 of each intermediate clamp-  
ing unit 59a has a locator bar 76 resting thereon  
and extending from adjacent the stationary  
clamping element 63 toward the movable clamp-  
ing element 66 and which terminates in spaced  
relationship to said movable clamping element  
66, for a purpose which will hereinafter become  
apparent. A pair of clips 77, as best illustrated  
in Figure 13 is secured to each locator bar 76  
adjacent each end thereof, each clip 77 having  
an outwardly offset lower portion 78 which is  
secured by fastenings 79 to a side wall of its lo-  
cator bar 76 and which terminates at its bottom  
edge in an inturned flange 80 which is spaced  
from the bottom surface of the bar 76. The pair  
of clips 77 at each end of the bars 76 are dis-  
posed in opposed relationship to one another so  
that the flanges 80 thereof extend inwardly and  
toward one another and are adapted to engage  
under the upper flange of the I-beams 60 or 65

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on which the locator bar 76 is disposed for con-  
necting the locator bar thereto. The pair of clips  
77 are provided with inwardly offset upper por-  
tions forming opposed spring jaws 81 which ter-  
minate at their upper ends in outwardly curved  
terminals 82. The spring jaws 81 are yieldable  
away from one another, for a purpose which will  
hereinafter become apparent. A spring 83, as  
seen in Figure 4, is connected to the fastening  
79 of one of the clips 77 which is located adja-  
cent the movable clamping element 66 of each  
locator unit 76, 77 and each spring 83 is provided  
with a downturned downwardly biased free end  
which extends through an opening 84 of the top  
flange of the I-beam 60 or 65 on which the lo-  
cator unit rests for retaining the locator unit  
against sliding movement longitudinally of the  
I-beam.

The upright flange of the angle member 72 of  
the end clamping unit 59, which is disposed adja-  
cent the post 32 has a socket 85 fixed to its outer  
side and which opens upwardly, and a socket 86  
is fixed to the horizontal, inwardly extending  
flange of the angle member 61 and is disposed  
in transverse alignment with the socket 85. A  
saw guide 87 which is formed of angle iron in-  
cludes an upright, outer flange and a horizontal  
inwardly extending flange, said horizontal flange  
being provided adjacent each end thereof with a  
depending pin 88. The pins 88 are spaced a dis-  
tance corresponding to the spacing between the  
centers of the sockets 85 and 86 and are received  
therein for supporting the saw guide 87 above the  
template 17 or 18 and adjacent an end thereof,  
as best illustrated in Figures 1 and 2.

Referring particularly to Figures 3 and 10, each  
of the cross braces 26 has a lug 89 fixed thereto  
to which one end of a supporting rod or rigid  
link 90 is pivotally connected. The opposite end  
of each rod 90 is detachably connected by a latch  
pin or plunger 91 to an I-beam 60, which is dis-  
posed directly thereabove and at the inner end  
of said I-beam which is cut away or bevelled, as  
seen at 92, the latch pin or plunger 91 engaging  
detachably in an opening 93 of the I-beam. Each  
rod 90 is provided with a bifurcated or slotted  
head 94 at each of its ends, the slots of which  
receive the brackets 89 and the flanges of the  
I-beams 60. As best seen in Figure 10, the upper  
head 94 of each rod 90 is provided with a laterally  
opening threaded socket 95 for receiving an ex-  
ternally threaded end of a sleeve 96 which pro-  
jects laterally therefrom and has a cap 97  
threaded connected to its opposite, outer end  
and which combines with the bed of the socket  
and sleeve to form a cylinder in which the latch  
pin 91 is reciprocally mounted. One end of the  
latch pin 91 extends loosely through a lateral  
opening 98 in the head 94, which intersects the  
slot of said head in which the web of the I-beam  
60 is received so that the I-beam opening 93 may  
be disposed in alignment with the opening 98 to  
receive the latch plunger 91. The latch plunger  
91 is provided with a collar or head 99 disposed  
intermediate of its ends and which is reciprocally  
disposed in the sleeve 96 and forms an abutment  
for one end of an expansion spring 100, the oppo-  
site end of which seats against the cap 97 for  
urging the plunger 91 through the opening 98.  
The cap 97 is provided with a central opening 101  
forming a guide through which the plunger 91  
reciprocally extends and one end of a flexible  
member 102 is attached to the end of the plunger  
91 which projects outwardly from the cap 97 and  
extends therefrom toward the end of the template



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or form 17 or 18, adjacent to which the rod 90 is disposed, as best seen in Figure 1.

As seen in Figure 11, the stationary clamping elements 63 are preferably provided with notches 103 which align with the I-beams 60 and 65 and, if desired, the movable clamping elements 66 may be similarly notched.

From the foregoing it will be readily apparent that the cranks 42 may be revolved for turning the shafts 48 to thereby revolve the worms 57 to swing the templates or forms 17 and 18 to horizontal positions, after which the supporting rods 90 may be swung to upright positions and the latch pins 91 engage in the openings 93, as illustrated in Figure 10, to thereby latch the forms or templates 17 and 18 in horizontal positions. The hand wheels 69 may then be revolved for displacing the movable clamping elements 66 away from the stationary clamping elements 63, after which a stud 104, preferably formed of 2 x 4 material is positioned on each locator bar 76 and gripped between the clip jaws 81 thereof. A single bottom plate or rail 105 is then positioned between corresponding ends of the studs 104 and the movable clamping elements 66 of the form or template. Two top plates or rails 106, which may likewise be formed of 2 x 4 inch material are then positioned between the opposite ends of the studs 104 and the stationary clamping elements 63 which are disposed in longitudinal alignment. The hand wheels 69 are then revolved in a direction for causing the movable clamping elements 66 to be displaced toward the stationary clamping elements 63 for clamping the studs 104 between the top plates 106 and the bottom plate 105 and for clamping said plates against the ends of the studs. The plates 105 and 106 may then be suitably secured to the ends of the studs in any suitable manner, not shown, as by means of driven fastenings. It will thus be seen that a framework for a wall or panel may be thus assembled and connected on each of the forms or templates 17 and 18 and with the studs thereof properly spaced relatively to one another and accurately held positioned while the studs are secured to the top and bottom plates. This work may be performed by the operators standing either between the templates 17 and 18 or on the outer sides thereof and, if desired, suitable stands or tables may be provided between the templates and therebelow for the convenience of the operators. At this time window and door frames may be inserted in the frames formed by the studs 104 and the plates 105 and 106 and where necessary, certain of the studs 104 may be cut off, as seen in Figure 12, to accommodate the door or window frame 107. Ordinarily the frame 107 is positioned over the intermediate clamping unit 59a and where a stud is omitted from the intermediate, extra I-beam 65 which is disposed directly beneath the feed screw 68 and, if desired, short lengths of studs, as indicated in dotted lines at 104a may be wedged between the ends of the frame 107 and the plates 105 and 106 and secured thereto.

After the frame 107 are in place a siding or sheathing 108 is applied to the upper side of each framework composed of the studs 104 and the rails 105 and 106 which are connected thereto, and the siding is secured to said studs and plates by suitable fastenings. Openings may be cut in the siding 108 to accommodate the frames 107 by the use of a conventional manually supported power driven rotary saw, such as a "Skilsaw." After the siding or sheathing 108 is applied and secured to

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the studs and plates, the saw guide 87 is applied to each template 17 or 18 by engaging its pin 88 in the sockets 85 and 86 and the guide 87 is then utilized for guiding the saw in cutting off the end of the sheathing 108, located at the adjacent end of the template 17 or 18 and which cutting operation may be either a straight cut or a bevelled cut as seen at 109 in Figure 14. In applying the sheathing or siding 108, the other end thereof is properly positioned with respect to the other end of the frame, formed by the studs and plates, so that one end only of the sheathing ordinarily needs to be cut off and, likewise, one longitudinal edge of the sheathing 108 is preferably correctly positioned relatively to the top plates 106 before the sheathing is secured to the plates and studs. Thereafter, the saw may be utilized for cutting off the other longitudinal edge of the sheathing 108 at the proper distance beyond the bottom plate 105, utilizing the upright flanges of the longitudinal angle members 72 as a guide for this operation and after the saw guide 87 has been removed. However, if desired, the other longitudinal edge of the sheathing or siding may also be cut off, utilizing the clamping elements 63 or the angle members 61 as a saw guide and if desired, sockets may also be provided adjacent the opposite end of each template 17 or 18 for mounting the saw guide 87 for cutting off the opposite end of the siding 108, particularly when a bevelled edge is required at each end.

After the siding has been nailed or otherwise secured in place on the studs and plates and the edges thereof have been trimmed, as previously described, the prefabrication of the wall or panel is completed and one of the operators then pulls on each of the flexible members 102 to release the latch pins 91 from the I-beams 60, after which by turning the cranks 42 the worms 57 may be revolved in proper directions for causing the worm wheel segments 58 to turn, one in a clockwise direction, as seen in Figure 4 or at the left-hand side of Figure 3 and the other in the opposite direction, so that the templates 17 and 18 will swing from horizontal positions, as seen at the left of Figure 3 to an upright position as seen at the right of Figure 3, as previously described. The locator bars 76 are prevented from dropping when thus disposed in vertical positions by engagement of the springs 83 in the openings 84. By rotating the hand wheels 69, the movable clamping elements 66 may be displaced away from the stationary clamping elements 63 and the turn buttons 74 may be swung to released positions so that the angle members 72 may swing downwardly on their hinges 73 to enable the prefabricated wall 110, as best illustrated in Figure 14, to be more readily displaced laterally out of engagement with the template 17 or 18 and while in an upright position, so that the wall 110 may then be conveniently moved to a position for storage, to a position for transportation or to a position in which it is to be employed as a part of a building. Thereafter, the cranks 42 may be turned in the opposite direction to return the templates 17 and 18 to horizontal positions, after which the supporting rods 90 are re-latched to the I-beams 60 and the angle members 72 returned to their normal positions of Figure 4 and latched therein by the turn buttons 74, preparatory to constructing another prefabricated wall or panel on each of the templates or forms 17 and 18.

Various modifications and changes are contemplated and may obviously be resorted to, without departing from the spirit or scope of the inven-



tion as hereinafter defined by the appended claims.

I claim as my invention:

1. An apparatus for assembling a prefabricated building wall or panel comprising an elongated base, longitudinally spaced pairs of supporting standards secured to and rising from said base and disposed in longitudinal alignment, a cross beam extending transversely between the upper ends of each pair of standards, means extending between the upper ends of the standards of each pair and transversely through said cross beams for pivotally supporting the cross beams on the upper ends of the standards, longitudinal beams secured to the ends of said cross beams, a plurality of transverse beams supported on and secured to said longitudinal beams transversely thereof and disposed in equally spaced relationship to one another, longitudinally of the apparatus, a stationary clamping element secured to said transverse beams adjacent to corresponding ends thereof and extending longitudinally of the apparatus, a movable clamping element supported on the transverse beams adjacent their opposite ends and parallel to the stationary clamping element, said clamping elements having adjacently disposed clamping surfaces rising from the transverse beams, feed screw means journaled in one of the clamping elements and threadedly engaging the other clamping element and operable for moving the movable clamping element toward and away from the stationary clamping element, locator means connected to and rising from the transverse beams and adapted to support a stud above and in alignment with each transverse beam and between the clamping elements, the ends of the studs being adapted to be spaced from said clamping elements to provide spaces adapted to accommodate top and bottom plates, said feed screw means being operable to displace the movable clamping element toward the stationary clamping element for clamping the studs and plates between said clamping elements while the studs and plates are secured together and while a siding member is disposed on and secured to the assembled studs and plates.

2. An apparatus for assembling a prefabricated building wall or panel comprising a horizontal base structure, standards rising from and secured to the base structure and disposed in longitudinal alignment, a template, means pivotally supporting the template on the upper ends of the standards and intermediate of the side edges of the template, said template being disposed above the standards and including a plurality of stationary transversely extending beams equally spaced relatively to one another, the spacing of said transverse beams corresponding to the spacing between the studs of a wall or panel to be prefabricated, a stationary clamping element extending longitudinally of the template and supported on and connected to said beams adjacent one side edge of the template, a movable clamping element slidably supported on said transverse beams adjacent their opposite ends and parallel to the stationary clamping element, manually actuated means for moving the movable clamping element toward and away from the stationary clamping element, said clamping elements having adjacently disposed upright clamping surfaces adapted to engage top and bottom plates of a wall or panel disposed on the template between said clamping elements, and transverse beams and supported thereon between the clamping elements and each adapted to de-

tachably support a stud above and in alignment with the transverse beam to which said locator means is connected for positioning a plurality of said studs in predetermined spaced relationship to one another and between the top and bottom plates, said manually actuated means being operable to displace the movable clamping element toward the stationary clamping element for clamping the top and bottom plates between the clamping elements and the ends of the studs while the plates and studs are secured together and while a siding is secured to the upper surface of the wall or panel frame formed by the plates and studs.

3. An apparatus as in claim 2, said standards locator means connected to and rising from the being inclined transversely of the longitudinal axis of the template whereby the lower ends of the standards are disposed beneath a side edge of the template when the latter is in a horizontal position, and said means for pivotally supporting the template on said standards having an axis disposed longitudinally of the template for rocking movement of the template in a vertical plane and about said axis whereby the template may be swung from a horizontal to a vertical position for unloading a prefabricated wall therefrom.

4. An apparatus as in claim 2, said locator means comprising locator bars disposed on said transverse beams and extending longitudinally thereof between the clamping elements, stud engaging clips fastened to each locator bar having portions engaging around portions of said transverse beams for retaining the locator bars thereon and including upwardly projecting resilient jaws between which the studs are releasably gripped and supported on the locator bars.

5. An apparatus as in claim 2, said locator means comprising locator bars disposed on said transverse beams and extending longitudinally thereof between the clamping elements, stud engaging clips fastened to each locator bar having portions engaging around portions of said transverse beams for retaining the locator bars thereon and including upwardly projecting resilient jaws between which the studs are releasably gripped and supported on the locator bars, one of the clips of each locator bar having a spring latch engaging the transverse beam on which said locator bar is supported and retaining the locator bar against sliding movement longitudinally of said transverse beam.

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