

952,387.

Patented Mar. 15, 1910.

2 SHEETS—SHEET 1.

Fig. 1.

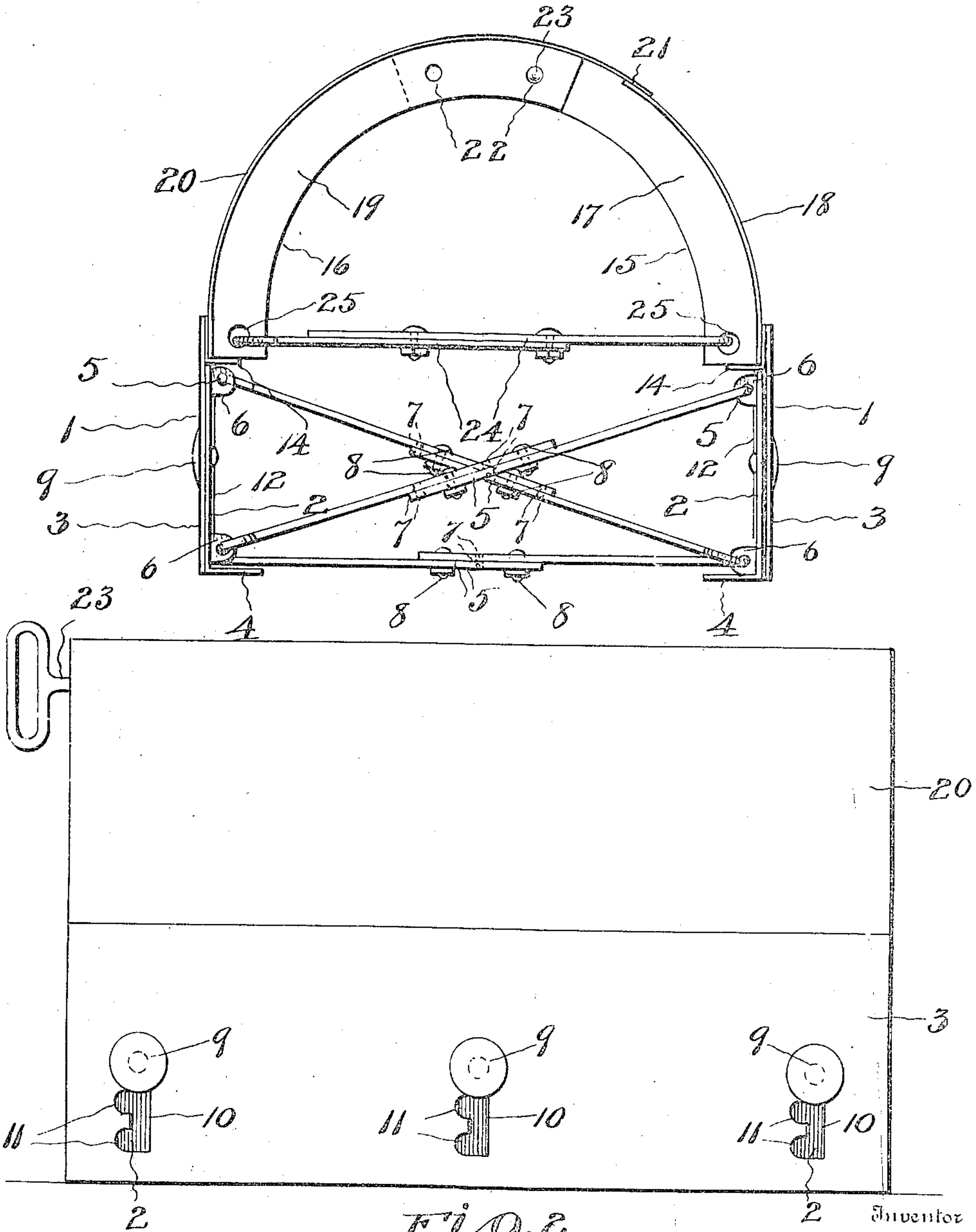


Fig. 2.

Witnesses

James W. Urie
By

James W. Urie

D. A. Bourier
Attorney

J. W. URIE.

MOLD.

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2 SHEETS—SHEET 2.

Fig. 4.

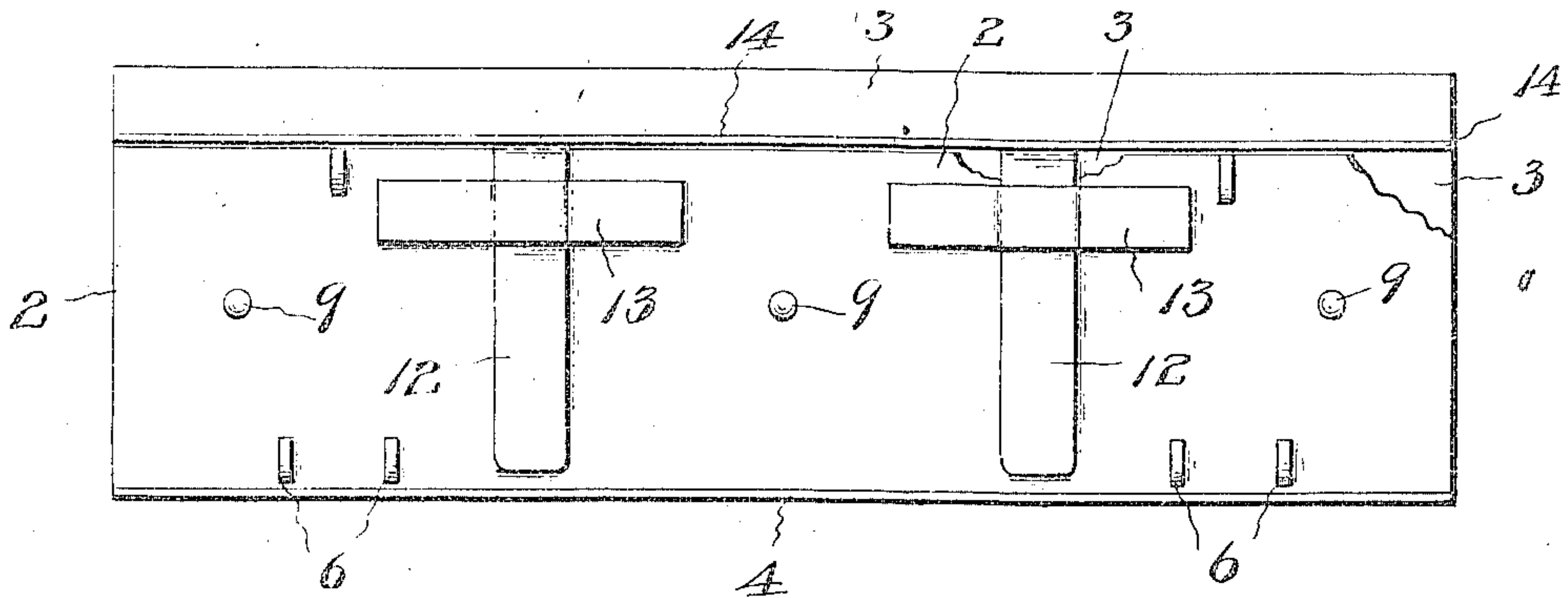
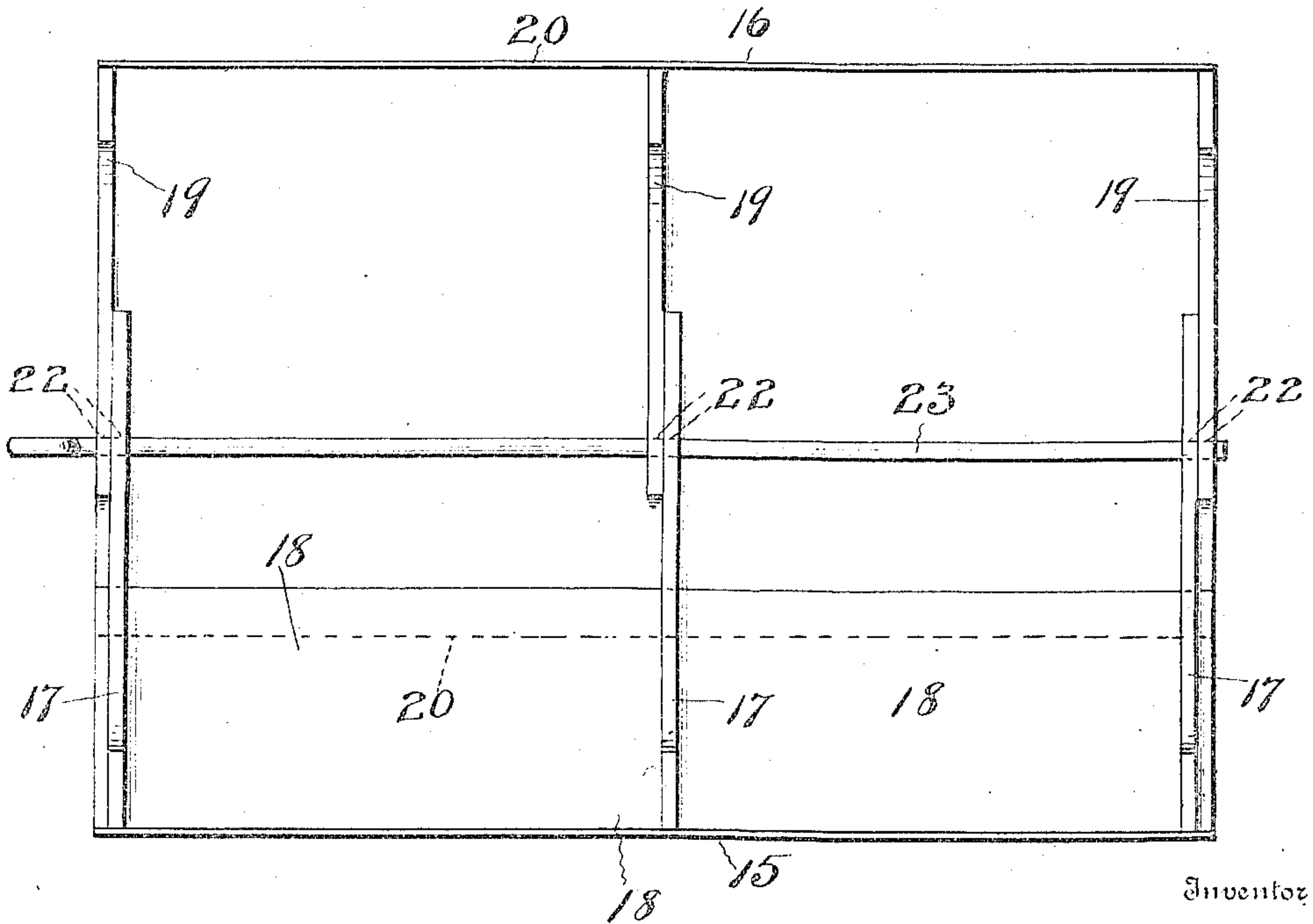


Fig. 3.



Inventor

Witnesses

James W. Urie
W. Kauder, Jr.

James W. Urie
By D. A. Gouvier
Attorney

UNITED STATES PATENT OFFICE.

JAMES W. URIE, OF CARSON CITY, MICHIGAN, ASSIGNOR OF ONE-HALF TO JOHN S. URIE, OF CARSON CITY, MICHIGAN.

MOLD.

952,387.

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To all whom it may concern:

Be it known that I, JAMES W. URIE, a citizen of the United States, residing at Carson City, in the county of Montcalm and State of Michigan, have invented certain new and useful Improvements in Molds, of which the following is a specification.

My invention relates to molds for building culverts, sewers, and similar structures and has for its object the provision of an adjustable mold capable of being adjusted to construct culverts of different sizes, the mold being so constructed that it can be dismembered when it is to be removed from the molded structure.

The construction and operation of my improved mold will be described in detail hereinafter and illustrated in the accompanying drawings in which—

Figure 1 is an end view of my improved mold in position, Fig. 2, a side view, Fig. 3, an interior view of the top mold, and Fig. 4, a view of the inner side of one of the side sections.

In the drawings similar reference characters indicate corresponding parts in all of the views.

The side sections 1 of my improved mold are formed of sheet metal and have overlapping members 2 and 3, each member 2 being formed with an inwardly extending flange 4 on its lower end that acts as a base for the mold. The members 2 are held in an upright position and spaced apart by means of hooks 5 pivotally secured to one member and engaging loops 6 on the other member, said hooks being constructed in two parts, as shown, and formed with series of holes 7 in each part to admit of adjusting their length when securing the bolts 8 therein. The outer sides of members 2 have headed pins 9 secured thereto and the members 3 are provided with vertical slots 10 to receive said pins and formed with horizontal notches 11 to receive the shanks of the pins to hold the members in adjusted positions.

12 indicates tongues secured to the inner sides of members 3 and 13 strips secured to members 2 that engage said tongues to brace members 3.

14 indicates shelves extending inwardly from members 3 adjacent to their upper edges.

The top of my improved mold is formed

of two segmental members 15 and 16 that seat on shelves 14. Member 15 consists of a plurality of arc-shaped ribs 17 having a plate 18 secured thereto of less width than the length of said ribs, while member 16 has arc-shaped ribs 19 covered by a plate 20 that extends beyond the ends of the ribs at their upper ends, as shown at 21, and that overlaps plate 18 when the two members 15 and 16 are in position. The meeting ends of ribs 17 and 19 are formed with a series of holes 22 through which the rod 23 is secured, when the mold is assembled, to adjust the width of the top.

24 indicates hooks formed in two parts and capable of being adjusted in length, said hooks being pivotally secured to the lower ends of ribs 19 at the ends of section 16 and engaging holes 25 in the lower ends of ribs 17 at the ends of section 15 when the mold is assembled.

It will be understood that when the mold is in an assembled position as shown in Fig. 1 it may be used to form a culvert, sewer or similar structure of plastic material and will effectually support the material until set. When set the mold may be removed by unhooking hooks 24 and withdrawing rods 23, when the two members 15 and 16 of the top portion will drop down and can be removed. The hooks 5 on side sections 1 are then unhooked and the side sections may be removed.

It will be apparent that the adjustable nature of the different sections of the mold makes it capable of being used in forming culverts, etc., of varying sizes and furthermore should it be desired to mold higher side walls than one set of the sections 1 would make that another set may be placed on the shelves of the first section, this being continued until the sides of the mold are the height desired.

Having thus described my invention what I claim is—

1. In a mold for culverts and the like, side sections formed with two members, one member having headed pins secured thereto, the other member provided with vertical slots to receive said pins, and the corresponding walls of the slots formed with notches to engage the pin shanks and hold the two members in adjusted positions.

2. In a mold for culverts and the like, side sections formed with two members, said

members being provided with securing means to hold them in adjusted positions, tongues on one of each pair of members, and strips secured to the other member and engaging said tongues.

3. In a mold for culverts and the like, side sections formed with two members, one member having headed pins secured thereto, the other member provided with vertical slots to receive said pins, the corresponding walls of the slots formed with notches to engage the pin shanks and hold the two members in adjusted positions, tongues on one of the members, and strips secured to the other member and engaging said tongues.

4. In a mold for forming an arch, two members, each of said members having arc-shaped ribs, a plate secured to the ribs of one member of less width than the length of the ribs, a plate secured to the other ribs and extended beyond the edge of the plate on the first-mentioned member, the meeting ends of said ribs provided with holes, a rod engaging aligned holes in the ribs, a hook pivotally secured to the lower ends of the ribs on one member, and the lower ends of the ribs on the other member formed with holes to engage said hooks.

5. In a mold for forming culverts and the like, side sections consisting of a plurality of pieces slidably mounted on one another, means to secure said pieces of the several sections in relatively adjusted positions, a shelf extending inwardly from the piece forming the upper portion of each section, and an arch-shaped top consisting of a plurality of arch segments removably secured together and seated on the shelves on the side section.

6. In a mold for forming culverts and the like, side sections each consisting of two members slidably secured together, means secured to the members and arranged at intervals to hold the members adjusted on one another, shelves extending inwardly from said side sections, and an arch-shaped top consisting of two members removably secured together and seated on the shelves aforesaid.

7. In a mold for forming culverts and the like, side sections each consisting of two members slidably mounted on one another, said sections secured together by hooks adjustable in length to adjust the width of the mold, said sections having inwardly extending shelves, and an arch-shaped top consisting of two members mounted on said shelves and removably secured together and adjustable in width.

8. In a mold for forming culverts and the like, side sections consisting of two members adjustably secured together, inwardly extending shelves on one member of each side section, and an arch-shaped top consisting of two members, each of said members having arc-shaped ribs, a plate secured to the ribs of one member of less width than the length of the ribs, the other member having a plate secured to the ribs greater in width than the length of said ribs and extended beyond the upper ends of said ribs, said extended portion overlapping the plate on the first-mentioned member, and means to secure the two top members together.

9. In a mold for forming culverts and the like, side sections consisting of two members, one of said members having pins thereon, the other member having slots engaging said pins and notches in corresponding walls of the slots to engage the shanks of the pins, an inwardly extending shelf on each section, and an arch-shaped top consisting of two members, each of said members having arc-shaped ribs, a plate secured to the ribs of one member of less width than the length of the ribs, the other member having a plate secured to the ribs greater in width than the length of said ribs and extended beyond the upper ends of said ribs, said extended portion overlapping the plate on the first mentioned member, and means to secure the two top members together.

10. In a mold for forming culverts and the like, side sections consisting of two members, one of said members having pins thereon, the other member having slots engaging said pins and notches in corresponding walls of the slots to engage the shanks of the pins, an inwardly extending shelf on each section, and an arch-shaped top consisting of two members, each of said members having arc-shaped ribs, a plate secured to the ribs of one member of less width than the length of the ribs, a plate secured to the other ribs and extended beyond the edge of the plate on the first-mentioned member, the meeting ends of said ribs provided with holes, a rod engaging aligned holes in the ribs, a hook pivotally secured to the lower ends of the ribs on one member, and the lower ends of the ribs on the other member formed with holes to engage said hooks.

In testimony whereof I hereto affix my signature in the presence of two witnesses.

JAMES W. URIE.

Witnesses:

ROLLAND W. COGSWELL,
SILAS E. BENNETT.