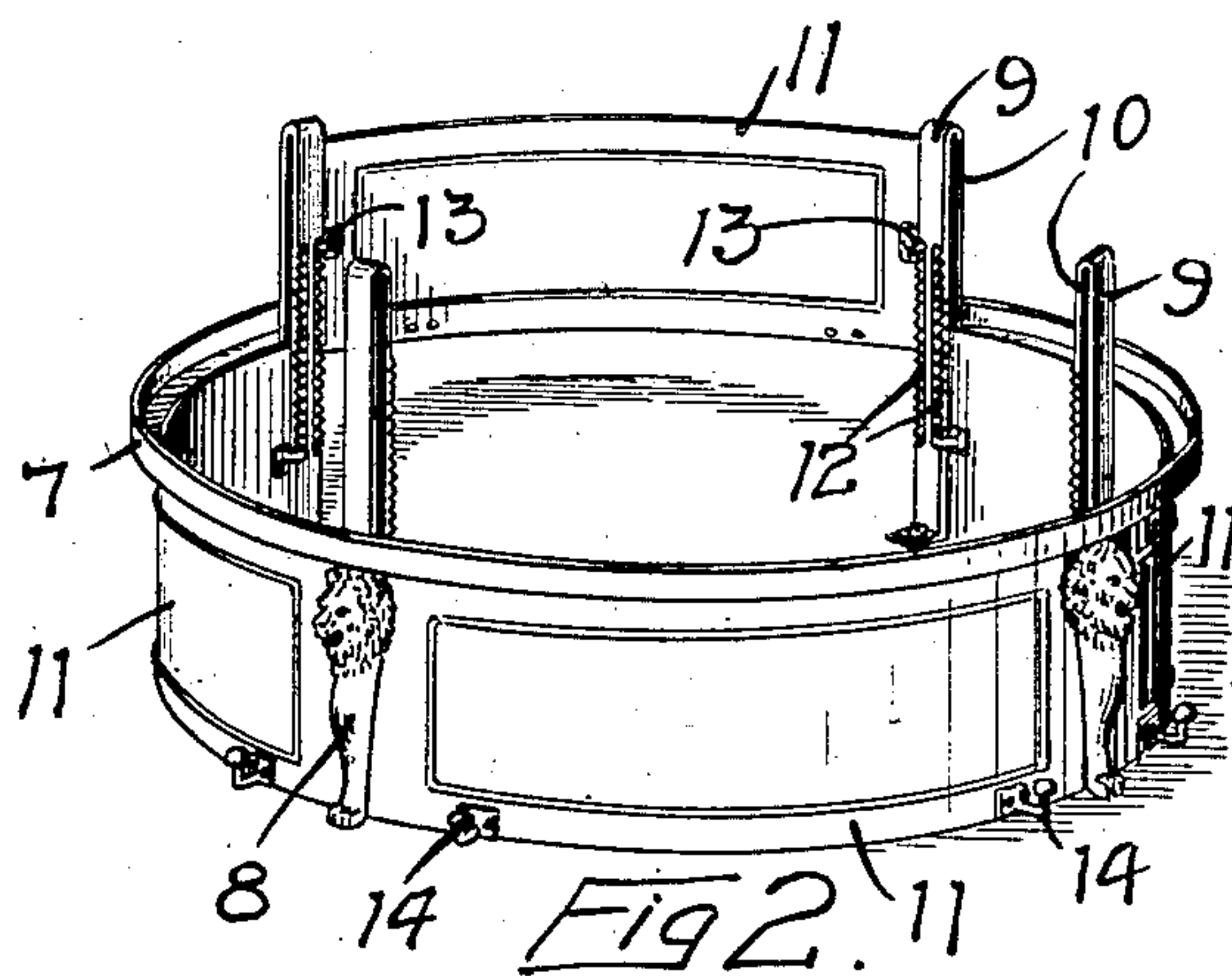
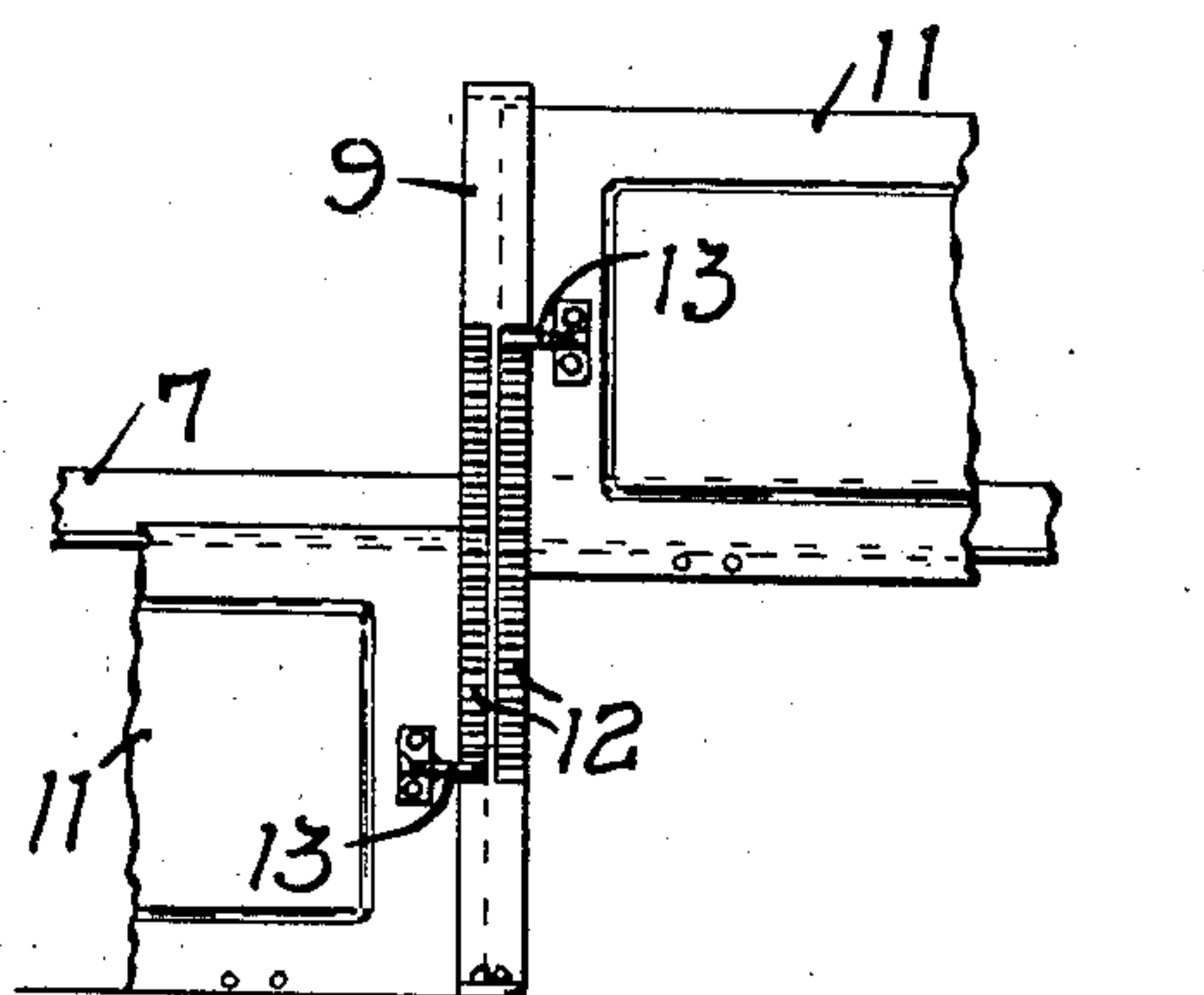
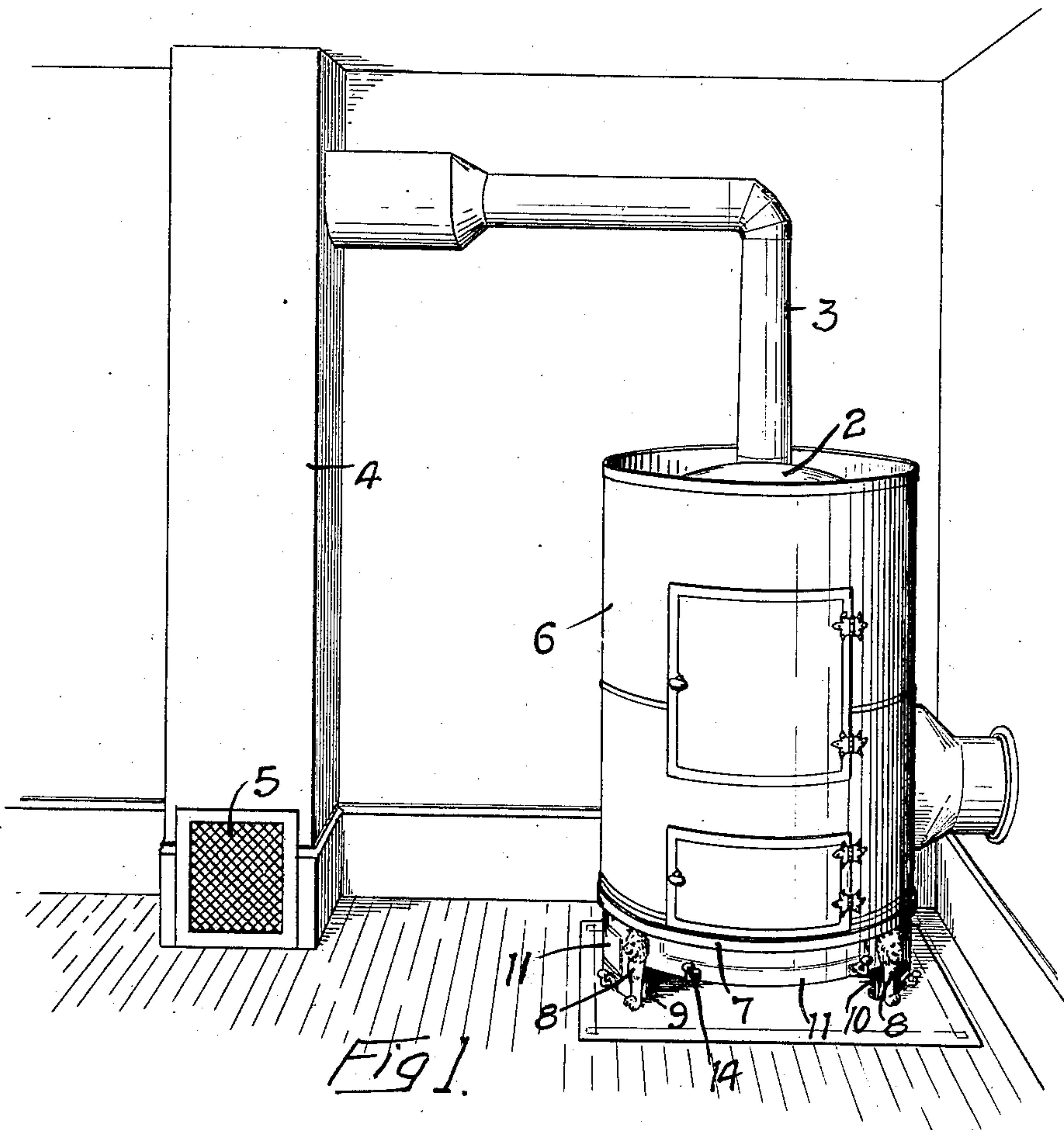


J. L. WATERBURY.
HEATING APPARATUS.
APPLICATION FILED JAN. 19, 1909.

915,134.

Patented Mar. 16, 1909.



WITNESSES
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UNITED STATES PATENT OFFICE.

JAMES L. WATERBURY, OF MINNEAPOLIS, MINNESOTA.

HEATING APPARATUS.

No. 915,134.

Specification of Letters Patent.

Patented March 16, 1909.

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To all whom it may concern:

Be it known that I, JAMES L. WATERBURY, of Minneapolis, Hennepin county, Minnesota, have invented certain new and useful Improvements in Heating Apparatus, of which the following is a specification.

My invention relates to hot air heaters and is designed particularly for use in school rooms and other public places, although capable of application wherever it may be desired to maintain a uniform temperature and effect a thorough ventilation of the space at the same time.

A further object is to provide means, by means of which the circulation of air around a heater may be controlled.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of a heating apparatus embodying my invention, Fig. 2 is a perspective view, illustrating the construction of the base of the heater casing, Fig. 3 is a detail, sectional view, illustrating the manner of supporting the slides in the base, by means of which the circulation of air within the casing is regulated.

The invention consists generally in various constructions and combinations all as hereinafter specified and particularly pointed out in the claims.

In the drawing, 2 represents a heater, 3 a flue for the products of combustion leading to the foul air flue 4, and 5 is the fresh air intake extending through the wall of the building. These features are common to other inventions of mine and I make no claim to the same herein.

6 is a casing inclosing the heater and spaced therefrom and ornamented in any suitable way to present a neat, attractive appearance in the room.

7 is a ring angular in cross section, its vertical flange inclosing the lower end of the casing and its horizontal flange forming a seat or support for said casing. This ring may be cast or made of angle bar iron and is supported by ornamental legs 8, arranged at intervals under the ring and resting upon the floor. Within the ring 7, I provide a series of straps 9, bent to form vertical loops and having guide-ways 10 therein, in which the ends of curved panels 11 are adapted to slide. One leg of each loop is provided with a series of teeth 12 and each panel has a spring finger 13 secured to each end and adapted to slide over the surface of the tooth 12, the bevel of

the tooth being the same on both sides to permit the finger to slide up and down thereon. The ends of the panels meet in the rear of the ornamental legs 8 and their lower edges contact with the floor and form close joints therewith, so that when the panels are lowered, entrance of air under the base and into the casing will be cut off; but upon raising any or all of the panels, a circulation of air will be generated along the floor and up between the heater and the casing wall. Suitable handles 14 are provided on the panels for convenience in moving them. I prefer to provide four panels under each base ring, but this number may be varied, if preferred and each panel will be suitably ornamented to correspond with the ornamentation of the casing above.

I claim as my invention:—

1. The combination, with a heater, of a casing inclosing the same and spaced therefrom, a ring having a seat to receive the lower end of said casing, and legs supporting said ring above the floor, and vertically moving panels provided between said legs and adapted to slide upwardly within said ring and casing, for the purpose specified.

2. The combination, with a heater, of a casing inclosing the same and spaced therefrom, a ring having a seat to receive the lower end of said casing, and legs supporting said ring, panels slidably mounted within said ring and having lower edges adapted to contact with the floor, said panels filling the space below said ring and between said legs, and means for supporting said panels at different elevations from the floor, substantially as described.

3. The combination, with a heater, of a casing inclosing same and spaced therefrom, a base having legs whereon said casing is seated, openings being provided beneath said base and casing, and panels having ornamental outer faces fitting within said base and vertically slidable and arranged to close said openings.

4. The combination, with a heater, of a casing inclosing same and spaced therefrom, a base provided with legs whereon said casing is seated, panels arranged to close the space between said base and the floor, vertically arranged loops mounted on said base and having guide-ways wherein said panels are slidable, said loops having ratchet teeth formed thereon, and spring fingers mounted on said panels and arranged to engage the

teeth of said ratchet and thereby hold said panels at any desirable elevation from the floor.

5 5. The combination, with a heater, of a casing inclosing the same and spaced therefrom, a base having a seat to receive the lower end of said casing, and legs supporting said base above the floor, and movable panels arranged between the seat for said casing in
10 said base and the floor line and adapted to

close the openings between the legs supporting said base, the movement of said panels allowing the admission of air beneath the said casing or the shutting off of the same.

In witness whereof, I have hereunto set my hand this 4th day of January 1909.

JAMES L. WATERBURY.

Witnesses:

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J. A. BYINGTON.