

No. 675,289.

Patented May 28, 1901.

C. E. PARKS.
SAND BOX.

(Application filed Nov. 26, 1900.)

(No Model.)

Fig. 1.

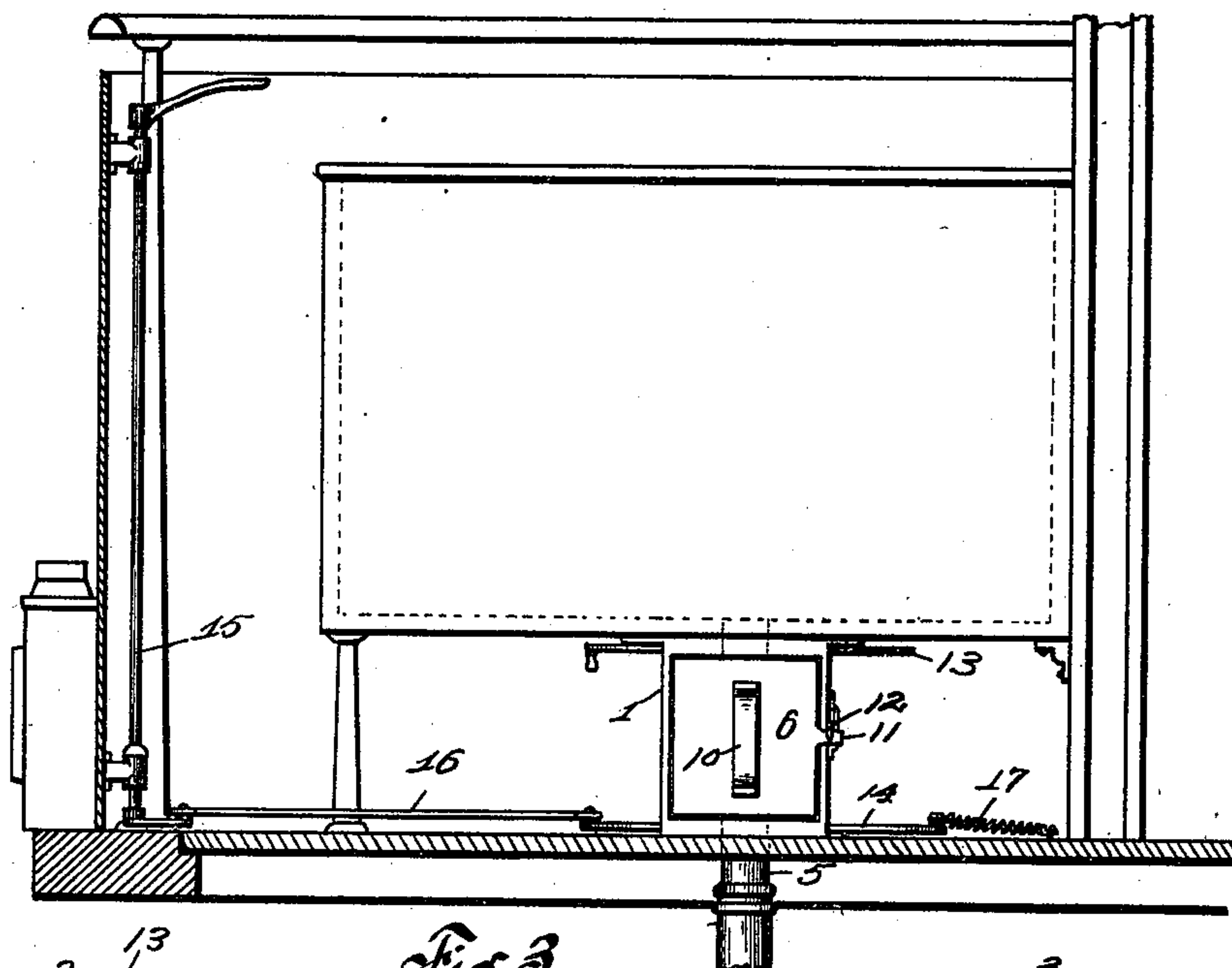


Fig. 2.

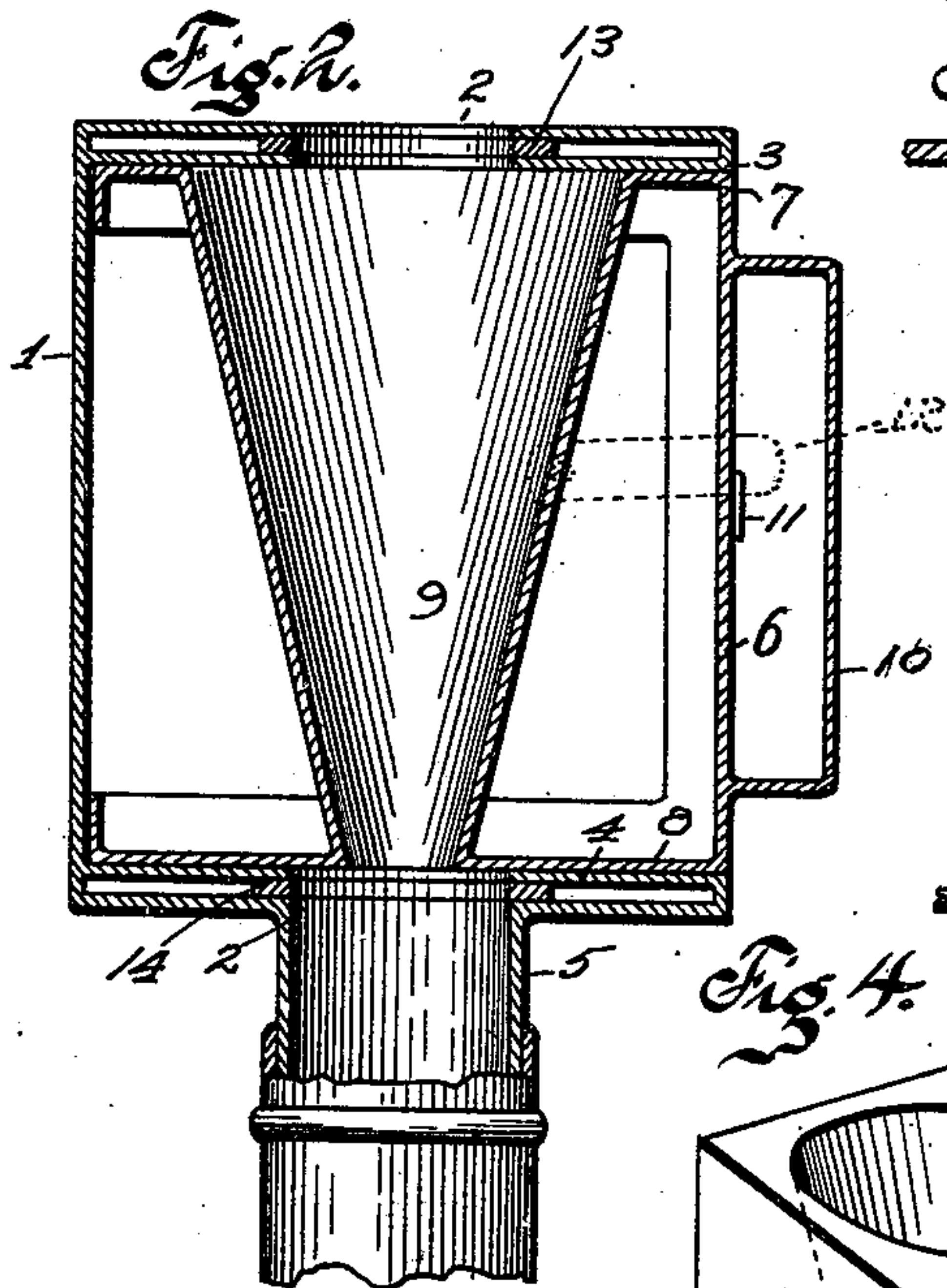


Fig. 3.

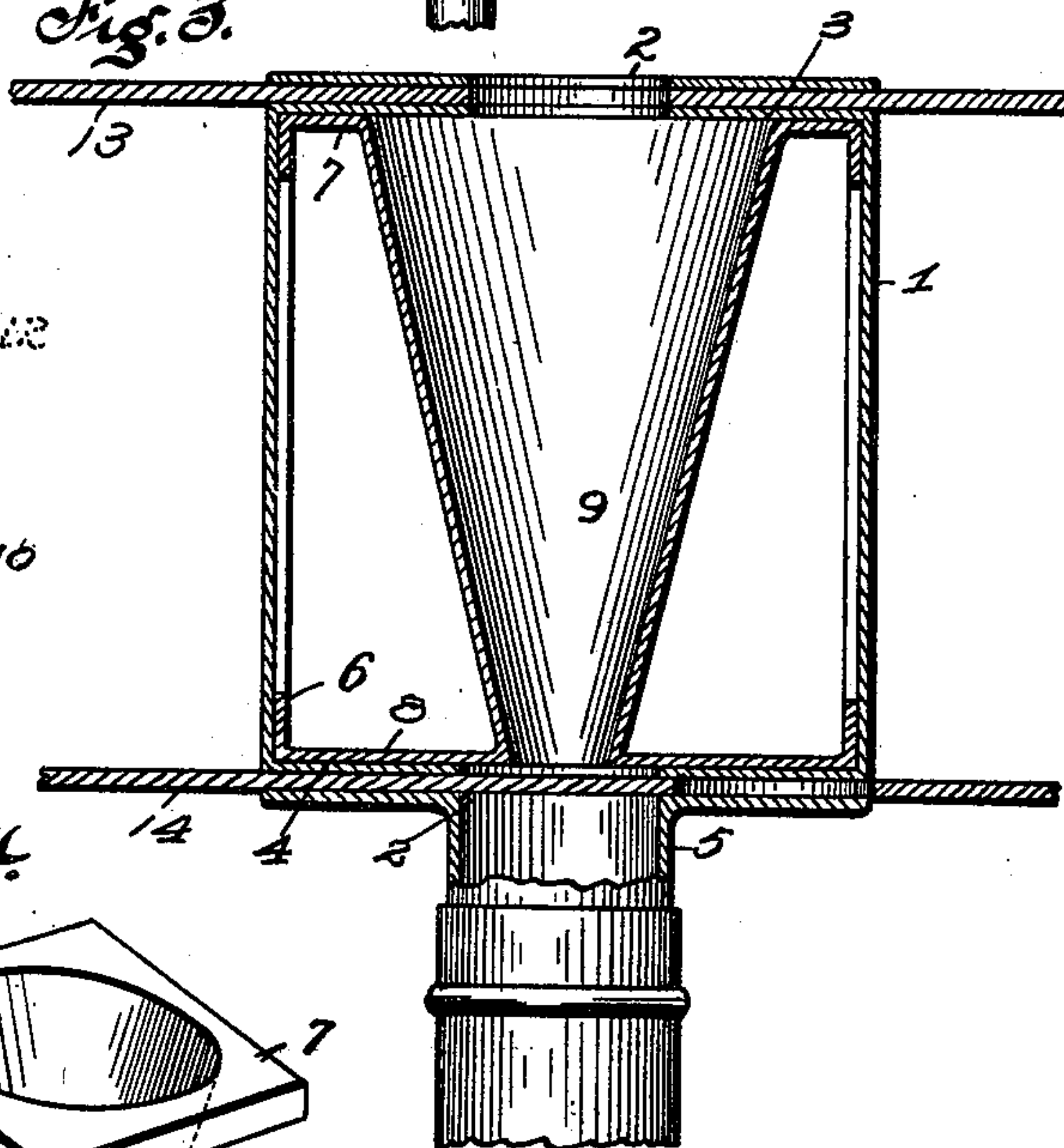
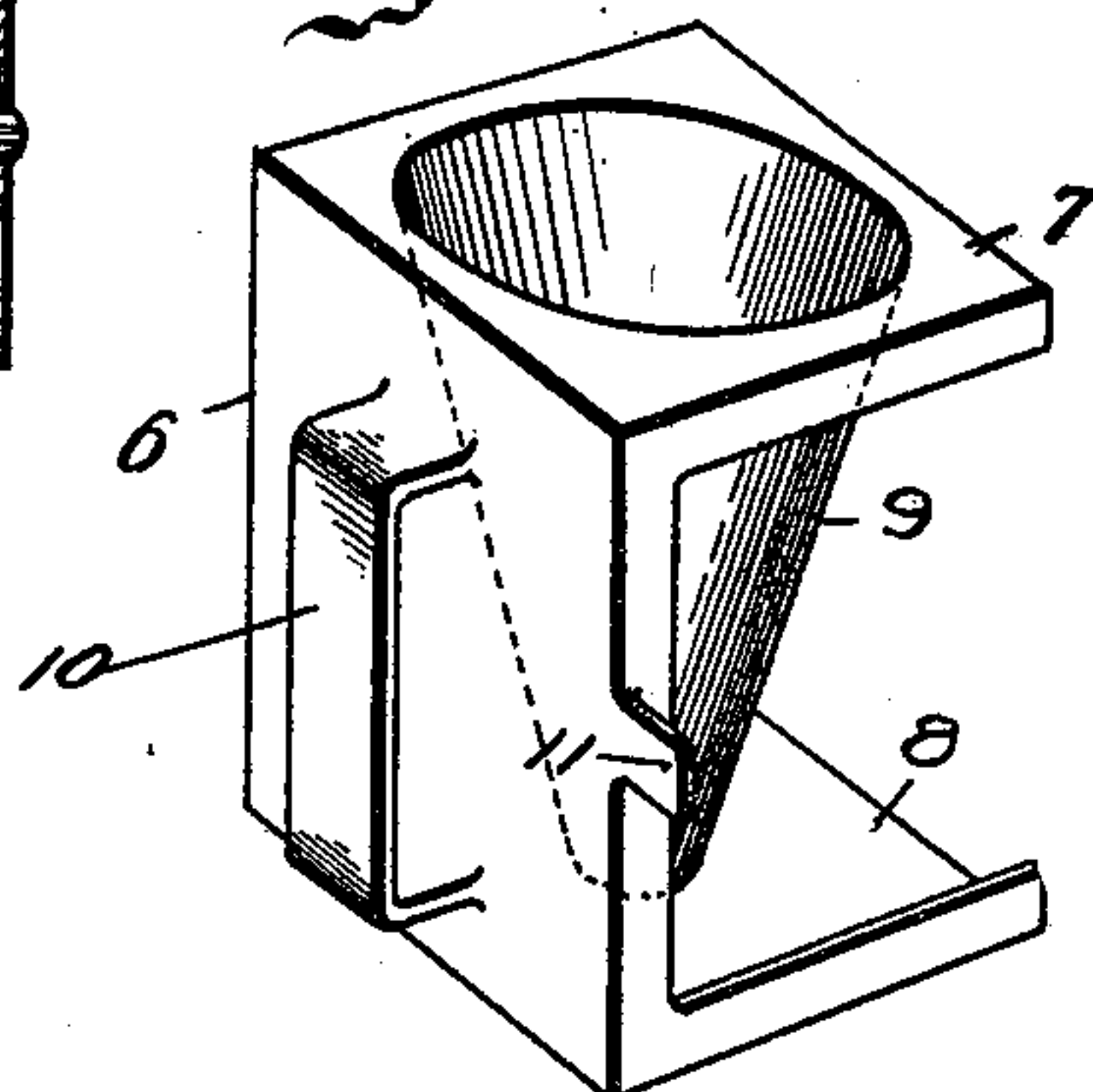


Fig. 4.



Witnesses:
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UNITED STATES PATENT OFFICE.

CYRUS E. PARKS, OF ST. LOUIS, MISSOURI.

SAND-BOX.

SPECIFICATION forming part of Letters Patent No. 675,289, dated May 28, 1901.

Application filed November 26, 1900. Serial No. 37,858. (No model.)

To all whom it may concern:

Be it known that I, CYRUS E. PARKS, of the city of St. Louis, State of Missouri, have invented certain new and useful Improvements in Sand-Boxes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

This invention relates to sand-boxes; and it consists of the novel construction, combination, and arrangement of parts hereinafter shown, described, and claimed.

Figure 1 is a view showing my improved sand-box in operative position. Figs. 2 and 3 are sectional views showing the construction and arrangement of the various parts employed in constructing my improved sand-box. Fig. 4 is a perspective view showing the movable drawer forming a part of my invention.

In using devices of this kind much difficulty is frequently encountered owing to the fact that the tube or passage leading from the sand-chest to the track becomes choked or gorged, preventing further passage of the sand to the rails until the tube has been opened. This involves difficulty, because it is necessary to force a rod or similar article through the entire length of the passage, driving out the material which has become lodged therein. To do this, the rod must be either passed through the chest or up from below, either instance causing great inconvenience.

My present invention has for its object to construct a suitable device to be located at a convenient point along the passage to the rail, whereby it is rendered absolutely impossible for the passage to become choked or gorged in the manner described.

In the construction of my improved sand-box I provide a box or shell 1 of any desired shape and constructed of any suitable material, having through its top and bottom openings 2 to permit the passage of the sand. Within the box a short distance below the top is a secondary top 3, having an opening of equal size and in alinement with the opening 2 through the outer top. A secondary bottom 4 is also provided and has an opening corresponding to the opening 2 through the bottom. The several openings are all in aline-

ment. A tubular projection 5 is integral with the bottom of the box, the purpose of which is to connect the box to a hose or other suitable device for conducting the material to the rail in the manner shown in the different views of the drawings. The box is located with the opening through the top communicating with the opening through the bottom of the sand-chest to permit the sand to pass therefrom to the rail through a passage leading through the box, which will presently be described.

6 indicates a removable drawer to be located within the box 1, the said drawer having a top 7 and a bottom 8. A funnel-shaped passage 9 is carried between the top and bottom of the drawer, and there are openings through the said top and bottom corresponding to the ends of the said passage 9. The top of the passage 9 is larger than the passage 2 leading through the top of the box 1, and the bottom of the said passage is smaller than the opening through the bottom of the box, the purpose of which is to permit only a small stream of sand to enter the passage leading from the box 1 to the rail, thereby avoiding all liability of the passage becoming choked, because of the fact that the material does not necessarily come in contact with the sides of the passage. In case the passage 9 should become filled and choked with the sand, it may be easily withdrawn from the box 1 and opened by inverting the drawer or by striking against any solid body. The front side of the drawer is provided with a handle 10, whereby it may be withdrawn, and on one side is an integral projection 11, adapted to be engaged by a suitable lock 12, carried by the side of the box 1.

13 indicates a slide which is adapted to be carried within the passage formed between the top of the box 1 and its secondary top 3. The said slide projects a suitable distance to either side of the box 1 and is provided with an opening corresponding to the opening leading to the top of the box. The said slide 13 is constructed to be moved to close the opening 2 or to register its opening with the said opening 2 to permit the passage of the sand. In case the passage 9 becomes choked and it is desired to open the said passage, the slide 13 is operated to close the opening 2, after

which the drawer 6 may be removed and its passage opened in the manner described. It may then be replaced and the slide 13 operated to register its opening with the opening 5 2 to again permit the passage of the sand to the track. A similar slide 14 is carried between the bottom of the box 1 and its secondary bottom 4, and the said slide is provided with an opening corresponding in size to the 10 opening 2 leading from the bottom of the box. The slide 14 projects a suitable distance to the side of the box and is normally held in the closed position (shown in Fig. 3) by means of a spring or other similar device connected to 15 the said slide and to the bottom of the car. The passage leading from the sand-chest is normally closed by the slide 14, and when it is desired to sand the track the said slide 14 is operated to register its opening with the 20 opening 2. This is done in any desired manner, such as by a crank-rod 15, having a connection 16, leading to one end of the slide 14.

In use my improved sand-box may be located, as shown, beneath the sand-chest of the 25 car, having the opening 2 registering with the opening leading through the bottom of the sand-chest. The slide 14 is normally held in a closed position by means of the spring 17 and the slide 13 is normally open, and to permit the passage of the sand to the track the 30 slide 14 is operated to provide a continuous opening between the sand-chest and track. This operation may be repeated when it is desired to sand the track so long as the passage does not become choked; but in case of 35 such an occurrence the slide 13 is operated to close the opening 2 through the top of the box, so that no more sand may pass out of the chest. The drawer 6 is then removed and the 40 sand removed therefrom in the manner described, the opening leading from the lower side of the box 1 never becoming closed, because of the construction above described. In these features the sand-box possesses su-

perior advantages over those of ordinary construction at present in use. 45

I claim—

1. A sand-box, consisting of a suitable box or shell, and a removable connection carried within said box which is adapted to connect 50 the usual tube leading to the rail to the sand-chest, substantially as specified.

2. A sand-box, consisting of a suitable box having openings through its top and bottom, a removable drawer carried within said box, 55 and a suitable passage carried by said drawer and leading from the opening through the top of the box to the opening through its bottom, substantially as specified.

3. A sand-box, consisting of a suitable box 60 having openings through its top and bottom and means for closing said openings, and a removable passage carried within the box and connecting the opening through its top with the opening through its bottom, substantially 65 as specified.

4. A sand-box, consisting of an outer box having openings through its top and bottom, means for closing said openings, a drawer carried within said box and a funnel-shaped 70 passage carried by said drawer for connecting the opening through the top of the box with the opening through its bottom, substantially as specified.

5. In a car, having the usual sand-chest and 75 a pipe or passage for conducting sand to the rails, a funnel-shaped connection between the box and passage, means for removing said connection, and means for preventing the passage of the sand from the sand-chest when 80 the said connection is removed, substantially as specified.

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

CYRUS E. PARKS.

Witnesses:

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