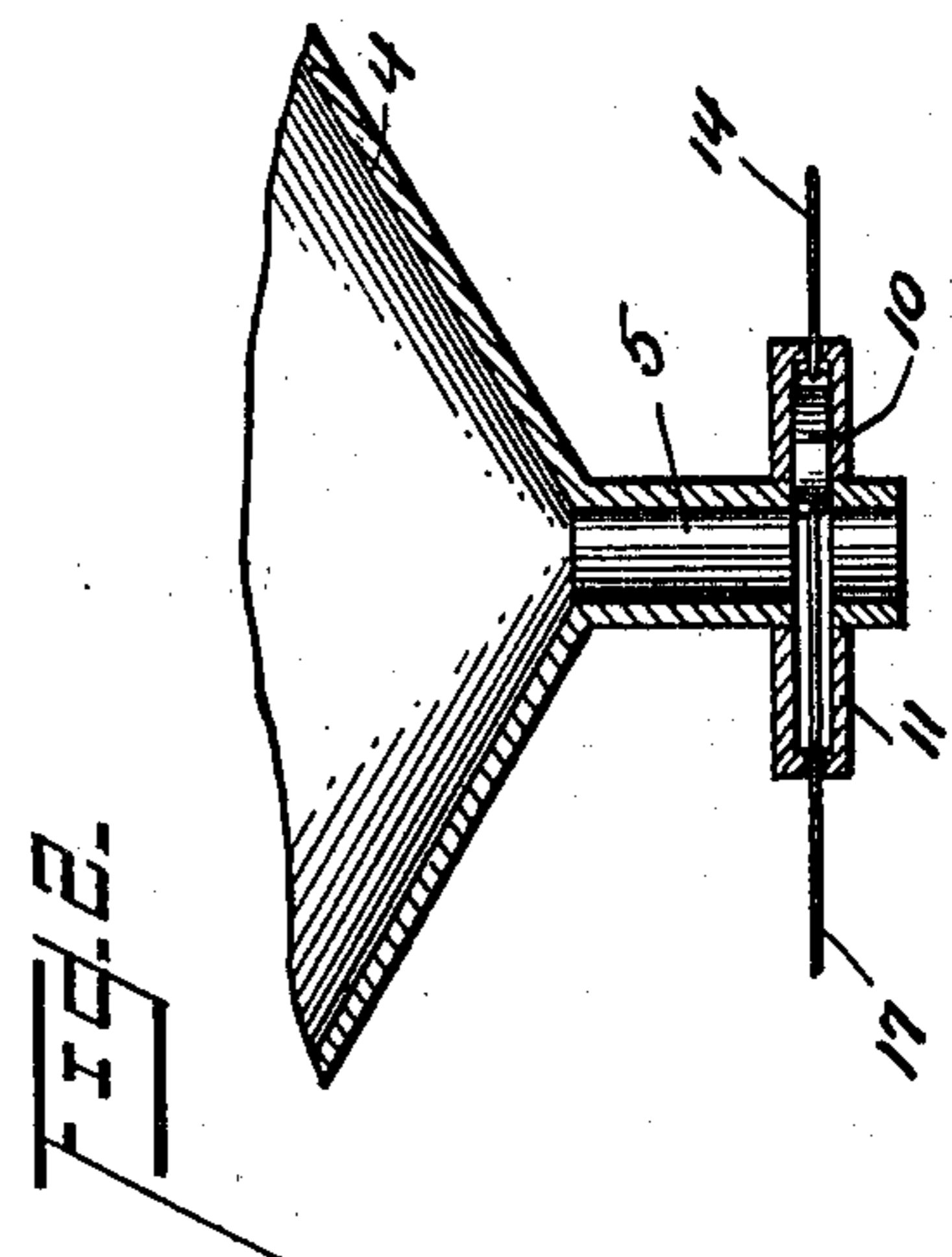
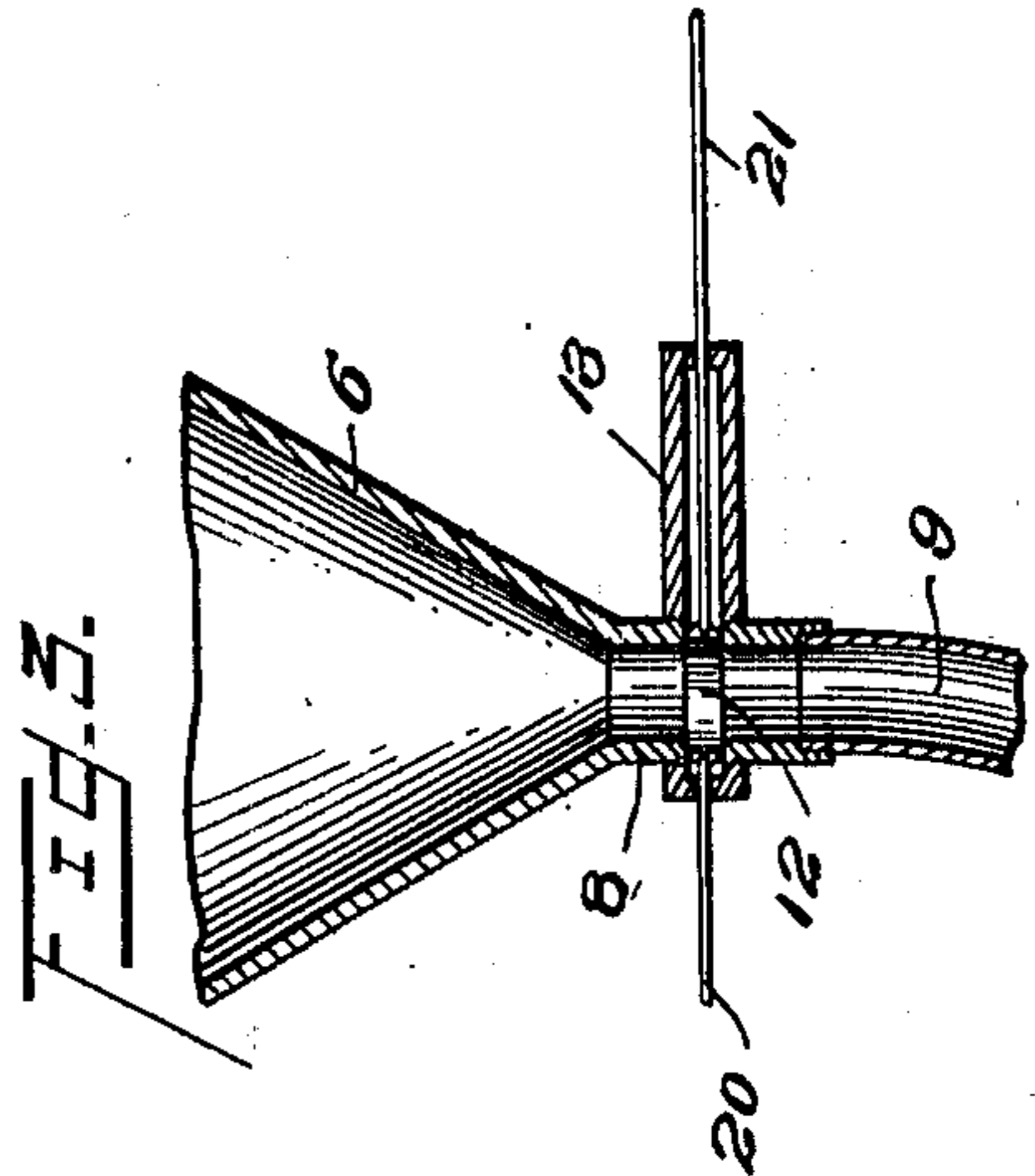
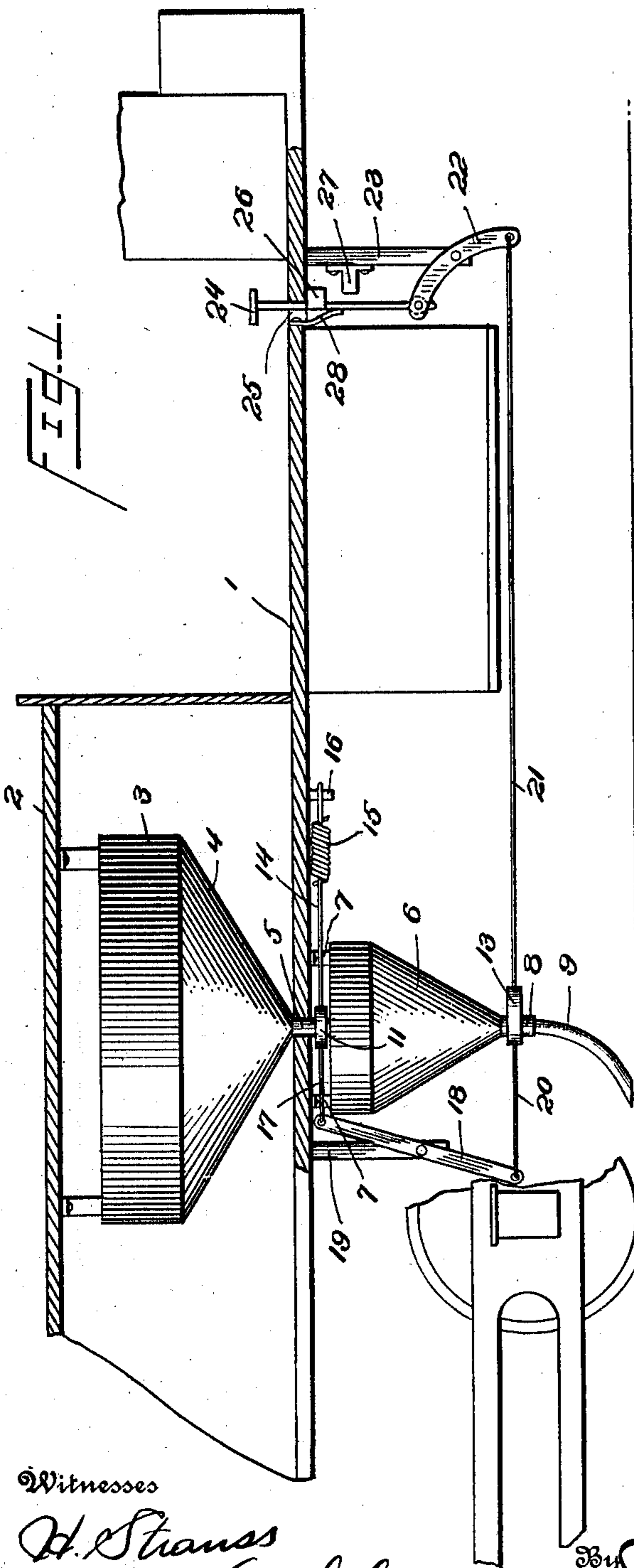


W. W. ROGERS.
 TRACK SANDING MECHANISM FOR STREET CARS AND THE LIKE.
 APPLICATION FILED MAR. 1, 1911.

992,990.

Patented May 23, 1911.



Witnesses

H. Strauss
R. V. Krenkel

Inventor

William W. Rogers

By *Joelmar F. Potts*
 Attorney

UNITED STATES PATENT OFFICE.

WILLIAM W. ROGERS, OF FRENCHTOWN, NEW JERSEY.

TRACK-SANDING MECHANISM FOR STREET-CARS AND THE LIKE.

992,990.

Specification of Letters Patent.

Patented May 23, 1911.

Application filed March 1, 1911. Serial No. 611,714.

To all whom it may concern:

Be it known that I, WILLIAM W. ROGERS, a citizen of the United States, residing at Frenchtown, in the county of Hunterdon and State of New Jersey, have invented certain new and useful Improvements in Track-Sanding Mechanism for Street-Cars and the Like, of which the following is a specification.

My invention relates to improvements in track sanding mechanism for street cars and the like, the object of the invention being to provide improved mechanism for controlling the flow of sand from a reservoir under the car seat into a hopper below the car, and from the latter onto the rail.

A further object is to provide an improved attachment of this character which may be placed in position on a car at a reasonably low cost, and which will effectually perform the functions for which it is intended.

With these and other objects in view, the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings: Figure 1, is a fragmentary view partly in section and partly in elevation illustrating my improvements. Fig. 2, is an enlarged view in vertical section illustrating the valve for the main reservoir, and Fig. 3, is a similar view of the valve for the hopper.

1, represents a car and 2 a seat therein.

3, is a sand reservoir having a conical bottom 4 communicating with an outlet pipe 5, extending through the bottom of the car. A distributing hopper 6 is supported below the car on suitable brackets 7, and is located directly below the outlet pipe 5. This hopper 6 is also provided with an outlet pipe 8 to which is connected a hose or pipe 9 for directing the sand onto the track. The flow through the outlet pipe 5 of reservoir 3 is controlled by a gate valve 10. This valve 10 is mounted to slide in an elongated casing 11, which intersects pipe 5, so that the valve may be moved to a position across the pipe to close the passage or may be moved to the side to open the passage. The flow through pipe 8 is controlled by a gate valve 12, similar to valve 10, which is mounted to move in a casing 13, which intersects pipe 8 and enables the valve to be in closed or open position.

Valve 10 is connected by a wire 14 with a coiled spring 15, the latter connected to a post 16 depending from the car. This spring 15 normally holds the valve 10 in open position as shown in Fig. 2. The other side of this valve 10 is connected by a wire 17 with the upper end of a lever 18. This lever 18 is fulcrumed between its ends on a bracket 19, depending from the bottom of the car, and its lower end is connected by a wire 20 with one side of valve 12. The other side of the valve 12 is connected by a wire 21 with one end of a curved lever 22. This curved lever 22 is positioned below the car platform, and is supported on a depending bracket 23.

24 represents a vertically movable foot plunger mounted to move in a slot 25 in the car platform, and connected at its lower end to lever 22, so that when the plunger 24 is depressed, valve 12 will be opened and valve 10 closed, allowing the sand to run from hopper 6 onto the track. When pressure is relieved on the plunger 24, the spring 15 will return the valves to their former position, moving valve 12 to closed position and valve 10 to open position. On plunger 24, a lug 26 is secured, and in the normal operation of the device, engages a lug 27 on bracket 23 to limit the downward movement of the plunger. The plunger 24 is held in the end of its slot 25 by means of a spring 28, so as to compel the lugs 26 and 27 to engage. If, for any reason, it is desired to open the outlet ends of both the reservoir and the hopper at the same time, it is simply necessary to draw the plunger 24 rearwardly as it is depressed, and then allow the lug 26 to engage under the lug 27. This movement will be sufficient to draw valve 10 to the left in Fig. 2, and valve 12 to the right in Fig. 3, thus opening the outlets of both the reservoir and the hopper. It will thus be noted that in the normal operation, when plunger 24 is depressed, the discharge end of reservoir 3 will be closed, while the discharge end of hopper 6 will be opened, allowing the sand from the hopper to flow onto the track. When the pressure is relieved, spring 15 will close valve 12 and open valve 10, so that the sand may flow from reservoir 3 into hopper 6 to make up for the sand used.

Various slight changes might be made in the general form and arrangement of parts described without departing from my invention, and hence I do not limit myself

to the precise details set forth, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the appended claims.

5. Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A device of the character described, comprising a reservoir, a hopper below the same, a valve controlling the outlet from the reservoir into the hopper, a second valve controlling the outlet from the hopper, a discharge pipe connected with the outlet of the hopper, a lever fulcrumed between its ends, wires connecting the respective ends of said lever with said valves, a spring connected with one of said valves and normally holding the reservoir valve open and the hopper valve closed, a depending bracket on the car, a lever on the bracket, a wire connecting the hopper valve with said lever, and a foot plunger connected with and adapted to operate said last-mentioned lever, substantially as described.

2. In a mechanism of the character described, the combination with a car, a reservoir in the car, and a hopper below the car into which said reservoir discharges, of valves controlling the outlets of said reservoir and hopper, means normally holding said reservoir valve in open position and said hopper valve in closed position, a depending bracket on the car, a valve operating lever pivotally connected between its ends to said bracket, said car having a slot

in its platform, a foot plunger projecting through said slot and connected to one end of said lever, and a connecting device between said lever and said valve holding means, substantially as described.

3. In a mechanism of the character described, the combination with a car, a reservoir in the car, and a hopper below the car into which said reservoir discharges, of valves controlling the outlets of said reservoir and hopper, means normally holding said reservoir valve in open position and said hopper valve in closed position, a depending bracket on the car, a valve operating lever pivotally connected between its ends to said bracket, said car having a slot in its platform, a foot plunger projecting through said slot and connected to one end of said lever, a connecting device between said lever and said valve holding means, a fixed lug on said bracket, a lug on said plunger normally above the bracket, but adapted to be positioned below the fixed lug to hold the plunger in an unusual position, whereby both of said valves are maintained open, and a spring pressing against said plunger, substantially as described.

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

WILLIAM W. ROGERS.

Witnesses:

CARRIE HAGAMOND,
EMILY L. ROGERS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."