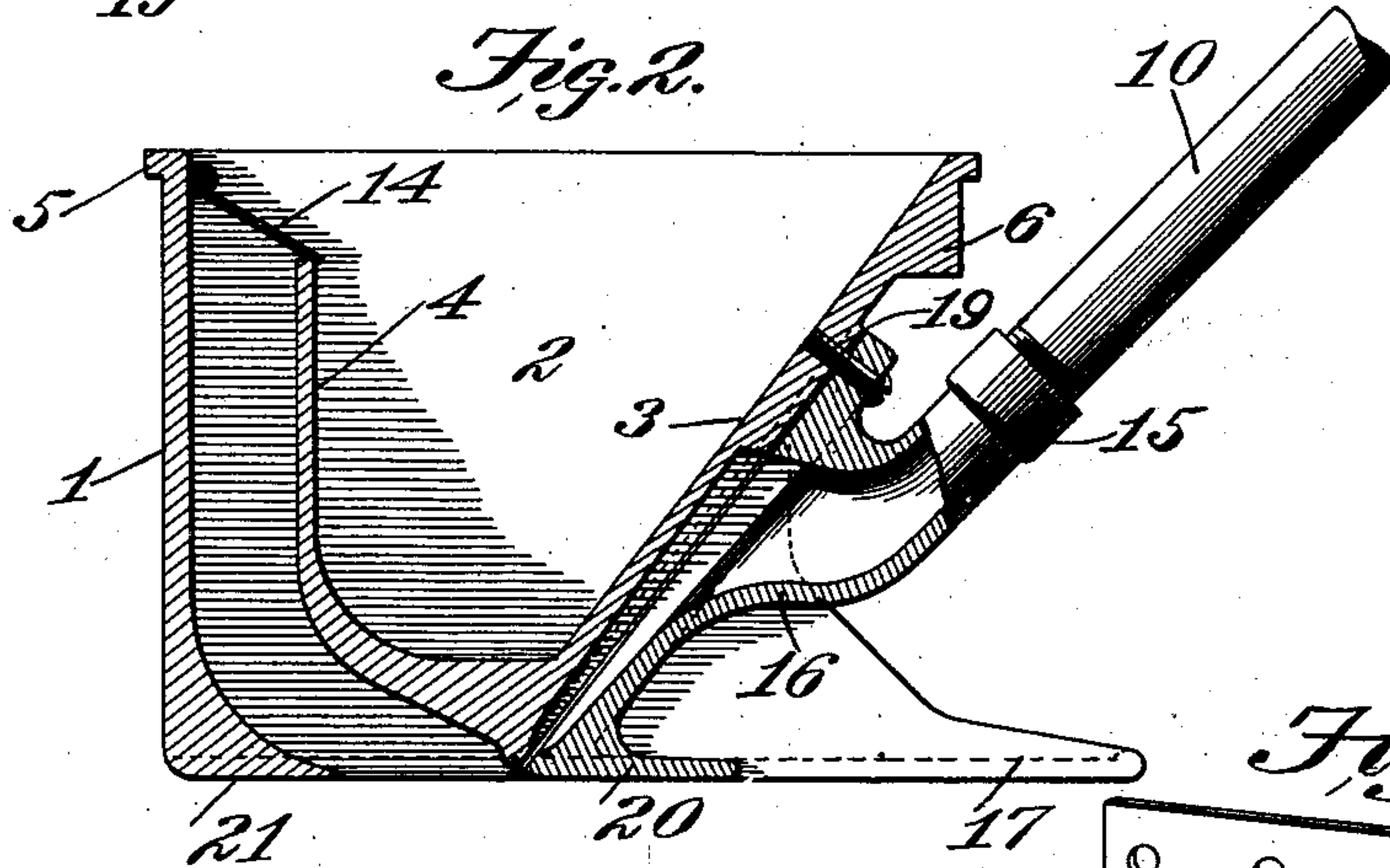
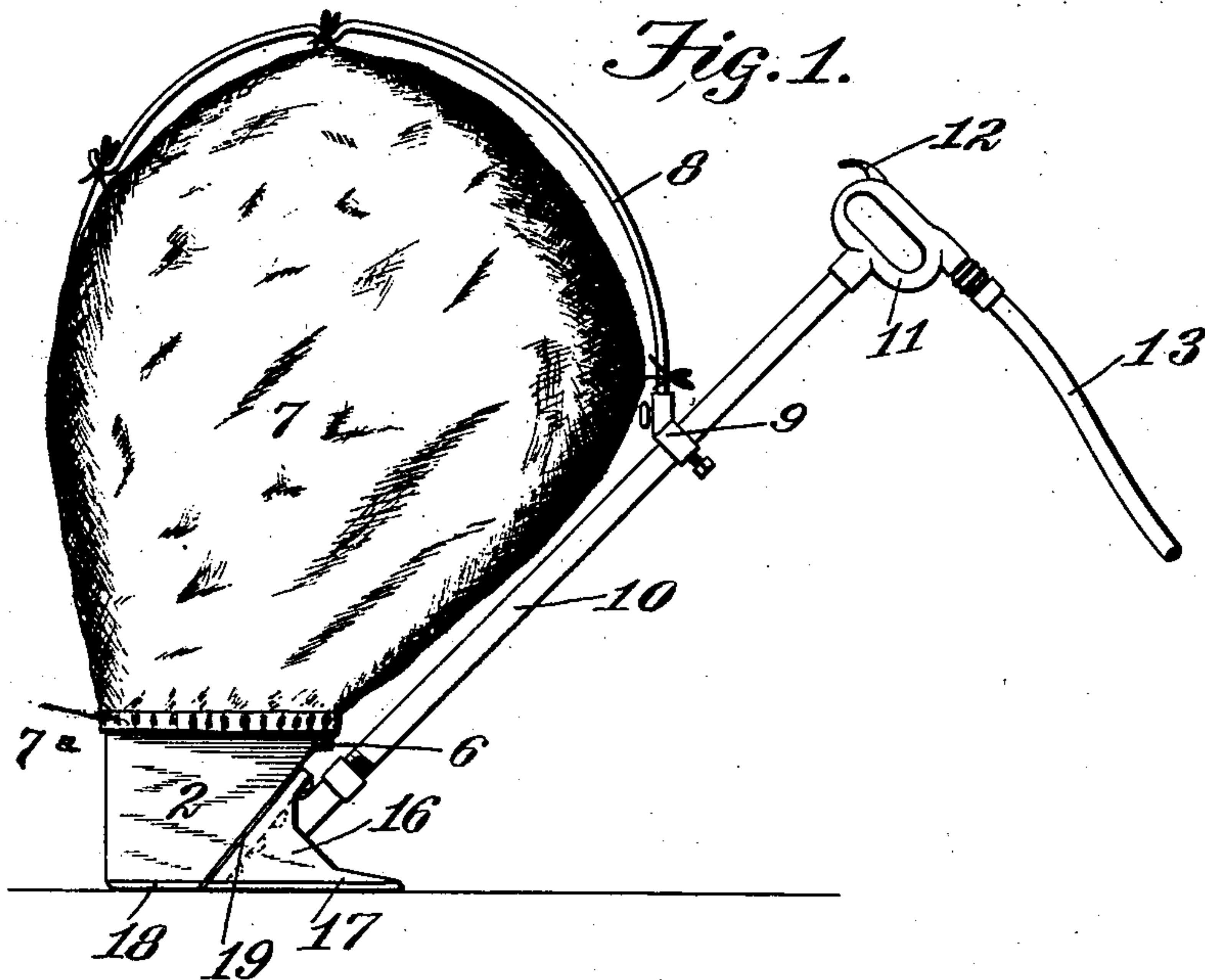


No. 744,437.

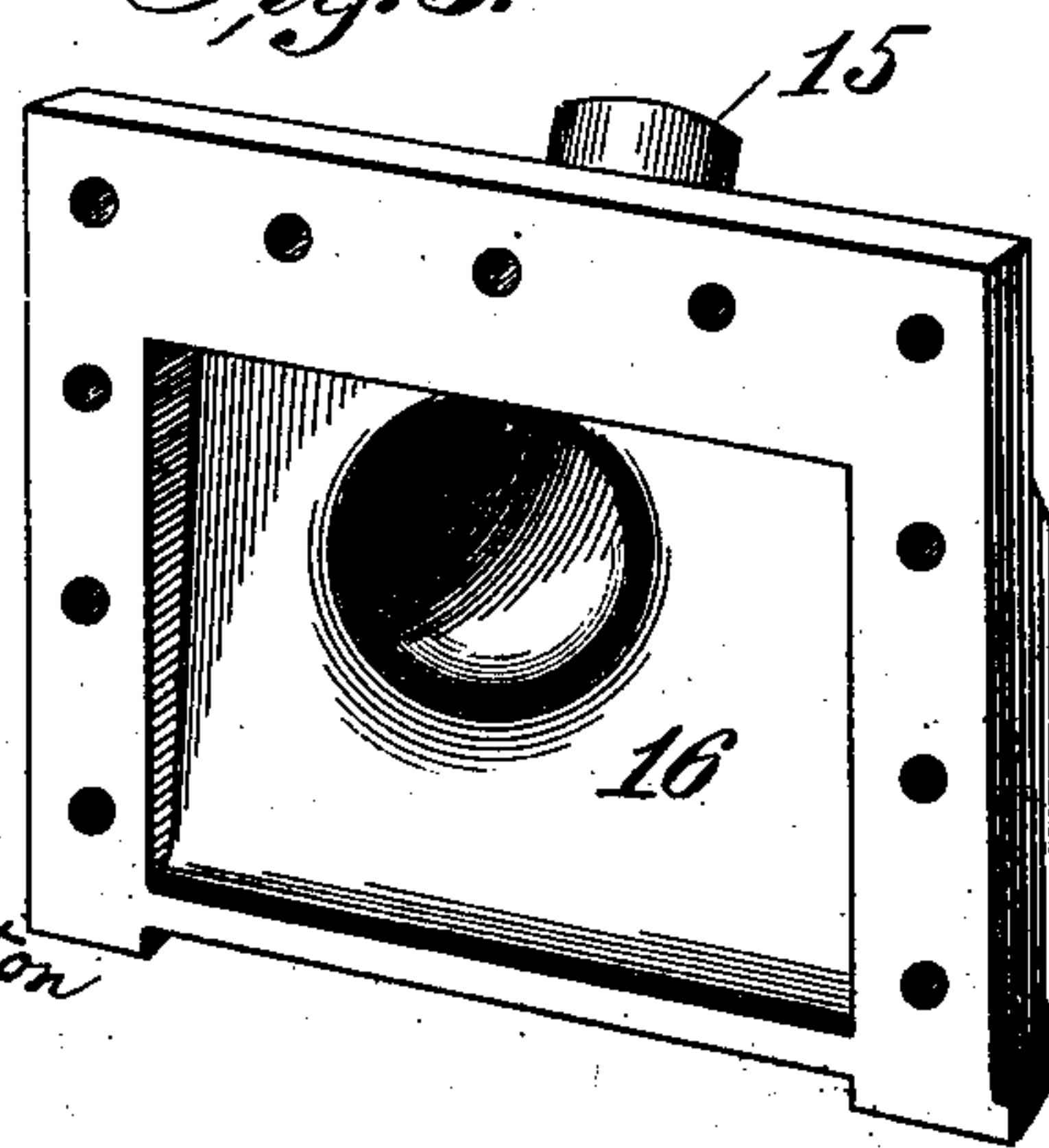
PATENTED NOV. 17, 1903.

J. S. THURMAN.  
CARPET RENOVATOR.  
APPLICATION FILED NOV. 25, 1901.

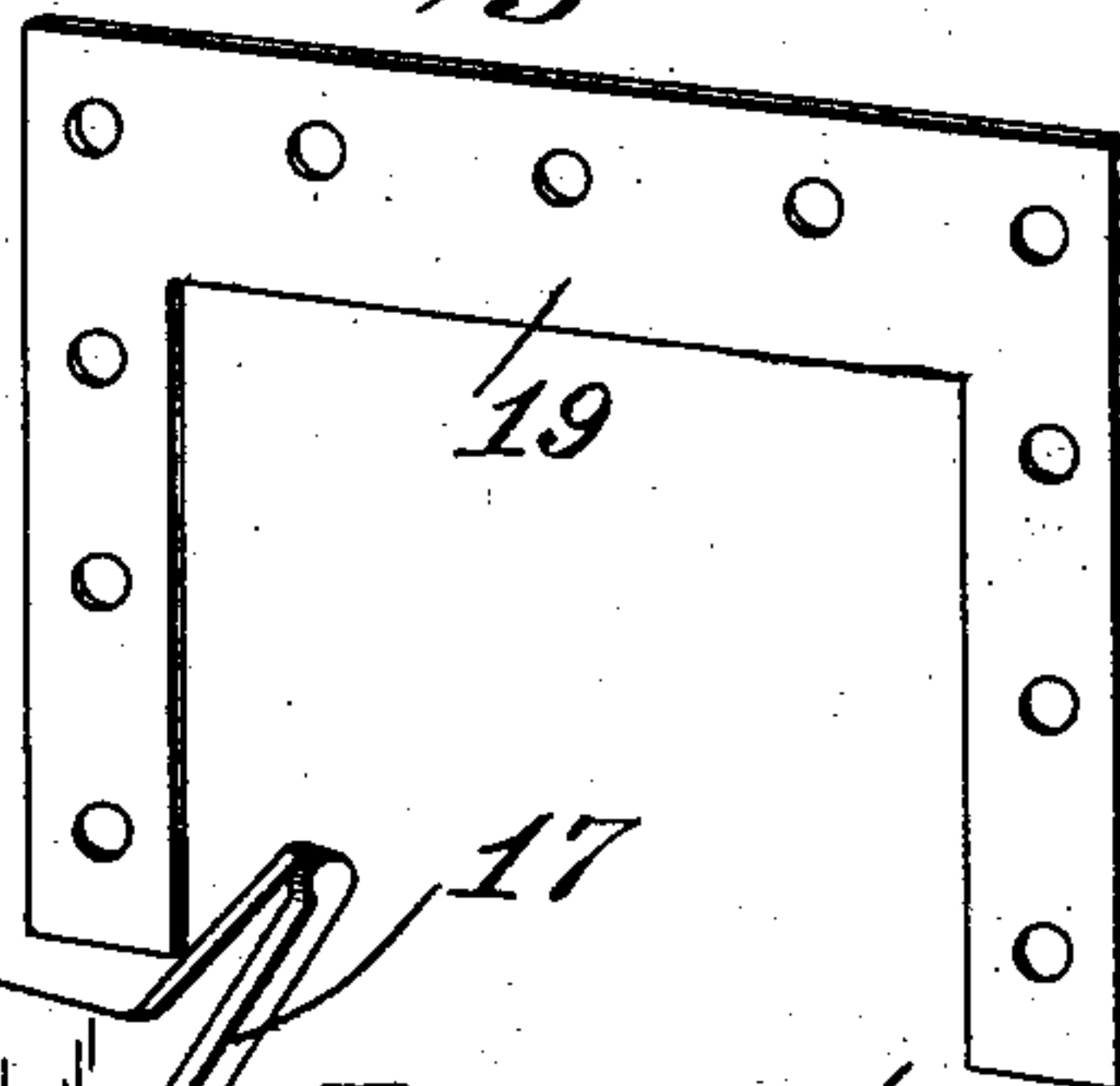
NO. MODEL.



*Fig. 3.*



*Fig. 4.*



Witnesses:  
G. A. Pennington  
Giles T. Moore

Inventor:  
John S. Thurman,  
by Bakewell Cornwall  
Attys.



# UNITED STATES PATENT OFFICE.

JOHN S. THURMAN, OF ST. LOUIS, MISSOURI.

## CARPET-RENOVATOR.

SPECIFICATION forming part of Letters Patent No. 744,437, dated November 17, 1903.

Application filed November 25, 1901. Serial No. 83,556. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN S. THURMAN, a citizen of the United States, residing at the city of St. Louis, State of Missouri, have invented a certain new and useful Improvement in Carpet-Renovators, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevational view of my improved carpet-renovator. Fig. 2 is a vertical sectional view through the same, the dust-arresting bag being removed. Fig. 3 is a detail view of the removable nozzle-casting, and Fig. 4 is a detail view of the washer which determines the width of the blast-nozzle.

This invention relates to a new and useful improvement in carpet-renovators, the object being to simplify the construction of devices of this character whereby they may be quickly and readily assembled for use, are cheap to manufacture, and are durable in service.

With these objects in view the invention consists in the construction, arrangement, and combination of the several parts, all as will hereinafter be described and afterward pointed out in the claims.

In the drawings, 1 indicates the front wall of a casing, 2 the side walls, and 3 an inclined back wall which extends downwardly nearly to the lower edges of the side walls and thence forwardly and upwardly, as at 4, parallel with the front wall, but terminating short of the upper edges of the side walls. These front, side, and back walls are provided with outwardly-extending flanges 5 at their upper edges, and the back wall is formed with a vertical seat 6 at its upper edge under the flange, thus providing a uniform seat vertically disposed on all sides of the casing, whereby the mouth of a dust-arresting bag 7 may be secured in position under said flanges. The bag 7 has at the margin of its mouth a tape or band 7<sup>a</sup>, which embraces the casing at a point directly below the flanges thereof, thus securing the bag in place. This dust-arresting bag extends upwardly and has its top supported by a rod 8, mounted in a suitable socket-clamp 9, attached to a handle 10.

This handle 10 is in the form of a pipe and provides a passage for the compressed air to the renovator, said handle having a handle 11 at its outer end containing a controlling-valve operated by a handle 12, whereby the amount of pressure admitted to the renovator may be regulated. A flexible supply-pipe 13 is attached to this handle, said supply-pipe leading from any suitable source of compressed-air supply.

14 indicates a valve which is hinged to the upper inner edge of the front wall and whose free end rests upon the upper edge of the extension 4 of the back wall. This valve closes the passage between the said extension and said front wall, and when the valve is raised by the dust-laden air passing upwardly through said passage the valve will direct the air inwardly and downwardly into the chamber formed by the side walls and the inclined back wall and its extension. The dust-laden air here becomes relieved of its heavier particles, depositing them in the chamber, after which the air passes upwardly into the dust-arresting bag and escapes through the meshes of said bag, the fine particles of dust carried by the air being arrested on the walls of the bag.

The lower end of the supply-pipe or handle 10 is received into a boss 15, extending upwardly and outwardly from a removable casting 16. This casting is designed to be fitted against the inclined rear wall and is preferably secured in position by suitable screws. The inner face of the casting as well as the outer face of the inclined rear wall are finished to fit snugly to each other, so far as marginal contact is concerned; but the space at the center is open and in communication with the pipe 10. Casting 16 is also made adjustable to and from the casing to regulate the thickness of the nozzle-slot. This casting 16 and the casing proper are preferably formed with runners 17 and 18, respectively, so as to contact with the carpet or other article being renovated and prevent the air from escaping from under the edges to the exterior. The air admitted through the pipe 10 to the space between the rear wall and the casting 16 escapes at an angle downwardly and forwardly, so as to pass into and through the carpet to drive the dust in the carpet up



into the passage between the front wall and the extension of the inclined rear wall beyond the valve and into the casing. In order to provide this blast-nozzle, I arrange a thin washer 19 between the casting and the rear wall of the casing, said washer extending on three sides thereof, being omitted at the lower side, where the air passes out in the form of an elongated blast. I have found that a slot of one one-hundredth of an inch in width is sufficient for ordinary circumstances, and consequently the washer referred to may be composed of a piece of thin paper cut appropriately. Where it is desired to increase the thickness of the slot, a thicker piece of paper may be used, or two or more washers may be employed. It will be noted that the casting behind the blast-nozzle, formed with a flat shoe 20, contacts with the carpet, but that the space in front of the nozzle is open to the forward passage of the dust-laden air. Thus the dust is driven forwardly up into and through said space. The front wall is formed with an enlarged lower end 21, which has considerable surface area contacting with the carpet, said enlargement being in the nature of a skimming-shoe directing the dust-laden air upwardly into the passage referred to.

I am aware that many minor changes in the construction, arrangement, and combination of the several parts of my device can be made and substituted for those herein shown and described without in the least departing from the nature and principle of my invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a carpet-renovator, the combination with a casing whose rear wall forms one portion of a blast-nozzle, of an adjustable portion forming the other part of said blast-nozzle, a dust-arresting bag, and means for securing said bag to said casing; substantially as described.

2. In a carpet-renovator, the combination with a casing formed with an inclined rear wall, of a casting secured in position upon said rear wall, and a washer for determining the width of the nozzle-opening between the lower edge of said rear wall and the adjustable portion; substantially as described.

3. In a carpet-renovator, a casing, one wall of which is adapted to serve as one portion of a separable blast-nozzle, and a removable member secured thereto adapted to form the remaining portion of said nozzle; substantially as described.

4. In a carpet-renovator, the combination with a casing formed with an inclined rear wall extending upwardly and forwardly, the lower edge of said wall being located above the lower edges of the side walls, a removable casting secured in position to said inclined rear wall, the lower edges of said casting being on the same plane as the lower edges of said side walls, and means for adjusting said removable casting; substantially as described.

5. In a carpet-renovator, the combination with a casing composed of a front wall formed with an enlarged skimming-shoe at its lower edge, side walls, an inclined back wall which is provided with a forward and upward extension, a removable casting secured in position against said inclined back wall, and a washer for adjusting said casting from the back wall and determining the width of the nozzle-opening; substantially as described.

6. In a carpet-renovator, the combination with an inclined back wall, of a casting having means for the attachment of a pressure-supply pipe, said casting being provided with runners, and a washer extending around the three sides of said casting and interposed therebetween and said inclined back wall; substantially as described.

7. In a carpet-renovator, the combination with a casing formed with an inclined back wall, of a casting 16 provided with a hollow boss 15, said casting having runners 17 and a flat shoe 20, a washer 19, and means for securing said casting in position against the inclined back wall; substantially as described.

8. In a carpet-renovator, the combination with a casing formed with a marginal flange at its upper edge, of a dust-arresting bag secured over said flange, an adjustable nozzle-casting secured to the back wall of the casing, means for adjusting said casting and determining the width of the slot which forms a nozzle, a threaded boss on said casting, a pipe secured in position in said boss, a handle at the outer end of said pipe, a flexible supply-pipe connected to said handle, and a bracket on said pipe for supporting the dust-arresting bag in position; substantially as described.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this 21st day of November, 1901.

JOHN S. THURMAN.

Witnesses:

GEORGE BAKEWELL,  
RALPH KALISH.