(No Model.)

J. MARTIN.

SALOON HOPPER TUBE FOR KEEPING CLEAN SALOON HOPPERS IN RAILROAD CARS, &c.

No. 312,876. Patented Feb. 24, 1885.

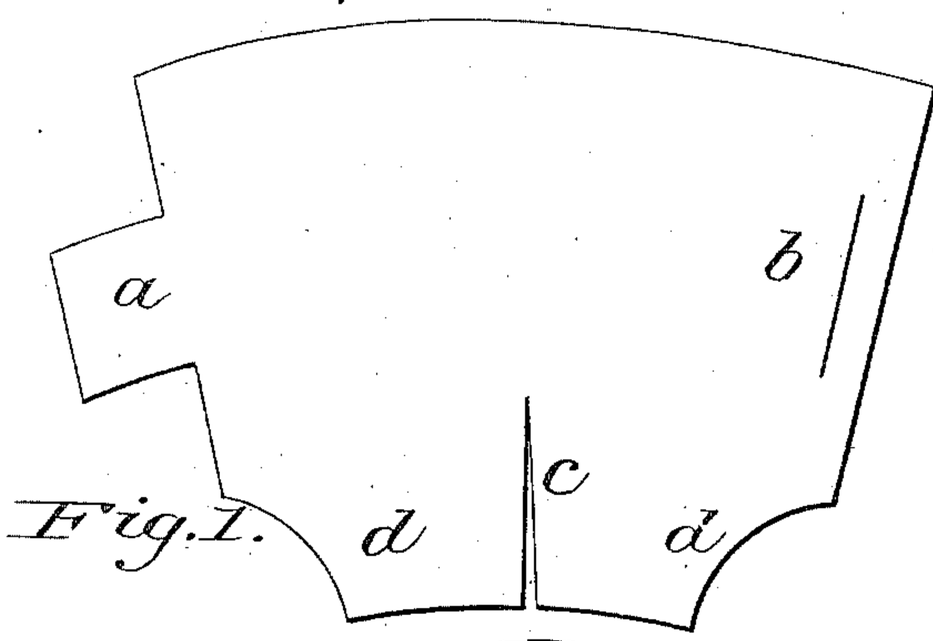


Fig. 1.

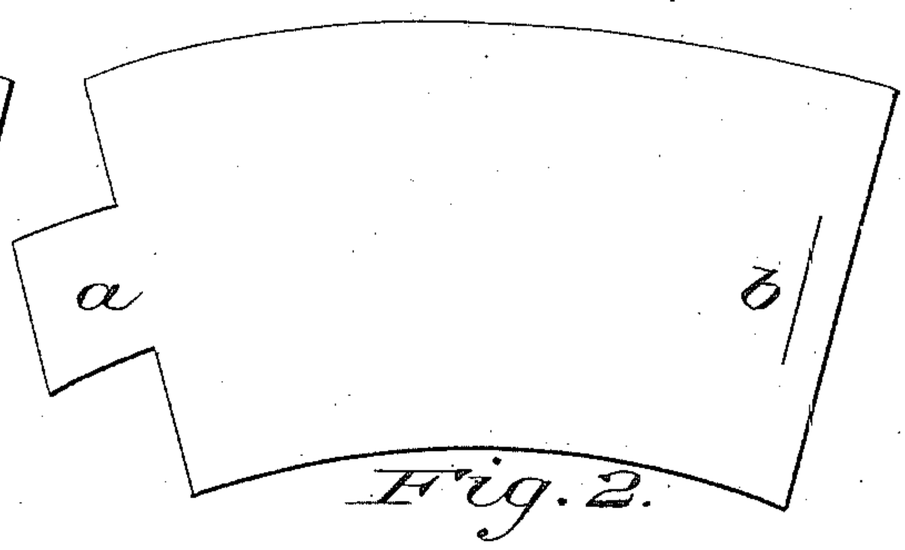


Fig. 2.

Fig. 3.

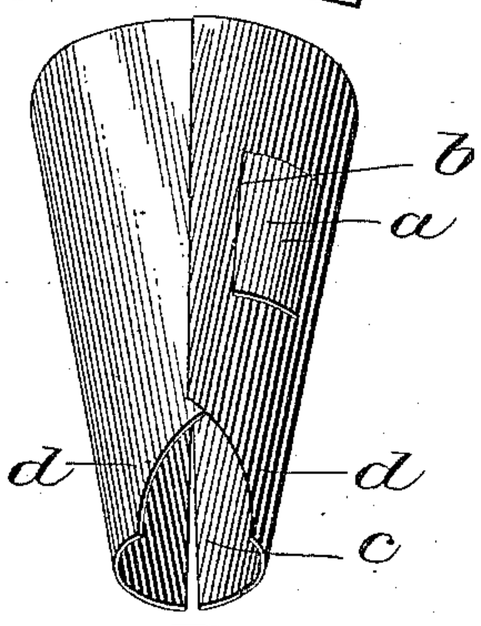


Fig. 4.

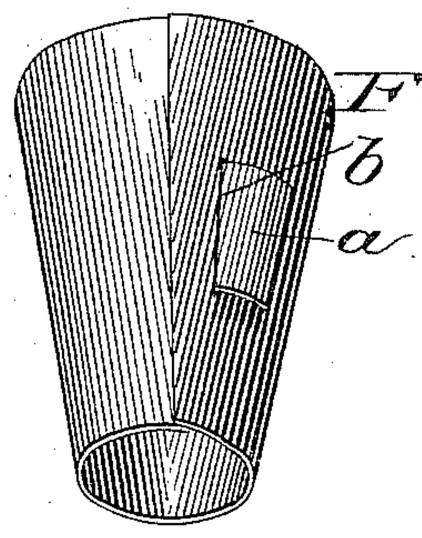


Fig. 5.

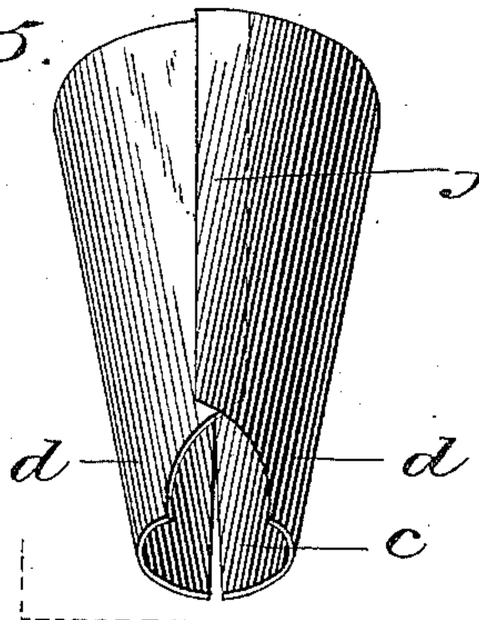


Fig. 6.

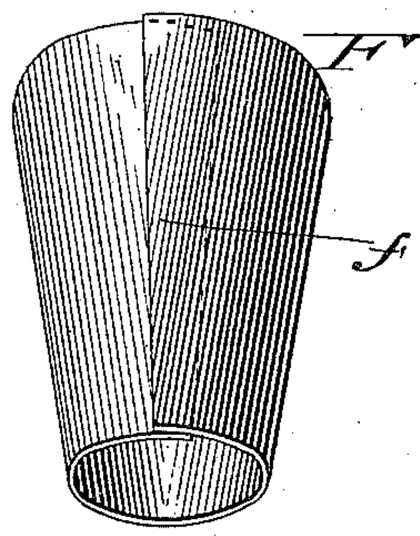


Fig. 7.

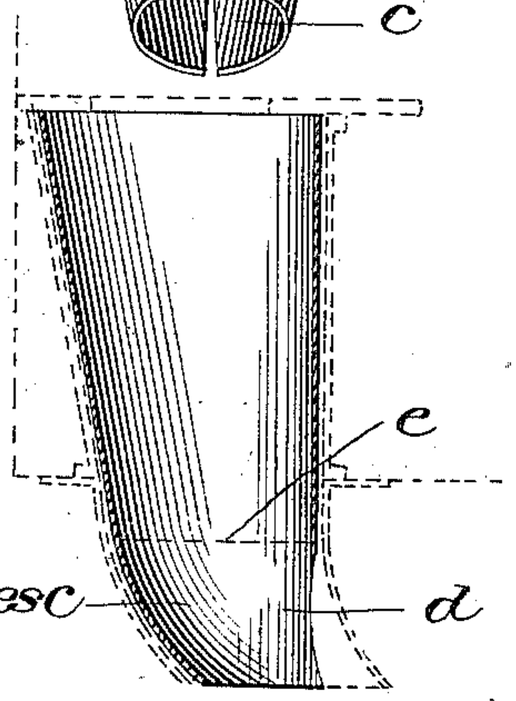
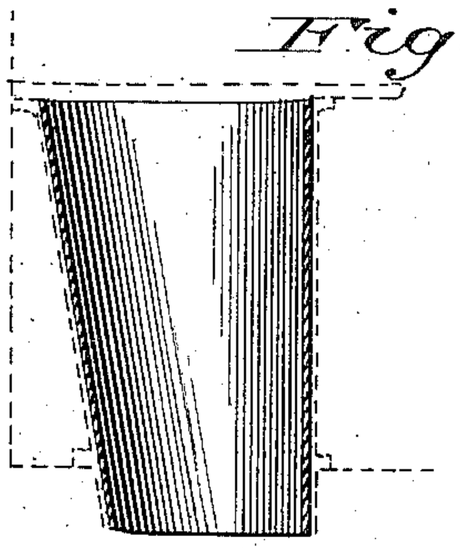


Fig. 8.



Witnesses

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SALOON-HOPPER TUBE FOR KEEPING CLEAN SALOON-HOPPERS IN RAILROAD-CARS, &c.

SPECIFICATION forming part of Letters Patent No. 312,876, dated February 24, 1885.

Application filed May 29, 1884. (No model.)

To all whom it may concern:

Be it known that I, JAMES MARTIN, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented a new and useful device for cleaning and keeping free from foul matter and obnoxious odor the saloon-hoppers in railroad-cars and sleeping-cars while standing in stations or *en route*; and I do hereby declare that the following is a full and exact description of the invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon, similar letters referring to similar parts throughout the several views.

The object of my invention is to clean and to keep free from disagreeable odor the hoppers in the saloons of railroad-cars and sleeping-cars while moving on the rails or standing in stations or other places. This is attained by using a movable tube or lining made of felt, paper, wood, or other flexible material that can be removed and replaced at any time. The different forms of these tubes or linings are shown in the drawings, in which—

Figure 1 is a plan of tube or lining for an ordinary saloon-hopper with offshoot, which will be more fully understood by referring to Fig. 7. Fig. 2 is a plan of tube or lining for an ordinary saloon-hopper without an offshoot. Figs. 3 and 5 are tubes or linings put together for use in hopper with an offshoot, as shown in Fig. 7. Figs. 4 and 6 are tubes or linings put together for use in ordinary hopper without an offshoot. Fig. 7 is a vertical section of ordinary hopper with tubes or linings shown in Fig. 3 or 5 inserted. Fig. 8 is a vertical section of ordinary hopper with tubes or linings shown in Fig. 4 or 6 inserted.

To enable others skilled in the art to make and use my device and process, I will proceed to describe them fully.

In general I use medium-weight Manila paper, and when the hoppers vary in size I cut the tubes or linings in the shape shown by Fig. 1. This is then made in cylindrical form by bringing the flap *a* over to and inserting it in the slit *b*, which will produce the tube or lining, as shown in Fig. 3. The flap *a* fits the slit *b* loosely, thereby allowing it to conform to the interior of the hopper. The gore *c* is made to allow the tube or lining to adapt itself to the offshoot—the offshoot is that portion of the hopper shown below the dotted line *e*, Fig. 7—by lapping over, as shown at *c*, Fig. 7. There is also a side opening, as shown by *d d*, Figs. 1, 3, and 5, in order not to interfere or lessen the lower opening of the hopper, as shown at *d*, Fig. 7. When the hoppers with an offshoot are regular in size, I dispense with the flap *a* and slit *b*, Fig. 1, and make the tubes with a permanent seam, as shown by *f*, Fig. 5, by lapping the paper and pasting or otherwise fastening it.

The description of tubes or linings for ordinary hoppers without offshoot, Fig. 8, will be fully understood from the preceding description of tubes or linings for hoppers with offshoot, and by referring to Figs. 2, 4, and 6. The dark lines in Figs. 7 and 8 show the tubes inserted ready for use. The dotted lines show the hoppers proper and their surroundings.

The tubes are easily inserted in the hopper by pressing the top portion of the tubes slightly together and adjusting them after they have been dropped in the hopper. If necessary, I slightly dampen the tubes to make them adhere snugly to the sides of the hopper.

I remove the tubes by loosening them from the hopper and folding them as they hang in the hopper, and then force them through the opening at the bottom of the hopper to the ground below.

At present there is no way of getting rid of the filth which accumulates in the hoppers of cars while *en route*, which causes a disagreeable odor in the saloons, and very often on railroads where the cars are hauled long distances it can be noticed in the cars proper. The great advantage of my device and process is that after a tube has been inserted in the hopper the foul matter cannot reach and hang to the sides of the hopper, but, on the contrary, it comes in contact with the tubes, which can be forced from the hoppers at short intervals and a fresh one put in, thus leaving the hopper clean, and free from filth and disagreeable odor, and also saving labor and expense in cleaning them at terminal points.

The intention being to destroy or to throw away the tube or lining after it has done its service, it may be made of any cheap material which will cover and protect the interior of the closet-hopper from being soiled in use,

the simplest form being a sheet of paper, which becomes a tube when in service, the edges of the paper not necessarily being joined in any way to seal that side of the lining, but overlapping, as may be required, to fit the interior of the hopper, the lower end of both hopper and lining being open for the free exit of excrement, the lining only receiving such as would stick to the sides, and removing it when thrown away.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with a closet-hopper, of a flexible removable lining therefor, substantially as shown and described.

2. The combination of a closet-hopper and a paper lining adapted to fit itself loosely to the interior thereof, substantially as shown and described, for the purpose specified.

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