L. ROBINSON.

Sink.

No. 168,052. Patented Sept. 21, 1875.

Fig. 1.

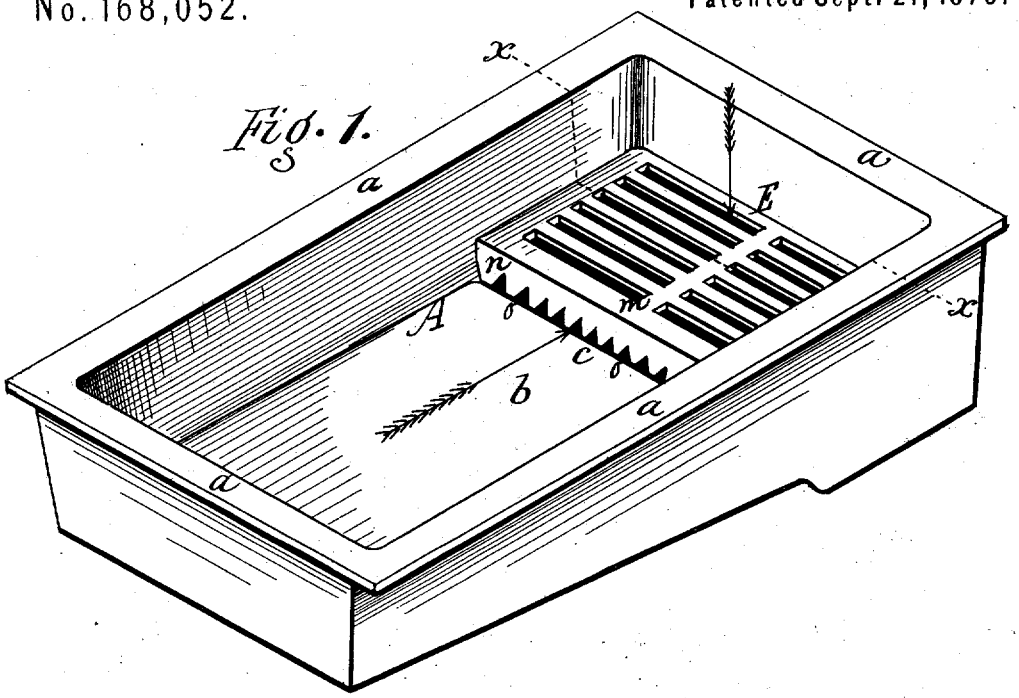


Fig. 2.

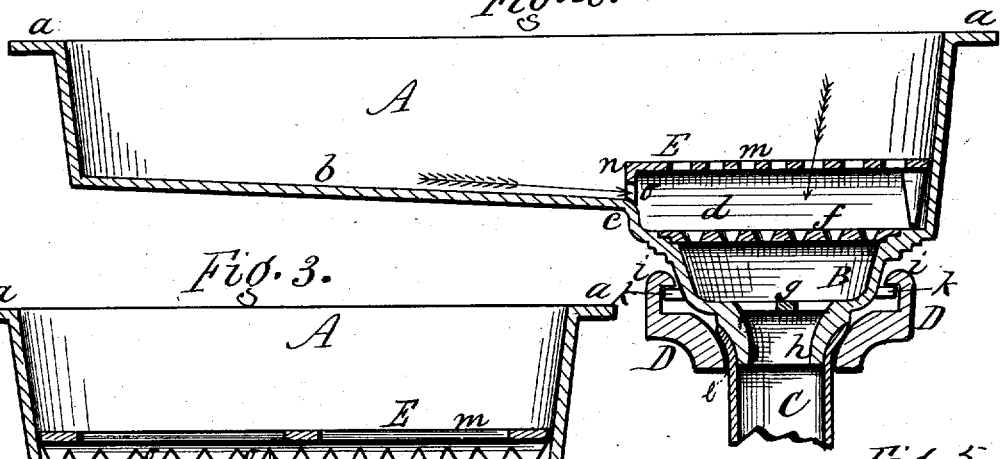


Fig. 3.

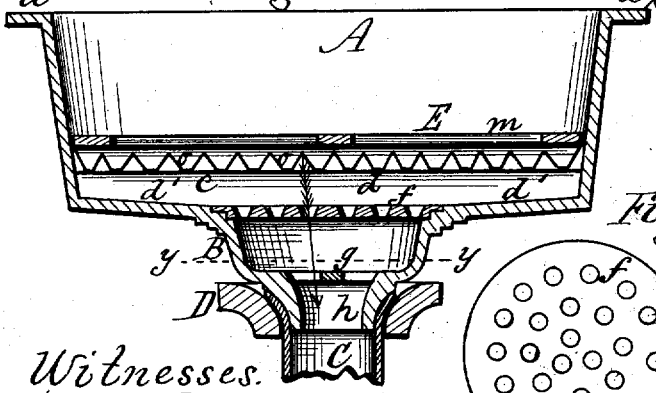


Fig. 4.

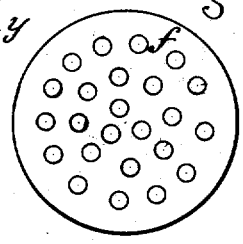
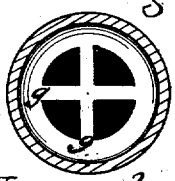


Fig. 5.



Witnesses.
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UNITED STATES PATENT OFFICE.

LAFAYETTE ROBINSON, OF MEDINA, NEW YORK.

IMPROVEMENT IN SINKS.

Specification forming part of Letters Patent No. **168,052**, dated September 21, 1875; application filed June 9, 1875.

To all whom it may concern:

Be it known that I, LAFAYETTE ROBINSON, of Medina, in the county of Orleans and State of New York, have invented a certain new and useful Improvement in Sinks; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view. Fig. 2 is a longitudinal vertical section. Fig. 3 is a cross-section in line *x x* of Fig. 1. Fig. 4 is a plan of the disk strainer. Fig. 5 is a section in line *y y* of Fig. 3.

My improvement relates to cast-iron sinks. The invention consists of the construction and arrangement of parts, as hereinafter described.

A represents the sink, which is of the usual rectangular or square outline, and is constructed with a projecting flange, *a*, which rests upon the supporting wood-work. The bottom *b* the greater portion of its length is made inclined longitudinally to properly discharge water; and at its end is an offset, *c*, that forms a chamber or cavity, *d*, which receives the water. The sides of the bottom of the cavity *d* are made inclined transversely toward the center, as shown at *d' d'*, Fig. 3, by which means the water thrown over by the incline *b* is concentrated upon the perforated strainer-disk *f*, through which it is discharged into the escape-pipe C below. The strainer-disk is cast separate, and fitted in its seat, so as to be removed at any time for cleaning or other purposes. B is a bulb or enlargement cast on the sink beneath the chamber *d*. It has, at some distance below the strainer-disk, a cross-strainer, *g*, consisting of arms which are cast in, as shown in Fig. 5. The spaces between the cross-arms allow a ready passage of the water, but retain all coarse substances. Below this cross-strainer is the nipple *h*, which is of conical or angular form, for the attachment of the pipe C. This pipe is of lead, and the upper end, *e*, is expanded or spread, so as to fit the angle of the nipple, which it embraces. D is a clamping-collar, which fits around the upper flaring end of the pipe, and is secured to the bulb B by means of hooks *i i*, which fit over lugs *k k* of the bulb. The lugs are made slightly spiral or inclined, so as to force the bearing of the collar up against the expanded end of the pipe. The inner surface of the collar is made to fit accurately to the pipe, so as to make a secure and tight joint. E is a stationary grate, which is cast separate, and fitted into the sink over the cavity *d*. It is constructed with a flat grated top, *m*, and with a vertical flange, *n*, the latter resting over and seated on the edge of the offset *c*, where it falls to the chamber *d*. The lower edge of the flange *n* is notched or serrated, so as to form small openings *o o*, which come in line with the inclined surface *b*, thereby allowing free passage of the water from the latter through into the chamber *d*, but serving as a strainer to prevent the passage of dirt.

By the construction above described the water from the inclined surface *b* is primarily strained in passing through the holes *o o* in the edge of the grate. Entering the chamber *d* it is concentrated by the transverse inclines *d' d'* over the straining-disk *f*, where it is again strained; and in passing through the cross-strainer *g* it receives a third action before entering the pipe C. A chamber is left above each of the strainers *g f* to prevent the deposit of sediment. The principal straining action, however, is produced by the notched edge of the grate E before the water can reach the ordinary strainer *f*, by which means the latter, in a great degree, is kept free from clogging, the daily washing of the sink removing all the deposit. To do this the grate is simply lifted from place. In ordinary sinks the water simply discharges through the strainer *f*, which, having only small holes, soon fills up. The notches *o o* in my device prevent the coarser substances from reaching the pipe-strainer and leave them upon the bottom of the sink, where they can be easily removed. The grate E, in addition to this function of acting as a strainer, serves as a platform to hold any article placed thereon without allowing such article to rest over and cover the ordinary strainer *f*, which it will do in ordinary sinks, frequently stopping the flow of water. The grate forms a stationary closely-fitting attachment seated closely in

the bottom of the sink, and occupying but very little space. The top, being grated, allows ready passage of water through when turned thereon.

Another feature in my invention is the method of attaching the lead-pipe C. In ordinary sinks this pipe is soldered onto the sink. By expanding or spreading the end *e* outward, and making the clamping-surfaces of the nipple *h* and collar D of corresponding form, I can clamp it in place, thereby forming a tight joint of considerable extent. The lead, being soft, will readily pack. I thereby avoid the expense of soldering, and the parts can be separated at any time for cleaning or repairs. The expansion of the end of the pipe is necessary to produce the packing action, as a straight surface would not pack. The tightening of the collar on the lugs *k k* is sufficient to make a close joint.

Having thus described my invention, I am aware that a sliding grate has been combined with a sink-basin; such I do not claim.

What I claim as new is—

1. The combination, with a sink, A, having an inclined bottom, *b*, and depressed chamber *d*, of the stationary grate E, constructed with the vertical flange *n* resting on the offset *c*, and provided with the notches *o o*, forming strainers for separating the coarser particles before reaching the pipe-strainer, as herein shown and described.

2. In a cast-iron sink having a depressed chamber, *d*, the notched grate E, resting over said chamber, the disk-strainer *f* at the bottom of said chamber, and the cross-strainer *g*, located beneath and over the pipe C, the whole combined to operate in the manner and for the purpose specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

LAFAYETTE ROBINSON.

Witnesses:

HENRY A. CHILDS,

S. H. GOODMAN.