(No Model.)

F. A. STRATER.

DRAINER.

No. 471,578. Patented Mar. 29, 1892.

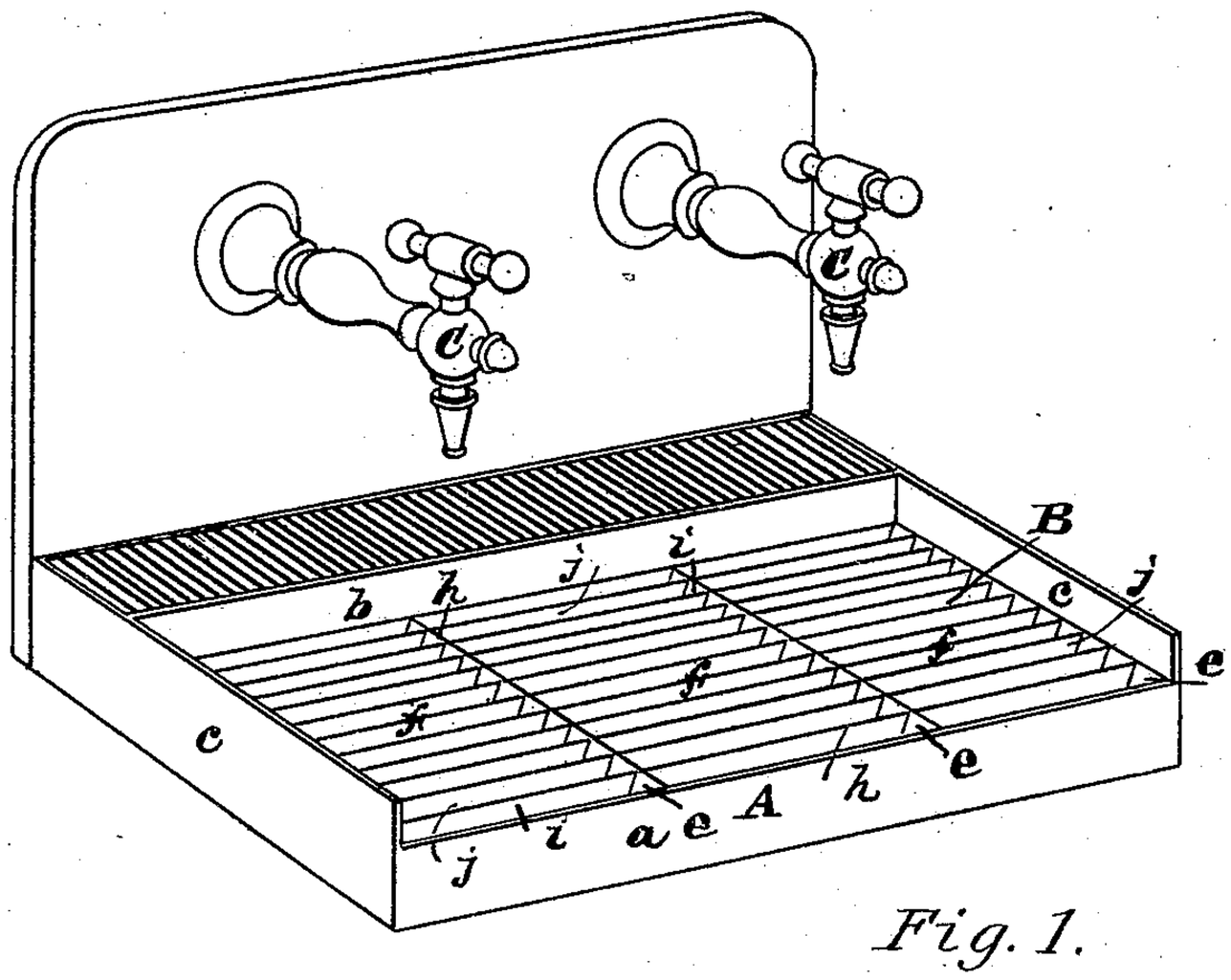

Fig. 1.

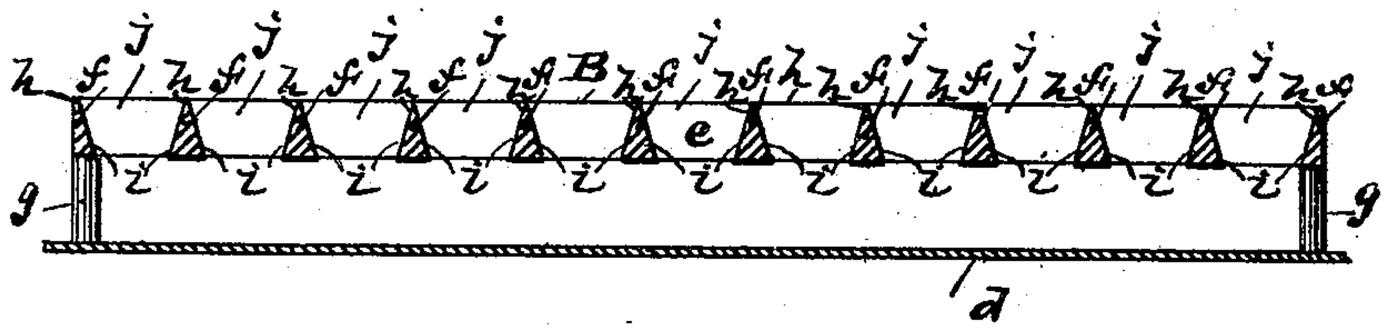

Fig. 2.

Witnesses,
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UNITED STATES PATENT OFFICE.

FRANCIS A. STRATER, OF BOSTON, MASSACHUSETTS.

DRAINER.

SPECIFICATION forming part of Letters Patent No. 471,578, dated March 29, 1892.

Application filed November 23, 1889. Serial No. 331,363. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS A. STRATER, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Drainers, of which the following is a specification, reference being had to the accompanying drawings.

The leading object of my invention is to so construct a drainer that it will prevent liquid which is forcibly thrown thereon from so spattering as to fall outside of the sink or box containing the drainer.

The invention consists in a drainer constructed and combined with a sink or box, as hereinafter set forth, and specifically pointed out in the claim.

In the drawings, Figure 1 is a perspective view of a sink or box and drainer therein embodying my invention and of faucets shown therewith to illustrate the purposes of the invention. Fig. 2 is a transverse vertical section of the drainer and of the bottom of the sink or box.

The sink or box A, provided with the vertical sides *a* and *b* at front and back and *c c* at the ends and having the bottom *d*, may be such as is adapted to the required use and location. In this sink or box is placed the removable drainer B. This is formed, preferably, of longitudinal bars *f* and transverse bars *e*, so joined that the upper surface of all the bars, and hence of the drainer, is in one and the same plane. This may be done by casting the whole as one piece. Legs *g* are formed on and may be cast with the same. These legs keep the body of the drainer and the under surface of the bars at the required distance from the bottom *d* of the sink or box supporting the drainer. The upper edge *h* of each of the bars is made as sharp as possible, and these edges may be sufficiently sharp as to be termed "knife-edges." Thus the upper surface of the drainer presents no broad planes. If any liquid is thrown forcibly on the drainer—as, for instance, it would be in falling from faucets C—it will find no portion of the upper surface of the drain on which it may dash, and hence the liquid will not be caused to spatter by said surface. The streams or drops of the liquid will be cut by the sharp edges *h*, and will strike the inclined sides *i* of the bars or the bottom of the sink or box. In either case the liquid cannot, by spattering, be thrown above the drainer, only in lines that are vertical or inclined very slightly from the vertical, so that it on falling back will not pass outside of the sink or box.

It is important that the upper edges of the bars forming the drainer—that is, the upper edges of the walls of the openings *j* in the drainer—be sharp; but these openings may be of other shapes than rectangular, which a skilled mechanic may devise, and still the drainer embody the essential features of the invention.

Preferably the bottom of this drainer is formed by a series or group of slats or ribs, which are triangular in cross-section, with the apex pointing upward, while the base of each one is located in the same plane with every other, thereby presenting a uniform flat surface. These strips or slats are non-contiguous—that is, a narrow slit or drainage-orifice exists between each two adjacent slats. As a result, the upper surface presents a series of knife-edges. These, it is evident, offer a minimum surface either to articles placed thereupon to drain or to any liquid which may fall within the drainer. The oblique surfaces of the slats direct it downward, while the edges divide and prevent the particles from spattering, which would occur if any horizontal plane surface was offered.

In addition to the advantages obtained by the upper surface of the drainer, owing to the peculiar shape and position of the slats, I secure a flat surface upon the under side of the drainer-plate. This I do because a flat surface is the most effective form to receive and catch the flying particles, and thus prevent the liquid which passes beneath the drainer from spattering up through the openings.

Heretofore drainers have been so made as to present flat surfaces on which the liquid strikes, so as to be greatly spattered and caused to fall largely outside of the sink, and much annoyance and loss of liquid has re-

sulted therefrom. My invention successfully does away with such annoyance and loss, as appears both by theory and practice.

I claim as my invention—

As a new article of manufacture, a drainer-plate composed of a series of non-contiguous bars or strips suitably fastened together and triangular in cross-section, with the apex of the triangle directed up to create a series of knife-edges upon the upper side, the base of each strip located in the same plane to form a smooth under surface on the lower side, substantially as specified.

FRANCIS A. STRATER.

Witnesses:
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