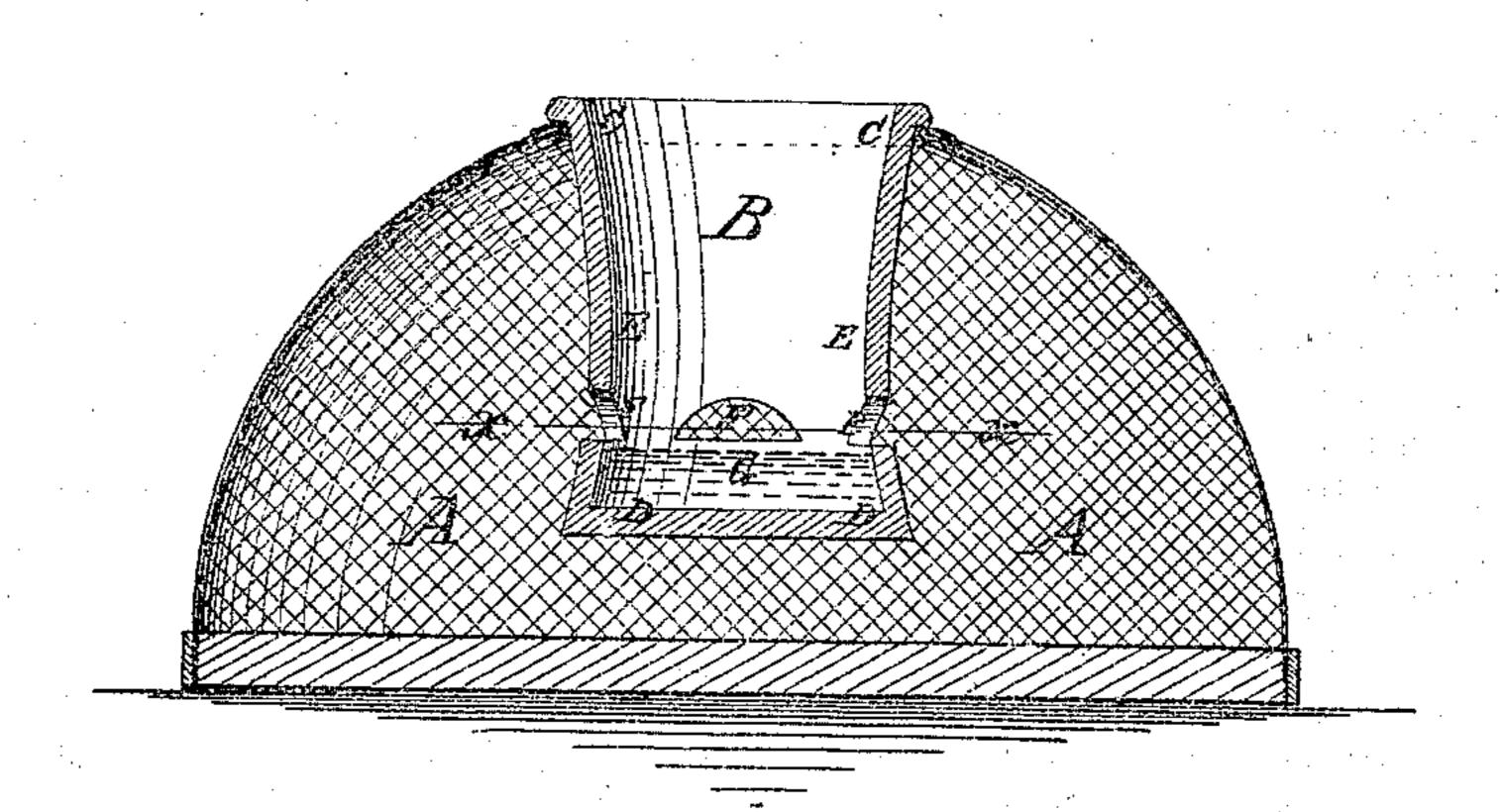
## JOHN JAMES ARMSTRONG.

Improvement in Insect Traps.

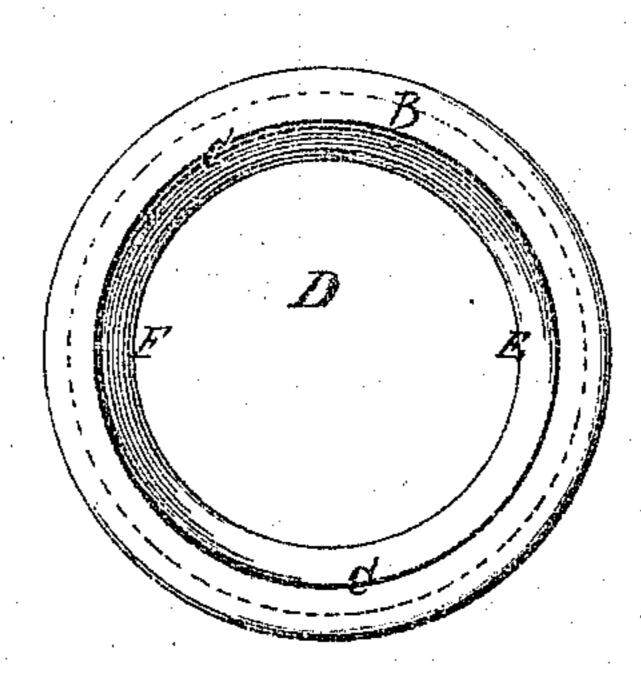
No. 120,020.

Patented Oct. 17, 1871.

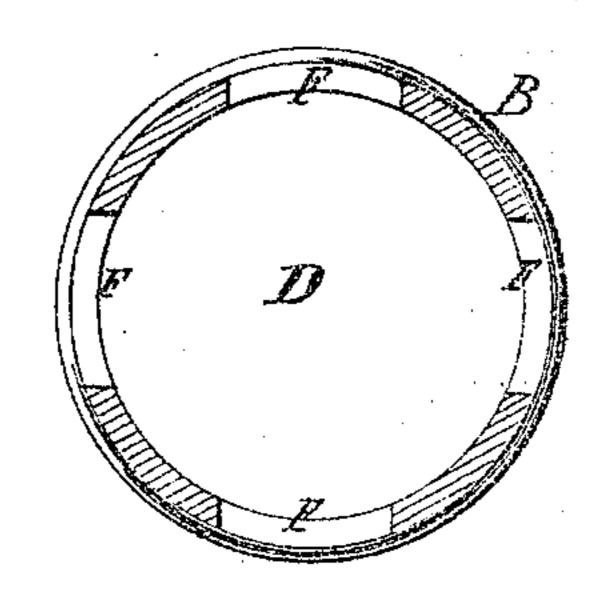
Fig. 1



Freg. E



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## UNITED STATES PATENT OFFICE.

JOHN JAMES ARMSTRONG, OF KINGS COUNTY, NEW YORK.

## IMPROVEMENT IN INSECT-TRAPS.

Specification forming part of Letters Patent No. 120,020, dated October 17, 1871.

To all whom it may concern:

Be it known that I, John James Armstrong, of the county of Kings and State of New York, have invented a certain Improvement in Insect-Traps, of which the following is a specification:

My invention relates to insect-traps in general, but is more particularly designed for catching that class of insects known as roaches; it consists in the peculiar construction of a cup, and in the combination of the same with any ordinary receiver, in which the said cup is placed, as will be hereinafter described.

In the accompanying drawing, Figure 1 represents a vertical section of a trap complete, embodying my invention. Fig. 2 is a top view of the cup. Fig. 3 is a horizontal section of the same taken through the line x x of Fig. 1.

Similar letters of reference indicate like parts. A is the ordinary receiver of a trap, semi-spherical, or of any other shape, and made of wirecloth or any other suitable material. It is provided with an opening, in which is inserted the cup above mentioned. This cup B fits tight in the opening in A, and is prevented from slipping through the same by means of a flange at its upper edge, or by means of its upper end flaring outward wider than the said opening. The cup B may be made of any material having a smooth or glossy surface, and its circumference or perimeter may be of any form, round, oval, prismatic, or polygonal, so long as it has the following peculiarities: The upper end C and the lower end or bottom D are wider than the middle part E, so that a vertical section of each side of the cup B will present a concavo-convex form, the convexity being inward; or the sides of the

cup B may be said to be constructed of two hollow truncated cones, joined together at their smaller ends. A little distance from the bottom D the cup B is provided with orifices F. The cup B should not be higher or deeper than when inserted in position; the under side of its bottom will stand far enough above the bottom of the receiver to allow a roach, when in the receiver, to pass freely underneath the said cup B. The cup is filled to a little below or flush with the lower edge of the apertures F with a liquid bait G. The roach, taking advantage of the incline downward of the sides of the cup B for foothold in descending to reach the bait, and seeing the bottom D below, and apertures F of escape, steps down and through the latter into the receiver A, from whence escape is impossible. Should it happen to reach again one of the openings F, the convexity of the glossy inner surface of the cup narrowing from the bottom toward the center of its height, affords no foothold for climbing; but the roach tumbles into the liquid and is drowned or gets through the apertures F again to the receiver A.

I claim—

The cup B, of concavo-convex sides, and provided with the apertures F and bottom D, in combination with the receiver A, substantially as and for the purpose specified.

The above specification of my invention signed by me this 1st day of September, 1871.

JOHN JAMES ARMSTRONG.

Witnesses:

J. JOHN C. HOWLAND, FRANK BROWNLY.

(143)