

(No Model.)

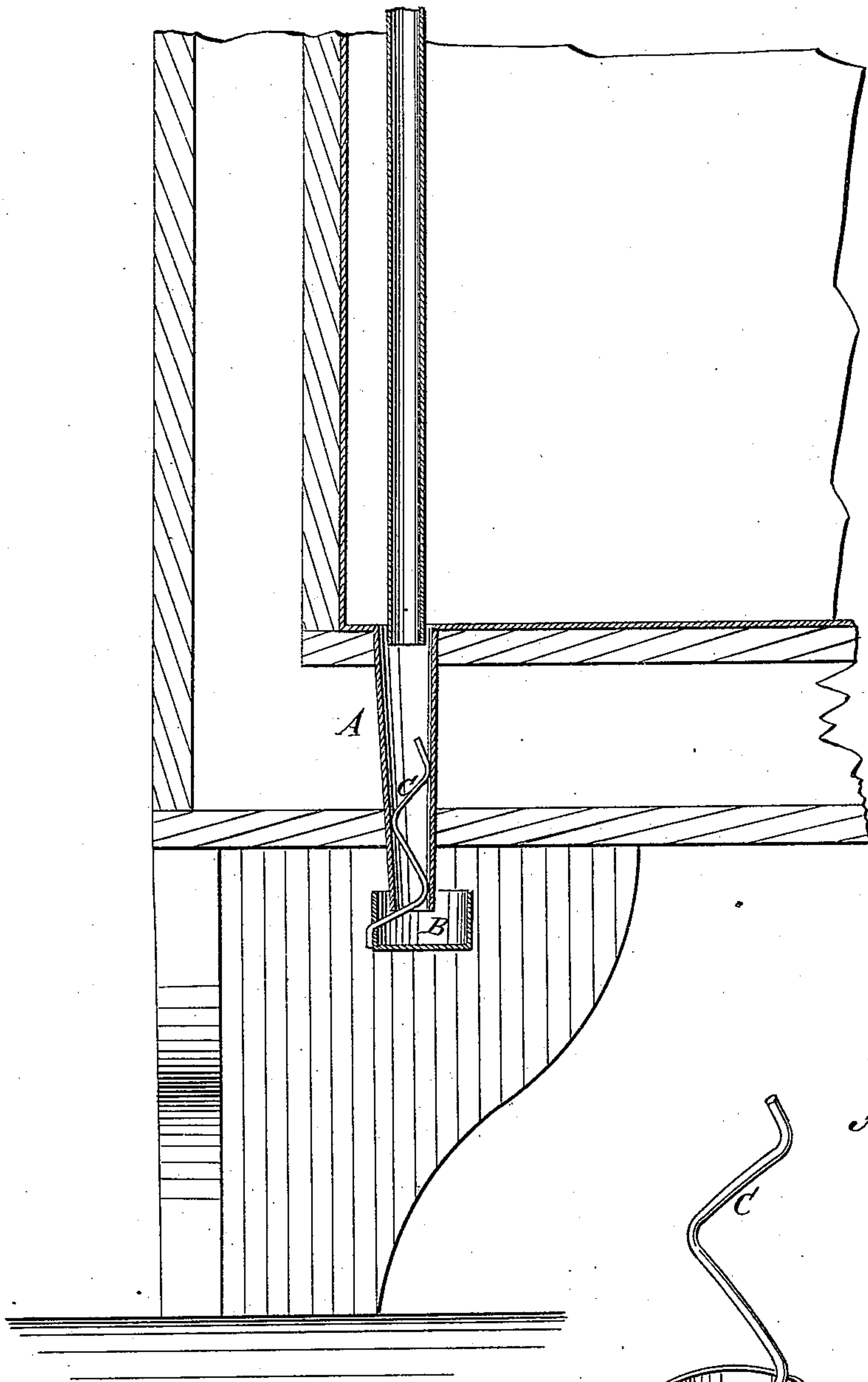
S. GRAY.

Water Seal Cups for Waste Pipes for Refrigerators and  
for other Purposes.

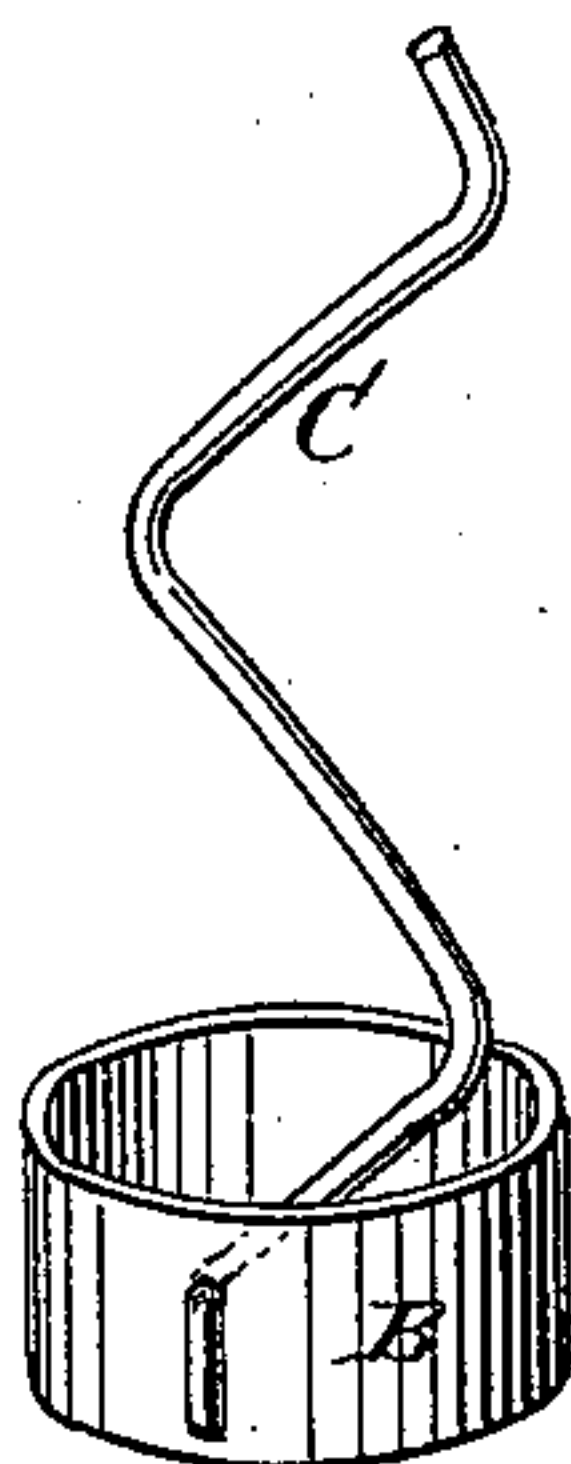
No. 234,979.

Patented Nov. 30, 1880.

*Fig: 1.*



*Fig: 2.*



WITNESSES:

*Chas. Nida*  
*C. Sedgwick.*

INVENTOR:

*S. Gray.*  
BY *Munn & Co.*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

SYLVESTER GRAY, OF LONG ISLAND CITY, NEW YORK.

WATER-SEAL CUP FOR WASTE-PIPES FOR REFRIGERATORS AND FOR OTHER PURPOSES.

SPECIFICATION forming part of Letters Patent No. 234,979, dated November 30, 1880.

Application filed September 30, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, SYLVESTER GRAY, of Long Island City, in the county of Queens and State of New York, have invented a new and useful Improvement in Water-Seal Cups for Waste-Pipes for Refrigerators and other Purposes, of which the following is a specification.

Figure 1 is a sectional elevation of the improvement, illustrating its use. Fig. 2 is a perspective view of one of the cups.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish water-seal cups for refrigerator waste-pipes and other purposes which shall be so constructed that they shall be readily attached to the waste-pipes, will be held in place securely, and can be readily detached and cleaned.

The invention consists in the combination of a bent wire with the water-seal cup and the waste-pipe, whereby the cup is securely and detachably connected with the waste-pipe, as will be hereinafter fully described.

A represents the waste-pipe of a refrigerator, which may be made straight or tapering, as desired. I prefer to make the waste-pipe A tapering, as shown in Fig. 1, as it holds the water-seal cup B more securely. The water-seal cup B is made of a larger diameter than the lower end of the waste-pipe A and of any convenient depth.

C is a wire, the lower end of which is passed through one side of the cup B at a little distance from its upper edge, is bent down along and is soldered to the outer side of the cup B, or is otherwise secured to the said cup. The

wire C extends nearly across the cup B, and is then bent into zigzag form, as shown in Figs. 1 and 2, so that when the said wire C is pressed up into the lower end of a waste-pipe, A, its bends will rest against the opposite sides of the interior of the said waste-pipe A with sufficient force to support the said cup B in place.

If desired, the wire C can be bent in spiral form and placed within or upon the outer side of the waste-pipe, the cup in either case being supported by the friction of the bent wire C against the waste-pipe A.

With this construction the water-seal cup B can be readily detached and cleaned, and when attached will not be liable to drop off accidentally and leave the lower end of the waste-pipe A exposed.

With this construction the lower end of the waste-pipe A, being below the top of the cup B, will be always immersed in water, so that air cannot enter the said pipe A and pass into the ice-chamber of the refrigerator and melt the ice.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

The combination of the bent wire C with the water-seal cup B and the waste-pipe A, substantially as herein shown and described, whereby the cup is securely and detachably connected with the waste-pipe, as set forth.

SYLVESTER GRAY.

Witnesses:

JAMES T. GRAHAM,  
C. SEDGWICK.