

(No Model.)

W. H. SCUDDER.

REFRIGERATING PROCESS AND APPARATUS.

No. 246,979.

Patented Sept. 13, 1881.

Fig. 1.

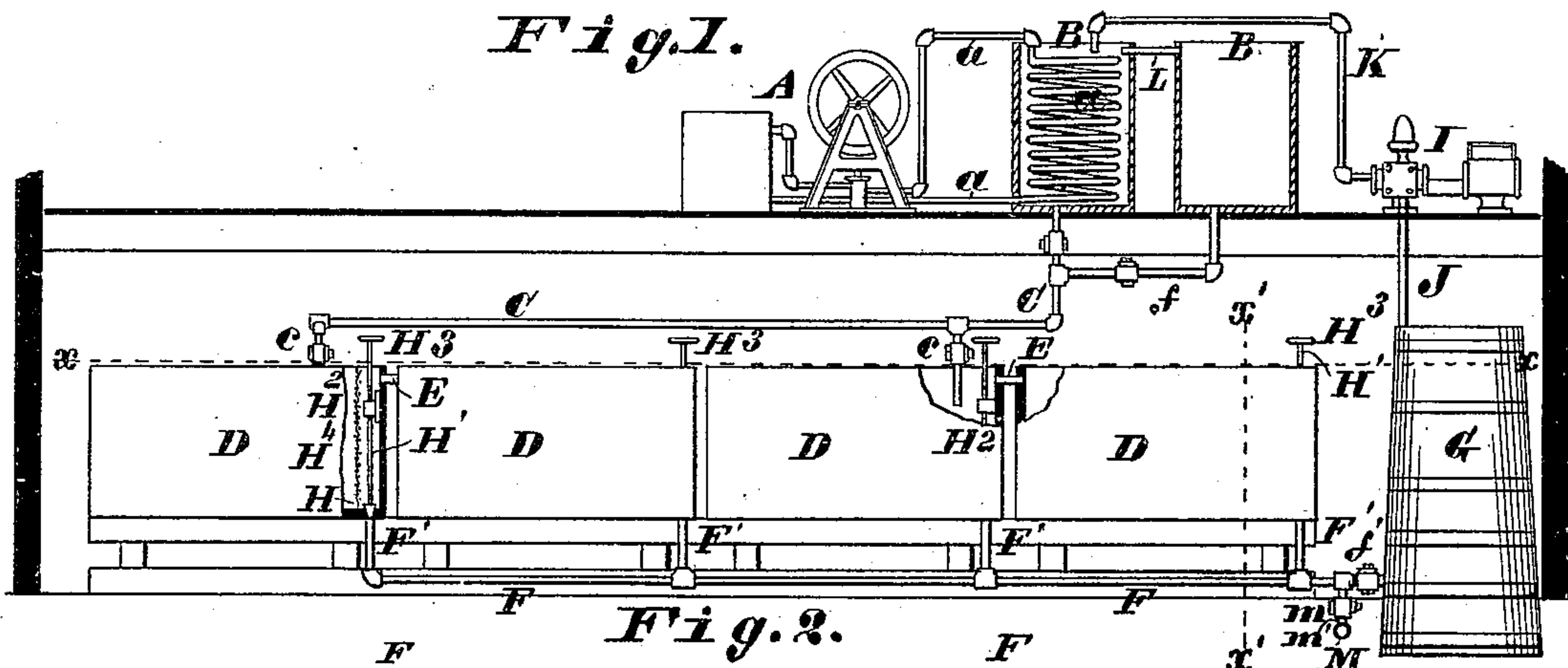


Fig. 2.

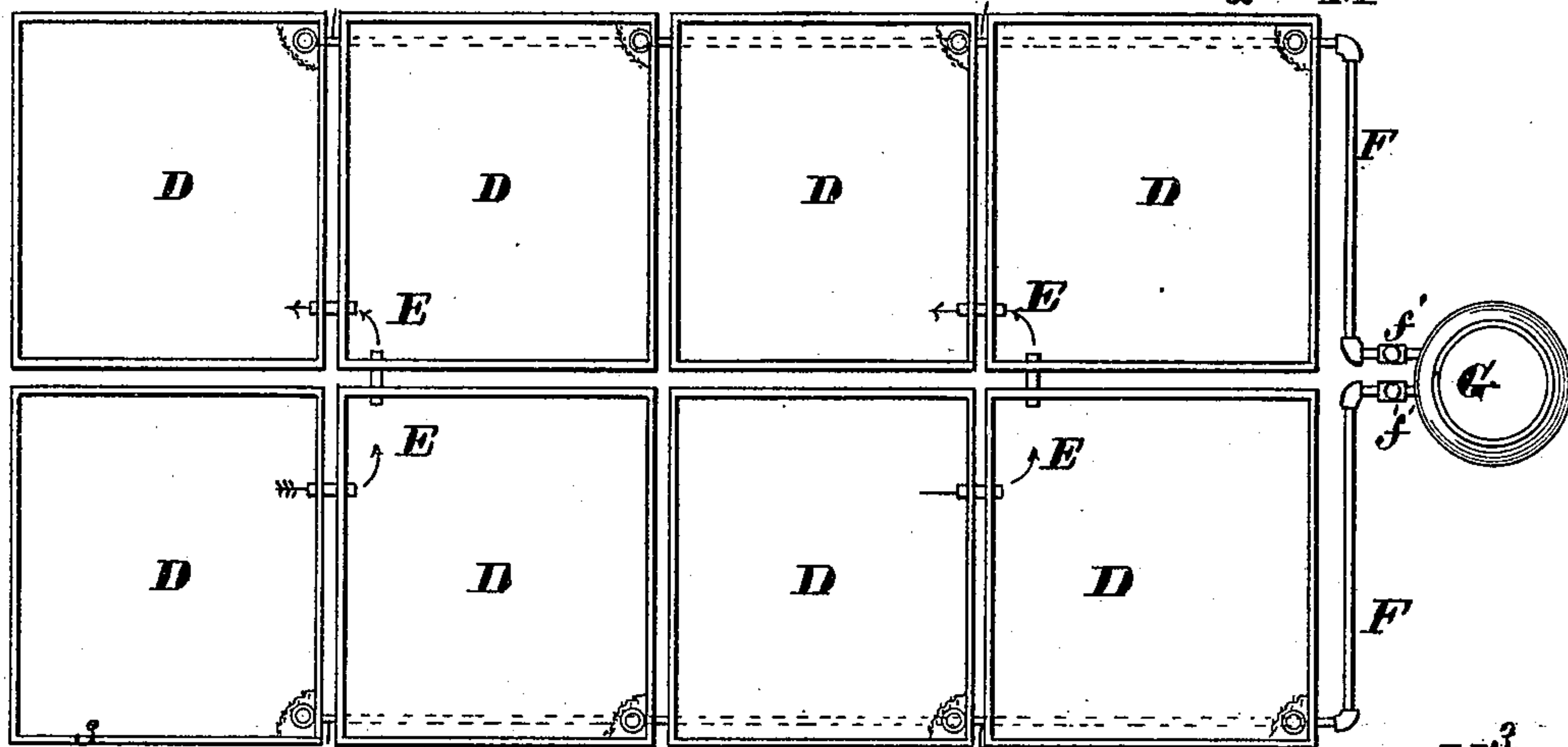
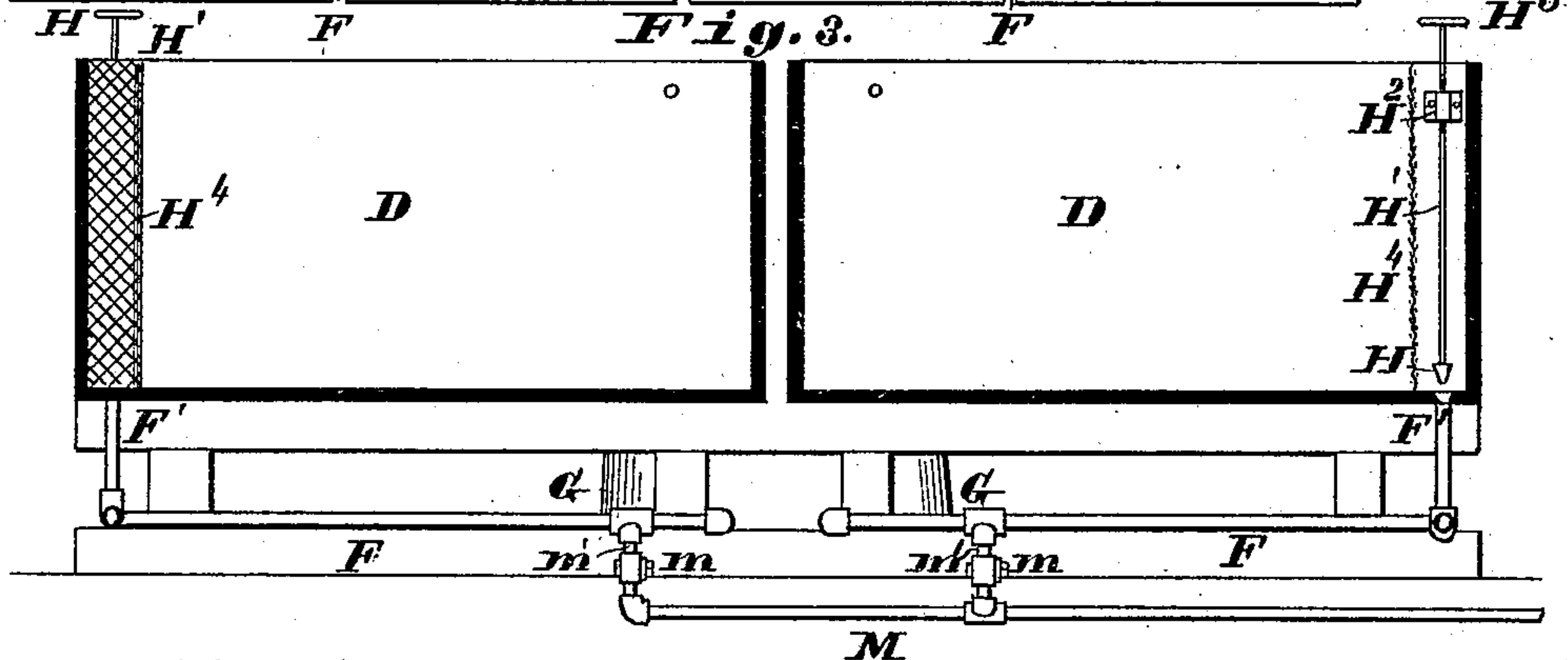


Fig. 3.



Attest:
Charles Pickles
Geo. H. Knight.

Inventor:
William H. Scudder
By Knight Bros.
Attys.

UNITED STATES PATENT OFFICE.

WILLIAM H. SCUDDER, OF ST. LOUIS, MISSOURI.

REFRIGERATING PROCESS AND APPARATUS.

SPECIFICATION forming part of Letters Patent No. 246,979, dated September 13, 1881.

Application filed May 4, 1881. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. SCUDDER, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful
5 Improvement in Meat-Curing and Apparatus, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

10 In the drawings, Figure 1 is a side view of my improved device for curing meat. Fig. 2 is a section of same at $x x$, Fig. 1. Fig. 3 is an end section at $x' x'$, Fig. 1, enlarged.

A is a freezing apparatus of any desired construction.

15 a is an ammonia-pipe leading from the machine A to the box B, in which it is coiled a number of times and passes back again to the machine. The pipe a is for the purpose of
20 conveying ammonia to the box for the cooling of the same.

C is a brine-pipe leading from the bottom of box B to one or more vats, D. I have shown two rows of vats standing side by side.

25 c are branch pipes, provided with valves, for conveying brine from the main pipe to the vats. I do not use a branch pipe c for each vat, but connect, where there are two rows of vats standing side by side, four vats together
30 by tubular couplings E, so that by one branch pipe four vats are filled.

The brine is drained from the vats through pipes F and branch pipes F', which form a communication between the bottoms of the
35 vats and a well, G. The mouths of the branch pipes F' are closed by plug-valves H on ends of rods H' screwing through brackets H², secured to the insides of the vats.

The rods are turned by handles or wheels H³
40 on their upper ends. The rods are preferably situated at one corner of the vats, and are inclosed by a strainer of wire-gauze, H⁴, to prevent the pipes from being stopped up with small pieces of meat, &c.

45 As before stated, the pipes F' preferably communicate with the bottom of the well G, so that when the valves H are open the brine will escape from the vats into the well until it finds its level.

50 I is a pump, of any desired make, for pumping the brine from the well back to the box B through pipes J K.

The well G may be done away with and the pipe F communicate directly with the pump.

It will thus be seen that the brine has a perfect circulation from the cooling-box through the vats and back to the box. 55

To have plenty of capacity for storing the brine there may be any number of the boxes B situated along side each other, the cooling-machine and pump communicating only with one of them, as shown, and it connected to the one next it by tubular coupling L at their tops, and the rest of the boxes are connected to the said second one by tubular couplings at their
60 bottoms, so that by draining said second box the balance of the additional boxes are drained. The bottom of said second box has communication with main pipe by branch pipe f , provided with a valve for closing or opening it at
70 will.

M is a waste-pipe, which is used for cleaning out the vats by opening the valves m in its branch pipes m' , connecting it with the main pipes F, and closing the valves f' in the pipes
75 F between the waste-pipe and the well.

As before stated, I do not confine myself to any particular arrangement of the pipes C and F, or any particular make of ice-machine or pump, or any particular form or number of
80 boxes or cases B or vats D, as these may all be varied at will without changing the character of my invention. The device I have shown is what I consider to be the best and cheapest
85 for the purpose.

My invention may also be used for cooling the temperature of a room by placing a pan above the room, into which the pipe C would empty, and a pipe communicating with the bottom of the pan would carry the liquid to
90 the well either by way of the vats or direct.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

The combination of freezing apparatus A, 95 box B, ammonia-pipe coil a within the said box, communicating with the said freezing apparatus, one or more vats, D, pipe C, connecting the said box and the said vat or vats, well G, pipes F F', connecting the said well with the
100 said tanks, pump I, and pipes J and K, connecting the said well with the pump and box B, respectively, as set forth.

W. H. SCUDDER.

Witnesses:

SAML. KNIGHT,
GEO. H. KNIGHT.