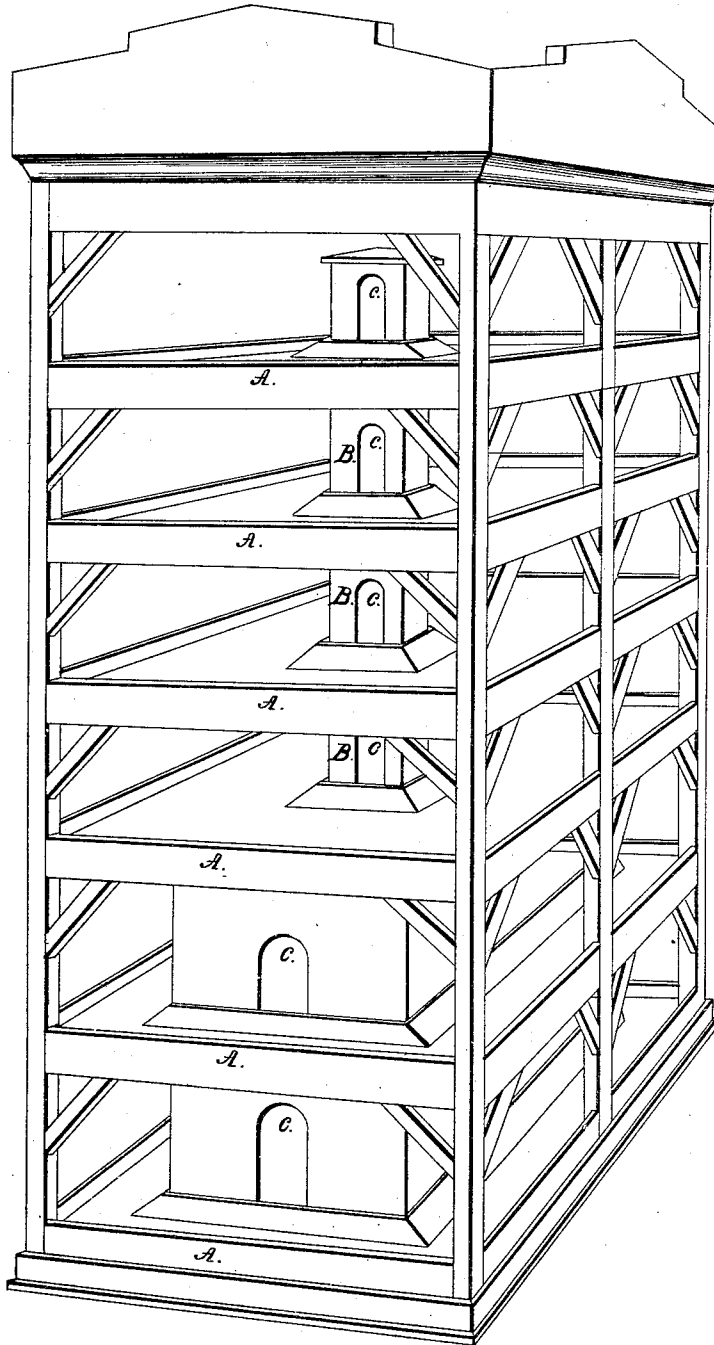


*J. E. Manuel.*

*Ice Machine.*

*N<sup>o</sup> 1,240.*

*Patented Jul. 12, 1839.*



# UNITED STATES PATENT OFFICE.

JOSEPH E. MANUEL, OF PHILADELPHIA, PENNSYLVANIA.

## MODE OF OBTAINING AND SECURING ICE.

Specification of Letters Patent No. 1,240, dated July 12, 1839.

*To all whom it may concern:*

Be it known that I, JOSEPH E. MANUEL, of the city of Philadelphia, in the State of Pennsylvania, have invented a new and useful Mode of Obtaining Ice by Means of Reservoirs Constructed for that Purpose; and I do hereby declare that the following is a full and exact description thereof.

I erect a series of platforms, one above the other, which are to be constructed so as to constitute reservoirs capable of containing water to the depth of six inches, more or less, as may be preferred. The floors, or bottoms, of these reservoirs are to be made watertight by calking, or by covering them with metal, or in any other manner in which this object may be effected. These dimensions and number of these platform reservoirs must be determined by the quantity of ice which it may be desired to make. Their height one above the other, or, in other words, their distance apart, should be such as will admit of the collecting the ice and shoveling it into the vertical hollow trunk, to be presently described, and which leads down from the reservoirs into the ice house or other receptacle.

The accompanying drawing represents the kind of structure which I build for the purpose of obtaining ice.

A, A, A, are the platform reservoirs, sustained by framing of sufficient strength, and made capable of containing water to the required depth. The timber, or other material, which forms the sides of these reservoirs are not to rise vertically from the floor, but at an angle, say of forty five degrees, more or less, as the water with which the reservoirs are to be filled is to be allowed to freeze in them, and as it expands in freezing, it would press against the sides, were they vertical, with a degree of force which they could not resist; but by giving them a sufficient slope the ice will be made to rise up as it expands, and all injury to the platform be prevented.

In the middle of the reservoirs, or in any convenient part thereof, I form a vertical hollow trunk B, B, B, which passes through all the reservoirs, and opens below into an ice house, or into any receptacle by which the ice is to be conveyed away. Into this trunk I make openings C, C, C, just above the level of the water in each of the reservoirs, through which the ice is to be shoveled, or thrown, that it may pass down into the ice house, or other receptacle.

In using this structure for obtaining ice, water is to be admitted into the reservoirs, in any convenient manner. Where there are water-works, as in the city of Philadelphia, or where it can be obtained from any source sufficiently elevated, it will, of course, be allowed to flow in spontaneously. When the cold has been sufficiently intense to convert this water into ice, it is then to be broken up, and disposed of as above stated; and this operation is to be repeated until a sufficient quantity has been obtained.

Having thus fully described the nature of my invention, and shown the manner in which the same is to be carried into operation, I claim—

The erecting and employment of platform reservoirs, in the manner herein set forth, said reservoirs being placed one above the other, and being made capable of containing water for the production of ice; and in combination with such a structure I claim the formation and employment of a hollow trunk through which the ice may be passed from the respective reservoirs into an ice-house, or other receptacle, the whole formed and operating substantially as herein set forth.

J. E. MANUEL.

Witnesses:

THOS. P. JONES,  
JOHN M. A. KANN.