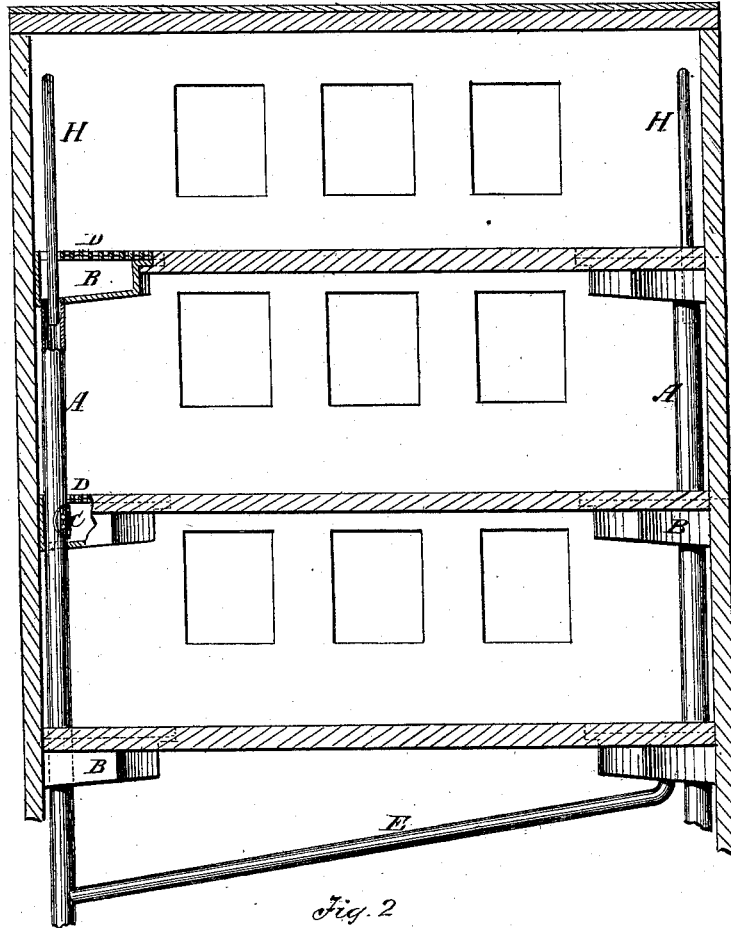


J. H. MORRELL.  
Floodway for Warehouses.

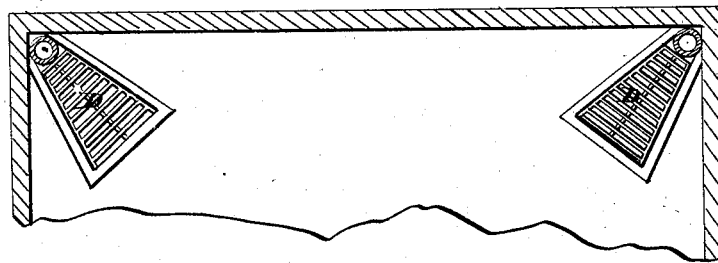
No. 165,247.

Patented July 6, 1875.

*Fig. 1.*



*Fig. 2.*



WITNESSES:

*Francis McArdle.*  
*A. F. Terry*

INVENTOR:

*J. H. Morrell*

BY

*Munn & Co.*

ATTORNEYS.

# UNITED STATES PATENT OFFICE,

JOHN H. MORRELL, OF NEW YORK, N. Y.

## IMPROVEMENT IN FLOODWAYS FOR WAREHOUSES.

Specification forming part of Letters Patent No. **165,247**, dated July 6, 1875; application filed May 28, 1875.

*To all whom it may concern:*

Be it known that I, JOHN H. MORRELL, of the city, county, and State of New York, have invented a new and Improved Floodway for Warehouses, &c., of which the following is a specification:

The object of this invention is to provide a means of preventing warehouses and other buildings from being flooded in case of fire, as is now commonly the case when a fire breaks out in any of the upper stories of a building, and thereby save a large amount of goods which might otherwise be destroyed by water soaking through the floors to the rooms below, the construction and operation of which will be understood from the following description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a sectional elevation, showing my invention as applied. Fig. 2 is a plan of the same.

Similar letters of reference indicate corresponding parts.

In the case here presented, A represents a metallic pipe leading continuously from the top floor of a warehouse or other building to the street-sewer or other drain. B B are metallic sinks or reservoirs countersunk in the flooring, and located in the corners of the warerooms, or such other part or parts of the building as the aforesaid pipe or pipes may pass, each of the said pipes to have an opening or series of openings, C, equal to its capacity in each sink or reservoir, so that in case of fire breaking out on any floor or room of a building, the damage by water may be confined thereto, as the water thrown into such room readily finds its way of escape into the sinks and down the pipes, thus keeping the floor of such room or compartment sufficiently free from water to prevent soaking through to the next floor below, the aforesaid metallic sinks or reservoirs to be sunk in the flooring so that their upper edges may be flush with the floor or a little below. I also propose having a

series of grooves, channels, or pipes in the flooring, leading toward each sink or reservoir, tapping the same when necessary so as to conduct the water thereto, the aforesaid pipe or pipes to have their openings protected by a wire-gauze or to have a series of holes, C, made or cast in the same so as to prevent floating debris from getting in the pipe; the aforesaid sinks or reservoirs to have a grating, D, over them, which, being flush with the floor, will enable the whole space of flooring to be occupied. In cases where the main pipe or pipes may not be near the sewer on the lower floor or basement, I tap the main pipe or pipes and attach a diagonal leader or leaders, as shown at E in the drawing, and thereby save the expense of digging in order to make my connection with the sewer.

The above-described invention also provides a means of escape for water, in case of pipes bursting from frost or otherwise, which, if not checked immediately, would cause great damage, both to building and property contained therein, and, furthermore, the leader from the eaves may be turned inward, as at H, so as to conduct the water from the roof into the pipe or pipes and thereby utilize them and save the additional cost of full length of leader, as ordinarily applied to the outside of buildings.

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

The pipes A, extending up through the building and having the openings C, in combination with the sinks B, covered by gratings D, upon each floor, the said pipes A communicating with the eaves-pipe above, the sewer-pipe below, and with all of the sinks through the openings C, substantially as described, and for the purpose set forth.

JNO. H. MORRELL.

Witnesses:

CHARLES H. NASH,  
T. B. MOSHER.