UNITED STATES PATENT OFFICE.

EMERY C. HODGES, OF BLOOMINGTON, ILLINOIS.

DRAINAGE FOR BUILDING-FOUNDATIONS.


To all whom it may concern:

Be it known that I, EMERY C. HODGES, a citizen of the United States, residing at Bloomington, in the county of McLean and State of Illinois, have invented certain new and useful Improvements in Building-Foundations, of which the following is a specification.

My invention relates to improvements in drainage for building foundations, and the main object of my invention, is the provision of a building foundation which will absolutely prevent moisture or dampness from entering the walls of the structure, thus insuring a dry and healthy condition, and keep the earth surrounding the structure, in a comparatively dry condition, and which will carry off the water and discharge it in the sewer, and thus prevent the collection of water adjacent the structure.

With this object in view, my invention consists of a building foundation embodying novel features of construction substantially as disclosed herein and pointed out in the claims.

Figure 1, represents a plan view of the system of drainage which I employ in my building foundation. Fig. 2, represents a sectional view of the complete foundation with the parts in position, one side of the structure and foundation being shown. Fig. 3, represents an enlarged sectional view of one of the ventilating pipes; and Fig. 4, represents a plan view of the drain pipes and ventilating pipes.

In the drawings: The numeral 1, designates a portion of one of the walls of a structure, providing the lower compartment or cellar 2, this foundation wall extending below the ground 3, as usual, and surrounding the structure, is a trench or ditch 4, in which is placed a filling of crushed stone 5, which forms a filtering bed and surrounding the structure, and arranged in said ditch or trench, is the drain pipe 6, composed of a series of sections fitted together, and communicating with this drain pipe, is the inclined discharge pipe 7, which discharges into the trench 8, filled with cinders of like material 9, above which is the layer or filling of earth 10, and leading from the bed of cinders, is the discharge pipe 12, which leads to the sewer.

The drain which surrounds the house, may be provided with a single branch 13, as shown in Fig. 4, or this branch may be dispensed with. Communicating with openings 14, in the foundation wall, are the angular pipes or elbows 15, the vertical portion of which, projects above the filter bed, to the outer air, and is protected by a hood or cap 16. The purpose of this series of pipes is to admit air for the purpose of ventilation, or to carry off any foul air which may accumulate in the basement or cellar.

It will be observed that I provide a foundation which remains dry under all conditions and positively prevents the accumulation of water around the structure, thus insuring a healthy condition, which provides proper ventilating means, and which can be produced at such a price as to make the foundation practical and desirable.

I claim:

1. The combination with a building foundation of a structure, of a filtering bed surrounding the exterior of the structure, drainage pipes embedded in the filtering bed, a discharge pipe leading from the drainage pipes, and sewer connections from the discharge pipe.

2. The combination with a building foundation of a filtering bed surrounding the exterior of the structure, a system of drainage pipes embedded in the filtering bed, a discharge pipe for the drainage system, a cinder bed for receiving said discharge from the drainage system, and a sewer-discharging pipe leading from the cinder bed.

In testimony whereof I affix my signature in presence of two witnesses.

EMERY C. HODGES.

WITNESSES:

W. M. HOFFMAN,
WM. N. MOORE.