

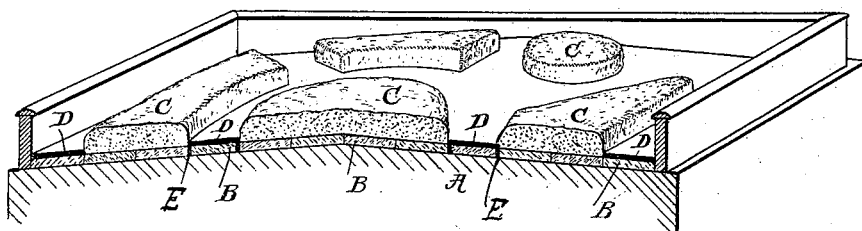
(No Model.)

C. C. GILMAN.

ROOF GARDEN.

No. 342,595.

Patented May 25, 1886.



Attest:

*Geo. H. Graham*  
*Notary*

Inventor:

*Chas. C. Gilman,*  
*per*  
*W. C. Schmitt,*  
*att'y.*

# UNITED STATES PATENT OFFICE.

CHARLES CARROLL GILMAN, OF ELDORA, IOWA.

## ROOF-GARDEN.

SPECIFICATION forming part of Letters Patent No. 342,595, dated May 25, 1886.

Application filed October 22, 1885. Serial No. 180,569. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES CARROLL GILMAN, a citizen of the United States, and a resident of Eldora, Hardin county, Iowa, have invented a new and useful Improvement in Roof-Gardens, of which the following is a specification.

The object of my invention is to make a roof-garden simple in construction, relatively inexpensive, and capable of taking up a large quantity of water and retaining it for a long time.

To this end my invention consists in the combination of elements hereinafter described and claimed.

The accompanying drawing, forming part of this specification, illustrates my invention in cross-section and perspective.

In said drawing, A may designate any kind of roof, treated in any one of the known effective methods for rendering it thoroughly water-proof. I cover said roof entirely, or only in places intended for flower-beds, with blocks or slabs B, of porous terra-cotta or terra-cotta lumber. Instead of using pieces of this material in regular form, I may use it in the form of broken pieces of any size. The depth of the layer of porous terra-cotta is from three to six or eight inches. I use the specified material for the reason that it is capable of absorbing a very large quantity of moisture, and that it gives up the water or moisture it has taken into its pores very slowly. The extremely porous character of the material and its poor heat-conducting qualities account for these facts. The earth C for the plants or flowers is placed over the layer of porous terra-cotta in sufficient quantity—say to a depth of about a foot, more or less. Wherever the beds of earth do not extend I cover the porous terra-cotta slabs with a layer of asphalt mastic, D, which serves to make an excellent walk. It is not essential that the foundation of the asphalt mastic consist of porous terra-cotta, for it may consist of the materials ordinarily used as a foundation for said covering. The slabs of porous terra-cotta underlying the mas-

tie of the walks may be separated from those beneath the earth C and asphalt mastic poured in between the same, as shown at E.

In watering these beds a large quantity of water may be used, which, after passing through the earth, is taken up and stored in the porous terra-cotta. Beds of earth having this underlying layer can be kept moist much longer than has heretofore been possible with the constructions of roof-gardens in use. The walks, by reason of the layer of asphalt on the foundation of porous terra-cotta, are on a higher level than the porous terra-cotta underlying the beds of earth, whereby the walks are kept dry. When desired, the under surface of the terra-cotta slabs, serving as a retainer of moisture, may be waterproofed by dipping its face in melted asphalt. It is preferable, however, to leave it entirely porous, that drainage may be had of excessive waterings.

Instead of asphalt for walks, cement may be employed for that purpose.

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

1. A roof-garden in which the bed or beds of earth are combined with an underlying layer of porous terra-cotta resting on a roof or foundation impervious to moisture, substantially as described.

2. A roof-garden consisting of beds of earth combined with an underlying layer of porous terra-cotta, and walks adjacent to said beds, formed of asphalt mastic on a foundation of porous terra-cotta, substantially as described.

3. A roof-garden in which the bed or beds of earth are combined with an underlying layer of porous terra-cotta, and in which the walks are arranged on a higher level than the said underlying layer, substantially as and for the purpose set forth.

In testimony whereof I have signed my name in the presence of two witnesses.

CHARLES CARROLL GILMAN.

Witnesses:

SAML. G. SLOAN,  
H. H. GALUSHA.