(No Model.)

F. T. WHALEN.

WATER PROOF STRUCTURE IN BUILDINGS.

No. 389,914. Patented Sept. 25, 1888.

Fig. 1

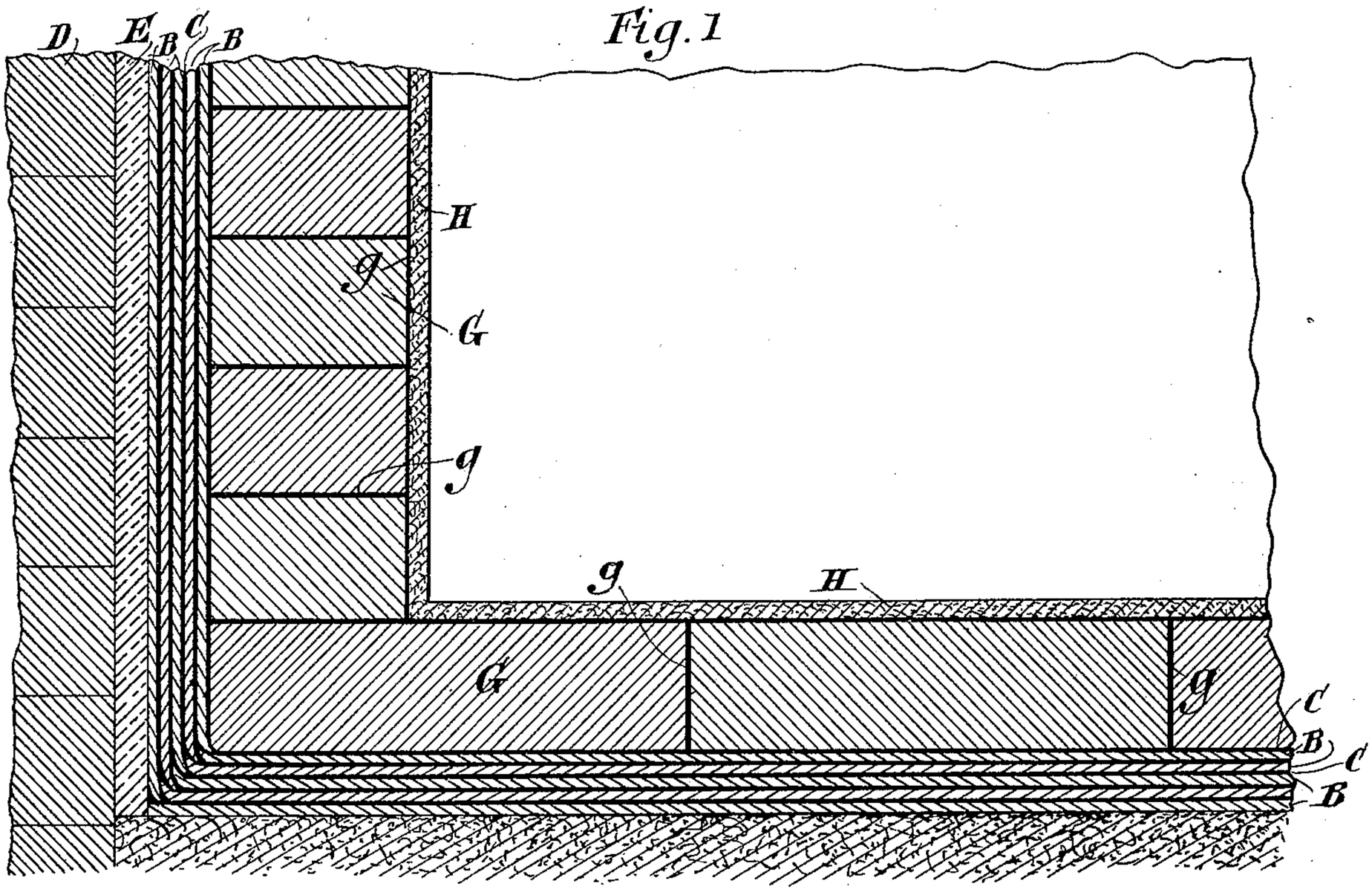
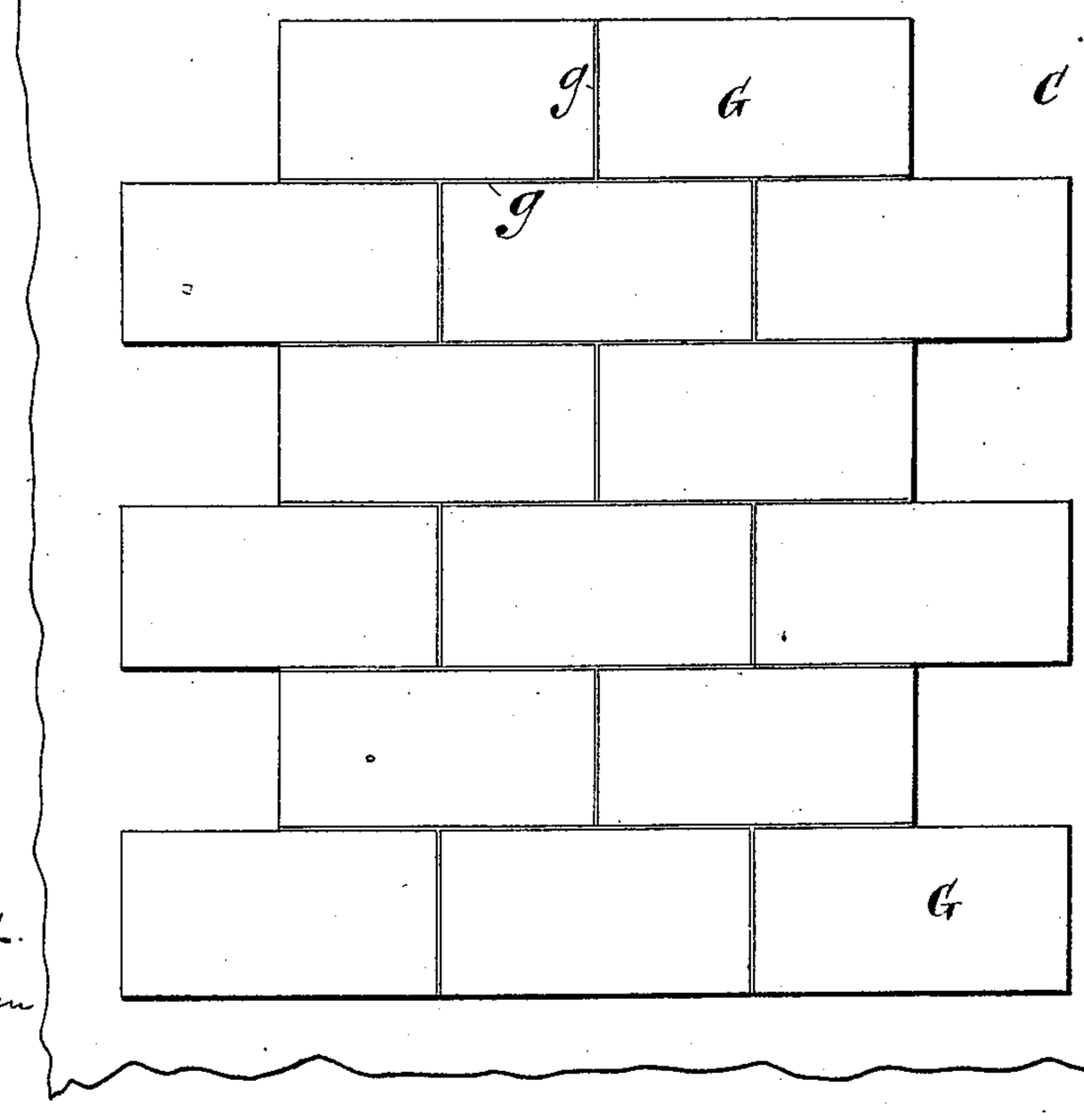


Fig. 2



Witnesses
I. D. Griswold.
Geo Wadman

Inventor
Frank T. Whalen
By his Attys
Gifford & Brown

UNITED STATES PATENT OFFICE.

FRANK T. WHALEN, OF NEW YORK, N. Y.

WATER-PROOF STRUCTURE IN BUILDINGS.

SPECIFICATION forming part of Letters Patent No. 389,914, dated September 25, 1888.

Application filed October 17, 1887. Serial No. 252,567. (No model.)

To all whom it may concern:

Be it known that I, FRANK T. WHALEN, of New York, in the county and State of New York, have invented a certain new and useful Improvement in Water-Proof Structures in Buildings, of which the following is a specification.

My improvement relates to houses and other buildings.

The object of my improvement is to afford an effective protection against water and moisture.

The improvement may be used in a cellar-lining, in foundation-walls, or in a roof, vault, cover, or sidewalk.

In the accompanying drawings, Figure 1 is a vertical section of a part of one of the foundation-walls of a building and of a portion of a cellar in such building. Fig. 2 is a plan or top view of the cellar-floor in an incomplete state.

Similar letters of reference designate corresponding parts in both figures.

A designates a surface upon which the flooring of the cellar is laid. This surface A may be the earth smoothed off, or it may be made of ruddle or of any other suitable material. The surface A will be leveled and will also be smoothed off as much as practicable. Upon the surface A are laid a number of layers, B C, of roofing-paper and roofing-cement. The layers of roofing-paper and roofing-cement will preferably be alternated, or, in other words, a layer of the roofing-cement will be placed between each two layers of the roofing-paper. The roofing-paper may be of ordinary kind, consisting of a heavy paper saturated or impregnated with tar, pitch, asphaltum, or like substance. The roofing-cement, of which layers are interposed between the layers of roofing-paper, may be of the same substance as that incorporated into the roofing-paper.

D designates an upright wall of masonry forming one side of the cellar. It may be faced with mortar or concrete, E, so as to have a smooth inner surface. Layers B C of roofing-paper and roofing-cement, arranged like those heretofore described as laid upon the surface A, may be laid against the surface E, and these upright layers of the roofing-paper will overlap the horizontal layers of roofing-paper.

G designates a course of bricks, which are thoroughly saturated or impregnated with tar, pitch, or asphaltum. Preferably they will be immersed in the tar, pitch, or asphaltum while the latter is boiling and allowed to remain sufficiently long for the air, or at least a portion of the air, in their interstices to be expelled and for the tar, pitch, or asphaltum to enter the interstices or pores. These bricks will be impervious to water; hence they are capable of preservation almost indefinitely, for if the water be excluded from them danger from frost will be obviated. Of course I do not wish to be restricted to a single course of these bricks. Between the bricks are layers *g* of the tar, pitch, or asphaltum. Preferably the tar, pitch, or asphaltum will extend entirely around the bricks.

The bricks may form the flooring, or there may be laid over them a course of Portland cement or other like substance capable of being made very flat and smooth. Sand may be mixed with the tar, pitch, or asphaltum on the top to make a rough surface, which will cause the Portland cement or like substance to adhere. These bricks may be laid in the foundation-walls of the building where the latter are exposed to moisture. They may also be used upon roofs.

What I claim as my invention, and desire to secure by Letters Patent, is—

A building having in a portion of its structure which is exposed to water or moisture a course or a number of courses of bricks saturated or impregnated with tar, pitch, or asphaltum, each of the bricks being entirely surrounded with tar, pitch, or asphaltum, and alternate layers of roofing-paper and roofing-cement adjacent to the courses of the bricks, substantially as specified.

FRANK T. WHALEN.

Witnesses:
JAMES S. GREVES,
W. A. RABAN.