

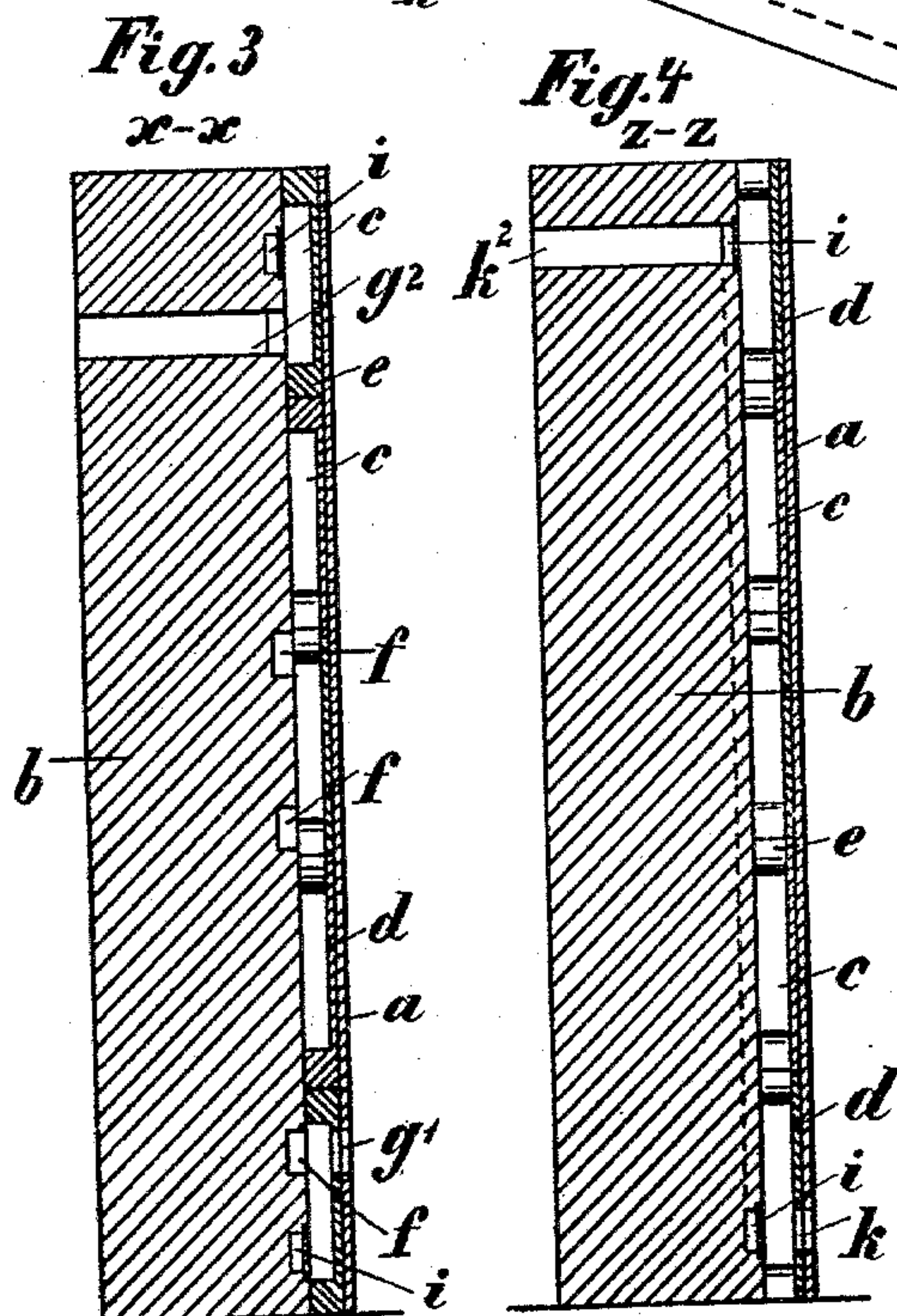
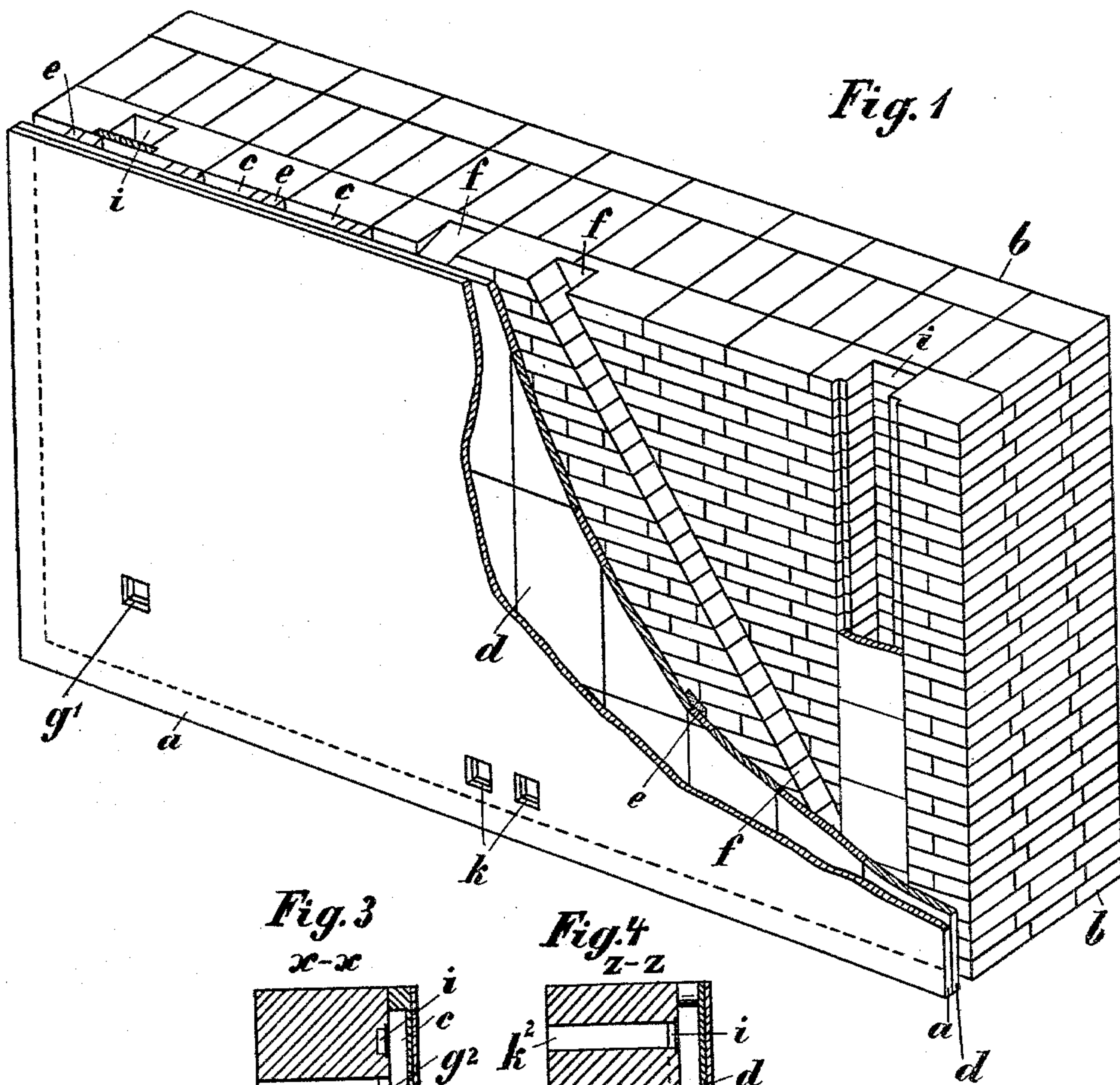
(No Model.)

2 Sheets—Sheet 1.

C. J. SCHULZ.  
DRYING DAMP WALLS.

No. 597,808.

Patented Jan. 25, 1898.



Witnesses  
H. E. Deigner.  
Paul Folber.

Inventor  
Carl Julius Schulz,  
by his Attorneys:  
Dr. J. Schanz, & Co.

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Fig. 2

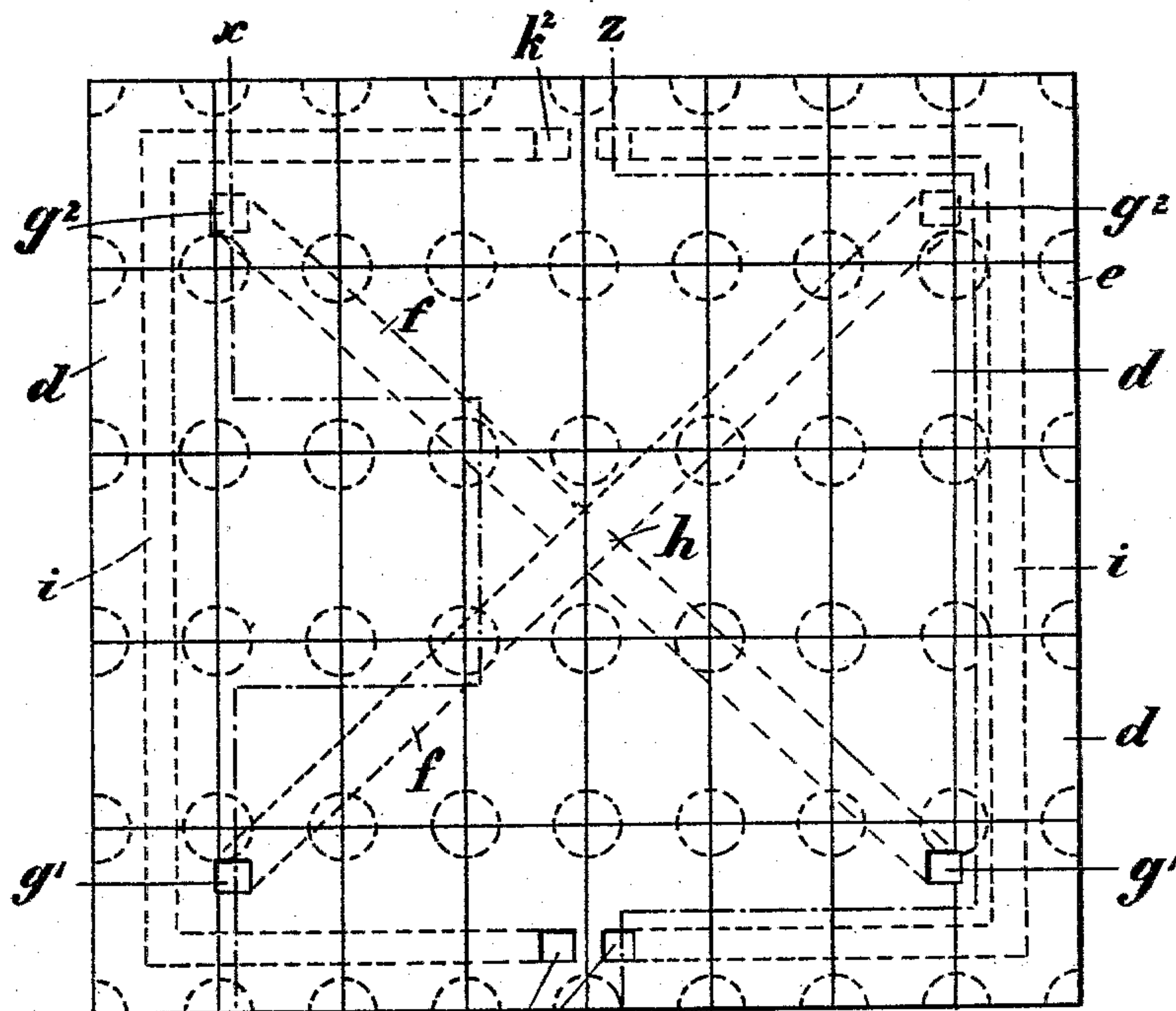
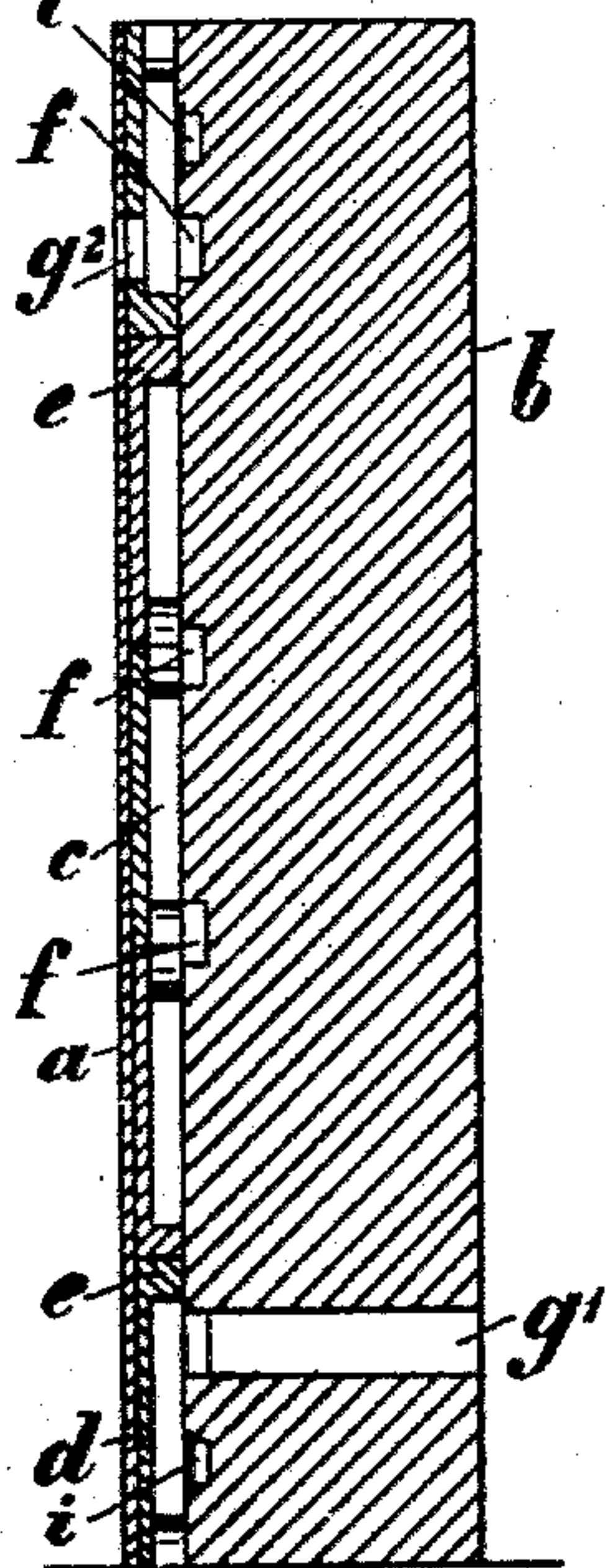
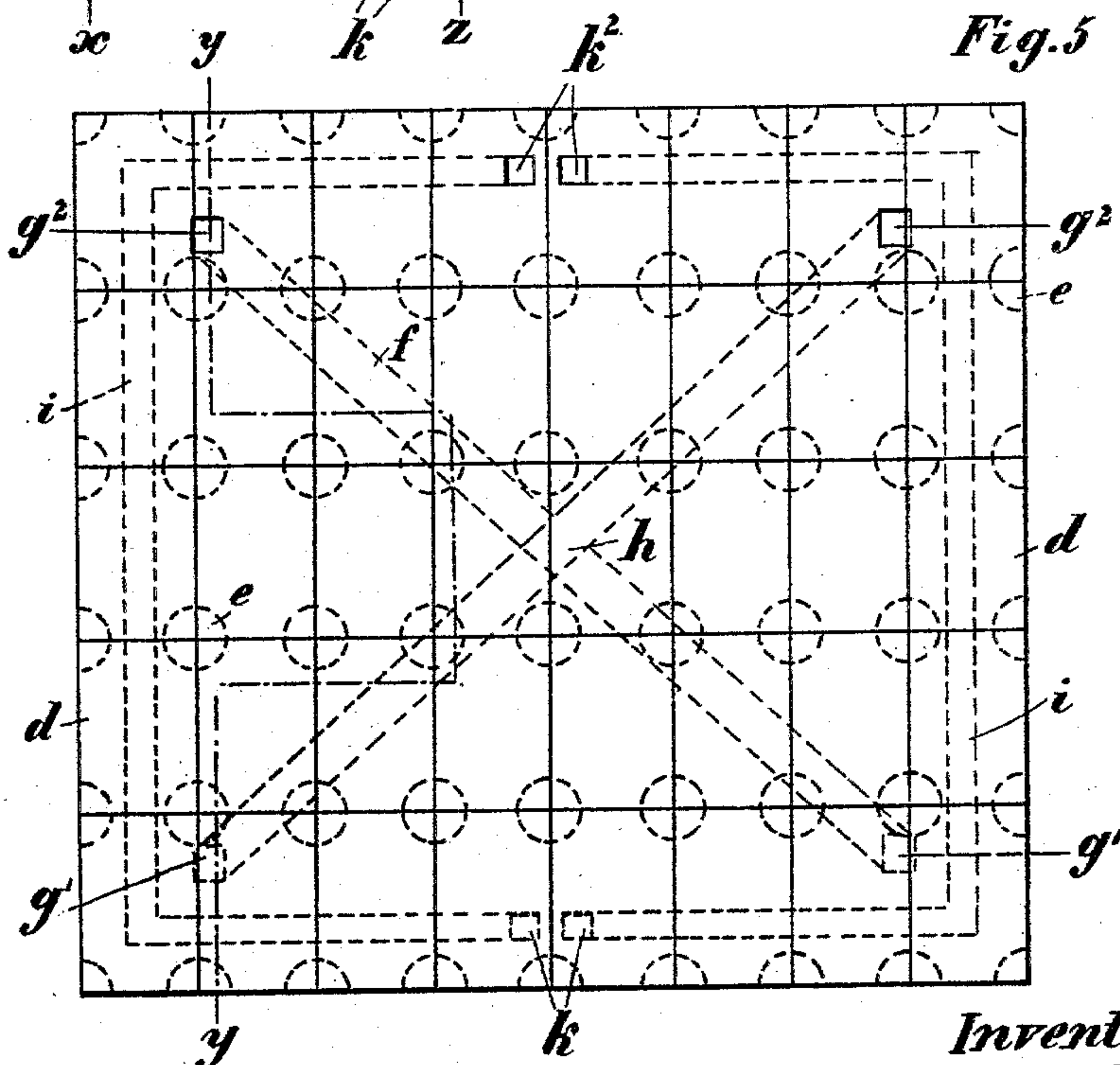


Fig. 6  
y-y



Witnesses  
H. F. DeGner.  
Paul Folber

Fig. 5



Inventor  
Carl Julius Schulz  
by his Attorneys:  
M. J. Schawr & Co



# UNITED STATES PATENT OFFICE.

CARL JULIUS SCHULZ, OF HAMBURG, GERMANY.

## DRYING DAMP WALLS.

SPECIFICATION forming part of Letters Patent No. 597,808, dated January 25, 1898.

Application filed August 13, 1896. Serial No. 602,690. (No model.)

*To all whom it may concern:*

Be it known that I, CARL JULIUS SCHULZ, master mason, of 12 Fröbelstrasse, Hamburg, in the Empire of Germany, have invented new and useful Improvements in Drying Damp Walls, of which the following is a specification.

The present invention relates to a method of draining wall and ceiling plaster of a building and maintaining it permanently dry, whereby at the same time sponginess and the formation of aphroniter are impossible and the inner air of a building is carried off and renewed.

In the accompanying drawings, Figure 1 is a perspective view of a portion of the inner side of a wall with my improvements fitted thereto. Fig. 2 shows the surface of the wall of Fig. 1, the plaster being removed. Figs. 3 and 4 are cross-sections on the lines  $xx$  and  $zz$  of Fig. 2, respectively. Fig. 5 shows the front view of the outer surface of a wall with my improvements fitted thereto, the plaster being removed; and Fig. 6 is a cross-section on line  $yy$  of Fig. 5.

The method has for its object the formation of a hollow space  $c$  underneath the plaster  $a$ —i. e., between it and the wall  $b$ —thus securing a permanent circulation of air. These hollow spaces form a complete and continuous layer between wall and plaster and are produced by means of plates  $d$ , made of slate, glass, or similar material, which are laid upon the wallwork in such a manner that they only touch the wallwork at their corners by means of cross-pieces  $e$ . As a consequence the space  $c$  between the surfaces of the plates and the wallwork remains perfectly free, thus allowing the air to circulate, as desired.

In order to direct the circulation in a definite manner, the wallwork itself is provided with channels  $f$ , which, as shown in Figs. 2 and 5, are suitably arranged diagonally over one another and have their outlets at the ends  $g'$  and  $g^2$ . These channels do not pass through each other at the point of contact  $h$ , but lap around each other, a process very easy to effect. The channels open into the hollow space  $c$  and are thus directly connected with the latter. Their purpose is to create a movement of the air in the whole of the hollow spaces.

In Figs. 1, 2, 3, and 4 the system is applied to the inner side of a wall. The upper openings  $g^2$  of the channels  $f$  are here connected with the outer air and the lower openings  $g'$  with the inner space of the building.

In Figs. 5 and 6, on the other hand, the system is applied to the outer surface of a wall, although the upper openings are also connected with the outer air and the lower openings with the inner space of the building. This form of construction is suited, for instance, for the wallwork of cellars.

In providing for the drainage of the plaster a form of construction can be adopted with advantage for conducting the bad inner air outside, as well as smoke or such like impurities. Extra air-passages  $i$  are inserted in the wallwork around the hollow space  $c$ , the channels being suitably arranged around the whole wall along its periphery. Their openings are below, at  $k$ , and the outlets at  $k^2$ .

The system can be applied in an analogous manner for draining ceiling-plaster.

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

1. In combination with the wall or the ceiling of a building, plates attached to the wallwork and forming a hollow space between themselves and the wall, and channels being inserted in the wallwork, and having the one end connected with the outer air and the other end connected with the inner space of the building, and being connected with the hollow space formed by the wallwork and the said plates, substantially as and for the purpose set forth.

2. In combination with the wall or the ceiling of a building, plates attached to the wallwork and forming a hollow space between themselves and the wall, and channels being inserted in the wallwork, and running along the periphery of the wall, and means for connecting the said hollow space and the said channels with the outer air and with the inner space of the building, substantially as and for the purpose specified.

3. In combination with the wall or the ceiling of a building, plates attached to the wallwork and forming a hollow space between themselves and the wall, channels being inserted in the wallwork, and having the one



end connected with the outer air and the other  
end connected with the inner space of the  
building, and being connected with the hol-  
low space formed by the wallwork and the  
5 said plates, and channels running along the  
periphery of the wall, substantially as and for  
the purpose described.

In testimony that I claim the foregoing as  
my invention I have signed my name in pres-  
ence of two subscribing witnesses.

CARL JULIUS SCHULZ.

Witnesses:

F. H. THIELE,

T. NORRISON.