

(No Model.)

H. MAURER.
FIRE PROOF CEILING.

No. 324,716.

Patented Aug. 18, 1885.

Fig. 1.

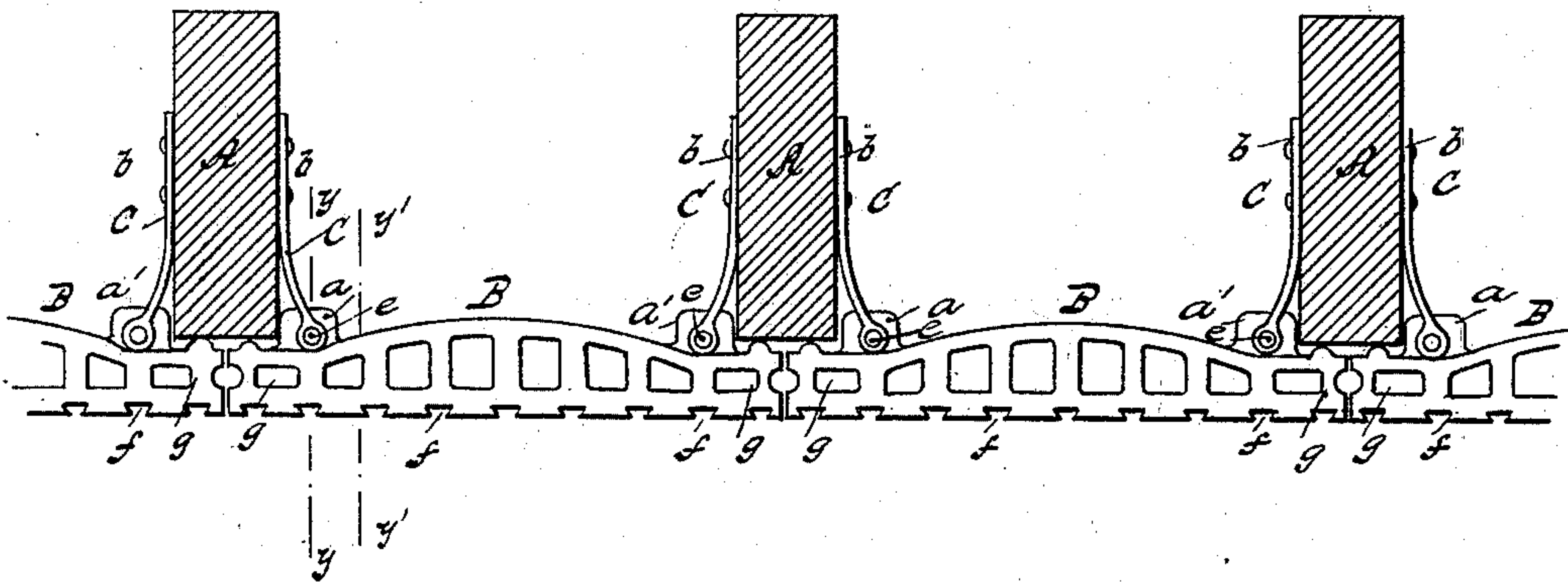


Fig. 2.

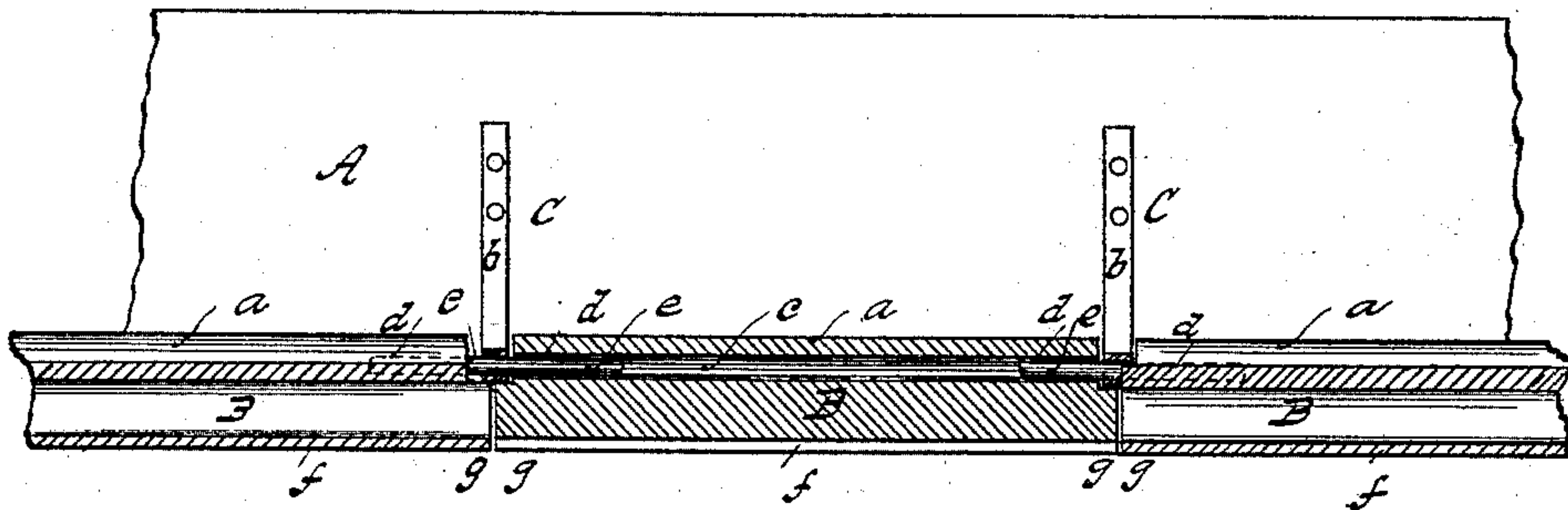
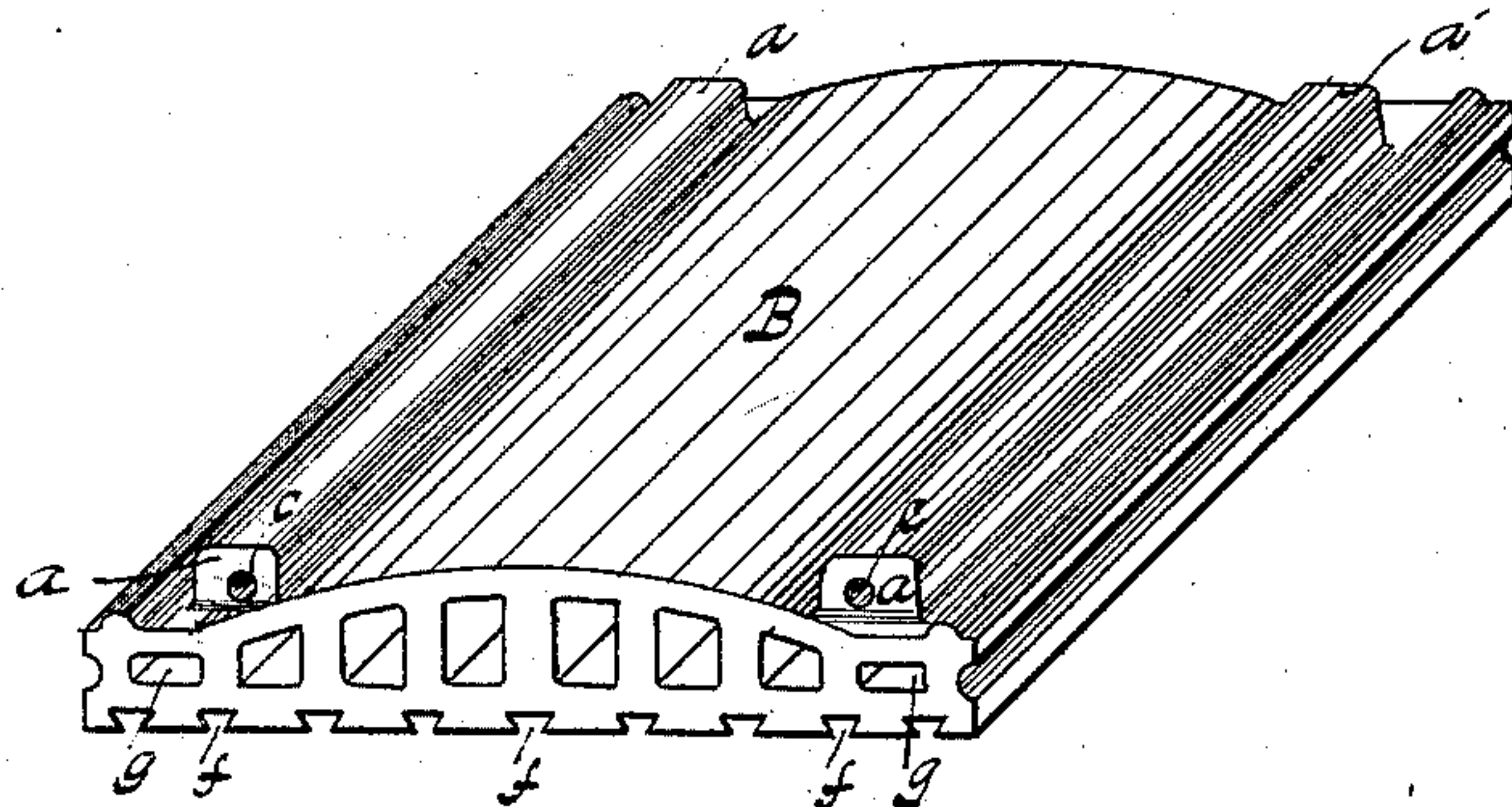


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

HENRY MAURER, OF NEW YORK, N. Y.

FIRE-PROOF CEILING.

SPECIFICATION forming part of Letters Patent No. 324,716, dated August 18, 1885.

Application filed April 16, 1885. (No model.)

To all whom it may concern:

Be it known that I, HENRY MAURER, a citizen of the United States, residing at New York, in the county and State of New York, have
5 invented new and useful Improvements in Fire-Proof Ceilings, &c., of which the following is a specification.

My invention relates to improvements in fire-proof ceilings and the like; and it consists
10 in the combination, with the floor-beams, of hangers provided with suitable arms which are suspended from the floor-beams, tiles having protuberances formed thereon, and sockets in said protuberances, constructed to receive the arms of the hangers, all of which
15 is more fully pointed out in the following specification and claims, and illustrated in the accompanying drawings, in which—

Figure 1 is an end view, partly in section,
20 of a ceiling embodying my invention. Fig. 2 is a vertical section, part in the plane yy , and part in the plane $y'y'$, Fig. 1. Fig. 3 is a perspective view of one of the tiles.

Similar letters indicate corresponding parts.

25 In the drawings, the letters A designate the floor-beams. B are the tiles, and C are the hangers suspended from the floor-beams. As shown, the tiles B are hollow, each having formed therein several air-passages; but the
30 design of the tiles may be modified to suit existing conditions. On each of the tiles are formed protuberances $a a'$, which run longitudinally across the same at some distance from the respective sides, not, however, extending completely across, but stopping short
35 of the edges, in order to leave spaces for the body b of the hanger C, and the said protuberances are in position to abut against the sides of the floor-beams. In the example
40 shown in the drawings a hole, c , extends longitudinally through each of the protuberances $a a'$ on the tiles, and forms sockets d for the arms e of the hangers; but it is evident that a hole could be formed into each end of the
45 protuberances, which would answer the same purpose as one extending completely through the same. In the bottom of the tiles are

formed grooves or dovetails f , which aid in retaining the plaster or other material spread over the tiles.

50 It will appear evident from the above description that by properly adjusting and spacing the hangers C each of the tiles B will be supported at four points by the arms e of the adjoining four hangers.

55 The main advantage gained by constructing a ceiling as and with the tiles described is, that a hollow portion, g , of each of the tiles extends underneath each of the floor-beams A, whereby the latter are effectually protected
60 from the effects of fire, and the use of the ordinary wooden floor-beam is rendered as safe or fire-proof as the use of rolled-iron beams.

I am aware that fire-proof ceilings have been previously constructed of variously-shaped
65 tiles; but in all of these the tiles were placed almost entirely between the floor-beams, and the hollow portions of said tiles did not extend underneath the floor-beams to protect the latter in the manner herein described.

70 For certain purposes the sockets can be formed directly in the tile.

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

1. The combination, with the floor-beams,
75 of the hangers C, provided with suitable arms, the tiles B, and the sockets d in said tiles, constructed to receive the arms of the hangers, substantially as and for the purpose specified.

80 2. The combination, with the floor-beams, of the hangers C, provided with suitable arms, the tiles B, the protuberances $a a'$, formed thereon, and the sockets d in said protuberances, constructed to receive the arms of the
85 hangers, substantially as and for the purpose specified.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

HENRY MAURER.

Witnesses:

W. HAUFF,

A. FABER DU FAUR, Jr.