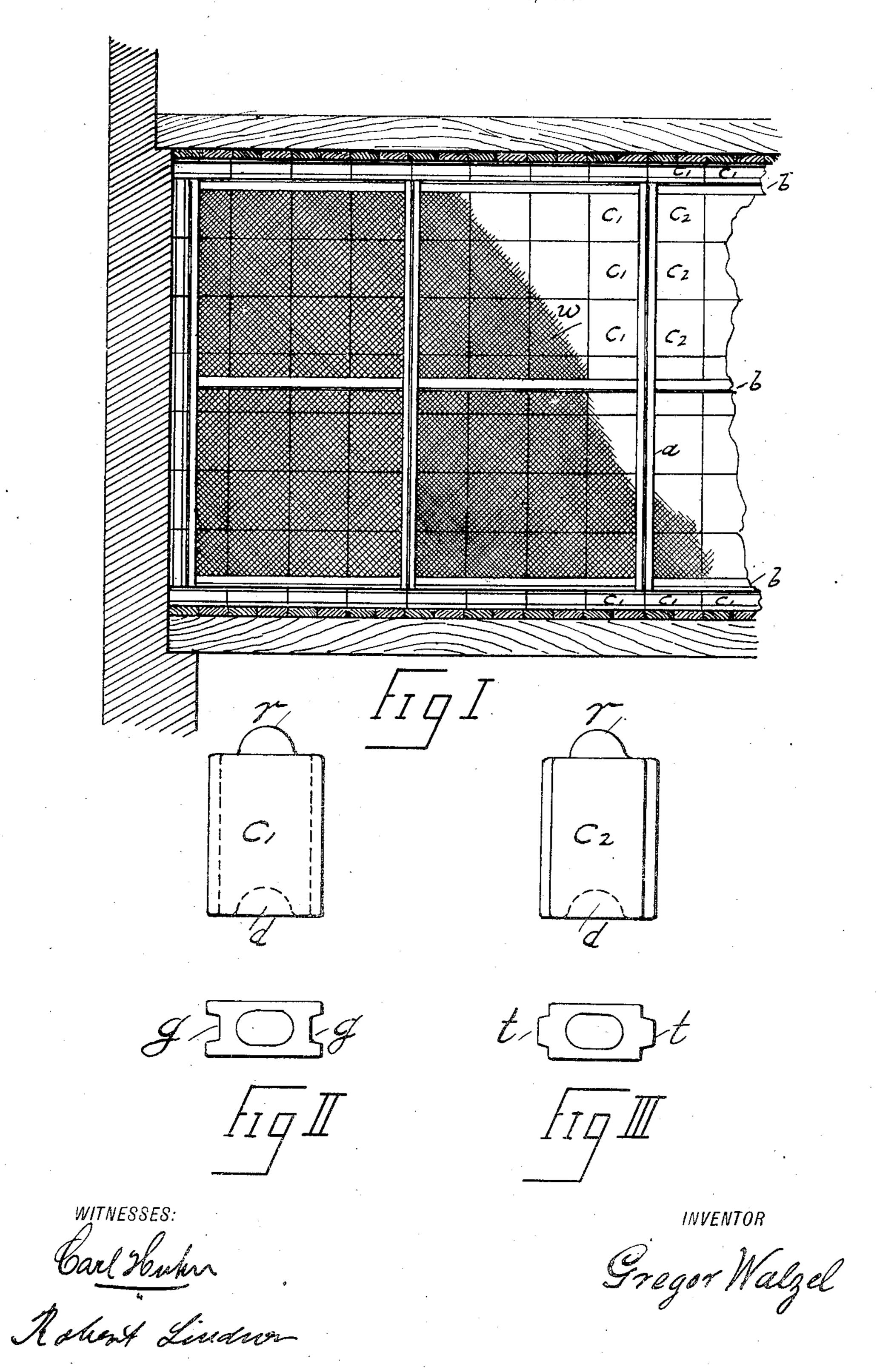
G. WALZEL.
INSULATING WALL.
APPLICATION FILED JULY 17, 1907.



## UNITED STATES PATENT OFFICE.

GREGOR WALZEL, OF NEW YORK, N. Y.

## INSULATING-WALL.

No. 896,780.

Specification of Letters Patent.

Patented Aug. 25, 1908.

Application filed July 17, 1907. Serial No. 384,244.

To all whom it may concern:

Be it known that I, GREGOR WALZEL, a citizen of the United States, residing at New York city, (Manhattan,) county and State of New York, have invented new and useful Improvements in Insulating-Walls, of which the following is a specification.

This invention relates to a novel construction of insulating walls or partitions for refrigerators, cold storage chambers, etc. by which the transmission of the atmospheric temperature is effectively checked.

In the accompanying drawing: Figure 1 is a vertical sectional view of my improved insulating wall, and Figs. 2 and 3 are detail views of the female and male vacuum cells

respectively. The wall is composed essentially of a number of vacuum cells  $c_1$ ,  $c_2$ , laid in courses. .20 These cells, which are preferably made of glass, are hollow, and the air is exhausted therefrom in suitable manner. The construction of the cells is such that they are interlocked with each other at their sides as 25 well as at the top and bottom, so that they are self-sustaining and that a direct flow of atmospheric air along the joints is prevented. To effect this result, each course is composed of female cells  $c_1$ , alternating with male cells 30  $c_2$ . Cells  $c_1$ , are provided at each upright edge with a vertical groove g, adapted for the reception of a tongue t, formed on the corresponding vertical edge of the adjoining male cell  $c_2$ . Furthermore, each cell  $c_1$ ,  $c_2$ , has a 35 concavity or socket d, at its bottom and a corresponding projection or bulge r, at its 

top, so that each cell will be interlocked with the adjoining cells of the same course and also with the vertically alined cells of the superposed courses.

In constructing the wall, the cells, laid in the manner described, are faced by a wire screen w, which is secured in place by a system of vertical and horizontal bars a, b. As the blocks are not connected by mortar at 45 their joints, the screen and bars constitute additional means for holding the blocks against displacement. The ceiling and floor may also be composed of the interlocking vacuum cells, as indicated by the upper and 50 lower reference letters  $c_1$ , Fig. 1.

It will be seen that my improved wall diminishes, to a considerable extent, the transmission of heat by conduction, so that an efficient insulation is obtained.

The invention may be used either for the construction of a wall complete in itself, or for lining a wall composed of brick or other material.

An insulating wall, comprising superposed rows of vacuum cells having interlocking tongued and grooved sides, and interlocking socketed and bulged tops, substantially as

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GREGOR WALZEL.

Witnesses:

CARL HUBER, ROBERT LINDNER.