

(No Model.)

E. L. RANSOME.
ILLUMINATING FLOOR.

No. 570,102.

Patented Oct. 27, 1896.

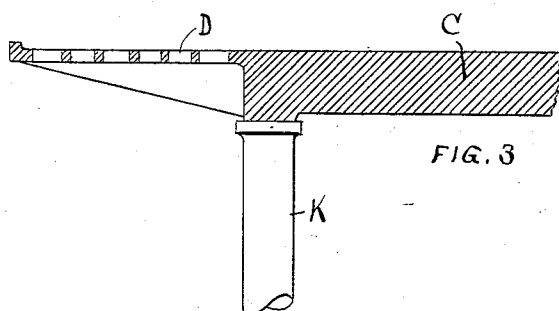


FIG. 3

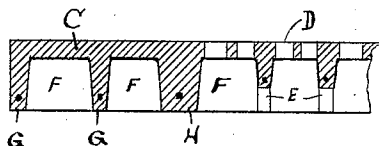


FIG. 2

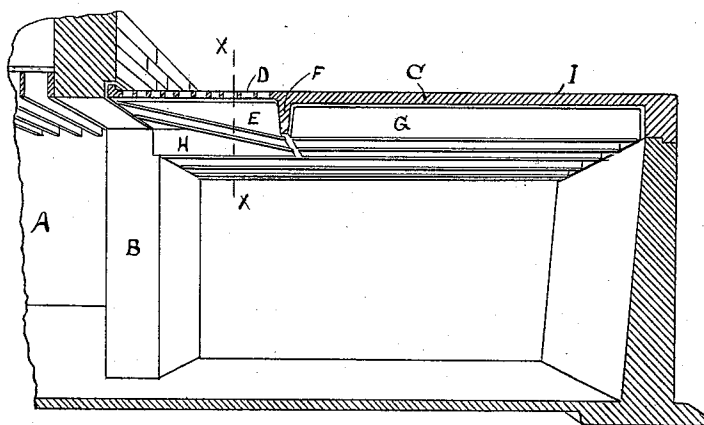


FIG. 1.

WITNESSES:

Casper L. Redfield.

Geo. H. Longard.

INVENTOR:

Ernest Leslie Ransome.

UNITED STATES PATENT OFFICE.

ERNEST L. RANSOME, OF CHICAGO, ILLINOIS.

ILLUMINATING-FLOOR.

SPECIFICATION forming part of Letters Patent No. 570,102, dated October 27, 1896.

Application filed March 23, 1896. Serial No. 584,543. (No model.)

To all whom it may concern:

Be it known that I, ERNEST LESLIE RANSOME, a citizen of the United States, residing in Chicago, Cook county, Illinois, have invented an Improvement in Illuminating-Floors; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates, primarily, to giving light to the underground stories of buildings; and it consists in an improved method of upholding the illuminating-tile placed in the sidewalk or other floor for that purpose.

In the ordinary construction of the illuminating parts of sidewalks used for the purpose of giving light to the underground story of a building it has been customary to support them on the building by means of a beam resting upon the piers of the building and spanning the space through which light is to be passed. In concrete-iron construction these beams are necessarily comparatively deep, and consequently they intercept an undue portion of the light and therefore are very objectionable.

A method of construction has been devised to remedy this, whereby the beam is cut away in part, so as to lessen the interception of light. This is also objectionable, because it is only a partial remedy and is costly.

By my invention I dispense with this beam altogether and also with all direct support from the building of this illuminating portion of the sidewalk. Instead thereof I uphold the illuminating-tiles from the far side by cantalivers, as hereinafter described.

My invention is illustrated by the accompanying drawings.

Figure 1 is a perspective view of the under side of one of my standard concrete-iron illuminating-sidewalks in place with my present improvement introduced. Fig. 2 is a cross-section taken on line X X of Fig. 1, showing the general construction of the sidewalk or floor. Fig. 3 shows a modified form of construction.

A is the underground chamber; B, one of the wall-piers supporting the building; C, sidewalk; D, illuminating-tile; E, cantaliver;

F, header-beam; G, sidewalk-beams; H, sidewalk-beams of increased strength; I, top of walk; K, column.

By reference to the drawings it will be seen that there is no beam supporting the illuminating part of the sidewalk over the opening in the basement-wall. This part of the sidewalk is entirely unsupported at the building-line. Instead thereof the illuminating-tiles D are upheld by the cantalivers E, which are sustained in position by the header-beam F, and this beam is supported at each end by beams H.

In narrow sidewalks, in place of beams F, G, and H, the walk may be solid, as shown in Fig. 3; also, in place of or in addition to the beam F being attached to the beams H, it may be supported wholly or in part by one or more columns K, as shown in Fig. 3.

In concrete-iron construction the sidewalk is usually built monolithically *in situ*; but it may be built in-sections or in any of the well-known ways.

While my invention is primarily designed and is eminently adapted to concrete-iron construction, I do not limit it thereto, for it may be used in other modes of construction. In like manner I do not limit myself to any special shape or material in the illuminating-tiles; nor do I limit the invention to a sidewalk, for it is equally adapted for a court or for a driveway or for any situation where it is advisable to introduce light in that way.

Having thus fully described my invention, what I claim is—

In combination with the walls of an underground chamber, one of which also serves as the wall of a building and has an opening therethrough, of a sidewalk supported by said walls above the opening and having adjacent to it an illuminating portion not supported directly by the said walls, and cantalivers secured to the sidewalk and serving to support the illuminating portion thereof.

ERNEST L. RANSOME.

Witnesses:

H. J. FARNHAM,
W. NORMAN MURRAY.