(No Model.) 2 Sheets—Sheet 1.

C. L. HEISTER.

CEILING.

No. 549,721. Patented Nov. 12, 1895.

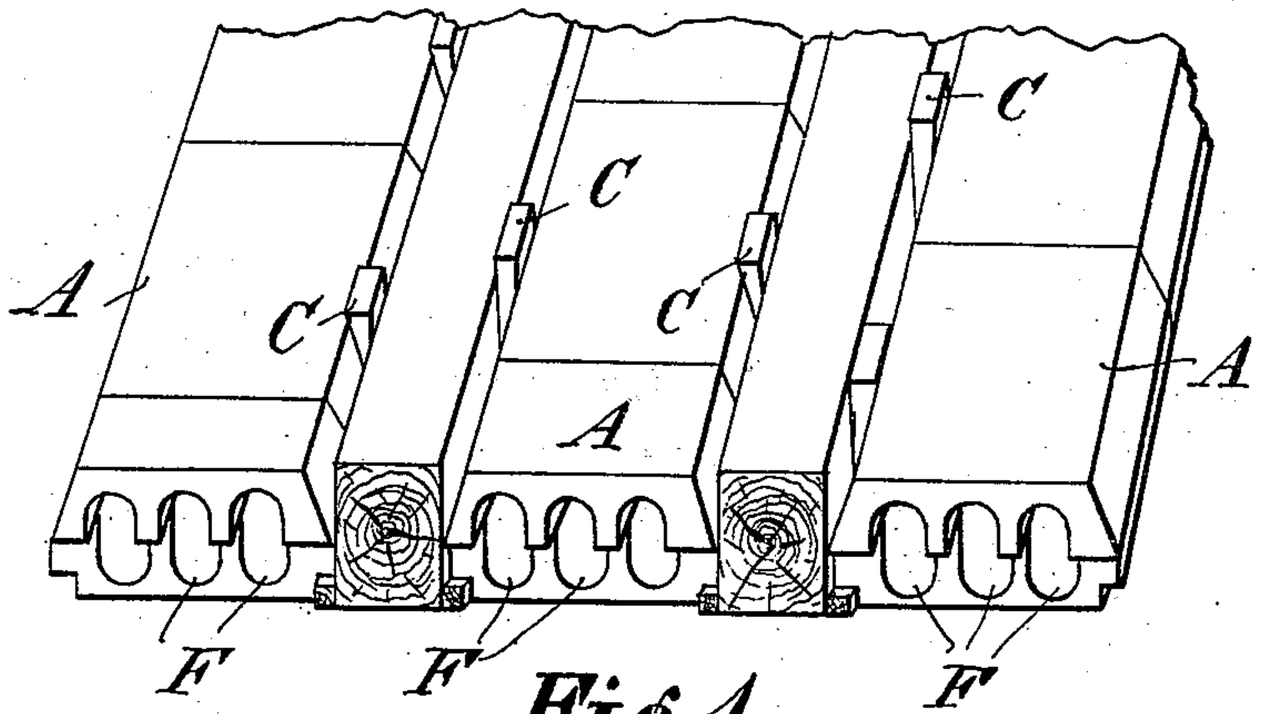

Fig. 1.

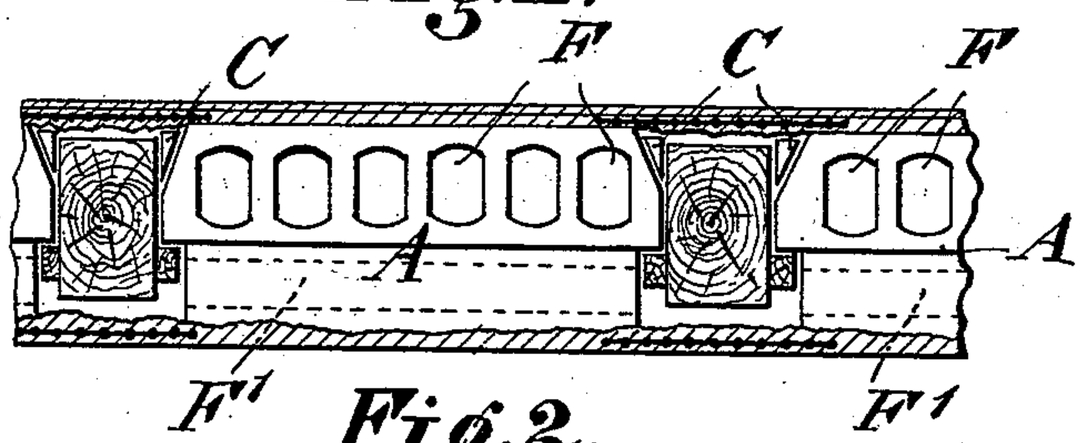

Fig. 2.

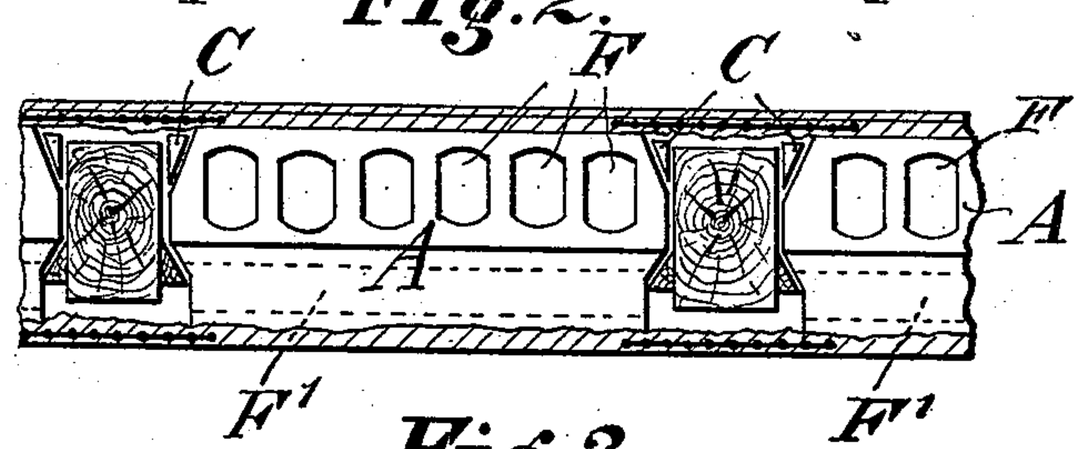

Fig. 3.

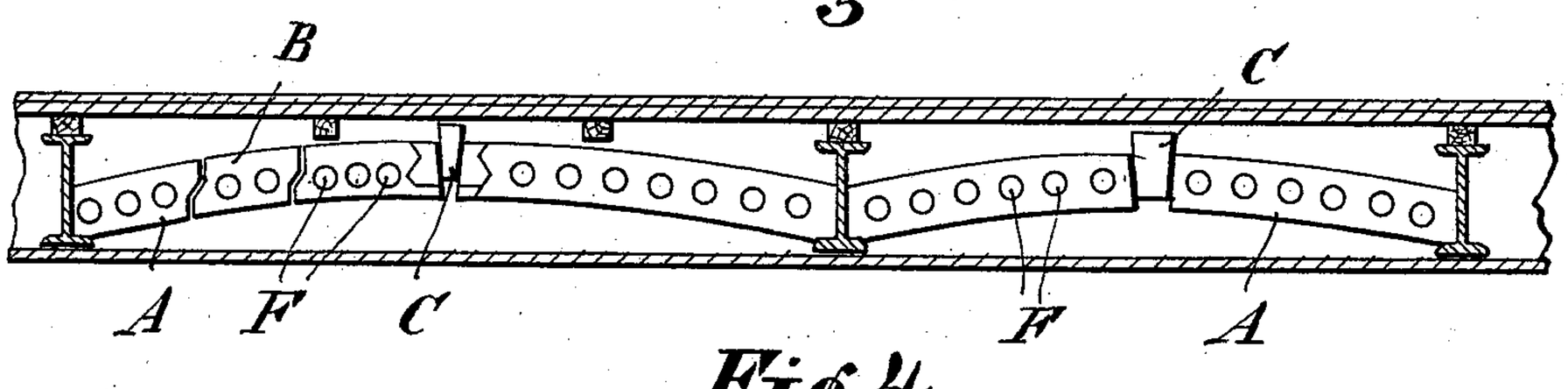

Fig. 4.

Witnesses:
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Inventor:
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Attorneys.

(No Model.)

2 Sheets—Sheet 2.

C. L. HEISTER.

CEILING.

No. 549,721. Patented Nov. 12, 1895.

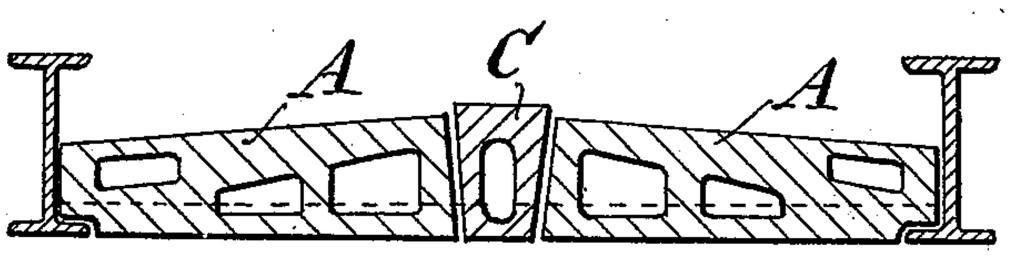

Fig. 5.

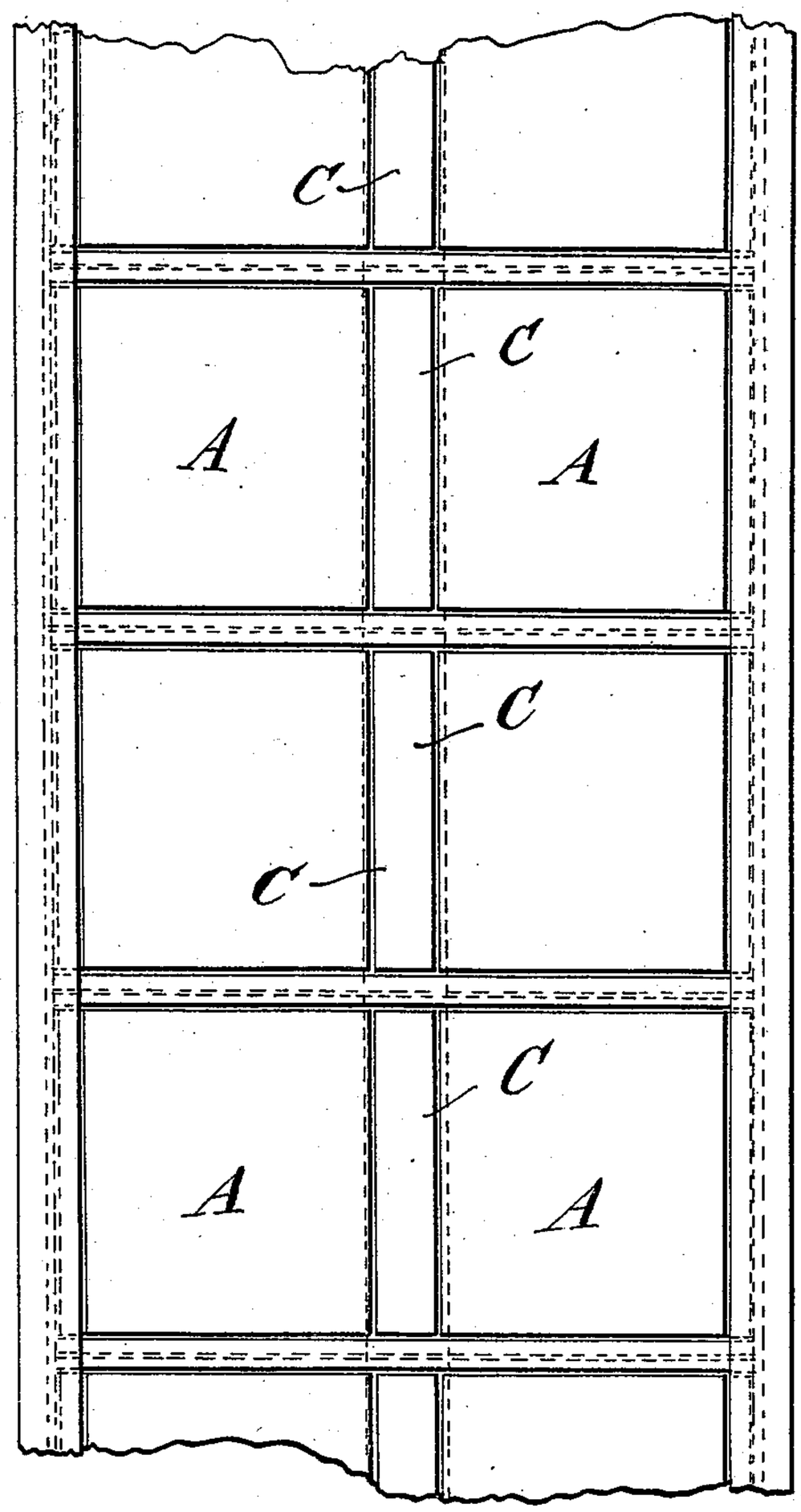

Fig. 6.

Witnesses:
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UNITED STATES PATENT OFFICE.

CHRISTIAN LUDWIG HEISTER, OF FRANKFORT-ON-THE-MAIN, GERMANY.

CEILING.

SPECIFICATION forming part of Letters Patent No. 549,721, dated November 12, 1895.

Application filed April 16, 1895. Serial No. 545,944. (No model.) Patented in Germany January 30, 1892, No. 66,355; in France October 18, 1892, No. 222,760; in Switzerland December 31, 1893, No. 7,288; in Belgium March 31, 1894, No. 109,050, and in Austria July 20, 1894, No. 44/3,362.

To all whom it may concern:

Be it known that I, CHRISTIAN LUDWIG HEISTER, a subject of the Emperor of Germany, residing at Frankfort-on-the-Main, Germany, have invented certain new and useful Improvements in Ceilings, (for which I have obtained Letters Patent of Germany, No. 66,355, dated January 30, 1892; of France, No. 222,760, dated October 18, 1892; of Switzerland, No. 7,288, dated December 31, 1893; of Belgium, No. 109,050, dated March 31, 1894, and of Austria, No. 44/3,362, dated July 20, 1894,) of which the following is a specification.

The invention relates to certain improvements in the constructions of ceilings, and has for its object to render such ceilings more durable and to allow them to be built up in a dry state very quickly and in a simple manner and to avoid such disadvantages which are followed by making the ceilings in the wet way, as heretofore has been usual.

The invention consists substantially in such features of construction, arrangement, and combinations of parts as will hereinafter be more particularly described.

In the drawings, Figure 1 is a perspective view of an even ceiling made according to my invention, and Figs. 2 and 3 sectional views of slight modifications of the arrangement shown in Fig. 1. Figs. 4 and 5 are sectional views of the invention as applied to entablatures made of **I**-iron, Fig. 4 showing a coved and Fig. 5 an even or straight ceiling. Fig. 6 is a view from below of a ceiling made according to Fig. 5.

A are the plates or blocks, made of artificial-stone matters, quite ready for use. Such plates when dry are placed between the timbers of the building and held firmly on their place by keys or wedges C, which are driven in at the joints between the plates and the timbers or between two juxtaposed plates, as shown in Figs. 4, 5, and 6, the plates being for this purpose tapered on their side edges. The plates are supported by lateral ledges fixed on the timbers or by the lateral flanges of the **I**-iron, as shown in Figs. 4 and 5.

The ledges may be square, as in Figs. 1 and 2, or have a triangular cross-section, as in Fig. 3.

For suiting any distances between the timbers or **I**-irons separate supplementary or intercalary plates B, Fig. 4, may be used, the side edges of which, in like manner as the adjoining side edges of the main plates, having such a form as to hold said plates B on their place, as is clearly shown in Fig. 4.

The plates A may be flush with the timbers, as shown by Fig. 1, or they may project downward and upward under and above the level of the timbers, as shown in Figs. 2 and 4. In the latter case a netting of wire or fabric is stretched below and above the timber, so as to leave an air-space between the timber and the outer air. This arrangement will make the ceiling fireproof, as the air-space is a bad conductor of heat and prevents the ceilings from being ignited by an outer fire.

In order to render the plates light, channels F are made through them. These channels may be single and arranged in one direction only, as shown in Figs. 1, 4, and 5, or they may be in two series, one above the other and one crossing the other in a right angle, as shown by F and F′ in Figs. 2 and 3. In the latter case the channels F′, together with the air-spaces below the timbers, provide continuous air-circulating spaces throughout the whole ceiling.

I claim—

1. A ceiling made of dry artificial stone plates or blocks supported by the timbers or entablatures of the building, held on their place by keys or wedges and having two rows of perforations or channels F, F′, one above the other and crossing each other in right angles.

2. A ceiling made of dry artificial stone plates or blocks supported by the timbers or entablatures of the building, held on their place by keys or wedges and projecting above

and below the timbers, the interstices left being overstretched by a netting of wire or fabric substantially as set forth.

3. As an article of manufacture an artificial stone plate or block for ceilings having tapered side edges and two series of perforations or channels one above the other and crossing each other in right angles.

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

CHRISTIAN LUDWIG HEISTER.

Witnesses:
FRANZ HASSLACHER,
MICHAEL VOLTS.