

(No Model.)

H. MAURER.
FIRE PROOF CEILING.

No. 299,820.

Patented June 3, 1884.

Fig 1

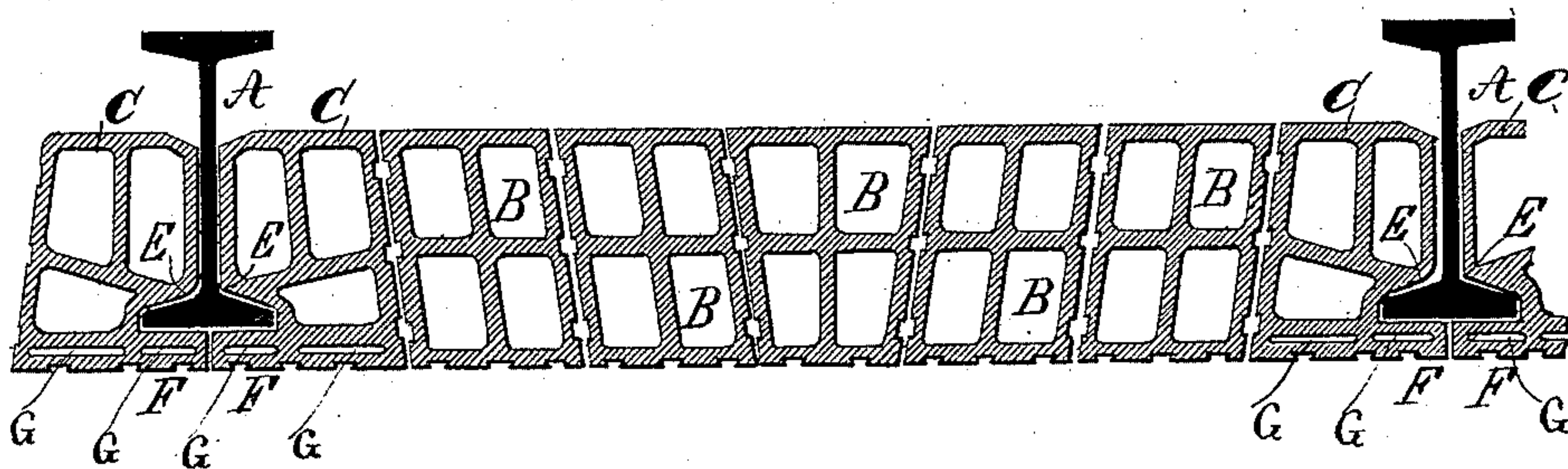


Fig 2.

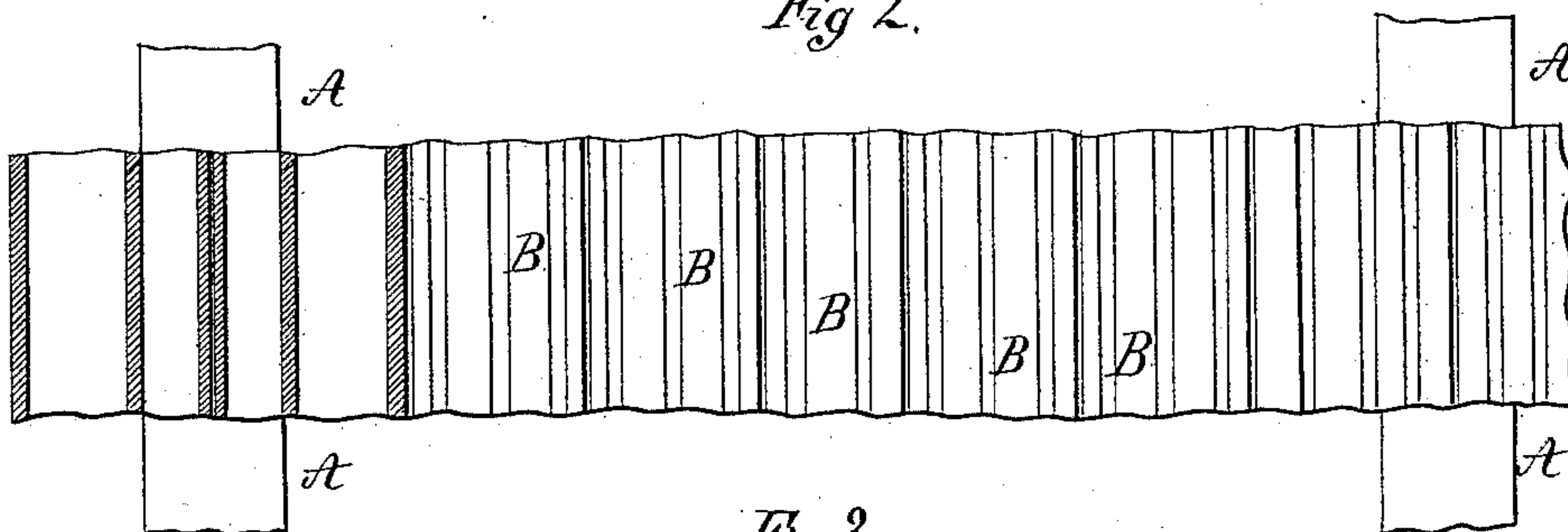
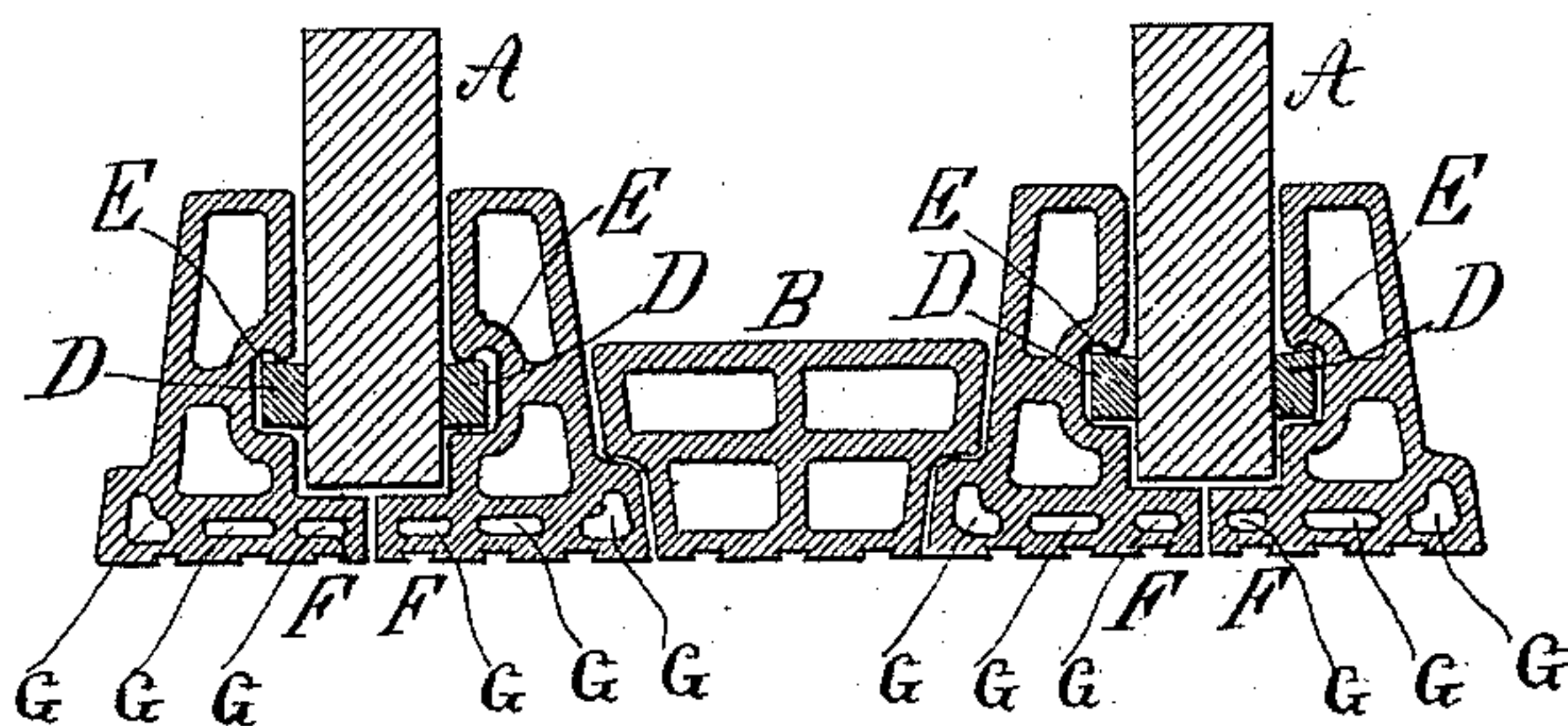


Fig 3.



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. 299,820, dated June 3, 1884.

Application filed December 5, 1883. (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, of which the following is a specification.

My invention relates to that class of ceilings in which a flat course of blocks or tiles com-
10 posing a "flat arch," so called, is combined with skewbacks resting on suitable portions of the beams. Prior to my invention these skewbacks have been made with flanges or extensions meeting under the beams, to protect the
15 latter at that point; and one object of my invention is to increase the effect of such flanges; to which end it consists in providing the same with longitudinal spaces or passages. Another
20 object is to protect the body or main portion of the skewbacks against flaws or imperfections; to which end it consists in forming spaces or passages in the entire lower portions of the skewbacks, as hereinafter more fully described.

25 In the accompanying drawings, Figure 1 represents a cross-section of a portion of a ceiling embodying my invention. Fig. 2 is an inverted plan view thereof, partly in section. Fig. 3 illustrates a modification.

30 Similar letters indicate corresponding parts. The letter A designates the beams, B the arch-blocks, and C the skewbacks.

When iron beams of the usual I shape are used, the lower flanges thereof afford the re-
35 quired support to the skewbacks C, as shown in Fig. 1, while when wooden beams are used cleats D are attached thereto for this purpose, as shown in Fig. 3, the skewbacks being in either case provided with shoulders E, to rest
40 on the proper parts of the beams.

45 The faces of the skewbacks C constitute abutments for the arch-blocks B, which are hollow, and are cast or otherwise formed to any usual or suitable shape to preserve the proper relation to each other in use, while the skewbacks, as well as the arch-blocks, are sunken to bring the lower edges thereof in planes below the beams, as shown. On the

skewbacks C are cast or otherwise formed flanges or extensions F, which meet under the
50 beams, approximately in the center line thereof, while in the entire lower portions of the skewbacks, below the beams, are formed spaces or passages G, which extend longitudinally thereof, and one of which is in the flanges or
55 extensions F, respectively. The effect of these spaces or passages G is to protect the body or main portion of the skewbacks C against flaws or imperfections due to careless handling or other causes, inasmuch as if the lower portion
60 of the skewback should become injured the body thereof will remain intact. The spaces or passages of the flanges F, moreover, tend to increase the effect of such flanges—which is
65 to protect the under portions of the beams—due to the circulation of air in the spaces named, and it is evident that these spaces may be used independently of the other or remain-
ing spaces of the skewbacks.

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

1. The combination, substantially as here-
inbefore described, with the beams and arch-
blocks, of the skewbacks having flanges or ex-
75 tensions for protecting the under portions of the beams, provided with longitudinal spaces or passages.

2. The combination, substantially as here-
inbefore described, with the beams and arch-
blocks, of the skewbacks having the lower
80 edges in planes below the beams, having flanges or extensions meeting under the beams, and having longitudinal spaces or passages in the entire lower portions thereof.

3. As a new manufacture, a skewback of the
85 character hereinbefore described, having a flange or extension for protecting the under portion of a beam, provided with a longitudinal space or passage.

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

HENRY MAURER. [L. S.]

Witnesses:

W. HAUFF,

CHAS. WAHLERS.