

No. 612,024.

W. D. DRAKE.
CAR ROOF.

Patented Oct. 11, 1898.

(No Model.)

(Application filed Mar. 28, 1898.)

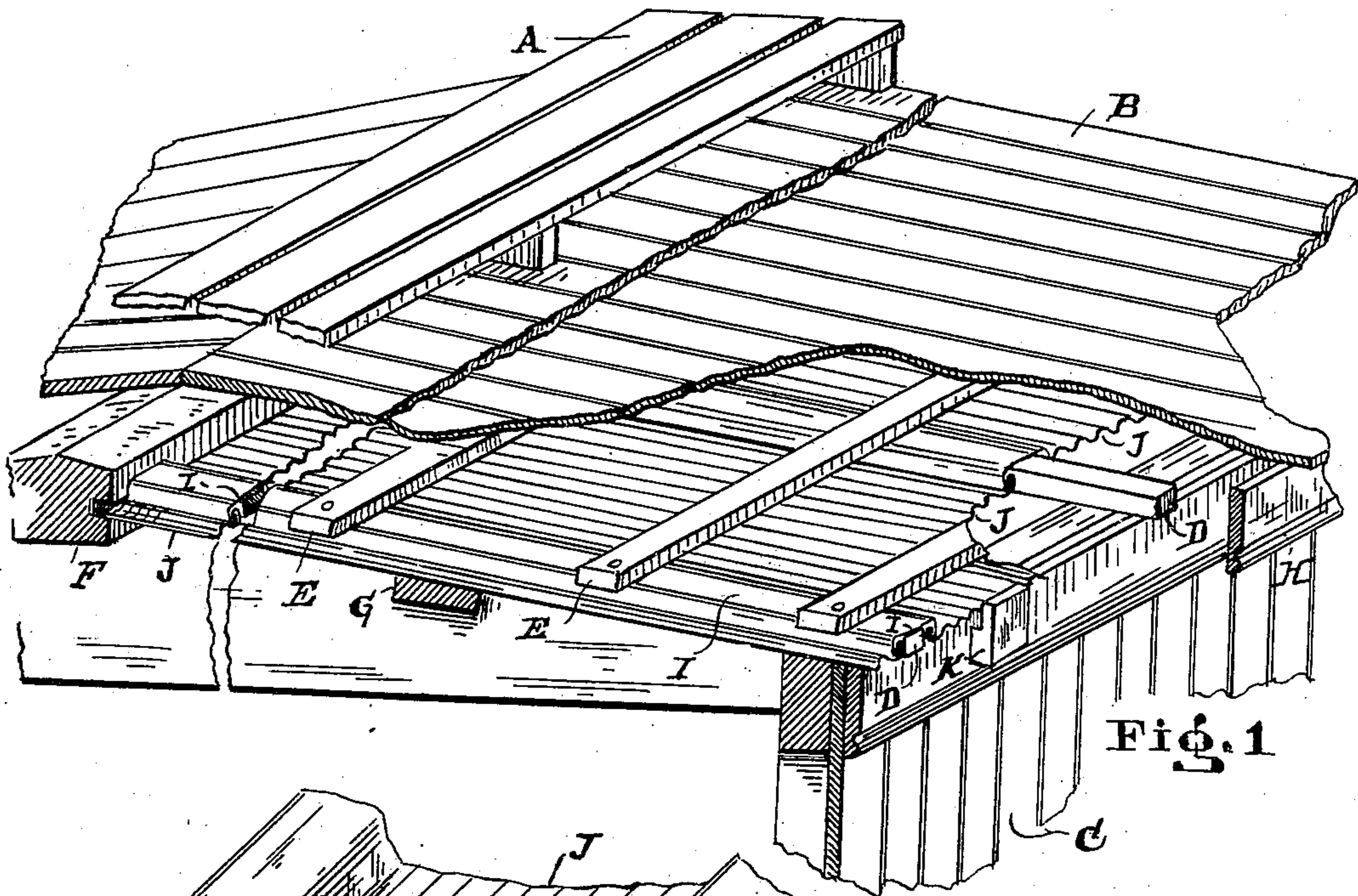


FIG. 1

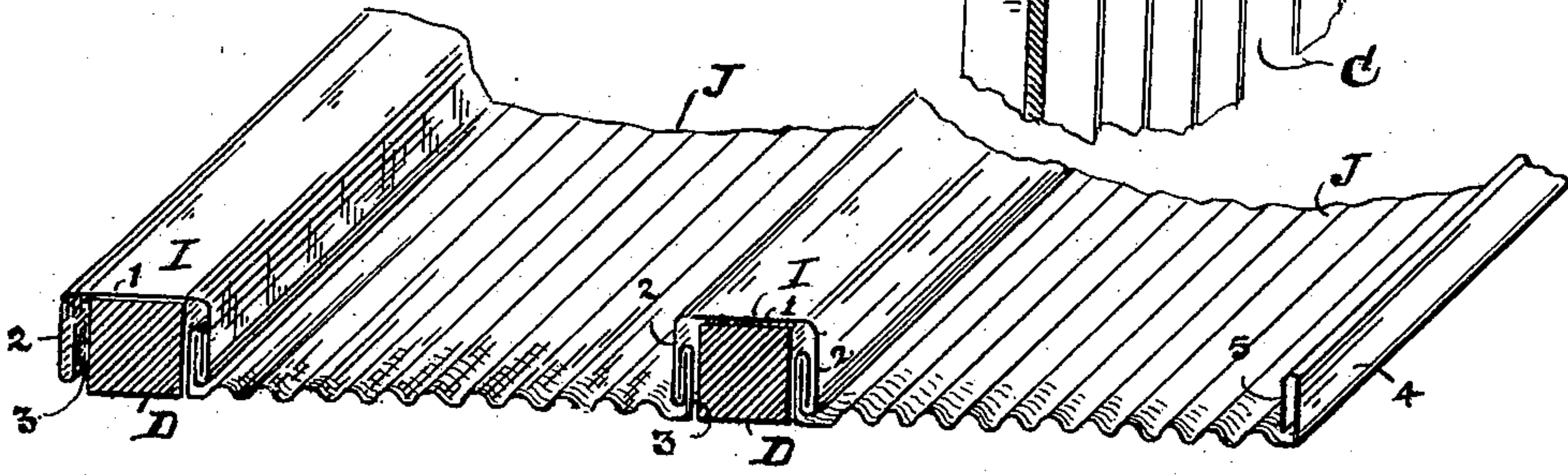


FIG. 2

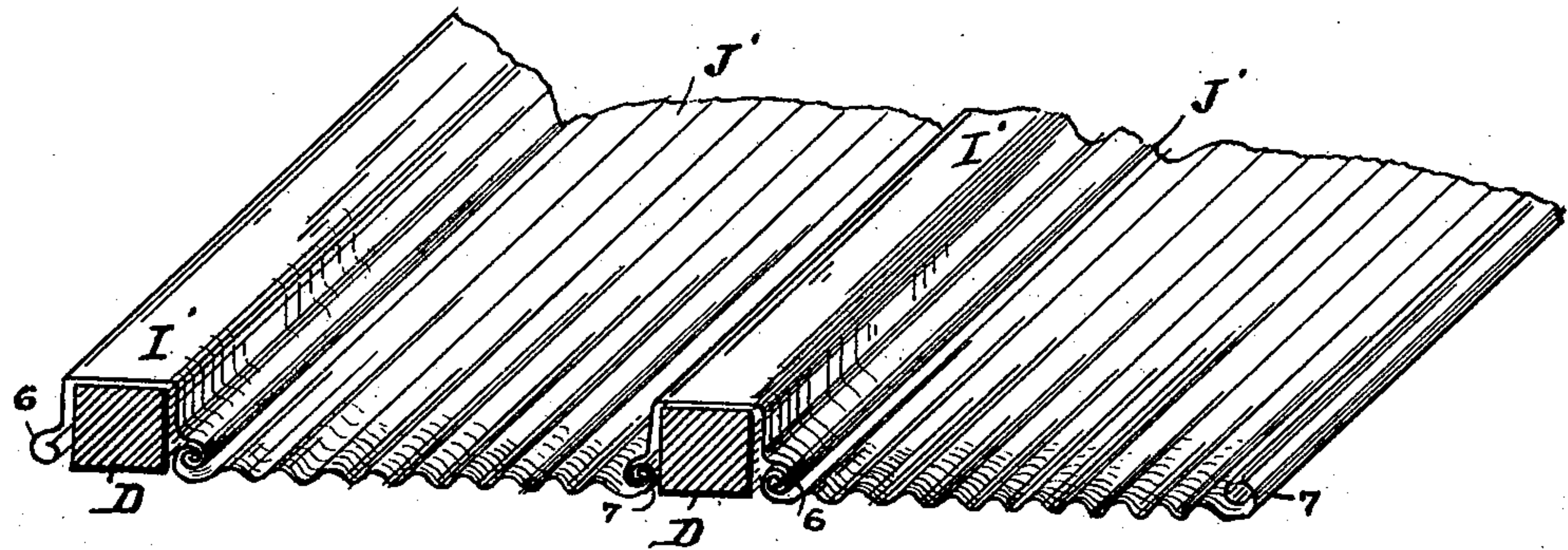


FIG. 3

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CAR-ROOF.

SPECIFICATION forming part of Letters Patent No. 612,024, dated October 11, 1898.

Application filed March 28, 1898. Serial No. 675,405. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM D. DRAKE, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and useful Improvement in Car-Roofs, of which the following is a specification.

My invention relates principally to improvements in what is known as a "double" car-roof, or a car-roof having an outer roof of boards and an inner roof of sheet metal; and the object of my invention is to provide a flexible inner roof which will not be injured by any strain to the car and which will effectually protect the inside of the car from water, fire, or other outside influences.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a part of a car-roof having a part of the roof removed to show the construction of the inner roof. Fig. 2 is a perspective view of a section of the inner roof. Fig. 3 is a perspective view of the inner roof, showing a modified form of the metal cap or hanger which holds the metallic sheets of the inner roof.

Like letters and figures refer to like parts throughout the several views.

In Fig. 1 is shown part of a car-roof. The roof is provided with running-boards A, outer roof-boards B, siding C, rafters D, longitudinal ribs E, ridge-pole F, intermediate purlins G, and facia H. Resting on the rafters D and extending from the eaves of the car to the ridge-pole is a metal cap or hanger I, as shown in Figs. 1 and 2. The upper part 1 of the cap I is of suitable form to rest upon the rafter D and extends off from the rafter, as shown in the drawings, and at each side is bent downward, forming the sides 2 2, and at its ends has an inner upward bend 3 3, as shown in the drawings, thus forming a flexible hanger of suitable form to hold the sides of the metallic sheets of the inner roof.

The metallic sheets J of the inner roof at each end have an upward extension 4 and a downward inner bend 5, as shown in the drawings, making each end of the sheets of suitable form to slide into and interlock with the adjacent side of the hanger I, as shown in Figs. 1 and 2. The ends of the metallic sheets thus constructed slide into the sides of the

hangers I, and when placed in position in engagement with the hangers the sheets are held from withdrawal by a hook or the stop-block K. (Shown in Fig. 1.) When the sheets are interlocked with the hangers I, as shown in the drawings, a continuous flexible metallic inner roof is formed.

In the construction of double car-roofs it is desirable that the metal sheets composing the inner roof should cover the top of the rafters and form one continuous metal surface, so as to avoid injury to the contents of the car from water which may leak through the upper board roof or from fire caused from sparks. It is also desirable that the metal sheets should be so attached to the roof that they will not buckle or be torn off by reason of any strain to the roof.

With my invention these advantages are obtained: The inner roof being constructed entirely of metal and the rafters being covered by the hangers I, which are connected with the metal sheets, it is impossible for fire to get through the roof into the car, and any water which may get through the upper board roof is carried on the metal sheets to the eaves of the car. The metal sheets being held loosely in the sides of the hangers I, the inner roof is rendered flexible, so that it will not buckle or be torn by any strain caused by the working of the car-body, and at the same time the roof may easily be put together, it only being necessary to place the metal caps or hangers I on the rafters and slide the metal sheets into place, as shown in Fig. 1.

To remove the sheets for repair, it is only necessary to take off the facia H and stop-block K and slide out the sheets.

If desired, the form of hanger may be as I' in Fig. 3, in which case the sides of the metallic sheets J would be constructed as at 7, (shown in Fig. 3,) of suitable form to interlock with the ends 6 of the hanger I'. I prefer to have the metal sheets J made corrugated, as shown in the drawings, as greater strength and flexibility is attained. It is not, however, essential to my invention that the sheets should be corrugated.

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

1. In a roof, in combination, the rafters, hangers resting on the rafters and provided

with flexible sides which are free from the rafters and which extend downward and with upward turn free from the rafters, metallic sheets suspended from the hangers by sides
5 which interlock with the sides of the hangers, forming with the hangers a continuous flexible roof, substantially as shown and described.

2. In a roof, in combination, the outer roofing, rafters, hangers resting on the rafters
10 and provided with flexible sides which are

free from the rafters and which extend downward and with upward turn free from the rafters, metallic sheets suspended from the hangers by sides which interlock with the
15 sides of the hangers forming with the hangers a continuous flexible inner roof, substantially as shown and for the purposes described.

WILLIAM D. DRAKE.

Witnesses:

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