

(No Model.)

G. J. CARPENTER.
CARRIAGE TOP.

No. 448,931.

Patented Mar. 24, 1891.

Fig. 1.

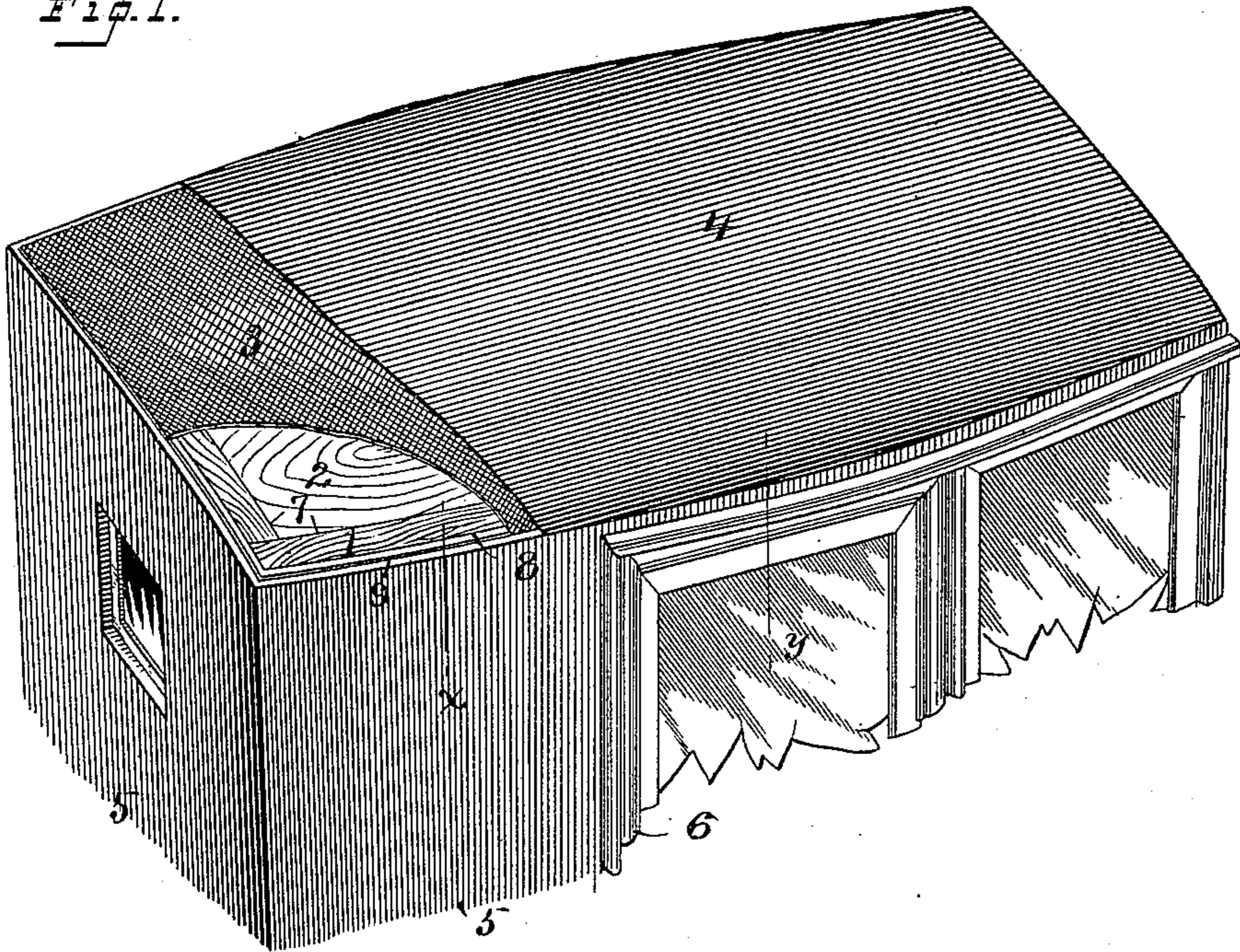


Fig. 2.

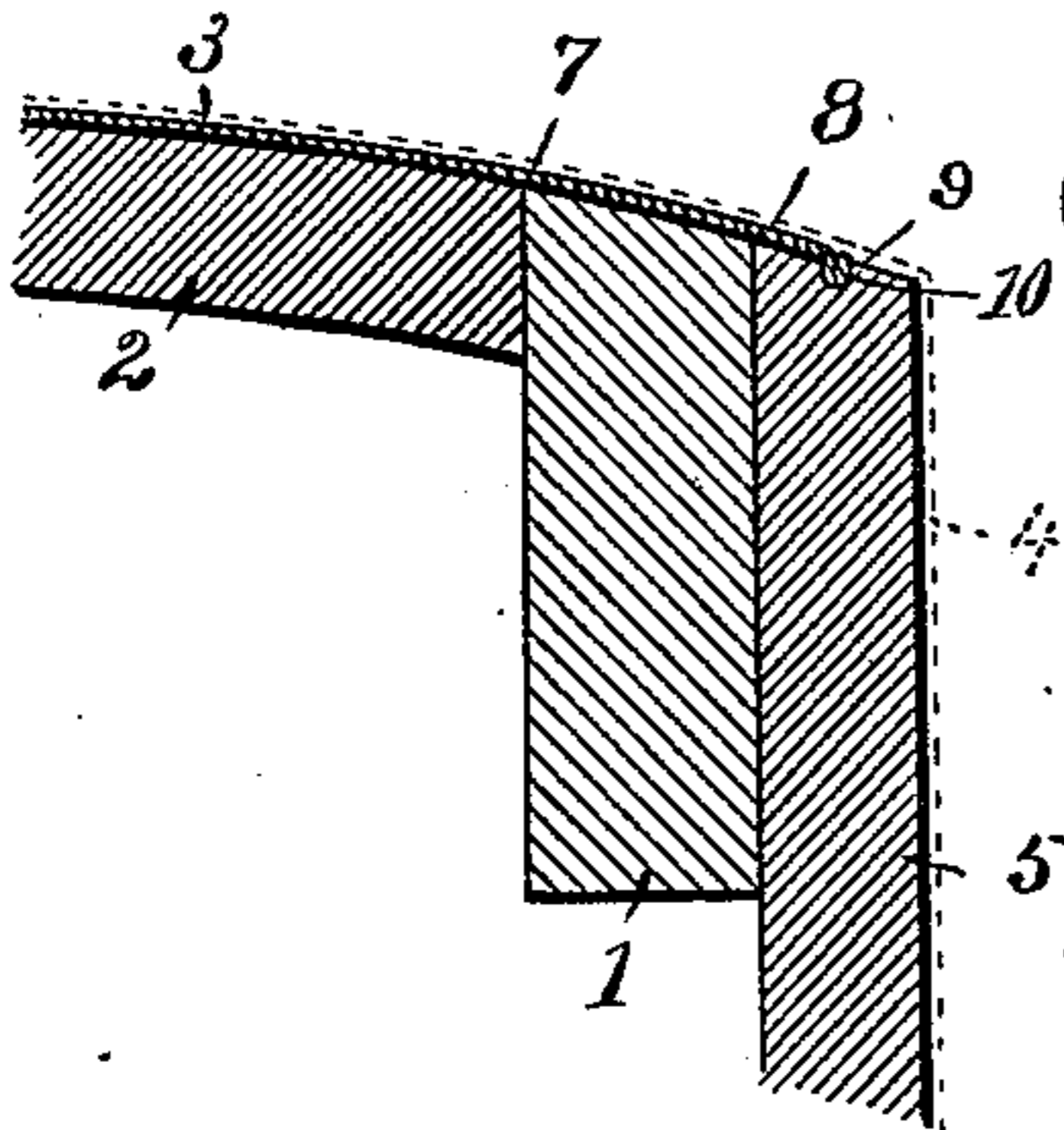


Fig. 4.

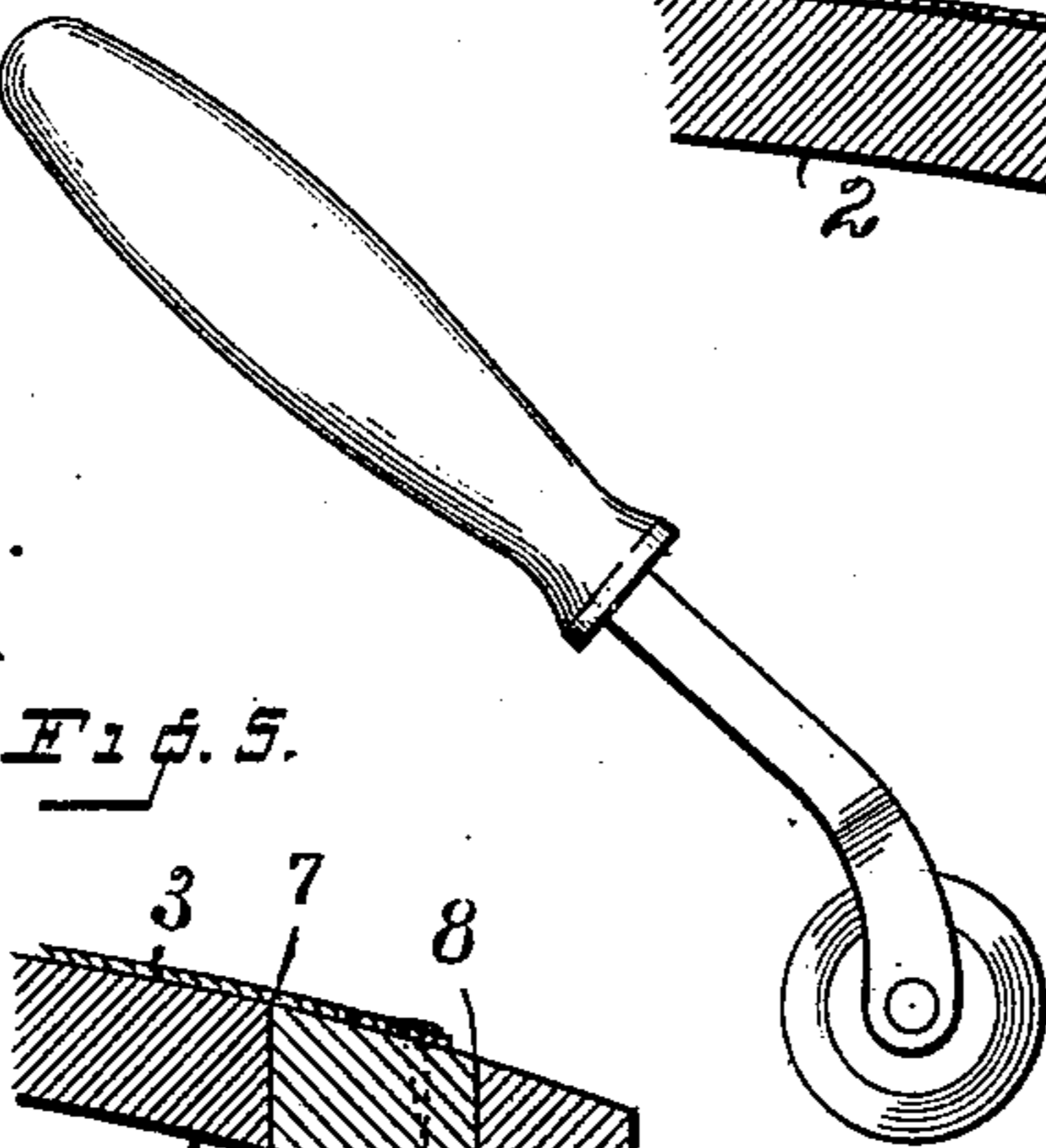


Fig. 3.

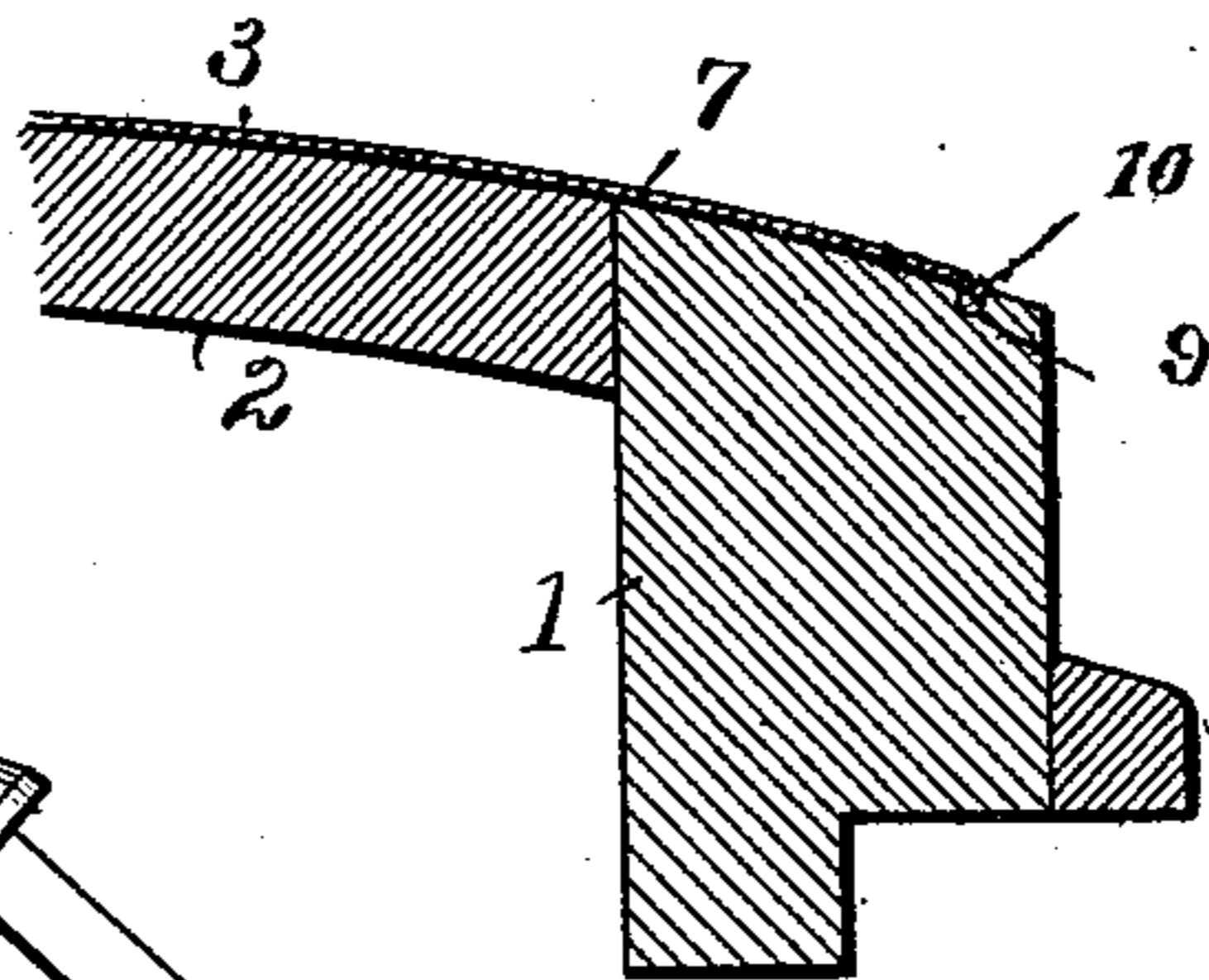
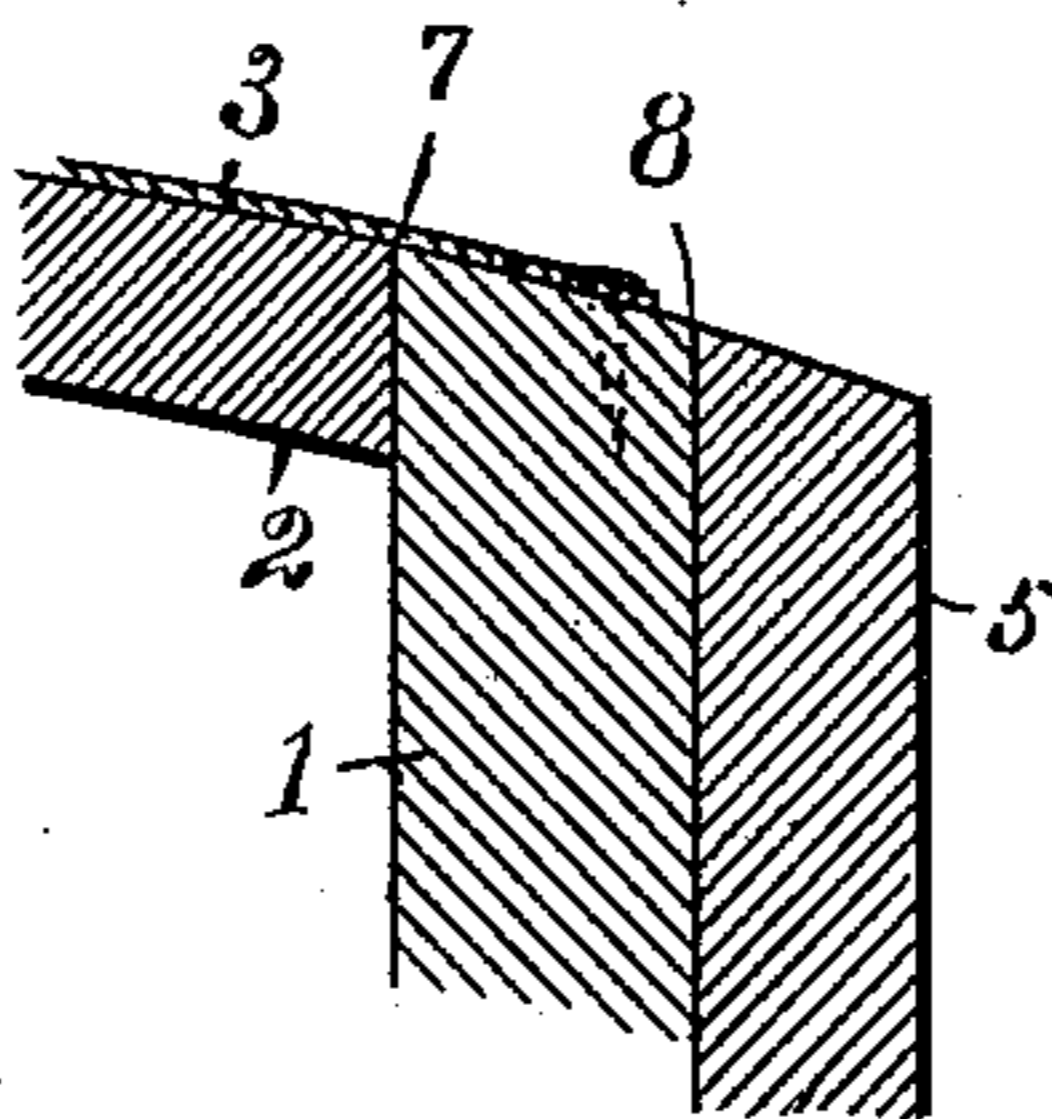


Fig. 5.



WITNESSES

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GEORGE J. CARPENTER, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO
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CARRIAGE-TOP.

SPECIFICATION forming part of Letters Patent No. 448,931, dated March 24, 1891.

Application filed October 25, 1890. Serial No. 369,339. (No model.)

To all whom it may concern:

Be it known that I, GEORGE J. CARPENTER, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Carriage-Tops; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention is applicable to all classes of carriages, coaches, &c., having solid—i. e., rigid—tops, and has for its object to devise a way of covering the tops with cloth that will be simple, inexpensive, and durable beyond anything heretofore placed upon the market, the special features of novelty and utility being that the top joints are all covered, a perfectly even and smooth surface is insured, there being no ragged edge where the cloth ends, and the use of nails being wholly avoided. It is of course well understood that carriages of all classes, especially coaches for public use, are subject to great changes in temperature. It is furthermore apparent that frequent alternations of heat and cold and rain and sunshine must cause expansion and contraction of the wood and tend to open the joints, the greatest trouble being at the joints near the edge of the carriage, where the side panels and top join the frame. The manner in which the frame of the top is made has nothing whatever to do with my invention, which is applicable to all classes of solid tops, whether made of blocks, cross-veneers, or in any ordinary or preferred manner. In making carriage-tops the ordinary mode is to cover the frames with strong heavy cloth, usually canvas, which is firmly secured to the top, and then covered with numerous coats of paint and varnish until a fine hard enamel is formed. The cloth may be held in place by any suitable adhesive material, as glue, varnish, or white lead. There is danger, however, of the edges becoming loose unless they are additionally secured by the use of fine nails driven closely together, which, however, leaves a rough surface, no matter how carefully the work is done, the slight depressions requiring careful filling in

and the cloth being left with an exposed raw edge. The use of nails has, furthermore, been found objectionable for the reason that the shrinking and swelling of the wood tends to lift the nails more or less, throwing them out from the wood, which quickly makes the top look uneven, and in the course of one or two seasons is very apt to break the enamel. Still another objection to this mode of securing the cloth is, that in order to make the nails hold at all it is necessary to drive them transversely to the grain of the wood, which necessitates fastening the outer edge of the cloth to the frame instead of carrying it past the joints, as the nails will not hold if driven into the ends of the panels endwise to the grain of the wood. My present invention, in addition to dispensing with the use of nails, enables me to carry the cloth past the top joints, thus fully covering and protecting the points which almost invariably give out first in carriage-tops, it being apparent that as soon as the slightest crack in the enamel is formed at or near a joint moisture will work in and quickly complete the work of destruction.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective of a carriage-top, showing both the enamel and the cloth broken away to illustrate the practical use of my invention; Fig. 2, a section on the line indicated by *x* in Fig. 1; Fig. 3, a section on the line indicated by *y* in Fig. 1; Fig. 4, a view of a tool which I use in fastening the cloth in place; and Fig. 5 is a section corresponding with Fig. 2, illustrating the ordinary way of attaching the cloth to the top by the use of nails placed inside the joint, leaving the joint protected only by the coat of enamel, which is likely to be broken by the lifting of the nails through expansion and contraction of the wood.

1 denotes the frame, which may be made in any suitable or preferred manner; 2, the top; 3, the cloth covering; 4, the enamel; 5, the side and back panels, in which the grain of the wood runs vertically, as is usual, and 6 the door.

It is not considered necessary to go into the details of construction of a carriage-top, as the style of carriage to which my invention

is applied is wholly immaterial, it being equally adapted to any of the various styles of carriages for public or private use.

7 denotes the joint between the frame and the top, and 8 the joint between the frame and the panels.

In applying the cloth to a carriage-top I first make a groove 9 near the outer edge of the top, the said groove being endwise of the grain of the wood in the said panels, as will be obvious. The cloth covering, thoroughly saturated with suitable adhesive material, ordinarily glue, is then laid on in the usual manner, the groove being also filled with the adhesive material. I then, by means of a suitable tool—such, for instance, as the wheel-tool illustrated in Fig. 4—crowd a fold 10 of the covering-cloth down into the groove, the projecting edge of cloth being then carefully trimmed, so that there is no exposed raw edge, as when nails are used. It will be understood of course, that in the drawings the relative proportions are somewhat exaggerated in order to illustrate the invention clearly. In practice, however, the groove is made so small that considerable pressure is required to force the fold of cloth down into it, and when it is once there a perfectly tight and smooth edge is

formed which, is in no danger of getting loose, even when subjected to long-continued hard usage. After the cloth has been laid on and secured in this manner and the glue or other adhesive material is dry, the usual enamel is formed over it by numerous coats of paint and varnish, each of which is dried thoroughly and then rubbed down.

Having thus described my invention, I claim—

A carriage-body comprising a frame 1, a top piece 2, and side and back panels 5, with joints 7 and 8 between the said top piece and frame and between the said frame and panels, respectively, the said panels being grooved at their upper ends endwise of the grain of the wood outside of the said joint 8 at 9, a cloth covering extending over the said joint 8 and having its outer edges secured in the groove of the panels, and an enamel surface formed in the usual manner over the cloth and panels, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE J. CARPENTER.

Witnesses:

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W. B. MIDDLEBROOK.