

(No Model.)

F. T. SMITH.

DIE FOR CARRIAGE DASH FRAMES.

No. 312,029.

Patented Feb. 10, 1885.

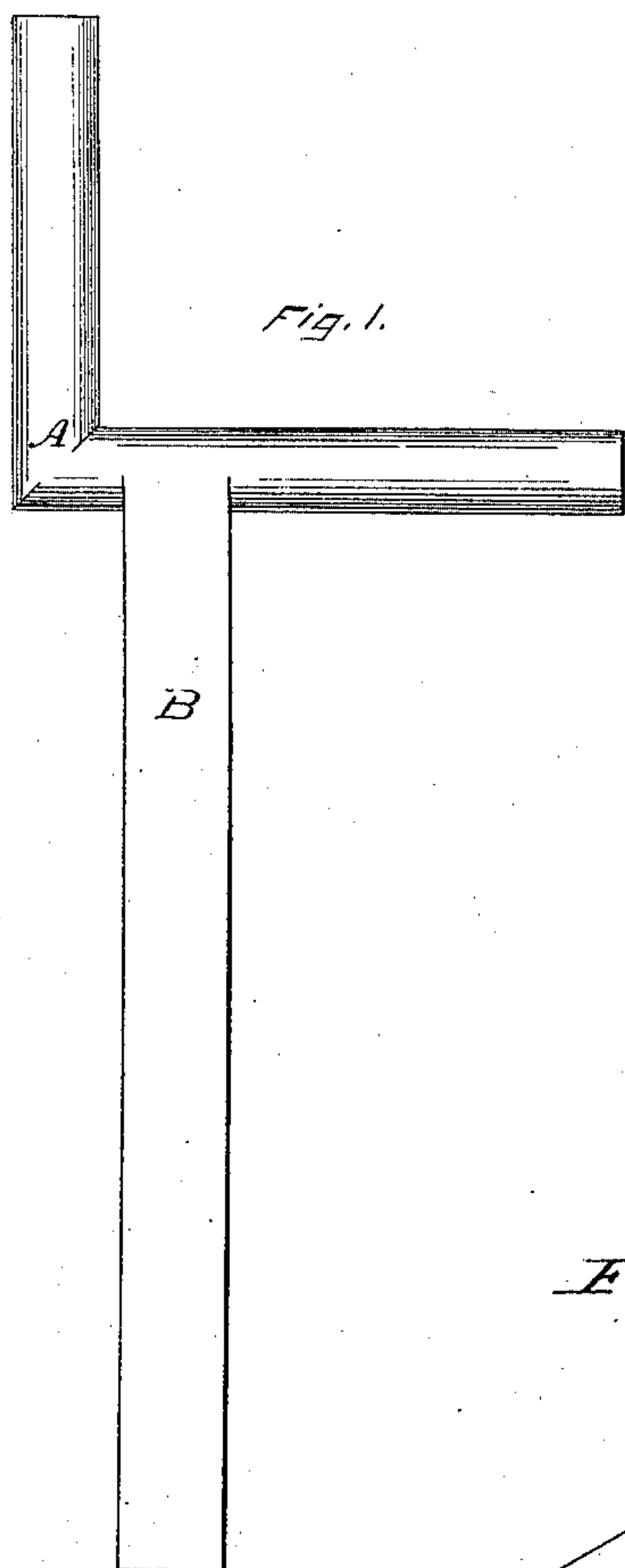


Fig. 1.

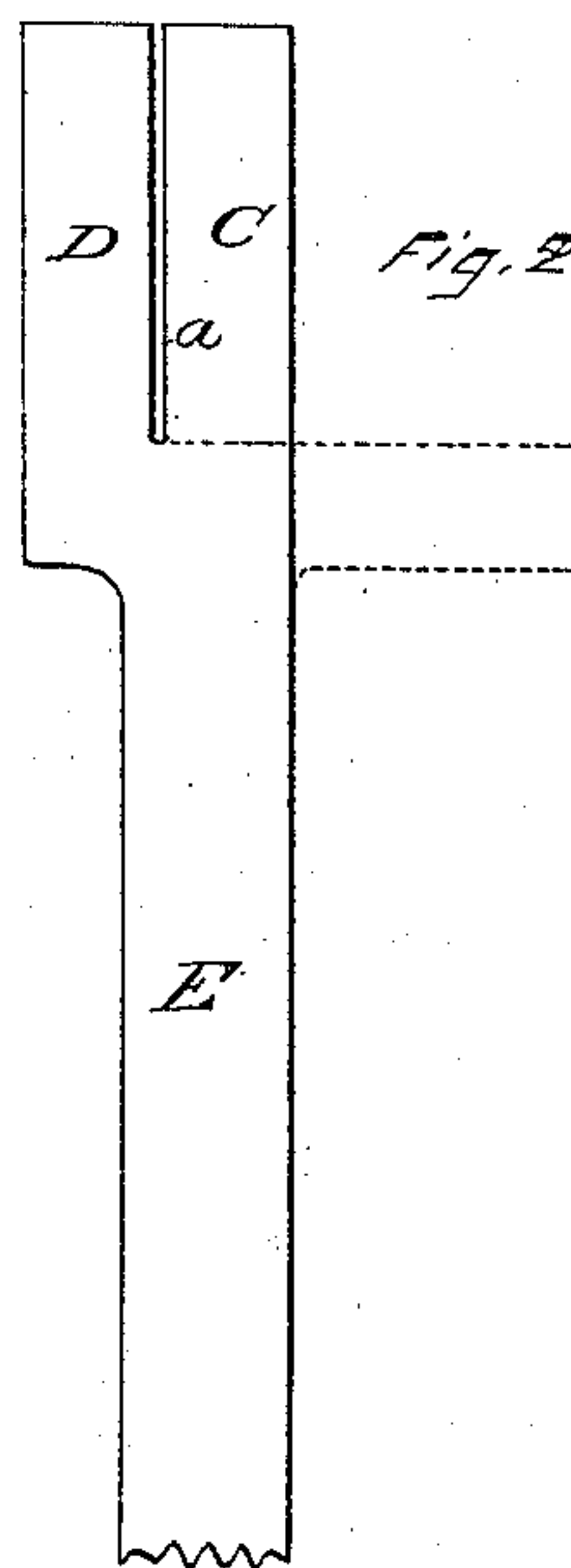


Fig. 2.

Fig. 4.

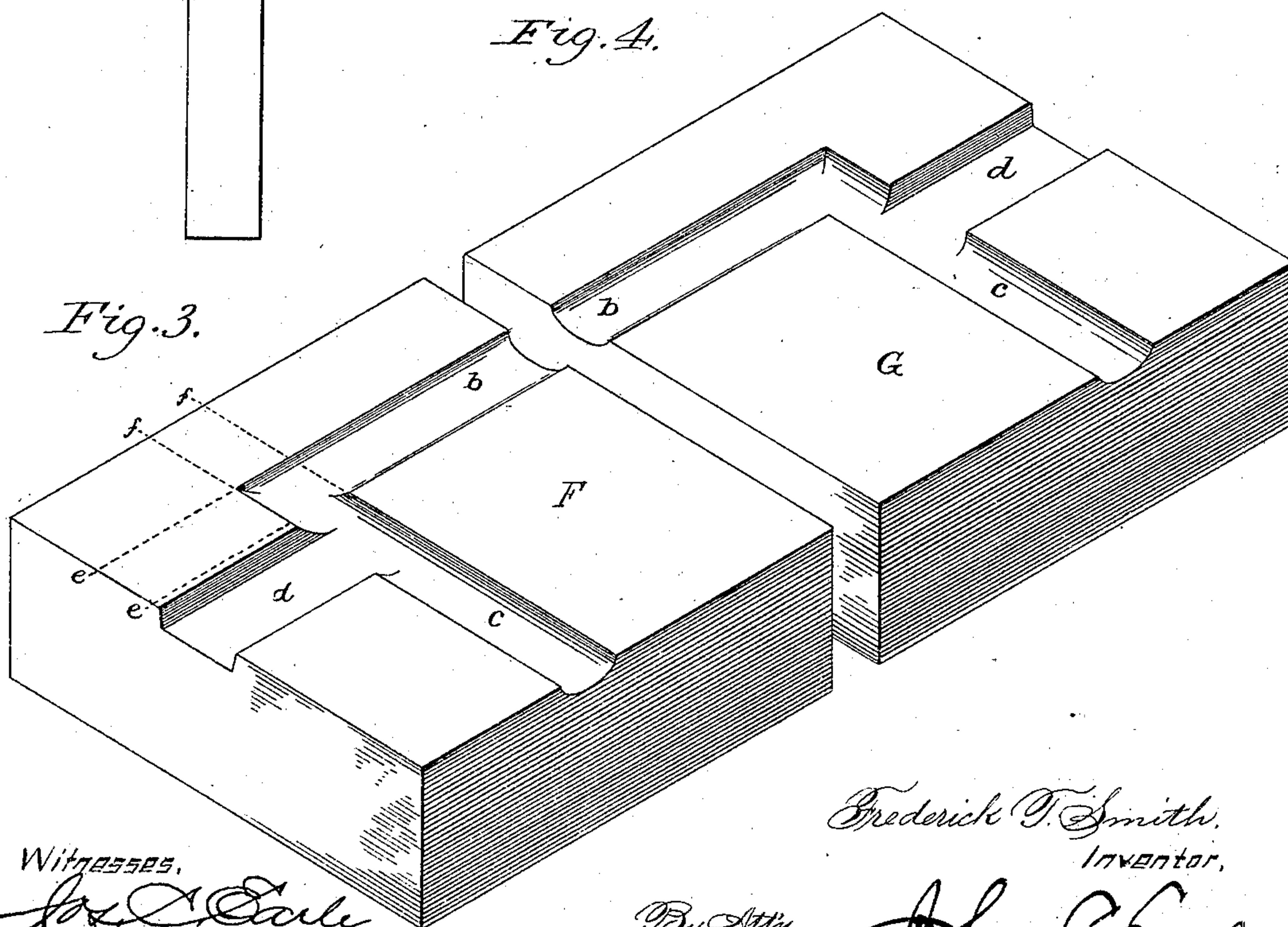


Fig. 3.

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# UNITED STATES PATENT OFFICE.

FREDERICK T. SMITH, OF PLANTSVILLE, CONNECTICUT.

## DIE FOR CARRIAGE-DASH FRAMES.

SPECIFICATION forming part of Letters Patent No. 312,029, dated February 10, 1885.

Application filed July 18, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK T. SMITH, of Plantsville, in the county of Hartford and State of Connecticut, have invented a new  
5 Improvement in Dies for Forging Carriage-Dash-Frame Blanks; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a  
10 full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, one of the lower angles of the frame with the dash-foot formed thereon;  
15 Fig. 2, the blank from which the article, Fig. 1, is forged; Figs. 3 and 4, perspective views of the two parts of the die.

This invention relates to an improvement in dies for forging carriage-irons, with special  
20 reference to the dash-frame.

In the more general construction of dash-frames the foot is welded to the frame by the carriage-smith.

The object of my invention is to construct  
25 the dash-foot, made as a part of the frame, without welding, and so that such part of the frame may be sold as an article of manufacture to the trade, to be completed by simply extending such part of the frame, and in dies  
30 whereby such a blank is produced, and as more fully hereinafter described, my invention consists.

Fig. 1 represents one angle, A, of a dash-frame with the foot B extending therefrom.  
35 To construct this portion of the frame as an article of manufacture, I shape the blank as seen in Fig. 2, splitting it, as at *a*, at the broader end and then bending the one part, C, downward at substantially right angles to the part D, the shank-like portion E being  
40 sufficient in length to form the foot.

F represents one part of the die, and G the other or companion part. In the meeting faces of these two dies a cavity, *b*, is made at  
45 right angles to a cavity, *c*, these two cavities joining at right angles and of a shape corresponding to the finished frame at and near the angle. From the lower or bottom por-

tion, *c*, a cavity, *d*, extends outward at substantially right angles thereto, this cavity *d*  
50 corresponding in shape to the shape of the foot at its junction with the frame. The cavities in the two parts F G are alike. The one is fixed on the anvil and the other in the hammer of a common drop-press. The blank is  
55 laid into the die so that the arms or parts C D E lie in the respective portions of the cavity in the die, and then the two parts of the die are brought forcibly together to bring the metal to the shape of the cavity in the die.  
60 The article is then trimmed to take off the fin produced in forging, and it is complete, ready for market. The foot is made as an integral part of the frame without welding. Thus made the article is sent to market. The car-  
65 riage-smith extends the bars of the frame by simply adding thereto straight rods of corresponding size and of the required length. In some cases the foot is required to be attached at the extreme outer end of the frame, instead  
70 of a short distance therefrom. In that case the cavity *d* in the die is made at the extreme end, and as a continuation of the portion *b* of the cavity, as indicated in broken lines *e e*, Fig. 3. In some cases a foot is required at  
75 the center of the frame. In such case the cavity *c* is continued across the face of the die, as indicated by the broken lines *f f*, Fig. 3, and where a central foot is desirable a connecting-bar is also desirable between the lower  
80 and upper bars. To provide for such connection the cavity *b* is made in direct line with the cavity *d*, as indicated by broken lines *e e*, Fig. 3, in which case the right-  
85 angular projection *b* from the part *c* will be the central connection.

I claim—

The herein-described dies for forging carriage-dash-frame blanks, consisting of the two parts F G, each constructed with correspond-  
90 ing cavities, *b c d*, substantially as shown and described.

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Witnesses:

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