

(No Model.)

D. F. SOUTHWICK.

DIE FOR FORMING CARRIAGE STEP PADS.

No. 277,853.

Patented May 15, 1883.

FIG. 1.

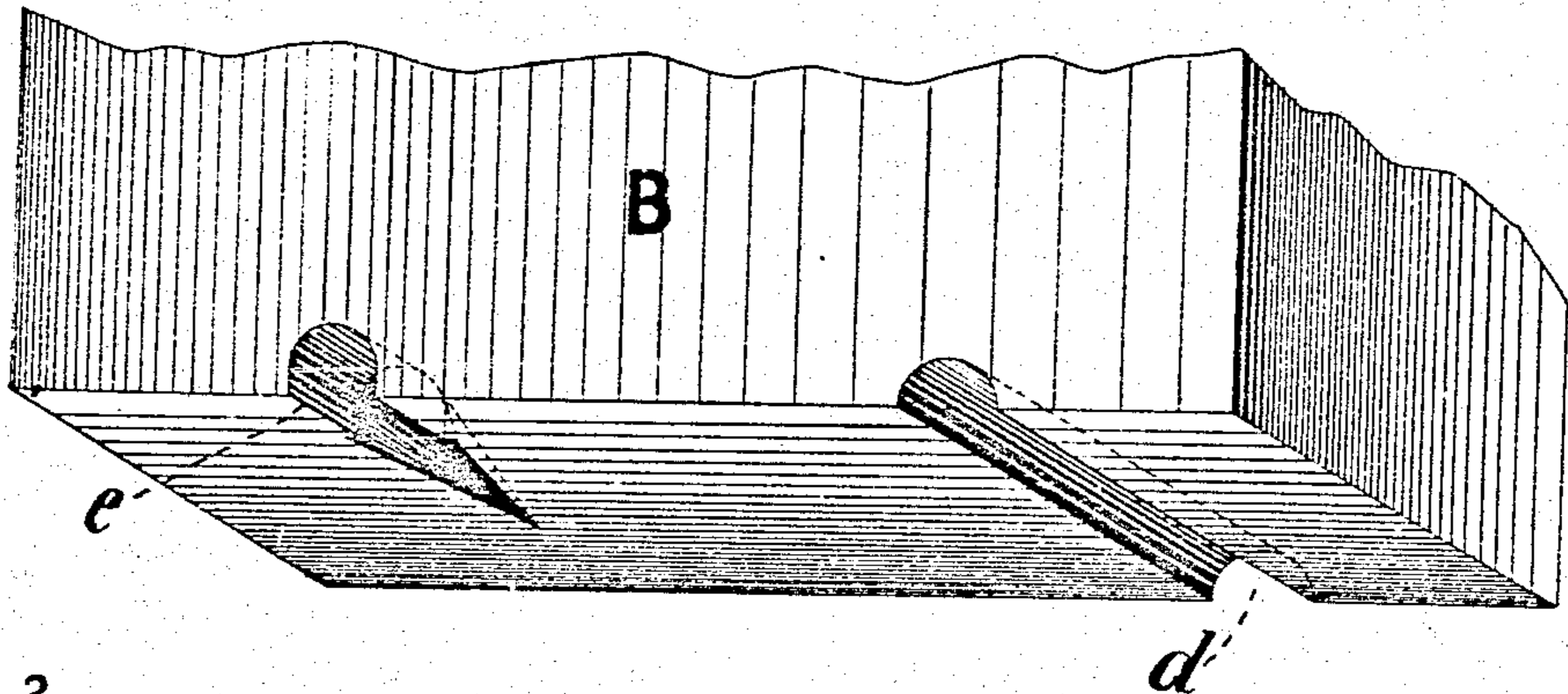
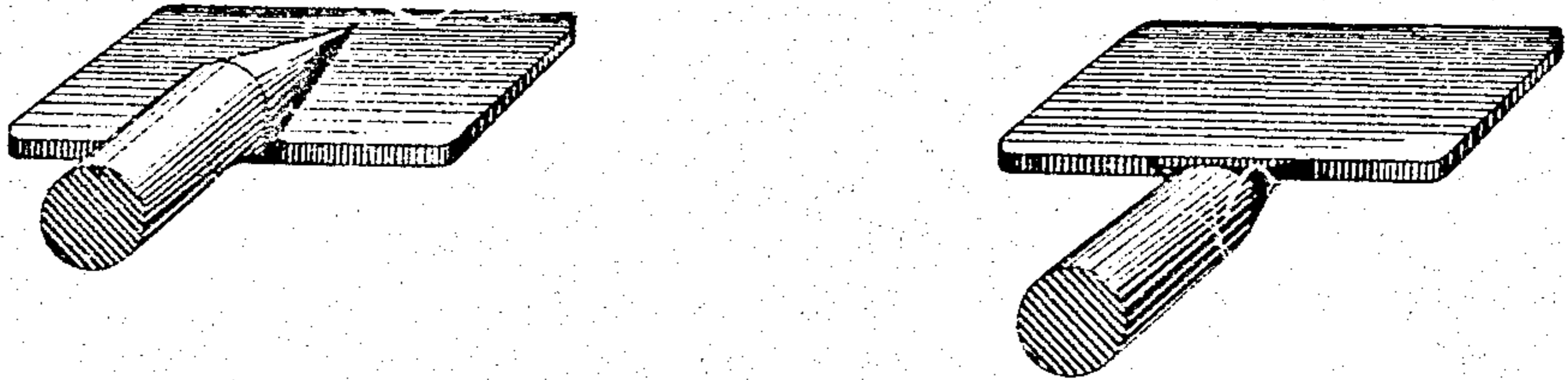
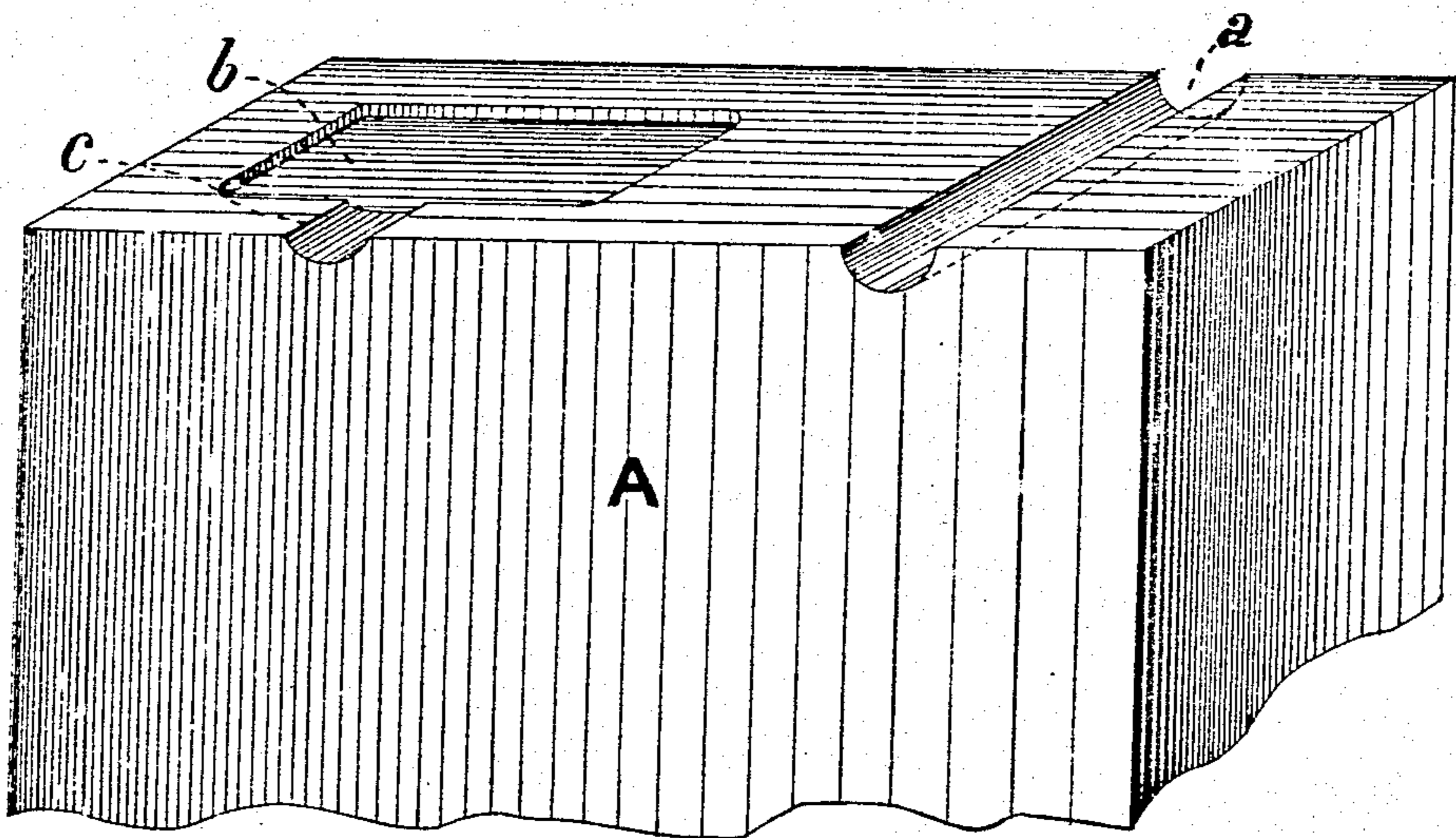


FIG. 2.



WITNESSES:

Frank Helden.
Francis Brown.

INVENTOR

Daniel F. Southwick
by H. J. Fenton

ATTORNEY

UNITED STATES PATENT OFFICE.

DANIEL F. SOUTHWICK, OF MERIDEN, CONNECTICUT.

DIE FOR FORMING CARRIAGE-STEP PADS.

SPECIFICATION forming part of Letters Patent No. 277,853, dated May 15, 1883.

Application filed December 19, 1881. (No model.)

To all whom it may concern:

Be it known that I, DANIEL F. SOUTHWICK, a citizen of the United States, residing at Meriden, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Dies for Forming Carriage-Step Pads; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 represents the two sides of a finished step-pad; and Fig. 2, views of the upper die, B, and lower die, A.

The design of my invention is to make a carriage-step pad at a single heat and by means of a single pair of dies, and I accomplish this object by the devices and in the manner hereinafter described—that is to say, a bar of iron, preferably flat iron, is cut off of a length containing metal enough to make the shank and body of the step-pad, and the part intended to form the shank is rounded and made cylindrical by inserting it, while hot, in the half-round groove *a* of the lower die, A, and causing it to be struck by the upper die, B, which has a corresponding half-round groove of the same size, after which the remaining or flat portion of the blank, while hot, is placed in the recess *b* of the lower die, A, and shape is given thereto, so that the resultant product of that portion of the die will correspond in shape with the body of the step-pad, as shown in Fig. 1. The flush or fin is to be trimmed or sheared off in the usual manner, by means of trimmers or otherwise.

The dies A and B are made of hard metal,

preferably steel. The lower die, A, has on one part of its face a half-round groove, as shown at *a*, Fig. 2, and on the other part of its facial surface a square or rectangular or other shaped depression, *b*, of even depth, and on one side thereof—namely, that which forms the side of the body of the step-pad next the shank—is a half-round groove, *c*, extending out to the side of the die. The upper die, B, is provided with a half-round groove, *d*, corresponding with and opposite to a similar groove on the lower die, and has, also, a groove or depression, *e*, of considerable depth, opposite the center of the depression in the lower die, this transverse depression being preferably of a semi-conical shape—that is to say, of the shape of a cone bisected by a line drawn from its apex to the center of its base.

In operating these dies the lower or anvil die, A, is held stationary in a bed-plate, and the upper die, B, may be held and operated by and in a hammer or in a drop-press operated by motive power.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The dies for forming both shank and body of carriage-step pads at a single heat, consisting of the upper die, B, with its depressions *e* and *d*, and the lower die, A, provided with recesses and grooves *a*, *b*, and *c*, substantially as described, and for the purpose specified.

DANIEL F. SOUTHWICK.

Witnesses:

H. T. FENTON,
S. W. KENT.