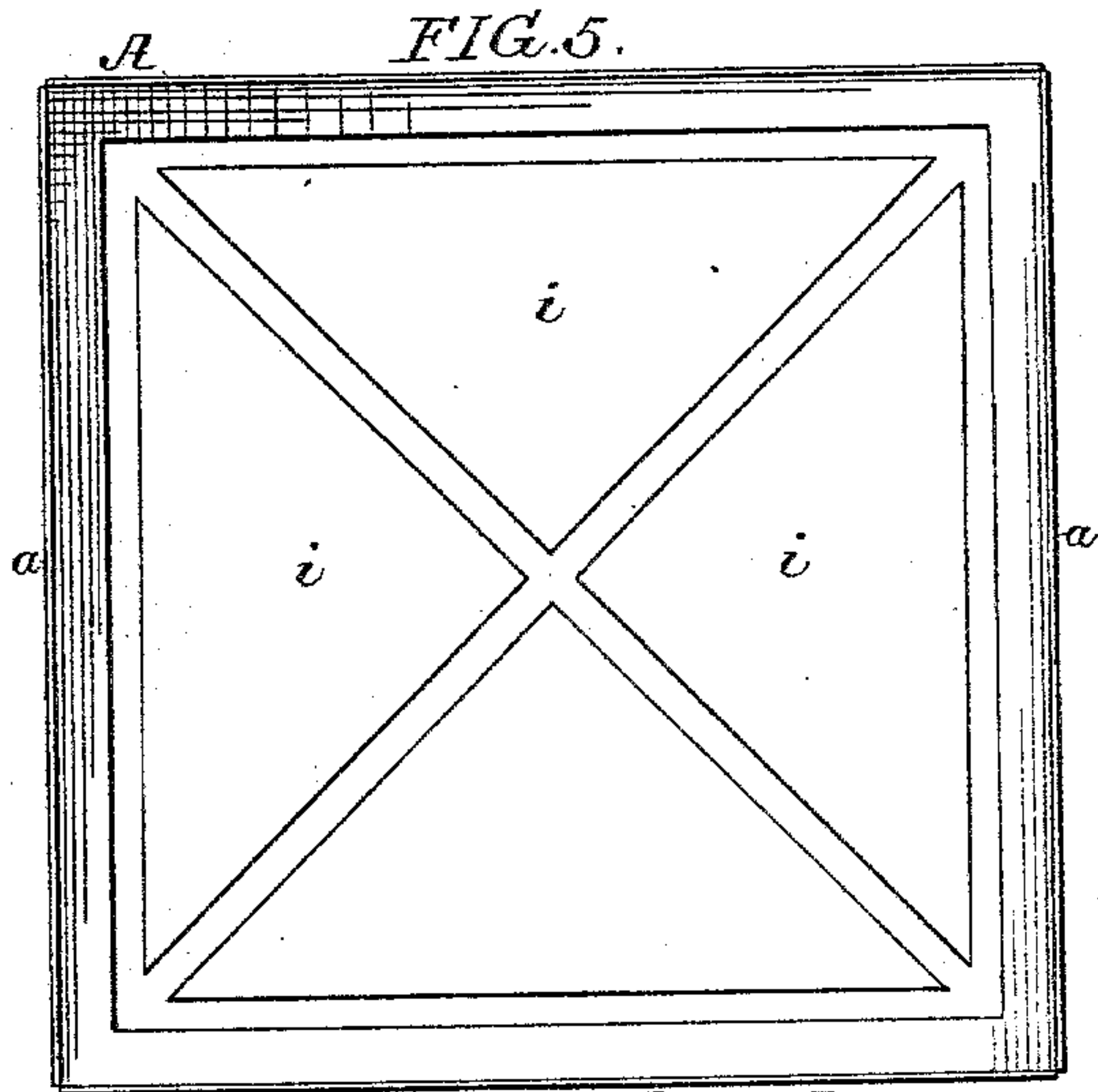
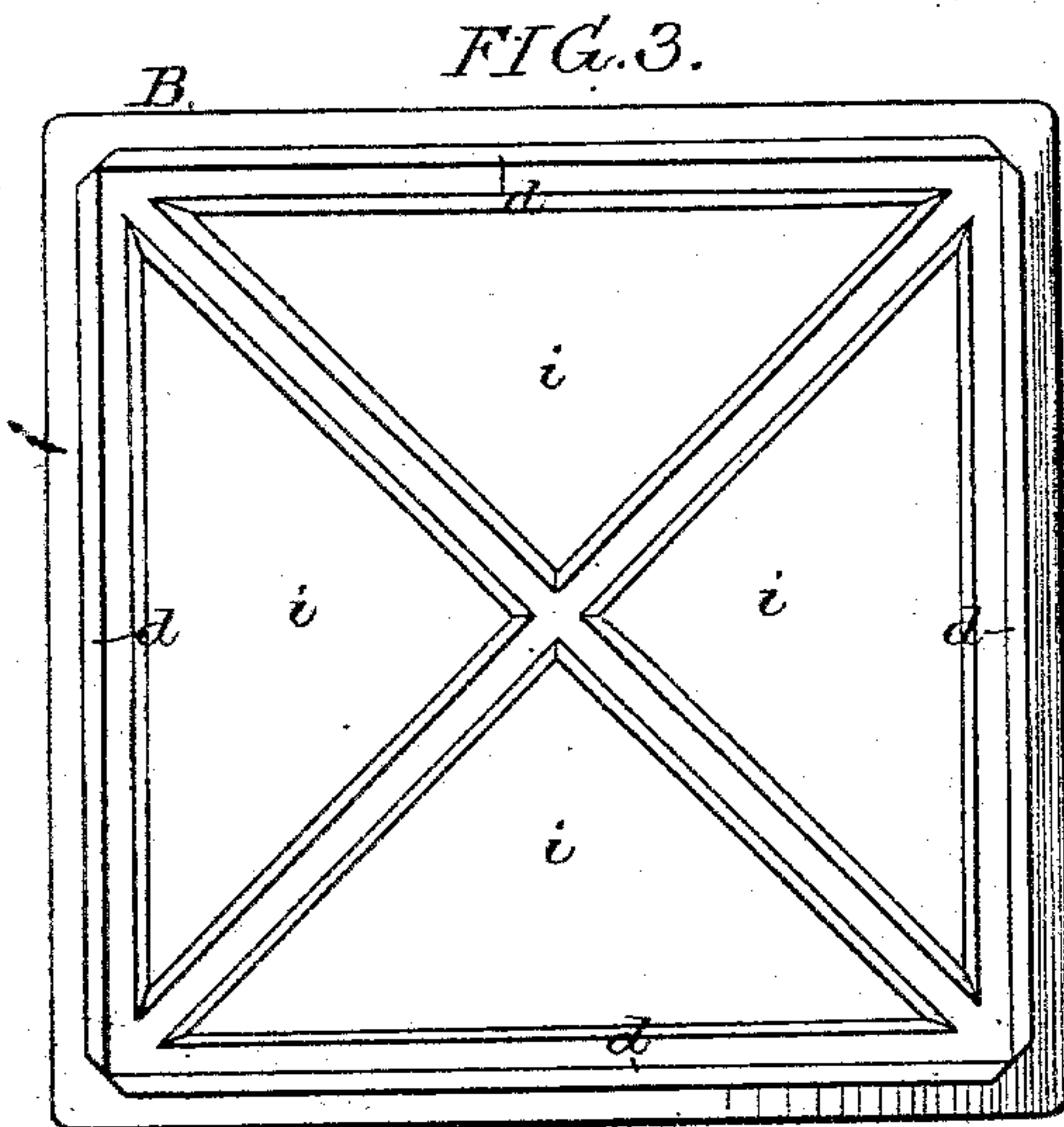
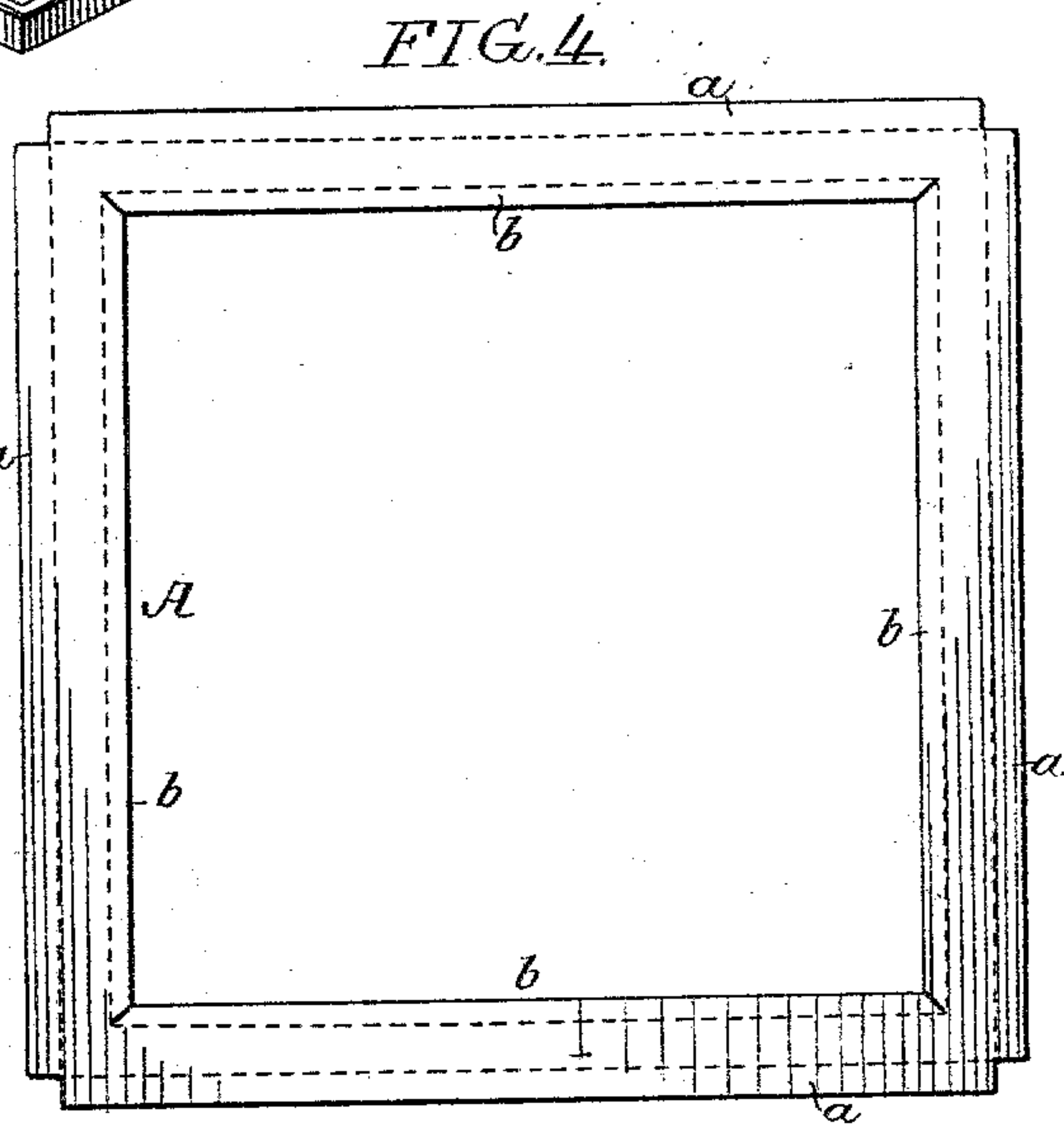
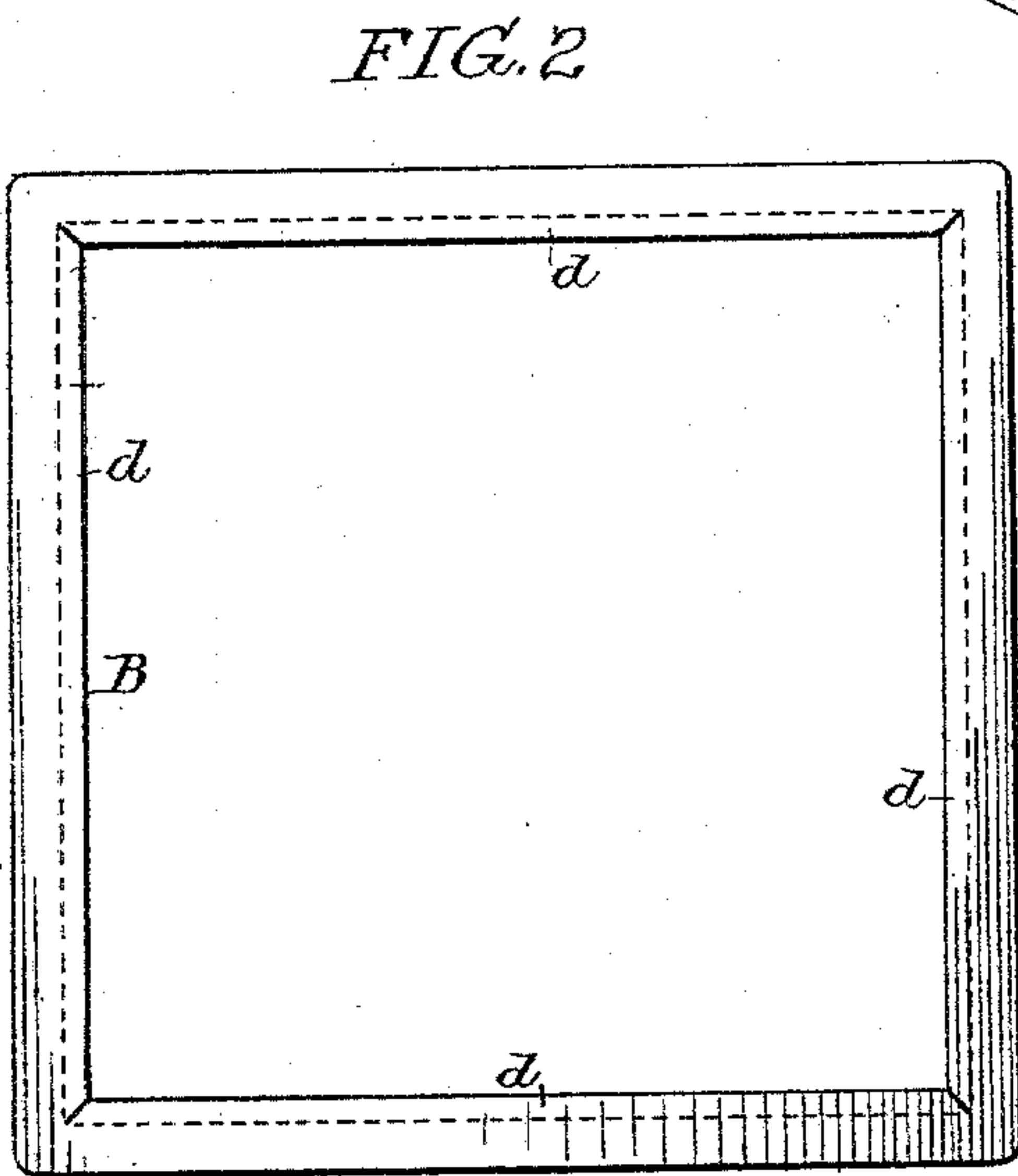
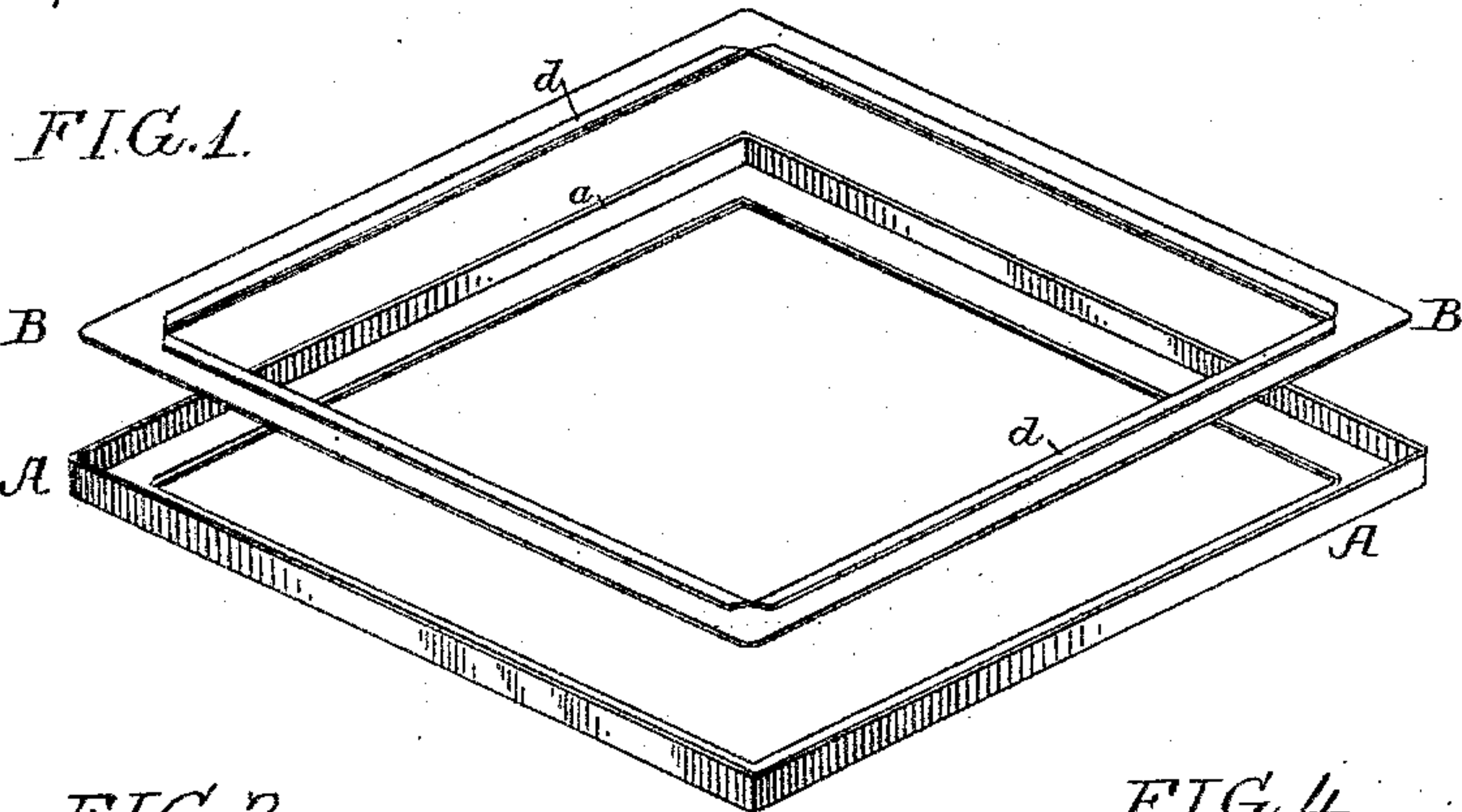


(No Model.)

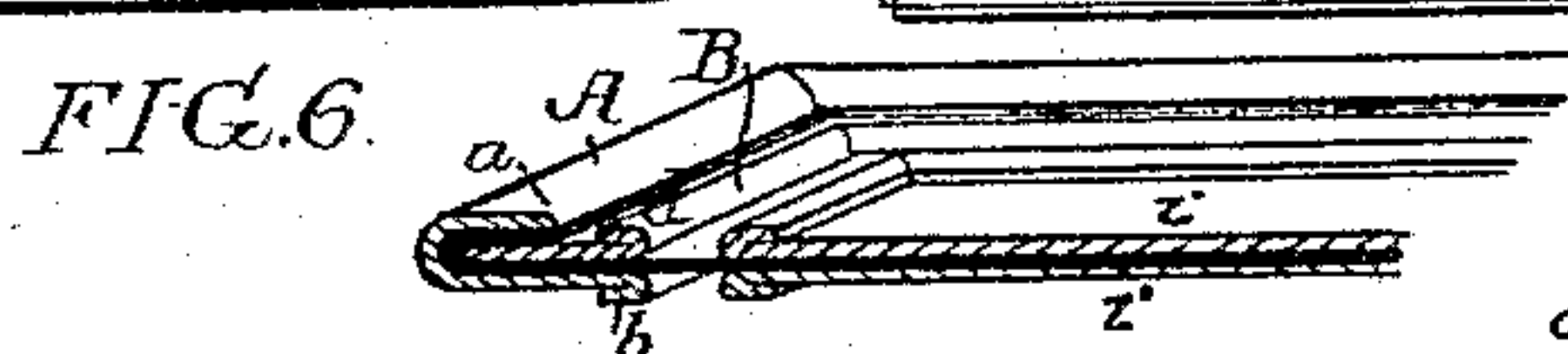
H. LOGUE.
GAS METER FRAME.

No. 490,149.

Patented Jan. 17, 1893.



Witnesses:
R. Schleicher
Alex. Darkoff



Inventor:
Hugh Logue
by his Attorneys
Howson & Howson

UNITED STATES PATENT OFFICE.

HUGH LOGUE, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE
AMERICAN METER COMPANY, OF NEW YORK, N. Y.

GAS-METER FRAME.

SPECIFICATION forming part of Letters Patent No. 490,149, dated January 17, 1893.

Application filed June 15, 1892. Serial No. 436,819. (No model.)

To all whom it may concern:

Be it known that I, HUGH LOGUE, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain
5 Improvements in Meter-Frames, of which the following is a specification.

The object of my invention is to make the diaphragm frame of gas meters of a single sheet of metal properly stamped up, thus
10 avoiding the corner joints of the ordinary frame.

In the accompanying drawings:—Figure 1, is a perspective view of the two frames detached, between which is clamped the leather
15 diaphragm; Fig. 2, illustrates the top frame prior to being bent up and flanged; Fig. 3 is a plan view of the top frame flanged; Fig. 4, is a plan view of the lower frame cut prior to being flanged; Fig. 5, is a view of the lower
20 frame flanged; and Fig. 6, is a sectional perspective view through both frames with the leather between them.

The usual method of making the frames for meter diaphragms has been to make each
25 frame of four strips of metal, soldered together at the ends so as to form a quadrangular frame, but these are not only costly to manufacture owing to the time and care required in soldering the joints, but also on account of
30 the difficulty of making a gas-proof joint between the frames and the leather, as the overlapping corners necessitate careful filling and packing in order to prevent leakage, but by stamping the frames out of a single sheet of
35 metal, the overlapping joints are dispensed with, and when the leather is once clamped down upon the frame, it will be perfectly even and gas-proof avoiding the necessity of packing.

40 The underframe A has a deep outside flange *a*, and a shallow inside flange *b*. This inner flange is turned outward and lapped over the outer face of the frame A so as to present a smooth edge for the leather. The outside
45 flange is of a sufficient height to lap over the frame B and the leather so as to hold the frame B firmly upon the leather making a

gas-proof joint. The frame B is also provided with an internal flange *d* which is turned over upon the outside of the frame B presenting a
50 smooth edge for the leather, the same as the flange *b* of the frame A.

The plates *i* cut from the interior of a flat diaphragm meter are preferably cut and the frames used as shields for the leather, as
55 shown in Figs. 3 and 5, thus all the metal is utilized in the manufacture.

The shields are cut and the edges folded over as shown in the figures, the shields being placed on both sides of the leather and
60 secured thereto in any suitable manner, as shown in Fig. 6.

I claim as my invention:—

1. The combination in a meter diaphragm, of the quadrangular open frame A made from
65 a single sheet of metal, having an external clamping flange, and an internal flange, a quadrangular frame B also made from a single piece of metal, and having an internal
70 flange, with leather or equivalent material mounted between the two frames, the clamping flange of the frame A being turned down over the frame B, substantially as described.

2. The combination in a meter diaphragm, of the quadrangular internally flanged frames
75 A and B each made from a single sheet of metal, one frame having an external clamping flange adapted to pass over the other, two sets of triangular flanged shields made from
80 the metal cut from the frames A and B, with leather clamped between the two sets of quadrangular shields, the internal flanges of the frames A and B, and the flanges of the triangular shields being bent outward so as to form
85 smooth edges for the leather, thus preventing the cutting of the said leather, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HUGH LOGUE.

Witnesses:

WILLIAM D. CONNER,
HENRY HOWSON.