

(No Model.)

O. W. SMITH.  
GRAVESTONE OR MONUMENT.

No. 518,552.

Patented Apr. 17, 1894.

Fig. 1.

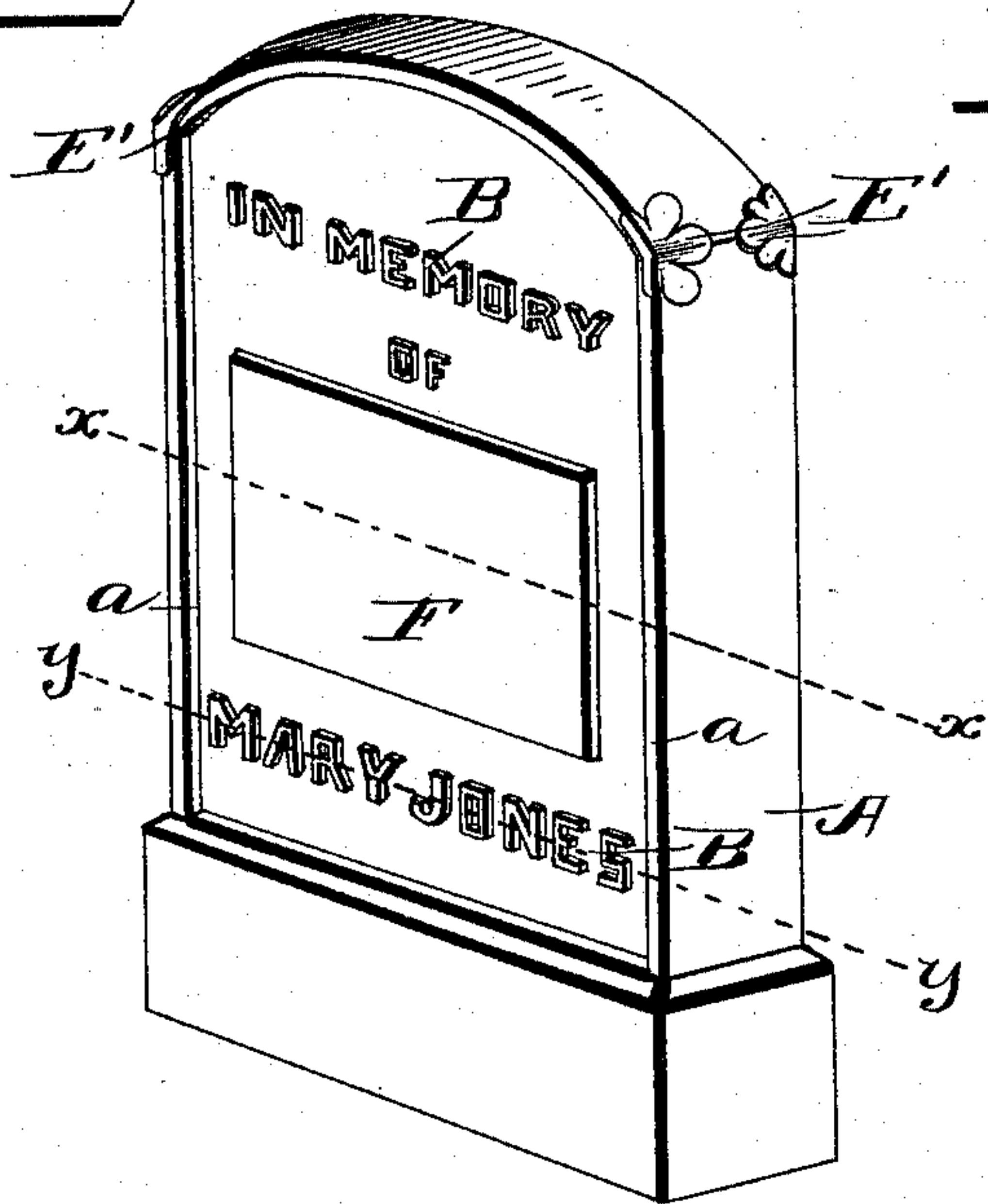


Fig. 2.

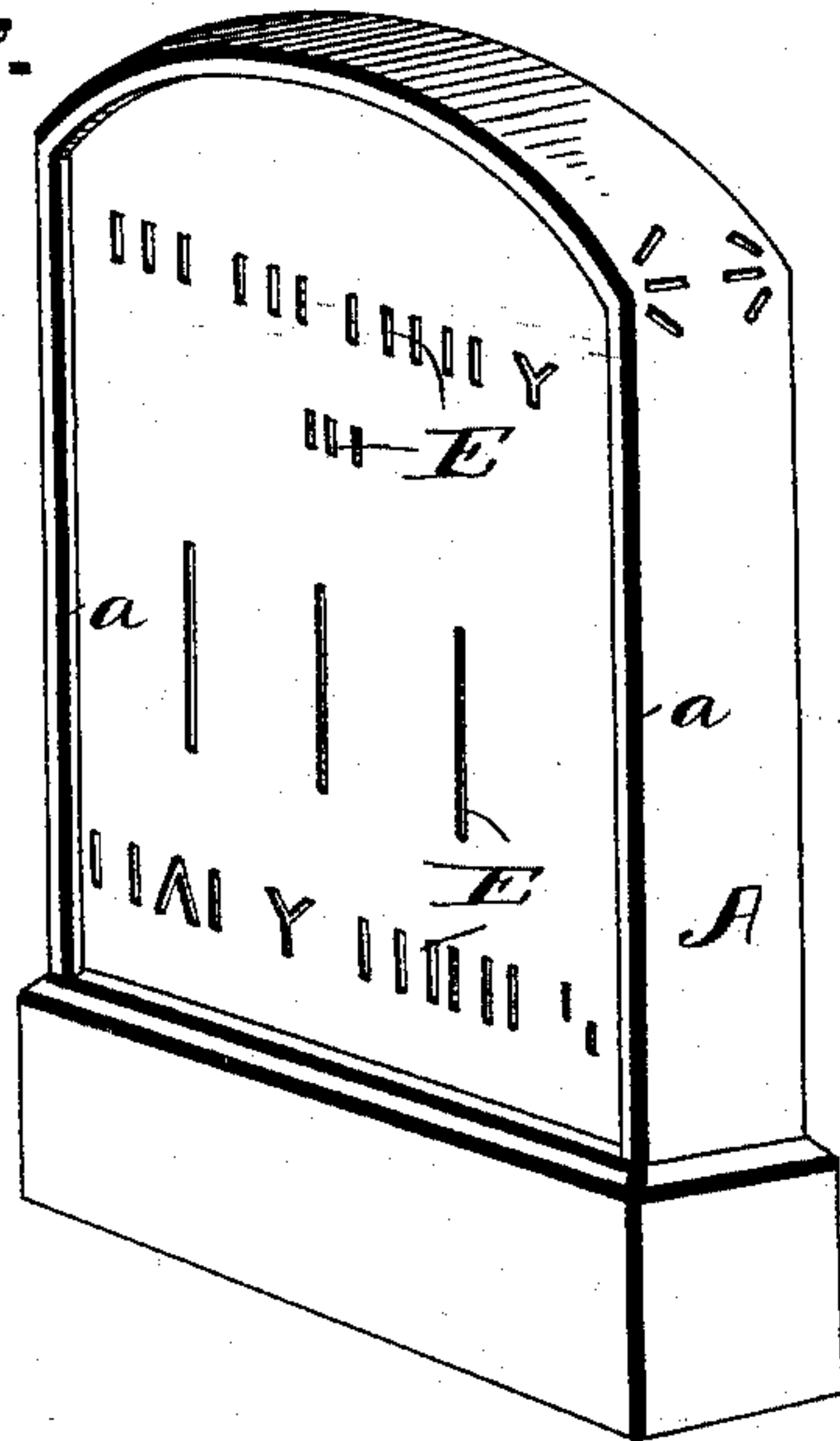


Fig. 3.

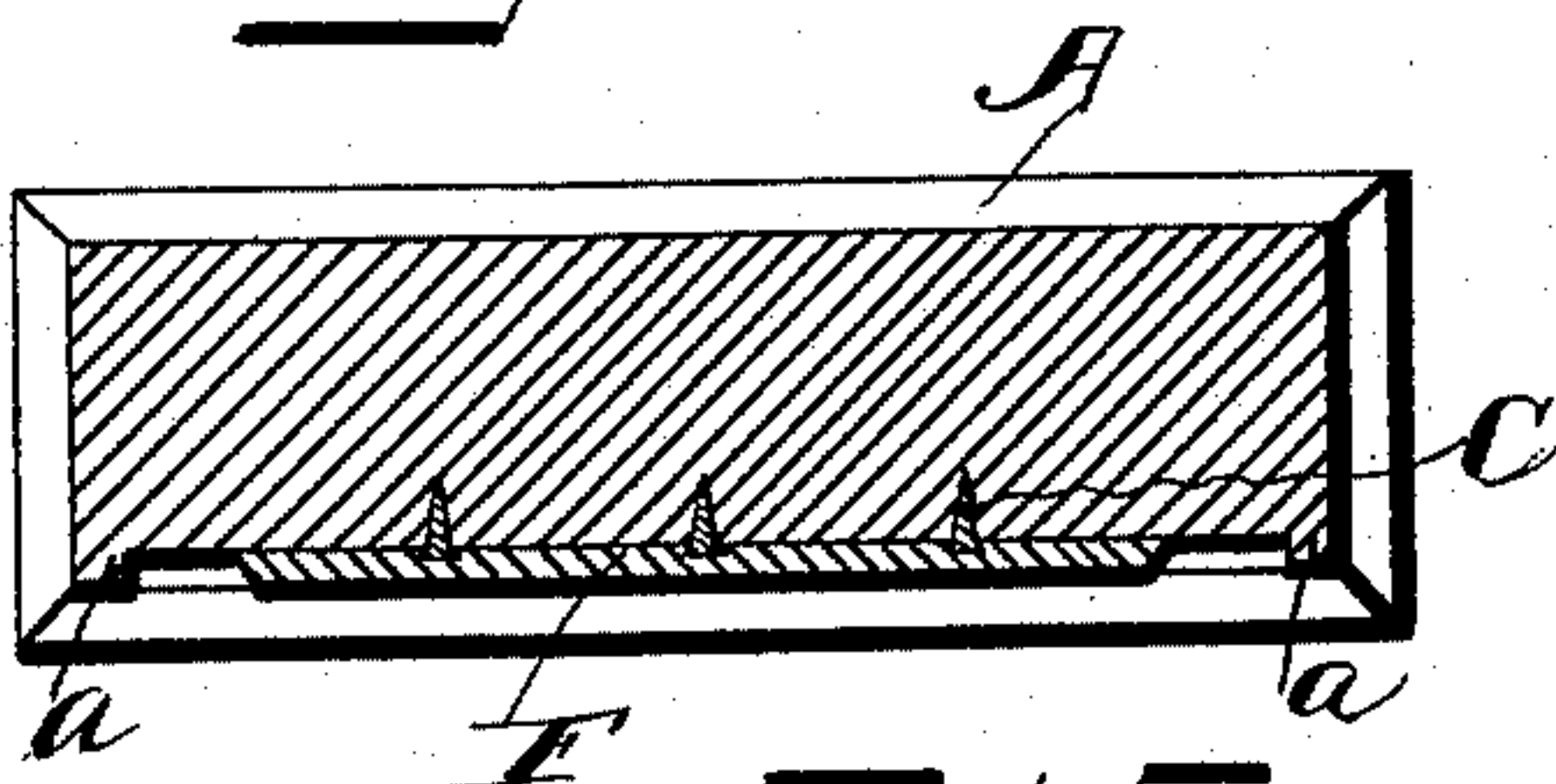


Fig. 4.

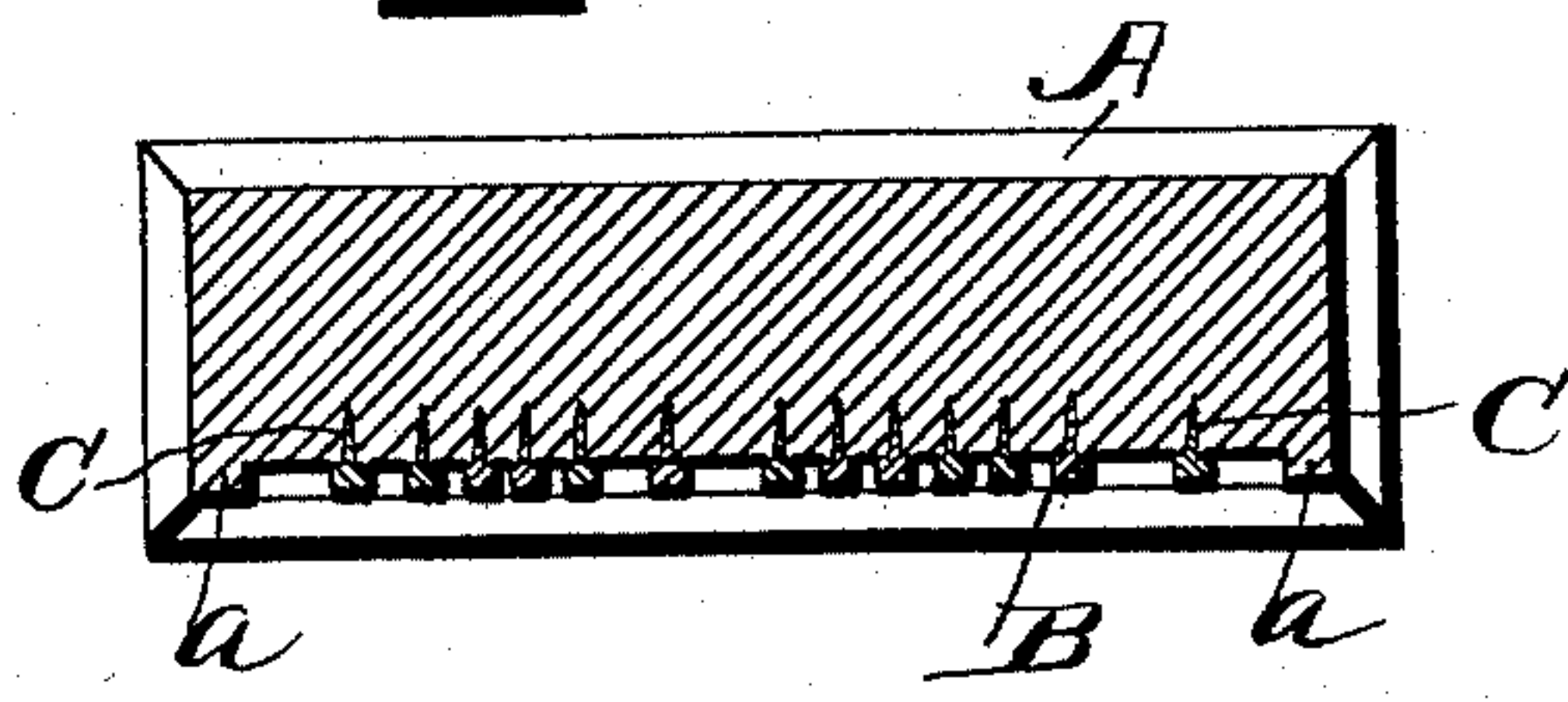
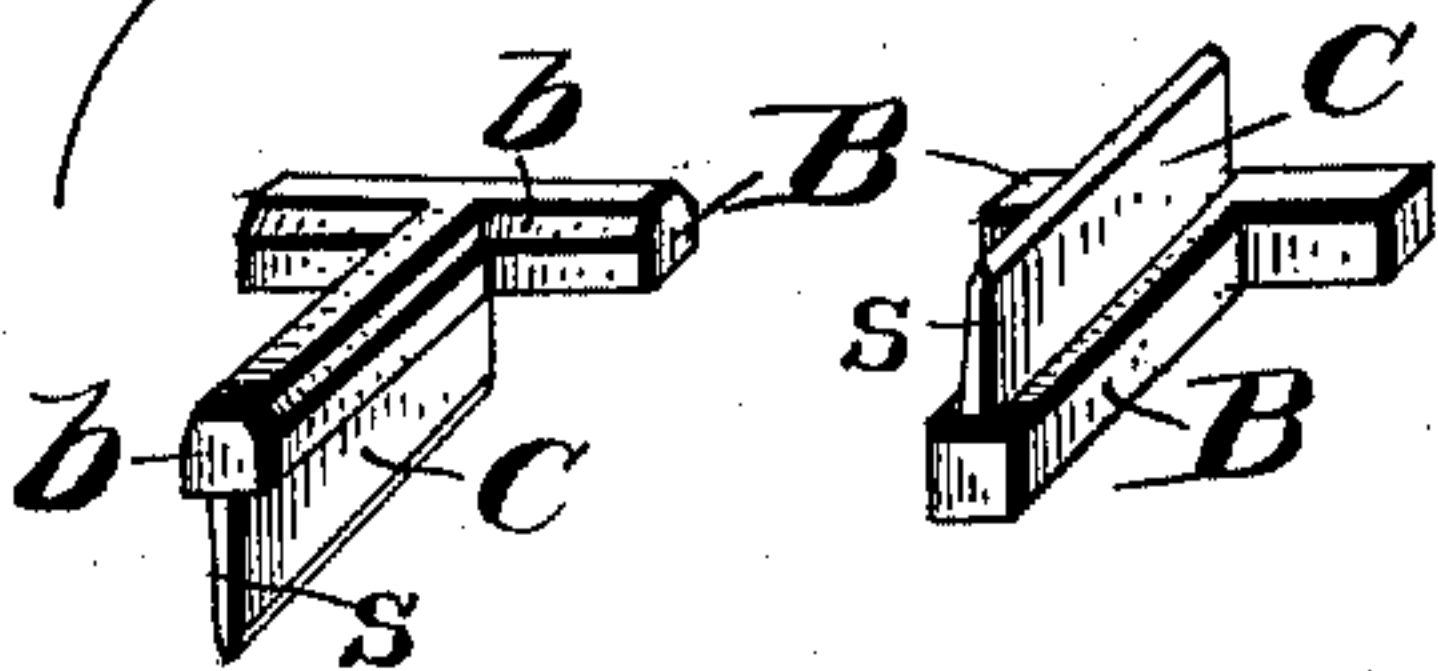
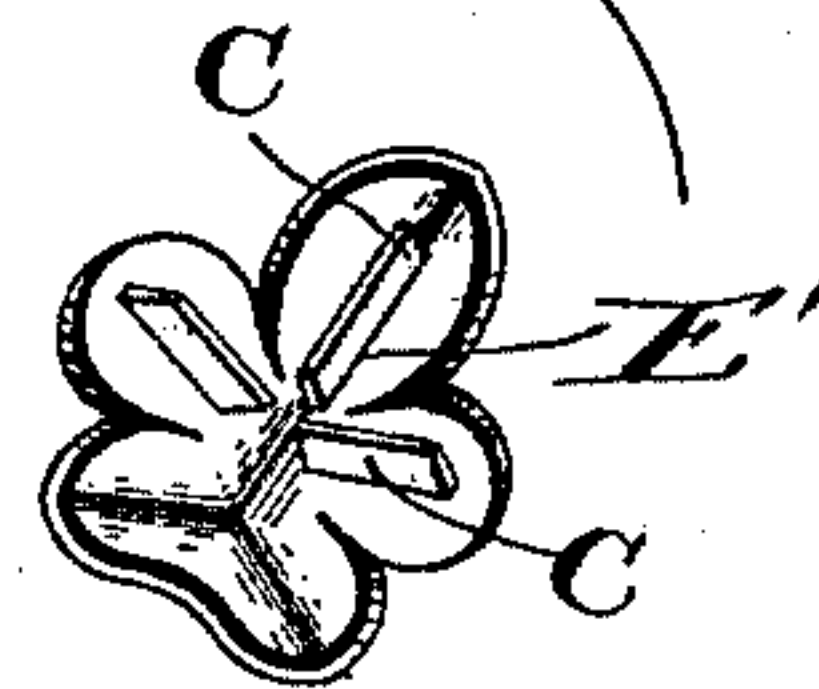


Fig. 5.



Witnesses

*C. E. Hunt.*  
*A. S. Shepard.*



Inventor  
*Orson W. Smith,*  
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his Attorney



# UNITED STATES PATENT OFFICE.

ORSON W. SMITH, OF CHARLEVOIX, MICHIGAN, ASSIGNOR OF ONE-HALF TO  
AUGUST G. CHALOUKKA, OF SAME PLACE.

## GRAVE-STONE OR MONUMENT.

SPECIFICATION forming part of Letters Patent No. 518,552, dated April 17, 1894.

Application filed April 29, 1893. Serial No. 472,311. (No model.)

*To all whom it may concern:*

Be it known that I, ORSON W. SMITH, a citizen of the United States, residing at Charlevoix, in the county of Charlevoix and State of Michigan, have invented certain new and useful Improvements in Grave-Stones or Monuments; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates, in general, to monuments or grave stones and more particularly refers to an improved manner of affixing in relief suitable letters, characters, or designs to the stone constituting the monument.

The chief object of my invention is to provide novel means for attaching the letters or other characters used in the name or epitaph of the deceased in an inexpensive, permanent, ornamental, and indestructible manner to the face of the stone, whereby the same will not be marred, obliterated, detached, or otherwise deteriorated by exposure to the weather or other exterior influences.

My invention has for its further object to ornament and protect the stone by suitable designs or decorations attached to the stone in substantially the same manner. For the attainment of these objects, and for other purposes hereinafter enumerated, my invention comprises, in brief, certain features of construction, and arrangement and combination of parts, all of which are more fully described hereinafter.

The novel features of the invention are set forth in the appended claim.

Referring to the accompanying drawings forming a part of this specification:—Figure 1 is a perspective view of a monument having my invention applied thereto. Fig. 2 is a corresponding view of the stone with the letters and designs detached therefrom, showing the recesses or indentures made for receiving the projections on the back of the letters or designs. Fig. 3 is a transverse sectional view on the line  $x-x$ , Fig. 1. Fig. 4 is a transverse sectional view on the line  $y-y$ , Fig. 1. Fig. 5 is a view illustrating in detail the construction of the various letters and designs embodied in my invention.

In all the views of the drawings, like letters of reference mark the same or corresponding parts.

In carrying out my invention, I preferably form the several letters or designs designed for attachment to the stone, A, of aluminum, aluminum-bronze, or other non-oxidizable metal, so that they will not become rusted or marred by exposure to weather. I have found by experience, that aluminum is the best adapted metal for this purpose, since it is light, easily formed into the desired shapes, not brittle, and does not readily disintegrate or rust; however, it will be understood that I can use any other substance susceptible of like use and having the necessary characteristics or qualities. Each letter, B, is shown as made in one piece of aluminum with a rearwardly projecting bar or stud, C, formed integral with the body of the letter and serving as the means of securing the letter to the face of the stone. Each bar or stud, C, is of the requisite size for strength and rigidity, and extends back far enough into the stone to permanently hold and support the body of the letter, the back of which is a plane surface fitting up snugly against the plane surface of the stone. If preferred, the stud, C, may be a separate piece from the body of the letter, and attached to the latter in any suitable manner, as shown in one instance in Fig. 5.

In order to affix the letters to the stone, the latter is first made according to some desired or approved process out of some composition molded into the shape or design required. Then, before the green or plastic mass sets or hardens, the several letters, B, are placed in position on the stone, with their studs, C, each pressed down into the plastic mass until the back of the particular letter is up against the plane surface of the stone. The designs are then applied in a similar manner, and the stone and its attached parts allowed to set and harden until ready for use. In Fig. 2 can be seen the recesses, E, in the stone, made by the several studs, C, of the letters and designs, prior to the insertion of the studs, C, in place.

In Fig. 1, I have shown in addition to the letters, B, the corners of the stone provided



with guard-plates, E', made in some ornamental shape, and there applied in order to protect the corners of the stone from being chipped or broken by carelessness or by coming in contact with other hard substances. Each plate, E', is provided with three studs, C, on its inner side, as shown in Fig. 5. I have also shown in Fig. 1, the front or face of the monument provided with raised ornamental panels, F, of marble having studs, C, on their inner sides and designed to be attached in substantially the same manner as above described with reference to the letters, B.

It will be seen that all the letters and designs affixed to the stone, A, are raised or in relief so as to be clearly defined and apparent. If preferred, the face of the letters, or designs, or both, may be painted black or other color to suit the taste, or may be left the natural color of the aluminum.

The letters B may be formed with a beveled surrounding edge, as shown at b, and either the face or the side edge of the letters may be colored black or in any other desired manner.

It will be understood that the stone or monument A to which the letters or designs B are to be applied as herein described and illustrated, may be formed of concrete or Portland cement and that the face of the stone proper may be embellished with any suitable design by having the face of the mold cut or engraved, so that when the stone is cast the form is turned face up and the face bored or

engraved part of the mold taken off, when the face of the stone may be laid out in straight or semi-circular lines or in any other suitable manner. The stone or monument may be molded to form a depressed face surrounded by a projecting rim or flange, as shown at a, so that the outer plane of the letter or design B is within or corresponds to the plane or projection of the rim or flange a and the latter thus serves as a guard or protection for the former. The bar or stud C is preferably arranged longitudinally so that it extends the entire length of the letter, and may be narrow or thin and sharp, as illustrated at s in one of the forms shown in Fig. 5.

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

A grave-stone or monument made of a composition of matter and having suitable characters or designs affixed thereto by means of a stud on the back of the character or design, said stud extending longitudinally along the back of the character or design and tapering to a sharp edge so as to be more readily pressed into the substance of which the stone is made when the latter is in a plastic state, substantially as set forth.

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

ORSON W. SMITH.

Witnesses:

T. F. WASHBURN,  
E. H. GREEN.