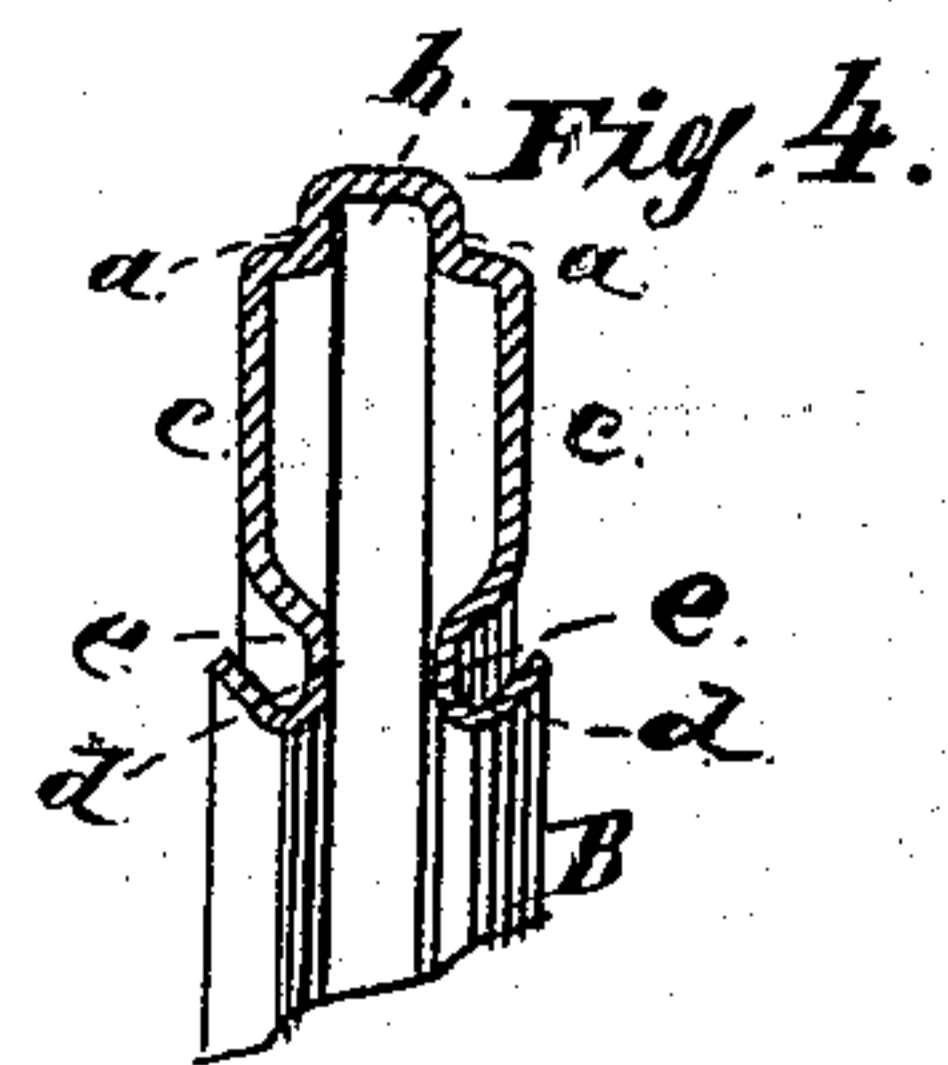
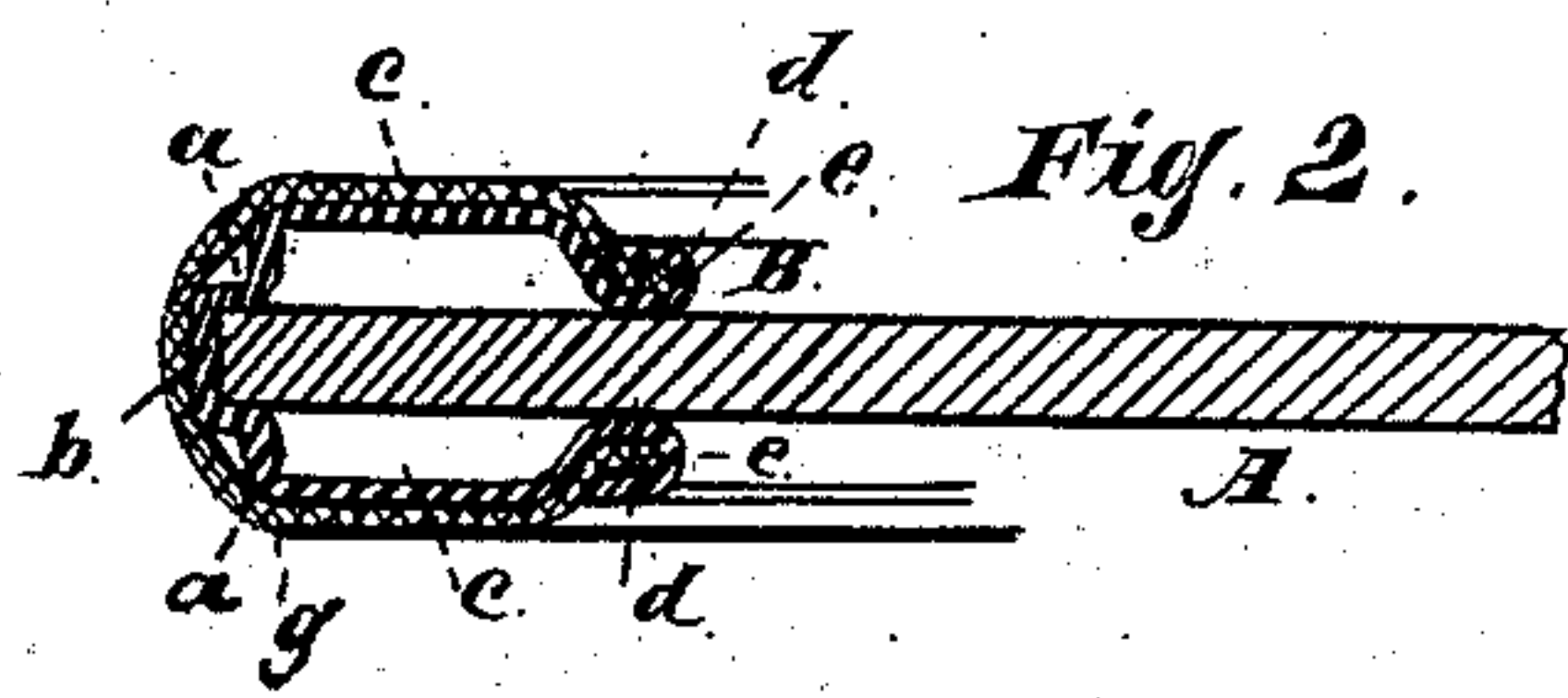
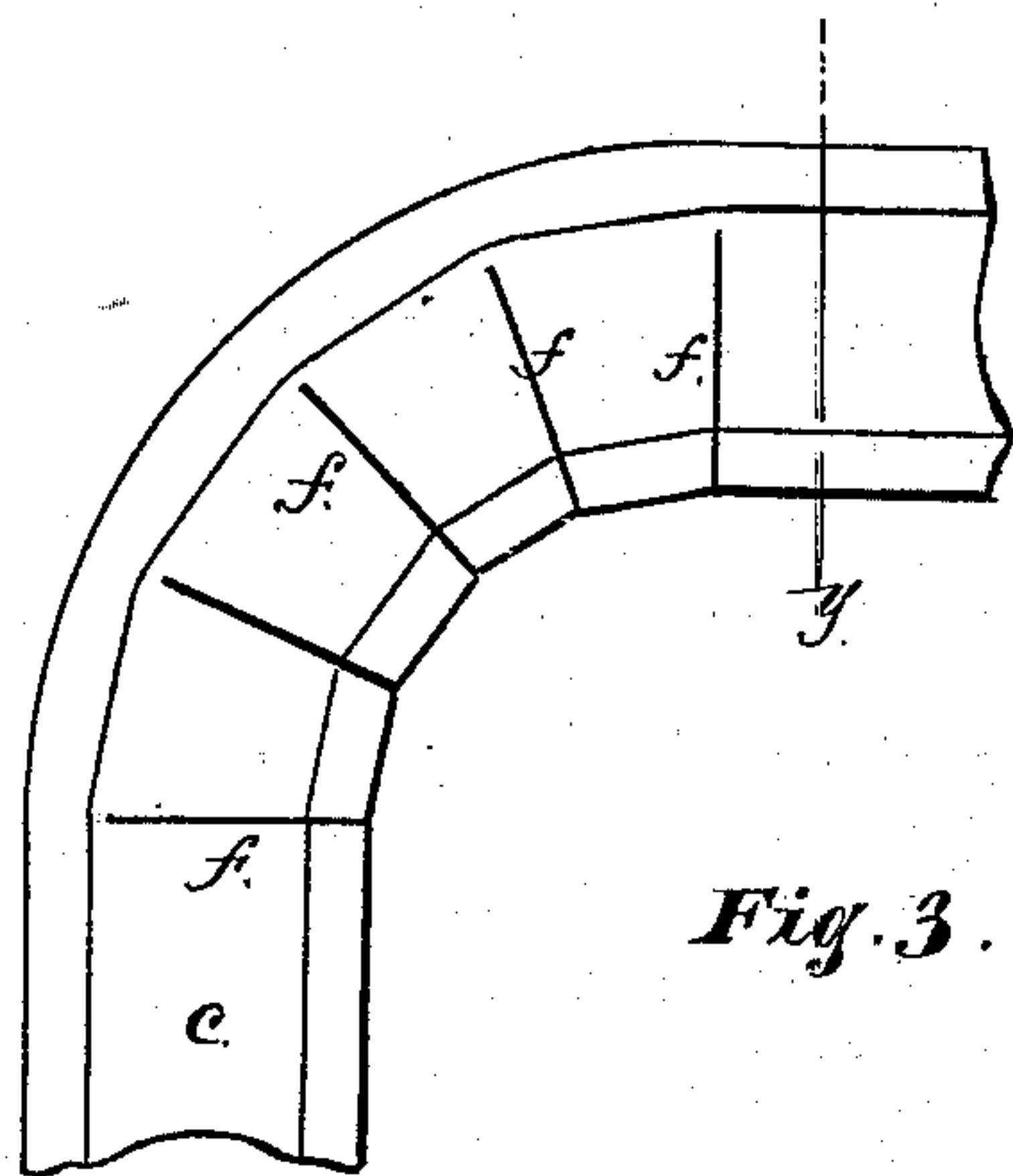
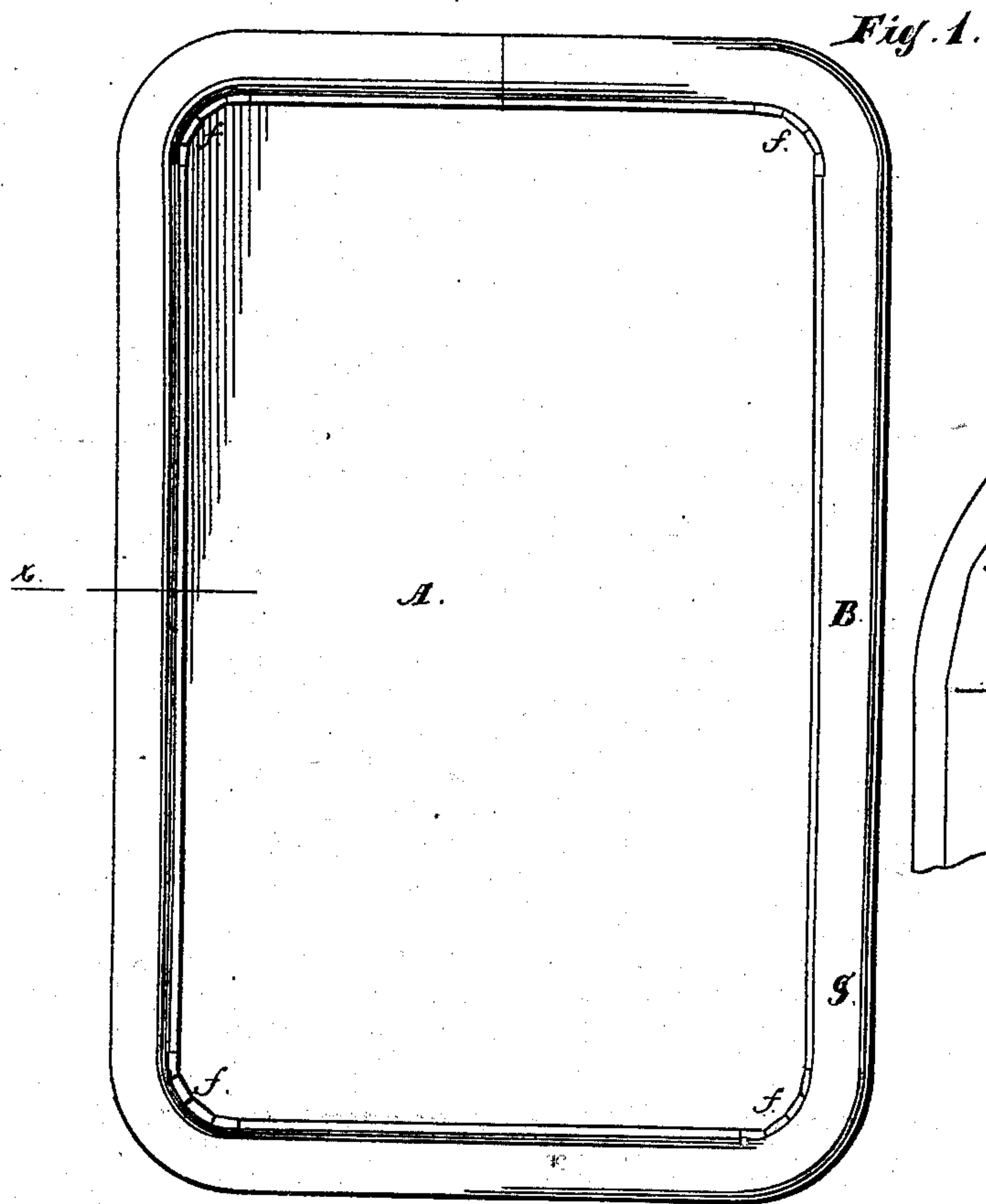


J. M. DODGE.
Slate.

No. 215,443.

Patented May 20, 1879.



Witnesses:

C. A. Hall
H. F. Brown

Inventor:

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN SLATES.

Specification forming part of Letters Patent No. **215,443**, dated May 20, 1879; application filed
March 8, 1879.

To all whom it may concern:

Be it known that I, JAMES M. DODGE, of the city of New York, in the State of New York, have invented a new and useful Improvement in Slates, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 represents a completed slate having my metallic frame and noiseless material applied thereto; Fig. 2, a section at *x* of Fig. 1. Fig. 3 shows a piece of the frame, and at one corner without noiseless material. Fig. 4 is a cross-section at *y* of Fig. 3. Figs. 2, 3, and 4 are enlarged.

The object of my invention is to provide a slate with a metal frame having noiseless material secured thereto, and so constructed that the same can be cheaply made; and it consists in making a metal frame of peculiar form, and in applying the noiseless material thereto in a novel manner, as hereinafter fully described and claimed.

In the drawings, A represents a piece of slate, the corners of which are rounded. B is the frame, which is made from a single strip of thin sheet metal, bent into the form shown in Figs. 2 and 4, and so that the outer edge of the slate proper, A, when the frame has been applied thereto, will be between two shoulders, *a a*, which form the two side walls of the recess *b* in the edge of the frame, and on the inside thereof. The sides *c c* of the frame are not in contact with the slate A, but are bent so as to come in contact with it at the points *d d*. The edges of the metal strip are bent back, forming two grooves or recesses, *e e*, one on each side.

By the use of a suitable machine the strip of metal can be bent, as described, at a single operation.

At *f*, and on each side, the metal is to be cut away, so that the frame can be bent around the corners of the slate. After the frame has been brought to place around A, the two ends of the frame are to be secured together by the use of solder.

g represents a piece of noiseless material, of

proper width to pass around or over the sides and outer edge of the frame, and have the edges of such material inserted in the grooves or recesses *e e*. The noiseless material can be firmly secured to the frame by bending down the edges of the metal, as shown in Fig. 2. This can be rapidly and effectually done by means of machinery.

At the time of applying the frame to A, a strip of paper may, if desired, be placed over that part of A covered by the frame, so that the metal will not be in contact with the slate.

In manufacturing, the slate A should fit well into the recess *b*, and the points *d* should be in close contact with the slate, or the interposed paper or other material applied to the edge thereof.

The frame can be made at little cost, and the noiseless material can be applied with very little labor, and the completed slate will be as nearly noiseless as any of the common noiseless slates now in use. I am thus able to prepare a very cheap noiseless slate, the frame of which will be very light and durable, having only a single joint, and that secured by soldering.

I have described the frame as made from a single continuous strip. Of course it can be made from several pieces joined together, but that would be attended with more expense.

What I claim as new, and desire to secure by Letters Patent, is as follows:

1. The slate-frame B, made of sheet metal, bent as shown, so as to form a hollow space, and provided with the recess *b* for the edge of the slate, substantially as specified.

2. A slate-frame, B, made of sheet metal, bent as described, so as to form recesses *e*, in combination with noiseless material *g*, held upon the frame by clamping its edges in the recess, substantially as and for the purpose set forth.

JAMES M. DODGE.

Witnesses:

E. A. WEST,
O. W. BOND.