

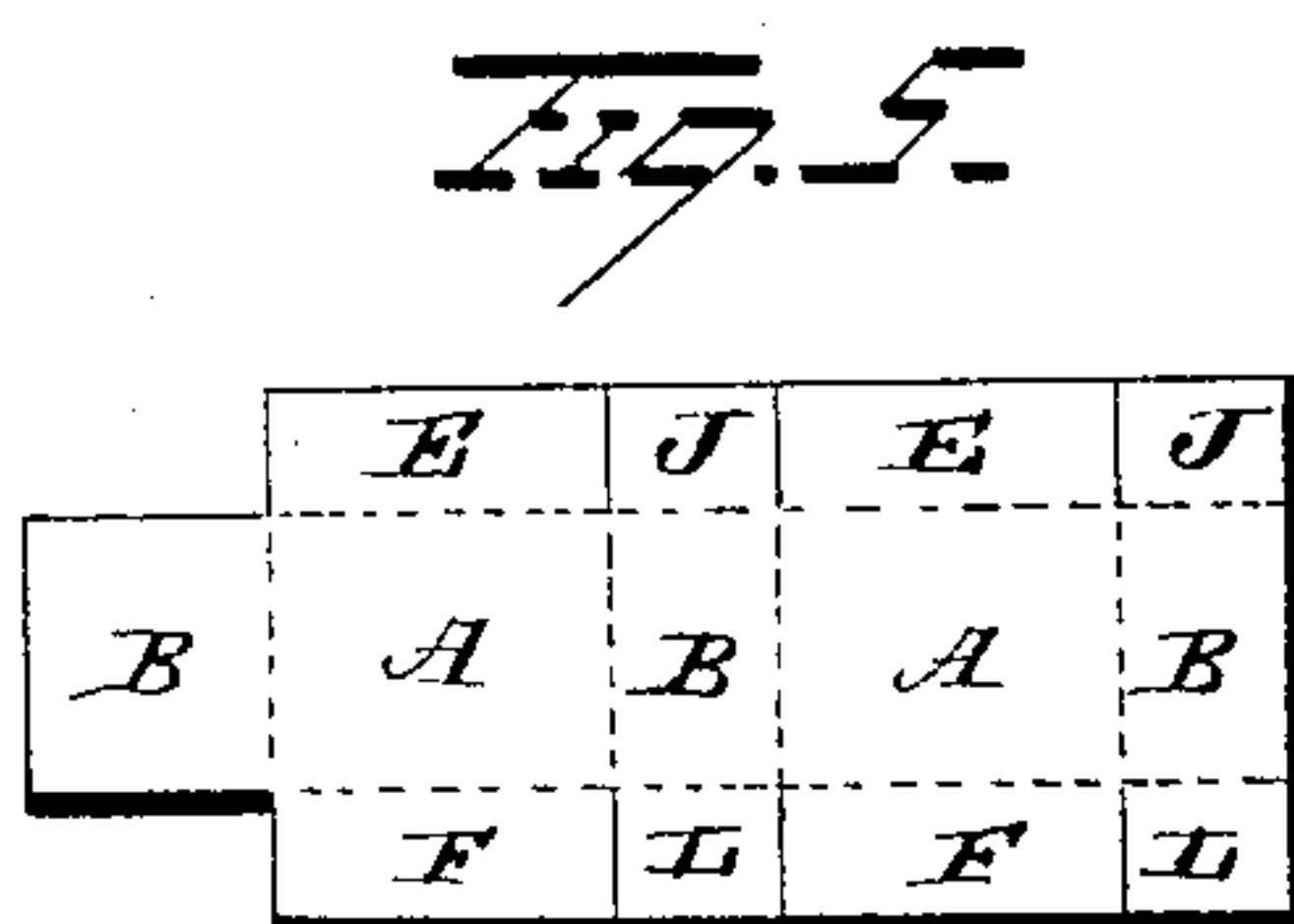
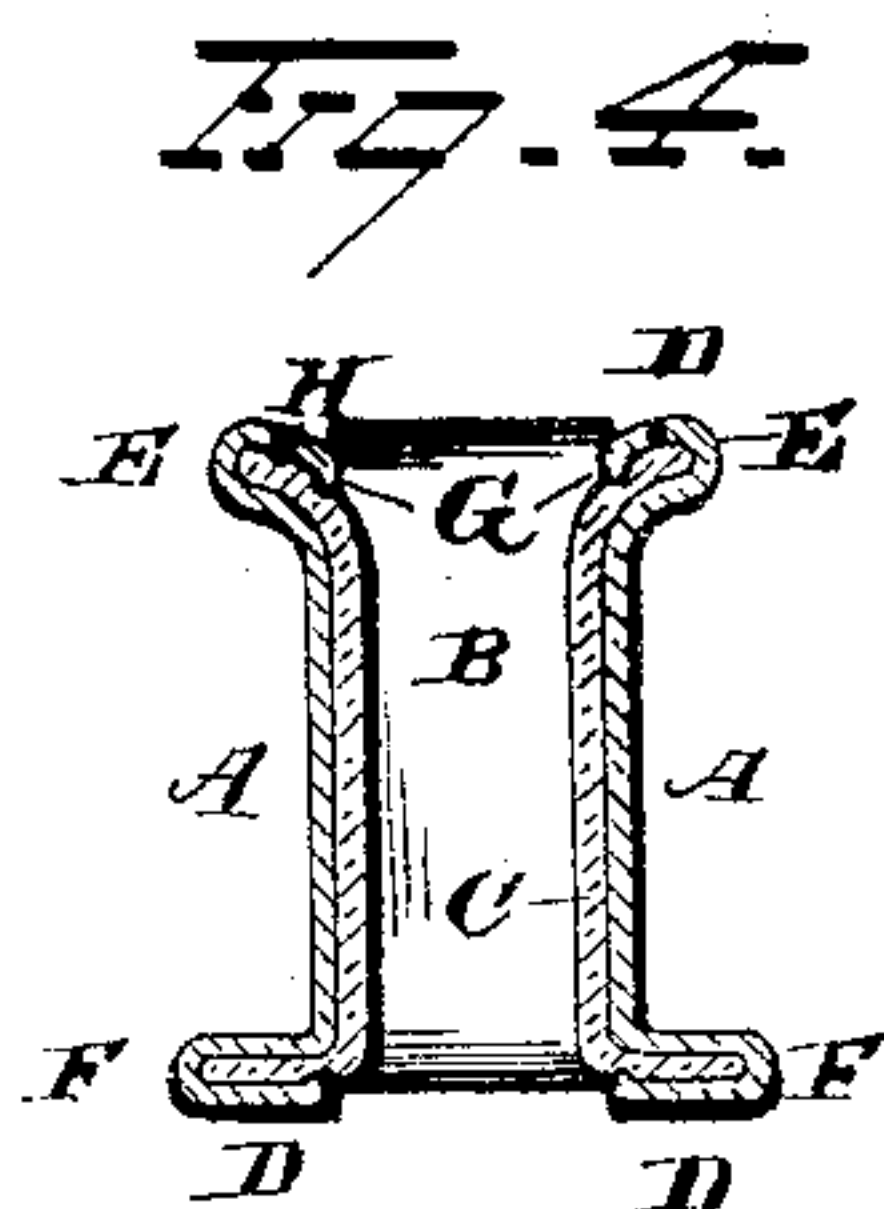
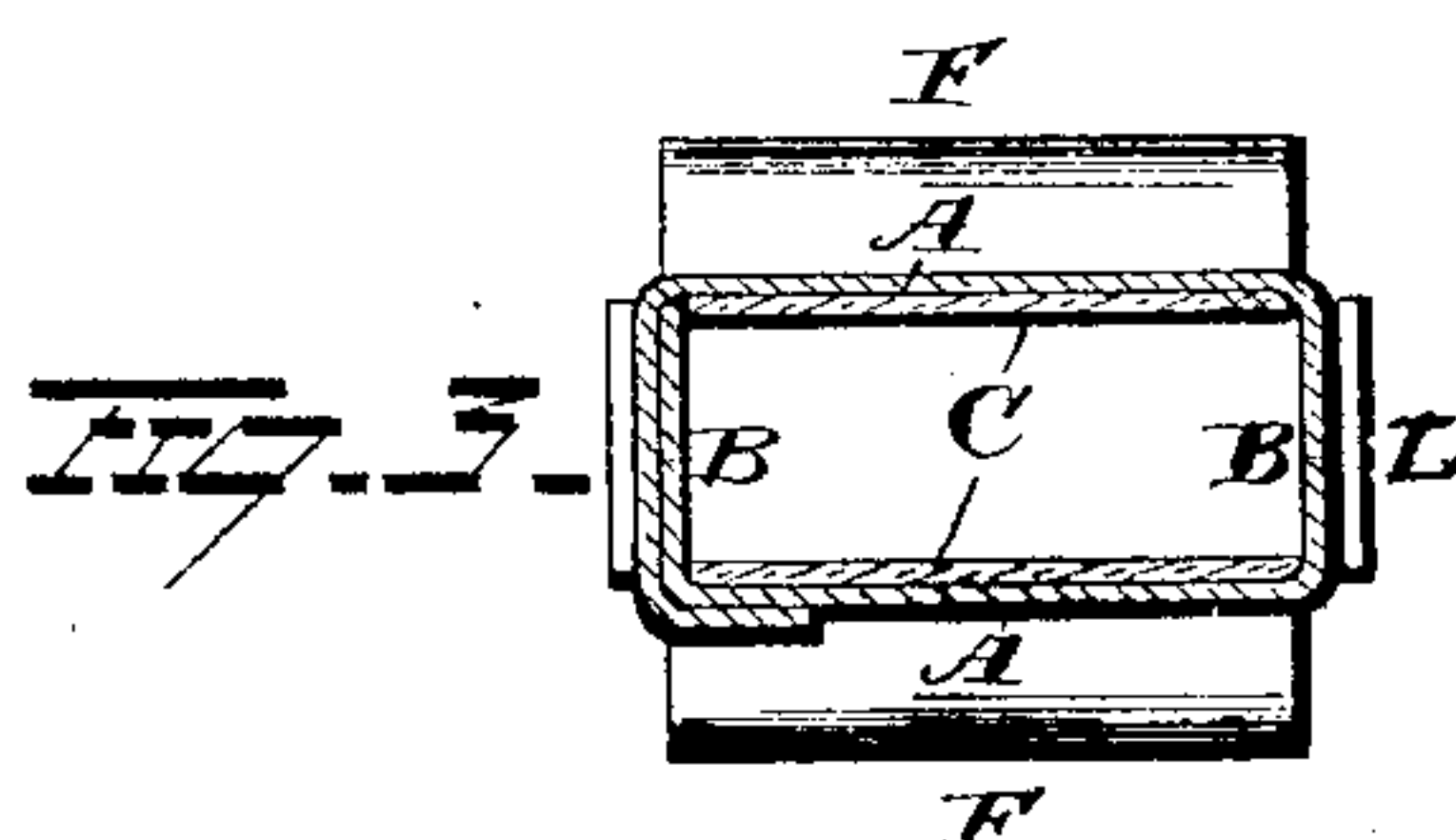
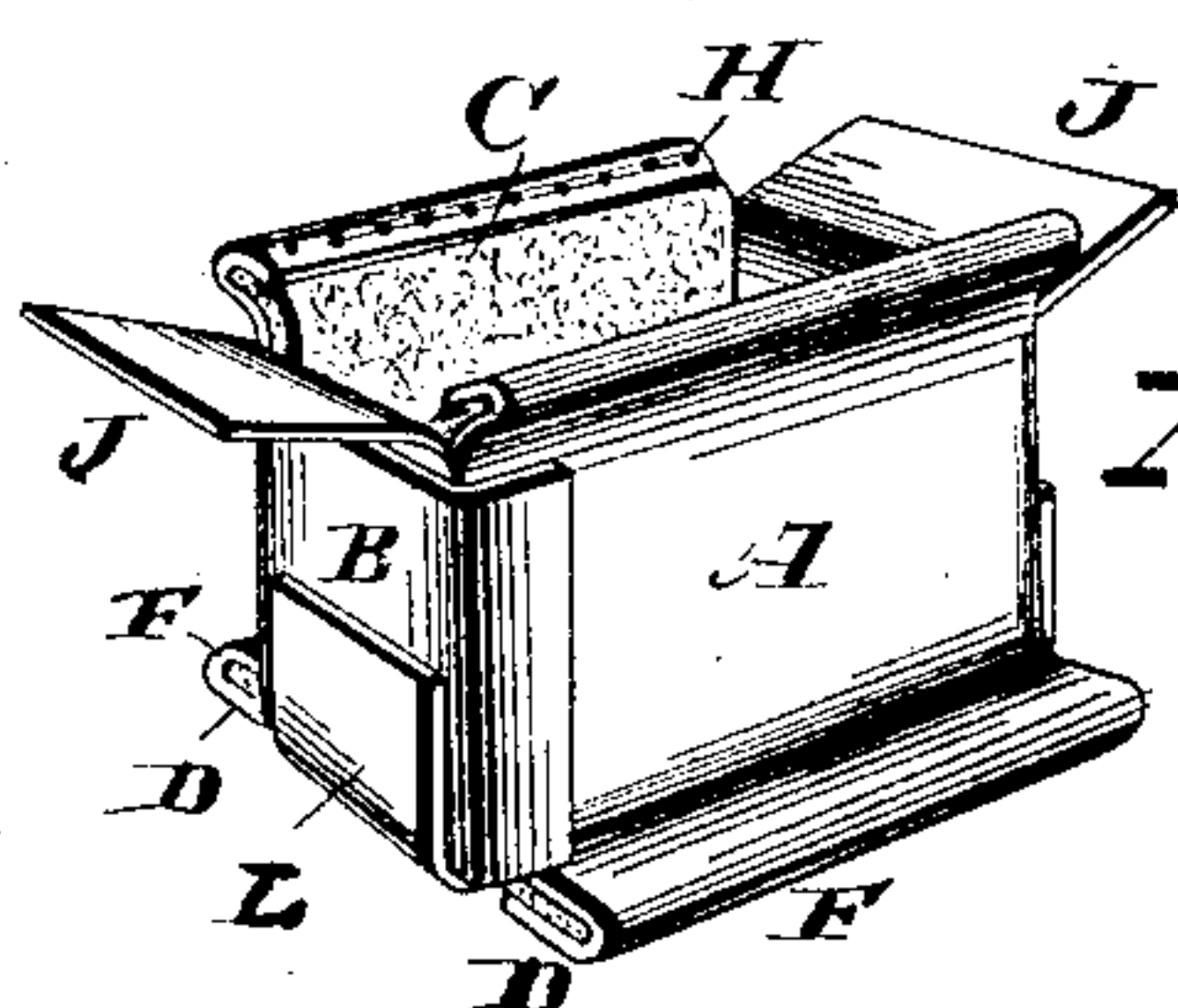
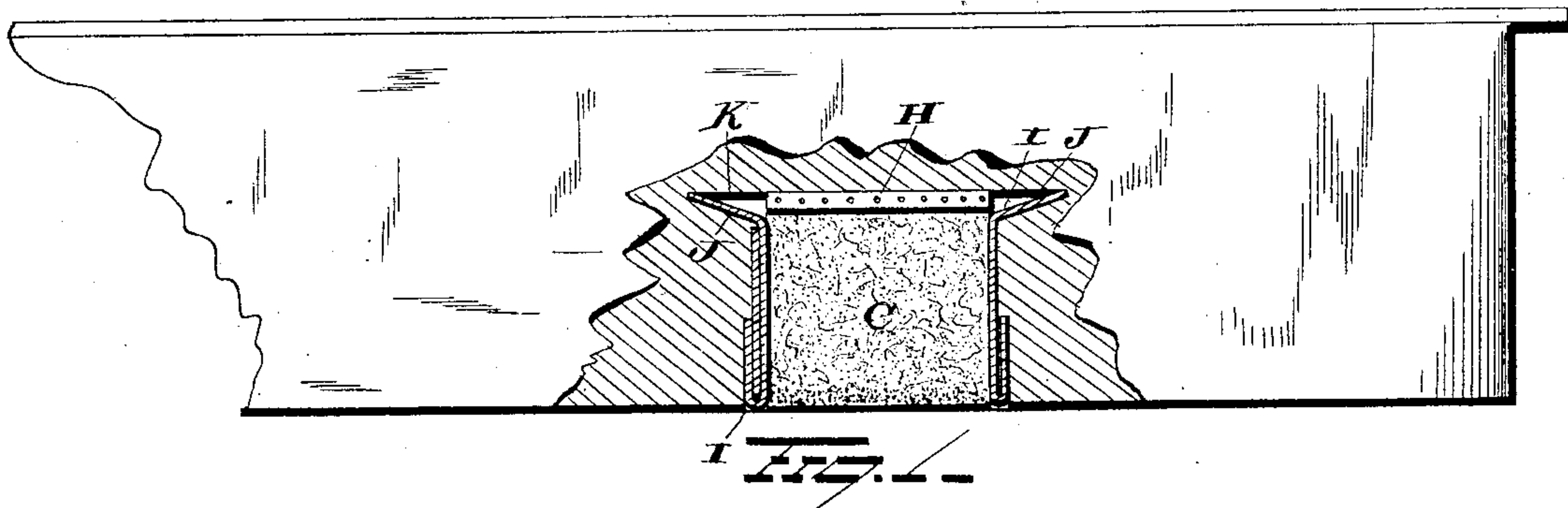
(No Model.)

W. H. LAUGHLIN.

KEY FOR MUSICAL INSTRUMENTS.

No. 274,504.

Patented Mar. 27, 1883.



WITNESSES
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WILLIAM H. LAUGHLIN, OF OBERLIN, OHIO.

KEY FOR MUSICAL INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 274,504, dated March 27, 1883.

Application filed August 9, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. LAUGHLIN, of Oberlin, in the county of Lorain and State of Ohio, have invented certain new and useful
5 Improvements in Pianos and Organs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

10 My invention relates to an improvement in pianos and organs, and more particularly to mortise-casings for the guide-pins of the keys of such instruments, the object of the invention being several fold, comprehending the
15 production of a mortise-casing which shall embody new means for being secured in position, and for the attachment of the felt lining, which shall combine simplicity of construction with durability and efficiency in use, and which
20 shall be adapted to be manufactured and applied to the keys of pianos or organs at a comparatively light expense.

With these objects in view, my invention consists in certain details of construction and
25 combinations of parts, as will hereinafter be described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in vertical longitudinal section of a piano-key provided with a mortise-casing embodying my invention. Fig. 2 is a view in
30 perspective of my improvement. Fig. 3 is a view thereof in horizontal cross-section. Fig. 4 is a view thereof in vertical transverse section, and Fig. 5 is a plan view of one of the blanks from which the casings are formed.

35 In the following description corresponding sections of the blank and casing will be designated by the same letter.

The said blanks are formed from suitable
40 strips of sheet metal, the edges of the same being incised to permit them to be deflected in sections to form the felt-retaining flanges and the fastening-lips. The central sections, A, of the blanks form the side walls of the
45 casings, while the sections B form the end walls thereof, the two outer of the said sections B being lapped past each other. The inner faces of the said side walls are covered with strips C, of felt, or of equivalent material,
50 which serve as a cushion for the guide-pins.

The upper and lower edges of the said strips of felt are clasped by the inwardly-turned edges D of the flanges E and F, respectively, said inwardly-turned edges being bent to form
55 hook-like ends G, which engage with the felt strips C and prevent their displacement. As a further safeguard against the displacement of the felt, the metal of the inwardly-turned edges D is upset by a prick-punch, whereby
60 the punctures H are formed. If desired, the hook-like ends G may be dispensed with and the upset portions of metal alone relied upon to retain the felt in place. The flanges E are given a slight outward deflection to clear them
65 from any possible interference with the action of the guide-pins, while the flanges F are bent outwardly until they form right angles with the side walls of the casings. The casings are secured in position in the mortises I of the
70 keys by means of the lips J, which are deflected into recesses K, leading out of the mortises, after the casings are introduced into the same, the deflection of the lips being effected by any suitable means. The lips L are turned
75 up against the outer faces of the end walls, B, of the casings, one of said lips serving to aid in locking the ends of the casing together.

I would have it understood that I do not limit myself to the exact construction shown and described, but that I hold myself at liberty
80 to make such slight changes and alterations as may fairly be considered to fall within the spirit and scope of my invention.

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

1. A metal mortise-casing the upper and lower edges of the side walls of which are provided with outwardly-extending felt-retain-
90 ing flanges.

2. A metal mortise-casing the upper and lower edges—either or both—of the side walls of which are provided with outwardly-project-
95 ing flanges, the edges thereof being turned inwardly in a hook-like form, substantially as set forth.

3. A metal mortise-casing the upper and lower edges—either or both—of which are provided with outwardly-projecting flanges, the
100 edges thereof being turned inwardly and pro-

vided with a series of punctured holes, substantially as set forth.

4. A metal mortise-casing, the upper ends thereof being provided with outwardly-inclined lips, which are adapted to be deflected into recesses formed in the mortises, in which the casings are secured, substantially as set forth.

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

WILLIAM H. LAUGHLIN.

Witnesses:

CHAS. A. METCALF,
GEO. E. ROSE.