

(No Model.)

L. KÜSSNER.
PEDAL ATTACHMENT.

No. 418,572.

Patented Dec. 31, 1889.

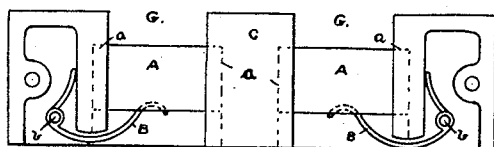


FIG. 1.

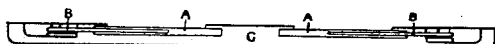


FIG. 2.

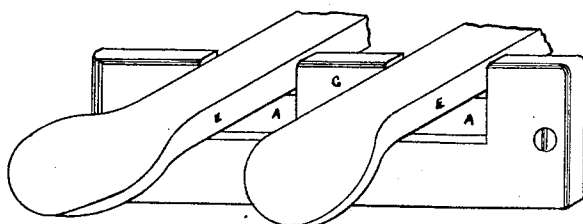


FIG. 3.

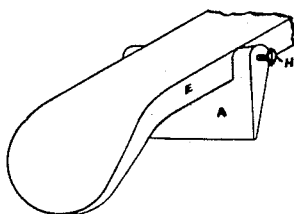


FIG. 4.

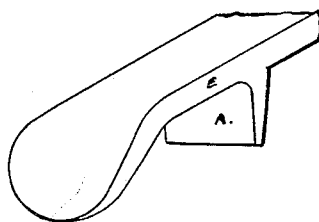


FIG. 5.

Witnesses

Blument
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UNITED STATES PATENT OFFICE.

LORENZ KÜSSNER, OF TERRE HAUTE, INDIANA.

PEDAL ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 418,572, dated December 31, 1889.

Application filed July 22, 1889. Serial No. 318,321. (No model.)

To all whom it may concern:

Be it known that I, LORENZ KÜSSNER, a citizen of the United States, residing at Terre Haute, in the county of Vigo and State of Indiana, have invented a new and useful Improvement in Mouse-Proof Attachments for Upright-Piano-Forte Pedals, of which the following is a specification, reference being had to the accompanying drawings, forming part thereof.

It is well known that mice and other vermin often gain access to the interiors of pianos and organs and work great injury to the same, and that such access to the interiors of upright pianos is generally gained through the openings beneath the pedals when they are in their normal or raised positions.

The object of my invention is to permanently close such openings without interfering with the free operation of the pedals, and thus render the piano vermin-proof.

To this end my invention consists in certain devices, hereinafter described, and particularly pointed out in the claims at the end of the specification.

In the drawings, Figure 1 is a rear elevation of the plate-casting forming the pedal-support, with my attachment applied thereto, the pedals being removed. Fig. 2 is a bottom plan view of the same. Fig. 3 is a front perspective view of the same, showing the pedals in position. Figs. 4 and 5 are detail perspective views of modifications of my invention.

Referring to Figs. 1, 2, and 3, C represents that portion of the front of the piano which constitutes the support for the pedals and my attachment, and such part will hereinafter be generally referred to as the pedal-support. This supporting-plate is cut away, as shown at G G, to accommodate the pedals E E, the latter being pivoted in the upper portion of said openings, in order that they may have a considerable range of pivotal movement.

A A are vertically-sliding plates arranged to move freely in grooves *a a* in the pedal-support C at the sides of the opening G G.

B B are springs fastened to the support C at *b b*. The outer end of each of said springs bears against a portion of the pedal-support, while the inner end bears against the lower edge of the corresponding plate A, and thus keeps the said plate at all times pressed

against the under side of the pedal. It will be readily understood that when the pedal is in its normal position no opening will be left below the same for the entrance of vermin.

In Fig. 4 the plate A is shown as attached to the pedal by means of a screw H, the relative positions of the several parts being substantially the same as those of the corresponding parts just described when the pedals are in their normal or raised position. This modified form of my invention is designed to be applied to pianos of the ordinary construction now in use, the plate A being the only new feature.

In Fig. 5 the pedal and the downwardly-projecting plate are shown as cast in one piece, this being a simplified and desirable construction when a piano of the ordinary construction is to be supplied with new pedals.

The operation of my invention will be readily understood from the foregoing description, and it will also be seen that I have invented a simple, cheap, and effective device, and one that may be easily applied to any upright piano.

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

1. The combination, with the pedals and the support therefor, of plates below the pedals adapted to slide in grooves in the pedal-support, and springs bearing against said plates to hold them against the under side of the pedals to close the spaces below the same, substantially as described.

2. The combination, with the pedal and the support therefor, of the sliding plate below the pedal, and means for holding the said plate against the under side of the pedal, substantially as described.

3. The combination, with the pedal and the plate secured at the front of the piano and provided with a vertical slot for the free front end of said pedal to project through, of a plate supported under the said pedal and moving therewith, whereby the open portion of the said slot under the pedal is always kept covered, substantially as set forth.

LORENZ KÜSSNER.

Witnesses:

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CHAS. W. CONN.