U. PRATT.

KEYS FOR PIANOFORTES, ORGANS, &c.

No. 173,999. Patented Feb. 22, 1876.

Fig. 1.

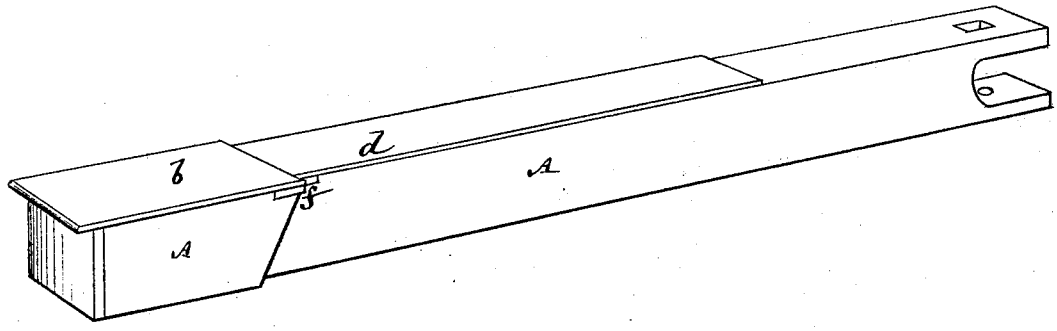


Fig. 2.

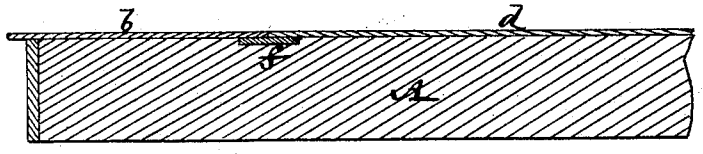
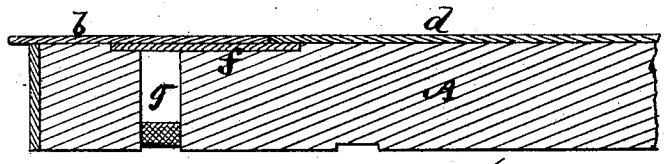


Fig. 3.



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ULYSSES PRATT, OF DEEP RIVER, CONNECTICUT.

IMPROVEMENT IN KEYS FOR PIANO-FORTES, ORGANS, &c.

Specification forming part of Letters Patent No. **173,999**, dated February 22, 1876; application filed August 12, 1875.

To all whom it may concern:

Be it known that I, ULYSSES PRATT, of Deep River, in the county of Middlesex and State of Connecticut, have invented certain new and useful Improvements in Keys for Piano-Fortes, Organs, and other musical instruments; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, which forms part of this specification, and in which—

Figure 1 represents a view, in perspective, of a key constructed in accordance with the invention. Fig. 2 is a vertical longitudinal section of said key in part, and Fig. 3 a further partial vertical longitudinal section, showing a modified construction of the key.

This invention relates to the white keys of piano-fortes, organs, melodeons, and other musical instruments. In the manufacture of said keys it is usual, by way of economising stock, to apply the ivory, or other veneer, in two or more pieces, to the tops of said keys, as for instance, one broad piece which is applied to the wide forward top portion of the key, and one narrower piece or strip, which is applied to the other narrower portion of said key. This usually makes what is termed a black joint at the meeting ends of the pieces or strips of veneer, and is very objectionable. This black joint results not so much from separation of the veneer-sections by longitudinal expansion or contraction, as from the gradual rising of one or other of said sections or pieces, which, in being separately applied to the wood of the key, are liable to be pressed unequally into the wood, and so that the one piece which is pressed harder than the other piece into the wood will rise more slowly as the wood recovers itself. There are, also, other causes which operate to produce this black joint.

My invention has for its object the prevention of such a joint; and it consists in a combination, with the separate veneer sections or pieces and wooden body or wood of the key, of a joint-supporting piece, A, of ivory, or other harder material than the wood of the key, inserted in the wood and beneath the meeting portions of the veneer-sections, whereby both of said veneer sections will uniformly rise to or maintain a flush top surface at the joint. The invention, also, consists in an extension of said inserted joint-supporting piece over the opening or hole made in the wood of the key for the pin, on which the forward portion of the key works, whereby said joint supporting piece also serves to admit of the hole for the reception of said pin being made entirely through the wood of the key, and of the pin fitting deeply into the latter, without any exposure of it, or of dust collecting above it, through the transparent or partially transparent veneer of the key.

Referring, in the first instance, to Figs. 1 and 2 of the drawing, A represents the body or wood of the white key of a piano-forte, or other musical instrument, of reduced width, or cut away on one or both of its sides for the greater portion of its length in the rear, to accommodate the sharps and flats, or black keys, of the instrument, but of increased width in front, as usual. Said front and rear portions of the wood of the key are covered, respectively, with separate pieces or sections *b d*, of ivory or other veneer, as customary in the construction of said keys, the veneer section or piece *b* being considerably wider than the piece *d*. Underneath these separate veneers, or sectional pieces of veneers, and between them and the wood of the key at the meeting parts of said veneers, and let into the upper surface of the wood of the key, is a joint supporting piece, *f*, which may be, also, of ivory, or is of any other suitable harder material than the wood of the key, whereby the two veneers *b d* will always be kept at the same level under all circumstances, and a black joint at the meeting ends of said veneers will be avoided.

Fig. 3 of the drawing shows a similar combination of separate veneers, *b d*, a joint-supporting piece, *f*, and the wood A of the key; but with the joint-supporting piece *f* extended in a forward direction, so as to project over the opening or hole *g* made in the wood of the key for reception of the pin on which the wide forward portion of the key works. The said joint-supporting piece thereby not only prevents a black joint in the veneer covering the upper portion of the key, as hereinbefore specified, but also admits of the hole *g*

being made with increased expedition through the entire wood of the key, and of the pin which enters said hole, fitting deeply within the wood of the key without exposure at the upper end of said through opening or hole *g*; also without exposure of any dust or dirt collecting above said pin through the transparent, or partially transparent, veneer on the upper surface of the key, by reason, as mentioned, of the forward-extended portion of the joint-supporting piece *f* over the hole *g*.

I claim—

1. The combination with the wood A forming the key-body, and the separate veneers *b d* applied to its top, of the joint-supporting piece *f*, of ivory or other material harder than said wood, and inserted in the latter under the meeting ends of said veneers, substantially as specified.

2. The combination, with the wood or body A of the key, and its separate top veneers *b d*, of the joint-supporting piece *f* inserted in the wood or body of the key, and extending to project over the opening or hole *g* in the forward portion of the body of the key, essentially as and for the purposes herein set forth.

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Witnesses:
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