R. E. LETTON.

COUPLERS FOR ORGANS, &c.

No. 190,687. Patented May 15, 1877.

Fig. 1.

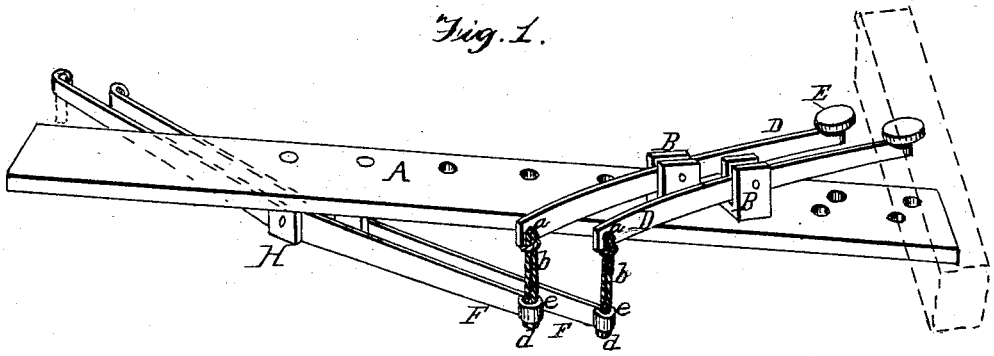

Fig. 2.

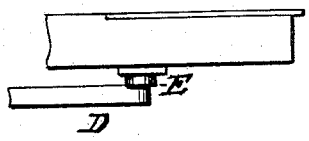

Fig. 3.

Witnesses;
Granville Lewis
Chas. R. Gill

Inventor
Raphael E. Letton
by his Attys.
Cox & Cox.

UNITED STATES PATENT OFFICE.

RAPHAEL E. LETTON, OF QUINCY, ILLINOIS.

IMPROVEMENT IN COUPLERS FOR ORGANS, &c.

Specification forming part of Letters Patent No. **190,687**, dated May 15, 1877; application filed February 19, 1877.

To all whom it may concern:

Be it known that I, RAPHAEL E. LETTON, of Quincy, in the county of Adams and State of Illinois, have invented a new and useful Improvement in Couplers for Keyed Instruments, of which the following is a specification, reference being had to the accompanying drawings.

The invention relates to an improved coupler for keyed instruments; and consists in the devices hereinafter more fully described.

The object of the invention is to provide a coupler that will occupy less space in the instrument, in which there is little or no strain upon the pivot-board, and which admits of the use of a shorter key than those couplers now in general use.

Figure 1 is a perspective view of a device embodying the elements of the invention. Figs. 2 and 3 are detached views of portions of same.

In the accompanying drawings, A represents a section of the pivot-board, or the board upon which the coupler is usually attached. Upon the upper side of this board is provided the pivot-stand B, standing diagonally to the length of the board, and having pivoted between its sides, at about its center of gravity, the lever D, one end of which is furnished with the cap E, to receive the thrust of the pin or block upon the under side of the piano or organ key. The opposite end of the lever D is provided with an aperture, *a*, through which passes the thong *b*, connecting this end of the lever with the end of the lever F, which is secured in the pivot-stand H on the under side of the board A, the thong being attached to the lever F by a wedge-pin, *d*, driven through the loop *e* on the end of the lever F. The pivot-stands B H are arranged relatively to each other, so as to hold the levers at or about at the angle shown.

The end of the lever F opposite that which is furnished with the thong *b* is intended to come in contact with a collar on a sticker-pin (not shown) an octave from the key which operates upon the cap E. Thus the action of the sticker-pin will sustain the end of the lever F above the collar, and hence force up the cap E, so that when the key is struck the sticker-pin will be forced down, causing the reed to speak, and when the pressure upon the key is relieved the sticker-pin will at once resume its usual position.

It is plain that, the pivot-stands being upon opposite sides of the board A, and the levers D and F of about equal length, there will be little, if any, strain upon the board of a twisting nature; also, that from their peculiar construction the couplers will necessarily occupy but little space, and so can be advanced nearer the key-board, besides which there is no possibility of any rattling of the coupler-levers against each other.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A coupler for keyed instruments which is sustained in single detachable pivot-stands B, placed on opposite sides of the pivot-board, substantially as shown and described.

2. A hinged coupler for keyed instruments, the two levers of which are connected by a thong, and are pivoted on opposite sides of the pivot-board, substantially as shown and set forth.

3. The lever D, thong *b*, and lever F, in combination with the stands B and pivot-board A, all arranged substantially as set forth.

In testimony that I claim the foregoing improvement in couplers for keyed instruments, as above described, I have hereunto set my hand this 13th day of February, 1877.

RAPHAEL E. LETTON.

Witnesses:

R. C. LOCKWOOD,

U. S. PENFIELD.