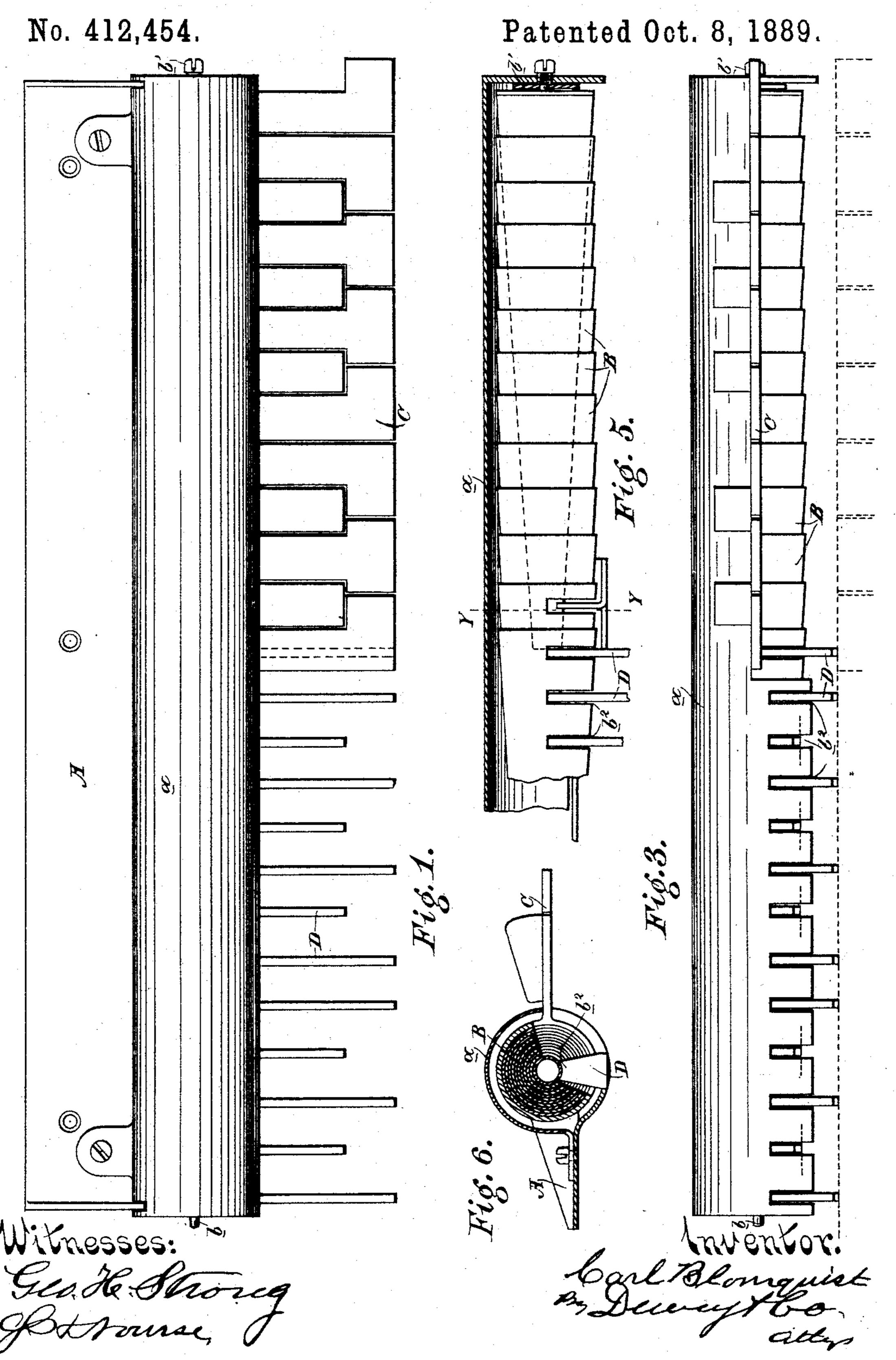
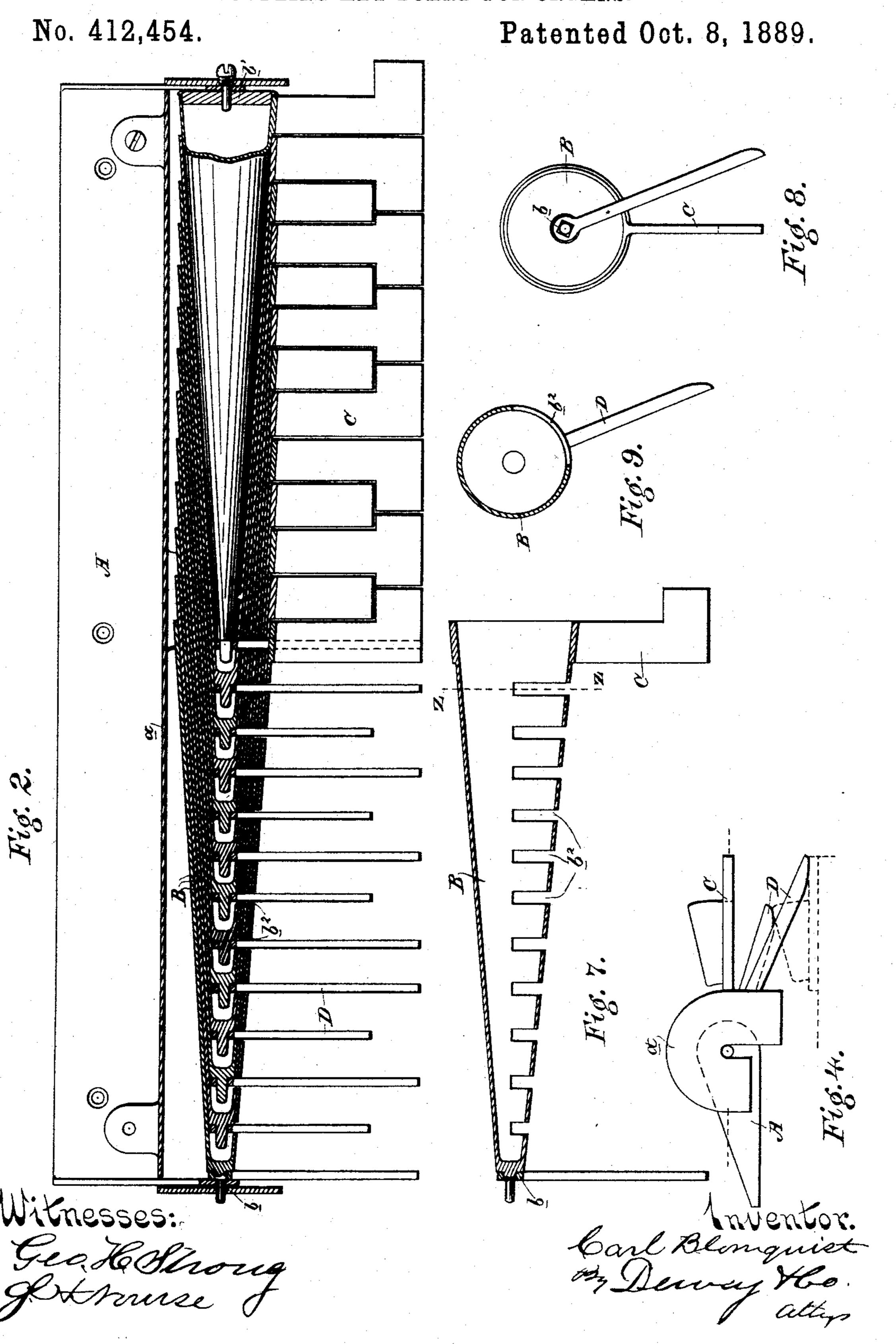
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#### COUPLING KEY BOARD FOR ORGANS.



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# United States Patent Office.

CARL BLOMQUIST, OF PESCADERO, CALIFORNIA.

## COUPLING KEY-BOARD FOR ORGANS.

SPECIFICATION forming part of Letters Patent No. 412,454, dated October 8, 1889.

Application filed March 30, 1889. Serial No. 305,454. (No model.)

To all whom it may concern:

Be it known that I, CARL BLOMQUIST, of Pescadero, county of San Mateo, State of California, have invented an Improvement in 5 Coupling Key-Boards for Organs; and I hereby declare the following to a full, clear,

and exact description of the same.

My invention relates to the class of musical instruments, and especially to the class of 10 organs; and my invention consists in a supplementary key-board adapted to be attached to the organ-face above a portion of the main key-board, the keys of the supplementary board being attached each to an axially-mova-15 ble tube, said tubes being arranged in concentric series and each tube having connected with it an arm or lever, which lies over and is adapted to move down into contact with the key of the main key-board, 20 which lies under it, whereby said key is operated, all of which I shall hereinafter fully describe.

The object of my invention is to do away with the usual foot-keys of an organ by pro-25 viding a simple, convenient, and effective means for coupling the keys of the main keyboard in octaves by hand, whereby when notes are joined the keys of which are separated by a distance too great to span the 30 proper keys may be operated conveniently by means of the supplementary key-board of

the coupling device.

Referring to the accompanying drawings for a more complete explanation of my in-35 vention, Figure 1 is a plan of my coupling key-board. Fig. 2 is a horizontal section of the same. Fig. 3 is an elevation. Fig. 4 is an end view. Fig. 5 is a sectional elevation. Fig. 6 is a cross-section on line YY of Fig. 5. 40 Fig. 7 is a detail of one of the tapering devices. Fig. 8 is an end view of Fig. 7. Fig.

9 is a section on line Z Z of Fig. 7.

A is a frame adapted to be secured to the face of the organ. This frame has on its front 45 a casing a, in which are contained the concentric series of tapering tubes B. This series is mounted in the casing a by means of the point b of the outermost tube at one end and the end b' of the innermost tube at the 50 other end. The intermediate tubes are mounted one in another, and all the tubes are

adapted to be independently and separately moved, each about its own axis.

C are the keys of the coupler, here shown as a complete octave and one key over, 55 though as many may be employed as may be desired. Each key is connected with a tube of the concentric series, this connection being permissible by reason of the arrangement of the series, the end of one tube projecting 60 from the end of the other. To the point of each tube is secured an arm or lever D, which projects outwardly through suitable elongated apertures  $b^2$ , made in all the tubes. These arms or levers project and lie directly 65 over the inner portion of the keys of the main key-board, which main key-board it is unnecessary to show herein, as the operation will be readily understood.

The arms or levers and the keys of the de- 70 vice are arranged an octave apart, so that the keys of the main board may be coupled in

octaves.

The operation of the device is as follows: By pressing down any of the keys C the par- 75 ticular tube to which the key is attached is thereby partially rotated, so that the arm or lever D, which is attached to its point, is moved downwardly upon and presses down the key of the main key-board. When the 80 key C is relieved, the upward movement of the main key returns the parts of the coupler to normal position. Now in executing notes which are removed by a distance too great to span, the proper key of the supple-85 mentary or coupling key-board may be touched conveniently, thereby pressing down the key of the octave below which is desired. Thus the employment and use of the footkeys are avoided, as the proper notes may be 90 played by the hands.

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

Patent, is—

1. A coupling key-board for organs, consist- 95 ing of a series of supplementary keys placed above the main keys of the organ, a series of arms or levers adapted to extend over and lie in contact with the main keys, and a series of concentric slotted tubes connecting the 100 supplementary keys with the arms or levers. whereby as the former are pressed down the

latter are forced down also to operate the corresponding keys of the main key-board,

substantially as described.

2. A coupling key-board for organs, consisting of the series of supplementary keys placed above the main keys of the organ, the series of arms or levers adapted to lie over and in contact with the main keys of the organ, and the concentric series of axially-rotating tapering and slotted tubes connecting the supplementary keys with the arms or lo

the supplementary keys with the arms or levers, whereby as the former are operated the latter press down the main keys of the or-

gan, substantially as described.

5 3. A coupling key-board for organs, com-

prising a frame adapted to be attached to the organ-face and having a front casing, the concentric series of tapering slotted tubes mounted and adapted to be axially moved in said casing, the series of keys attached to 20 said tubes, and the series of arms or levers attached to said tubes, arranged and adapted to operate substantially as described.

In witness whereof I have hereunto set my

hand.

CARL BLOMQUIST.

Witnesses:

S. H. NOURSE, H. C. LEE.