

(No Model.)

W. R. & A. S. CONNER.

KEYED MUSICAL TUBE.

No. 358,841.

Patented Mar. 8, 1887.

Fig. 1.

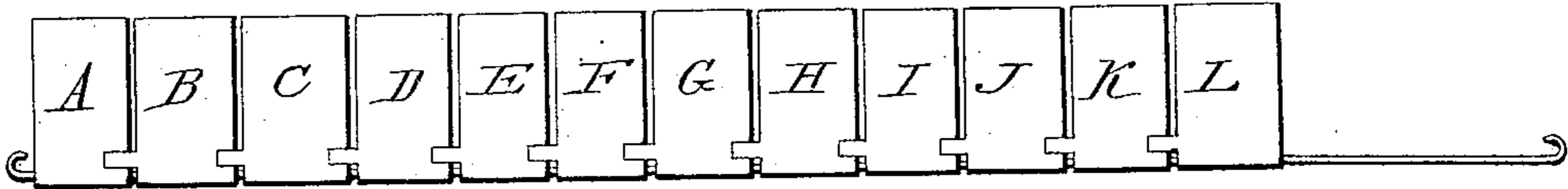


Fig. 2.

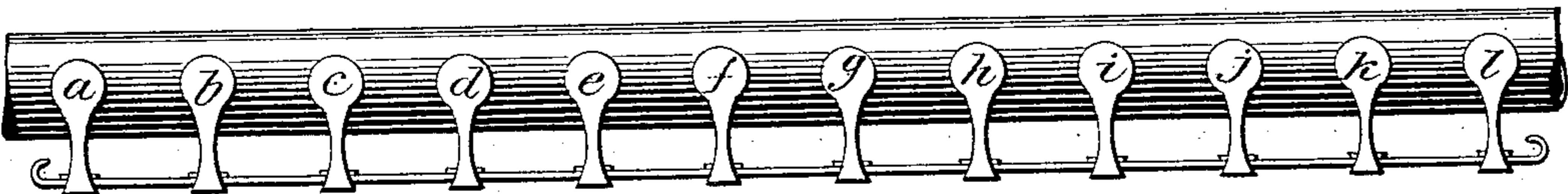


Fig. 3.

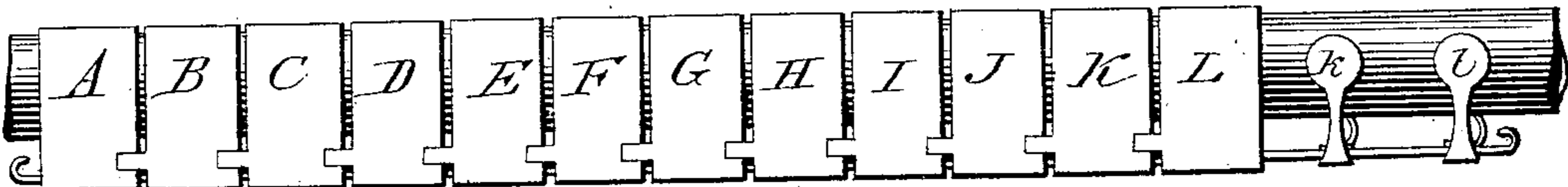


Fig. 4.

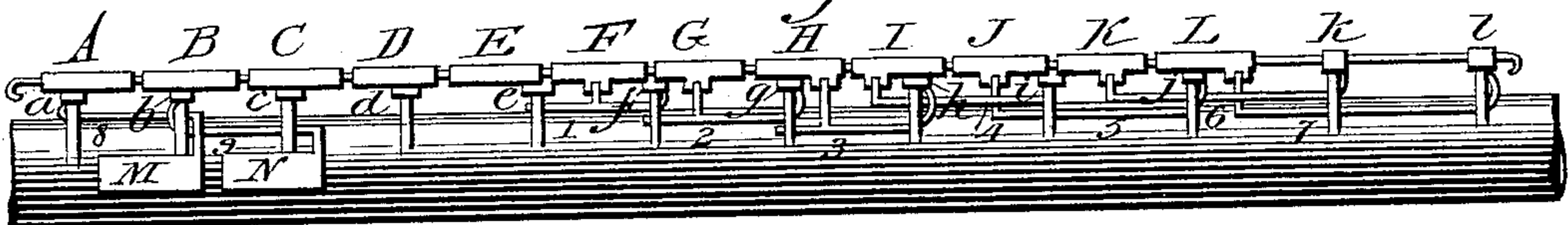
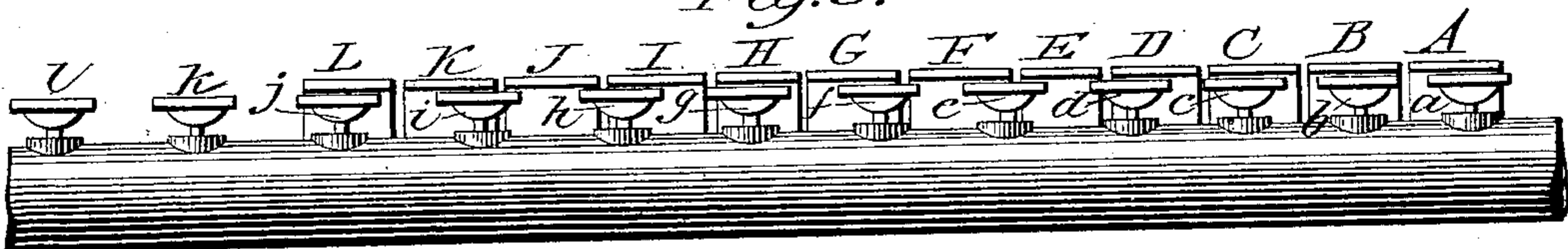


Fig. 5.



Witnesses.

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KEYED MUSICAL TUBE.

SPECIFICATION forming part of Letters Patent No. 358,841, dated March 8, 1887.

Application filed November 10, 1885. Serial No. 182,390. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM ROBERT CONNER and AARON SHELBY CONNER, citizens of the United States, residing, respectively, at Milton, in the county of Van Buren and State of Iowa, and at Hitt, in the county of Scotland and State of Missouri, have invented a new and useful Improvement in Keyed Musical Tubes, of which the following is a specification.

The object of our invention is to render the execution of music equally easy in all keys upon musical tubes having vent-holes in the side—such as the flute, clarinet, oboe, saxophone, and piccolo—which is accomplished by the combination, with the tube, of a set of keys constructed and arranged as hereinafter described.

In the drawings, Figure 1 is a set of overlapping keys. Fig. 2 is a tube with keys to cover the holes. Fig. 3 shows the keys in combination with the tube. Fig. 4 is a back view showing two sets of keys, rods, standards, and thumb attachments. Fig. 5 is a front view showing two sets of keys.

In the drawings similar letters refer to similar parts throughout the several views.

In the set of keys A, B, C, D, E, F, G, H, I, J, K, and L, each key extends in one direction, so that when acted upon it comes in contact with the key next to it in one direction. Consequently when any key is acted upon it acts in one direction upon the key next to it, and consequently upon all keys in that direction.

It will be understood that the instrument may be constructed with but a single set of

keys, each key containing a pad; but as the keys for the fingers to play upon should be of uniform width, and as the holes, when the tube is properly tuned, gradually increase in distance toward the lower end of the instrument, we deem it best to use two sets of keys where the holes are too far apart to use one set conveniently, as shown in Fig. 4, in which A, B, C, D, E, F, G, H, I, J, K, and L are the keys for the fingers to play upon, each one of which, when acted upon, acts upon a key in the set a, b, c, d, e, f, g, h, i, j, k, and l, which cover the holes. A, B, C, D, and E act directly upon a, b, c, d, and e by coming in contact with them; and F G H I J K L act upon f, g, h, i, j, k, and l by means of the rods 1, 2, 3, 4, 5, 6, and 7. The thumb attachments M and N act upon a and b by means of rods 8 and 9. Proper springs are provided for the purpose of carrying back the keys.

What we claim as our invention, and desire to secure by Letters Patent, is—

The combination, with a musical tube having vent-holes in the side, of the set of keys A, B, C, D, E, F, G, H, I, J, K, and L, each one of which is provided with an extension projecting so as to connect with the adjacent key, so that when any key is acted upon it comes in contact with and acts in one direction upon the key next to it, and consequently upon all keys in that direction, as specified.

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AARON SHELBY CONNER.

Witnesses:

ROBERT TUCKER DAVIS,
JAMES EVESTT HESKETT.