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PATENTED DEC. 26, 1905.

D. C. GREENE.
PIANO PEDAL.

APPLICATION FILED APR. 10, 1905.

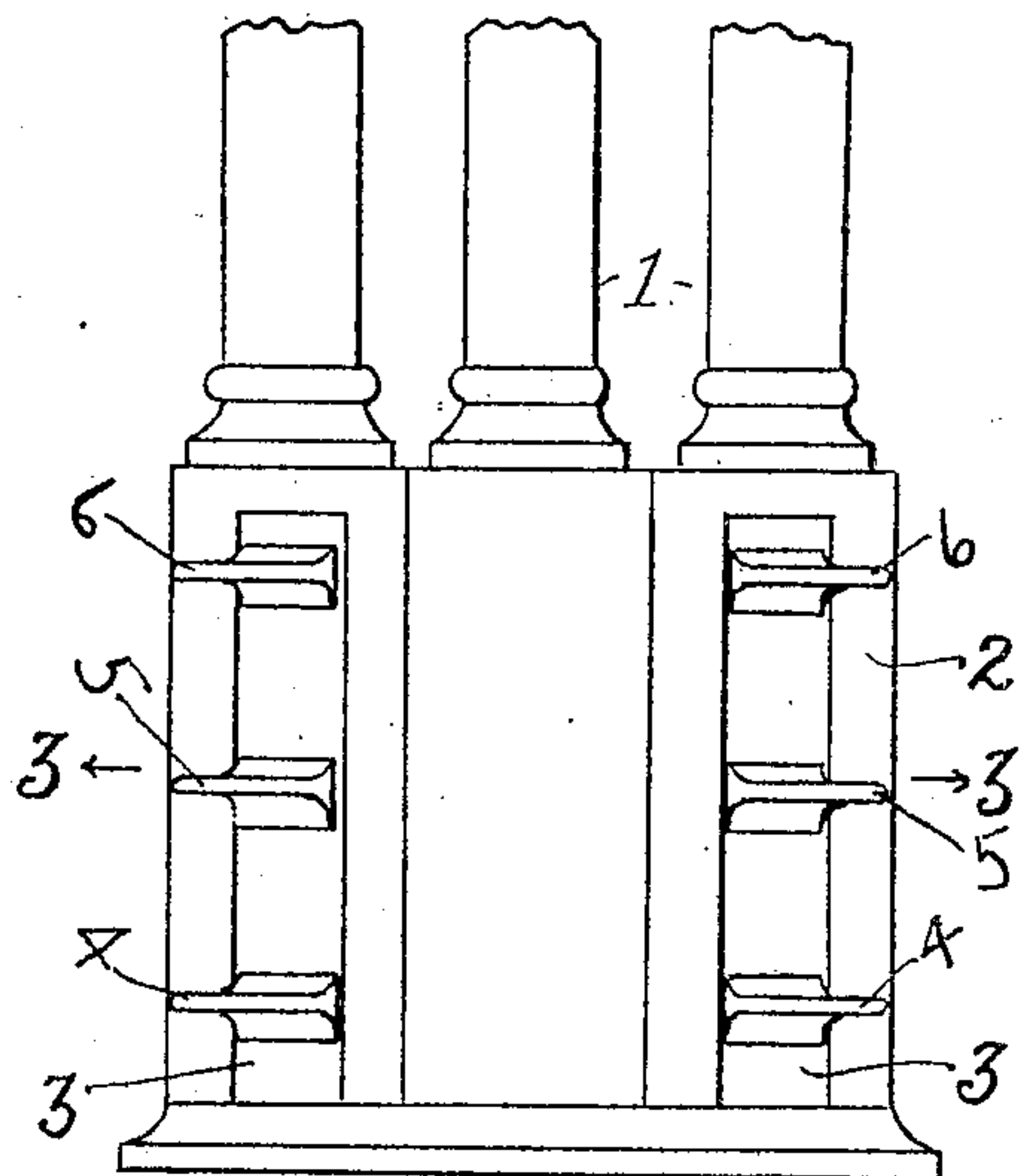


Fig. 1.

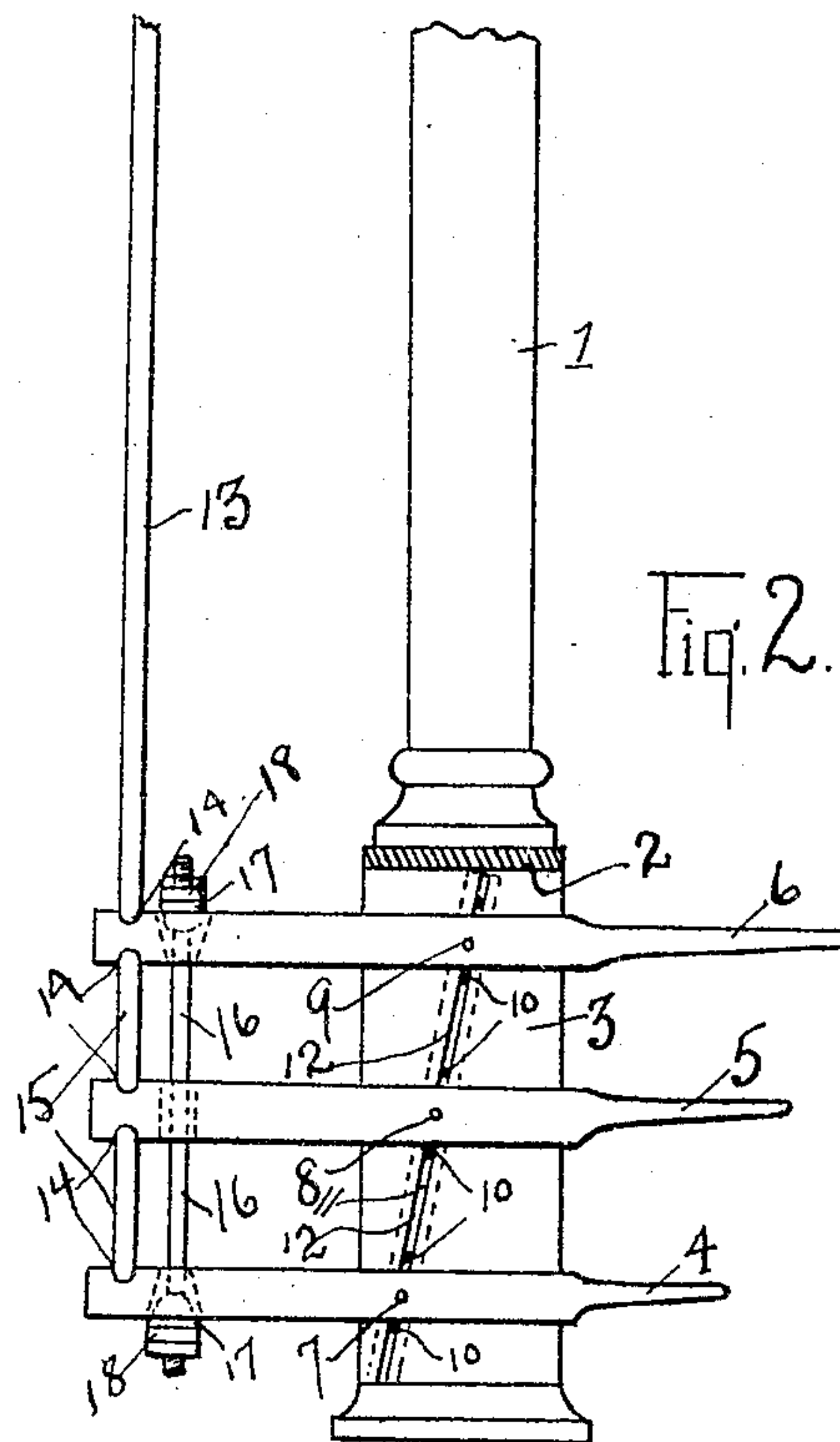


Fig. 2.

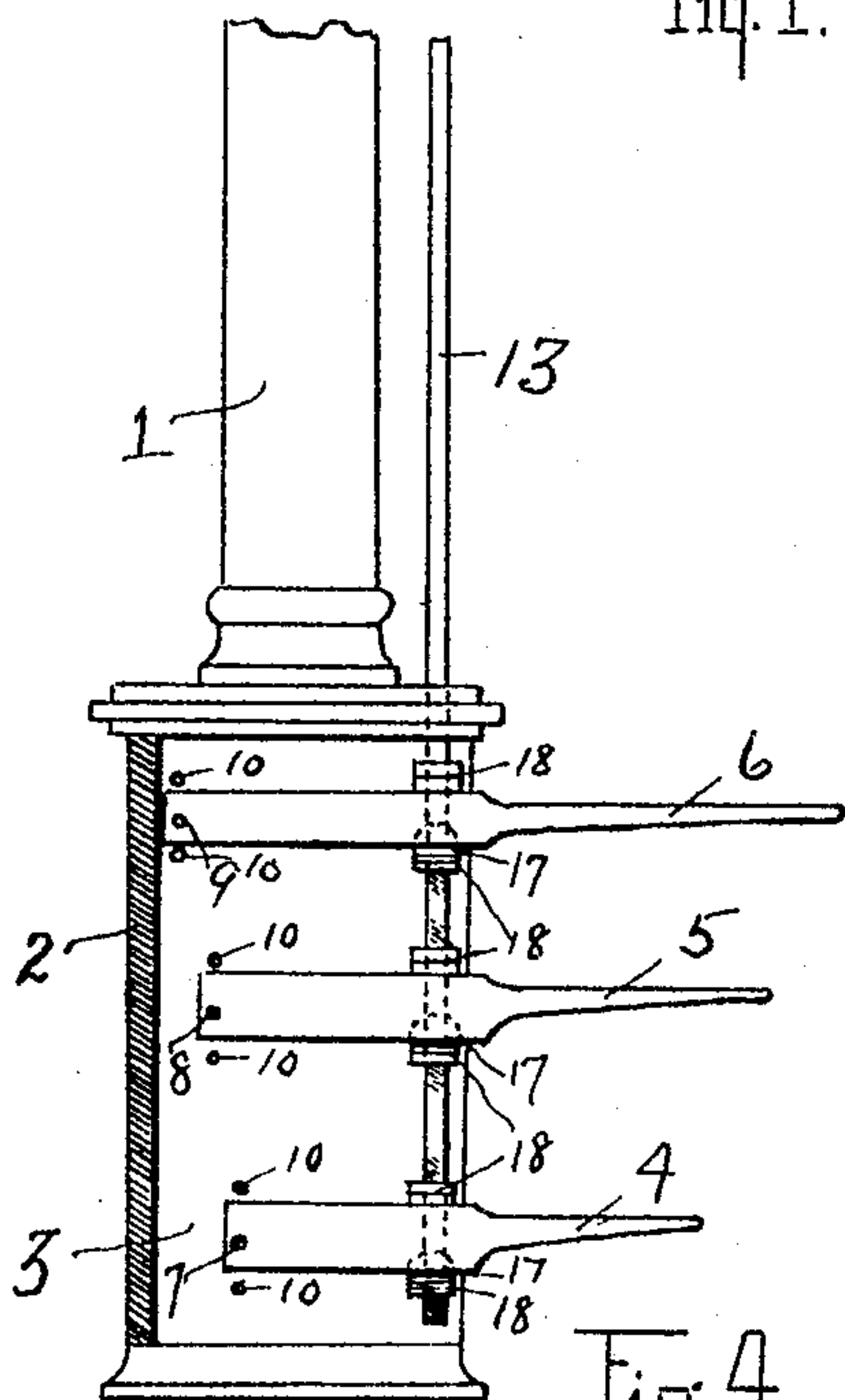


Fig. 4.

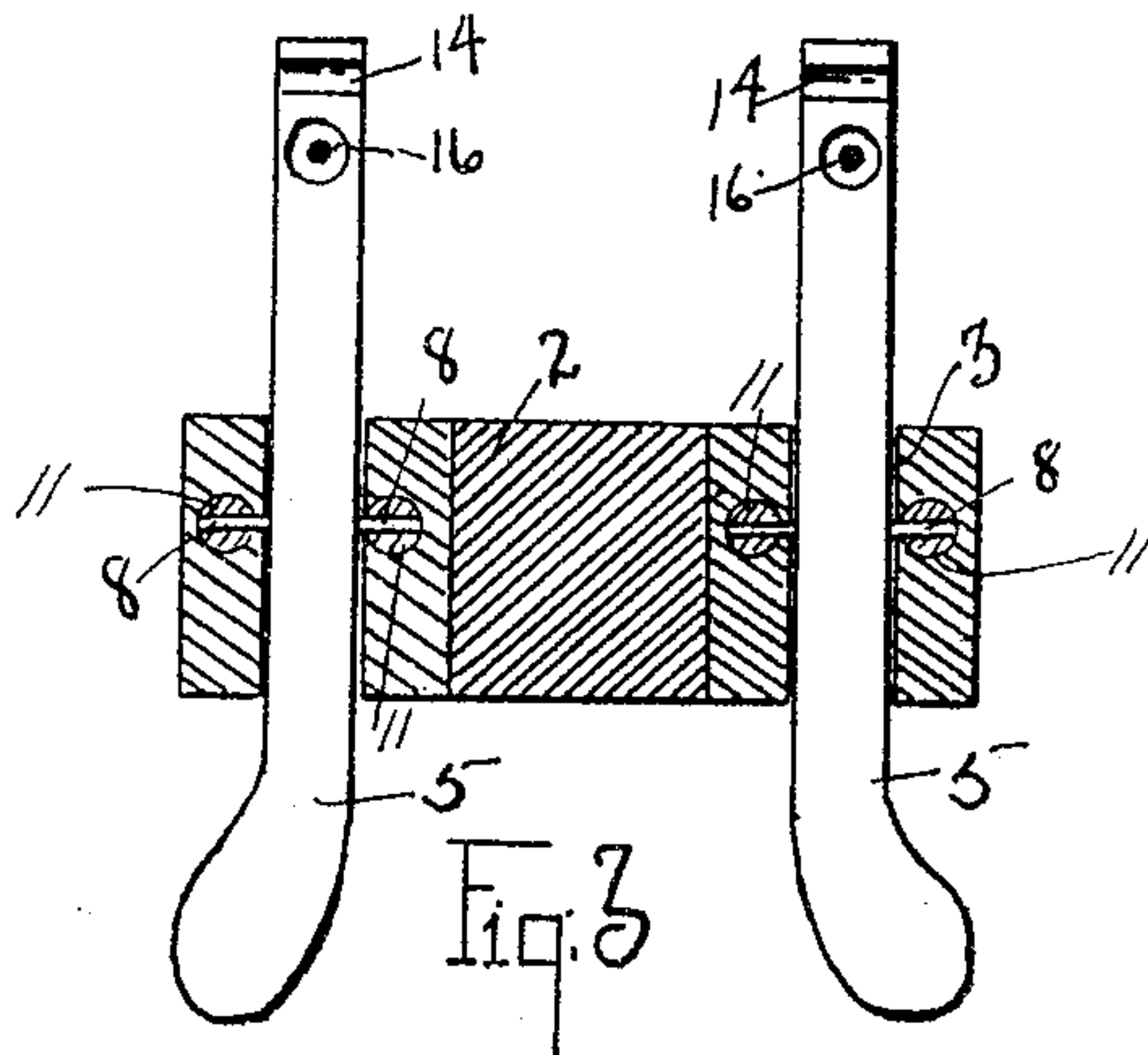


Fig. 3.

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PIANO-PEDAL.

No. 808,449.

Specification of Letters Patent.

Patented Dec. 26, 1905.

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To all whom it may concern:

Be it known that I, DUNCAN CAMERON GREENE, a citizen of the United States, residing at Somerville, county of Middlesex, Commonwealth of Massachusetts, have invented certain new and useful Improvements in Piano-Pedals, of which the following is a specification.

This invention relates to piano-pedals, and more particularly to a pedal structure adapted for use by players of different stature.

The object of the present invention, therefore, is to provide a pedal or a multiple pedal which will be accessible and convenient for persons of different stature and at the same time retain the usual movement and easy and noiseless action which are present in the usual piano-pedal.

To this end I have devised a multiple pedal, which while adjustable within certain degrees is convenient without adjustment for adults, children, and those of small stature. This pedal, moreover, by preserving the same lever ratio throughout, makes the action of the pedal even and assures the effect desired.

Various other features are present in this invention, which will be more fully set forth in the accompanying specification and the drawings, which form a part thereof, and in which—

Figure 1 is an elevation of the front of my pedal structure; Fig. 2, a transverse section of the pedal portion; Fig. 3, a section on the line 3-3, Fig. 1; and Fig. 4 is a section of a modification.

1 is a lyre of any known construction having a base 2, slotted at 3 for the reception of pedals, which are superimposed and suitably spaced apart.

Pedal 5 is made slightly longer than 4, and 6 is slightly longer than 5, so that the upper pedals are not only nearer the body of the piano, but extend nearer the front of it. 7, 8, and 9 are pivot-pins for the pedals 4, 5, and 6 and are arranged to make of each pedal a lever of the same ratio. The pivot-pins 7, 8, and 9 bear in holes 10 in a dowel 11 through inclined slots 12. The dowels 11 are set in holes in the base 2 and are at such an incline that the pins 7, 8, and 9 of the pedals 4, 5, and 6, which are suitably spaced apart, will engage the holes 10 through the slot 12. These dowels are merely wooden rods having the holes 10 bored at intervals throughout their length for the reception of the pins 7, 8, and 9. In assembling the parts the pins 7,

8, and 9 are inserted in the proper holes in the dowels and the latter slide into their respective holes in the base 2 and the pedals with them.

In Fig. 2 I have shown the pedal-rod 13 as resting in a socket 14 on the top of the pedal 6 and links 15, bearing in similar sockets 14, connecting the ends of all these pedals. 16 is a tie-rod having a bushing 17 at each end held against the top and bottom, respectively, of pedals 6 and 4 by lock-nuts 18. The rod 16 passes through all three pedals and has sufficient play in each to prevent any binding of the parts.

As shown in Fig. 4, I usually employ a slightly-different structure where the pedal-rod comes between the pivot and the foot, forming a lever of the second class. In this form I usually dispense with the struts 15 and pass the pedal-rod through all three pedals, providing each with a pair of bushings 17 and lock-nuts 18. In this form the pedals are most easily adjustable, as they can be moved by merely changing the position of the lock-nuts of the rod 13, which is screw-threaded at intervals at its lower end for this purpose. In this case the pivots 7, 8, and 9 are similarly arranged and the pedals proportioned as above.

For studio use the pedals will be adjusted for the average pupils, and in families or for recitals where several are to perform the individual pedals may be set for each person.

What I therefore claim, and desire to secure by Letters Patent, is—

1. A device of the class described having a plurality of superimposed pedals of increasing length, but pivoted in the same lever ratio.

2. A device of the class described having a plurality of superimposed pedals of increasing length, but pivoted in the same lever ratio, and an inclined support for the pivots.

3. In a device of the class described, a plurality of superimposed pivoted pedals of increasing length, and a support for said pivots, inclined so as to preserve the same lever ratio in all the pedals.

4. In a device of the class described, a plurality of superimposed pivoted pedals of increasing length, but of the same lever ratio, means for adjustably supporting said pedals, a pedal-rod connecting said pedals, and means for adjusting the connections of said pedals with said rod.

5. In a device of the class described, a plurality of superimposed pivoted pedals of in-

creasing length, but of the same lever ratio, an inclined support for the pivots of said pedals, means for adjusting the pivots therein, a pedal-rod connecting said pedals, and means
5 for adjusting the connections of said pedals with said rod.

6. In a device of the class described, the combination of a plurality of superimposed pivoted pedals of increasing length, but of the
10 same lever ratio, a support for said pivots consisting of an inclined member having recesses therein.

7. In a device of the class described, the combination of a plurality of superimposed
15 pivoted pedals of increasing length, but of the same lever ratio, a support for said pivots consisting of a rod having recesses therein, said

rod being inclined to preserve the lever ratio of said pedals.

8. In a device of the class described, the
20 combination of a plurality of superimposed pedals, a notch on the upper face of the upper pedal for the reception of the pedal-rod, notches in the adjacent faces of the pedals, connecting-struts between said pedals said
25 struts resting in said notches and a tie-rod holding said pedals together.

In testimony whereof I affix my signature in presence of two witnesses.

DUNCAN CAMERON GREENE.

Witnesses:

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