

R. H. Hooper

Piano Attachment

N^o 79830.

Patented July 14, 1868.

Fig. 2

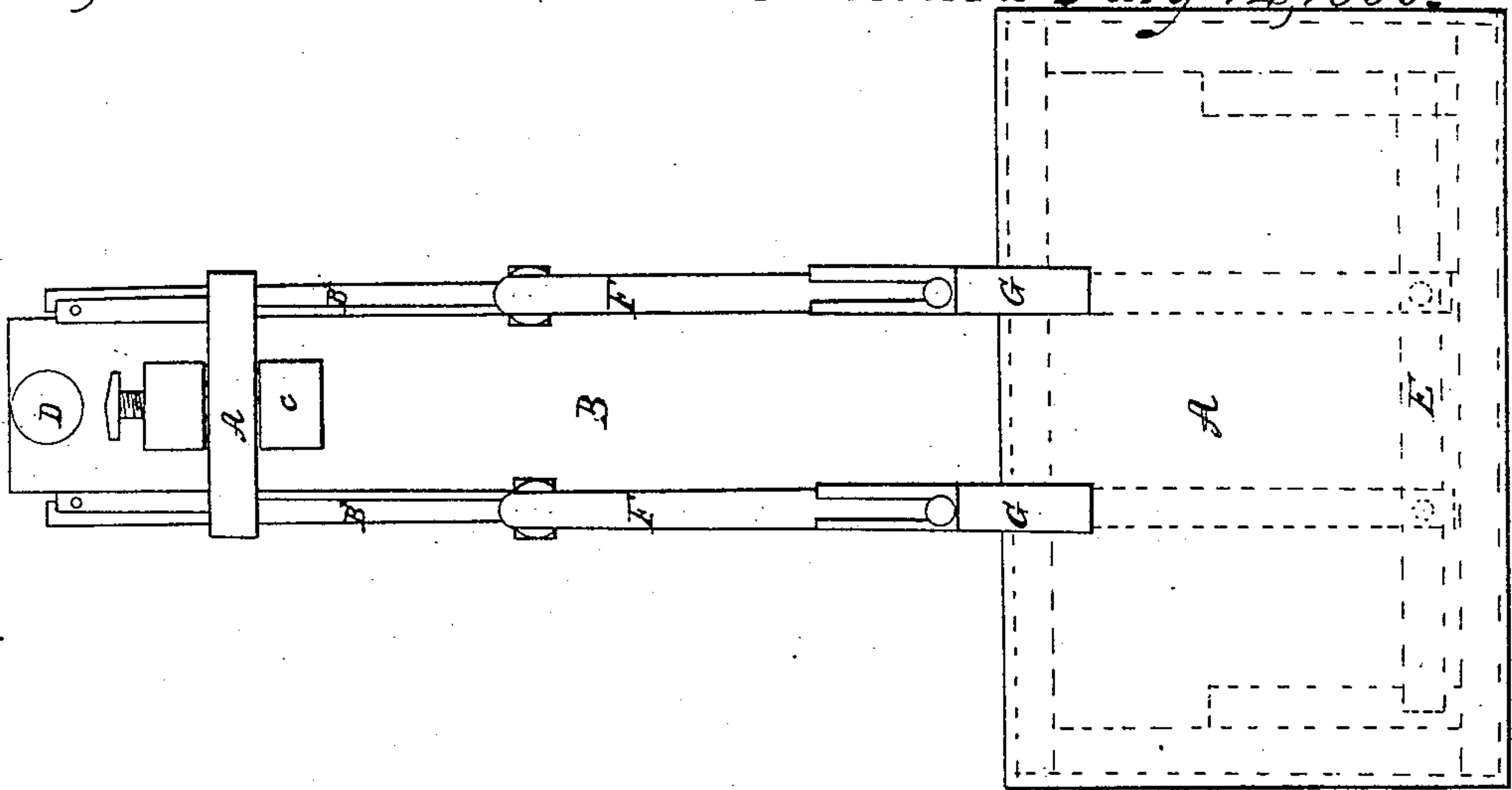
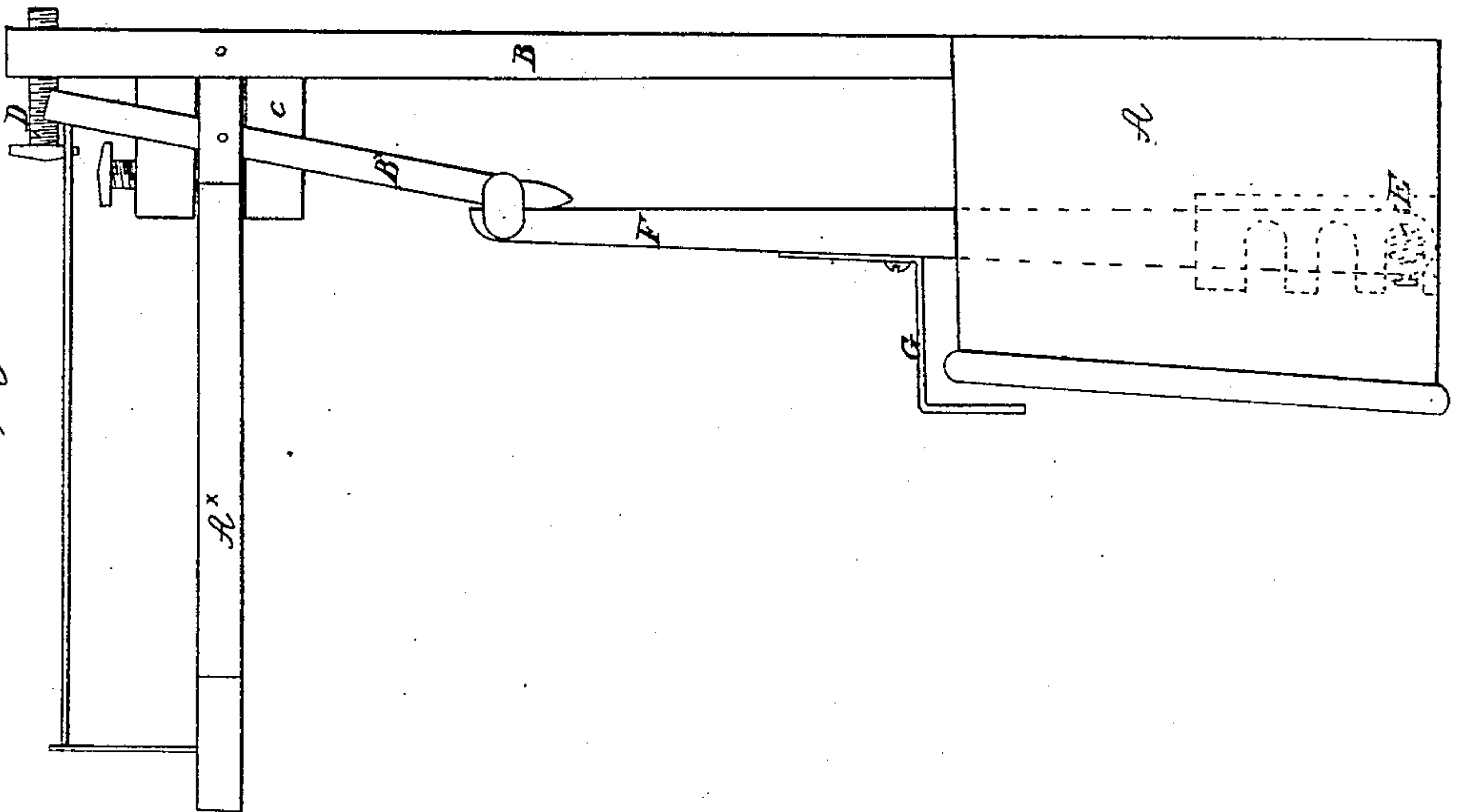


Fig. 1



Witnesses:
Lemuel P. Jenkins
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UNITED STATES PATENT OFFICE.

R. H. HOOPER, OF WEST ROXBURY, MASSACHUSETTS.

IMPROVEMENT IN WORKING THE PEDALS OF PIANO-FORTES, &c.

Specification forming part of Letters Patent No. 79,830, dated July 14, 1868.

To all whom it may concern:

Be it known that I, R. H. HOOPER, of West Roxbury, Norfolk county, State of Massachusetts, have invented a new and improved device for the purpose of working the pedals of piano-fortes, æolian attachments to the same, reed-organs, and similar instruments; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in a device which I attach to the lyre or pedal-standard of a piano-forte or similar instrument, to enable children and others with lower limbs of inferior length to manage in the usual way with the feet the pedals referred to.

In the drawings, Figure 1 is a side view of my device, and Fig. 2 is a top view.

In the drawings, A, Figs. 1 and 2, is a box or footstool, made in any convenient manner, (and sometimes covered with carpet,) which sets upon the floor.

B, Figs. 1 and 2, is a slab of wood fastened to the bottom of the box A, and projecting on the right hand some distance beyond the side of the box or stool, and called the "stool-bar." This stool-bar bears at its end farthest from the box a footstool, and within some few inches from its end, on its upper surface, a perpendicular projection, c, Figs. 1 and 2, made of wood or other convenient material, called the "pedal-stop." This pedal-stop I sometimes make to fit into a slot in the stool-bar, and it fastens by means of a screw or other convenient method at any (practically) required distance from the pedals B^x B^x. (This serves to fit my device to the varying width of pianos.) Close by the end of the stool-bar I have a screw, preferably of wood, (sometimes with a little platform hung to its lower end to prevent its penetrating the carpet,) D, Figs. 1 and 2, called the "bar-screw," passing vertically through the stool-bar. The use of this bar-screw is to be screwed down onto the floor or the carpet, and by thus getting pressure upward upon the lower end of the lyre or pedal-standard A^x of a piano, &c., to hold my whole device in place. I sometimes arrange my bar-screw to act horizontally, it being for that purpose placed so as to work in a standard or ear, resembling the pedal-stop c, and screwing on to the back side of the lyre, as shown in the drawings.

E, Fig. 1, and dashed lines, Fig. 2, is a round shaft, called the "turning shaft," which passes from side to side of the box or footstool A, (parallel with the piano,) having a bearing at each end of the footstool, inside, which bears the pedal-levers F, Fig. 1, and F F, Fig. 2. (I sometimes use but one, or more than two, pedal-levers, according to the number of pedals.) These pedal-levers are hung loosely upon the turning shaft E, and pass horizontally through an aperture in the front of the footstool A, projecting till they reach the pedals proper of the piano-forte. At the end nearest the piano-forte they are sometimes armed on the lower side with buffers of wash-leather, rubber, or other convenient substance, which, when the pedal-levers impinge upon the piano-forte pedals, prevent any noise. These pedal-levers bear each (seen in Figs. 1 and 2) a stiff strap of metal, G, Fig. 1, called the "treadles," which is borne by the pedal-lever in a slot in the latter, and secured there by a screw or other convenient method, so as to be movable back and forward, which treadle passes back parallel with the pedal-lever, then up till it reaches a little above the level of the footstool A, when it proceeds horizontally for a short distance. (I sometimes use instead thereof perpendicular projections, placed close to the edge of the footstool, upon the pedal-levers, in the form of a cylinder, with a ball flattened on its upper surface at its top.) These treadles are pressed upon by the foot, while the heel rests upon the footstool A. I sometimes, instead of advancing or receding the treadles G G, cause the pedal-levers F F to advance or recede, having for this purpose the holes on the inside of the ends of the footstool A duplicated or otherwise increased in number, cutting away the upper part of the bearings, so as to admit a ready change; and I sometimes make my pedal-levers slide sidewise upon the turning shaft E, having then the aperture made for the emergence of the pedal-levers in the front of the footstool A enlarged laterally, in which case I prefer to use metallic or other bearings to hold the pedal-levers from shifting laterally, fastening these bearings to the front side, bottom, or top of the footstool A; and I sometimes attach my pedal-levers and treadle to the pedal, the end of the pedal forming the treadle in some instances, thus dispensing with the stool-bar and turn-

ing shaft and the stool; and I sometimes attach a spring (spiral or other) to the pedal-levers F F, to assist the action of the pedals, and thus ease the action of the feet in operating; and sometimes I dispense with the stool-bar B and its attachments, and weighting the footstool A, use its specific gravity to hold my device in place. The top of my footstool is seen in Fig. 1 to be inclined toward the piano-forte; but I sometimes make it simply horizontal, and I sometimes so arrange my pedal-levers, treadles, and stool-bar as that I can fasten them to a stool or ottoman, unfastening at pleasure.

The operation of my device is as follows: I place the device (seen in the drawings) so that the footstool is beneath the feet as the operator sits upon the piano-stool, and, pressing the pedal-stop C against the front part of the pedal, I screw down the bar-screw D. Then, adjusting the treadles G G to a convenient distance

from the footstool A, the device is in order, the treadles being operated in the same manner as the ordinary pedals, and, by being pressed, working them.

What I claim herein as of my own device, and desire to secure by Letters Patent, is—

1. The pedal-levers and treadles, when constructed substantially as shown, and used with the pedals of a piano or other similar musical instrument, all substantially as and for the purpose described.

2. The pedal-levers and treadles, in combination with the fixed footstool A, all constructed and used substantially as described.

3. The pedal-levers and treadles, in combination with the stool-bar B, when constructed and used substantially as described.

R. H. HOOPER.

Witnesses:

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