## H. A. HAMBLOCH. PIANO FORTE PEDAL.

No. 478,007.

Patented June 28, 1892.

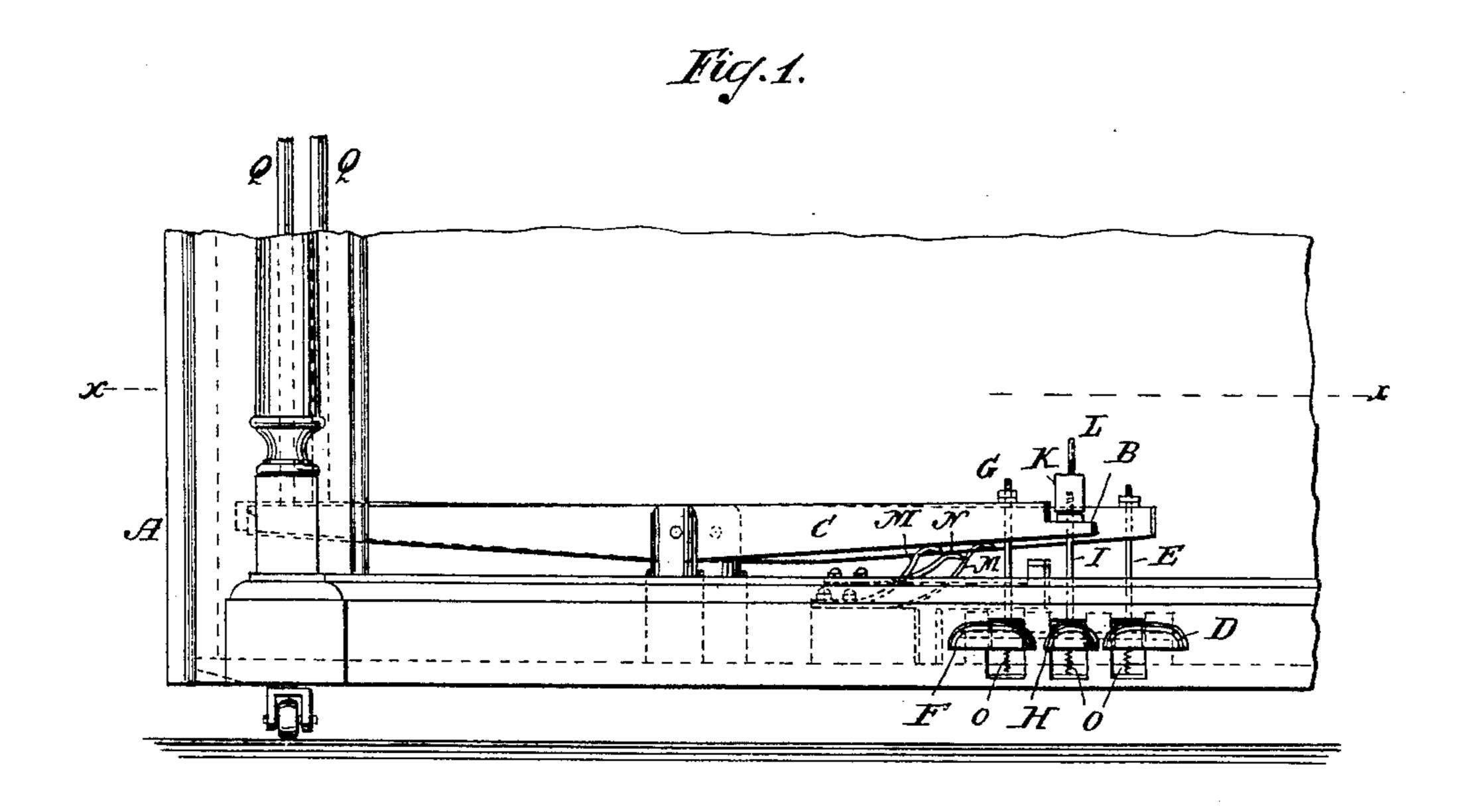
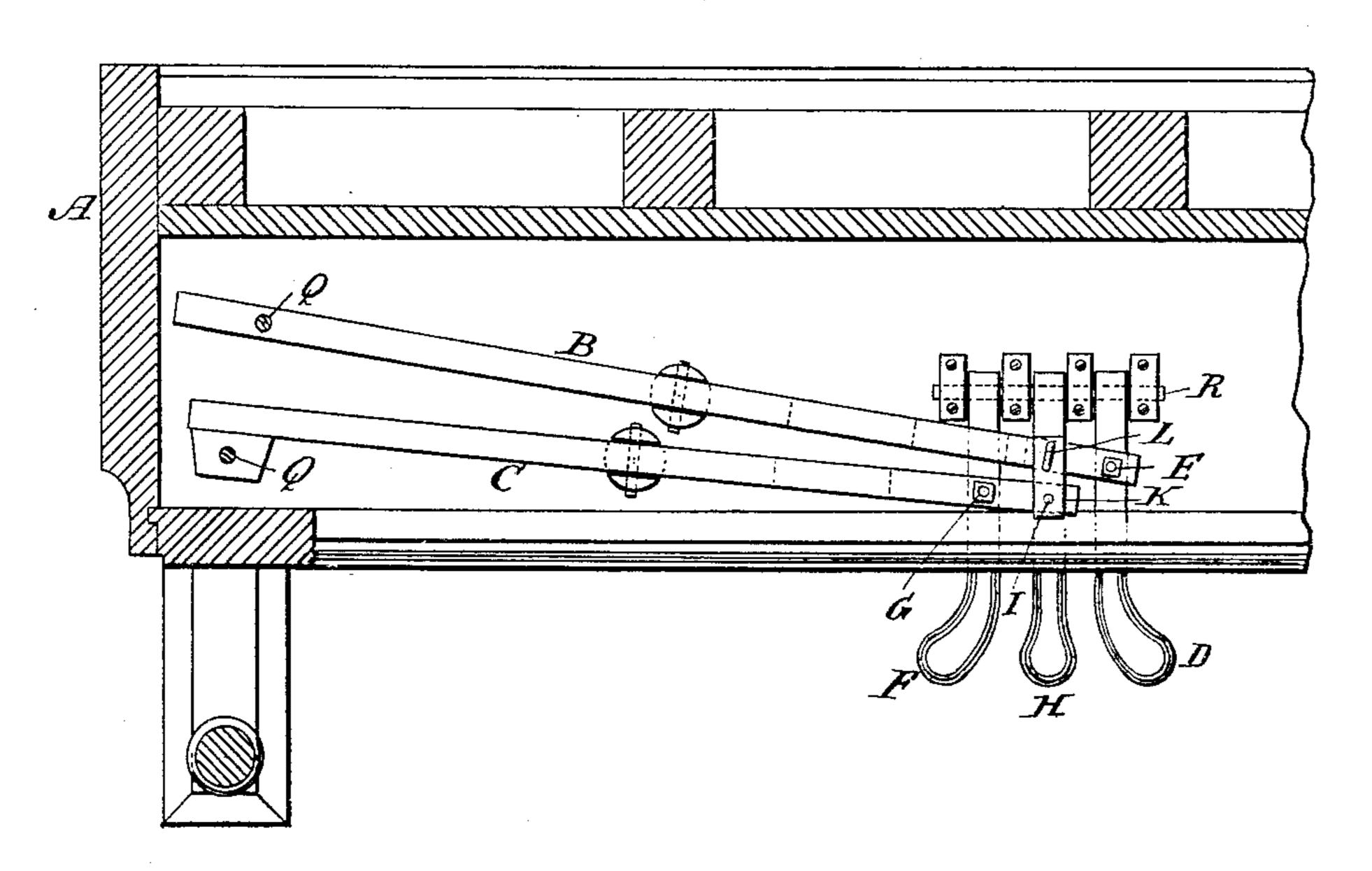


Fig. 2.



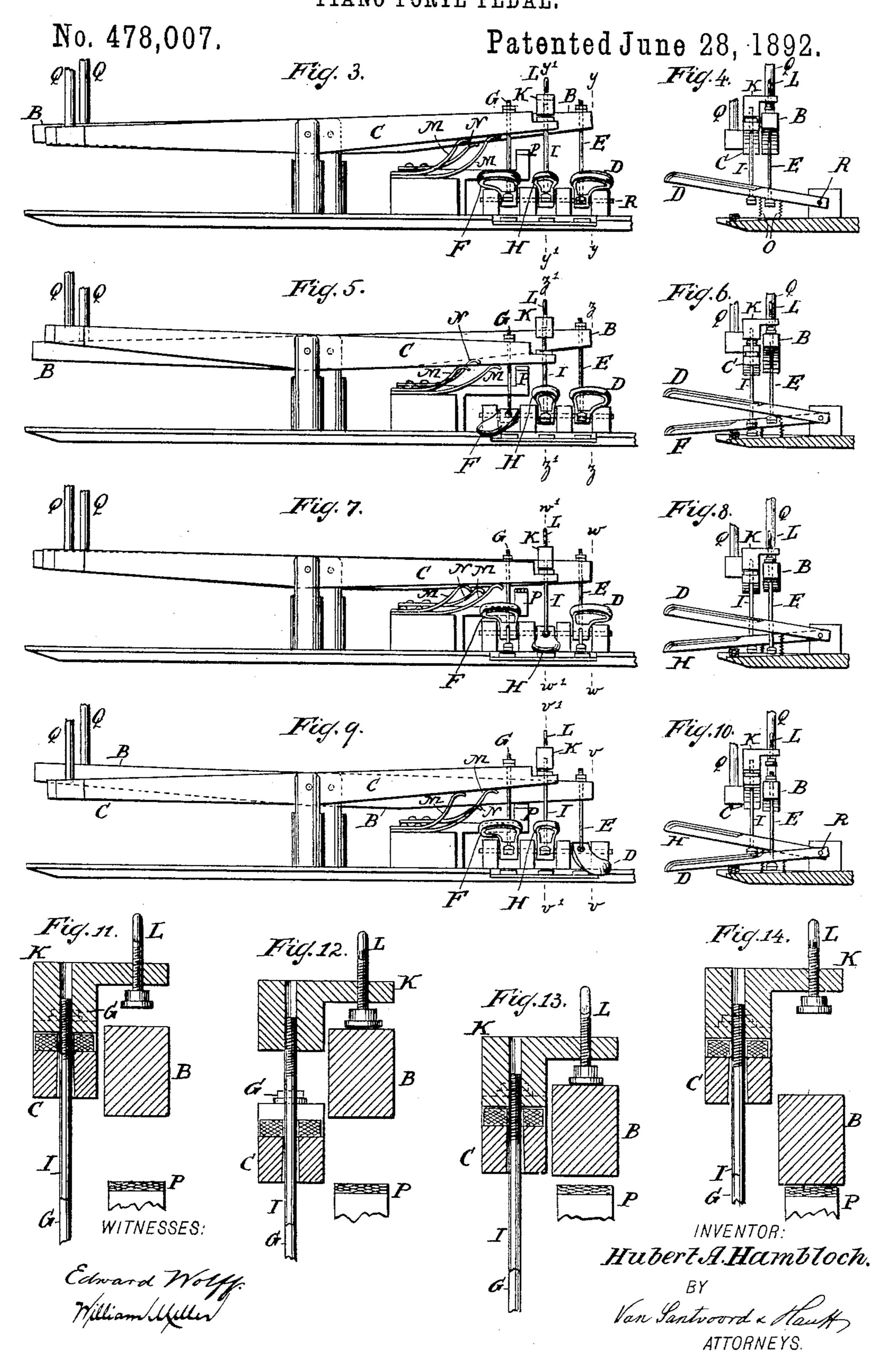
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## H. A. HAMBLOCH. PIANO FORTE PEDAL.



## United States Patent Office.

HUBERT A. HAMBLOCH, OF NEW YORK, N. Y., ASSIGNOR TO HAMILTON S. GORDON, OF SAME PLACE.

## PIANO-FORTE PEDAL.

SPECIFICATION forming part of Letters Patent No. 478,007, dated June 28, 1892. Application filed April 21, 1892. Serial No. 430,106. (No model.)

To all whom it may concern:

Be it known that I, HUBERT A. HAMBLOCH, a citizen of the United States, residing at New York, in the county and State of New York, 5 have invented new and useful Improvements in Piano-Forte Pedals, of which the following is a specification.

This invention relates to an improvement in piano-forte pedals; and by means of this invention swell effects and damper effects, as well as medium effects, can be produced, as set forth in the following specification and claims and illustrated in the annexed drawings, in

which—

Figure 1 is a front elevation of the pedals. Fig. 2 is a section along x x, Fig. 1. Fig. 3 is a front elevation showing all the pedals raised. Fig. 4 is a section along y y, Fig. 3. Fig. 5 20 a section along zz, Fig. 5. Fig. 7 shows the intermediate or medium pedal depressed. Fig. S is a section along w w, Fig. 7. Fig. 9 shows the swell-pedal depressed. Fig. 10 is a section along v v, Fig. 9. Fig. 11 is a section 25 along y' y', Fig. 3. Fig. 12 is a section along z' z', Fig. 5. Fig. 13 is a section along w' w', Fig. 7. Fig. 14 is a section along v' v', Fig. 9. In the drawings, the letter A indicates the case of a piano.

The piano indicated is an upright piano; but of course I do not limit the use of my in-

vention to upright pianos.

The swell or loud pedal lever is indicated by B and the damper or soft pedal lever by 35 C. The swell-pedal D is connected by a rod or connection E to the swell-pedal lever B, so that on depressing pedal D, Figs. 9, 10, and 14, the lever B is actuated. The damper-pedal F, by means of rod or connection G, actuates 40 the damper-pedal lever C, Figs. 5, 6, and 12. The intermediate or medium pedal H when depressed actuates both the levers B and C, Figs. 7, 8, and 13. The medium pedal H has a rod or connection I, provided with a head 45 K, adapted to lie over or engage both levers B C, so that when the pedal H and rod I are depressed to draw down the head K said head actuates both levers B C. The rod I is screw-

threaded, Figs. 11 to 14, so that by screwing 50 the head K more or less down on rod I the action of head K on levers B C can be regu- levers, substantially as described.

lated or adjusted. The head K is shown as acting on the lever B by means of a finger or presser L, which can be adjusted or screwed more or less up or down on head K, so that 55 the action of head K on lever B can be adjusted or regulated by means of finger L. When released, the levers B C are raised by springs MN. The spring for the lever C may be a double spring M M to secure efficient ac- 60 tion. The pedals DFH are each shown as having an individual restoring-spring O. A block or stop P is also shown provided for the lever B. The finger L, or rather its striking head or end, as also the stop P and lever C, 65 are preferably provided with the usual pads known in the trade to deaden or soften the impact and prevent noise or rattle. The levers B C transmit their action by suitable shows the damper-pedal depressed. Fig. 6 is | rods or connections Q. The rod I of the me- 70 dium pedal H is shown as passing loosely through the lever C, so that, as seen in Fig. 12, the lever C can be depressed or moved without affecting rod I or head K. The rod I might of course pass along outside or clear 75 of the lever C; but the construction becomes more compact by leading the rod or connection I through the lever C. The various pedals D F H are readily mounted on a common fulcrum R. The medium or intermediate 80 pedal H, actuating both levers B C, will, as is readily perceived, produce a medium effect, intermediate between swell and damper effects of the pedals DF. I have found it of advantage to adjust the medium pedal or its 85 head K so that it actuates the damper or soft lever C only to a fractional part—say about one-half-as compared with the soft-pedal F, so that the damping or softening effect of the medium pedal II will not be as great as that 90 of the soft-pedal.

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

1. The combination, with a swell-pedal lever and a damper-pedal lever, of a pedal for 95 each of said levers and a pedal common to both levers, substantially as described.

2. The combination, with a swell-pedal lever and a damper-pedal lever, of a pedal H, having a rod or connection I, provided with 100 a head made to engage or overlie both of said

3. The combination, with a swell-pedal lever and a damper-pedal lever, of a pedal H, having a rod or connection I, provided with a head made to engage or overlie both of said levers, said head being adjustably mounted on the rod, substantially as described.

4. The combination, with a swell-pedal lever and a damper-pedal lever, of a pedal H, having a rod or connection I, provided with a head made to engage or overlie both of said levers and having an adjustable finger or presser for engaging one of the levers, substantially as described.

5. The combination, with a swell-pedal lever and a damper-pedal lever, of a pedal for

each of said levers, a pedal common to both levers, and a stop or rest P for one of said levers, substantially as described.

6. The combination, with a loud or swell pedal and a soft or damper pedal, of an in-2c termediate or medium pedal so adjusted as to produce a partial damping effect as compared with the soft pedal, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing 25

witnesses.

HUBERT A. HAMBLOCH.

Witnesses:

WM. C. HAUFF, E. F. KASTENHUBER.