

No. 876,443.

PATENTED JAN. 14, 1908.

O. DREGER.

PEDAL CONNECTION FOR MUSICAL INSTRUMENTS.

APPLICATION FILED AUG. 16, 1906.

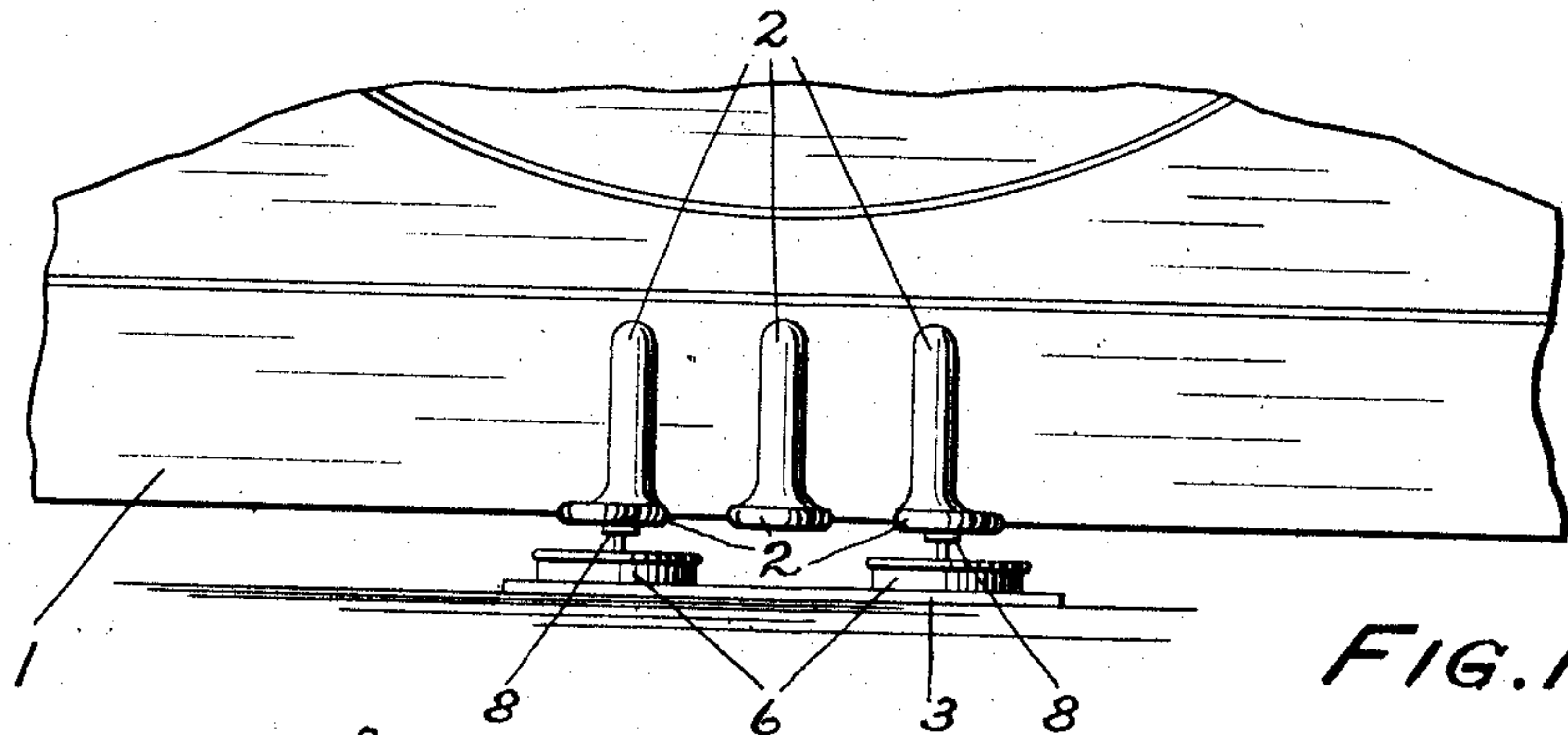


FIG. 1.

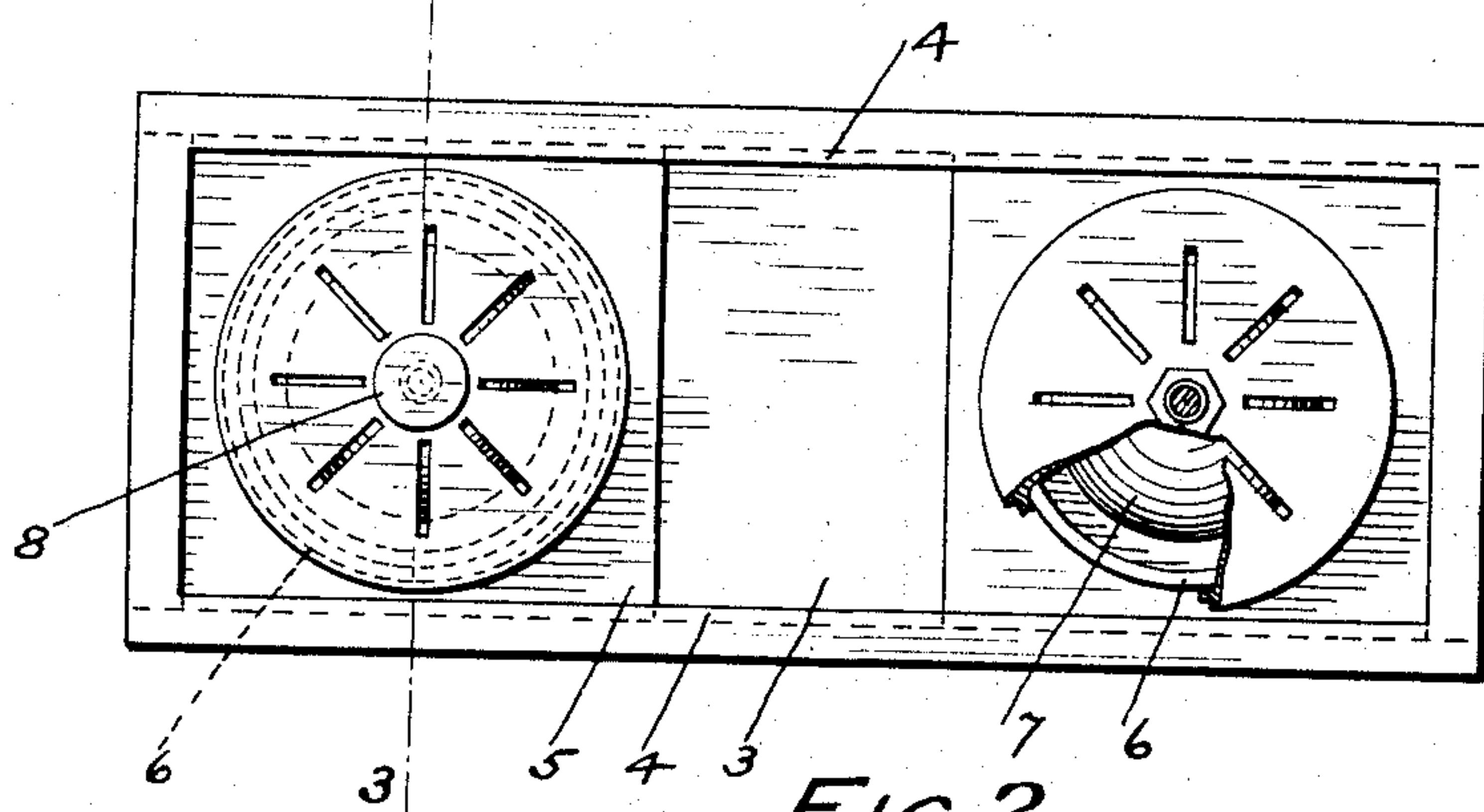


FIG. 2.

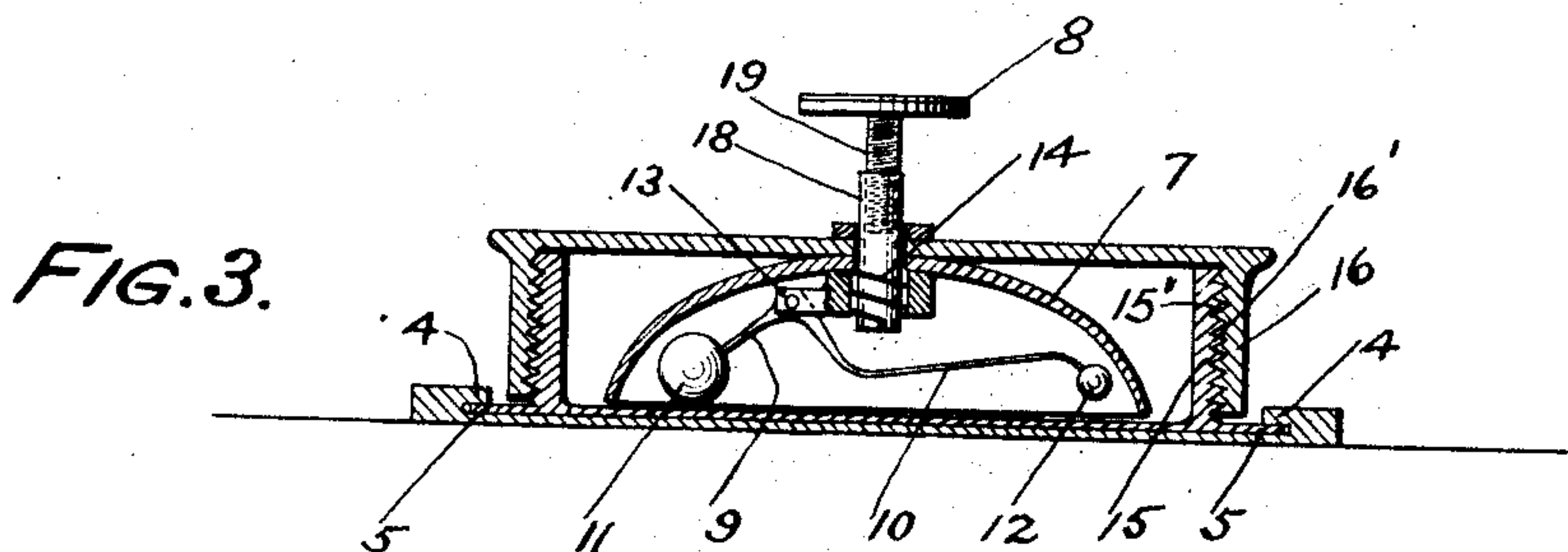


FIG. 3.

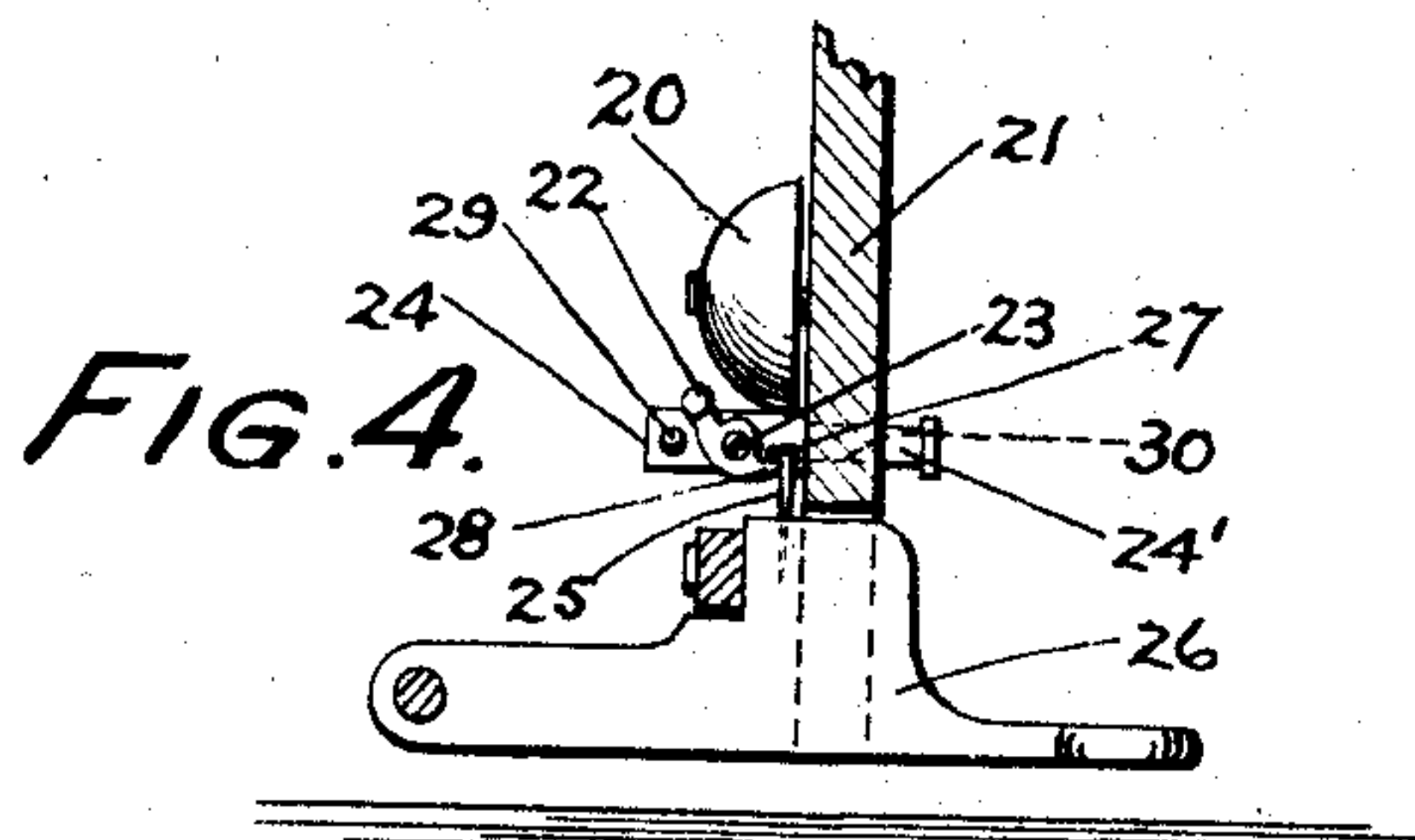


FIG. 4.

WITNESSES:

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PEDAL CONNECTION FOR MUSICAL INSTRUMENTS.

No. 876,443.

Specification of Letters Patent.

Patented Jan. 14, 1908.

Application filed August 16, 1906. Serial No. 330,849.

To all whom it may concern:

Be it known that I, OTTO DREGER, residing in the city of Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented a Pedal Connection for Musical Instruments, of which the following is a specification.

This invention is a connection for the pedal mechanism of piano-fortes whereby the attention of the performer is called to any movement thereof.

Particularly with students, the pedals are frequently operated involuntarily with resulting discord without the performer being conscious of the cause, the mechanism being thrown and held on or off at or during improper periods.

It is the object of this invention to provide a simple connection for indicating to the performer any movement of the pedal mechanism.

In the accompanying drawings, Figure 1 represents a front elevation of a section of a piano-forte with the pedals having a form of the pedal connection in position to be operated; Fig. 2 represents an enlarged broken plan view of the form of the connection shown in Fig. 1; Fig. 3 represents a sectional view taken on the line 3—3 of Fig. 2, and Fig. 4 represents a sectional side elevation of a further form of the invention.

Referring to Figs. 1, 2, and 3 of the drawings, the piano-forte 1 has, placed under the pedals 2, mechanism comprising the base 3 with the ways 4 for the guides 5 of boxes 6 which contain bells 7 operated by means including plungers 8 disposed under the pedals; the boxes with the sounding mechanism being movable upon the base under or away from the pedals as desired.

In order that the bell may be sounded both upon throwing the pedal mechanism on and off, any suitable striking mechanism may be employed, as, for example, a lever having the arms 9 and 10 with the hammers 11 and 12 thereon pivoted on the fulcrum 13, in combination with the plunger 8, reciprocating under control of the coiled spring 14, the spring being connected to the plunger and to a fixed support so that it acts to lift the former out of contact with the lever. When the foot of the performer, upon a pedal 2, depresses the plunger 8, the latter strikes

the arm 10 and throws the hammer 11 against the bell. When the foot is withdrawn from the pedal the coiled spring lifts the plunger and the hammer 11, being of sufficient weight therefor, throws the hammer 12 against the bell, the arm 10 being made resilient therefor.

As in different instruments the pedals are placed at different elevations, a vertical adjustment for the connection is provided by forming a thread 15' on the body 15 of the box and a thread 16' on the cover 16. A further adjustment is provided by making the plunger of a sleeve 18 and a stem 19 movable therein by means of a screw threaded engagement.

It will be understood that this mechanism can readily be thrown out of engagement with the pedals by shifting the boxes or moving the base with the signaling apparatus carried thereby.

As shown in Fig. 4, a bell 20 is secured within the casing 21 of the piano-forte and rung by a hammer 22 oscillating on the fulcrum 23 carried by the support 24, a spring 25 carried by the pedal 26 having thereon a lug 27 which strikes a cam 28 connected with the hammer, by which the latter is caused to strike the bell upon the depression or elevation of the pedal. On rising the spring 25 is bent from its normal position by contact of its lug 27 with the cam 28 and when the lug has passed the cam the spring flies back to its normal position and, in doing so, strikes the cam a blow, by which the hammer 22 is thrown into contact with the bell. A stop 29 on the support 24 limits the backward movement of the hammer, and the support has the part 24' thereon movable in its bearing 30 in the casing by which the hammer can be moved out and in to throw the signaling device out of or into operative relation to the pedal.

Having described my invention, I claim:—

1. A musical instrument having a pedal, a bell, a counterbalanced hammer for striking said bell, and a device operated by said pedal for striking said hammer and causing it to strike said bell.

2. A musical instrument having a pedal, a bell, a hammer having a support about which it oscillates, and resilient mechanism operated by said pedal to strike said hammer and cause it to strike said bell.

3. A musical instrument having a pedal, a

bell, a hammer mechanism for striking said
bell, a device operated by said pedal for
striking said hammer mechanism and causing
it to strike said bell, and means whereby said
5 striking mechanism can be shifted into and
out of engagement with said pedal.
In testimony whereof I have hereunto set

my name this 14th day of August, 1906, in the
presence of the subscribing witnesses.

OTTO DREGER.

Witnesses:

JOS. G. DENNY, Jr.,
ROBERT JAMES EARLEY.