

A. ANDERSON.
 BELLOWS FOR PIANO PLAYERS.
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1,055,251.

Patented Mar. 4, 1913.

2 SHEETS—SHEET 1.

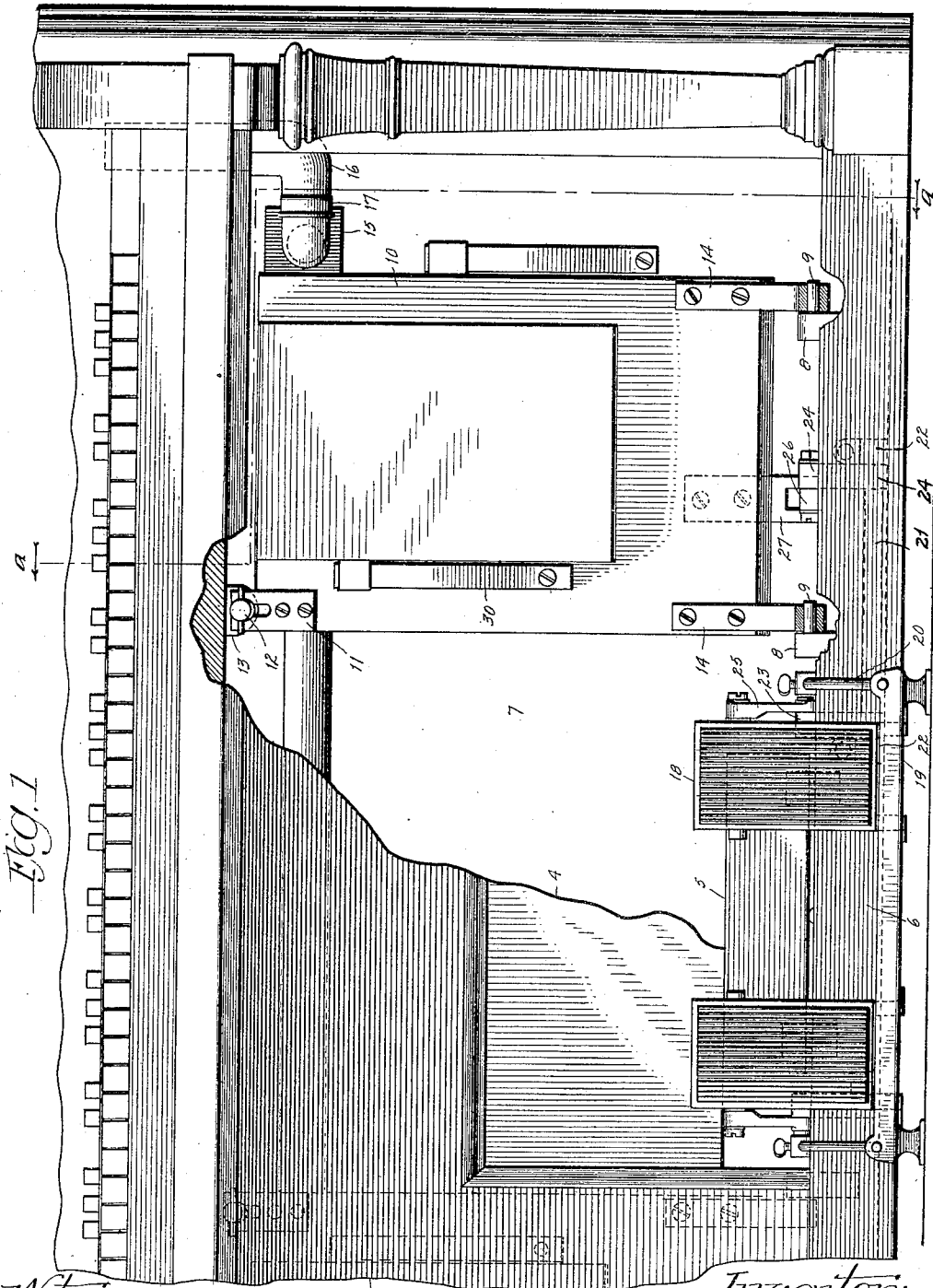


Fig. 1

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UNITED STATES PATENT OFFICE.

ALFRED ANDERSON, OF ROCKFORD, ILLINOIS, ASSIGNOR TO SCHUMANN PIANO COMPANY, OF ROCKFORD, ILLINOIS, A CORPORATION OF ILLINOIS.

BELLOWS FOR PIANO-PLAYERS.

1,055,251.

Specification of Letters Patent.

Patented Mar. 4, 1913.

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To all whom it may concern:

Be it known that I, ALFRED ANDERSON, a citizen of the United States, residing at Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Bellows for Piano-Players, of which the following is a specification.

The object of this invention is to attach the bellows of a piano player in a manner that it may readily be detached without disturbing the other parts of the mechanism.

In the accompanying drawings, Figure 1 is a front elevation of the lower portion of a piano case in which portions are broken away to show my improvements. Fig. 2 is a section on line *a a* Fig. 1.

The piano case 1 is of the usual construction having a base 2 and a front 3 closed by the closure 4, and leaf 5 hinged to the lower section 6 of the front. Between the front 3 and the back 7 of the piano case is located the bellows for supplying air to the pneumatics of the player. To the lower section 6 of the front are secured two brackets 8 and each provided with a stud 9, the studs facing in the same direction. A bellows 10 has a slotted plate 11 secured to its upper end, and a screw 12 is located in the slot of this plate and turned in connection with the bracket 13 connected to the piano case. To the lower end of the bellows are secured two arms 14, and each provided with an opening to receive a stud 9. The air pipe leading from the bellows is connected to the supply pipe 16 to the pneumatics by the union 17.

By loosening the union 17, and taking out the screw 12 the bellows can be tipped forward into the dotted line position shown at Fig. 2. The bellows can be removed from its connection with the studs 9 by sliding it sidewise.

The bellows can be operated by any suitable means, and in this instance, a treadle 18 is pivotally connected to a support 19 which is held the proper distance from the piano front 3 by the rod 20. A rock-shaft 21 is supported in brackets 22 connected to the base 2 of the piano case. To this rock-shaft 21 are connected two arms 23 and 24. Links 25 form a connection between the arm 23 and the treadle 18. To the arm 24 is pivoted a link 26 having its free end forked.

To the movable section of the bellows is connected a bracket 27 having its lower end slotted and supporting a pin 28. The forked end of the link 26 receives the pin 28, thereby forming a connection between the treadle 18 through the links 25 and rock-shaft 9. A stop 29 is located at the point of pivotal connection between the links 25 which will prevent the upward movement of the links, in order that the downward movement of the treadle will rock the rock-shaft 21.

A bar spring 30 has one end attached to the stationary portion of the bellows and its other end engages a rod 31 projecting from the movable section of the bellows. The action of the spring is to hold the bellows collapsed, and the treadle in its elevated position, and will also hold the pin 28 within the forked end of the link 26.

I claim as my invention.

1. In an automatic piano, the combination with a case, of a bellows located in the case, operating means for the bellows, a mounting for the bellows that permits its movement with relation to the operating means and with respect to the case, to permit the bellows to be placed in an exposed position with relation to said case, and means connecting the operating means and bellows, said connecting means permitting said movement of said bellows with respect to the case and operating means while maintaining the connection with said operating means.

2. In an automatic piano, the combination with a case, of a bellows mounted in the case, operating means for the bellows connected to the case, a mounting for the bellows that permits its movement from the case to an exposed position with relation thereto, said bellows also moving with relation to the operating means, and means detachably connecting the operating means and bellows, said connecting means permitting the said movement of the bellows with respect to the case and operating means, while maintaining the connection with said operating means, and said connection being exposed on said movement of the bellows to permit the detachment of the bellows from the operating means.

3. In an automatic piano, the combination with a case, of a bellows, a pivot mounting for the bellows located in the case and permitting the movement of said bellows to an

- exposed position with respect thereto, an
operating treadle mounted on the case, and
means detachably connecting the operating
treadle and bellows, said connecting means
5 swinging with the bellows and with relation
to the treadle and being exposed upon said
swinging movement of the bellows, to per-
mit the detachment of the bellows from the
treadle.
- 10 4. In an automatic piano, the combination
with a case, of a bellows pivotally mount-
ed at its lower portion in the case and mov-
able outwardly through said case, a treadle,
and means connecting the treadle and bel-
lows, including a rock shaft having its mov- 15
able pivot in substantial line with the axis
of movement of the bellows and a detachable
link connection between the rock shaft and
lower portion of the bellows, said connection
being exposed when the bellows is swung 20
outwardly.

In testimony whereof I have hereunto set
my hand in presence of two subscribing wit-
nesses.

ALFRED ANDERSON.

Witnesses:

A. O. BEHEL,
E. D. E. N. BEHEL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
