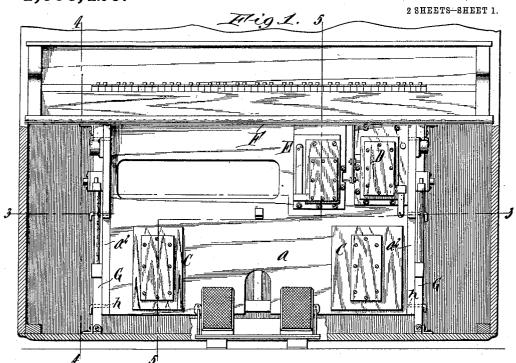
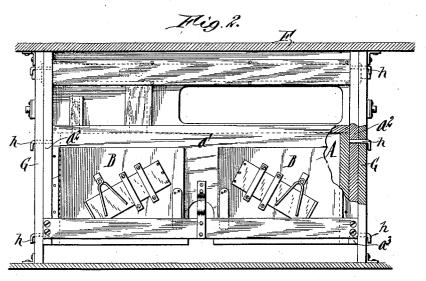
W. F. BAYER.

# BELLOWS FOR AUTOMATIC MUSICAL INSTRUMENTS. APPLICATION FILED OCT. 2, 1909.

1,006,426.

Patented Oct. 17, 1911.





Witreesses. Richard Sommer Anna Heigie Therentor Milliam F. Bayer By Geyer Popp Attorneys.

# W. F. BAYER.

## BELLOWS FOR AUTOMATIC MUSICAL INSTRUMENTS.

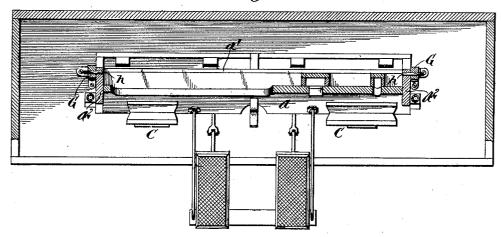
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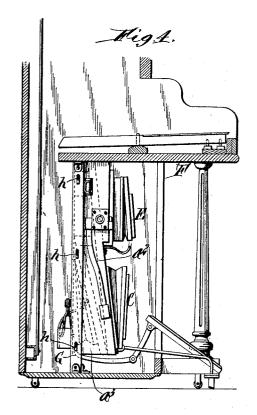
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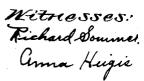
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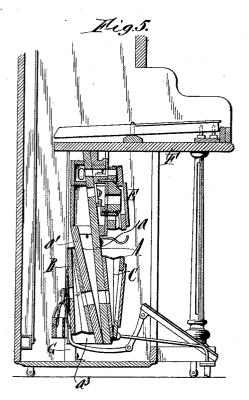
2 SHEETS-SHEET 2.

Fig.3.









Milian & Bayer, By Leyer Popp

# UNITED STATES PATENT OFFICE.

WILLIAM F. BAYER, OF BUFFALO, NEW YORK, ASSIGNOR TO THE CHASE & BAKER COMPANY, OF BUFFALO, NEW YORK, A CORPORATION OF NEW YORK.

#### BELLOWS FOR AUTOMATIC MUSICAL INSTRUMENTS.

1,006,426.

Specification of Letters Patent. Patented Oct. 17, 1911.

Application filed October 2, 1909. Serial No. 520,731.

To all whom it may concern:

Be it known that I, WILLIAM F. BAYER, a citizen of the United States, residing at Buffalo, in the county of Erie and State of 5 New York, have invented a new and useful Improvement in Bellows for Automatic Musical Instruments, of which the following

is a specification.

This invention relates to the main bellows
10 of pneumatic pianos and piano-players; and
more particularly to a bellows-construction
which is removably secured in the case of the
instrument to facilitate repairing it and permit convenient access to the strings for re15 newing them. Its object is to improve the
construction of such bellows with a view of
rendering them more compact and reducing
their cost of manufacture.

In the accompanying drawings consisting of 2 sheets: Figure 1 is a sectional front elevation of the lower portion of a piano embodying the invention. Fig. 2 is a rear view of the main bellows and its supports. Fig. 3 is a horizontal section in line 3—3, Fig. 1. Figs. 4 and 5 are transverse sections on the correspondingly-numbered lines in Fig. 1.

Similar letters of reference indicate corresponding parts throughout the several views.

A indicates the stationary air chamber or 30 reservoir of the bellows-structure, B the customary pumps or feeders and C the usual pressure equalizers.

D indicates a motor-governor and E an expression governor, which parts form no part of the present invention and are preferably mounted on the front side of the air

reservoir A.

The front wall a of the reservoir extends continuously from the bottom thereof to the underside of the key table F of the instrument, while its rear wall  $a^1$  may terminate short of the key table, as shown in Figs. 2 and 5. Like the front wall a, the end walls  $a^2$  of the reservoir extend continuously from 45 its bottom to the underside of the key table. The upper portions of these side walls preferably extend forwardly beyond the front wall a, and their lower portions extend rearwardly beyond the rear wall  $a^1$ , as shown.

Preferably the reservoir is removably arranged between a pair of fixed uprights or

standards G extending from the underside of the key-table to the bottom of the pianocase and suitably secured to these members. In the construction illustrated in the draw- 55 ings, the reservoir is detachably secured to said uprights by removable pins h passing through the latter and entering openings in the end walls  $a^2$  of the reservoir, as best shown in Fig. 3; upper, lower and inter- 60 mediate pairs of such pins being shown in the drawings. In order to firmly secure the lower portion of the reservoir in place, the lower portions of its end walls are extended rearwardly beyond the rear wall thereof, as 65 shown at  $a^3$ , and provided with openings for the reception of the lower pair of pins h. Upon withdrawing the pins h, the reservoir and attached parts can be bodily removed from the piano-case, permitting convenient 70 repair of the parts and affording free access to the piano strings.

By the construction of the main bellows herein shown and described, the number of its parts is reduced to a minimum and it can 75 be produced at correspondingly less cost.

I claim as my invention:

In an instrument of the character described, the combination of a case, a keytable, fixed uprights extending from the bot- 80 tom of the case to the underside of the keytable, a bellows-structure removably arranged between said uprights and including an air-reservoir having a rear wall, a front wall extending continuously from the bot- 85 tom of the reservoir to the underside of the key-table, and end walls connecting said front and rear walls and extending continuously from the bottom of the reservoir to the underside of the key-table, the lower 90 portions of said end walls extending rearwardly beyond the reservoir and having openings, and removable pins passing through the lower portions of said uprights and into said end-wall openings.

Witness my hand this 3d day of August, 1909.

### WILLIAM F. BAYER.

Witnesses:

C. F. GEYER, E. M. GRAHAM.