(No Model.) 2 Sheets—Sheet 1.

O. SPAETHE.

ACCORDION.

No. 277,368. Patented May 8, 1883.

Fig: 1.

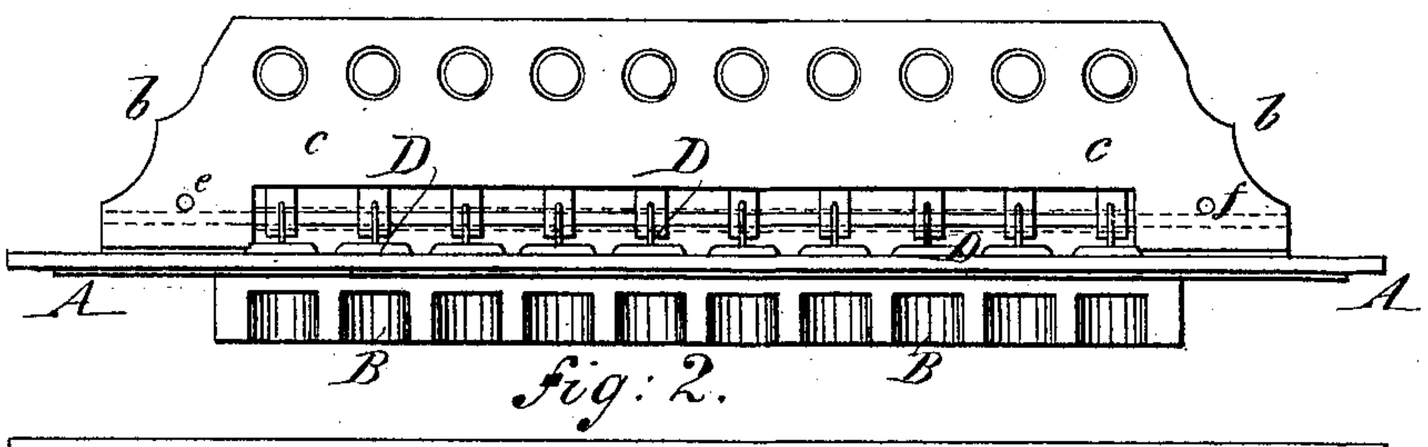


Fig: 2.

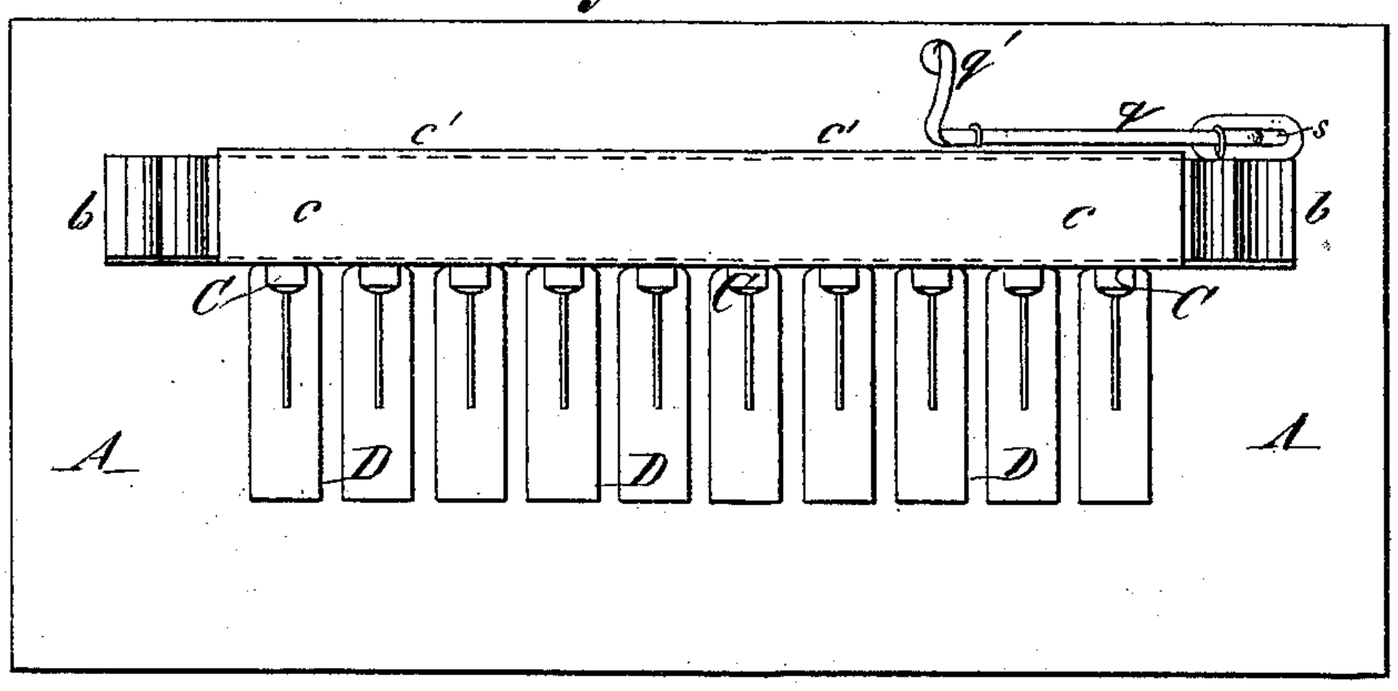
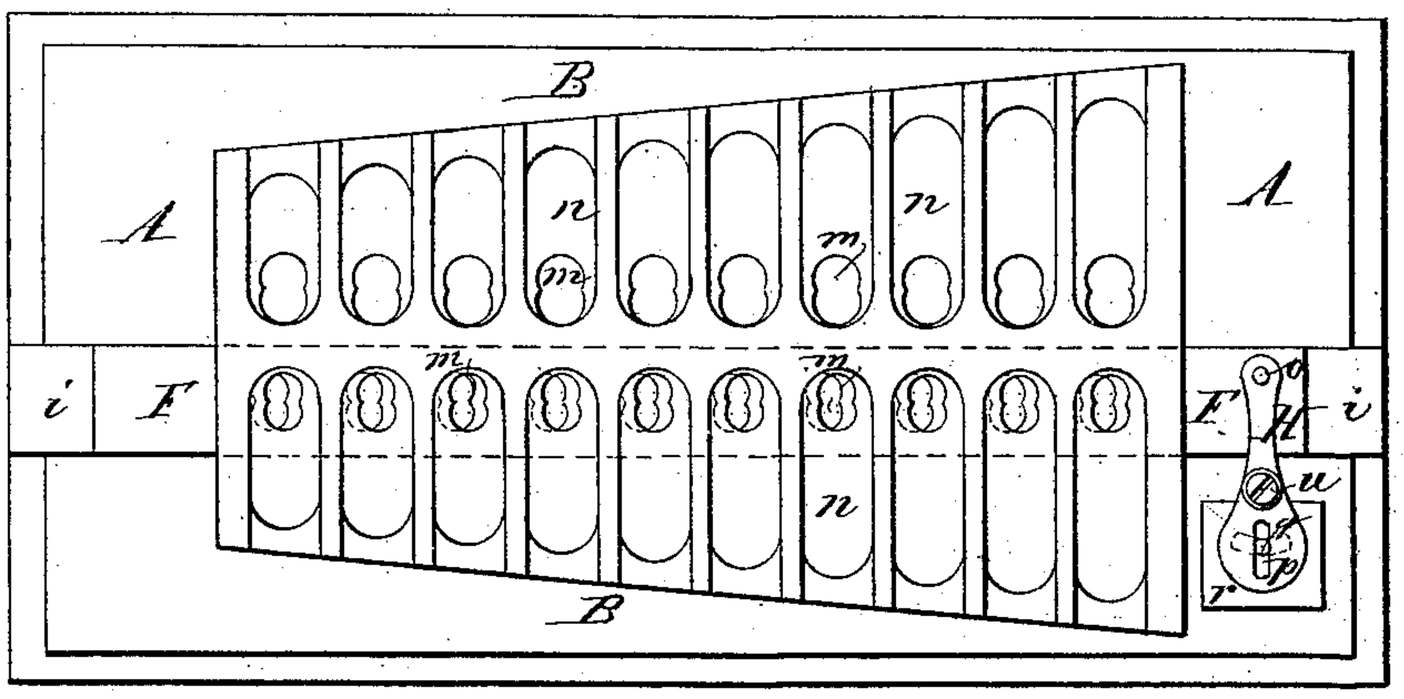


Fig: 3.



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(No Model.) 2 Sheets—Sheet 2.

O. SPAETHE.

ACCORDION.

No. 277,368. Patented May 8, 1883.

fig: 4.

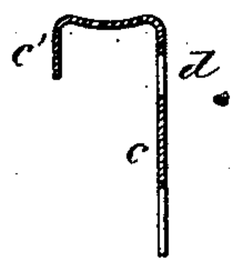


fig: 5.

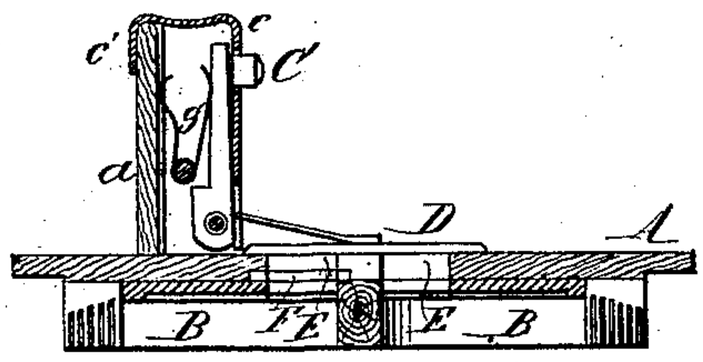


fig: 6.

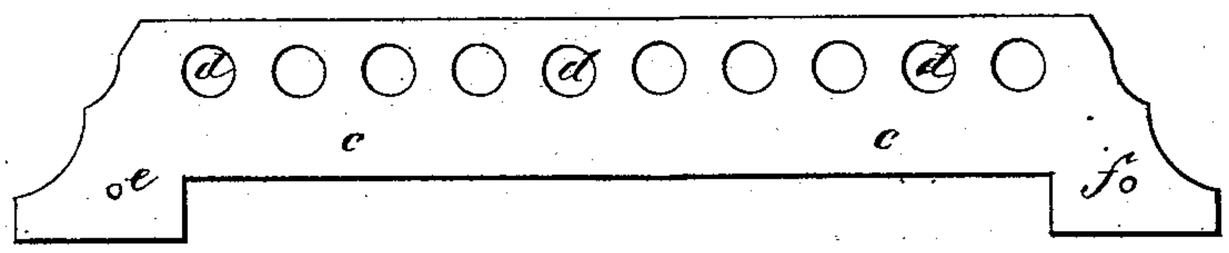


fig: 7.

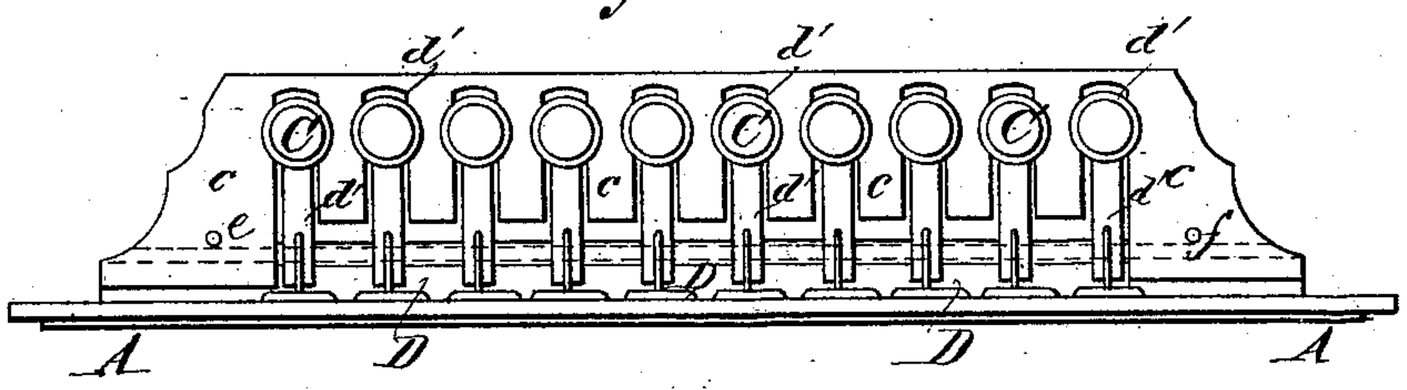
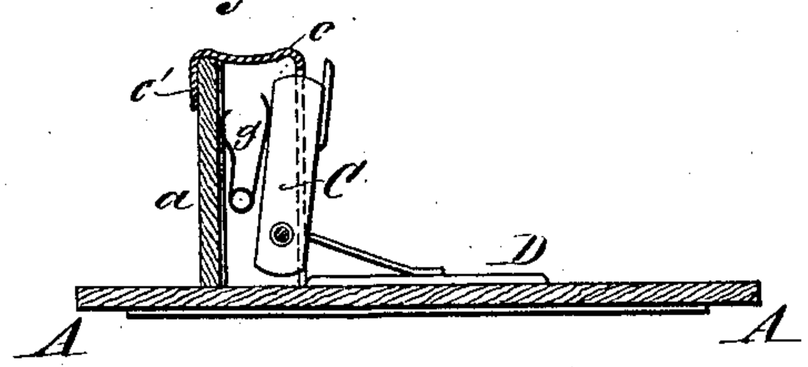


fig: 8.



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UNITED STATES PATENT OFFICE.

OTTO SPAETHE, OF GERA, GERMANY.

ACCORDION.

SPECIFICATION forming part of Letters Patent No. 277,368, dated May 8, 1883.

Application filed December 30, 1882. (No model.)

To all whom it may concern:

Be it known that I, OTTO SPAETHE, of Gera, in the Empire of Germany, have invented certain new and useful Improvements in Accordions, of which the following is a specification.

This invention has reference to improvements in the construction of accordions, whereby the player is enabled to make small repairs by readily getting at the key mechanism, and by which also the tunes may be played with modified force, so as to give greater variety of expression to the instrument.

The invention consists of an accordion the key-board of which is provided at one side with a metallic face-plate having holes or slots for the keys, said face-plate being attached to the board by a U-shaped extension at its upper end, and by fastening-screws, so as to be readily detached when desired.

The invention consists, secondly, of a sliding register interposed between the cover and the tongue-frame of the accordion, the openings of which correspond with the wind-opening, said register being operated by suitable lever mechanism from the outside whenever a modulation of the sounds is required.

In the accompanying drawings, Figure 1 represents a side view of the key-board and cover of an accordion. Fig. 2 is a plan of the same. Fig. 3 is a bottom view of the tongue-frame with the adjustable register. Fig. 4 is a detail vertical transverse section of the metallic face-plate of the key-board, shown detached from the latter. Fig. 5 is a vertical transverse section through the key-board and the cover of the accordion. Fig. 6 is a detail side view of the face-plate shown in Fig. 4, and Figs. 7 and 8 are respectively a side elevation of a modified form of the key-board and a vertical transverse section of the same.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents the cover or top of the bellows of an accordion, to which is attached the key-board *a*, which is supported by bracket-shaped ends *b b*. The key-board *a* and the bracket ends *b b* are covered at one side by a metallic face-plate, *c*, the outlines of which correspond therewith. The face-plate *c* is bent at its upper part into U shape, so as to be retained on the key-board *a* by the spring of the metal. The face-plate *c* is provided either with a series of round holes, *d d*, or with a series of recesses, *d' d'*, as shown, respectively, in Figs. 6 and 7, according as round keys C, which project through the openings *d d*, or keys which project bodily through the recesses *d' d'*, are used. The keys C are pivoted to a stout longitudinal wire that is secured to the bracket ends *b b*. The keys C are pressed in outward direction by means of small springs *g*, which are interposed between them and the key-board *a*. The metallic face-plate *c* is secured to the bracket ends *b b* by means of screws *e* and *f*, whereby the shifting of the face-plate in longitudinal direction is prevented. In this manner the metallic face-plate *c*, together with the bracket ends *b b* and the key-board *a*, forms a kind of housing in which the entire series of keys C are arranged.

To the keys are connected by stiff wires the valves D, by which the wind-openings E in the top or cover A are opened or closed, according as the keys are depressed or released by the player.

It is obvious that a key-board constructed as described can be readily repaired or readjusted by the player himself by simply removing the metallic face-plate and carefully examining the entire system of keys.

Intermediately between the tongue-frame B and the cover A is arranged a longitudinally-adjustable register, F, which is guided in recesses *i i* of the cover, and provided with as many openings *m* of equal size as those of the tongue-frame B. The openings *m* of the register F, as well as the openings *n* of the tongue-frame, correspond with the wind-openings E. The register F is operated by a fulcrumed lever, H, that turns on the pivot *u*, and takes by a pin, *o*, into a slot of the register F, so as to move the same longitudinally in its guide-recesses *i i* when the lever is operated. The opposite end of the fulcrumed lever H is provided with a radial slot, *p*, which is engaged by a pin, *q*, of an exterior finger-piece, *q'*. The pin *q* passes through a slot, *s*, of the cover A. The motion of the finger-piece *q'* is so regulated by the slot *s* that the register F can be

set by the intermediate lever, H, either in a position so that its openings *m* register with the openings *n* of the tongue-frame or close the same.

To prevent the escape of air through the slots of the cover A, which would produce a disagreeable sound, a piece, *r*, of leather is interposed between the cover A and lever H, it being provided with an arc-shaped slot at right angles to the radial slot *p*, whereby the slot *s* is closed and the escape of air prevented, whatever be the position of the pin *q*.

In Fig. 3 the register F and the lever H are shown in an intermediate position, in which the openings are partly closed, so that the tongues can only be sounded with half their strength. By properly setting the register F the player is enabled to modulate the strength of the sounds, and play thereby the tunes with full strength or with diminished strength, as desired, whereby the general effect of the instrument is considerably improved.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, in an accordion, of a bellows-body, a tongue-board, a cover provided with bracket ends *b b* and a vertical key-board, *a*, a removable metallic face-plate, *c*, slotted on its vertical side, arranged in front of said key-board, and provided with an angular flange at its upper end, which takes over said key-board, a series of spring-pressed keys pivoted, within the space between said key-board and face-plate, upon a continuous wire extending between the end brackets, the finger ends of said keys projecting through the slots in the face-plate, and suitable valves opened and closed by said keys, substantially as described.

2. In accordions, a metallic key-board plate, *c*, provided with a bent U-shaped top part, *c'*, and with openings for the keys, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

OTTO SPAETHE.

Witnesses:

RUDOLF SPANNBERG,

WILHELM FRIEDEWALD.