G. W. Scribner. Reed Organ. N^Q 104,653. Patented Jun. 21,1870. Fig.1.

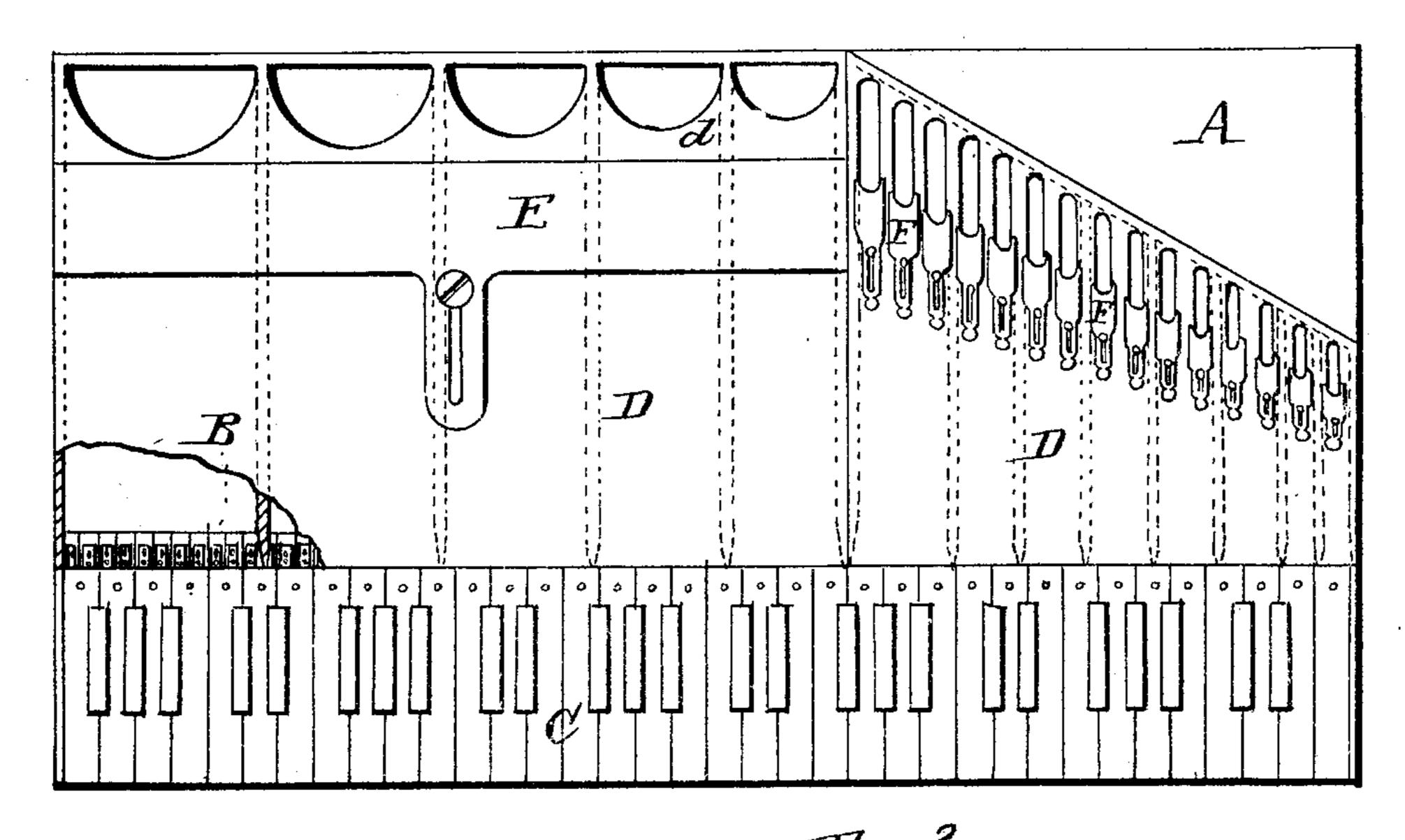


Fig. 3.

D Cof d

D

Inventor:

Witnesses: James Thierry Ger M. Scribner Per Attorney Ths. S. Sprague

UNITED STATES PATENT OFFICE.

GEORGE W. SCRIBNER, OF DETROIT, MICHIGAN.

IMPROVEMENT IN REED-ORGANS.

Specification forming part of Letters Patent No. 104,653, dated June 21, 1870.

To whom it may concern:

Be it known that I, GEORGE W. SCRIBNER, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in Reed-Organs; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1 is a plan of my improvement, showing the same lying on the wind-chest behind the reeds and key-board. Fig. 2 is a perspective of one of my qualifying-tubes; and Fig. 3 is the plan of the same with a tuning slide

attached.

Like letters indicate like parts in each figure. The nature of this invention relates to the construction and application of qualifying-tubes to the reeds of harmoniums, melodeons, and similar instruments, in which the tone is produced by the suction of air through metallic reeds, for the purpose of qualifying and softening the metallic tone of the reeds, and rendering it similar to that produced by pipes.

The invention consists in the construction of tubes of wood or metal, the smaller ends of which inclose one or more reeds, while the larger ends are closed, but each tube having an opening on the upper side at the rear end, through which the air subsequently passing through the reed enters, and through which the sound produced by the vibration of the reed escapes.

The tubes inclosing the reeds of the treble are provided with adjustable valves or slides over the mouth-opening, by means of which the tubes may be tuned in unison with the reeds, to produce a flute-like tone, such as

produced in pipe-organs.

In drawing, A represents the top of the wind-chest or sounding-board of a reed-organ. B represent a part of the reeds, and C the key-board, of a five-octavo reed-organ, all of ordinary construction. D, Fig. 2, represents a tube, preferably of wood, open at its throat or smaller end, and closed at larger. It lies flat on the sounding-board, and its throat incloses one or more of the reeds. It is provided at its top rear end with an opening or mouth, d, through which wind enters and sound escapes.

The tubes of the three lower octaves or bassregister of the instrument may be constructed in the form of a box, having a series of longitudinal partitions, shown by the dotted lines, dividing it into tube-like compartments. The lowermost compartment may embrace the reeds of the lowest octave in the register, each subsequent compartment being narrower and embracing a lesser number of reeds as it ascends the scale. In the passage of the reed-tone through the compartment, its quality is so altered that it resembles very closely that produced by an organ-pipe, its reedy twang being dissipated by its resonance in the passage through the tube.

The tubes of the bass-register may be of uniform length, and have the volume of sound emitted from them diminished at will by a slide, E, operated by a suitable stop or swell. The tubes of the treble-register may be constructed in like manner, except that they diminish in length and width as they ascend the scale, the shorter compartments inclosing but a single reed, while the longer ones may inclose two or more. The tubes of the trebleregister are each provided with an adjustable slide, F, for covering its mouth, by means of which it may be tuned in unison with the reed, and thus remove the disagreeable features of the reed-tone, and give it the flutelike quality so much admired in the organpipe. In tuning the tubes which embrace more than one reed, the slide may be so adjusted as to divide the trifling discord, if any exists, between the notes.

In practice the reeds are voiced and tuned in the usual manner, and placed in the instrument, the tubes being subsequently placed in position and tuned in unison with the reeds,

as above described.

If it be desired to construct a reed-organ having the appearance of a pipe organ, the reed-board and qualifying-tubes may be placed vertically in the instrument in the relative positions described, with the advantage of having the sound emitted from the tubes thrown forward into the apartment, instead of upward.

This improvement can be easily applied to any reed-organ already built at a trifling ex-

pense.

I am aware that reed-pipes in pipe-organs are now in use, but the reeds in such pipes

are of an entirely different construction. They are placed in the throat of the pipe, through which wind is forced by the bellows to produce the required sound, whereas, in the present invention, the tubes are simply brought into juxtaposition to the reeds in the reedboard of an ordinary reed-organ, and produce the same effect as the organ-pipes by the resonance of the tone of the ordinary reed in passing through them, the wind being drawn through the tubes to and through the reeds.

What I claim as my invention, and desire

to secure by Letters Patent, is—

1. The tube D, provided with two or more

metallic reeds, B, with mouths d, and with tuning-slides E F, constructed and arranged as described and shown, and for the purposes set forth.

2. The reed organ above described and shown, consisting of the chest A, tubes B, provided with mouths d and tuning slides E and F, and key-board C, and suitable bellows, when the several parts are constructed and arranged as and for the purpose set forth.

GEORGE W. SCRIBNER.

Witnesses:

H. F. EBERTS, H. S. SPRAGUE.