

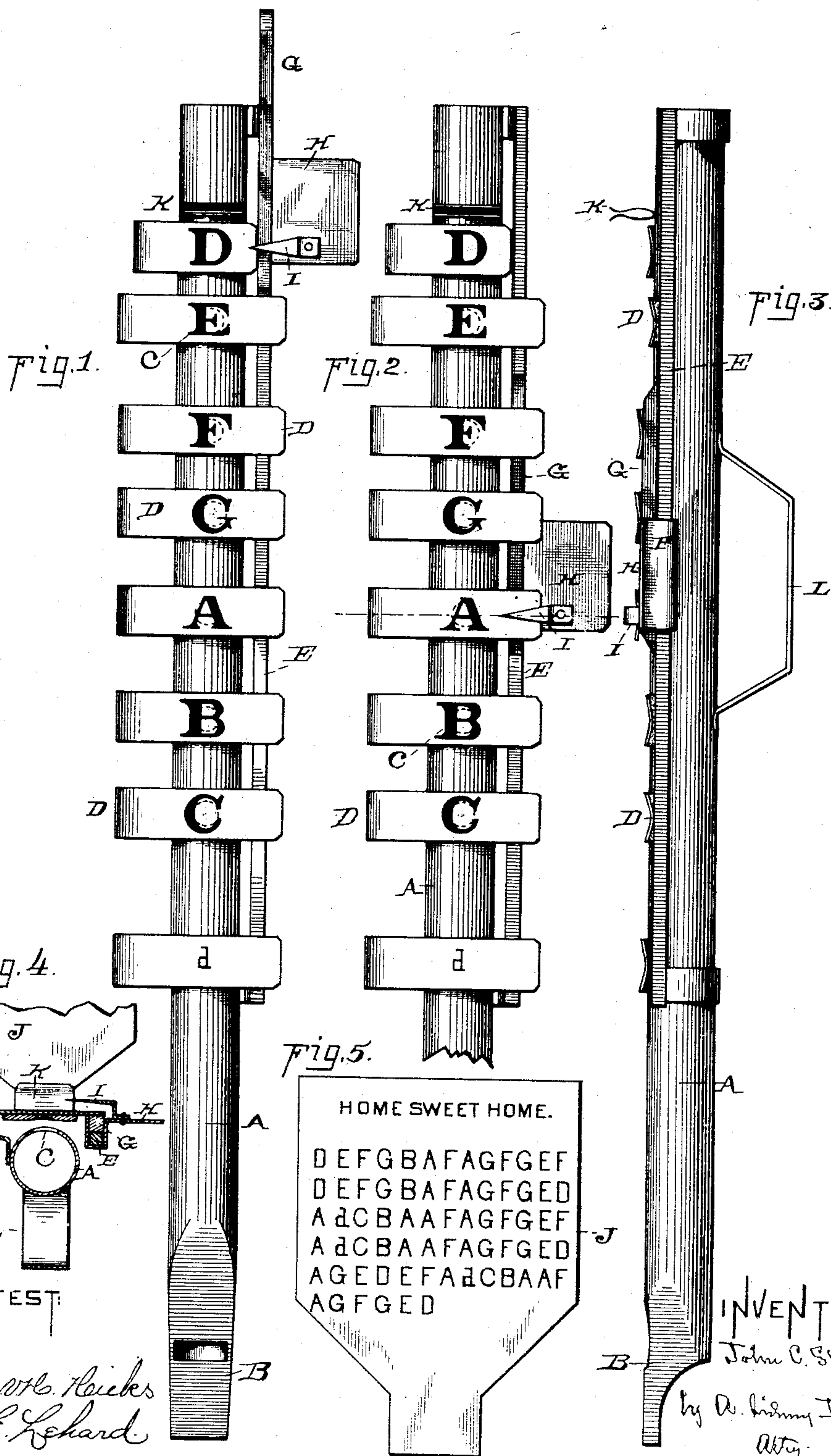
(No Model.)

J. C. ST. JOHN.

WIND MUSICAL INSTRUMENT.

No. 341,181.

Patented May 4, 1886.



ATTEST:

William H. Hicks
Louis E. Lehard

INVENTOR:

John C. St. John
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Atty.

UNITED STATES PATENT OFFICE.

JOHN C. ST. JOHN, OF NEW YORK, N. Y., ASSIGNOR TO EDWARD G. BLACK,
OF SAME PLACE.

WIND MUSICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 341,181, dated May 4, 1886.

Application filed December 26, 1885. Serial No. 186,711. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. ST. JOHN, of the city, county, and State of New York, (assignor to EDWARD G. BLACK,) have invented
5 Improvements in Wind Musical Instruments; and I do declare the following to be a full, clear, and correct description of the same, reference being had to the accompanying drawings, making part of this specification, and to
10 the letters of reference marked thereon, in which—

Figure 1 is a top view of my invention. Fig. 2 is a top view of the same, the sliding rail being shown partially drawn down and certain of the movable covering-plates as open;
15 Fig. 3, a side view of the invention, the sliding rail partially drawn down and certain of the movable covering-plates as open; Fig. 4, a cross-section of the instrument with the printed card in position; Fig. 5, a view of the printed card employed with the instrument.

In the drawings, like parts of the invention are designated by the same letters of reference.

The nature of the present invention consists
25 in improvements, as hereinafter set forth, in wind musical instruments, somewhat resembling the flute or flageolet, the object of the invention being the production at a low cost of a wind musical instrument of the class named.

30 To enable those skilled in the art to make and use my invention, I will describe the same.

A shows a tube, formed preferably of metal, provided with a mouth-piece, B, and a series of perforations, C, upon its upper surface. Over
35 these perforations C are placed a series of movable closing-plates, D, formed of spring-metal, and provided upon their under sides with a thickness of felt, leather, or suitable material, which, when the plates are depressed, will
40 snugly fit over the perforations over which the plates are pressed. The plates D are so constructed as to project beyond the tube A on one side that they may be raised, as hereinafter set forth, and on the other side that sufficient elasticity of metal may be availed of to
45 cause them to be self-closing, as hereinafter set forth.

The tube A is provided on one side with a rail, E, over which is passed and moves freely

a looped plate, F, supporting a short rail or
50 strip of metal, G, having its forward and rear ends inclined, as shown.

H is a flat plate attached to the rail or strip G, and serving as a handle to move the same
55 up or down, or change its position, as required. From the upper surface of the plate H projects the pointer I.

The movable plates D may have affixed to their upper surfaces letters to indicate the notes
60 which will result when they are raised, as hereinafter set forth, and the instrument is being performed on. I do not, however, consider this as absolutely necessary, and probably in the use of the instrument by a competent
65 musician they would not be required. A printed card (designated as J, and shown in Fig. 5,) is intended to indicate to the performer what notes it will be necessary to produce upon the instrument to perform the selection of music
70 shown upon the same. This may be held in a clip, K, composed of the two plates of metal attached to the forward end of the tube A, as shown.

Such being the construction, the operation may be thus described. The instrument is
75 held in the hand of the performer by passing the fingers of the hand through and around the looped handle L, and in order to produce any desired note the mouth-piece B is placed
80 in the mouth, and the rail G is moved by means of the plate H, grasped by the other hand of the performer, until the pointer I is brought about opposite the center of the particular plate D covering the particular perforation in the tube
85 A. As the rail G is moved down, as described, the inclined end of the same easily raises the desired movable plate, and the party blowing in the mouth-piece the air passes down the tube A and through the particular perforation
90 in the same, and the result will be the production of the desired note. It will be observed that the rail G is of sufficient length to allow three of the movable plates to be kept raised at one time, so that a proper tone can
95 be given to the note produced by opening these three plates. After the rear inclined end of the rail G has passed fully beyond any one of the plates D, the same is closed over and

upon the perforation in the tube by the elasticity of the metal of which it is composed, which causes it to resume the position it occupied before being opened.

- 5 The instrument can be afforded at a low cost, and can be easily operated.

Having now set forth my invention, I claim as new—

- 10 1. The combination, with a tube, A, provided with a mouth-piece, B, a series of perforations, C, and a corresponding number of movable plates, D, of a movable rail, G, constructed and operating substantially as and for the purpose set forth.

- 15 2. The combination, with a tube, A, provided with a mouth-piece, B, a series of perforations, C, and a corresponding number of movable plates, D, of a movable rail, G, provided with the plate H, substantially as and for the purpose indicated.

3. The combination, with a tube, A, provided with a mouth-piece, B, a series of perforations, C, and a corresponding number of movable plates, D, of a movable rail, G, provided with the plate H and pointer I, substantially as and 25 for the purpose described.

4. The combination, with a tube, A, provided with a mouth-piece, B, and a series of perforations, C, of a series of lettered movable plates D, and a movable rail, G, substantially as and 30 for the purpose set forth.

5. The combination, with a tube, A, having a mouth-piece, B, the perforations C, and the lettered movable plates D, of a movable rail, G, and printed card J, as and for the purpose 35 fully described.

JOHN C. ST. JOHN.

In presence of—

W. V. H. HICKS,
A. SIDNEY DOANE.