

(No Model.)

G. A. SKUGRUD.

VIOLIN.

No. 345,454.

Patented July 13, 1886.

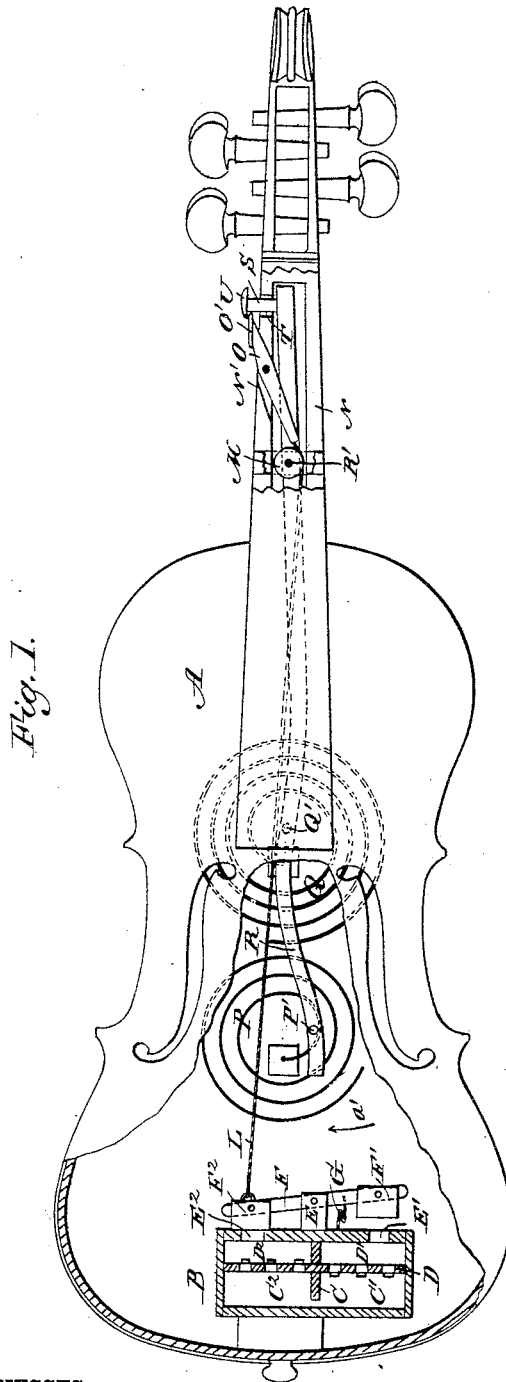


Fig. 7.

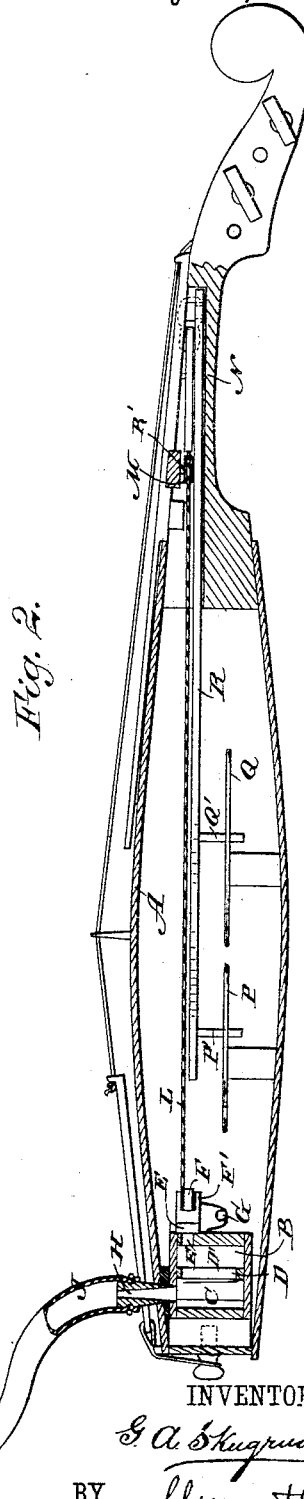


Fig. 2.

WITNESSES:

WITNESSES:
Probyer
C. Sedgwick

INVENTOR:

S. A. Skjerve

BY

Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

GUSTAV A. SKUGRUD, OF GENESEE, IDAHO TERRITORY.

VIOLIN.

SPECIFICATION forming part of Letters Patent No. 345,454, dated July 13, 1886.

Application filed December 8, 1885. Serial No. 185,055. (No model.)

To all whom it may concern:

Be it known that I, GUSTAV A. SKUGRUD, of Genesee, in the county of Nez Perces and Territory of Idaho, have invented certain new and useful Improvements in Violins, of which the following is a full, clear, and exact description.

The object of my invention is to provide certain new and useful improvements in violins, whereby the player is enabled to play the bass tones for the melody he is playing on the violin.

The invention consists in the construction and combination of parts and details, as will be fully described hereinafter, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a top view of my improved violin, parts being broken out and others being in section. Fig. 2 is a longitudinal sectional elevation of the same.

The violin A is in general of the usual construction. In the wider or lower end of the same—that is, at the chin-rest—the box B is fixed within the body of the instrument, and is divided by the partition C into two compartments, C' and C², in each of which a reed, D' or D², is held one on the front and the other on the rear side of the partition D in the box, the partition D having apertures. In the front of the box the apertures E' and E² are provided, which can be closed alternately by the valves F' or F² on the ends of a lever, F, pivoted on a projection, E, on said box. The spring G acting on the lever F presses the valve F² on its opening E². A tube, H, projects from the top of the box B through the top of the violin A, and is connected with a flexible tube, J, on the upper end of which a mouth-piece or nipple, K, is secured. A rod or wire, L, is secured to one end of the lever F, is passed over a pulley, M, in the neck N of the violin, and is secured to the inner end of a lever, O, pivoted in the slot N' in the side of the neck N, which lever O has a head, O', on its outer end.

In the violin two coil-springs, P and Q, are secured. A lever, R, is pivoted at R' in the neck N of the violin, and is provided on its

inner end with the pins P' and Q', which can strike the springs P and Q. From the front end of the lever R a stem, S, projects through an aperture, T, in the side of the neck N, and is provided with a head, U, which overlaps the head O' of the lever O.

The operation is as follows: The operator places the mouth-piece K in his mouth and at the beginning of the bar forces air into the box B. The valve F' being from the box, the air can escape through the opening E' and the reed D' is sounded, and thus the first tone of the bass is produced. The operator then presses on the button U, whereby the inner end of the lever R is swung in the direction of the arrow a', and the pin Q' strikes the spring Q, and the second tone of the bass is produced. By pressing the button U inward the button O' under it is pressed inward, and the valve F² moved from the box B, and thus the opening E² is uncovered and the opening E' closed. The operator then draws in his breath and the air passes through the opening E², the reed D², the box B, tube J, &c., and thus the third tone of the bass is produced. Then the finger is removed from the button U and the spring G, acting on the lever F, presses the valve F² over the opening E², and the valve F' is moved from the opening E'. As the cord L is connected with the lever F, the cord is pulled toward the butt-end of the violin by the action of the spring G. The front end of the lever O is thrown outward, and as the said lever O acts on the head U of the stem S the front end of the lever R is thrown outward and the pin Q' strikes the spring Q, and the fourth tone of the bass is produced. In this manner one, two, three, or four bass tones can be produced to accompany the melody played on the violin.

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

1. The combination, with a violin, of a reed instrument in the same, and a tube connected with the reed instrument, substantially as herein shown and described.

2. The combination, with a violin, of a reed instrument, of a flexible tube connected with the said reed instrument, and of a mouth-piece on the said tube, substantially as herein shown and described.

3. The combination, with a violin, of a reed

instrument in the same, a tube and mouth-
piece connected with the reed instrument,
valves for closing openings in the reed instru-
ment, and of a lever in the neck of the violin,
5 for operating the said valves, substantially as
herein shown and described.

4. The combination, with a violin, of a reed
instrument, a tube for blowing air into the
same, valves on said instrument, a lever piv-
10 oted in the neck of the violin, and of a cord
extending from said lever to the valves, sub-
stantially as herein shown and described.

5. The combination, with a violin, of coil-
springs in the body of the same and of a lever
15 pivoted in the neck of the violin for sounding
said springs, substantially as herein shown
and described.

6. The combination, with a violin, of coil

springs in the same, a lever pivoted in the
violin-neck, a reed instrument in the violin, 20
valves on the same, a lever for operating said
valves, pivoted in the violin-neck, and of a
cord extending from the valves to said lever,
substantially as herein shown and described.

7. The combination, with a violin, of a reed 25
instrument and coil-springs in the same, valves
on the reed instrument, the lever O, pivoted
in the neck of the violin, the cord L, extend-
ing from the valves to the lever O, the lever R,
the stem S on the same, and the head U on the 30
stem S, overlapping the front end of the lever O,
substantially as herein shown and described.

GUSTAV A. SKUGRUD.

Witnesses:

JAMES E. JACOBSON,
PETER MARTENSON.