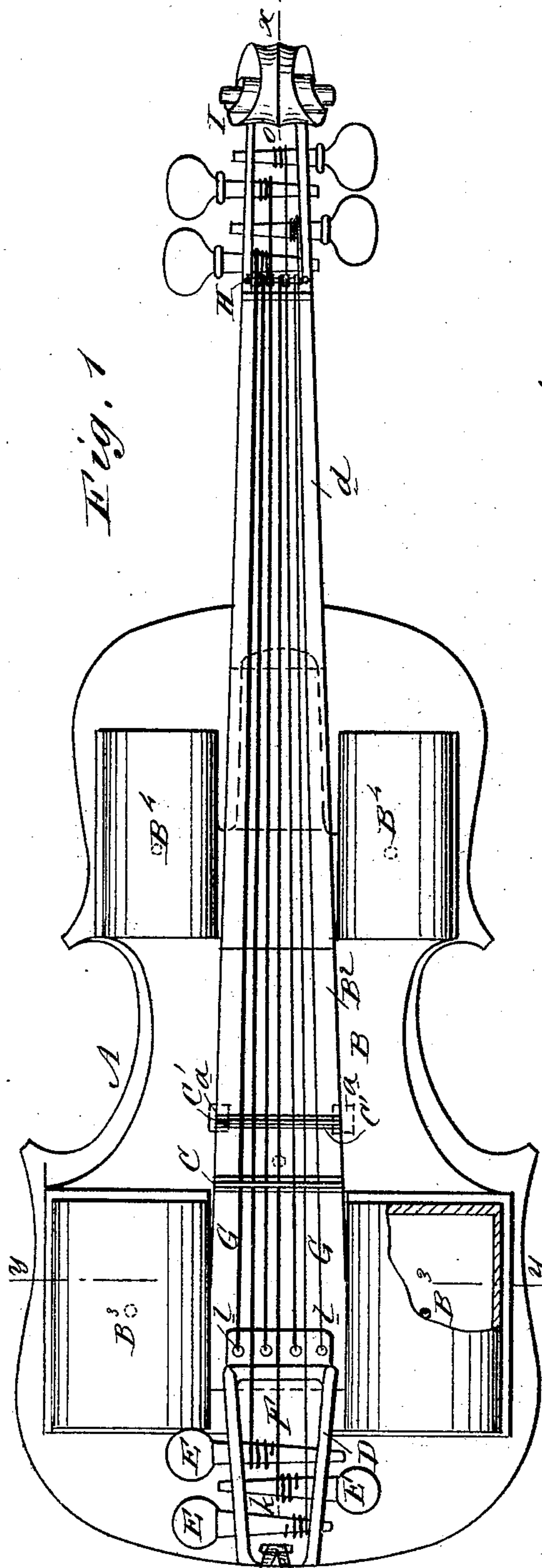


(No Model.)

P. TOPHAM.
VIOLIN.

No. 249,120.

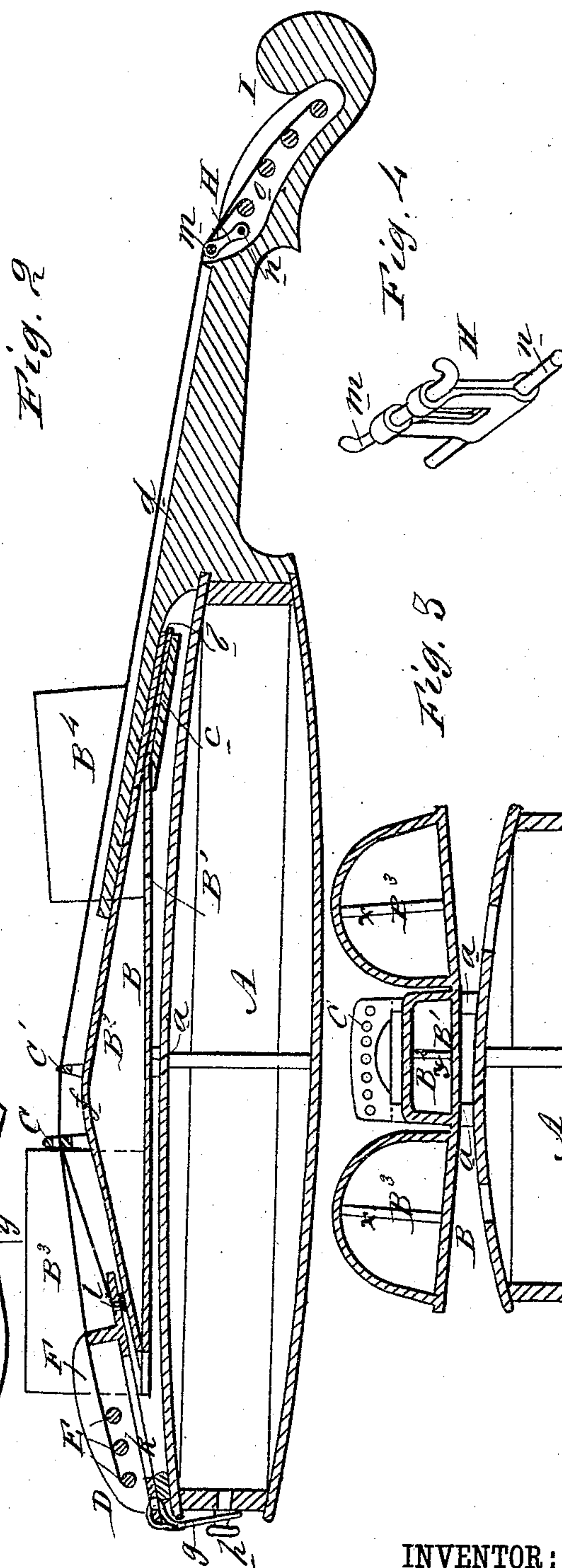
Patented Nov. 1, 1881.



WITNESSES

C. Verneux

B. G. Underwood.



INVENTOR:

P. Totham.

BY

Miner & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

PHINEAS TOPHAM, OF NEWARK, NEW JERSEY, ASSIGNOR TO HIMSELF AND
MATILDA A. TRELEASE, OF SAME PLACE.

VIOLIN.

SPECIFICATION forming part of Letters Patent No. 249,120, dated November 1, 1881.

Application filed August 23, 1881. (No model.)

To all whom it may concern:

Be it known that I, PHINEAS TOPHAM, of Newark, in the county of Essex and State of New Jersey, have invented a new and Improved Violin, of which the following is a full, clear, and exact description.

The object of this invention is to increase the volume of sound and the fullness of the notes of the violin, to facilitate the playing of two notes at once, and to enable the operator to play the accompaniment with the tune.

The invention consists of a violin provided with a sounding-board extending over and supported on the violin-belly, with its tongue engaged in a pocket of the finger-board; of a number of auxiliary strings stretched between the usual strings; of a swinging link pivoted in the scroll for the attachment of the auxiliary strings; of a tail-piece for holding the usual strings, and provided with tightening-pins for holding and setting the auxiliary strings, and of the bridges set on the sounding-board to support the strings, all of which will be hereinafter set forth.

Figure 1 is a plan of a violin with my improvements attached. Fig. 2 is a longitudinal sectional elevation of the same on line *x x*, Fig. 1. Fig. 3 is a cross-section of the same on line *y y*, Fig. 1. Fig. 4 is a perspective view of the holder for the auxiliary strings.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents a violin of ordinary construction, and B a sounding-board extending over and supported on the violin-belly by central studs or supports, *a a*, and by a tongue, *b*, which projects from the front of said sounding-board B into a corresponding socket or pocket, *c*, formed in or upon the violin finger-board *d*, on the under side thereof. This sounding-board B is designed to extend nearly the whole width of the violin to which it is applied, and to be as long as possible without interfering with the strings. The sounding-board B consists of a thin board or veneer bottom, *B'*, bent slightly upward from its longitudinal center to its edges, and having fixed on its top, along its center, a hollow box, *B²*, which slopes downward to either end from the highest central point, *f*, as shown. The vibra-

tions of the sounding-board B are transmitted to the belly of the violin by means of the supports *a a*.

At the rear end of the board *B'* a semi-cylindrical drum, *B³*, is secured thereon at either side of the box *B²*, and on the forward end of the board *B'* a smaller semi-cylindrical drum, *B⁴*, is secured on either side of the box *B²*. The purpose of the box *B²* and drums *B³* *B⁴* is to increase the volume of sound and the fullness of the notes by increasing the resonant and vibrating surface of the violin.

Across the sounding-board B, on either side of the peak *f*, is a bridge, *C C'*, the rearmost one of which, *C*, is provided with perforations for holding in place the violin-strings *F G*, that pass through it, while said strings *F G* are supported on the edge of the bridge *C'*.

The tail-piece *D* is held by a loop, *g*, on a stud, *h*, in the rear end of the violin A, in the usual manner. This tail-piece *D* is constructed with a pocket, *k*, through the sides of which are passed the string-tightening pins *E*, for holding the lower ends of the three auxiliary strings *F*, while the front of said tail-piece *D* is provided with holes *l*, as usual, for the fastening of the lower ends of the usual violin-strings, *G*. The upper ends of the three auxiliary strings *F* are made fast to the upper rod, *m*, of a swinging link, *H*, which latter is pivoted on a transverse rod, *n*, in the pocket *o* of the scroll I. The rod *m* of the link *H* has its ends bent, as shown, for the purpose of more surely holding the ends of the strings *F*. The auxiliary strings *F* are stretched in the interspaces of the strings *G*, so that the seven strings occupy no more space than do the usual four strings; neither do they interfere with each other. By this arrangement the operator is enabled to play two notes at once and to play the accompaniment with the tune.

This improvement is not confined in its application to violins, but may be advantageously applied to bass-violins and kindred musical instruments.

The box *B²* and the drum *B³* are to be provided with sounding-posts, as shown at *x y*. The walls of the box *B²* and the drum *B³* are also to be suitably perforated.

Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent, is—

1. A violin constructed, substantially as herein shown and described, with an independent
5 sounding-board covering and supported on the belly of the violin and carrying the string-bridges, as set forth.

2. In a violin, the combination, with the auxiliary sounding-board B, placed over and communicating with the violin-belly, of the strings
10 G and auxiliary strings F, substantially as shown and described.

3. In a violin, as a means for increasing the volume of sound and the fullness of the notes,
15 the sounding-board B, constructed, substantially as herein shown and described, of board B', longitudinal central box, B², and drums B³ B⁴, said sounding-board being connected with the violin-belly by studs or supports *a a*, as
20 set forth.

4. In a violin, as a means of increasing the volume of sound, the combination of the strings G and auxiliary strings F, placed near together, and adapted to be stopped and vibrated by
25 the bow in pairs, substantially as shown and described.

5. In a violin, as a means for stretching the

auxiliary strings F, the combination, with the swinging link H, of the tail-piece D, provided with tightening-pins E, substantially as herein
30 shown and described.

6. A violin tail-piece constructed, substantially as herein shown and described, with string-holes *l* and tightening-pins E, as set forth.
35

7. The combination, with the violin A, of the auxiliary sounding-board B, secured in pocket *c* over the belly, and communicating therewith by pins *a a*, substantially as shown and described.
40

8. In a violin, the combination, with the auxiliary sound-board B, of the finger-board *d*, provided with the pocket *c*, whereby the sound-board B is secured over the belly of a violin,
45 substantially as shown and described.

9. In a violin, the combination, with the sounding-board B, of the bridges C C', tail-piece D, provided with tightening-pins E, auxiliary strings F, and swinging link H, substantially as herein shown and described.

PHINEAS TOPHAM.

Witnesses:

AMOS DAY,

JNO. J. MCBRIDE.