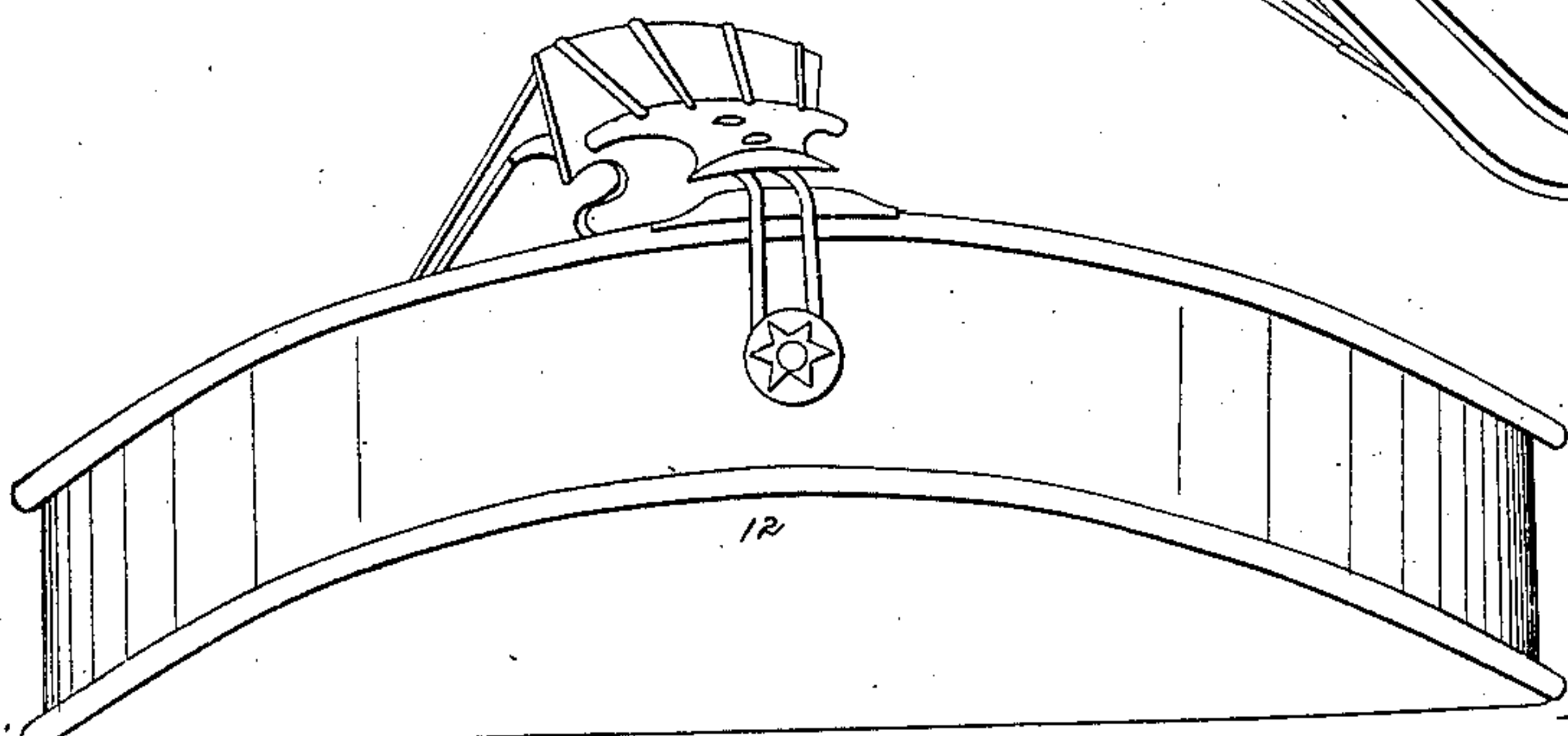
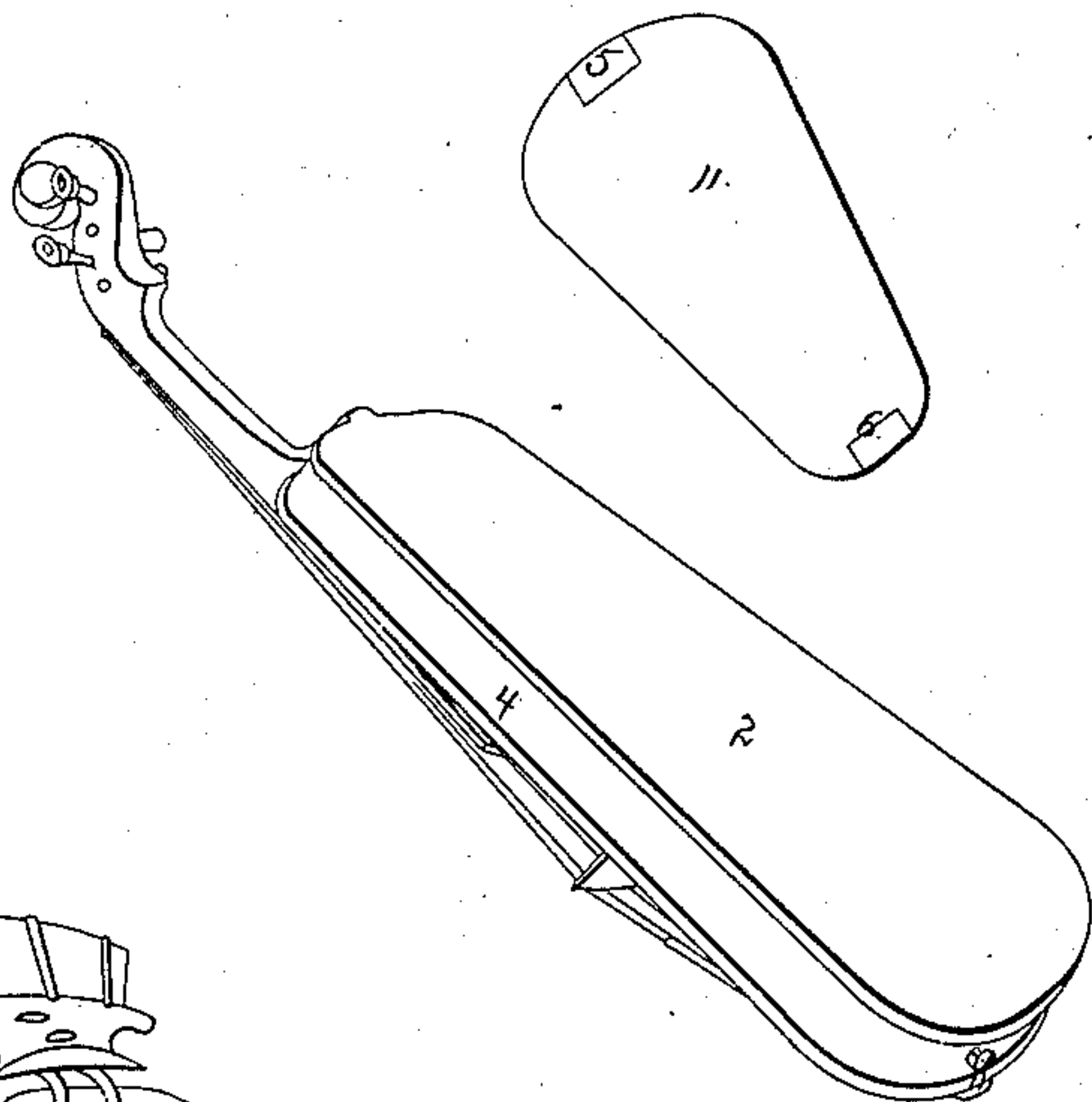
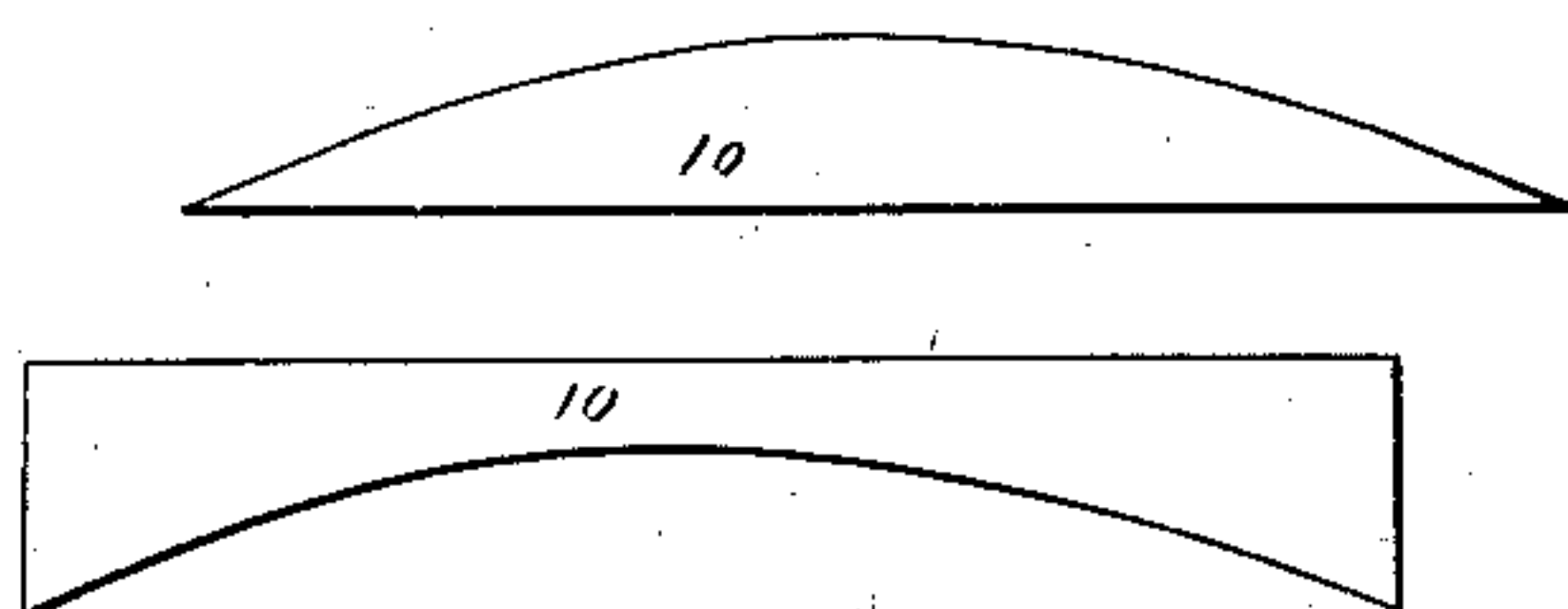
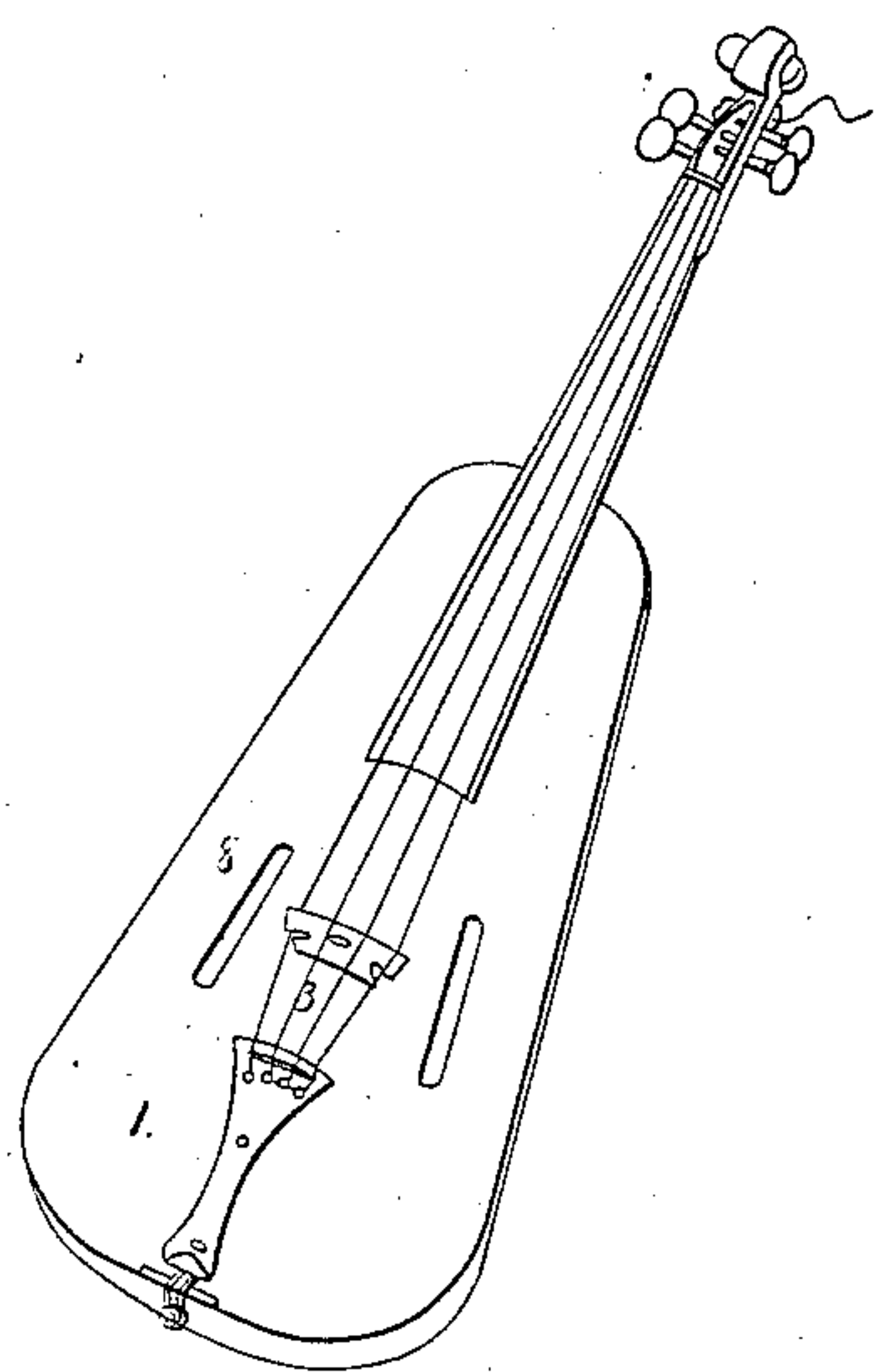
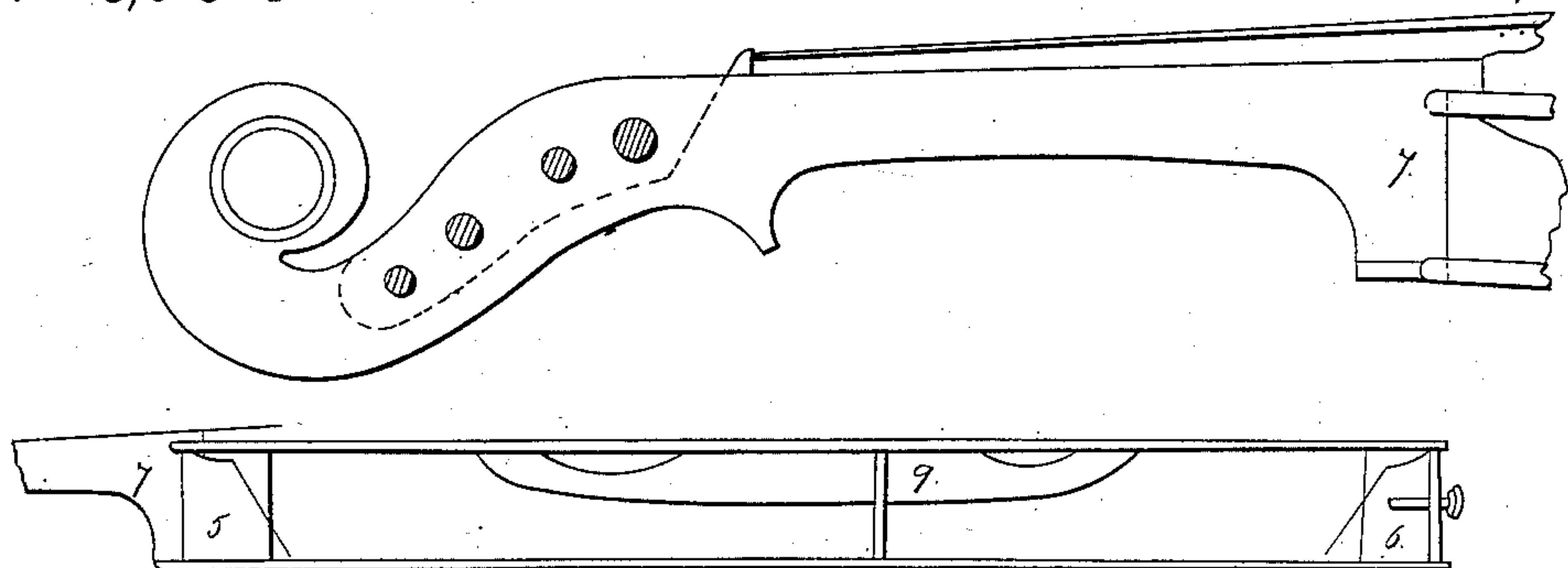


W. S. Mount

Violin

No 8,981.

Patented June 1, 1852.



Witnesses;  
Francis H. Lytton  
William Dodge

Inventor;  
W. S. Mount



# UNITED STATES PATENT OFFICE.

WM. S. MOUNT, OF STONEY BROOK, NEW YORK.

## VIOLIN.

Specification of Letters Patent No. 8,981, dated June 1, 1852.

*To all whom it may concern:*

Be it known that I, WILLIAM S. MOUNT, of Stoney Brook, in the county of Suffolk and State of New York, have invented a new and improved mode of constructing violins and other stringed musical instruments by which a greater strength of the parts is secured with a greater lightness of the material composing the instrument, and at the same time a superior quality and greater quantity of tone and sound are obtained.

The nature of my improvement consists in the peculiar form in which I construct the back of the instrument, or that part which receives the strain of the strings, when they are tightened in the process of tuning the instrument. In the construction of all stringed musical instruments heretofore made, the form of the back has either been convex or flat, and hence in the process of tuning the instrument by tightening the strings the effect has been to strain or bend the back and also as an inevitable consequence, so to compress the fibers of the wood composing the sounding board in front as to alter, interfere with or impair its sonorous and vibrating qualities. To overcome this difficulty, I construct the back of the instrument, or that part which is strained by the tightening of the strings in a concave form, so that a convex surface is presented in front toward the strings. By this form of construction when the strings are strained in the process of tuning, the effect is to lengthen instead of shorten the lower line, and thus, while the back of the instrument is relieved from the strain to which it would be otherwise subjected, the compression of the wood composing the sounding board is entirely avoided.

The drawing hereunto annexed, and which I make part of this my description, represents the violin constructed in accordance with my invention. The Figures No. 1 and No. 2 representing—the former—the convex sound board front of the instrument, and the latter—the concave or hollow back.

In constructing the violin according to my method, I first plane the wood designed for the back and front to the required thinness—leaving it a little thicker in the center at the bridge (No. 3). The wood I then bend either by steaming or by holding it close to a hot stovepipe or heated iron cylinder and then press it upon molds of the required shape. The bass bar (No. 9) is then glued

to the sounding board obliquely under the left foot of the bridge in a line with the bass string. The holes in the sounding board (No. 8) should be cut before the wood is planed to the requisite degree of thinness. I then construct a block or mold of the form required for the violin and of the requisite depth, say three inches as in No. 11—the edges being squared from the top and mortised at each end to admit the blocks (Nos. 5 and 6.) The sides (No. 4) are bent on a hot piece of iron to fit the mold, and are secured to the end blocks by means of a cramp. The sides and ends are made to fit by the aid of a band, with two small blocks at each end, assisted by a hand screw. I then cut away the mold to fit the patterns (No. 10) and give the true curves of the back and front. The sides and end blocks I first glue to the back, and afterward the front is glued to the back, after which I cut an ornamental groove in the sound board near the edge and scooped away gently toward the center. The neck, (No. 7) I glue on last, and cause it to pitch down a little so that the end of the finger board will be elevated about an inch above the sound board. Fig. No. 12, shows the elevation of the arch at the base, which I make about an inch. Constructed in this manner, the back and sides of the violin, by reason of the concavity, receive the strain of the strings when tightened, and the greater shortness of the sound post increases the vibration of the sound board, making the tone of the instrument more sonorous, rich and powerful. I construct the back of the instrument of curled maple—the front of spruce the sides of bird's eye maple—the end blocks of pine, and the bass bar of spruce.

That which I claim as my improvement, and desire to secure by Letters Patent is—

1. The construction of that portion of stringed musical instruments which receives the strain of the strings when tightened in tuning in such form or forms as will cause the line of that portion of the instrument to be lengthened instead of shortened, if the same be altered at all by the strain.

2. I also claim the hollow backed violin or other stringed musical instrument of similar character, constructed substantially in the manner herein set forth.

WM. S. MOUNT.

Witnesses:

FRANCIS H. UPTON,  
WILLIAM DODGE.