

(No Model.)

C. L. LANDAS.

VIOLIN BOW.

No. 413,069.

Patented Oct. 15, 1889.

Fig. 1.

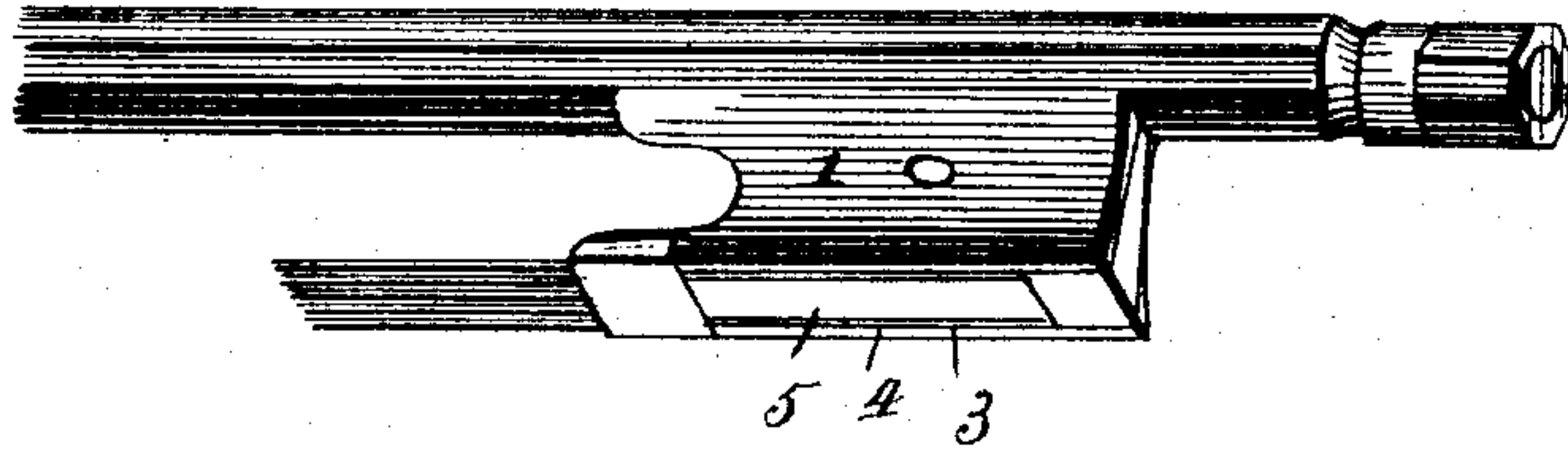


Fig. 2.

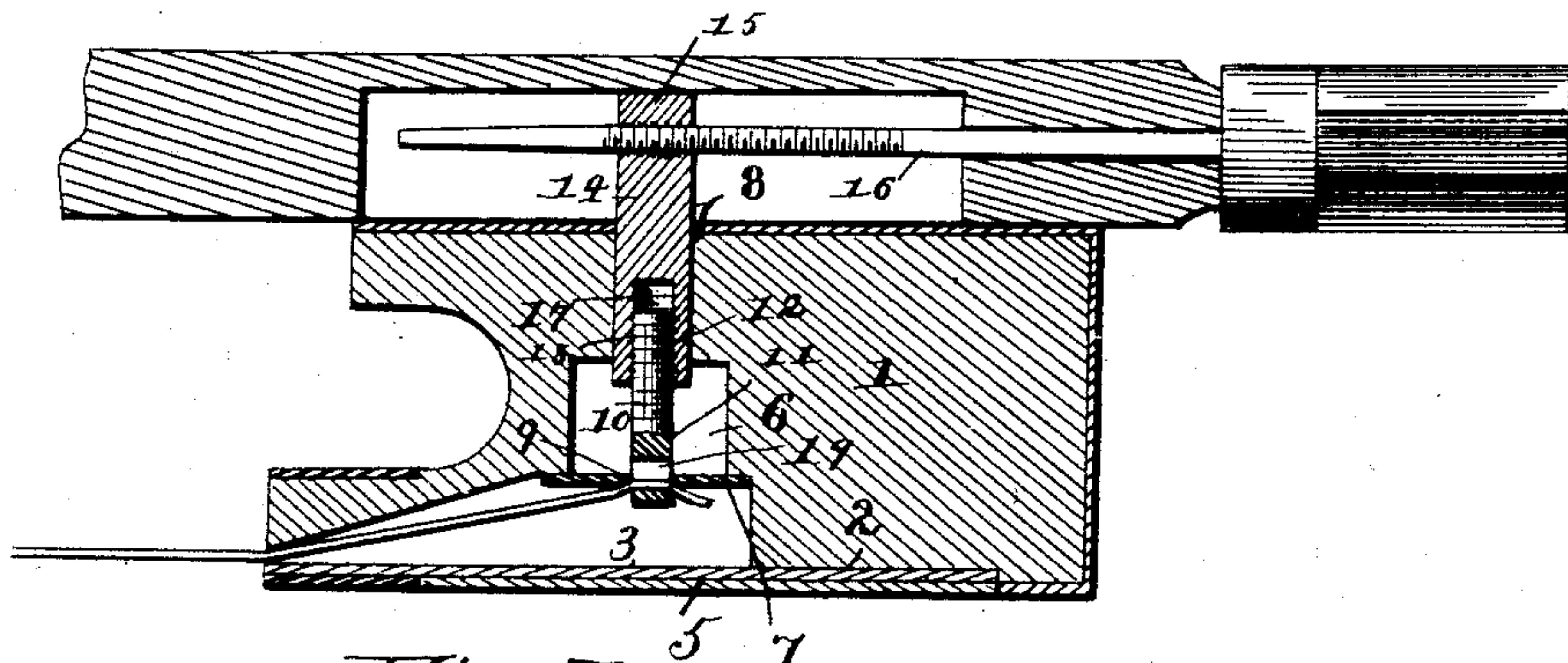


Fig. 3.

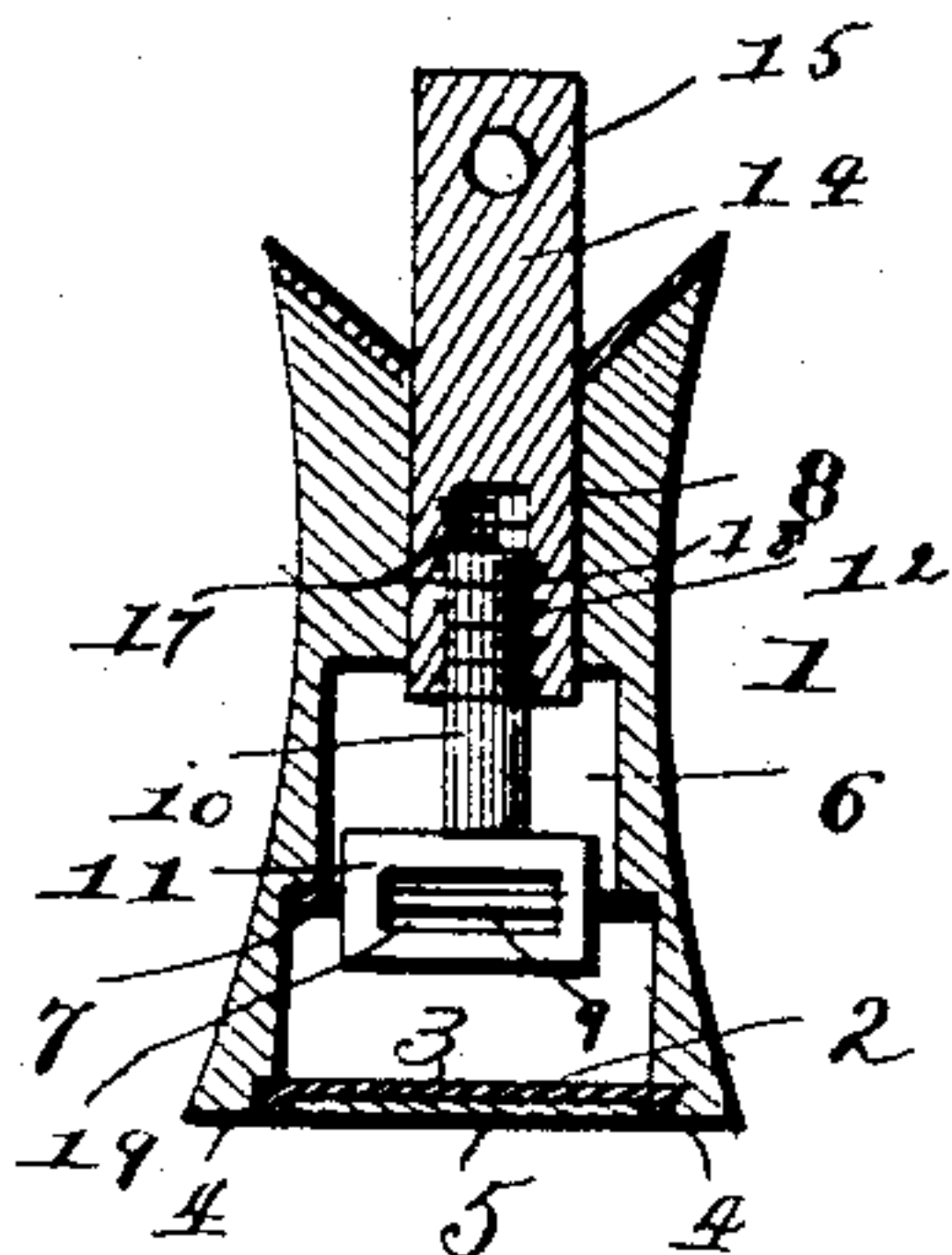
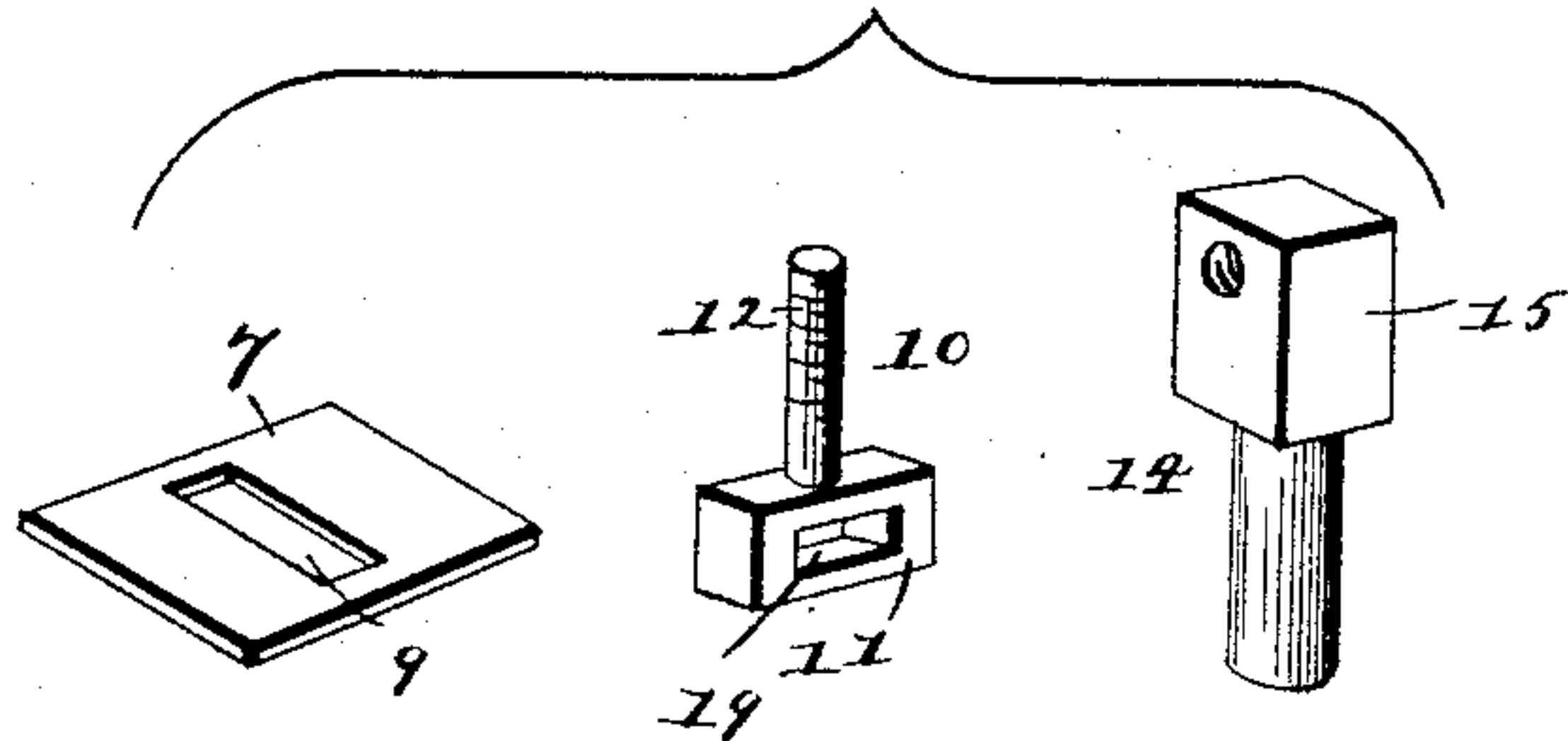


Fig. 4.



Witnesses
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VIOLIN-BOW.

SPECIFICATION forming part of Letters Patent No. 413,069, dated October 15, 1889.

Application filed April 25, 1889. Serial No. 308,503. (No model.)

To all whom it may concern:

Be it known that I, CLARRENCE L. LANDAS, a citizen of the United States, residing at Titusville, in the county of Crawford and State of Pennsylvania, have invented a new and useful Bow for Violins and other Stringed Instruments, of which the following is a specification.

This invention has relation to bows for violins and other stringed instruments, and has special reference to the frogs thereof.

Among the main objects in view are to provide a frog of such a construction as to facilitate the filling of the bow when occasion requires, and this without the use of glue or other sticky substances, the means for accomplishing the object being simple and inexpensive.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective of the frog of a bow constructed in accordance with my invention. Fig. 2 is a vertical longitudinal section on an enlarged scale. Fig. 3 is a transverse section. Fig. 4 represents detail views of the novel parts.

Like numerals of reference indicate like parts in all the drawings.

1 represents the frog of a bow, which, with the exception of certain features hereinafter mentioned, is similar to those ordinarily used, the same being provided with a bottom recess 2, extending throughout its length, a metal tip 3, an abutting wall 4, and a removable slide 5. Within the recess 2 there is formed a second shorter recess 6, which is of rectangular shape and fitted with a correspondingly-shaped bearing-plate 7. A vertical perforation 8 is formed in the frog, which extends throughout its height and communicates with the bearing-plate 7, which plate is provided with a transverse slot 9.

10 represents a binding-key; and the same consists of a head portion 11, adapted to fit the slot formed in the plate 7, and a reduced spindle portion 12, provided with screw-threads. This key is of such a length as to extend about midway the vertical perfora-

tion formed in the frog. The remainder of the perforation is occupied by a binding-bolt 14; and the same consists of an upper head portion 15, transversely perforated and screw-threaded for the reception of the usual screw-threaded adjusting-shaft 16; and it further consists of a reduced portion 17, plain upon its outer surface, but provided with an internally-screw-threaded bore 18, adapted for the reception of the reduced screw-threaded portion of the key.

To fill a bow, by which is meant to provide the same with hair, it is simply necessary to rotate the binding-bolt so as to be moved upwardly, and thus the slot 19, of rectangular shape, formed in the head of the key, is brought below the plane of the bearing-plate. It now remains to insert the ends of the hair. This having been done, by screwing the binding-bolt downwardly the head of the key is drawn upwardly and the hair at each side thereof drawn snugly against the walls of the recess formed in the bearing-plate. It now remains simply to regulate the adjustment of the filling thus mounted.

Having thus described my invention, I claim—

1. In a frog for bows, a movably-mounted key provided with a head having an opening, and a plate slotted for the reception of the head, in combination with means for operating the key, substantially as specified.

2. In a frog for bows, a bearing-plate having a slot, in combination with a key provided with a head having a slot and provided with a reduced spindle portion having screw-threads, and a binding-bolt mounted upon the key and internally bored and screw-threaded for the reception of the spindle, substantially as specified.

3. In a bow, a frog provided with a recess and a vertical perforation, in combination with a bearing-plate mounted in the recess and a key mounted in a perforation and provided with a slotted head adapted to be projected through an opening in the plate, and with a reduced screw-threaded spindle, and a binding-bolt provided with an internally-screw-threaded bore for the reception of the spindle, and with a transversely-apertured

head for the reception of the adjustment-shaft, substantially as specified.

4. In a frog for bows, the key 10, longitudinally movable and having the slot 19, for the
5 passage of the hairs, as set forth.

5. In a frog for bows, the key 10, longitudinally movable and having the hairs connected therewith, and the binding-bolt 14,
10 as set forth.

6. In a frog for bows, the key 10, longitudinally movable and having the hairs con-

nected therewith, and the binding-bolt 14, having a threaded connection with the key, and the adjustment-shaft 16, connected with
15 the binding-bolt, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

CLARENCE L. LANDAS.

Witnesses:

JOS. T. CHASE,

C. E. PRICE.