

No. 773,698.

PATENTED NOV. 1, 1904.

J. W. WHITLOCK.
PICKER FOR STRINGED MUSICAL INSTRUMENTS

APPLICATION FILED JAN. 9, 1904.

NO MODEL.

Fig. 1.

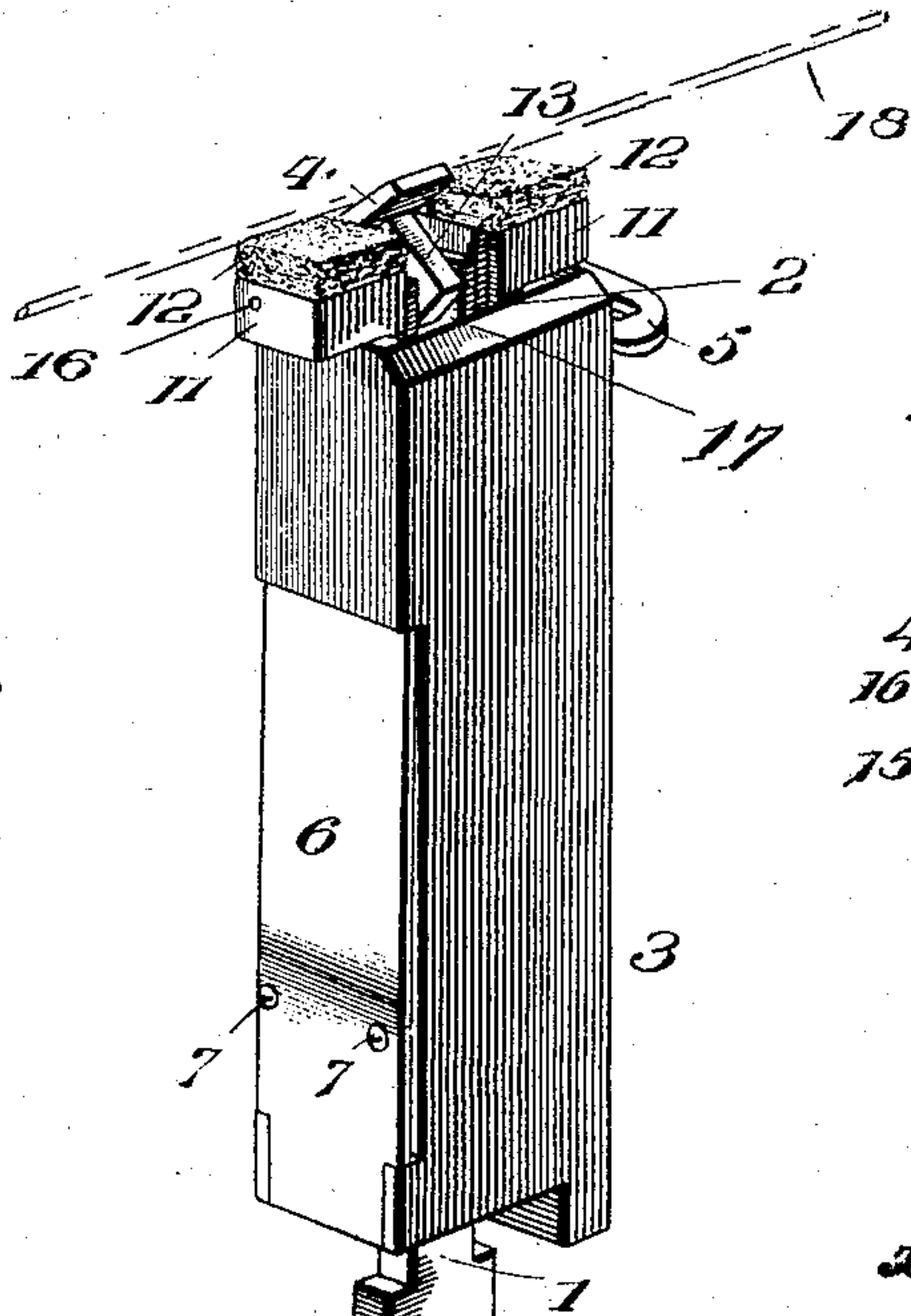


Fig. 5.

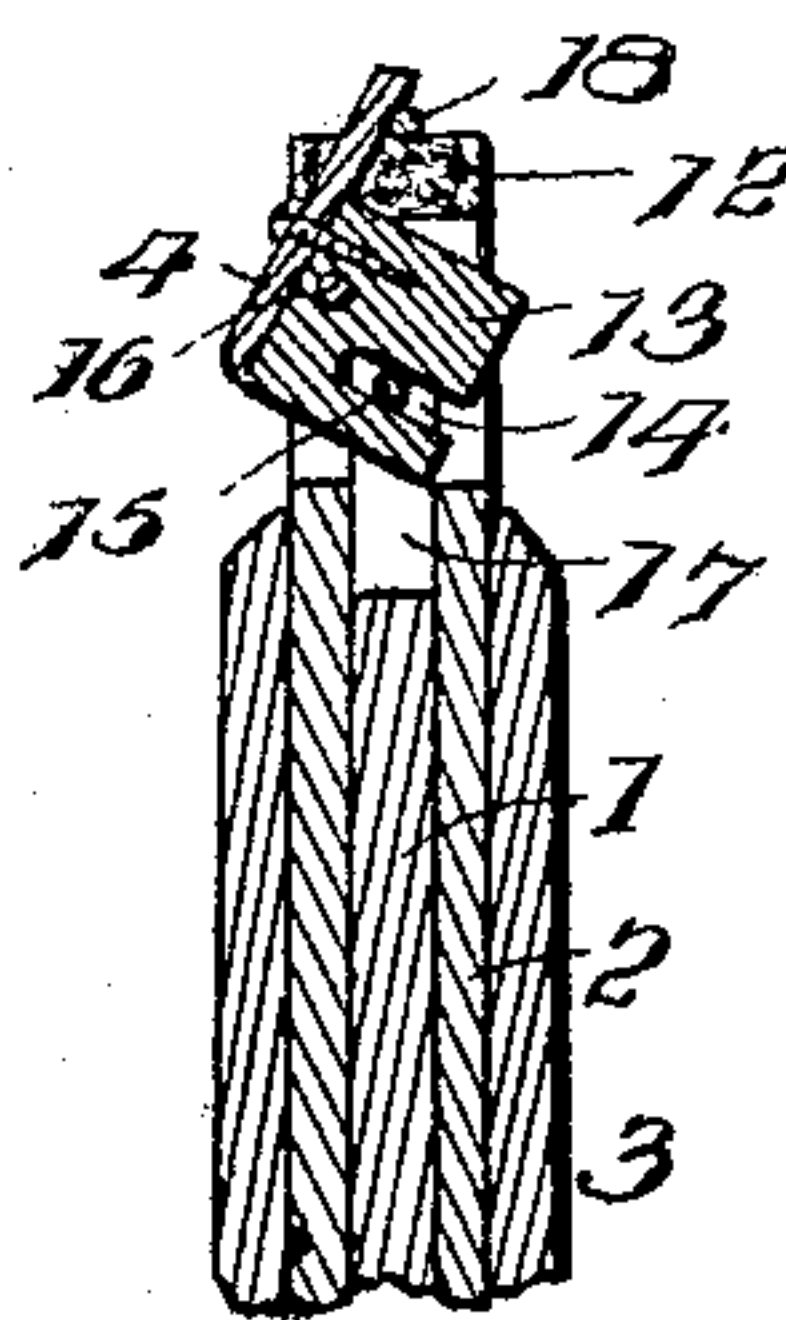


Fig. 2.

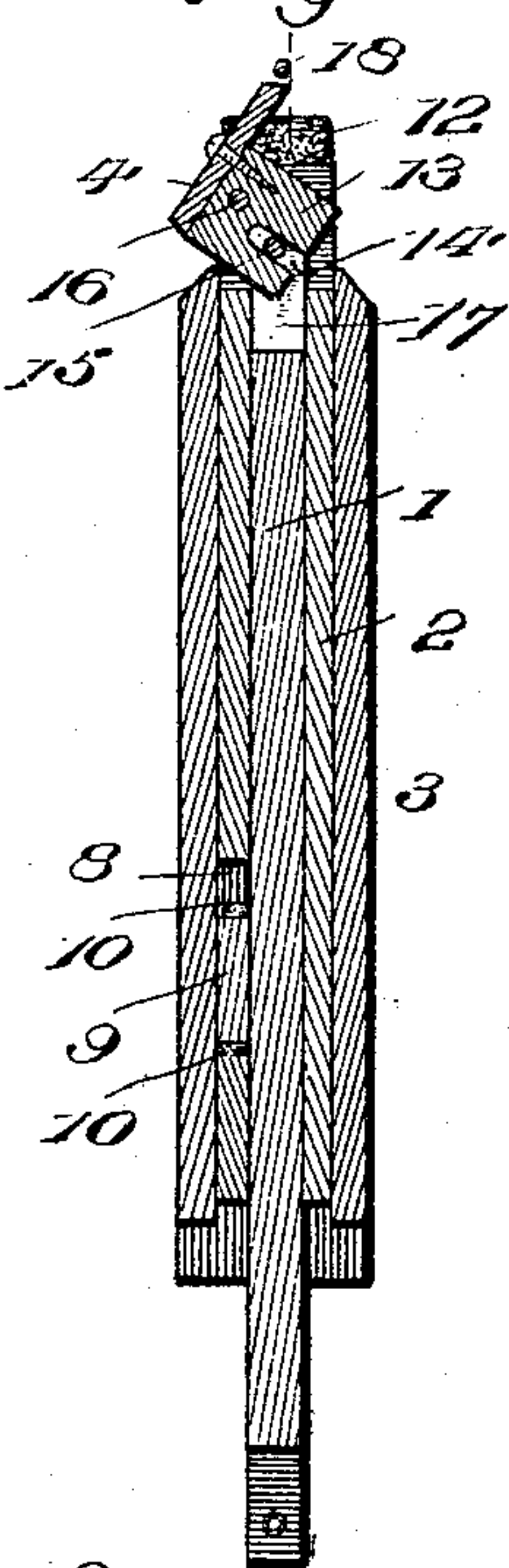


Fig. 3.

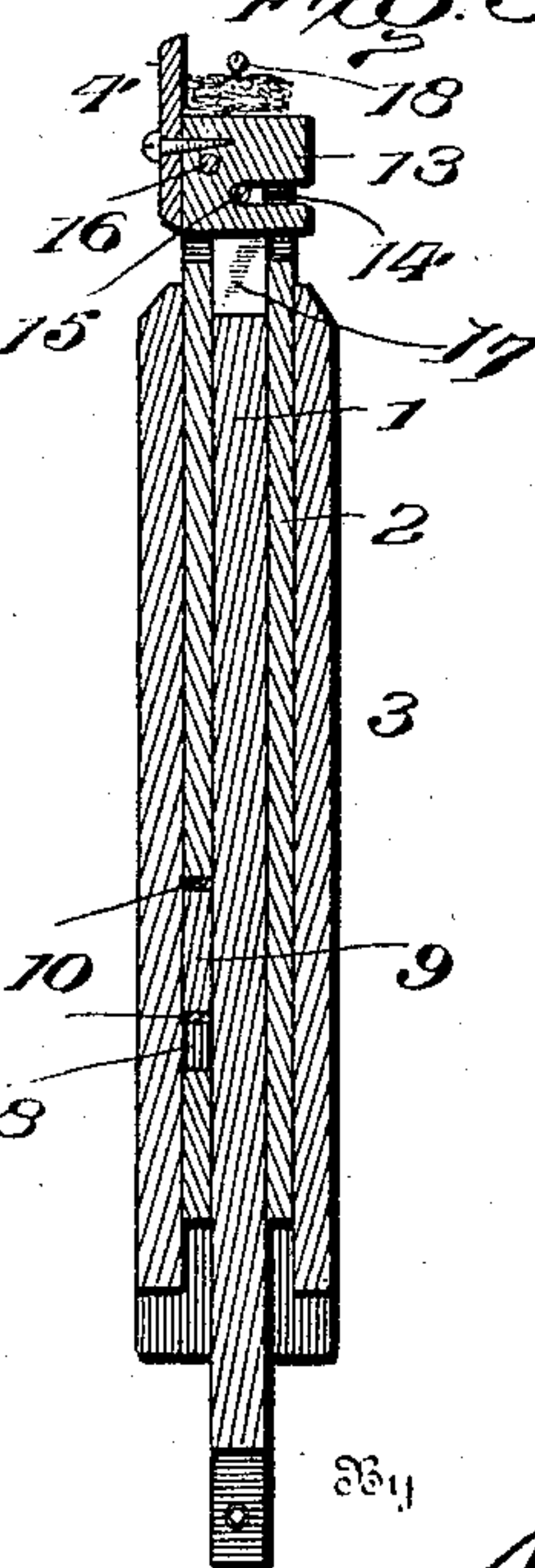
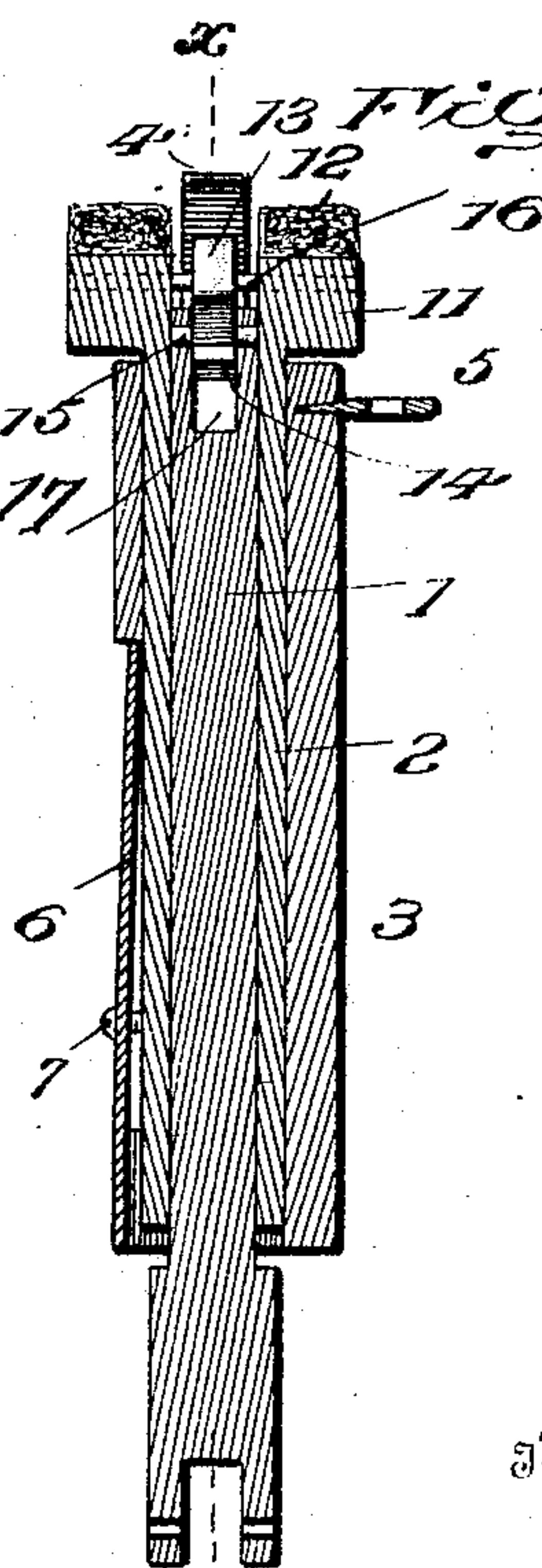


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

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PICKER FOR STRINGED MUSICAL INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 773,698, dated November 1, 1904.

Application filed January 9, 1904. Serial No. 188,350. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. WHITLOCK, a citizen of the United States, residing at Rising-sun, in the county of Ohio and State of Indiana, have invented certain new and useful Improve-
5 ments in Pickers for Stringed Musical Instruments, of which the following is a specification.

This invention has for its object to devise a simple, effective, and novel form of picker for
10 self-playing stringed musical instruments, the purpose being to secure a soft quality of tone approximating that produced by instruments played by hand, thereby avoiding the mechanical rhythm and tone generally produced by
15 self-playing instruments.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to
20 be had to the following description and drawings hereto attached.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the
25 invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a picker embodying the invention. Fig. 2 is a vertical central section thereof on the line X X of Fig.
30 4, showing the position of the picker after the string has been sounded and prior to return of the parts to normal position. Fig. 3 is a view similar to Fig. 2, showing the normal position of the parts and the string damped.
35 Fig. 4 is a vertical section of the picker on the line Y Y of Fig. 2 looking to the left. Fig. 5 is a view similar to Figs. 2 and 3, showing the position of the picker during the initial movement of the jack prior to the move-
40 ment of the guide to carry the damper away from the string.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same
45 reference characters.

The picker comprises the jack 1, guide 2, supporting-guide 3, and the pivoted picker 4.

The supporting-guide 3 may be of any formation so long as it serves to receive the guide
50 2 and direct it in its reciprocating movements.

The supporting-guide 3 is fixed and is adapted to be connected to the instrument in any substantial and convenient way and for this purpose is provided with a slotted plate 5. A portion of a wall of the guide 3 is cut away
55 and provided with a spring 6, adapted to exert a pressure against the side of the guide 2, so as to offer a slight resistance to its movement, the same being essential to the effectiveness of the picker, as will appear more
60 fully hereinafter. The spring 6 is secured at one end to the supporting-guide 3 and is free at its opposite end and is adjustable laterally by the set-screws 7, passed through openings
65 in the edge portions thereof and threaded into the edge portions of opposite walls of the guide. By proper manipulation of the set-screw 7 the spring 6 may be caused to bear
70 upon the guide 2 with a greater or less pressure.

The guide 2 is movable with reference to the guide 3 and is mounted therein for reciprocal movement. A portion of a wall of the guide 2 is cut away, as indicated at 8, and receives a stop 9, projected from the jack 1.
75 The cut-away portion or opening 8 is a trifle longer than the stop 9 to admit of the jack 1 having a limited movement in each direction without producing a corresponding movement
80 of the guide, this being essential to the proper sounding of the note. Opposite ends of the stop 9 are cushioned, as indicated at 10, to prevent any noise incident to the impact of said stop with the end walls of the opening 8.
85 The guide 2 projects beyond the guide 3 and is provided with oppositely-disposed cheek-pieces 11, to which pieces of felt 12 or like material are applied. The walls of the projecting portion are cut away intermediate of the cheek-pieces 11 to make provision for free
90 operation of the picker 4.

The picker 4 is of fibrous material, such as wood, and is provided with a shank 13, notched, as at 14, to receive the pin 15, applied to the upper end of the jack 1. The shank 13 while
95 shown separate from the picker 4 and attached thereto may in practice be an integral part of the picker; but by having the parts separate either one may be replaced when worn independently of the other. The picker is pivoted
100

to the upper end of the movable guide 2 by means of a pin 16, which is passed through corresponding openings of the shank 13 and opposite walls of the guide 2. The pins 15 and 16 are not in the same line. Hence movement imparted to the jack 1 causes the picker to turn upon its pivotal support 16, whereby the outer or projecting end of the picker is caused to move laterally or toward and from the line of movement of the jack 1.

The jack 1 consists of a rod or bar and is slidably mounted in the movable guide 2 and is adapted to have a reciprocating movement imparted thereto, being connected at one end to any suitable action mechanism, according to the style of stringed instrument to which the picker may be adapted. The opposite end of the jack is forked, as indicated at 17, and receives the shank 13, the pin 15 being supported at its ends in the fork members. The stop 9, projected laterally from the jack, may be a part thereof or applied thereto and limits the movement of the jack with reference to the movable guide.

The part 2 performs the dual function of a guide for the jack and a support for the picker and will be referred to hereinafter by the term "support" in order to distinguish it from the guide 3. The normal position of the picker, its support, and adjunctive parts is shown in Fig. 3. When the jack is actuated to sound the string, the picker 4 is turned so as to extend across the path of the string during the initial movement of the jack, said picker assuming the position shown in Fig. 5. A continued movement of the jack causes the support or guide 2 to move therewith, whereby the damper is carried away from the string and the latter sounded by contact of the picker therewith in the well-known manner. When the string has been set in vibration, so as to produce the note, the picker and damper are entirely out of the way and assume the position about as shown in Fig. 2. Upon movement of the jack in the opposite direction to effect a resetting of the parts the picker is turned upon the pin 16 during the initial movement of the jack so as to throw it out of the path of the string, thereby admitting the picker to return to a normal position without coming in contact with the string. After the picker has been turned so as to clear the string a continued movement of the jack moves the support or guide 2 so as to bring the damper 12 in contact with the string to deaden the sound thereof in the manner well understood.

In order that the friction between the jack 1 and guide 2 may not cause the two to move together upon the initial movement of the jack, the spring 6 has been provided and acts in the capacity of a retarder to hold the guide 2

stationary until positively operated by contact of the stop 9 with the walls of the opening 8.

Having thus described the invention, what is claimed as new is—

1. In a picker for stringed musical instruments, the combination of a support provided with damping material, a picker carried by said support, a jack, connecting means between the jack and picker for imparting a movement thereto independent of its support, and positive interlocking means between the jack and picker-support for moving the latter with the picker, substantially as described.

2. In a picker for stringed musical instruments, the combination of a support provided with a damper and an elongated opening, a picker carried by said support, a jack, connecting means between the jack and picker-support, and a stop carried by the jack and arranged to operate in the elongated opening of the picker for moving the latter independently of its support, substantially as set forth.

3. In a picker for stringed musical instruments, the combination of a support, a picker carried by said support, a jack, connecting means between the jack and picker for operating the latter independently of its support and then with the support, and a retarder for exerting pressure upon the support sufficient to overcome the friction between the jack and support, substantially as specified.

4. In a picker for stringed musical instruments, the combination of a guide provided with a damper, a picker pivoted to said guide, a jack slidably mounted with reference to the guide and having a movement independent thereof, connecting means between the guide and jack to cause both to move in unison after the jack has moved the limited distance in each direction, a retarder for exerting a pressure upon the guide, and means varying the pressure of said retarder, substantially as set forth.

5. In a picker for stringed musical instruments, the combination of a stationary guide, a movable support provided with a damper, a picker carried by said support, a jack slidably mounted with reference to the guide and support, connecting means between the jack and picker to move the latter independently of its support and then with the support, and a retarder connected to the stationary guide and exerting a pressure against the aforesaid support, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN W. WHITLOCK. [L. S.]

Witnesses:

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FRANK WOODWARD.