

(No Model.)

W. H. R. TOYE.
FRETTED MUSICAL INSTRUMENT.

No. 518,869.

Patented Apr. 24, 1894.

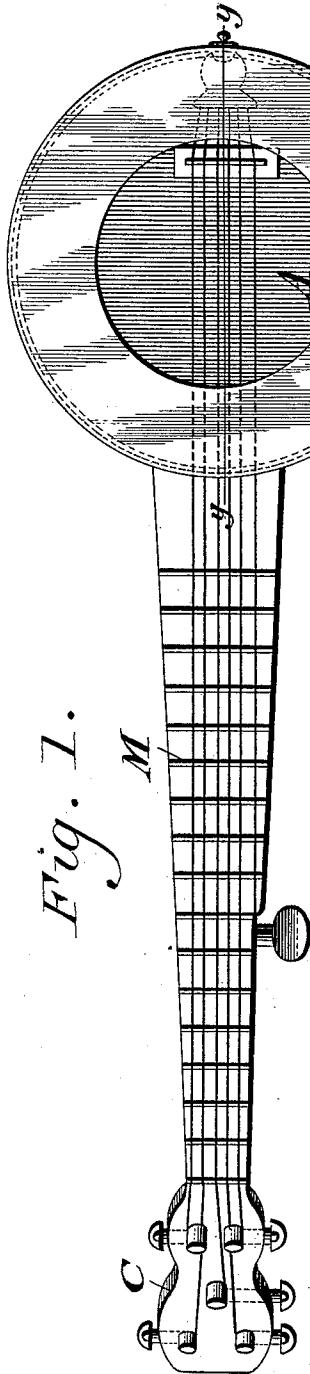


Fig. 1.

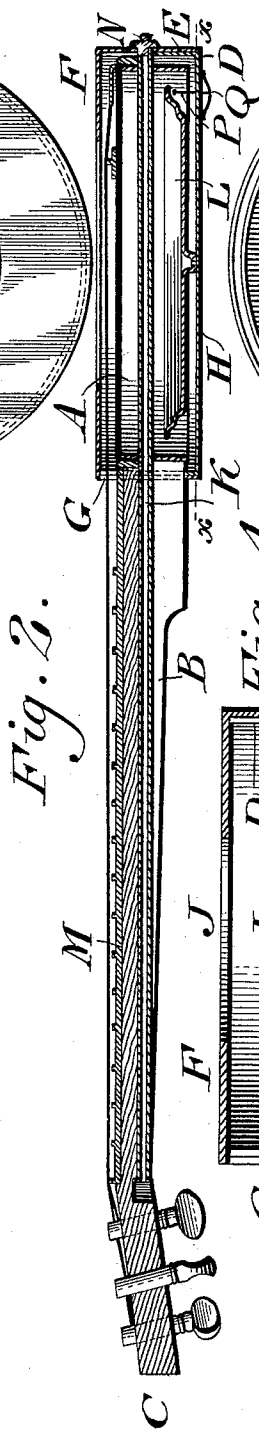


Fig. 2.

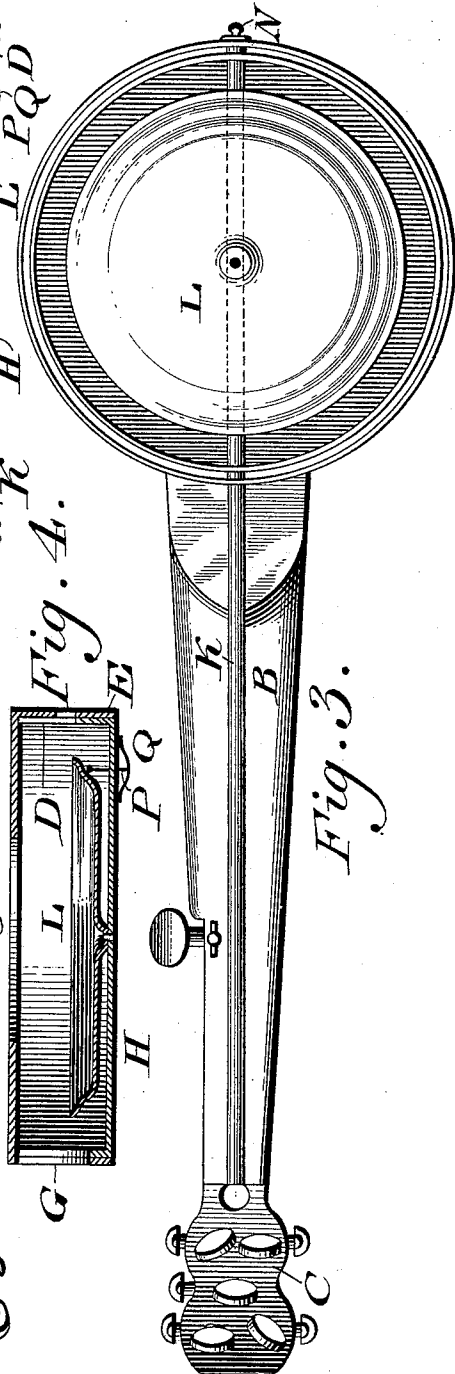


Fig. 3.

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UNITED STATES PATENT OFFICE.

WILLIAM H. R. TOYE, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF
ONE-HALF TO GEORGE N. WRIGHT, OF SAME PLACE.

FRETTED MUSICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 518,869, dated April 24, 1894.

Application filed May 26, 1892. Renewed March 14, 1894. Serial No. 503,639. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. R. TOYE, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Fretted Musical Instruments, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of an improvement in fretted musical instruments, more particularly banjos, whereby the resonance of the same is increased in delicacy, purity and power, strength and durability are obtained, and other advantages are presented as will be hereinafter set forth.

Figure 1 represents a top or plan view of a banjo having a casing embodying my invention applied thereto. Fig. 2 represents a longitudinal section thereof. Fig. 3 represents a bottom plan of the interior thereof. Fig. 4 represents a transverse section of the casing on line *y, y*, Fig. 1.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings:—A designates the head of a banjo, B the neck, and C the key-board thereof, which parts excepting the features of my invention applied thereto, are of usual construction.

D and E designate two cylinders which are fitted to each other telescopically, forming the casing F adapted to inclose the head of the banjo, the side of said casing toward the neck B, having an opening G, to permit the strings and said neck to pass through the same. The bottom H of the casing is closed, and the top thereof has an opening J, whereby the strings are accessible for playing purposes and the escape of the sound.

K designates a tube which is secured to the casing F rearward of the tail piece of the banjo, the same extending through the head and under or behind the neck B and secured to the inner end of the key-board C, said tube serving to connect the casing with the head of the banjo, strengthen the neck and the connection of the key-board with said neck, and being hollow, also serving to increase the resonance of the instrument. Secured to the

bottom or base H of the casing F is a concave or dish-shape vessel L, which acts as a sound reflector for the instrument.

M designates the fret-board which is secured to the neck and formed of aluminum.

The casing F provides a sounding body around the head of the banjo, and it is also made of aluminum, which material is light, non-corrosive and durable, and owing to its nature, adds delicacy and purity of tone to the instrument. In order to secure the tube K to said casing F, I employ a screw N, which is fitted in the end of the tube, and has its head bearing against the wall of the casing. In the bottom H of the casing F, is a pin P, whose end within the casing is adapted to be moved to and from the deflector L, the outer end of said pin being engaged by a spring Q, the tendency of which is to hold said pin from said reflector, it being evident that when said pin is forced into contact with the reflector, the latter is muffled, and vibration thereof resisted or stopped.

Owing to the resonant nature of aluminum, and the tensile strength of the same, I form the strings of such material as also the bridge, tube K, and the sound reflector L, it being evident that the instrument will be found to possess great purity of tone and volume of sound, and owing to the sound reflector, the notes will be greatly prolonged.

The fret-board on the neck, which latter is formed as usual of wood, serves to brace the connected parts, and prevent springing of the same, while solidly supporting the strings and permitting fullest vibrations thereof. The strings may be wrapped with steel wire or other material, or combined with silk, &c., without departing from my invention.

The cylinder D may be removed, and access thus had to the reflector L.

It will be evident that other metals may be used to construct the novel parts of my instrument, without departing from the main features thereof.

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

1. A fretted and stringed instrument having its head provided with a telescopic casing

having a closed bottom and openings in its top and sides, substantially as and for the purpose set forth.

2. A fretted and stringed instrument having a casing inclosing its head, and a tube secured to said casing and passing through said casing, said parts being combined substantially as described.

3. A fretted and stringed instrument having a casing for its head provided with a sound reflector therein, said reflector having a muffler, substantially as described.

4. A fretted and stringed instrument hav-

ing a casing for its head provided with a sound reflector therein, and a spring-controlled pin adapted to contact with said reflector, substantially as described.

5. A fretted and stringed instrument having a head with a casing, and a tube with one end in said casing, and the other end connected with the key board, said parts being combined substantially as described.

WILLIAM H. R. TOYE.

Witnesses:

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