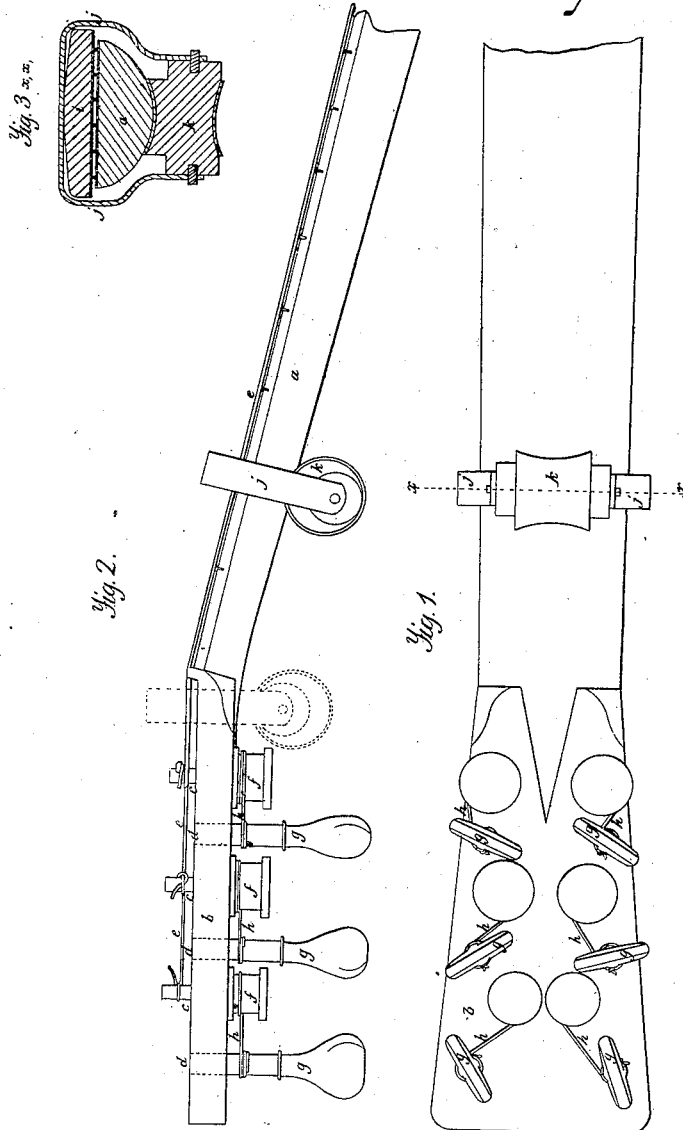


J. Ashborn,

Guitar Head,

N^o 7,279.

Patented Apr. 16, 1850.



UNITED STATES PATENT OFFICE.

JAMES ASHBORN, OF WALCOTTVILLE, CONNECTICUT.

GUITAR-HEAD AND CAPO TASTO.

Specification of Letters Patent No. 7,279, dated April 16, 1850.

To all whom it may concern:

Be it known that I, JAMES ASHBORN, of Walcottville, in the county of Litchfield and State of Connecticut, have invented certain
5 new and useful Improvements in the Guitar-Head and Capo Tasto, and that the following is a full, clear, and exact description of my invention, of the principle or character which distinguishes it from all other things
10 before known, and of the method of making, constructing, and using the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1, is a bottom view of a guitar
15 head and handle on my improved plan, Fig. 2 a side elevation thereof and Fig. 3 a cross section taken at the line *xx* of Fig. 1.

The same letters indicate like parts in all the figures.

20 In the old-fashioned guitar the strings are wound directly onto the ends of what are called pegs, the spindles of which are fitted to, and turn in holes made in the head. The defect of this arrangement is that the
25 hand has not sufficient leverage to overcome the tension of the strings, for the pegs must be fitted very tight to prevent them from being turned back by the tension of the strings. Hence it follows that the pegs are
30 not sensitive, and that the accurate tuning of the instrument is a matter of great difficulty. To avoid these defects, what is known as the patent metal head was invented and has been introduced into almost
35 universal use. But this improvement, while it gives the performer complete control of the strings by the leverage of the keys is seriously objectionable on account of its injurious effects on the tone of the instrument.
40 The keys and their appendages, as well as their connection with the handle, must be made of metal, and the weight of all these pieces of metal injuriously affects the vibrations of the instrument. In addition to
45 this the pieces are very liable to rattle and thereby to vitiate the intonation. Added to these objections is that of the great cost of a guitar head thus constructed.

50 The use of the capo tasto, (the clamp used on the handle of a guitar to determine the vibrating length of the strings to set the instrument for playing in difficult keys), as heretofore made, is attended with great difficulty, as is well known to all guitarists, in
55 fact, so much so that many performers have abandoned the use of it.

The object of my invention is to remedy the defects above pointed out in the guitar head and the capo tasto and to this end

The first part of my invention consists in
60 winding the strings on spindles that pass through and turn in the head of the guitar handle which spindles are of an enlarged diameter below the head, when these are combined with pins of the usual construction by means of cords attached to, and
65 wound around both, the pins being of less diameter than the enlarged part of the spindles with which they are combined or connected thereby increasing the leverage of
70 the pins to overcome the tension of the strings, while at the same time the tendency to turn back the pins by the tension of the strings is greatly reduced. I thus obtain all the advantages of the patent metallic head
75 without its defects. And the second part of my invention consists in combining with the capo tasto, or plate for pressing the strings onto any particular fret of the handle, a metal or other strap attached thereto and
80 passing down on each side of the handle, and an eccentric roller journaled to the said strap and acting against the under surface of the handle, so that the said plate may, with one hand only, be drawn down onto the
85 strings, and adjusted or liberated therefrom by simply turning the said roller, the whole thing being put on and pushed back onto the head beyond the last fret where it does not interfere with the vibration of the
90 strings.

In the accompanying drawings (*a*) represents the usual handle for a guitar with its frets, and (*b*) the head in which there
95 are twelve holes (*c*) and (*d*) six of each. To the six holes (*c*) are fitted six spindles which project sufficiently above the upper surface of the head to admit of attaching and winding the strings (*e*) thereon. These
100 spindles pass down below the head and are there made of an enlarged diameter as at (*f*) with small flanches at both ends. The diameter of the enlarged part should be from three to four times the diameter of the spindle on which the strings are wound.

105 To the six holes (*d*) are fitted pegs (*g*) of the usual kind used in old fashioned guitars except that they do not project above the guitar head. To each of these
110 pegs is attached one end of a piece of catgut (*h*) which winds around it and then around the periphery of the enlarged part

(f) of one of the spindles to which the other end of the said piece of catgut is attached, so that by turning the peg the piece of catgut is wound onto the peg which turns the spindle to tighten or loosen the strings. Each peg is connected and combined with one spindle in the manner just above described. By this arrangement all the objections to the use of the patent metallic head are avoided, while the advantages which it has of controlling the strings and preventing them from slipping are retained at much less cost.

The capo tasto plate (i) lined, as is usual with buckskin, is attached to a strap of metal (j) which only touches it about the middle of its length. This strap of metal is bent down on each side of the handle, and the ends pierced each with a hole to receive the journals of an eccentric roller (k), the periphery of which is turned down in the middle to correspond with the form of the underside of the handle; the periphery of the said roller when it acts on the handle being covered with buckskin or other kind of leather to prevent the handle from being injured. When the said roller is in the position represented in the drawings, the capo tasto or pressure plate is drawn

down tight onto the strings, holding them forcibly onto the edge of one of the frets on the handle; but when it is turned half way round, that is, when its shortest radius is toward the handle, then the plate is not drawn down onto the strings and the whole apparatus can be pushed back onto the head as shown by dotted lines.

What I claim as my invention and desire to secure by Letters Patent is—

1. The method, substantially as herein described, of tuning guitars by winding the strings each on a spindle, having a part below the guitar head of an enlarged diameter, connected and combined with a peg of the usual construction, by means of a cord, in the manner and for the purpose, substantially as described.

2. I also claim combining an eccentric roller with a capo tasto for moving and holding it down onto any desired part of a guitar handle, by means of a metal strap made to embrace the handle and capo tasto plate and attached thereto, substantially in the manner and for the purpose specified.

JAMES ASHBORN.

Witnesses:

A. G. BRADFORD,
ALBERT BRADLEY.