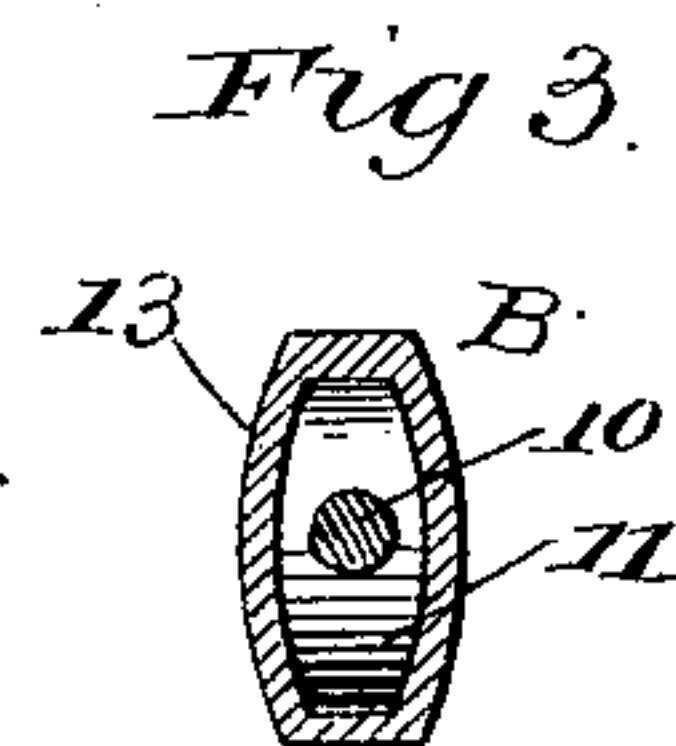
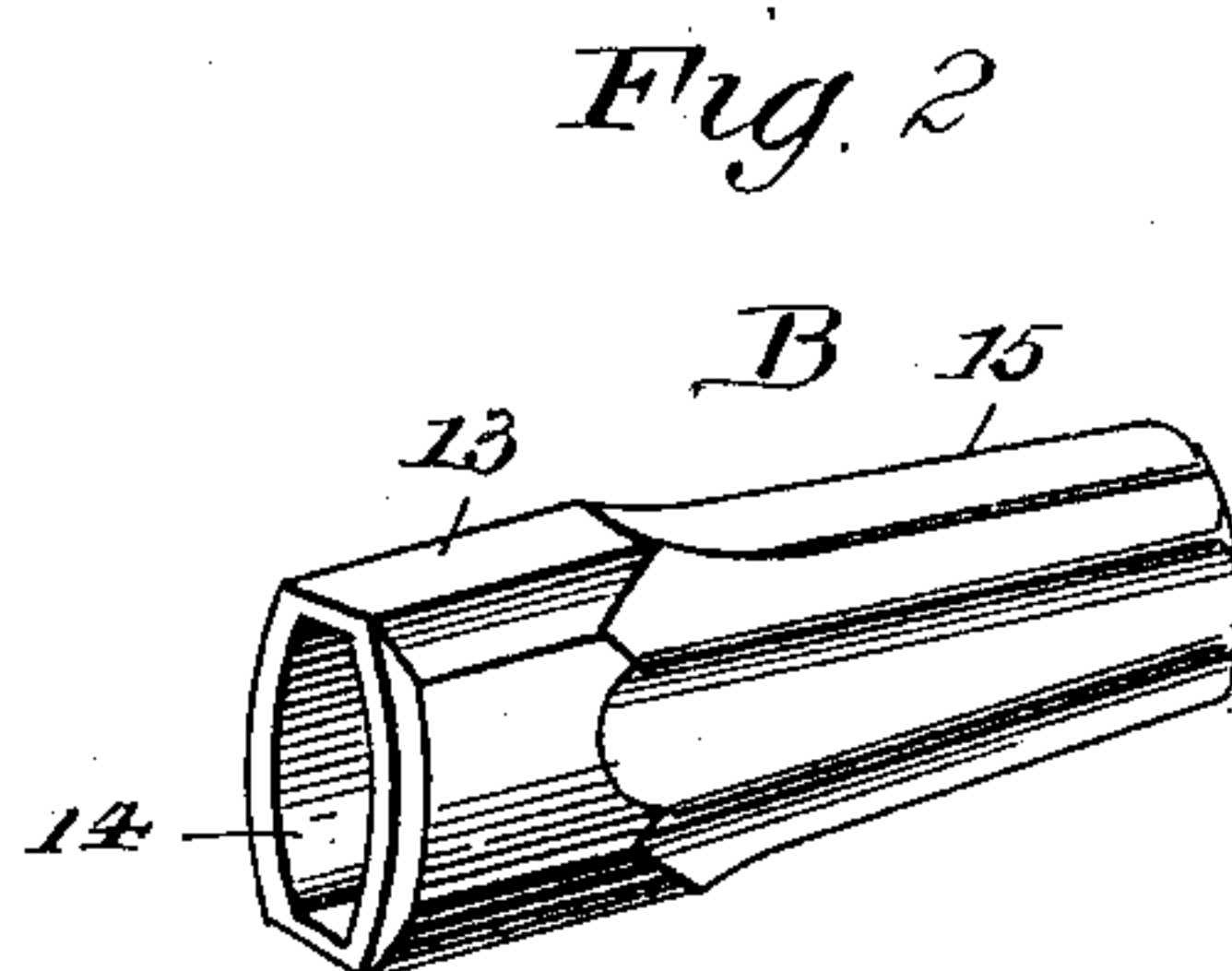
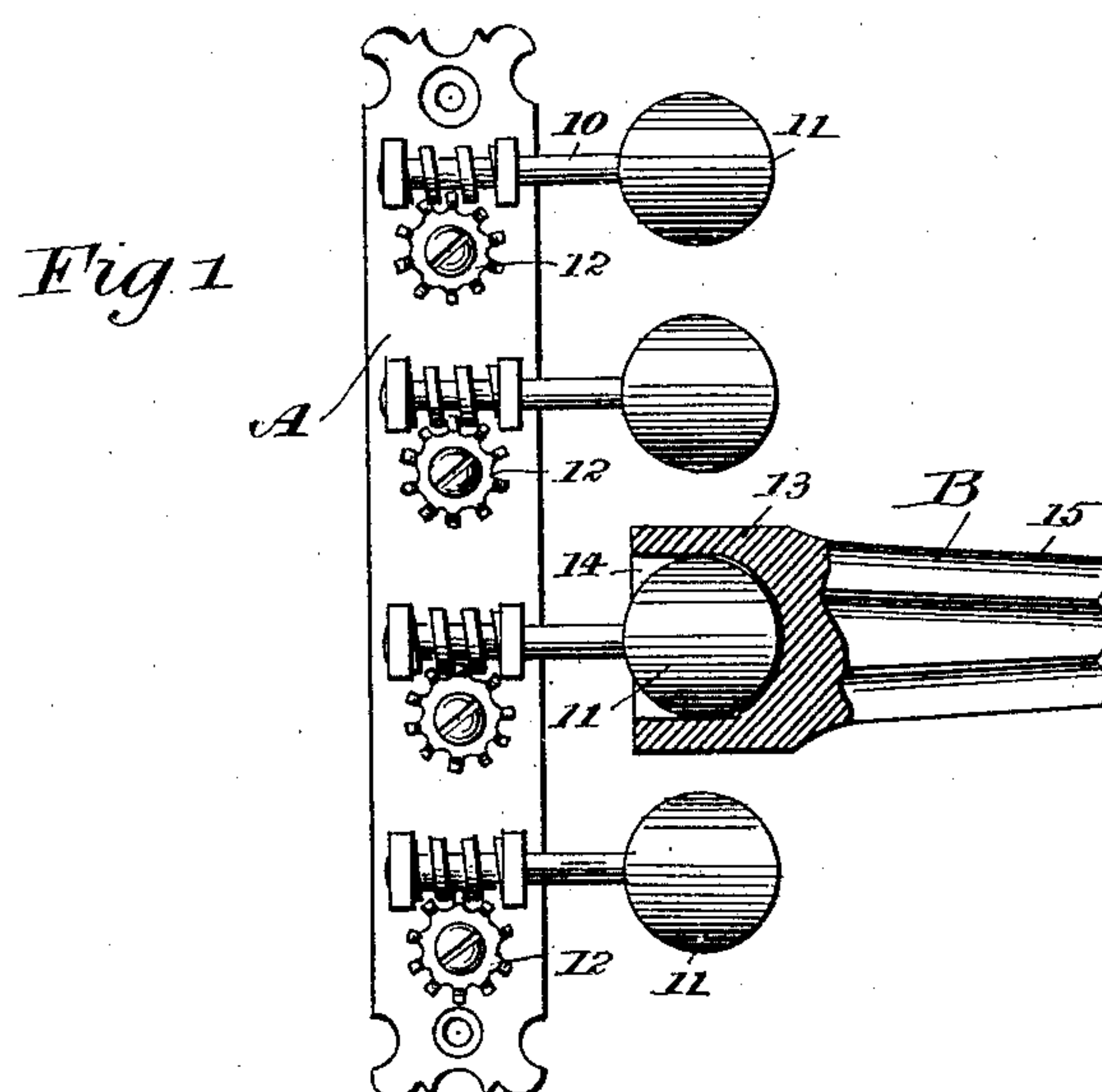


(No Model.)

J. AYUSO.
WINDING KEY FOR GUITARS.

No. 510,375.

Patented Dec. 5, 1893.



WITNESSES:
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UNITED STATES PATENT OFFICE.

JOHN AYUSO, OF BROOKLYN, NEW YORK.

WINDING-KEY FOR GUITARS.

SPECIFICATION forming part of Letters Patent No. 510,375, dated December 5, 1893.

Application filed March 3, 1893. Serial No. 464,535. (No model.)

To all whom it may concern:

Be it known that I, JOHN AYUSO, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Winding-Key for Guitars, Mandolins, and like Musical Instruments, of which the following is a full, clear, and exact description.

My invention relates to a winding key for guitars, mandolins, banjos, and like stringed instruments, and it has for its object to provide a supplementary key adapted to be used in connection with what is known as screw keys, whereby the latter keys may be much more rapidly and conveniently manipulated than by applying the fingers directly to them, and whereby also instead of the half turn only which can be given to the screw by the fingers at one manipulation thereof, the said screw can be given a complete revolution at each manipulation.

Another feature of the invention consists in so constructing the supplemental key that it will be entirely independent of the screw keys, and whereby one supplemental screw key winder may be used in connection with the entire set of screw keys.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth and pointed out in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of a set of screw keys showing the supplemental key applied to one of them, the supplemental key being in vertical longitudinal section. Fig. 2 is a detail perspective view of the supplemental key; and Fig. 3 is a transverse section through the supplemental key and through one of the handles of the screw key.

The group of screw keys A, shown in Fig. 1, are of the ordinary type, each key embracing a worm shaft 10, provided at its outer end with a handle 11 and a worm wheel 12 meshing with the worm shaft. The handles 11, are of essentially circular contour, but their opposite side faces are somewhat convexed, the handles being therefore thicker at the center than at any other portion.

The supplemental key B, may be made of any suitable or approved material; for example, metal, celluloid, bone, rubber or hard wood may be used, and the supplemental key comprises a body 13, having a socket 14, produced in one end the cross sectional shape of the socket corresponding to the cross sectional shape of the handle of the screw key; therefore, the socket is somewhat oblong and its side walls are concaved. The socket is made just deep enough, preferably, to receive the entire handle of the screw key, or the major portion of the handle, and the two fit in such manner that while the screw key may be manipulated by turning the auxiliary key one may be readily disconnected from the other. In addition to the body 13 provided with the socket 14, the auxiliary key comprises a handle section 15, which may be integral with or attached to the body, and is preferably located at the end opposite that in which the socket is placed.

It will be observed that when the auxiliary key B, is employed, one key may be used for turning any of the screw keys upon the instrument; and it is likewise evident that a screw key may be manipulated much more rapidly and conveniently when the auxiliary key is applied to it than is possible to do by hand, thereby providing for the quick winding of the lengthy end of the string upon a key. Furthermore, when screw keys are manipulated by hand the keys can be given but one-half a revolution or one-half a turn at one grip, but when the auxiliary key is employed the same force applied to the auxiliary key that has heretofore been employed upon the ordinary winding key will turn the latter a complete revolution.

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

1. As an improved article of manufacture, a winding key for the screw keys of guitars, mandolins and similar instruments, the said auxiliary key comprising a body having a socket formed in one end of corresponding cross sectional shape to the cross sectional shape of the head or handle of the screw key, and a handle section secured to the body and forming a longitudinal extension thereof, as and for the purpose set forth.

2. An auxiliary winding key for the screw
keys of guitars, mandolins and like stringed
instruments, the same comprising a body sec-
tion provided with a socket in one end cor-
5 responding in cross sectional shape to the
cross sectional shape of the head or handle of
the screw key, and a handle projected from
the opposite end of the body in longitudinal
alignment therewith, the said handle being
10 practically straight, as and for the purpose set
forth.

3. The combination, with the head or han-
dle of a screw key for guitars, mandolins and

like instruments, of an auxiliary key compris-
ing a body provided with a socket correspond- 15
ing in cross sectional shape to the cross sec-
tional shape of the said head or handle, the
socket loosely receiving the head or handle,
and a handle section secured to the body sec-
tion of the said auxiliary key in longitudi- 20
nal alignment therewith, as and for the pur-
pose set forth.

JOHN AYUSO.

Witnesses:

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