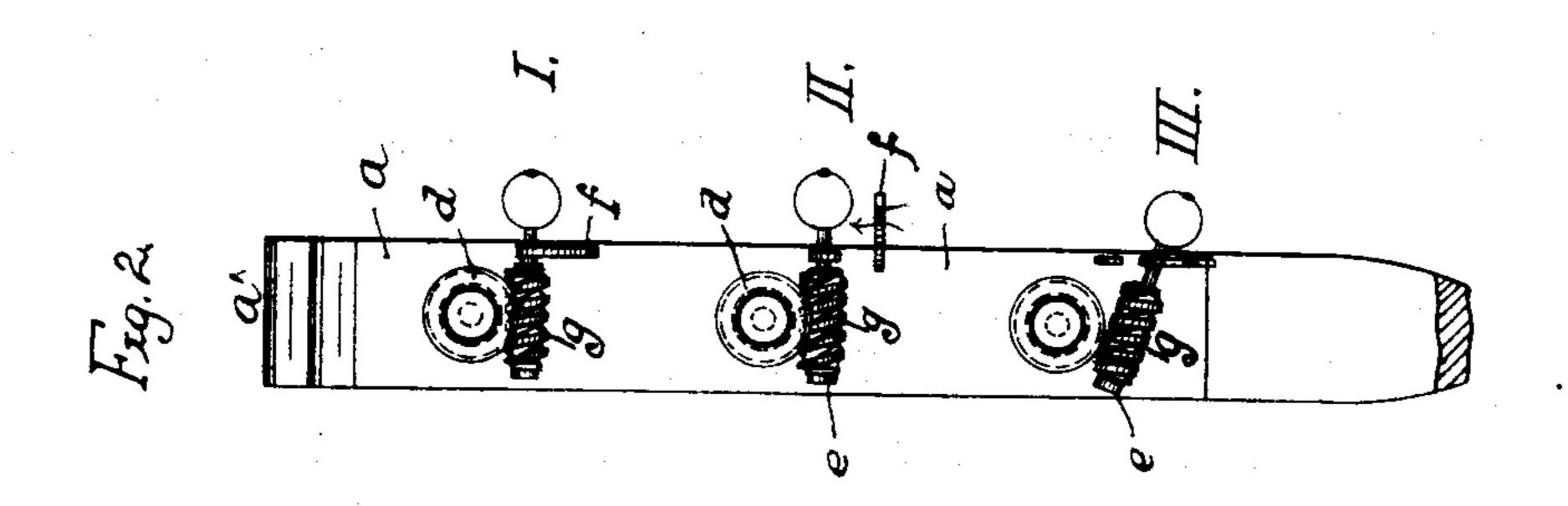
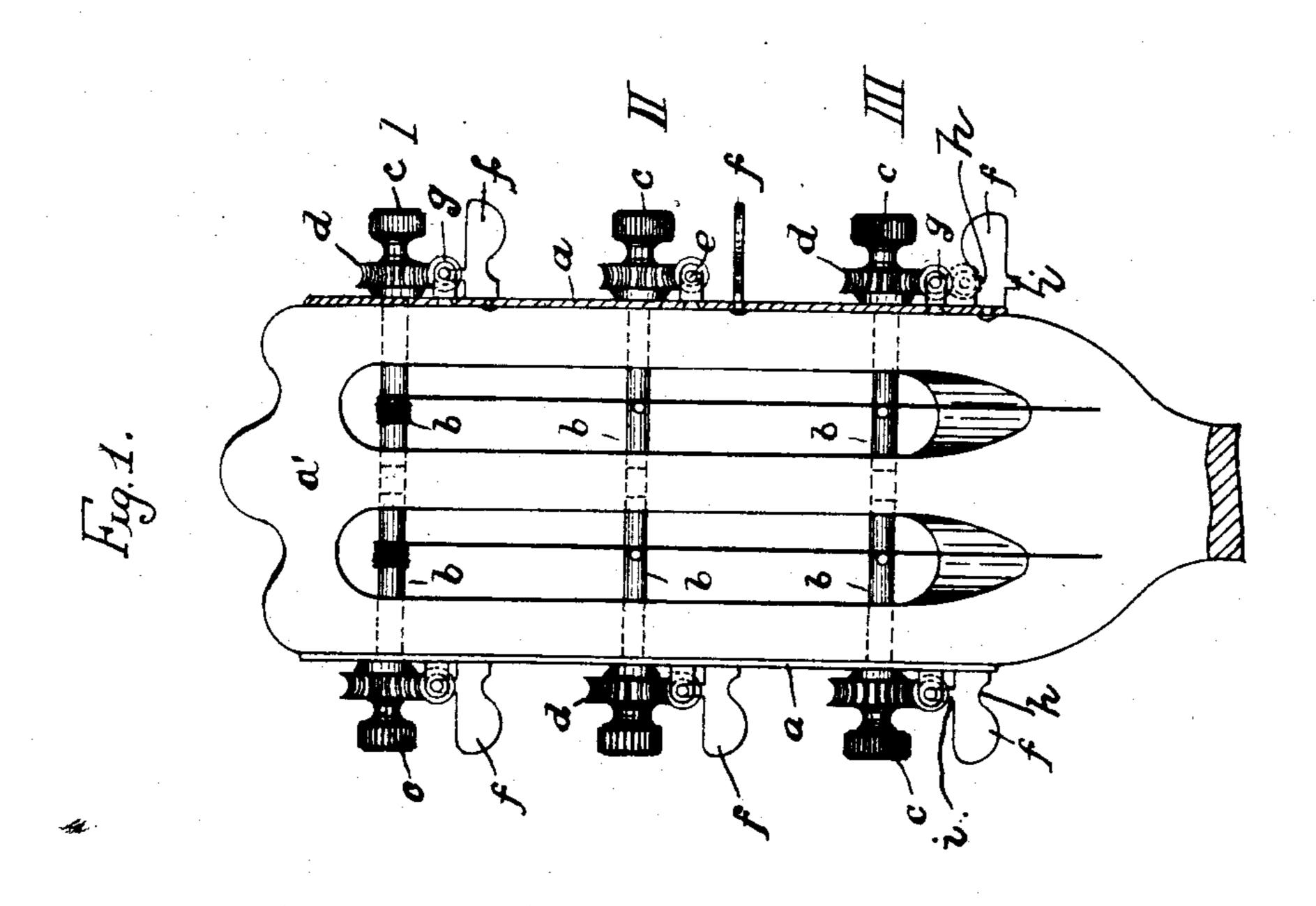
MUSICAL STRING INSTRUMENT.

(Application filed Apr. 5, 1901.) (No Model.)





Witnesses: Jakichardson J.B. Stelle.

Inventor: Otto Gerecke by J. Sithman, Atty.

United States Patent Office.

OTTO GERECKE, OF MARKNEUKIRCHEN, GERMANY.

MUSICAL STRING INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 682,925, dated September 17, 1901.

Application filed April 5, 1901. Serial No. 54,557. (No model.)

To all whom it may concern:

Be it known that I, Otto Gerecke, a subject of the Emperor of Germany, residing at Markneukirchen, Saxony, Germany, have in-5 vented certain new and useful Improvements in Musical String Instruments; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which 10 it appertains to make and use the same.

This invention relates to stringed musical instruments, and has for its object to provide improved means whereby the strings may be tightened or wound on the pegs by manual 15 power applied directly to the pegs for rapid winding or by manual power applied to a worm-shaft for the last winding or turning.

With this object in view my invention consists in the improved construction, arrange-20 ment, and combination of parts hereinafter fully described and afterward specifically claimed.

In the accompanying drawings, which illustrate the head of a stringed instrument— 25 such as of a guitar, as an example—Figure 1 is a plan view, and Fig. 2 a view in side elevation.

In the drawings, a indicates the usual metal plate secured to the side of the head a^\prime 30 and in which the pegs b are journaled, said pegs being provided with holes for receiving the ends of the strings and with a milled head c for directly turning the pegs to wind up any amount of slack in the strings.

d d indicate worm-wheels secured to the pegs, and g worms adapted to be engaged with the worm-wheels, by the turning of which worms the tuning (which requires great power and complete control) of the strings is effected. 40 The worm-shaft e is mounted at one end in a

swiveled bearing, so that the worm may be swung from the position I, in engagement with the worm-wheel, to position III, free from

such engagement.

findicates a stop and support for the worm- 45 shaft e, said stop comprising a pin swiveled in the plate a, whereby when it is turned up, as at position I, it will hold the shaft e with the worm g and wheel d engaged, or in the positions I and II, as shown. The swiveled 50 stop-pin f has a notch h in one side and a lug i projecting from the other, the latter being at a greater distance from the axis of the pin than the former, so that when the shaft e is dropped down, as in position III, its free end 55 will rest in notch h, and when in engaged position, as at I, its free end will be upheld on the lug i.

Having thus fully described my invention, what I claim as new, and desire to secure by 60 Letters Patent of the United States, is—

The combination with the head of a stringed musical instrument, and the usual metal plate on the side thereof, of a string-peg journaled in said plate provided with a head for 65 direct turning, a bearing swiveled in the side plate, a shaft journaled at one end in said swiveled bearing, a worm-wheel on the peg, a worm on the shaft, and a stop or support for the shaft at its opposite end comprising a 70 supporting-pin swiveled in the plate and having a notch in one side and a lug projecting from the other, substantially as described.

In testimony whereof I affix my signature

in presence of two witnesses.

OTTO GERECKE.

Witnesses: ERNST BACKMANN, JOSEPH P. FOX.