

(No Model.)

E. A. EDGREN.
KEYBOARD FOR MUSICAL INSTRUMENTS.

No. 520,982.

Patented June 5, 1894.

Fig. 1.

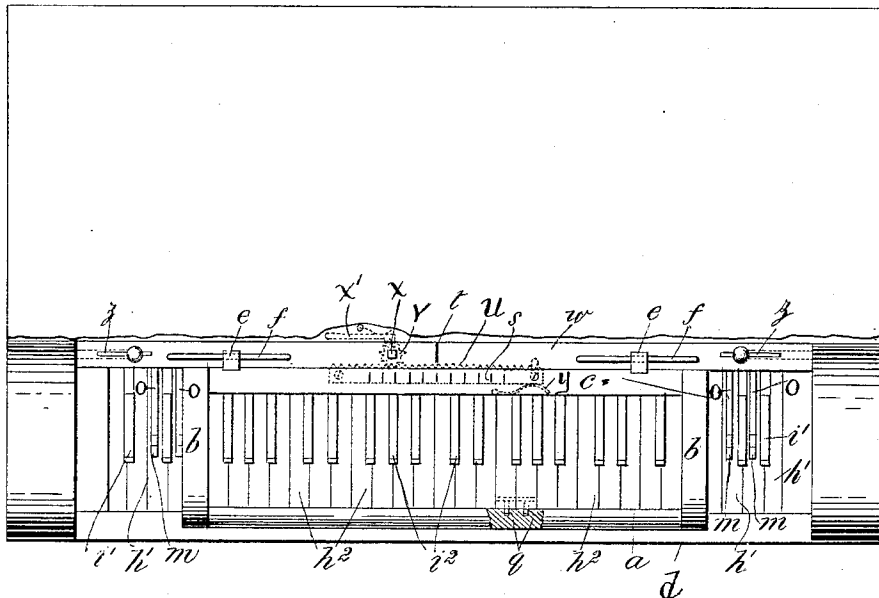
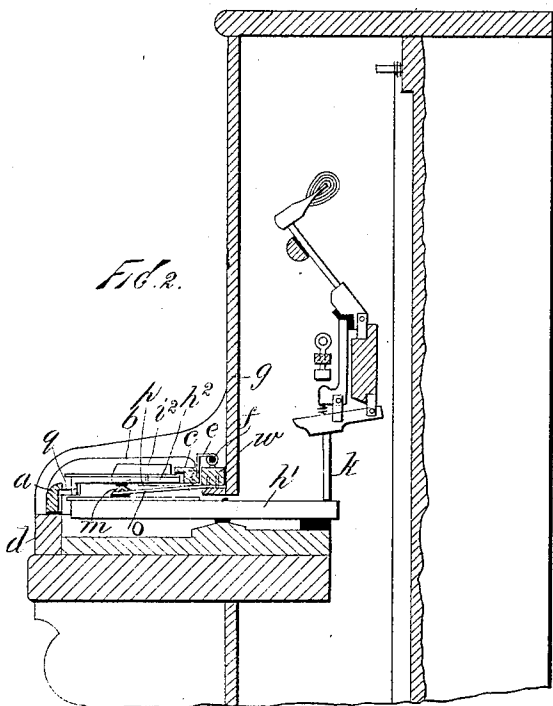


Fig. 2.



WITNESSES:

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KEYBOARD FOR MUSICAL INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 520,982, dated June 5, 1894.

Application filed February 6, 1893. Serial No. 461,291. (No model.)

To all whom it may concern:

Be it known that I, ERIK ADOLF EDGREN, a subject of the King of Sweden and Norway, and a resident of New York city, in the county and State of New York, have invented certain new and useful Improvements in Keyboards for Pianos, Organs, and other Like Musical Instruments, of which the following is a specification.

My invention consists in the improved construction and arrangement of an auxiliary key board of a piano, organ or other like musical instrument, whereby it may be readily adjusted laterally either way from the true normal position, to other positions so that while the key board will apparently be in the normal key the music will be given in a higher or lower key to suit the voice of the performer not in harmony with the normal key of the instrument, the improvement being adapted for application to instruments in use, all as hereinafter fully described reference being made to the accompanying drawings, in which—

Figure 1, is a plan view of part of an upright piano with the key board of my invention as applied to a piano of ordinary construction. Fig. 2, is a transverse section on line *x x*, of Fig. 1.

In addition to the ordinary key board I employ an auxiliary key board *a-b-c*, connected so as to slide laterally, that is, lengthwise of the key board a suitable distance each way from the normal position, as in this example, the front edge *a* of the key board rests on the upper surface of the front part *d* of the frame and the rear edge *c*, of the said key board is hung by the sliding metallic brackets *e*, on the slide way rods *f*, mounted on a bar *w*, applied to hold the key board and secured by slide bolts *z*, thus supporting the key board so that it may be shifted freely, and also so that the front edge may be raised slightly to facilitate the shifting which is favored thereby.

For application to keys *h'* and *i'* of the ordinary arrangements in instruments already in use, I provide auxiliary keys *h²* and *i²* pivoted to the back edge *c* of the sliding key board so as to range over the ordinary keys *h'* and *i'* and transmit the motion to them using intermediate transmitting keys *m*, over

the keys *h'* which are lower than keys *i'*, and cannot therefore be acted on directly by the auxiliary keys, said transmitting keys being so connected to the bar *n*, on which the key board slides and by which it is secured in the instrument that they remain in constant relation with the keys *h'* and vibrate freely with the other keys. In this example they are represented as connected by thin flexible strips *o* of metal, and keys *h²* and *i²* are also suitably connected to edge piece *c* of the key board by like strips *p*, but they may of course be connected in any other suitable way. The keys *h²* are in this case provided with a guide spur *q* at the front extremity working in a vertical guide slot in the inner edge of the front piece *a* of the auxiliary key board to guide the keys against lateral play, but this may be omitted if preferred.

A scale *s* is provided on the adjustable key board to gage the shifting as by the mark *t*, and a toothed rack as *u*, on the key board, and a pinion *v* on the fixed bar *w*, may be used for shifting the key board, the pinion having a stud as *x* by which to apply the ordinary tuning key for turning it.

A notched spring pawl as *x'* may be used in connection with the teeth of the pinion for locking the key board in position or any other approved means may be employed, for instance, the toothed bar *u*, may be movable against the pinion and a spring *y* may be employed to press it against the pinion and produce friction on the journals of the pinion.

I claim—

The combination with the ordinary key board of a piano, organ or like instrument, of the auxiliary key board *a-b-c*, the attaching bar *w*, detachably secured to the instrument and having the said auxiliary key board hinged to it, the auxiliary keys *h²* and *i²* pivoted to the back edge *c* of the said auxiliary key board, and the transmitting keys *m*, secured to the bar *w*, all constructed and arranged substantially as described.

Signed at New York city, in the county and State of New York, this 6th day of December, A. D. 1892.

ERIK ADOLF EDGREN.

Witnesses:

W. J. MORGAN,
C. E. WHITNEY.