

No. 612,930.

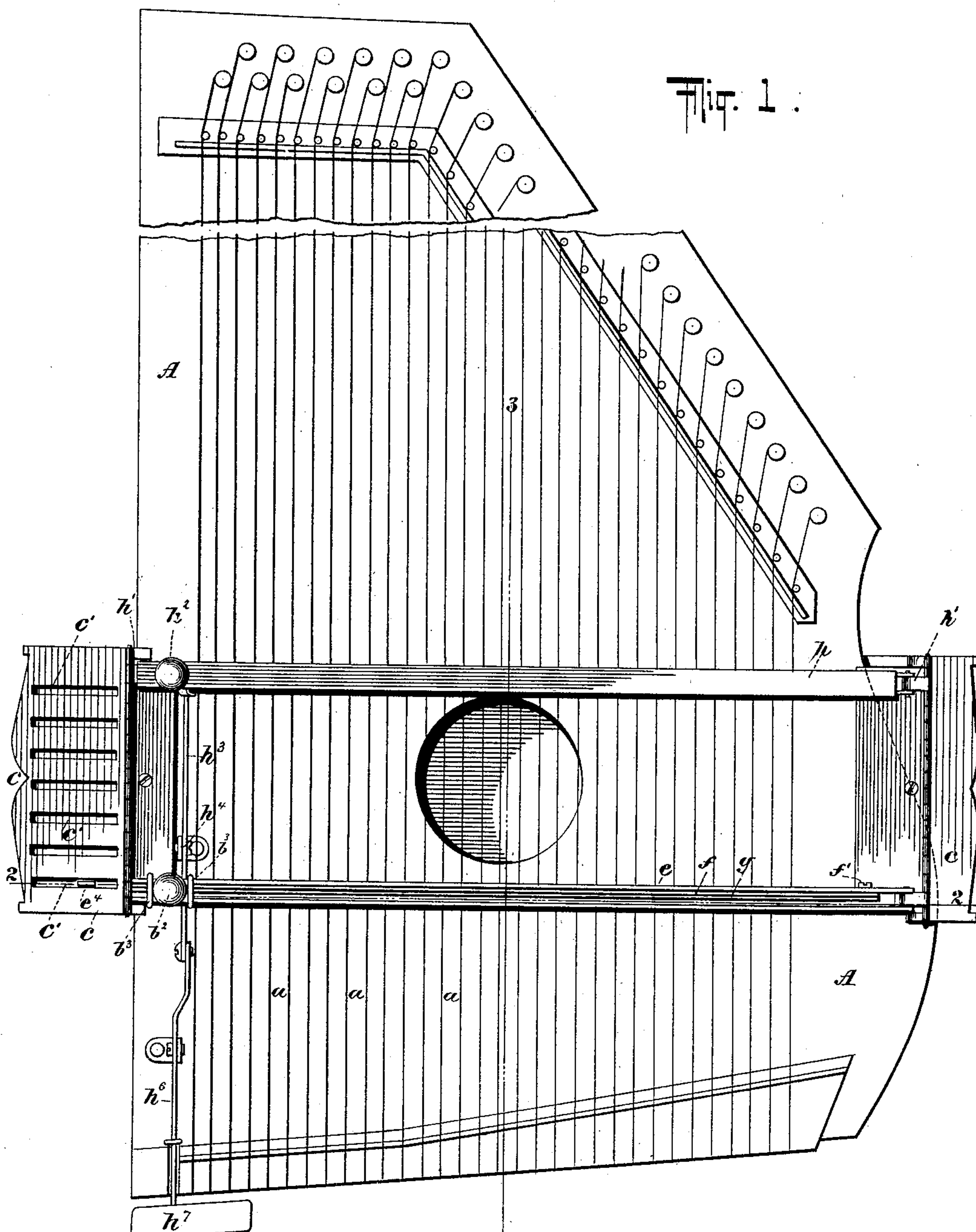
Patented Oct. 25, 1898.

M. F. MAUS.
MUSICAL INSTRUMENT.

(No Model.)

(Application filed Feb. 10, 1898.)

2 Sheets—Sheet 1.



WITNESSES:

Gustave Dietrich.
Geo. C. Munroe.

INVENTOR

Markus F. Maass

BY *Biesen Knauth*

ATTORNEYS

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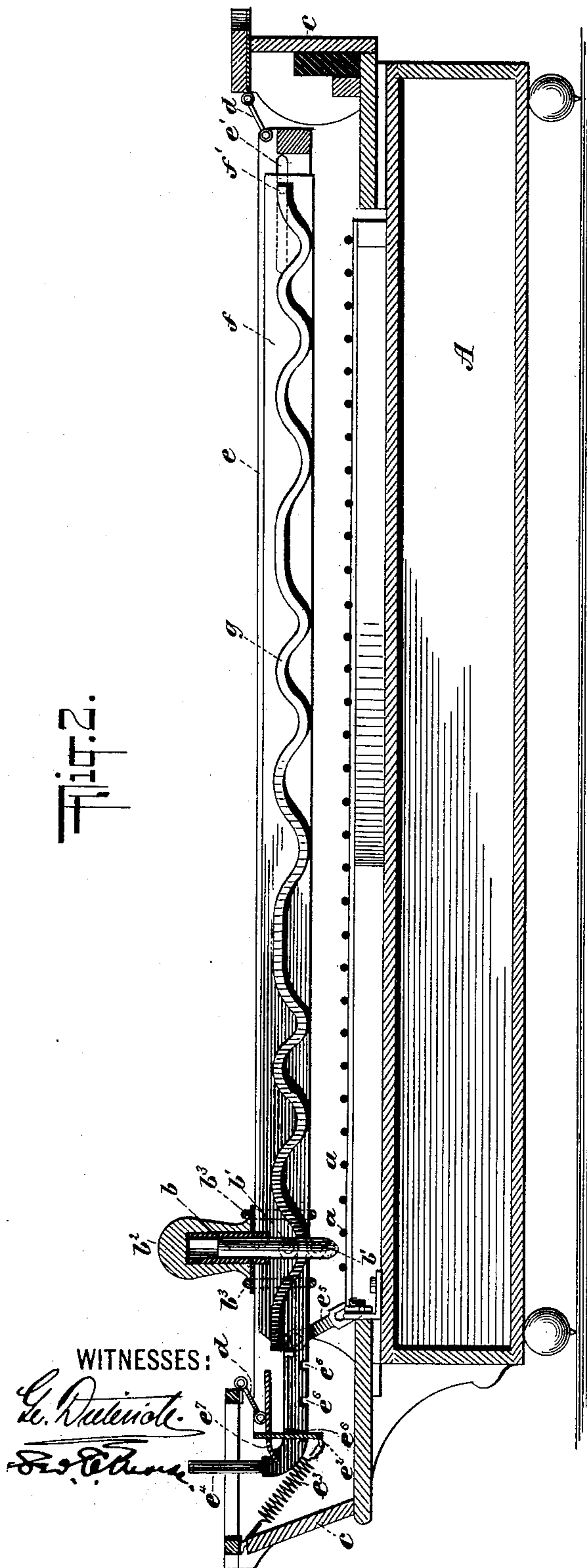
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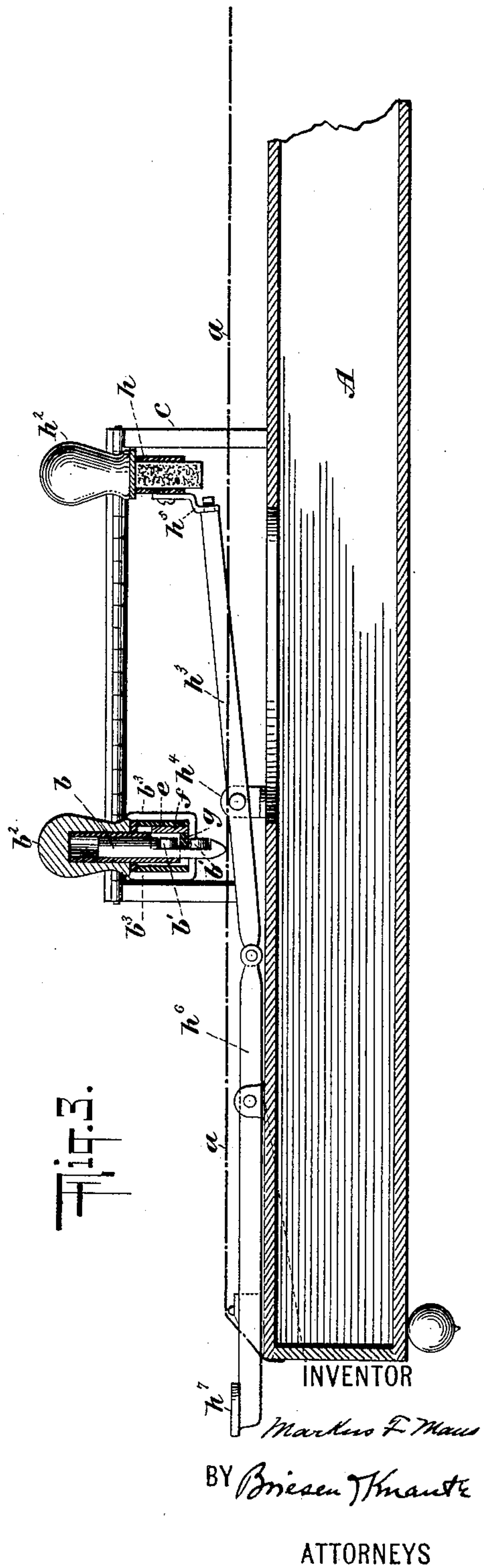
Fig. 2.



WITNESSES:

C. R. D. R. D.
S. C. R. D.

Fig. 3.



INVENTOR

Markus F. Maus
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UNITED STATES PATENT OFFICE.

MARKUS F. MAUS, OF NEW YORK, N. Y., ASSIGNOR TO LOUIS MELCHER
AND JACOB MAYER, OF SAME PLACE.

MUSICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 612,930, dated October 25, 1898.

Application filed February 10, 1898. Serial No. 669,782. (No model.)

To all whom it may concern:

Be it known that I, MARKUS F. MAUS, of the city of New York, borough of Manhattan, county and State of New York, have invented
5 certain new and useful Improvements in Musical Instruments, of which the following is a specification.

My invention relates to musical instruments, and has for its object to produce a
10 structure wherein the proper chords may be struck automatically.

To this end my invention consists in the construction hereinafter set forth and claimed.

My invention will be understood by referring to the accompanying drawings, in which—
15

Figure 1 is a plan view of a stringed instrument embodying my invention. Fig. 2 is a section on line 2 2 of Fig. 1, and Fig. 3 is a section on line 3 3 of Fig. 1.

20 The primary object of my invention is to provide a device wherein when playing stringed instruments the proper chords may be struck.

I am aware that it has been heretofore proposed to damp certain strings of such instruments and to leave other strings free to vibrate and to thereupon use a picker or finger-piece to strike all of the strings. This device
30 just described is, however, objectionable, for the reason that in striking all of the strings those which are damped will give a scratchy sound, which detracts from the tone of the freely-vibrating strings, and as a consequence the music thereby produced is inharmonious.

35 By my invention, however, I strike only such strings as should be struck, entirely skipping the strings which should not be struck.

In carrying out my invention I provide a suitably-stringed instrument—such, for instance, as the sounding-box A, having strings
40 a, with a means for picking or striking the said strings, comprising a vibrating picker or striker b, having suitable operating means. In the present instance I have shown these operating means as follows: Supporting-brackets c are shown as provided with suitable links or hinges d, from which a guide e is suspended. The guide e is preferably provided with a slidable or adjustable plate f, carrying
50 a sinuous cam or picker actuating means or picker-moving means g, with which suitable

bowls or rollers or guiding devices b', carried by the picker or striker b, cooperate. This picker or striker b is free to vibrate in a suitable handle b², which is supported by
55 a suitable carriage b³, which slides freely upon the guide e. It will be observed that the picker is indirectly supported by the guide e through the medium of the carriage and the cam g on the plate f. The plate
60 f is preferably secured to the guide e as follows: The pin f', carried by the plate f, enters a slot e' in the guide. At the opposite end of the guide the plate f passes through a slot in the turned-over end e² of the guide,
65 which turned-over end e² is connected to the bracket c by a spring e³. An upward-projecting handle e⁴ is provided to move the plate f, which plate f is preferably connected to the body of the instrument by a link e⁵ and is
70 likewise preferably provided with notches e⁶, into which the turned-over end e² of the guide e is entered, a spring e⁷ bearing down upon the plate f. I may likewise provide the instrument with a suitable damper-bar h piv-
75 otated at each end to the brackets c by links h'. The damper may be provided with a handle h² in addition to other operating means—such, for instance, as the lever h³—pivoted at h⁴ and secured at one end to the bracket h⁵
80 on the damper and at the other end to a similarly-pivoted lever h⁶, which is or may be provided with a thumb or hand piece h⁷. The mode of operation of the damper will be readily apparent.
85

Any desired number of apparatus for striking the chords may be employed. In the present instance I have shown but one for the purpose of clearness, as it will be readily apparent that several may be used, and I have
90 shown the bracket c as slotted at c' to receive the handle e⁴ of the plates f, which carry the guiding-cam g for the picker.

In order to operate the apparatus, I seize the handle b² firmly and press down upon the
95 same, thereby swinging the guide e downward against the tension of the spring e³, so that the picker may be brought into such position as to strike the strings when at the lowermost portions of the cam or guide g.
100 The handle b² is thereupon slid along the guide e, and the cam reciprocates the picker

or striker and causes said picker or striker to strike the proper strings and to entirely omit touching strings that should not be struck.

5 It will be observed that in order to transpose the key I provide for three different longitudinal adjustments of the plate *f*, which carries the cam *g*, the said plate being held in its adjusted position by the notches *e*⁶,
 10 taking over the turned-over end *e*² of the guide *e*, so that if I use seven guides, as contemplated in the present instrument, I can strike three times seven chords—that is to say, three chords for every guide.

15 What I claim, and desire to secure by Letters Patent, is—

1. In a stringed musical instrument, the combination of a guide crossing strings of the instrument, a picker or striker supported by
 20 said guide and movable with respect thereto and adapted to strike the said strings and guided by the said guide and means for moving the picker or striker at predetermined times in its movement across the stringed
 25 portion of the instrument in order to bring the said picker or striker into contact with some strings and to carry the said picker or striker clear of other strings, substantially as described.

30 2. In a stringed musical instrument, the combination of a slidable carriage or picker-carrier, a guide therefor extending across the stringed portion of the instrument, and a picker or striker carried by the said carriage
 35 and combined with means for moving the same at predetermined times in its move-

ment across the stringed portion of the instrument in order to bring the said picker or striker into contact with some strings and to carry the said picker or striker clear of other
 40 strings, substantially as described.

3. In a musical instrument, the combination of the guide *e*, the cam *g* carried thereby, a carriage having a picker or striker actuated by the cam to strike the strings, and
 45 means for adjusting the cam with respect to the strings.

4. In a musical instrument, the combination of a swinging guide crossing strings, a picker carried by the said guide and movable
 50 with respect thereto, and means for automatically moving the picker as it traverses the said guide to cause the said picker to strike certain strings only of the instrument, substantially as described and for the pur-
 55 poses set forth.

5. In a musical instrument, the combination of a guide crossing strings, a picker carried by the said guide and movable with respect thereto and means for automatically
 60 moving the said picker as it traverses the said guide to cause the said picker to strike certain strings only of the instrument, substantially as described and for the purposes set forth, and means for adjusting the said
 65 means for automatically moving the picker, whereby the key may be transposed.

MARKUS F. MAUS.

Witnesses:

GEO. E. MORSE,
 CHARLES E. SMITH.