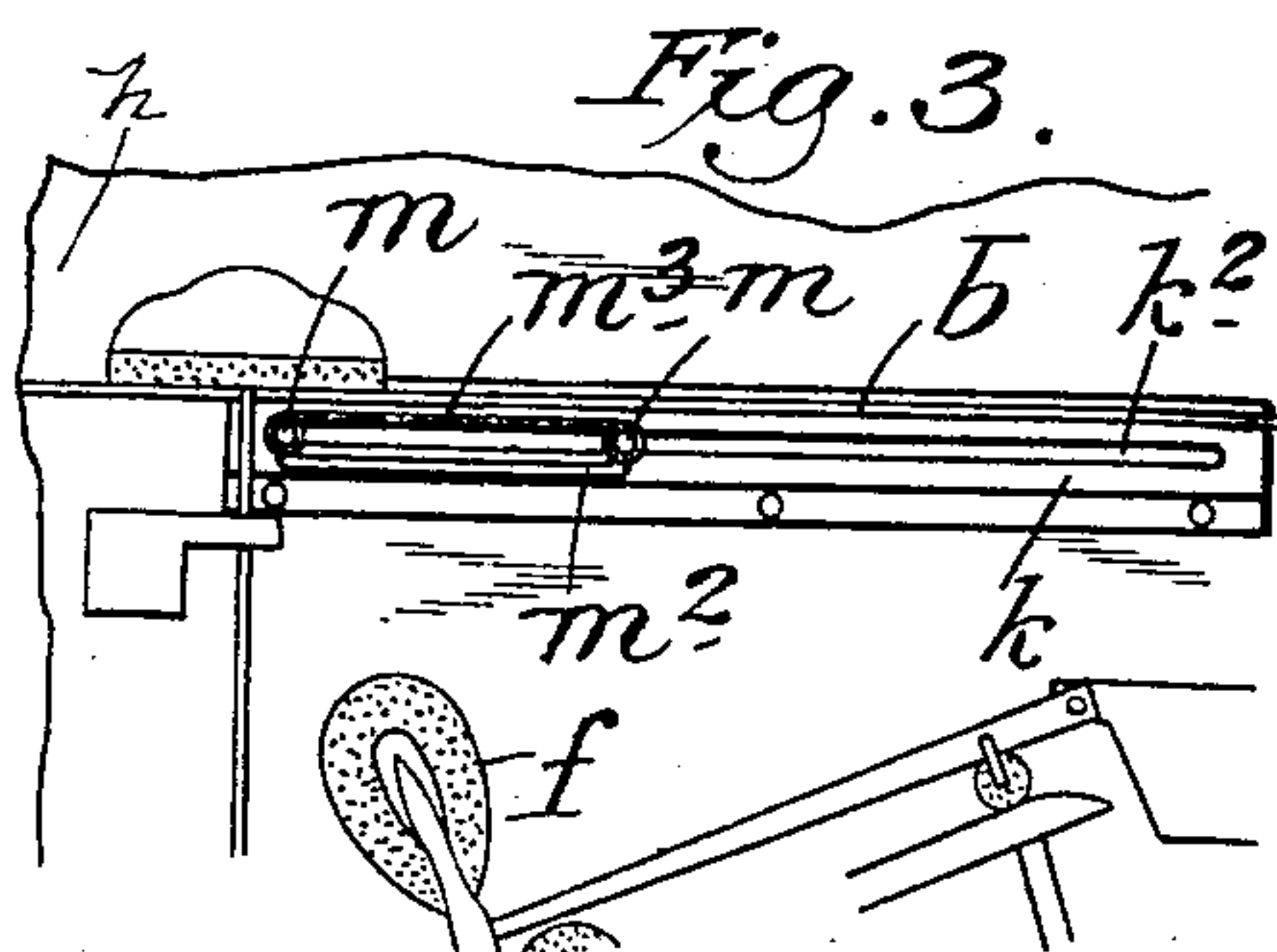
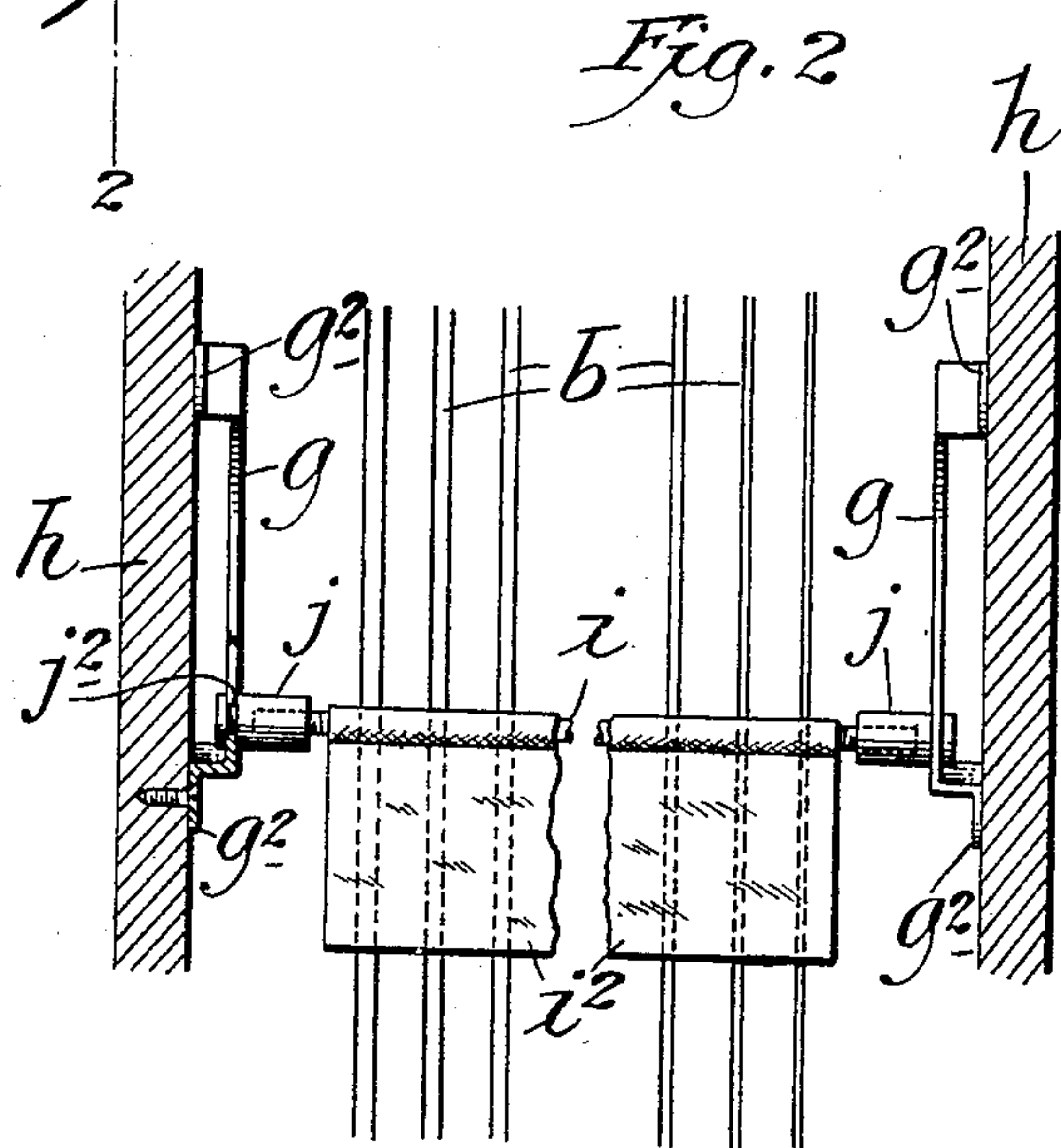
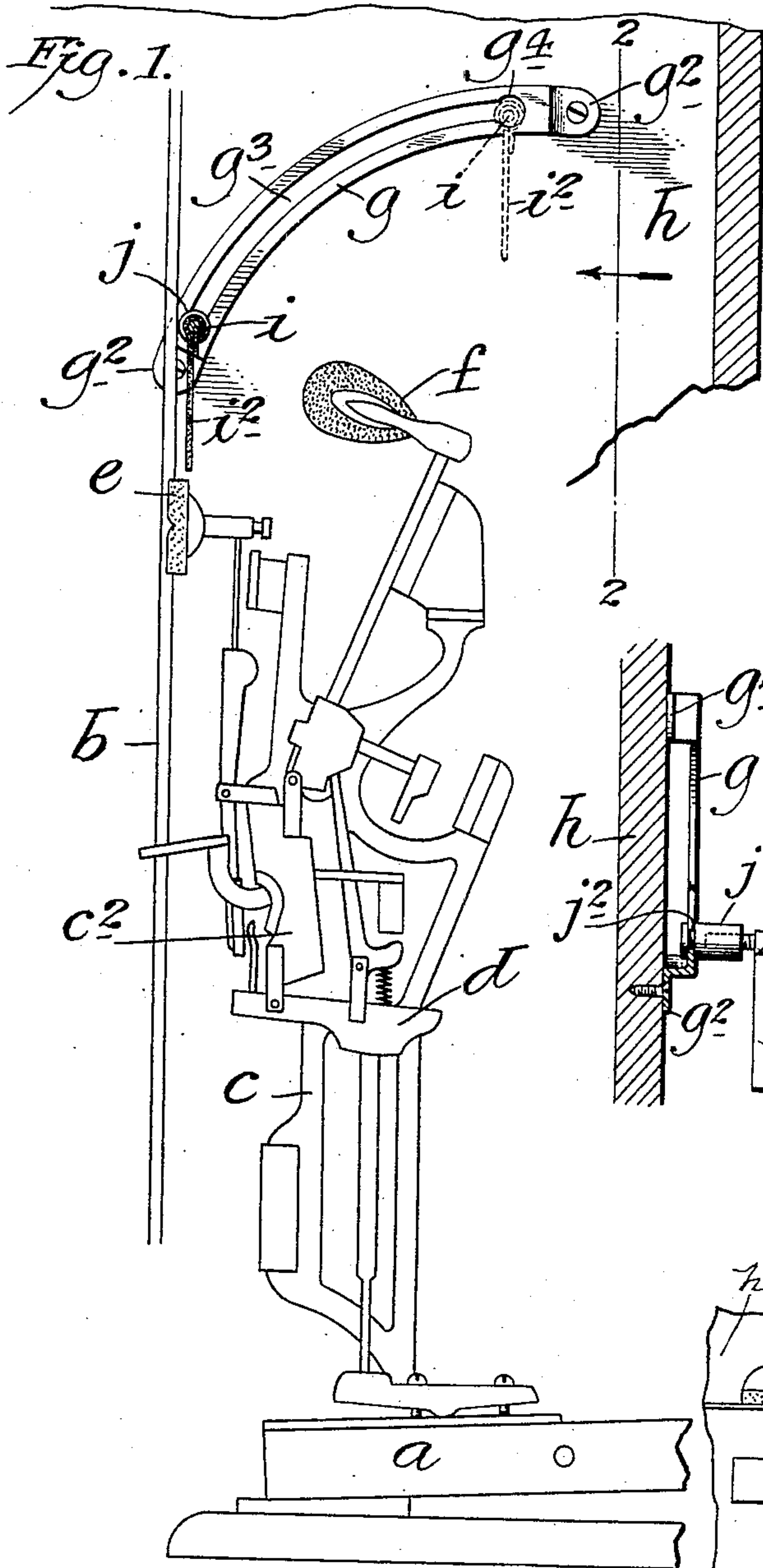


E. J. DAWSON.  
PRACTICE MUFFLER FOR PIANOS.  
APPLICATION FILED MAY 4, 1908.

912,294.

Patented Feb. 16, 1909.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

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## PRACTICE-MUFFLER FOR PIANOS.

No. 912,294.

Specification of Letters Patent.

Patented Feb. 16, 1909.

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*To all whom it may concern:*

Be it known that I, EMMA J. DAWSON, a citizen of the United States, and residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Practice-Mufflers for Pianos, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to piano mufflers, and the object thereof is to provide an improved device of this class by means of which the strings and hammers may be muffled, so as to prevent the noise produced by practice on the instrument, and with this and other objects in view the invention consists in a device or devices of the class specified constructed as hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawing forms a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which;—

Figure 1 is an inside side view of what is known as an upright piano and showing one key, one "action", and one string of a piano and showing a part of one of the sides of the casing and a part of the front thereof, and showing also my improvement, part of the construction being in section, Fig. 2 a section on the line 2—2 of Fig. 1 with the "action" removed, and;—Fig. 3 a view similar to Fig. 1 but showing a different style of piano in which the strings are arranged horizontally.

Referring to Figs. 1 and 2 of the drawing, in which I have applied my improvement to an upright piano, I have shown at *a* one of the keys, at *b* a part of the strings or wires, and at *c* one of the brackets or frame work which supports the "action", which involves the usual jack devices *d* and their connected parts together with a damper *e*, and one of the hammers *f* adapted to operate on one of the strings *b*. I have also shown at *c* the cross bar or rail with which parts of the "action" are connected, but it will be understood however, that the "action" and the damper *e* may be of the usual or any preferred construction, as they form no part of my invention.

In the practice of my invention as shown in Figs. 1 and 2, I provide two keepers *g* con-

sisting, in the form of construction shown, of segmental plates having outwardly directed ears *g*<sup>2</sup> by which they are secured to the inner side of the opposite side walls *h* of the piano casing, and said keepers when properly located extend from the plane in which the strings *b* are placed upwardly and forwardly. The keepers *g* are provided with central longitudinal slots *g*<sup>3</sup> at the forward ends of which are enlarged circular openings *g*<sup>4</sup>, and mounted between said keepers and movable therein is a rod or bar *i* from which is suspended a sheet *i*<sup>2</sup> of felt or any other suitable material which constitutes the muffler proper; the rod *i* which supports the sheet *i*<sup>2</sup>, in the form of construction shown, is provided with cylindrical end pieces *j*, and the opposite ends of said rod are provided with reverse threads, and the end pieces *j* are provided with sockets correspondingly threaded, or said end pieces may be tubular in form, and adjacent to the outer ends of said end pieces are annular grooves *j*<sup>2</sup>, and in practice the rod *i* may be connected with the keepers *g* by passing the outer end portions of the parts *j* outwardly through the enlarged openings *g*<sup>4</sup> in the ends of the keepers *g*, and the side portions of said keepers will fit in the grooves *j*<sup>2</sup> and hold the rod *i* in proper position at all times, and by turning the rod *i* the length of the support of the sheet *i*<sup>2</sup> may be increased or decreased as will be understood, and in this way the rod *i* may be held at any desired point in the keepers *g* by friction.

The muffler which consists as a whole of the parts *i*, *i*<sup>2</sup> and *j* is shown in its operative position in Fig. 1, in full lines, in which position it is supported adjacent to the strings *b*, and in front thereof, and in the backward movement of the hammer *f* the said hammer will strike the sheet *i*<sup>2</sup> of the muffler, and the usual sound produced by striking the string *b* will be much reduced or entirely done away with according to the construction of the muffler or the sheet *i*<sup>2</sup> thereof. If the sheet *i*<sup>2</sup> is supported quite close to the string *b* the hammer *f* may force the sheet *i*<sup>2</sup> against the string, but the noise produced will be very slight. Whenever it is desired not to use the muffler it is raised into the position shown in dotted lines in Fig. 1 where it normally rests, being held in said position by the enlarged openings *g*<sup>4</sup> in the keepers *g*, and when it is desired to use said muffler it is moved back-



wardly into the slots  $g^3$  in said keepers and drops by gravity, in the form of construction shown, into the position shown in full lines. It will be understood however, that the shape and exact position of the keepers  $g$  herein shown and described is not essential, and various forms of said keepers may be employed, and in Fig. 3 I have shown my improvement applied to a piano in which the strings are arranged horizontally, and the hammer  $f$  moves upwardly instead of backwardly. In this form of construction, I employ straight keepers  $k$  which are secured to the side walls  $h$  of the piano casing and provided with longitudinal slots  $k^2$ , and the muffler consists of a frame composed of parallel side bars  $m$  connected by cross rods  $m^2$ , and a flexible sheet  $m^3$  of felt or any other suitable material is secured to the parallel side bars  $m$ , and said muffler may be moved forwardly or backwardly whenever desired, but is shown in operative position in Fig. 3, or in such position that when the hammer  $f$  moves upwardly, it will strike the sheet  $m^3$  instead of the string  $b$ .

My invention in either of the forms shown is not limited to the exact construction described, and various changes therein and modifications thereof may be made, within the scope of the appended claims, without departing from the spirit of my invention or sacrificing its advantages.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent, is;—

1. The combination with a piano of a muffler comprising slotted keepers secured to the inner side walls of the opposite sides of the piano, and a transversely ranging flexible muffler device supported in and between said

keepers and adapted to be moved into position between the strings and the hammers.

2. A muffler for pianos comprising slotted keepers adapted to be secured to the inner side walls of the opposite sides of a piano, and a transversely ranging flexible muffler device adapted to be mounted in and between said keepers and to be moved into position between the strings and the hammers, said muffler device comprising a rod, the ends of which are movable in the slots of the keepers, and a flexible fibrous substance suspended from said rod.

3. A muffler for pianos comprising slotted keepers adapted to be secured to the inner side walls of the opposite sides of a piano, and a transversely ranging flexible muffler device adapted to be mounted in and between said keepers and to be moved into position between the strings and the hammers, said muffler device comprising a rod, the ends of which are movable in the slots of the keepers, and a flexible fibrous substance suspended from said rod, said rod being composed of separate longitudinally adjustable parts.

4. A muffler for pianos comprising slotted keepers adapted to be secured to the inner side walls of the opposite sides of a piano, and a muffler proper mounted in and between said keepers and movable therein and adapted to be moved into position between the strings and the hammers.

In testimony that I claim the foregoing as my invention I have signed my name in presence of the subscribing witnesses this 2nd day of May 1908.

EMMA J. DAWSON.

Witnesses:

M. E. DOODY,  
C. E. MULREANY.