

F. GROYN.
TYPE WRITER FOR MUSIC.
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1,002,266.

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Fig. 2.

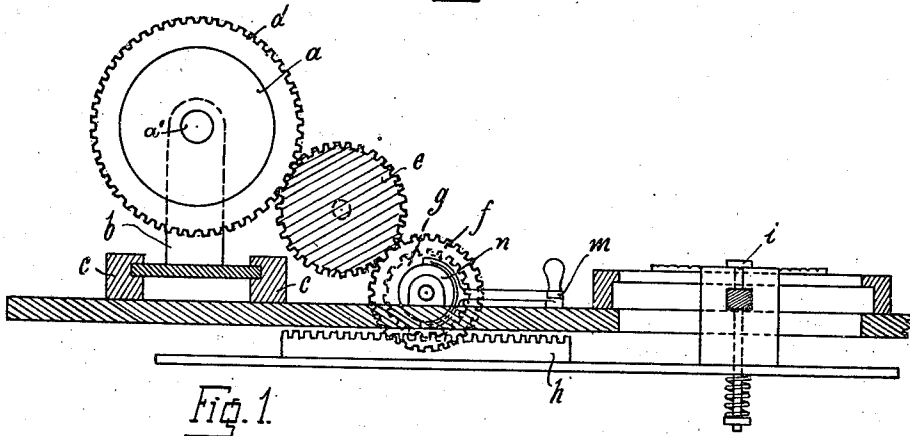
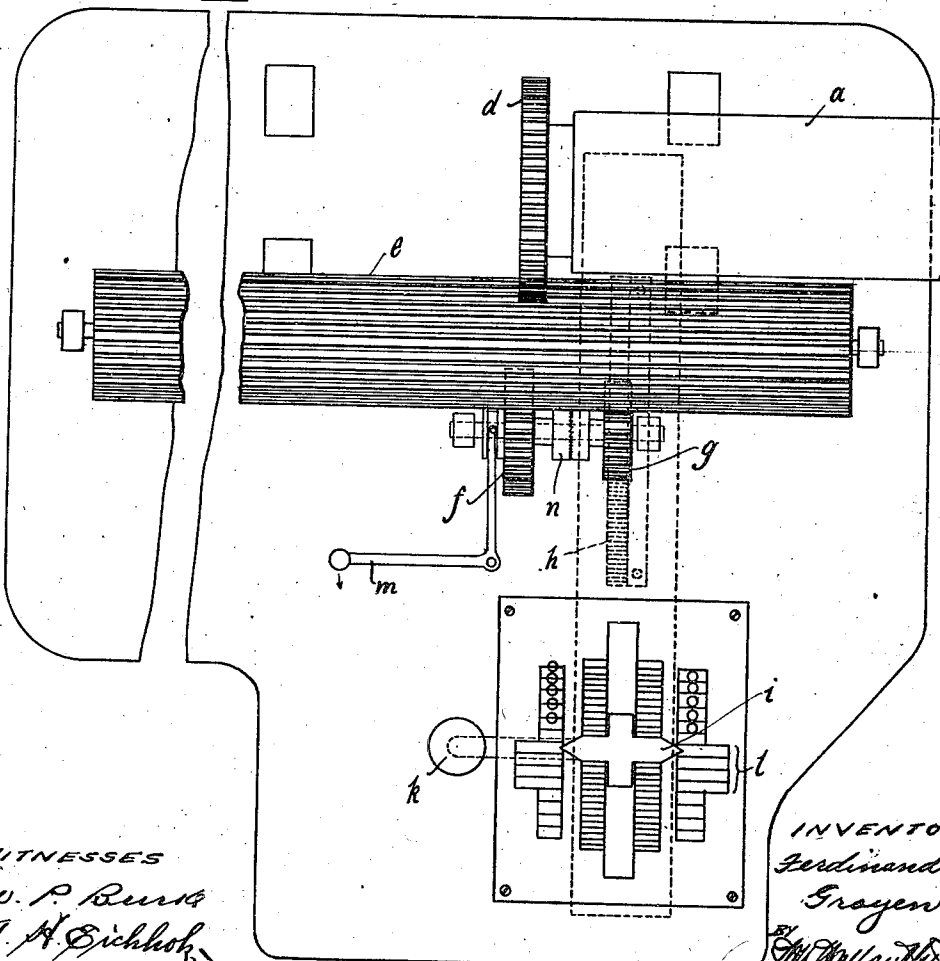


Fig. 1.



WITNESSES

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TYPE-WRITER FOR MUSIC.

1,002,266.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FERDINAND GROYN, a subject of the German Emperor, and residing at Cologne, Germany, have invented certain new and useful Improvements in Type-Writers for Music, of which the following is a specification.

My invention relates to typewriters for writing music. In such machines it is necessary to move the paper specially, independently of the usual movements for letters and lines whenever a note is written, corresponding to the height of the note.

A primary object of my invention is to provide improved mechanism by which the platen can be rotated as far as is requisite for adjusting it according to the height of the notes. I attain this end by arranging on the axle of the platen a gear in mesh with a toothed cylinder which is as long as the platen, so that said gear meshes with the cylinder in every position of the platen. This toothed cylinder is rotated through the medium of gearing according to the position of the notes to be written, this rotation being preferably effected with the aid of a hand-lever, whose movement can be followed by means of a pointer on a scale, so that the platen is always exactly adjusted.

One illustrative embodiment of my invention is represented by way of example in the accompanying drawing, wherein:—

Figure 1 is a plan view, and Fig. 2 a side elevation partly in section.

The platen *a* is journaled in the frame *b* slidable in the guides *c*. On the axle *a'* of the platen I fix a gear *d* meshing with a toothed cylinder *e* suitably journaled in the frame of the machine. Another gear *f*, detachably connected by a suitable clutch *n* with a pinion *g* meshing with a longitudinally displaceable rack *h*, also meshes with the toothed cylinder. This rack is continued under the frame of the machine and carries at its end a pointer *i* and a grip *k*. When the rack is shifted longitudinally by means of this grip, as the gear *f* is rotated in consequence of the pinion *g* meshing with the rack, rotation is imparted to the toothed cylinder *e* and consequently the platen *a* is rotated by the gear *d*.

The pointer *i* moves over two like scales,

the middle portion *l* of which corresponds to the five lines of a staff, while the lines and spaces thereabove and therebelow serve for determining the height or depth of the notes above or below the staff. For the sake of clearness it is preferable to use the double scale shown in the drawing in such manner that on the left-hand part of the scale the notes are formed between the lines, and on the right-hand part of the scale on the lines.

My invention is particularly intended for machines having an exchangeable type-sector or type-wheel, although it can also be used in machines having type-levers. In order to be able to write not only music, but also ordinary text on such machines, it is necessary to throw the mechanism for writing notes out of gear. This may be done in any desired manner, for example by means of the lever *m*, by which the gear *f* can be displaced in such manner that the clutch *n* is disengaged. The rotation of the cylinder *e* cannot then be imparted to the pointer *i*. This disengagement of the gear *f* or the clutch *n* is necessary, moreover, whenever the paper feed mechanism is actuated.

I claim:—

1. In a typewriter for typewriting music, the combination, with the platen, of a revoluble cylinder geared therewith, a longitudinally movable rack carrying a pointer, a scale arranged in operative relation to the pointer, and gearing connecting the rack with the cylinder.

2. In a typewriter for typewriting music, the combination, with the platen, of a revoluble toothed cylinder of a length equal to that of the platen, a gear fixed to the platen and meshing with the cylinder, a longitudinally movable toothed rack carrying a pointer, a scale arranged in operative relation to the pointer, gearing comprising a detachable clutch connecting the rack with the cylinder, and means for disconnecting and connecting the clutch.

In testimony whereof, I affix my signature in the presence of two witnesses.

FERDINAND GROYN.

Witnesses:

LOUIS VANDORY,
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