

A. BEYERLEN.

TYPE WRITER.

APPLICATION FILED AUG. 8, 1907.

944,590.

Patented Dec. 28, 1909.

Fig. 1.

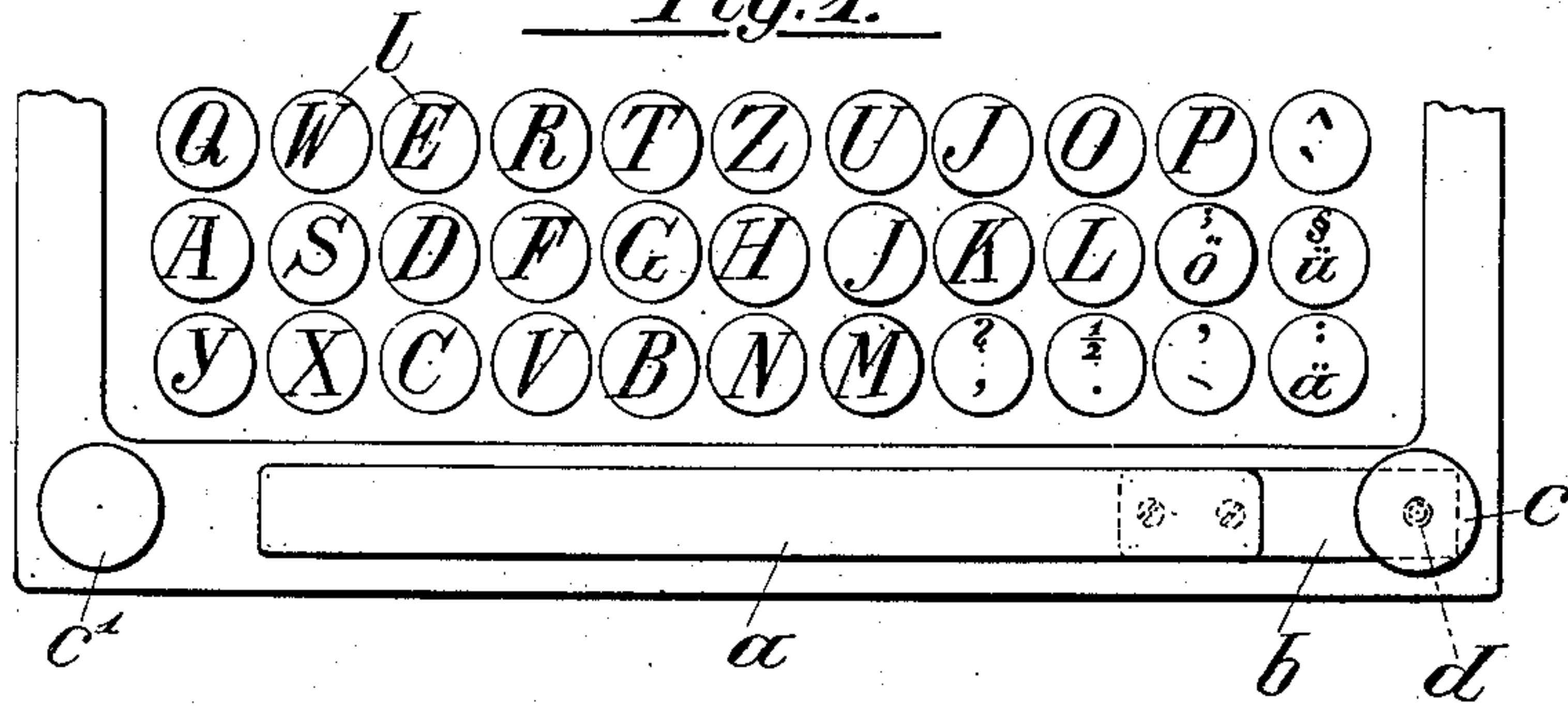


Fig. 2.

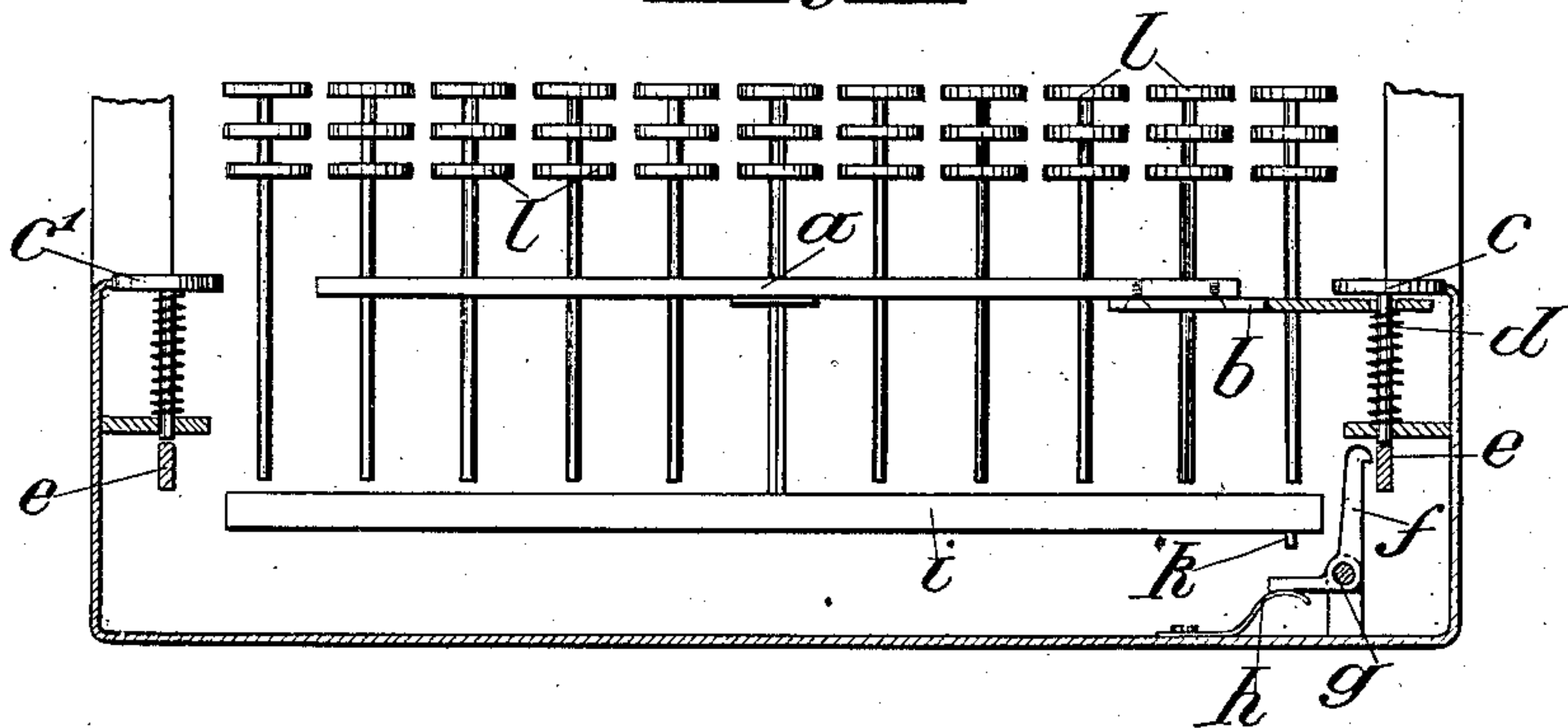
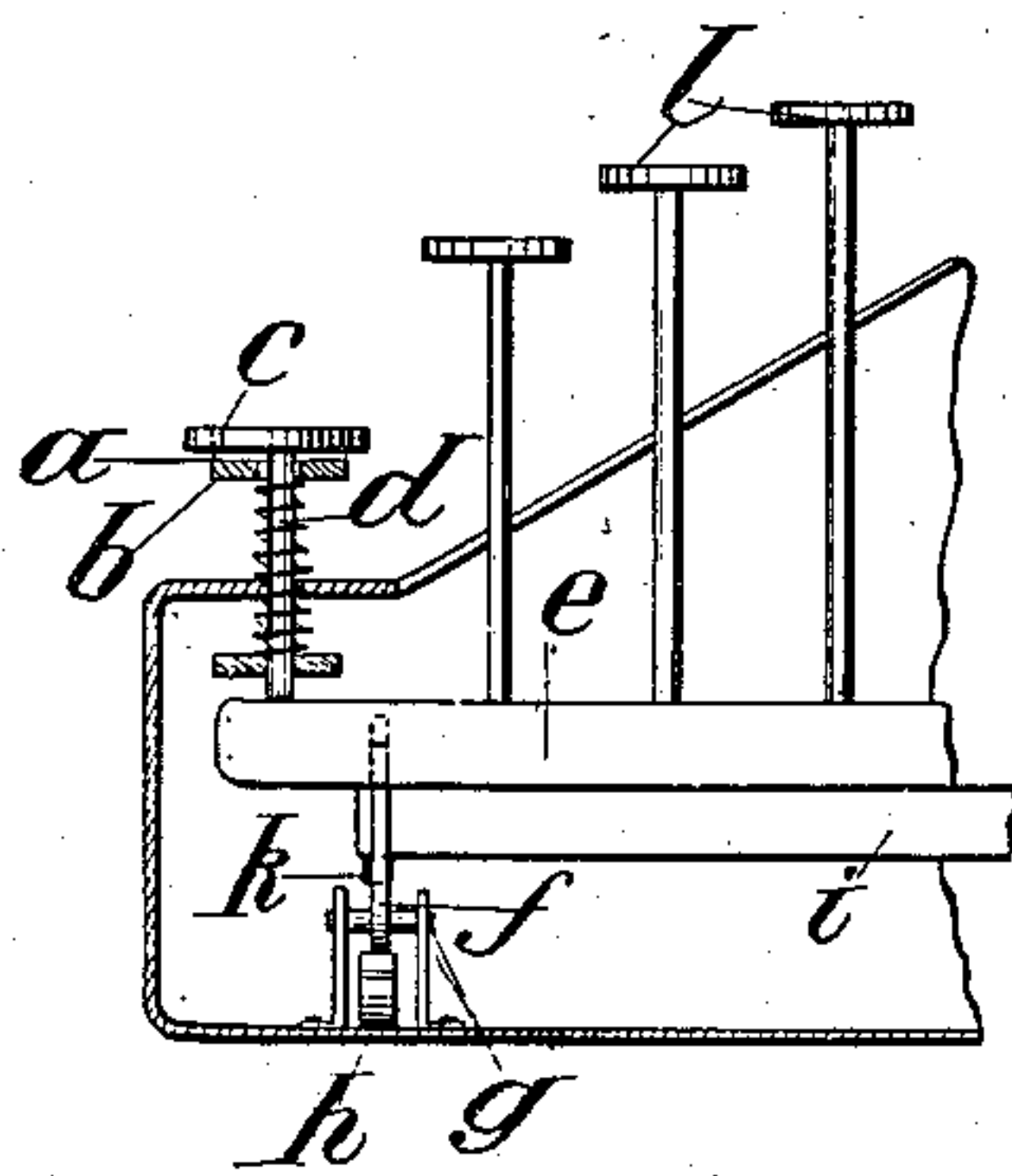


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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TYPE-WRITER.

944,590.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ANGELO BEYERLEN, a citizen of the German Empire, residing at Stuttgart, in the Kingdom of Württemberg, Empire of Germany, have invented certain new and useful Improvements in Type-Writers, of which the following is a description, reference being had to the accompanying drawing and to the letters of reference marked thereon.

This invention has for its object improvements in those typewriters which are provided with a single series of keys and in which consequently separate shifting keys are provided. In such machines therefore hitherto in order to write a capital letter, a separate key had always to be depressed. Capital letters are however only usually employed at the commencement of a word, and it is therefore necessary to leave a space before them, that is to say to also operate a spacing bar. Now various drawbacks are caused by this, in the first place such a double operation of the keys involves considerable loss of time as the spacing has first to be done, then the shifting completed, and then the letter key depressed, which not only involves a considerable increase of labor but is a great drawback in the case of the extraordinarily rapid writing at present sought after. Further it very frequently happens that the capital letters are out of alinement if the key, as is often the case, be depressed before the shifting has been completely effected. This drawback is now avoided by the spacing bar being combined in a peculiar manner with the shifting key, so that by depressing the latter the spacing bar is simultaneously operated. The shifting lever is then automatically held down until a capital letter has been written, whereupon it is again released also automatically, so that without any other device small letters may be again written in the ordinary way. Now if it be desired to write capital letters continuously the second shifting key usually provided in such machines may be utilized, independently of the improved device, or the spacing bar also, as desired, so that the writing of a word entirely with capital letters with or without spacing is in no way effected. The improved device is also char-

acterized by its being able to be subsequently applied with ease to all existing machines in this system, whereby the object of the invention may be universally employed.

The invention is shown more particularly in the accompanying drawings, in which:—

Figure 1 is a plan view of the keyboard with shifting keys and spacing bar; Fig. 2, a front view of Fig. 1; and Fig. 3, an end view of same.

The typewriter in accordance with this invention is provided with a spacing bar *a* of the ordinary arrangement and method of working, and also with shifting keys *c* and *c'* and keys *l* which work in the ordinary way.

Now in accordance with this invention, the spacing bar *a* is combined with the shifting key *c* by means of a bar *b* and in such a way that the spacing bar *a* may be depressed independently of the key *c*, while vice versa in depressing the shifting key *c* the spacing bar is carried with it. The shifting key *c* then encounters in the ordinary way the shifting lever *e* and is under the action of a spring *d*. Now if a capital letter is to be written and also a space made, it is only necessary to depress the key *c* which then carries with it the bar *a* in the manner described. The shifting lever *e* is thereby pressed down and arrested by a pawl *f*, which pivots on a pin *g* and is also under the action of a spring *h*. Now if a letter key *l* be struck, it encounters in the ordinary way the bridge piece *i* which is provided with a projection *k*, which then encounters the free arm of the pawl *f* formed as an elbow lever and causes it to pivot, whereby the shifting lever *e* is released and the shifting action ceases. The shifting key *c* and spacing bar *a* are in the meantime returned again to the normal position automatically by the action of a spring *d*.

As may be seen more particularly in Fig. 2, if the shifting is to continue, the other shifting key *c'* is operated in the ordinary way and also the spacing bar *a*, so that words may also be written consisting entirely of capital letters, and, if desired, with space between them.

I declare that what I claim is:—

In a typewriting machine, a spacing bar,

carriage-shifting connections including a shift lever, means for locking said shift lever in depressed position, and a shift key and connections for operating both the spacing
5 bar and the shift lever, in combination with letter-keys and with a bridge piece arranged for operation by any of said keys and with means, arranged for operation by

the bridge piece, for releasing the shift lever.

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

ANGELO BEYERLEN.

Witnesses:

• HERM. HOPPE,
JEAN GULDEN.