No. 693,277

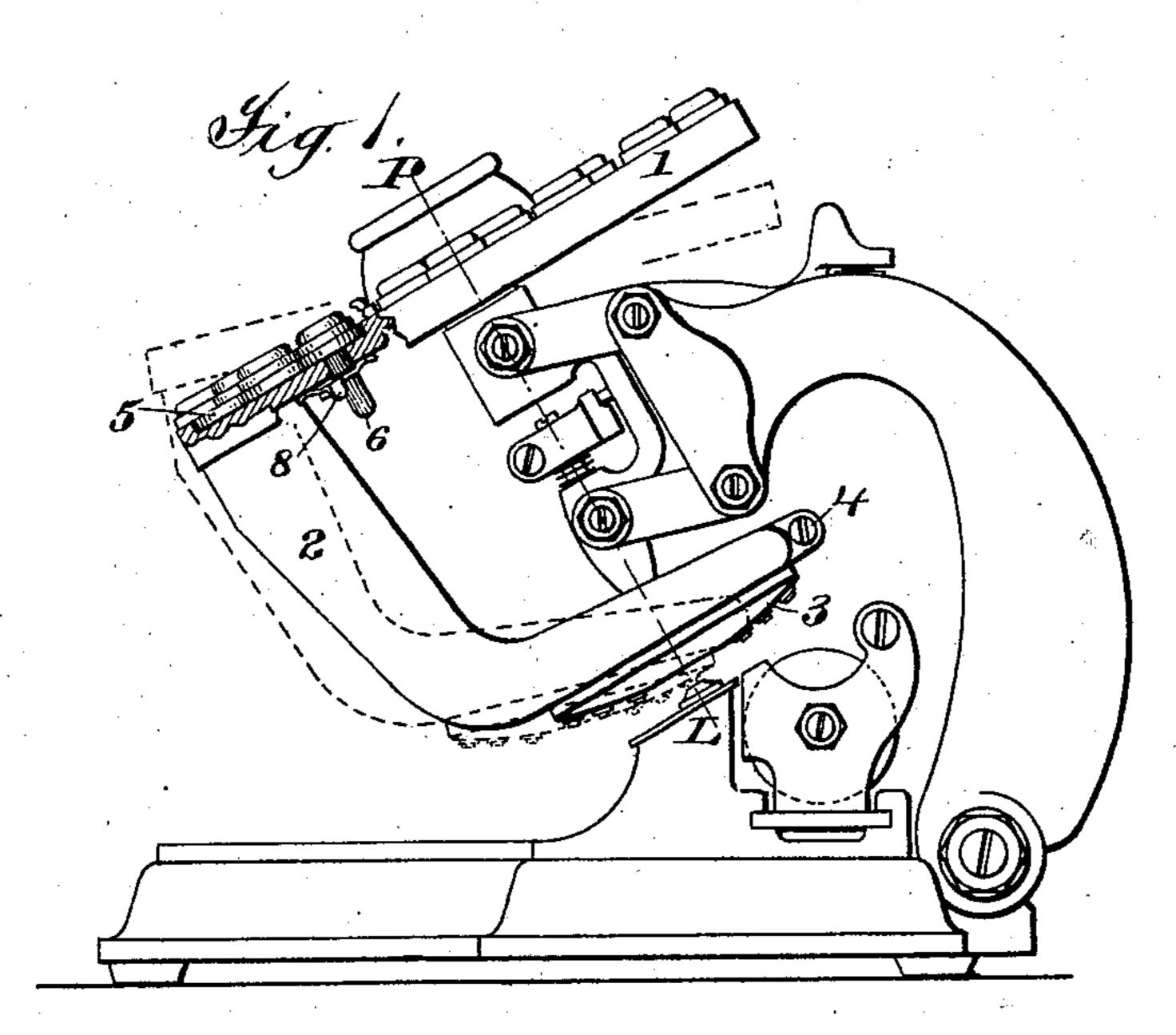
Patented Feb. II, 1902.

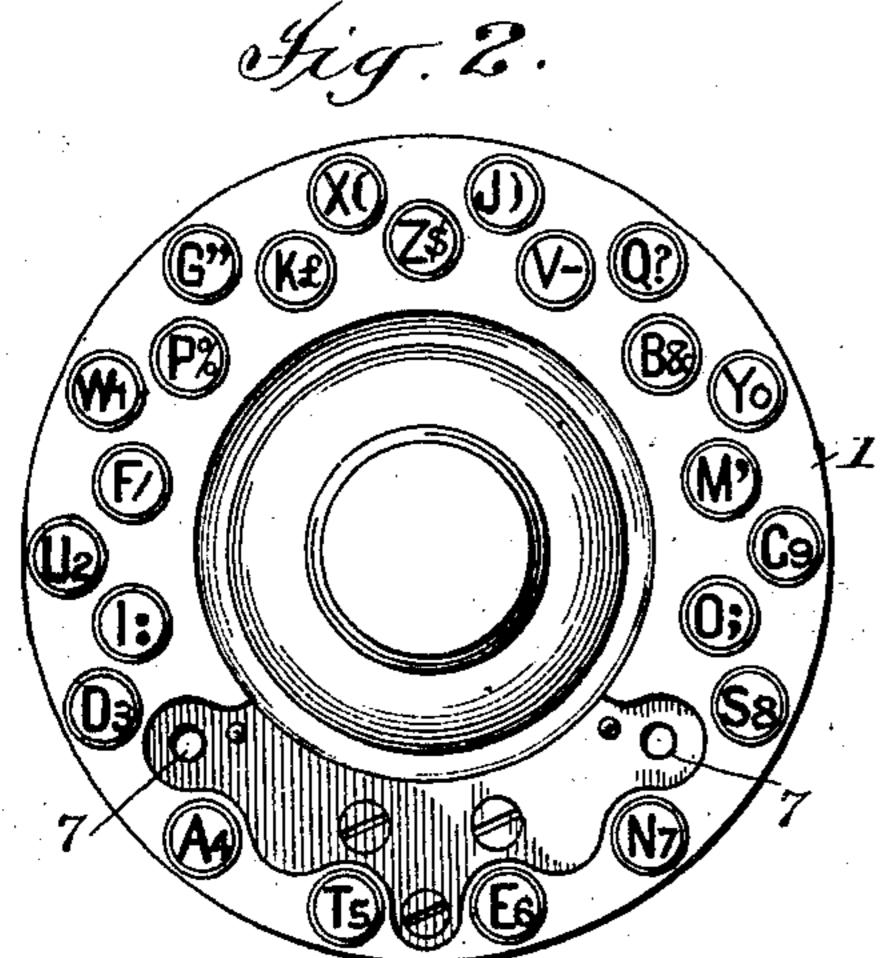
F. LAMBERT.

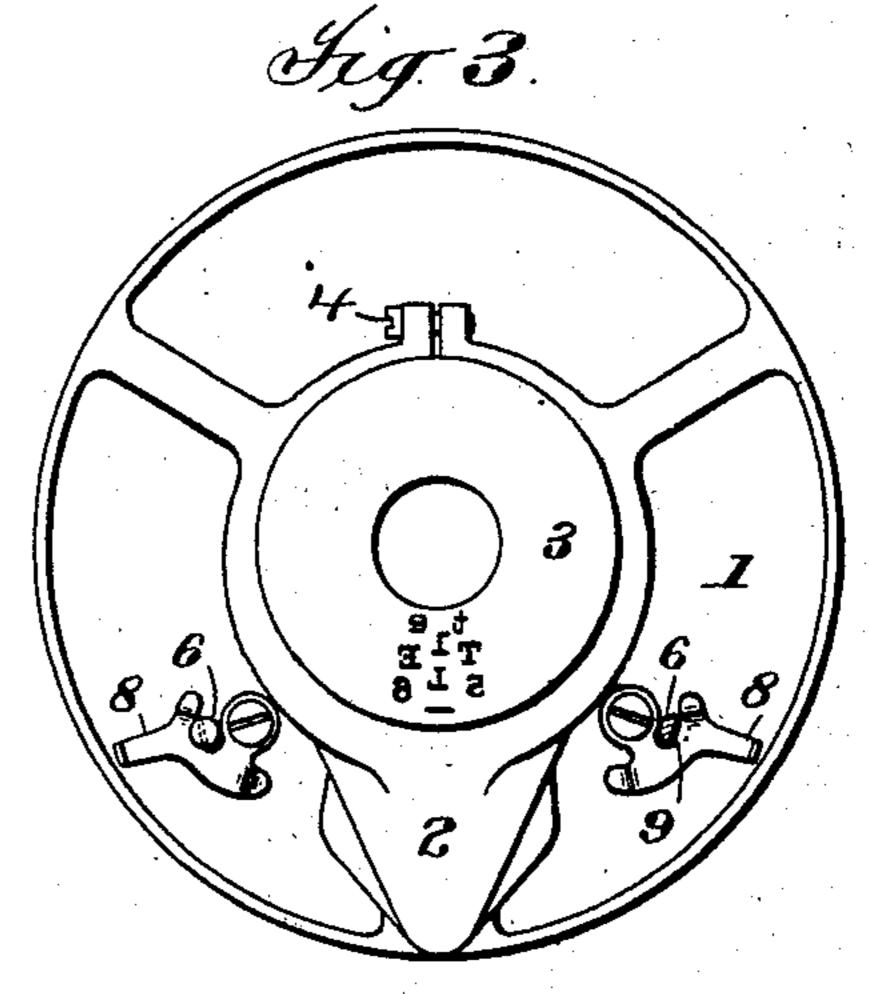
KEYBOARD FOR TYPE WRITERS.

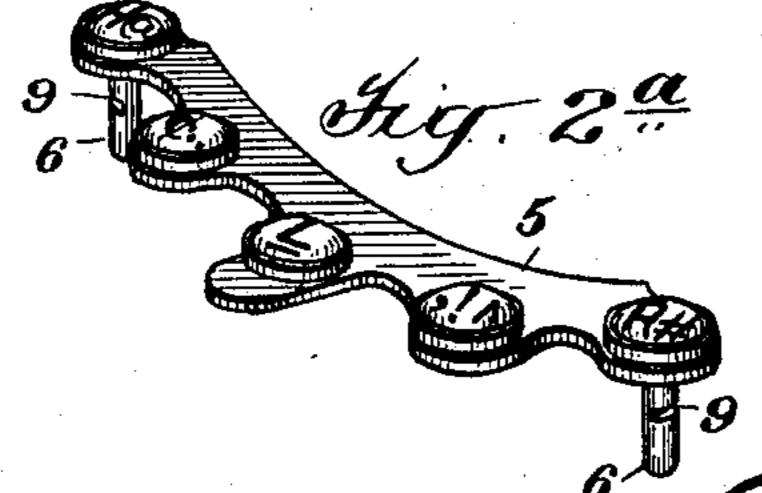
(Application filed Nov. 2, 1901.)

(No Model.)









WITNESSES:

Loo HBotts. Edith Saules

United States Patent Office.

FRANK LAMBERT, OF BROOKLYN, NEW YORK.

KEYBOARD FOR TYPE-WRITERS.

SPECIFICATION forming part of Letters Patent No. 693,277, dated February 11, 1902.

Application filed November 2, 1901. Serial No. 80,841. (No model.)

To all whom it may concern:

Be it known that I, Frank Lambert, a citizen of the United States, and a resident of New York city, borough of Brooklyn, Kings county, New York, have invented an Improved Keyboard for Type-Writers, of which

the following is a specification.

My invention relates to type-writers or other machines in which type are acted upon by means of a keyboard. In such machines, where the number of characters is necessarily limited, it is often desirable to make use of interchangeable sets of type, either for different languages or for different kinds of work; and the object of this invention is to provide for readily changing the characters in the keyboard to correspond to the change in the set of type.

In the ordinary series of interchangeable sets of type many of the characters are the same in each set of type and are placed in the same position relatively to the keyboard; but heretofore the difficulty has been to indicate properly on the keyboard the change in

25 the remaining characters.

My invention consists in virtually grouping the characters of the keyboard into two sets, forming together but one complete set of characters, corresponding to one set of type, 30 one group forming a relatively permanent part of the keyboard and the other group a

temporary part.

The group of permanent characters corresponds to the group of type that are the same 15 in the various interchangeable sets of type, while the group of temporary characters forms one of a series of interchangeable groups, each of said series corresponding to the group of type differing in each set of type. A sepa-40 rate temporary group is provided for each set of type bearing differing characters. By my invention any of these temporary groups of characters may be easily made a part of the keyboard or removed therefrom, so that 45 the characters are changed and no confusion is caused by having the keyboard show characters not in the set of type being acted upon, as heretofore has been the case.

I have shown my invention applied to the keyboard and type mechanism of the Lambert type-writer, described and shown in the United States Letters Patent No. 640,208,

dated January 2, 1900; but it may be applied to other machines in various modifications without departing from my invention as here- 55 inafter claimed.

In the accompanying drawings, Figure 1 represents in outline a side view of a Lambert type-writer, a portion of the keyboard being shown in section. Fig. 2 is a plan view 60 of the keyboard with the removable group of characters removed. Fig. 2^a is a perspective view, on a larger scale, of one of the series of removable groups of characters. Fig. 3 is a bottom plan of the type mechanism.

As shown and described in the above-mentioned Letters Patent No. 640,208, the keyboard in the form of a multiple key 1 has a depending arm 2, provided at its lower part with a socket for holding a set of type in the 70 form of a type-block 3. These three parts in one are so supported and placed in combination with other mechanism that simple pressure on the top of the keyboard—that is, upon one of the designated pressure-points on the 75 multiple key 1-will nutate or tilt the entire keyboard and type device, as shown in one tilted position in dotted lines in Fig. 1, on a central universal joint until the type in the block 3, corresponding to the character on the 80 pressure-point touched is brought into the printing-line P L, when the device is stopped from tilting further, and the continued pressure carries the whole device down to cause the type to print, all as clearly described in 85 said patent.

By loosening the clamping-screw 4, Figs. 1 and 3, the type-block 3 may be removed and another block readily inserted, whereby any number of interchangeable blocks bearing 90 different sets of type may be used in one machine.

In order that the keyboard shall correspond to the set of type used, the keyboard or multiple key 1 is provided with a group of chargacters or designated points forming a relatively permanent part of the keyboard, as shown in Fig. 2, and a removable group of designated points carried by a plate 5, as shown separately in Fig. 2^a.

On all of the interchangeable type-blocks 3 the type that are actuated by pressure on any of the designated pressure-points shown in Fig. 2 all correspond to the permanent char-

acters shown by said pressure-points, while the remaining type on said blocks 3 may differ on all the interchangeable blocks and a plate 5 provided for use with each type-block, the said plate bearing pressure-points designated by characters corresponding with the

type peculiar to its block.

The plate 5 may be removably secured to the key 1 in any convenient manner. The accompanying drawings show the plate 5 provided with two pins 6, adapted to be passed through holes 7 in key 1 and locked on the under side of the key by spring-latches 8, sprung into slots 9 in said pins 6, while the plate 5 is pressed down firmly on the key 1. The top of the key 1 is preferably countersunk for the plate 5, so that the top of the plate is flush with the top of the key.

It is evident that any other suitable means 20 of securing the temporary group of characters may be used without departing from my

invention.

In the Lambert machine each pressurepoint actuates three different type, (according to the position of the shift-key of the machine,) so that with proper calculation in arranging the type on the blocks and the corresponding characters on the keyboard the
group in the plate 5 will permit of difference
in fifteen of the characters on the series of
interchangeable type-blocks; but it is evident that a larger or a smaller number of
characters may be grouped for the removable
part of the keyboard, if desired.

35 It will be evident that my invention of grouping a number of pressure-points or push-buttons into a removable set adapted to be temporarily made a part of the key-board may be applied to various other type40 machines, and I do not limit my invention to the particular form of machine shown nor to

the particular way shown of grouping the removable characters.

I claim as my invention—

1. In type-writers or the like, having interchangeable sets of type, a keyboard bearing two groups of characters forming together a

complete set of characters corresponding to one set of type, one of said groups forming a relatively permanent part of said keyboard 50 and the other group being removable to permit of interchanging the characters on the keyboard to correspond to the interchange of

the sets of type.

2. In a type-writer, a multiple key, a series 55 of interchangeable differing type-blocks adapted to be actuated thereby, and a series of interchangeable differing plates, the said key being provided with a group of characters forming a permanent part of the said key, 60 and each of said plates being provided with a group of characters and adapted to be made temporarily a part of said multiple key, whereby the characters on said multiple key may be made to correspond to the type on the 65 type-block used.

3. In a type-writer, a multiple key having thereon characters divided into two groups, one of said groups being a relatively permanent part of said key and the other group be- 7°

ing removably mounted thereon.

4. In a type-writer, a multiple key having thereon characters divided into two groups, one of said groups being a relatively permanent part of said key and the other group being removably mounted thereon, and means for holding said removable group in position on said key.

5. In a type-writer, a multiple key having thereon characters divided into two groups, 80 one of said groups being a relatively permanent part of said key and the other being removably mounted thereon, and means for holding said removable group in a predetermined position relative to the permanent 85 group on said key.

In testimony whereof I have signed my name to this specification in the presence of

two subscribing witnesses.

FRANK LAMBERT.

Witnesses:

EDITH SARLES, EDITH J. GRISWOLD.