

M. SOBLIK.
PNEUMATICALLY OPERATED TYPE WRITING MACHINE.
APPLICATION FILED SEPT. 22, 1909.

947,688.

Patented Jan. 25, 1910.

Fig. 1

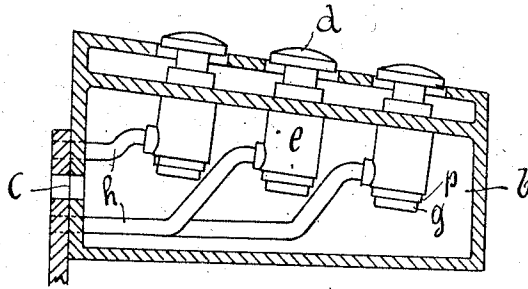


Fig. 2.

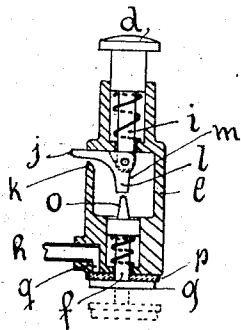
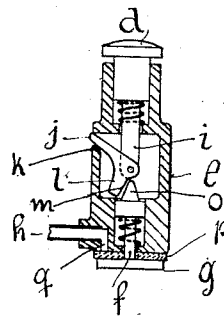


Fig. 3.



Witnesses:
G. A. Riley.
G. A. Mannin.

Inventor:
Max Soblik,
by W. W. Means
attys.

UNITED STATES PATENT OFFICE.

MAX SOBLIK, OF DUSSELDORF, GERMANY.

PNEUMATICALLY-OPERATED TYPE-WRITING MACHINE.

947,688.

Specification of Letters Patent.

Patented Jan. 25, 1910.

Application filed September 22, 1909. Serial No. 518,979.

To all whom it may concern:

Be it known that I, MAX SOBLIK, a subject of the German Emperor, and residing at Dusseldorf, Germany, have invented certain new and useful Improvements in Pneumatically-Operated Type-Writing Machines, of which the following is a specification.

My invention relates generally to pneumatically operated typewriting machines and particularly to keyboards thereof.

In the pneumatically operated typewriting machines of the kind described in the Letters Patent Nos. 659,703, 676,590 and 757,066 the types are struck owing to a compressed air duct rotating with the typewheel feeding uninterruptedly with compressed air an open system of piping which opens into the keys; when said duct passes a normally closed end of a pipe the pressure of air produced operates mechanism which checks the rotation of the typewheel, causes the type to strike and the typewheel to rotate again after the type has struck.

In the machines referred to having constantly rotating typewheels it is necessary that the operator pay particular attention to the duration of pressure on the keys and at once retract his finger, since otherwise the same type can be unintentionally struck again.

A primary object of my invention is to obviate such danger and to make the machine suitable for use by less practiced operators. To this end I provide a new keyboard having an improved arrangement of valves such that when a valve for admitting compressed air is opened by a key being depressed it remains open only for an instant and automatically closes again at once.

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

Figure 1 is a vertical transverse section through my new keyboard; Fig. 2 is a like view through one key and its appertaining valve in the normal position, and Fig. 3 shows the same when the valve has closed automatically after being opened by depressing the appertaining key.

Referring to the drawing, my new keyboard comprises the air-tight box *b* which can be connected detachably in well-known manner with the compressed air conduit of the machine. Air is supplied uninterruptedly into the box through its inlet *c*. Below each key *b* is arranged a valve box *e*. The spring-pressed valve rod *f* in the latter carries the valve *g* which, with the intermediary of an elastic disk *p*, closes the compressed air pipe *h* which is in open relation with the typewriting machine.

i is a rod or stem attached at its upper end to a key *d* and carrying revolubly at its bottom end an angle lever or pawl *j*.

Now when the spring-pressed key is depressed the arm *l* of the lever will first abut against the head *o* of the valve rod *f* and open the spring-pressed valve *g*, *p*, as indicated in dotted lines in Fig. 2, when compressed air will flow from box *b* through duct *q* into pipe *h* and on to the members in question in the typewriting machine. Simultaneously the other arm of the lever will strike the abutment *k* on the valve box and impart to the lever a rotary motion which will liberate the arm *l* from the head *o* of the valve rod, so that the head *o* of the latter can slide back along the face *m* of the lever into its closed position, independently as to whether the finger has released the key or not. Obviously, in any event when the key is depressed once the type can only be struck once, since the quantity of air sent into the pipe *h* only suffices for checking the motion of the typewheel once.

I claim:—

1. In a keyboard for a pneumatically operated typewriting machine, the combination, with a valve box containing a valve, of a key movable in said valve box, and a member mounted movably on said key and adapted to coact with said valve and said valve box, when said key is depressed, and momentarily open the valve.

2. In a keyboard for a pneumatically operated typewriting machine, the combination of a valve box having an abutment, a valve rod, carrying a valve therein, a key having a stem guided in said valve box above said valve rod, and an angle lever

pivoted in the valve box at the end of said stem above said valve rod, one arm of said lever being adapted to abut against said valve rod and open the valve when the key
5 is depressed, whereupon the other arm of said lever coacting with said abutment releases the former arm from the valve rod.

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

MAX SOBLIK. [L. s.]

Witnesses:

OTTO KÖNIG,

CHAS. J. WRIGHT.