## W. H. SNIDER.

TYPE-WRITERS.

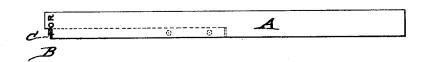
No. 185,590.

Patented Dec. 19, 1876.

Fig. 1.



Fig. 2.



WITNESSES

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INVENTOR: It & Emider

BY

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## UNITED STATES PATENT OFFICE

WILLIAM H. SNIDER, OF ANGUS, ONTARIO, CANADA, ASSIGNOR TO HIMSELF AND JONAS T. BUSH, OF SAME PLACE.

## IMPROVEMENT IN TYPE-WRITERS.

Specification forming part of Letters Patent No. 185,590, dated December 19, 1876; application filed August 28, 1876.

To all whom it may concern:

Be it known that I, WILLIAM H. SNIDER, of Angus, in the Province of Ontario and Dominion of Canada, have invented a new and Improved Compound Key-Lever for Type-Writers, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a top view, and Fig. 2 a top view, of my improved key-lever for type-writers.

Similar letters of reference indicate corre-

sponding parts.

The object of my invention is to so improve the key-levers for type-writers that either a considerable reduction in the number of keys may be made or the application of the keys be enlarged to a considerable extent, so that the speed of the type-writer may be increased and the working of the same facilitated.

The invention consists of a compound keylever, obtained by attaching a steel spring, with a type at the movable end, to the rear end of the same, and arranging one or more letters on the key itself, so that by depressing the key either the letter of the spring or the combination of spring and key letters be

formed.

In the drawing, A represents a type or key lever of the Sholes and Glidden or other typewriter, which is made with a recess, Cat the rear end, and provided with a spring, B, that is attached to the under side of the lever A, and bent upward at the movable rear end to project along the recess, above the end of the type-lever. The end of the steel spring B is formed with a type, and the end of the lever A is provided with one or more types sidewise of the spring-type, so as to form a word in common use therewith. The spring is guided along the recess of the lever, and retained by the stop or shoulder formed thereby. When the key is touched lightly the letter on the spring merely is formed; but by pressing with greater force on the key the spring is compelled to leave its position on the key, and is moved downward so as to form the combination of letters arranged on spring and lever.

When, for instance, the letter f is placed on

the end of the spring, and the letters o and r on the lever, the word "for" is obtained by simply pressing harder on the key. A number of words most commonly used may thus be arranged by means of this compound, while the keys may at the same time serve their common functions.

In forming a word the play of the key should be sufficient to make the operator sensible of the change from a letter to a word, but no more.

The spring should be placed on the left side. and contain the initial letter, which should always strike the center point. The complement of the word, being preferably placed on the lever, should strike outside of that point.

In this manner a whole word is formed at one movement of the hand of the operator, and thereby the working of the type-writer expe-

dited and facilitated.

In making a word of more than one letter, spacing has to be provided according to the number of letters in the word, which may be done by suitable lever-bars or other mechanism arranged for this purpose.

The single-letter keys may thus be made use of for forming words without requiring the addition of keys for all the words which

may be thus formed.

The keys should be labeled in full to correspond, the initial letter being made larger, and the complement of the word smaller, thereon.

Having thus described my invention, I claim as new and desire to secure by Letters Patent-

A compound key-lever for type-writers, composed of a key recessed at the end, and provided with one or more types and a typespring attached thereto, and working either separately or jointly with the key to produce a letter or combination of letters, according to the pressure exerted on the keys, substantially in the manner and for the purpose set

WILLIAM H. SNIDER.

Witnesses:

H. W. STRATH, E. A. CREASE.