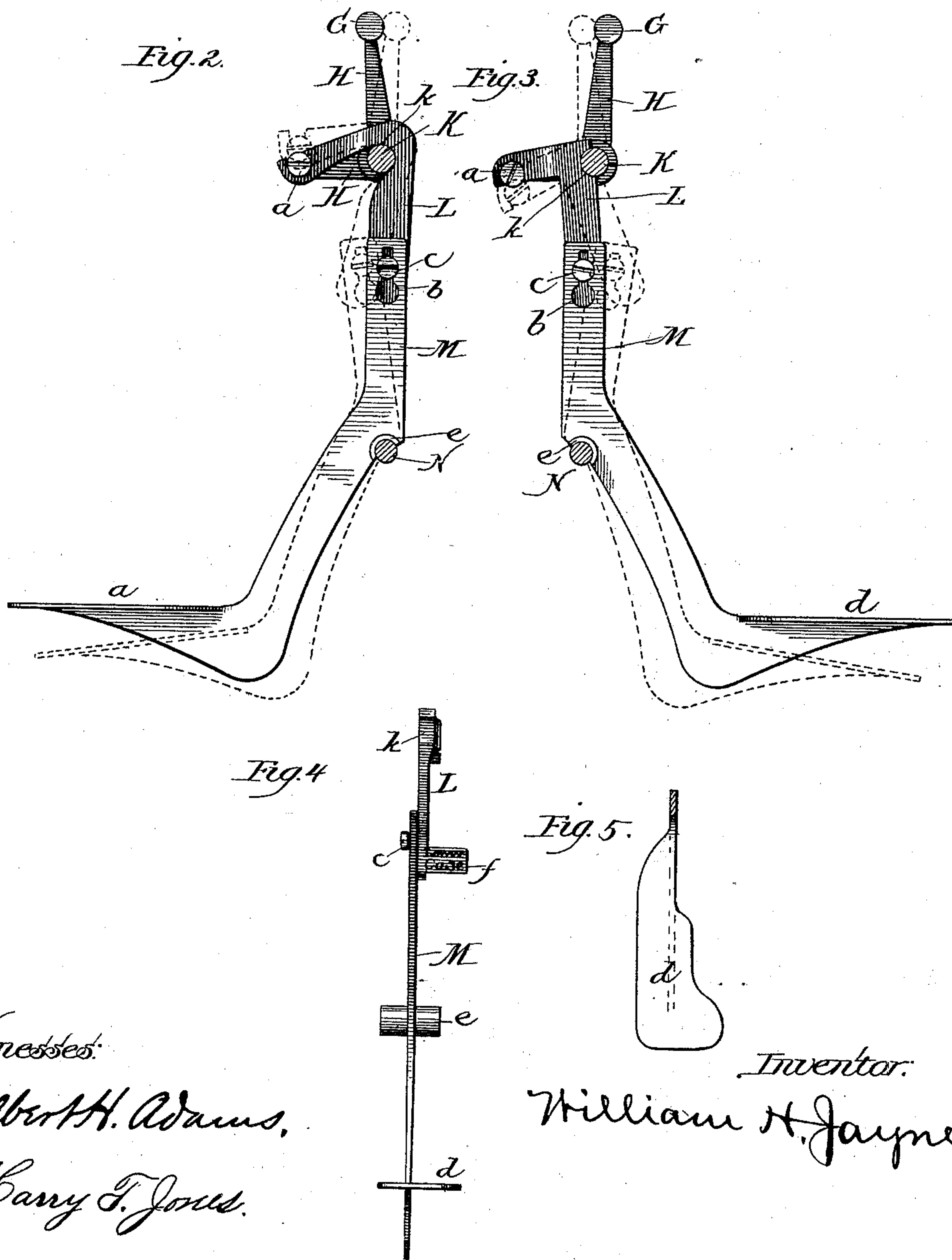


W. H. JAYNE.

DEVICE FOR SHIFTING THE PLATENS OF TYPE WRITERS.

No. 418,319.

Patented Dec. 31, 1889.



Witnesses:

Albert H. Adams,

Harry T. Jones.

Inventor:

William H. Jayne

UNITED STATES PATENT OFFICE.

WILLIAM H. JAYNE, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO
GARRIE S. FRENCH, OF SAME PLACE.

DEVICE FOR SHIFTING THE PLATENS OF TYPE-WRITERS.

SPECIFICATION forming part of Letters Patent No. 418,319, dated December 31, 1889.

Application filed March 18, 1889. Serial No. 303,743. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. JAYNE, residing at Chicago, in the county of Cook and State of Illinois, and a citizen of the United States, have invented a new and useful Improvement in Devices for Shifting the Platens of Type-Writers, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation, some parts being broken away. Fig. 2 is an enlarged detail, being a side elevation of the attachment for the right-hand side of the type-writer. Fig. 3 is an enlarged detail, being a side elevation of the attachment for the left-hand side of the type-writer. Fig. 4 is a front view of the attachment shown in Fig. 3. Fig. 5 is a plan view of the finger-piece.

This invention relates more particularly to type-writers of the class shown in Letters Patent No. 202,923, dated April 30, 1878, in which the platen is shifted to receive the impression of either an upper or lower case character. Its object is to provide an improved device for operating the mechanism for shifting the platen forward or backward, so as to cause the lower-case or upper-case type on the type-bars to strike the paper, which will be more convenient, more positive in its action, and require less time in operation than those devices heretofore in use for this purpose, which I accomplish, as illustrated in the drawings, and as hereinafter described.

That which I claim as new will be pointed out in the claims.

In the drawings, A represents the frame of the machine, constructed in one of the common styles of this class of machines.

B represents the paper-carriage, constructed as usual.

C represents the sliding frame, which carries the usual platen D. This frame C slides on the carriage B.

E is an arm secured to the under side of the sliding frame C.

F is a bracket which is secured to the arm E.

G is a rod, on which the bracket F moves longitudinally.

H is an elbow-lever for moving the rod G and sliding frame C.

I is a bracket, and J a spring, attached at

one end to the bracket I, by means of which the sliding frame C and platen D are returned to position after printing characters in either the upper or lower case.

K is a rock-shaft, on which the elbow-levers H are secured, a lever H being secured near each end. This shaft K is pivotally supported in the frame A of the machine.

All of the foregoing parts are constructed and arranged as in the common form of this class of machines and form no part of my invention, and are not, therefore, particularly shown and described, as they are not herein claimed, except as combined with my improvements.

L is an elbow-lever. The horizontal arm of this lever L, as shown, is secured to the horizontal arm of the elbow-lever H by a screw *a*, and at *k* it bears against the shaft K. The bearing-point *k* of the lever L, in the form shown in Fig. 2, must be on the front of the lever in order to cause the upper end of the lever H and rod G to swing backward to the position indicated by dotted lines in Fig. 2, while the bearing-point *k* of the lever L, in the form shown in Fig. 3, must be in the rear of the lever in order to cause the upper end of the lever H and the rod G to swing backward to the position indicated by dotted lines in Fig. 3. These forms of the lever L are adapted to be used on the right and left hand sides, respectively, of the present style of machines of this class.

The lower end of the lever L is provided with a finger-piece *f*, which is designed to be used only when normally writing upper-case characters.

M is a key. This key is made approximately in the form of an L-lever. At its upper end it is provided with a slot *b*, through which the pivot-screw *c* passes, for pivoting the key M to the lower end of the lever L. At a short distance below the slot *b* the key M is pivoted on the cross-rod N, or, if it is desired, it may be pivoted on a special rod or stud. A flange *e* on the key M at the pivotal point gives an increased bearing-surface. This key M at its lower outer end is broadened to form a finger-piece *d* to be struck by the operator. The form of this finger-piece *d* may be varied to suit its location in rela-

tion to the key-board of the machine, and should be approximately in the same horizontal plane as the lower row of keys of the key-board, as shown in Fig. 1.

5 When the operator is writing with lower-case characters or types and desires to move the platen D back to receive upper-case-character impressions, he presses down on the finger-piece of the key M, which causes its upper end to swing forward and through the lever L rock the shaft K and lever H, thereby moving the rod G backward to the position indicated by dotted lines in Figs. 2 and 3, which moves the sliding frame C and platen 15 D backward to the position for upper-case characters. The slot *b* permits the necessary motion between the upper end of the key M and the lever L to prevent binding at that point. The spring J returns the parts to the normal position for printing lower-case characters when the key M is released.

When the spring J and bracket I are adjusted to hold the rod G, sliding frame C, and platen D normally in the position for printing upper-case characters, the parts will normally occupy the position indicated by dotted lines in Figs. 2 and 3. When it is desired to print a lower-case character, the operator can press against the finger-piece *f* on the lever L, which will cause the lever L to swing backward and the lever H and rod G to swing forward to the position shown by the full lines. When the pressure against the finger-piece *f* is removed, the spring J will return the parts to the position indicated by dotted lines.

I have described both right and left hand keys, and the application of both to a machine increases the speed at which it may be operated; but it is evident that the same operation may be had by the use of a single key and lever on one side only of the machine.

On account of the convenient arrangement of the keys M and the direct action of the levers L it has been found in use that the operator can shift the platen forward or backward very quickly and readily.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a type-writing machine, the combination, with a shiftable platen, a rock-shaft, and connecting devices between the rock-shaft and platen, of a lever L, secured to the rock-shaft, and a key M, made approximately in the form of an L-lever, pivoted on the frame of the machine and pivotally connected at its upper end to the lever L, substantially as and for the purpose specified.

2. In a type-writing machine, the combination, with a shiftable platen, a rock-shaft, and connecting devices between the platen and rock-shaft, of a lever L, secured to the rock-shaft and provided at its lower end with a finger-piece *f*, for shifting the platen from the upper-case position to the lower-case position, substantially as specified.

WILLIAM H. JAYNE.

Witnesses:

HARRY T. JONES,
ALBERT H. ADAMS.