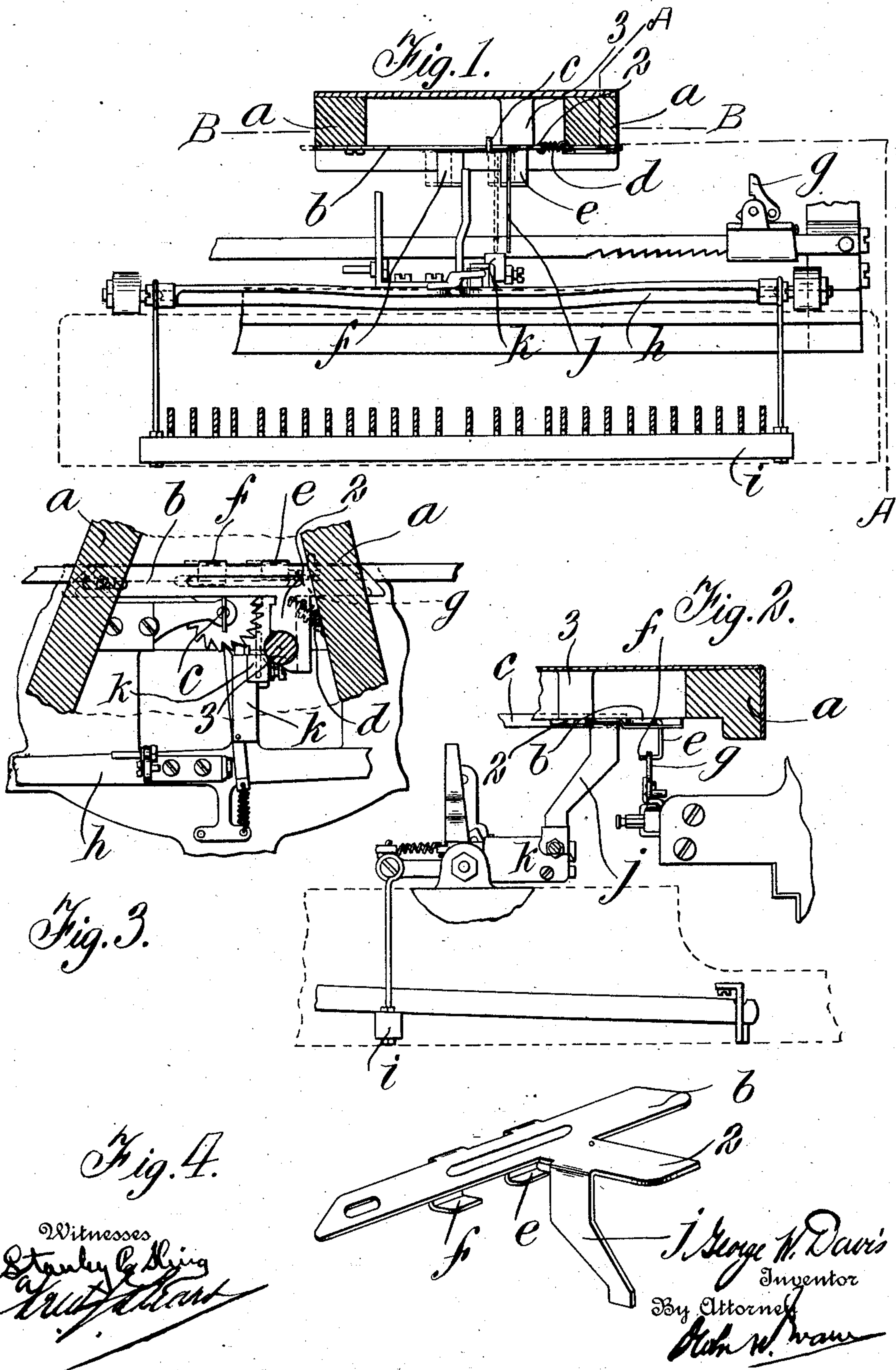


G. W. DAVIS.
 LINE LOCK FOR TYPE WRITERS.
 APPLICATION FILED MAR. 1, 1909.

997,374.

Patented July 11, 1911.



UNITED STATES PATENT OFFICE.

GEORGE WILLIAM DAVIS, OF WESTMOUNT, QUEBEC, CANADA.

LINE-LOCK FOR TYPE-WRITERS.

997,374.

Specification of Letters Patent.

Patented July 11, 1911.

Application filed March 1, 1909. Serial No. 480,593.

To all whom it may concern:

Be it known that I, GEORGE WILLIAM DAVIS, of Westmount, in the Province of Quebec, Canada, have invented certain new and useful Improvements in Line-Locks for Type-Writers; and I do hereby declare that the following is a full, clear, and exact description of the same.

This invention relates to typewriting machines, particularly to those of the sliding bar type, and consists of an improved type locking device adapted to act in unison with the locking plate and coact with the universal bar in locking the type and space bar when such plate is in abnormal position, and unlocking the same when the plate returns to its normal position. For full comprehension, however, of my invention reference must be had to the accompanying drawings forming part of this specification, wherein similar reference characters indicate the same parts and wherein—

Figure 1 is a front elevation of the dog rocker, the universal bar, a part of the carriage with the bell trip thereon, and the type guide frame in section, my invention being applied thereto. Fig. 2 is a transverse vertical section taken on line A A Fig. 1. Fig. 3 is a horizontal section taken on line B B Fig. 1, and Fig. 4 is a detail perspective view of my improved locking plate.

Referring to the drawings, *a* designates a portion of the type guide frame of a machine of the above mentioned class, to the underside of which frame is slidably pivoted the usual locking plate *b* which is adapted to be actuated in one direction by the lock release key *c*, and in the opposite direction by the spring *d*, such plate *b* being provided with the downwardly projecting lugs *e* and *f*. The function of these lugs is that the lug *e* is engaged by the bell trip *g* thus moving such plate longitudinally, and bringing a part carried thereby into the path of a member moving with each operation of the mechanism and thereby locking the latter when the carriage reaches the end of a normal line; and when it is desired to add a few letters to the line, the locking plate *b* is pushed farther back, thus moving the lug *e* out of the path of the bell trip *g* which has the effect of permitting the spring *d* to return the plate to its normal position, and permits the carriage to continue its travel until the bell trip engages the lug *f* which again shifts the locking

plate longitudinally and finally locks the machine in the manner just mentioned.

Disposed below and slightly in advance of the locking plate *b*, is the usual dog rocker bar *h* and universal bar *i* connected rigidly together to move in unison.

Formed on the underside of the locking plate *b* is a forwardly extending arm 2 having thereon a downwardly extending and forwardly inclined arm *j*. The end of the arm 2 projects beneath a boss 3 cast on the type guide frame and the end of the arm *j* is normally disposed to one side of and adjacent to the dog arm *k* projecting from the dog rocker bar *h*. The arms *j* and *k* are disposed in such relation to each other that when the locking plate *b* is moved by the carriage, the arm *j* will occupy a position over and in readiness to be engaged by the arm *k* thus preventing the rocking of the dog-rocker-bar *h* and through it locking the universal bar and the keys and space bar of the typewriter.

When it is desired to write a few additional letters as above mentioned the key *c* is pushed in, thus displacing the lug *e* from the bell trip and permitting the plate and lug *f* to return to position to be engaged by the bell trip.

Upon the return of the locking plate *b* to its normal position, the arm *j* will be carried out of contact with the arm *k*, and release the dog-rocker-bar *h* and consequently the universal bar, which unlocks the machine.

By the arm 2 bearing on the boss 3 when the arm *j* is engaging the dog arm *k* and thus locking the machine, the stress exerted on the said arm 2 by attempts to write is taken up by the type guide frame.

It will be observed that this construction retains the desirable feature of permitting of several letters being struck after the lug *e* has been passed by the bell trip *g*, while providing for the positive locking of the machine through the universal bar of which the dog-rocker is structurally a part.

What I claim is as follows:—

1. In a typewriter, the combination with the carriage and the writing mechanism,— of means for successively locking the writing mechanism during movement of the carriage in one direction, including a plate, an arm connected to the plate, stops also on the plate, and a part movable with the writing mechanism adapted to be obstructed

by the said arm when the carriage engages either one of the said stops.

2. In a typewriter, the combination with the carriage and the writing mechanism,—
5 of a stop carrying plate; a dog-rocker bar; an arm connected to the stop carrying plate; and stops on such plate adapted to be successively engaged by the carriage during
10 movement of the latter in one direction to successively move the said arm into the path of the dog-rocker bar.

3. In a typewriting machine the combination with the carriage and the dog rocker,
15 of a member in the path of and movable with the carriage when nearing the end of its travel and presenting as integral parts thereof an arm adapted to engage a fixed part of the machine and a second arm
20 formed integrally with the said first mentioned arm and adapted to engage and lock the said dog rocker.

4. In a typewriting machine the combination with the carriage and the dog rocker presenting an arm, of a horizontal plate

slidably mounted upon the frame of the 25 machine and presenting a pair of lugs adapted to be engaged successively by the carriage when nearing the end of its travel and said plate also having as integral parts
30 an arm extending from the said plate and disposed in the plane thereof and a second arm extending in a plane perpendicular to the said last mentioned arm and normally
35 disposed adjacent to the said arm upon the dog rocker and adapted to be brought into bearing relation with the said arm of the dog rocker when the said plate is moved by
40 the carriage at the end of the travel of the latter, a spring resisting the sliding of such plate, and means whereby the said plate is manually shifted.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

GEORGE WILLIAM DAVIS.

Witnesses:

WILLIAM P. McFEAT,
FRED J. SEARS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."