S. WANMER.

TYPE WRITER.

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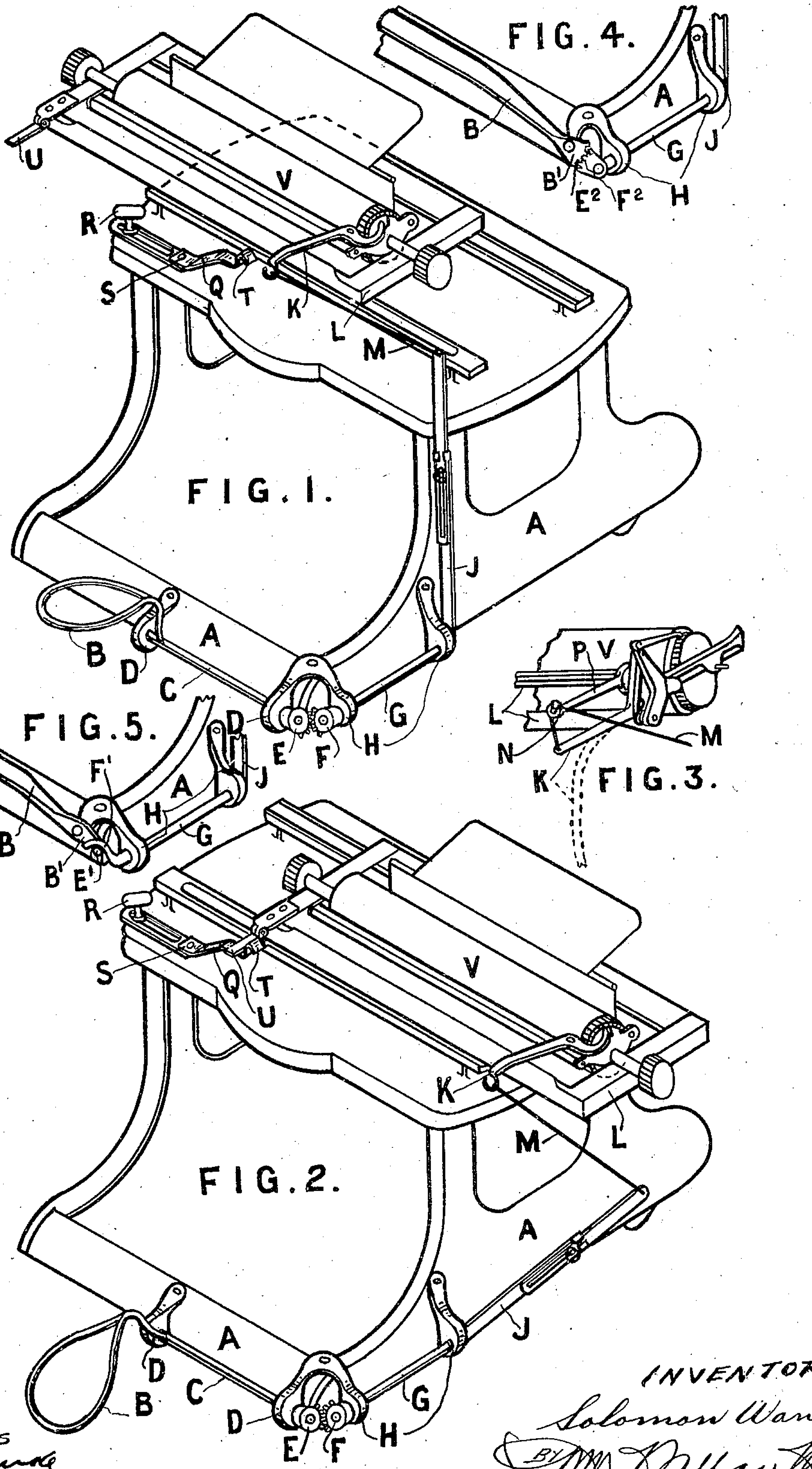
903,521.

Patented Nov. 10, 1908.



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TYPE-WRITER.

No. 903,521. Specification of Letters Patent. Patented Nov. 10, 1908.

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To all whom it may concern:

Be it known that I, SOLOMON WANMER, citizen of Australia, residing at Alice street, Rosalie, Brisbane, in the State of Queensland, Commonwealth of Australia, journalist, have invented new and useful Improvements in Type-Writers, of which the following is a specification.

This invention relates to mechanism attachable to typewriters for the purpose of returning the carriage either to the commencement of the line, or to any intermediate point, and at the same time, except when otherwise desired, advancing the platen, so as to write a new line.

The object is to provide a device that is simple in construction, effective, and that can be adapted to almost any make of machine, with little or no alteration to the latter. It is adaptable for use on machines having carriages of various lengths.

In carrying out my invention, I pivot in a bearing or bearings attached to or formed on the front of the machine, an operating lever so placed that it can be easily manipulated by the typist, without the latter removing his or her hands from, or far from the keyboard. This lever is geared, or articulated to another rocking shaft, pivoted in bearings attached to or formed on one side (preferably the right) of the machine. This rocking shaft carries an arm which is in turn connected with the carriage or with the line spacer. If desired the operating lever may be connected with a treadle, or provided with other means, whereby it may be operated by the foot.

In order to reduce the shock on the marginal stop, when the carriage is pulled back, I provide an adjustable stop suitably placed on the frame, capable of engaging with a projection on the carriage or with the carriage itself.

In order that my invention may be clearly understood I will now describe it fully with the aid of the accompanying drawings.

Figure 1 is a perspective view illustrating an ordinary "blind" typewriter (all the details which do not affect this invention being omitted) fitted with my invention, the "carriage returner" being shown in a position to return the carriage to the commencement of the line. Fig. 2 is a similar view, but showing the position of the "carriage returner" when the carriage has been returned. Fig. 3 is a part view illustrating another method by which the "carriage returner" is caused to operate on the line spacer. Figs. 4 and 5 are detail views illustrating alternative operating levers and the means of actuating the side rocking shaft.

A is the frame of the typewriter, at the front of which is placed an operating lever B (carried by the rocking shaft C in bearings D attached to or formed on the front of the frame) so designed and placed that, it can be easily operated preferably by the wrist, or by the fingers or hand, of the typist without the latter removing his or her hands from or far from the keyboard. If desired this operating lever B may be connected to a treadle or provided with a stirrup like attachment so that it can be operated by the foot of the typist. The operating lever is so designed that it can be quickly moved out of the way when the cover is being put on, by being swung back over the keyboard, or otherwise.

In typewriters having a fragile front frame it may be necessary to carry the shaft C right across the front of the machine. At one end of the rocking shaft C is a miter toothed sector E gearing into another sector F carried on a rocking shaft G pivoted in bearings H attached to or formed on the side of the frame A. Several other mechanical devices may be used for transferring the motion from the rocking shaft C to the shaft G, but I prefer the sectors E and F.

In Figs. 4 and 5, I illustrate modifications of the operating lever B and means of actuating the rocking shaft G. In both of these cases the lever B is placed and pivoted parallel to the front of the machine, one arm B′ of the lever, as in Fig. 5 being provided with a pin E′ which wipes against a cam face F′ carried on the rocking shaft G. In Fig. 4 the arm B′ of the lever is provided with a toothed sector E^2 which engages with a toothed sector F^2 on the rocking shaft G. The rocking shaft G is provided with an arm J connected to the line spacing lever K or carriage L. The arm J may be made in one piece, or it may be made extensible so that it can be adapted for use with carriages of different lengths, such as "foolscap," "brief" &c. As is well known, the changing of the line and the moving back of the carriage, are in most machines simultaneous movements, and as such movements are generally attained by the operation of the line spacing lever, I prefer that the arm should operate on, or be connected with the line spacer of the ma-

chine. The line spacers and their action differ very considerably in the various makes of machines. Some have a transverse oscillatory movement, others have a combined forward and upward movement, while others have a transverse horizontal movement. In some instances the said spacers are at the right hand end of the platen, while in others it is placed at the left hand side. It is therefore obvious that, in this specification, it would be impossible to describe the various adaptations. Suffice to say that the arm would be so placed that while it is capable of moving the carriage along it also advances the platen either at the commencement, during, or at the end of the movement of the carriage; also the arm and its connection with the spacer would be such that, in machines wherein the carriage is lifted to see the work, such carriage is not unnecessarily raised while being pulled along and at the same time such arm and connection should not interfere with the lifting of the carriage.

In Figs. 1 and 2 is illustrated the simplest form of connection between the arm J and line spacing lever K, viz:—a cord, leather or metal strap, or light rod M, the ends of which are attached to the arm J and lever K respectively. So far as I can see this form of connection is applicable to most makes of machine, without material alteration to the latter, but in some machines, such as the "Remington" wherein the line spacing lever moves forwardly and upwardly it is necessary that some mechanical device should be fitted so as to change the transverse motion of the arm J into a motion at right angles thereto. In Fig. 3 I illustrate one method of doing this. In this case the cord, or leather or metal strap M is attached to the arm J, and, passing over a roller or pulley N on the bracket P carried on the carriage L, is then attached to the line spacer K which is shaped somewhat as shown (the old shape being shown by dotted lines). In the case of machines having the line spacer on the left hand side of the carriage, the connection M would be so placed as not to interfere with the view of the writing, particularly of "writing in sight" machines.

In the foregoing I have described my mechanism as being attached at various points to the frame A. It will however be understood, that, if desired, the whole can be carried on a separate bedplate attachable to the frame A or base board by screws, clamps or other devices.

In addition to the usual marginal stop I prefer to fit a supplementary stop either in the position shown in the drawings or at the right hand side of the carriage L, or elsewhere as may be found most convenient. This stop consists of a stop Q (adjustably attached to the frame A by the thumb nut R) jointed at S, and provided with an inclined face at T. This stop Q engages with the hinged projection U carried on the carriage L preferably provided with a spring which tends to keep it in its normal position as shown in the drawings. Marginal notes may be made by raising the projection U and allowing it to pass over T. If desired the stop Q may engage direct with the carriage L, means being provided whereby it may be depressed, (such as by the marginal-release) when it is necessary to make a marginal note.

It will be understood that the details of carrying out my invention may be varied according to requirements and the make of the machine to which it is applied, without departing from the general principles. Ball bearings may be provided if desired.

The mode of operation is as follows:—Starting with the machine with the carriage L, at the end of the line as shown in Fig. 1, the operating lever B is depressed by means of the wrist or otherwise, thus causing the shafts C and G to rock and swing over the arm J, and thus move over the carriage L to the commencement of the line as in Fig. 2. The platen V is advanced at the commencement, during, or at the end of the movement of the carriage, or the carriage may be moved along without advancing the platen, according to the manner of applying the pressure which is put on the operating lever D.

Having now particularly described and ascertained the nature of my said invention, and in what manner the same is to be performed, I declare that what I claim is:—

1. A typewriter comprising a carriage, a lever for turning the platen and returning the carriage to starting position, a vertical lever, a flexible connection from the upper end of said lever to the lever on the carriage, a horizontal shaft on the side of the typewriter having its end secured to the lower end of the vertical lever, a horizontal shaft on the front of the type writer, gears on the adjacent ends of said horizontal shafts meshing with each other, and means for rocking the shaft on the front of the typewriter.

2. A typewriter comprising a carriage, a hinged stop on the same, a slotted slide, a thumb screw passing through the slot in said slide and into the typewriter, and a stop Q composed of spring metal having one end secured to said slide and projecting upwardly at an incline so as to be engaged by the hinged stop so as to act as a buffer to limit the return of the carriage.

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

SOLOMON WANMER.

Witnesses:
R. HOCKNAD,
ALEXANDER ANDERSON.