

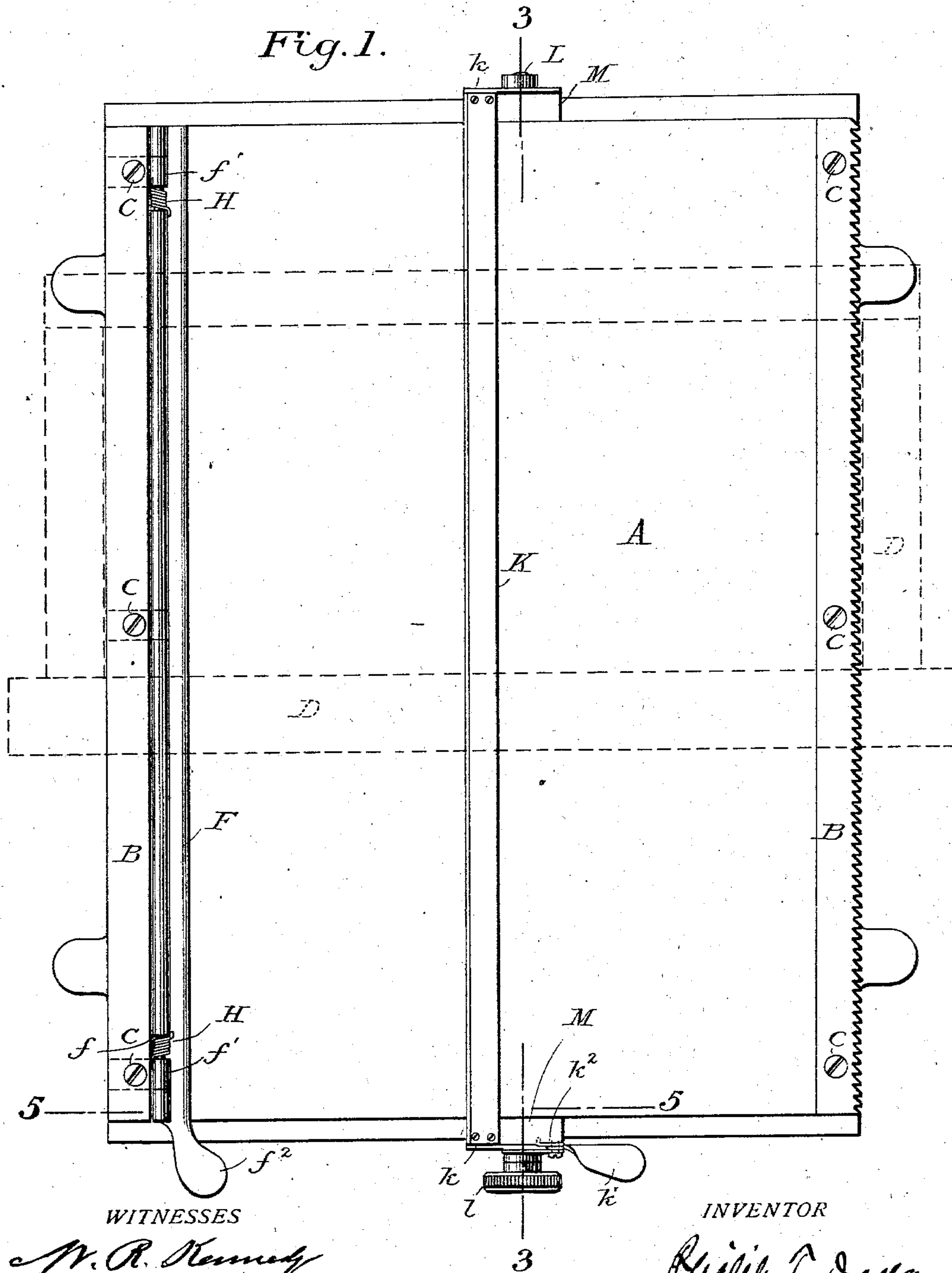
No. 730,520.

PATENTED JUNE 9, 1903.

P. T. DODGE.
TYPE WRITING MACHINE.
APPLICATION FILED APR. 11, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES
W. R. Kennedy
J. M. Coppenhaver

INVENTOR
Philip T. Dodge

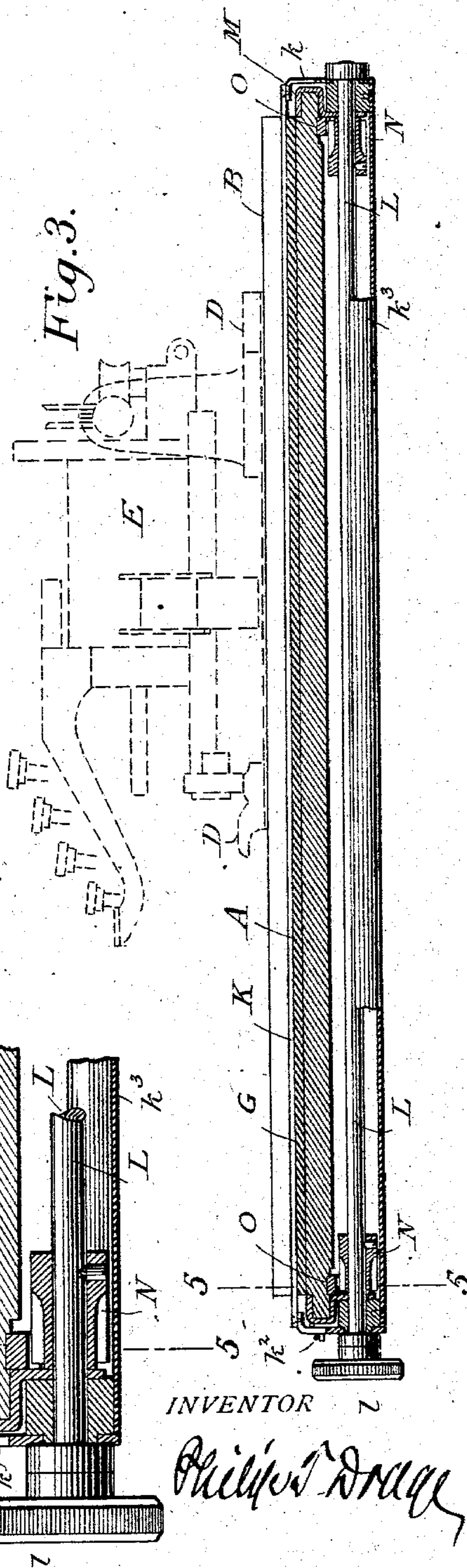
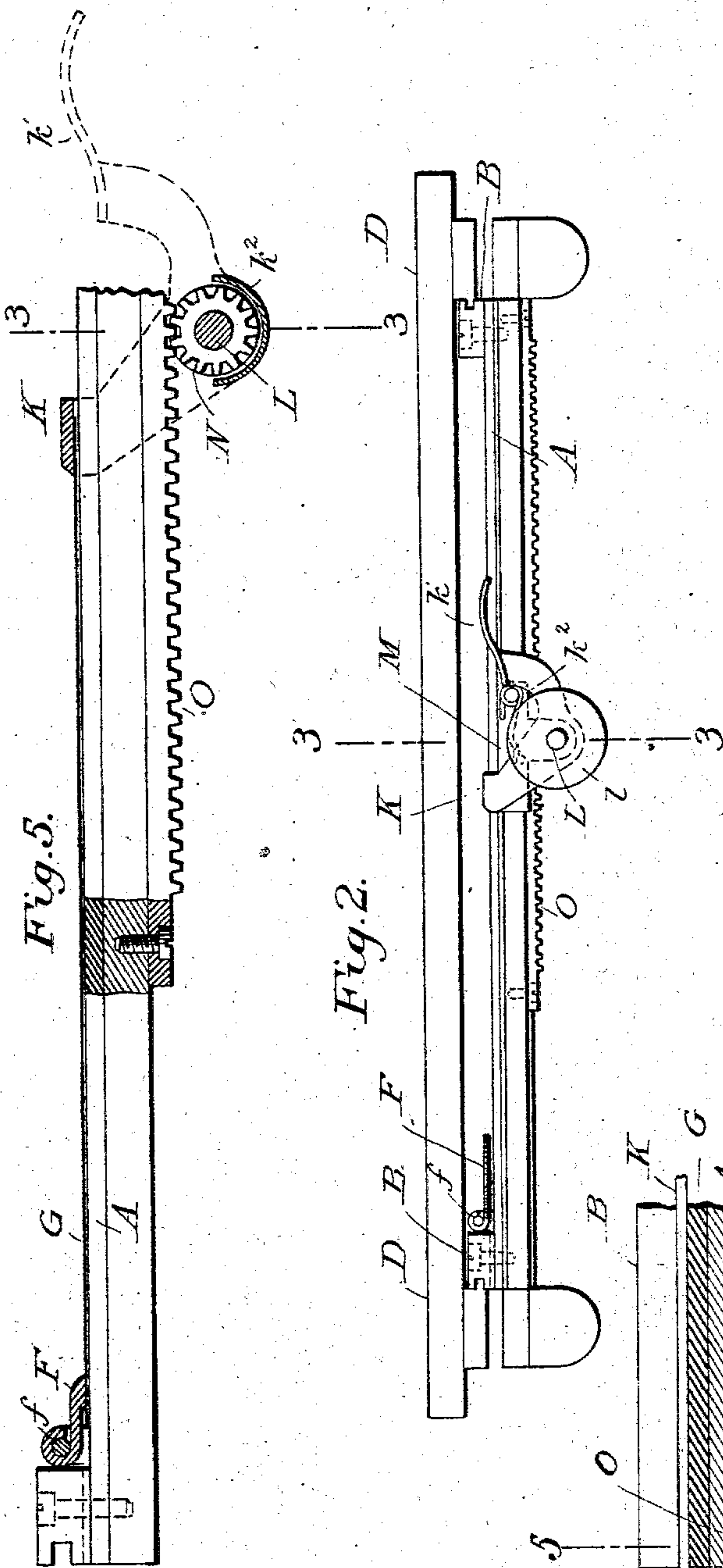
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WITNESSES
N. R. Kennedy
G. M. Copeland

INVENTOR
Philip Dodge

UNITED STATES PATENT OFFICE.

PHILIP T. DODGE, OF WASHINGTON, DISTRICT OF COLUMBIA.

TYPE-WRITING MACHINE.

SPECIFICATION forming part of Letters Patent No. 730,520, dated June 9, 1903.

Application filed April 11, 1902. Serial No. 102,394. (No model.)

To all whom it may concern:

Be it known that I, PHILIP T. DODGE, of Washington, District of Columbia, have invented a new and useful Improvement in
 5 Type-Writing Machines, of which the following is a specification.

My invention has reference to that class of machines in which the paper to be written upon is supported on a flat bed or platen over
 10 which a downwardly-acting writing mechanism is movable horizontally for letter and line spacing, as in the Elliott & Hatch machine of commerce and similar machines. At the present day these machines are extensively used
 15 by railway companies, express companies, and commercial houses employing blank forms of various sizes and shapes and frequently demanding the production of a large number of copies by the use of carbon-sheets between
 20 the paper sheets in the ordinary manner.

The aim of my invention is to simplify and cheapen the construction of the machine and permit the holding of sheets of various sizes and widths securely along both edges or along
 25 one edge and also along any desired point in their width, so that the matter may be written with accuracy at the exact point required and so that the sheets will be prevented from creeping or moving one upon another during
 30 the printing action.

To this end I combine with the bed or platen two longitudinal clamping bars or plates, one of which is preferably fixed in position to secure the sheet at one edge, while the other,
 35 lying parallel therewith, is movable transversely of the platen, that it may be operated at any required distance from its companion as the varying widths of the intermediate sheets may demand.

Referring to the accompanying drawings, Figure 1 represents a top plan view of the platen of my machine and the paper-confining devices thereon. Fig. 2 is an end view of the same looking from the front. Fig. 3 is
 40 a longitudinal vertical section on the line 3 3 of Figs. 1, 2, and 5. Fig. 4 is a like section on a larger scale through the front end only. Fig. 5 is a vertical cross-section on the line 5 5 of Figs. 1, 3, and 4.

Referring to the drawings, A represents a flat bed or platen for the purpose of supporting the sheets to be written upon. It may be

of any suitable material; but it is ordinarily of iron with a thin surface of vulcanized rubber, as usual in this class of machines.

B B represent two parallel guide-rails, extending in a fore and aft direction along the sides of the platen and secured firmly thereto by screws C or otherwise. These guides B support the open rectangular frame D, which
 60 is free to slide forward and backward for line-spacing and which in turn gives support to the ordinary writing-machine E, mounted to move right and left thereon for letter and word spacing.

The machine may be constructed in any ordinary manner and the ordinary devices provided to control the spacing movements of the machine and the frame D.

Referring now to my improved devices for
 70 confining the sheets upon the platen beneath the writing mechanism, F represents a longitudinal clamping bar or plate lying lengthwise of the platen at the left side and mounted on a horizontal pivot-rod *f*, so that it may
 75 be turned upward and downward to release and confine the edge of the sheet or sheets G. In the present instance the clamp is mounted on a longitudinal pivot-rod *f*, sustained in plates *f'*, extended and secured between the platen and the overlying guide-rail B. Spiral springs H, encircling the pivot-rod, bear at one end on the frame and at the
 80 other end on the clamp-plate, urging it downward, so that it will securely hold the sheets
 85 inserted thereunder. A finger-piece *f*² is formed on or attached to the forward end of the plate as a means of turning the same upward to release the sheets and holding it while the sheets are being inserted there-
 90 under.

It will be observed that by means of the foregoing device it is possible to secure one or more sheets along one edge securely upon the platen regardless of their length and
 95 this without the necessity of removing or lifting the writing mechanism or the guides which give it support.

For the purpose of securing the sheets at the opposite or right-hand edge I provide a
 100 second clamping bar or plate K, extending lengthwise of the platen from end to end and carried at its ends by two arms *k*, both mounted loosely on a horizontal supporting-shaft L,

lying beneath the platen. One of these arms is fashioned into a finger-piece or handle k' , the depression of which will serve to lift the clamp K from the platen against the action of a spring k^2 , which tends to urge the clamp K downward with sufficient pressure to hold the sheet or sheets firmly in place. After the sheets are laid upon the platen it is only necessary to depress the handle k' in order to lift and sustain clamp K, under which the sheets may be passed. On releasing the handle the clamp is automatically depressed and the sheets firmly held. It will be observed that the sheets may be extended beneath and beyond the clamp K, which may be used to confine them at any desired point in their width. This is particularly advantageous when, as is frequently the case, it is desirable to write upon narrow sheets overlying broader sheets on which the matter on the upper sheet is to be made to appear through the medium of a carbon-sheet, as usual.

As the bar K is a long one and liable to be twisted by lifting action applied at one end only, I connect its two sustaining-arms k beneath the platen by a semitubular or other stiff connection k^3 , as shown in Figs. 3, 4, and 5, adapted to resist the wringing or twisting strain.

In order that the clamp K may be caused to act along the margin of sheets of different widths, it is movable transversely across the platen, and to this end its supporting-shaft L is sustained in slides M, engaging over the ends of the platen and movable along its edges.

In order that the clamp K may be conveniently moved at both ends and kept parallel with clamp F, I provide the shaft L with pinions N, secured thereto and engaging racks O, attached to the under side of the platen, so that when the shaft is rotated the pinions will travel along the racks, carrying with them the shaft-supporting slides M and the clamp. For the purpose of rotating the shaft L to effect the lateral movement of the clamp a knob l is secured to its end.

While I prefer to retain the details of construction herein shown, it is to be understood that they may be variously modified without departing from the limits of my invention.

I believe myself to be the first to combine with the flat platen the spring-actuated clamp and means for lifting the same at both ends simultaneously, and also the first to combine with a clamp overlying the platen means for adjusting the same laterally and equally at both ends.

It is obvious that my clamping devices may be used in connection with machines of any suitable construction, and it is also obvious

that two or more movable clamps may be employed. While I consider the rack and pinions the most reliable means for effecting an equal movement of the two ends of the clamp, it is to be understood that my invention includes any equivalent arrangement for the purpose.

Having described my invention, what I claim is—

1. In a type-writing machine, a flat platen, guides along the sides of the platen, a writing mechanism movable on said guides for line-spacing, and two spring-actuated clamps extending lengthwise over the platen between it and the writing mechanism, said clamps operative independently of the machine-guides and adjustable laterally one in relation to the other, whereby sheets of different widths may be confined along their edges and released without moving the writing mechanism.

2. In a writing mechanism, the combination of a flat platen, slides at its ends, and a clamping-bar overlying the platen and pivotally connected to the slides.

3. In a type-writing machine, a flat platen, a vertically-movable clamp overlying the platen, and means for imparting lateral motion to the two ends of the clamp equally.

4. In a type-writing mechanism, the platen, the slides thereon, the clamp hinged to the slides, and means for moving the two slides equally.

5. In a type-writing machine, a flat platen, a vertically-movable spring-clamp extending across the same, slides carrying the clamp, a shaft carried by the slides and provided with pinions, and racks engaging the pinions, whereby lateral movement of the clamp may be effected.

6. In a type-writing machine, the flat platen and a writing mechanism movable thereover, in combination with slides M, mounted to move along opposite edges of the platen, and a spring-actuated clamping-bar extending over the platen and carried at its ends by the slides.

7. In a type-writing machine, a flat platen and a writing mechanism movable thereover, in combination with two parallel clamps extending longitudinally of the platen and adjustable laterally one in relation to the other, and means for maintaining the parallelism of said clamps.

In testimony whereof I hereunto set my hand, this 8th day of April, 1902, in the presence of two attesting witnesses.

PHILIP T. DODGE.

Witnesses:

M. A. DRIFFILL,
A. J. STEIDEL.