

No. 837,343.

PATENTED DEC. 4, 1906.

W. M. RULE.
BOOK TYPE WRITER.
APPLICATION FILED MAY 4, 1905.

2 SHEETS—SHEET 1.

FIG. 1.

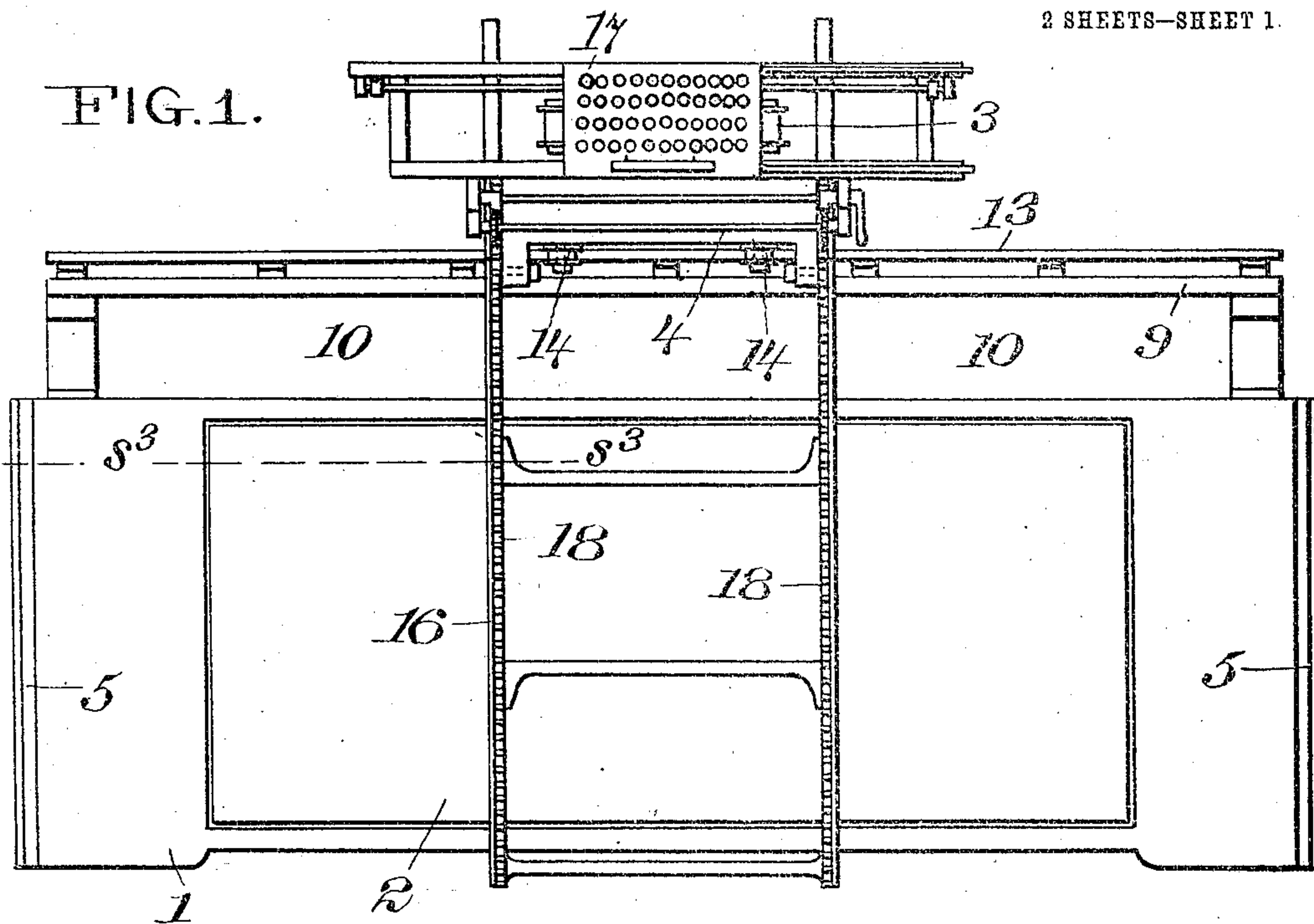
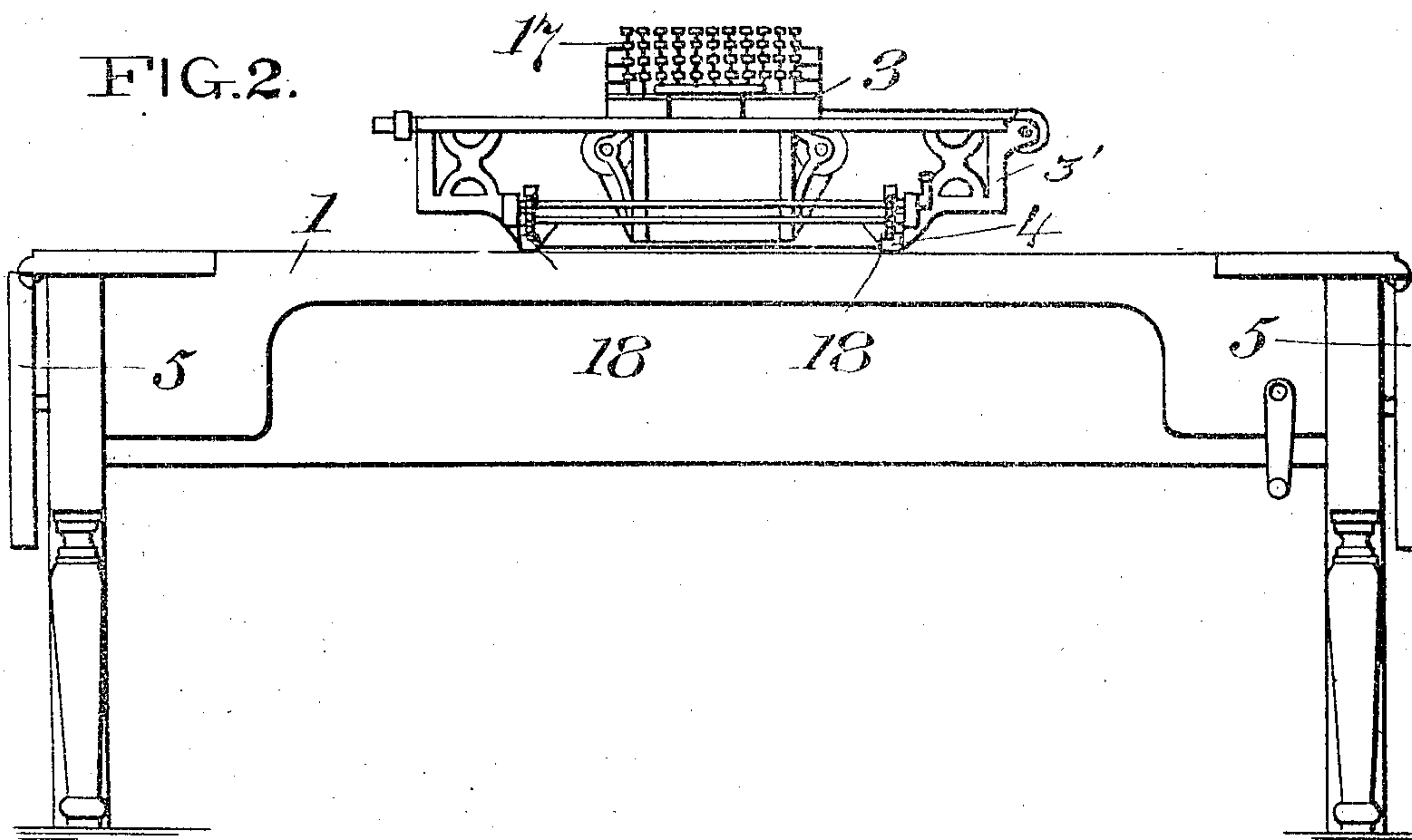


FIG. 2.



WITNESSES.

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2 SHEETS—SHEET 2

Fig. 3.

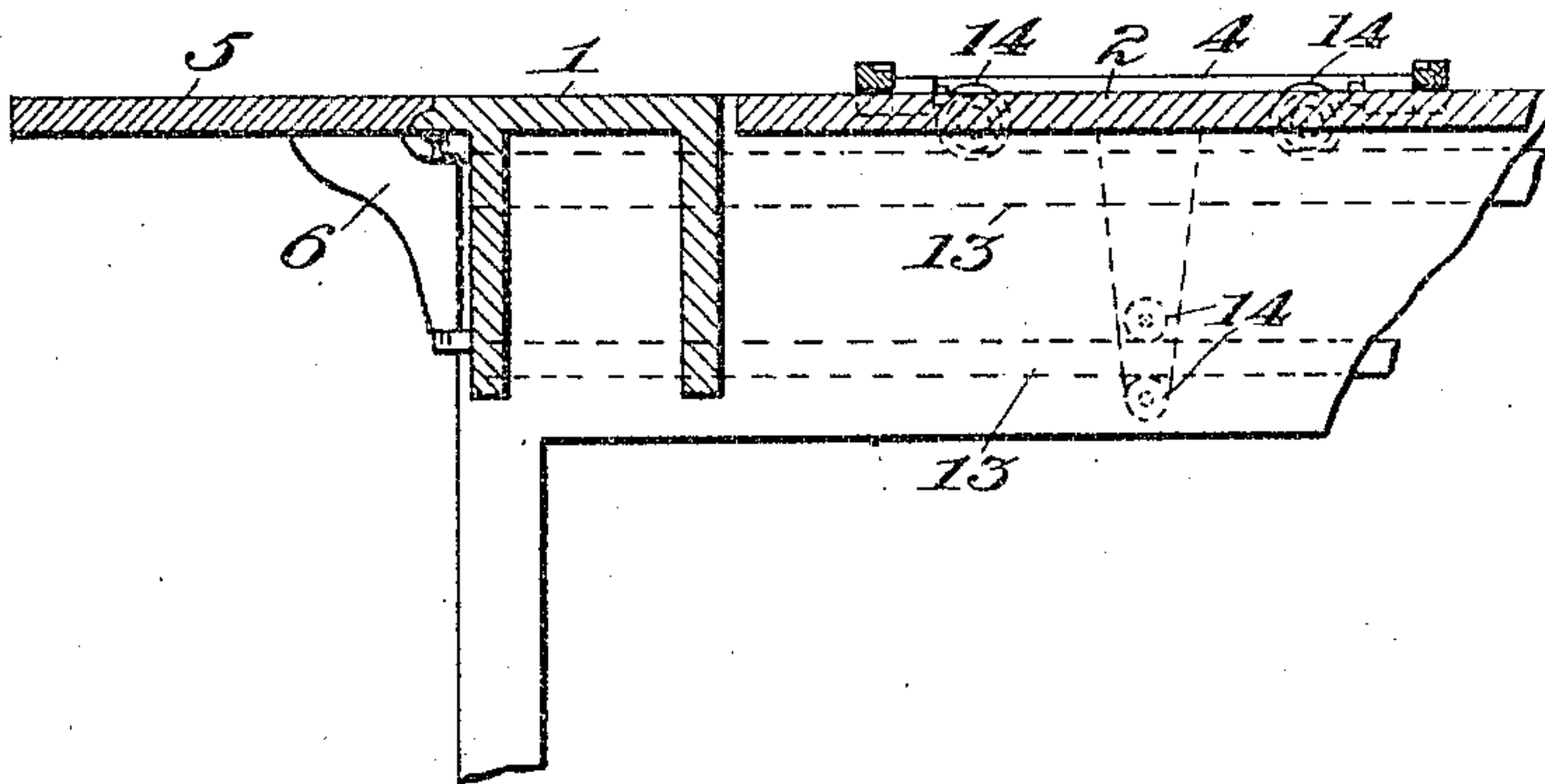
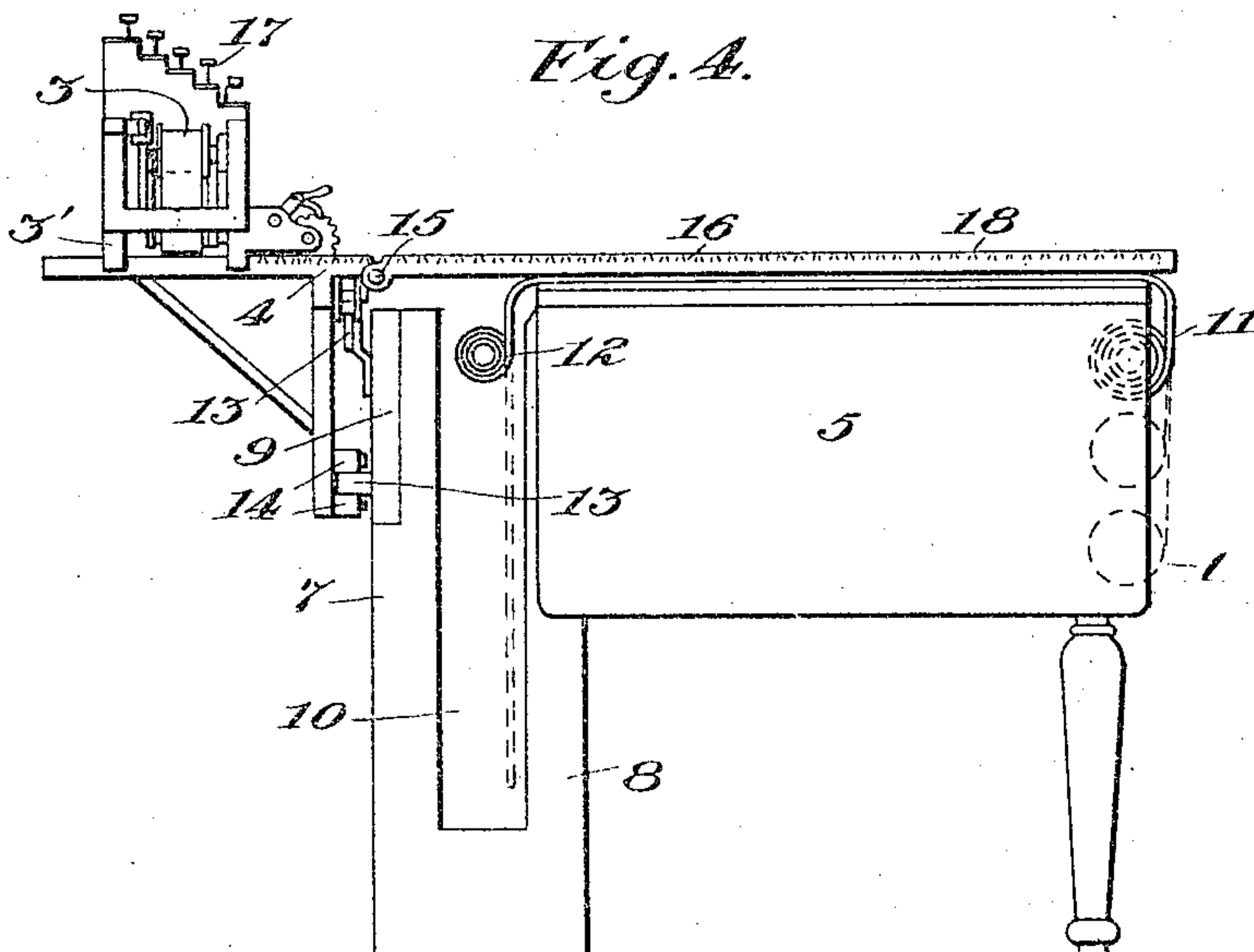


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM MANSFIELD RULE, OF TORRINGTON, CONNECTICUT, ASSIGNOR
TO GEORGE H. BENJAMIN, TRUSTEE, OF NEW YORK, N. Y.

BOOK TYPE-WRITER.

No. 837,343.

Specification of Letters Patent.

Patented Dec. 4, 1906.

Application filed May 4, 1905. Serial No. 258,897.

To all whom it may concern:

Be it known that I, WILLIAM MANSFIELD RULE, a citizen of the United States, residing at Torrington, county of New Haven, State of Connecticut, have invented certain new and useful Improvements in Book Type-Writers, of which the following is a specification.

My invention relates generally to type-writing machines and as herein embodied is adapted particularly for use in machines of this class known as "book" type-writers, in which the key-operated printing mechanism as ordinarily mounted is movable relatively to a fixed plate or platen supporting the paper.

The object of the invention is to render such machines effective for use with paper of any length or width, and to this end the printing mechanism and platen are relatively mounted to permit paper of any size, in either sheet or roll form, to be readily placed in position and adjusted to receive the desired impression—that is to say, to have matter type-written at any point thereon.

The accompanying drawings will serve to illustrate mechanism suitable for carrying my invention into effect. I wish it understood, however, that I do not limit myself to the mechanism shown, as other forms may be employed operating in substantially the same manner to produce practically the same result.

In the drawings, Figure 1 is a plan view showing a type-writing machine constructed and mounted in accordance with my invention. Fig. 2 is a view in front elevation of the same. Fig. 3 is a detail sectional view on the line S³ S³ of Fig. 1. Fig. 4 is an end view.

Referring now to the drawings, A table 1 is shown adapted to serve as a support for a platen 2 of a type-writing machine, the printing mechanism of which comprises the printing-machine 3 and its carrier 31, upon which it is adapted to slide laterally, and is mounted upon a carriage 4, movable back and forth across the platen, as will be later on explained. At opposite ends the table is provided with hinged leaves 5 5, which may be swung upward in the plane of the platen, as in Fig. 3, and supported by swinging brackets 6 6.

L-shaped uprights 7 7, secured at their

lower ends to the rear legs 8 8 of the table and connected at their upper ends by a cross-piece 9, form an extension-frame, which is offset sufficiently from the table or platen to provide an intervening paper-receiving space, chamber, or pocket 10, suitable for receiving the printed portion of the sheet as it comes from the platen.

In Fig. 4 delivery and take-up rolls 11 and 12 are shown in connection with the platen and may be employed, if desired, to carry the sheet. For manifolding purposes the number of such rolls would obviously be increased, as indicated in dotted lines.

Two guide-rails 13 13, secured upon the cross-piece 9 of the extension-frame, serve to support the carriage 4, which is mounted on rollers 14 14, running upon the rails 13 13 throughout the length of the table. Forming a continuation of the carriage proper and hinged to the same at 15 there is an adjustable section 16, which bridges the paper-receiving space 10 and extends across the platen, as shown in Figs. 1 and 4.

The printing mechanism 3, controlled and operated in the usual manner by a keyboard 17, is movable on parallel tracks 18 18, which extend throughout the entire length of the carriage and the adjustable section 16 thereof and may be toothed, as indicated, to cooperate with a suitable feed device (not shown) in the usual manner. Thus mounted the printing mechanism is movable throughout the length and breadth of the platen and may be shifted clear thereof onto the track-sections of the carriage proper to permit the hinged portion 16 of the latter to be swung up to give access to the platen and the space 10 in the rear thereof for the inspection, adjustment, or removal, &c., of the paper.

From the foregoing description it will be clear that in operation the carriage 4, including the track-rails 18, may be moved along the table on the supports 13 the entire length of the platen, while the carrier 3' of the printing mechanism is movable along the rails 18 of the carriage for line-spacing, the type-machine 3 of the printing mechanism moving laterally on the carrier 3' for letter-spacing when a key is struck.

The operation, advantages, &c., of my invention will be apparent from the foregoing description.

Having thus described my invention, I claim—

1. The combination of a table adapted to serve as a platen, a carriage movable longitudinally along the table, a support for the carriage located at a distance from the table, printing mechanism carried by the carriage, and means for moving the printing mechanism along the carriage and across the table whereby said printing mechanism is effective throughout the area of the table.
2. The combination of a table adapted to serve as a platen, a carriage provided with hinged rails, movable longitudinally along the table, a support for the carriage located at a distance from the table, printing mechanism carried by the carriage, and means for moving the printing mechanism longitudinally along the carriage.
3. The combination of a table adapted to serve as a platen, a carriage movable longitudinally along the table, a support for the carriage located at a distance from the table, guide-rails on said support, printing mechanism movable with the carriage, and means for moving the printing mechanism longitudinally along the carriage.
4. The combination of a table adapted to serve as a platen, a carriage movable longitudinally along the table and provided with rails hinged at a point beyond the transverse width of the table, a support for the carriage located at a distance from the table, guide-rails on said support, printing mechanism movable with the carriage, and means for moving the printing mechanism longitudinally along the carriage.
5. The combination of a table adapted to serve as a platen, a carriage longitudinally movable along the table, a support for the carriage located at a distance from the table, key-operated printing mechanism carried by the carriage and automatically movable across the carriage when a key is struck, and means for longitudinally moving the printing mechanism along the carriage.
6. The combination of a table adapted to serve as a platen, means for moving the sheet to be printed across the table, a carriage movable longitudinally of the table, a support for the carriage located at a distance from the table, printing mechanism carried by the carriage, and means for moving the printing mechanism longitudinally along the carriage.
7. The combination of a table adapted to serve as a platen, a carriage movable longitudinally along the table provided with guides and with rails hinged at a point beyond the transverse width of the table, a support for the carriage located at a distance from the table, printing mechanism movable with the carriage, and means for moving the printing mechanism longitudinally along the carriage.
8. The combination of a table adapted to serve as a platen, a carriage movable longitudinally along the table and provided with roller-bearings, a support for the carriage separated at a distance from the table, guide-rails mounted on said support which coact with the roller-bearings on the carriage, printing mechanism carried by the carriage, and means for moving the printing mechanism longitudinally along the carriage.
9. The combination of a table adapted to serve as a platen, a carriage movable longitudinally along the table, said carriage divided into two portions, one portion situated at a distance from the table, and the other portion extending over the table, a support for the carriage separated from the table but supported thereby, printing mechanism carried by the carriage, and means for moving the printing mechanism longitudinally along the carriage.
10. The combination of a table adapted to serve as a platen, a carriage movable longitudinally along the table, a support for the carriage located at a distance from one longitudinal edge of the table so as to leave an intervening space between the table and the support, printing mechanism mounted on the carriage and movable with the carriage along the table, and means for moving the printing mechanism longitudinally along the carriage across the table.
11. The combination of a table adapted to serve as a platen, a carriage movable longitudinally along the table and provided with vertically and horizontally disposed roller-bearings, a support for the carriage located at a distance from the table and provided with guide-rails which coact with said roller-bearings, printing mechanism carried by the carriage, and means for moving the printing mechanism longitudinally along the carriage across the table.
12. The combination of a table adapted to serve as a platen, a carriage movable longitudinally along the table, said carriage comprising a pair of parallel rails, vertically and horizontally disposed roller-bearings, carrying means for said bearings, a support for the carriage located at a distance from the table provided with guide-rails which coact with said roller-bearings, printing mechanism carried by the carriage, and means for moving the printing mechanism longitudinally along the carriage.
13. The combination of a table adapted to serve as a platen, means for progressively moving the sheet to be printed across the table, said means comprising a take-up roll located beyond one longitudinal edge of the table, a carriage movable longitudinally of the table, a support for the carriage located at a distance from the table and beyond the take-up roll, printing mechanism carried by the carriage, and means for moving the printing

mechanism longitudinally along the carriage across the table.

14. In a book type-writer, the combination of a table, a carriage movable along the table in the direction of its length, a support for such carriage located at a distance from one edge of the table, a type-writing machine carried by the carriage, and means for moving

the type-writing machine along the carriage and across the table.

In testimony whereof I affix my signature in the presence of two witnesses.

WILLIAM MANSFIELD RULE.

Witnesses:

GEO. E. COLE,
A. P. HINE.