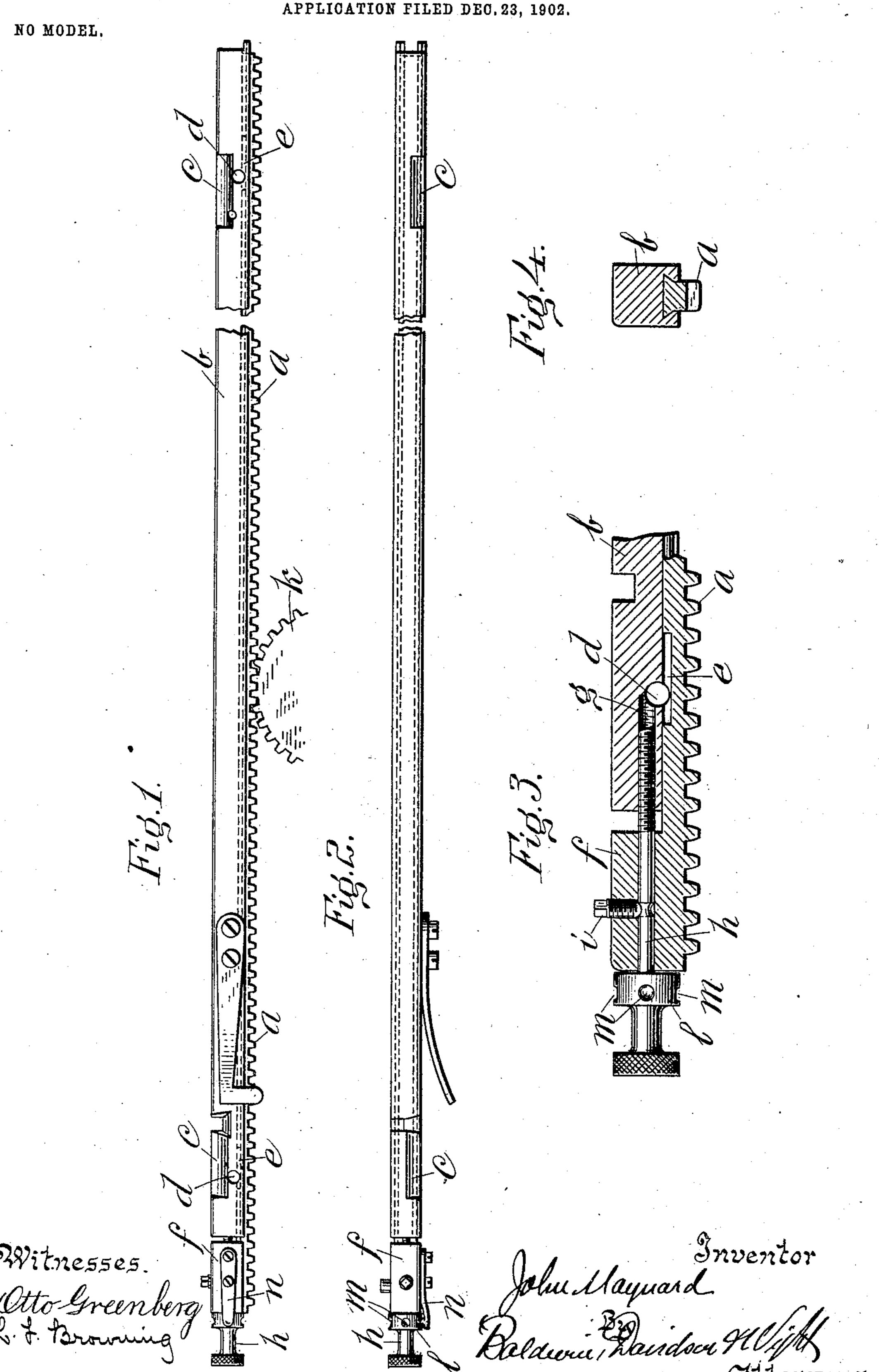
## J. MAYNARD. WRITING MACHINE.

APPLICATION FILED DEC. 23, 1902.



## United States Patent Office.

## JOHN MAYNARD, OF NEW YORK, N. Y.

## WRITING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 773,802, dated November 1, 1904.

Application filed December 23, 1902. Serial No. 136,411. (No model.)

To all whom it may concern:

Be it known that I, John Maynard, a citizen of the United States, residing in the borough of Manhattan, city of New York, State of New York, have invented certain new and useful Improvements in Writing-Machines, of which the following is a specification.

This invention comprises a novel organization whereby the paper carrier or carriage no may be adjusted relatively to the rack-bar to

afford adjustment of the letter-space.

In the drawings, which show the invention applied to the rack-bar of a Hammond machine, Figure 1 is a side elevation; Fig. 2, a plan; Fig. 3, a detail longitudinal section of one end on an enlarged scale, and Fig. 4 a transverse section.

The rack a is mounted to slide on a frame or guide b, in which it may be dovetailed, as in Fig. 4. The frame is provided with seats cc, usually formed on the bar itself for attachment to the frame of the carriage, and with apertures d d for securing-bolts.

In the present construction to permit end-25 wise adjustment of the carriage relatively to the rack it is recessed at e e for accommodation of the bolts. At one end there is secured to or formed with the rack a head f. conforming in cross-section to the frame b. 30 A longitudinal aperture in this head, whose axis is coincident with a threaded aperture g in the carriage-frame, receives an adjustingscrew or threaded rod h, whose threaded end works in the aperture g. The rod is held in 35 place by a small screw-bolt i working in the block and whose end enters an annular groove in the rod. k indicates the usual gear or toothed spring-drum of a Hammond machine. By rotating the rod the carriage may be 40 moved longitudinally to thereby adjust the letter-space. On the rod, adjacent the head f, is an annular boss l, having in its periphery four equidistant recesses m, which are en-

gaged by a teat on the end of a plate-spring

vice serves not only as a lock, but also as an

indicator to the operator as engagement of

the spring with the successive recesses m may

45 n, attached to the side of the head. This de-

be heard or felt. The pitch of the thread on the end of the rod may be such that two and 50 one-half revolutions equal the space of one letter, and in that event movement of the rod so that the spring may pass from one recess to the next would represent an adjustment equal to one-tenth of the letter-space. By 55 means of the screw h the letter-space may be adjusted with the most minute exactness and is not disturbed or changed by vibration of the machine.

This invention furnishes an accurate and 60 simple means for longitudinal adjustment of the paper for any desired purpose without shifting the paper in relation to the paper-holding devices. The utility of such adjustments is understood by those familiar with 65 the art. The invention is applicable to machines other than those of the Hammond type.

I claim as my invention—

1. In a writing-machine, means for adjusting the letter-space comprising the combination of the rack-bar guide adapted to be permanently attached to the frame of the paper-carriage, a rack-bar fitted to slide longitudinally therein, an apertured head on the rackbar, a rod passing therethrough and having a 75 threaded end engaging a threaded socket in the guide, an annular boss on the rod having recesses therein and a yielding device mounted on the head and successively engaging the recesses as the rod is rotated.

2. In a writing-machine, means for adjusting the letter-space comprising the combination of a rack-bar guide adapted to be permanently attached to the frame of the paper-carriage, a rack-bar fitted to slide longitudinally 85 therein, an apertured head on the rack-bar, a rod passing therethrough and having a threaded ed end engaging a threaded socket in the guide and means for preventing endwise movement of the rod in said head.

In testimony whereof I have hereunto subscribed my name.

JOHN MAYNARD.

Witnesses:

KATHARINE MACMAHON, WILLIAM A. STATELIN.