## G. GABRIELSON. TYPE WRITING MACHINE. PPLICATION FILED MAY 25, 1906.

Patented July 11, 1911. 997,911. Carl Laborlan Witnesses attorneys

## UNITED STATES PATENT OFFICE.

CARL GABRIELSON, OF SYRACUSE, NEW YORK, ASSIGNOR TO L. C. SMITH AND BROS. TYPEWRITER COMPANY, OF SYRACUSE, NEW YORK, A CORPORATION OF NEW YORK.

## TYPE-WRITING MACHINE.

997,911.

Specification of Letters Patent.

Patented July 11, 1911.

Original application filed April 29, 1904, Serial No. 205,641. Divided and this application filed May 25. 1906. Serial No. 318,712.

To all whom it may concern:

Be it known that I, CARL GABRIELSON, a citizen of the United States, and resident of Syracuse, Onondaga county, and State of 5 New York, have invented certain new and useful Improvements in Type-Writing Machines, of which the following is a specification.

This application is a division of my ap-10 plication Serial No. 205,641, filed April 29,

The invention relates particularly to the mounting of the platen in the carriage of a typewriting machine and means for detach-15 ably locking the platen in the carriage.

The invention will be described in connection with the accompanying drawings, in

which,

Figure 1 is a top plan view partly broken 20 away of a typewriter platen and a portion of the carriage in which it is supported; Fig. 2 is a right end view partly in section on the line 2 of Fig. 1; Fig. 3 is a section on the line 3 of Fig. 1.

Referring to the drawing, 10 indicates the rear bar or frame of a typewriter carriage, from the ends of which extend forwardly two arms 11, 12, in which the platen 13 is mounted. The platen is fixed on a shaft 14 30 and provided with the usual ratchet wheel 15 by means of which it is given a step by step rotation. On the ends of the shaft 14 are knobs 16 by means of which the platen may be turned by hand.

The present invention relates particularly to the bearings of the platen and means for removably locking the platen in the carriage. On each end of the platen shaft 14 is a sleeve or collar 17 forming a bearing for the shaft, 40 and in which the shaft turns freely. As shown in Fig. 3, the sleeve 17 is confined between the hub of the knob 16 and the hub of the ratchet wheel 15 with freedom to turn relatively to said hubs. Each of the arms 45 11 and 12 is provided with a notch 18 in its upper surface, forming a seat for the bearing sleeve 17. The sleeve is preferably provided with annular flanges at its ends which fit against the sides of the arms 11, 12 and

50 prevent longitudinal movement of the platen 13. It will evidently be sufficient to provide but one of the sleeves 17 with annular flanges, the other sleeve being a simple cylinder, if desired.

Each of the bearing sleeves is held in posi-.55 tion by a bolt 19 which is mounted on the corresponding arm of the carriage and secured thereto by a screw 20 passing through a slot 21 in the bolt. A knob 22 is preferably provided for operating the bolt 60 and a tongue 23 on the forward end of the bolt is adapted to engage and hold the bearing sleeve 17 against rotary and longitudinal movement in its seat. As shown in Figs. 2 and 3 the tongue of the bolt enters between 65 the flanges of the sleeve 17 when the bolt is in its forward position. When the bolts are moved back to the extent permitted by the slots 21, the platen may be lifted freely from the machine. When the platen is re-70 placed and the bolts moved forward, the bearing sleeves 17 are tightly clamped in the carriage arms but the platen is free to turn in said sleeves. In the accompanying drawing I have also illustrated certain of the 75 platen turning devices for line spacing. These devices are described and claimed in my pending application Serial Number 205,641, of which this application is a division and I therefore do not deem it neces- 80 sary to describe them particularly herein.

What I claim and desire to secure by Let-

ters Patent is.

1. In a typewriting machine, the combination with the platen and its shaft, of a 85 sleeve upon the shaft adapted to form a bearing therefor, a seat upon the carriage frame to receive said sleeve, and means for securing said sleeve in said seat against rotary or longitudinal movement.

2. In a typewriting machine, the combination with the platen, and its shaft, of a bearing sleeve upon said shaft, means for preventing longitudinal movement of the sleeve relatively to the shaft, a seat in the 95 carriage frame to receive the sleeve, flanges on the sleeve for preventing longitudinal movement of the sleeve in its seat, and means for removably securing the sleeve to its seat.

3. In a typewriting machine, the combi- 100 nation of a carriage having depressions in its end pieces, a platen, sleeves on the ends of the platen shaft and seated in said depressions in the carriage, means for holding the platen shaft from longitudinal movement in 105 said sleeves while permitting rotation of said shaft therein, and means connected with the carriage for removably locking the sleeves

in the seats formed by the depressions in the carriage frame.

4. In a typewriting machine, the combination with the platen and its shaft, of 5 sleeves on the ends of the platen shaft and in which said shaft is rotatable, a carriage, seats for said sleeves in the ends of the carriage, and sliding bolts on the carriage

adapted to removably lock the sleeves in their seats.

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

CARL GABRIELSON.

Witnesses:
C. M. Stevens,
C. F. Parsons.