

C. E. PETERSON.
TYPE WRITER PLATEN.
APPLICATION FILED JAN. 9, 1902.

NO MODEL.

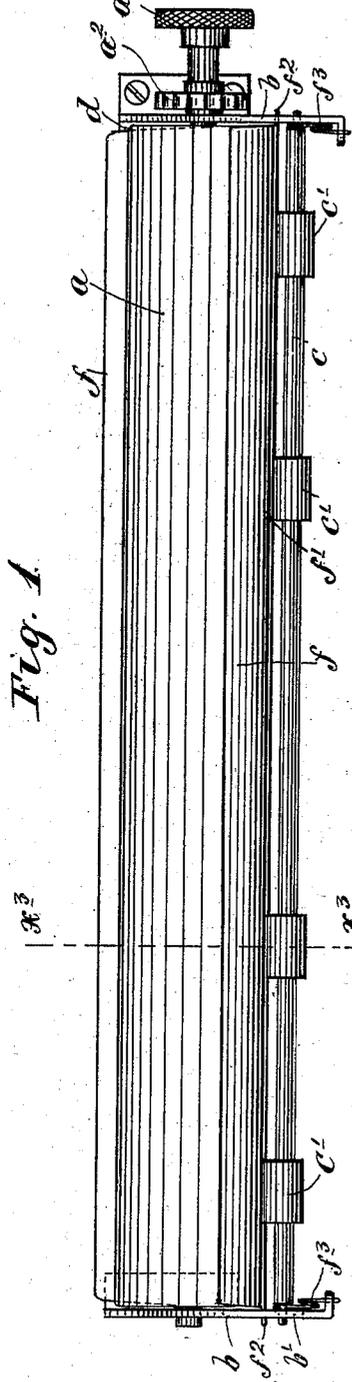


Fig. 1

Fig. 2.

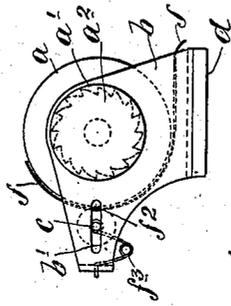


Fig. 3.

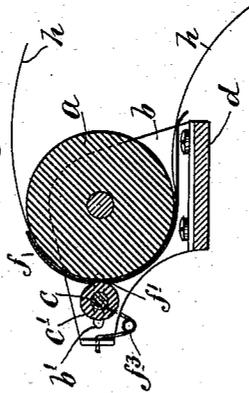


Fig. 4.



Witnesses.
A. H. Opsahl
H. D. Elgore

Inventor.
Charles E. Peterson.
By his Attorneys.
Williamson & Merchant

UNITED STATES PATENT OFFICE.

CHARLES E. PETERSON, OF MINNEAPOLIS, MINNESOTA.

TYPE-WRITER PLATEN.

SPECIFICATION forming part of Letters Patent No. 720,062, dated February 10, 1903.

Application filed January 9, 1902. Serial No. 89,002. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. PETERSON, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Type-Writer Platens; and I do hereby declare the following of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to type-writer platens, and has for its object to provide certain improvements therein with a view of securing greater efficiency.

To this end my invention consists of the novel devices and combinations of devices hereinafter described, and defined in the claims.

The invention is illustrated in the accompanying drawings, wherein like notations refer to like parts throughout the several views.

In said drawings, Figure 1 is a plan view showing my improved platen detached with some parts removed. Fig. 2 is a right end elevation with respect to Fig. 1. Fig. 3 is a section on the line $x^3 x^3$ of Fig. 1, and Fig. 4 is a front elevation of the paper-guard or guide-shield detached.

The main or platen roller a is mounted in bearing-brackets b , fixed to the ends of the base-plate d in the usual or any suitable way. The bearing-brackets b are of proper form to afford forward extensions, with bearing-slots b' , in which slots are mounted the journals of a feed-shaft c , having fixed thereto a series of small rubber rollers c' . The rollers c' and the shaft c are outward of the paper-guard or guide-shield f , and the small rollers c' work through openings f' in said paper-guide f , as clearly shown in Figs. 1 and 3. The paper-guide f is provided with end lugs f^2 , which also work in the bearing-slots b' . A pair of springs f^3 are applied to react against inward extensions of the bearing-brackets b and the journals of the feed-shaft c , thereby putting said feed-shaft under tension and holding the rollers c thereof in frictional contact with the main or platen roller a or against the face of the paper h when the latter is in working position between the paper-guide and the platen-roller a .

The platen-roller a is provided at its right end with the usual finger-disk a^1 and a suitable ratchet-disk a^2 for cooperation with line-feed and lock-pawl devices. (Not shown, but which may be of the usual or any suitable form.) In practice the platen is also provided on its base at the rear with a feed rack or ratchet for cooperation with a suitable escapement device under the control of the keyboard to effect the lateral travel or letter-feed of the platen.

The paper-guide f , being mounted with its end lugs f^2 in the bearing-slots b' and located between the feed-shaft c and the platen-roller a , is loosely held in proper working position with perfect freedom to adapt itself to the different thicknesses of paper h or manifold sheets which may be fed between the same and the rollers.

As the feed-shaft c is under tension from the springs f^3 , it is of course obvious that when the platen-roller a is turned by hand the feed-rollers c' and the shaft c will receive motion from the platen-roller under the frictional contact between the parts, and hence the platen-roller and the feed-rollers will turn in the proper direction for cooperation to feed the paper h in either direction desired. The feed-rollers c' , being under the yielding tension from the springs f^3 , will adapt themselves to the thickness of the paper or manifold sheets being fed between the platen and the feed-rollers, and the paper-guide f , being free, will also adapt itself by moving outward, so as to afford the desired clearance for the easy feed of the paper. Otherwise stated, the tension from the springs f^3 takes effect on the feed-rollers c' and not on the paper-guide f . The feed-rollers c' are of sufficient size to afford the required amount of clearance between the feed-shaft c and the platen-roller a , so as to insure this freedom of adjustment of the paper-guide f .

In practice I have found that this combination of parts affords an extremely efficient form of paper-feed devices on type-writer platens. The paper-guide cannot interfere with the feed movement of the paper, and as the platen-roller and the feed-rollers act on opposite sides of the paper a reliable and positive feed is insured. Moreover, inasmuch as a series of the feed-rollers c' are employed,

acting against the platen-roller at several different points crosswise of the paper, a parallel or even feed of the paper will be insured. There is no tendency of the sheet of
 5 paper to go askew.

It is of course obvious that my invention herein disclosed is capable of modification of construction without departing from the spirit of the invention.

10 What I claim, and desire to secure by Letters Patent of the United States, is as follows:

1. The combination with a main or platen roller, of a feed-roller yieldingly mounted for cooperation with the main or platen roller,
 15 and a paper-guide loosely mounted on shifting pivots and working between said rollers with freedom for universal adjustments to adapt itself to said platen-roller and provided with one or more openings through which the

feed-roller acts on the platen-roller, substantially as described. 20

2. The combination with a main or platen roller, and end brackets or supports having slots b' , of the spring-pressed feed-roller having projecting trunnions working in said slots
 25 b' , and the paper-guide f having trunnions or projections f^2 also working in said slots b' , said paper-guide further having openings f' through which the sections of the feed-roller act on the platen-roller, substantially as de-
 30 scribed.

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

CHARLES E. PETERSON.

Witnesses:

JAS. F. WILLIAMSON,
 ELIZABETH KELIHER.