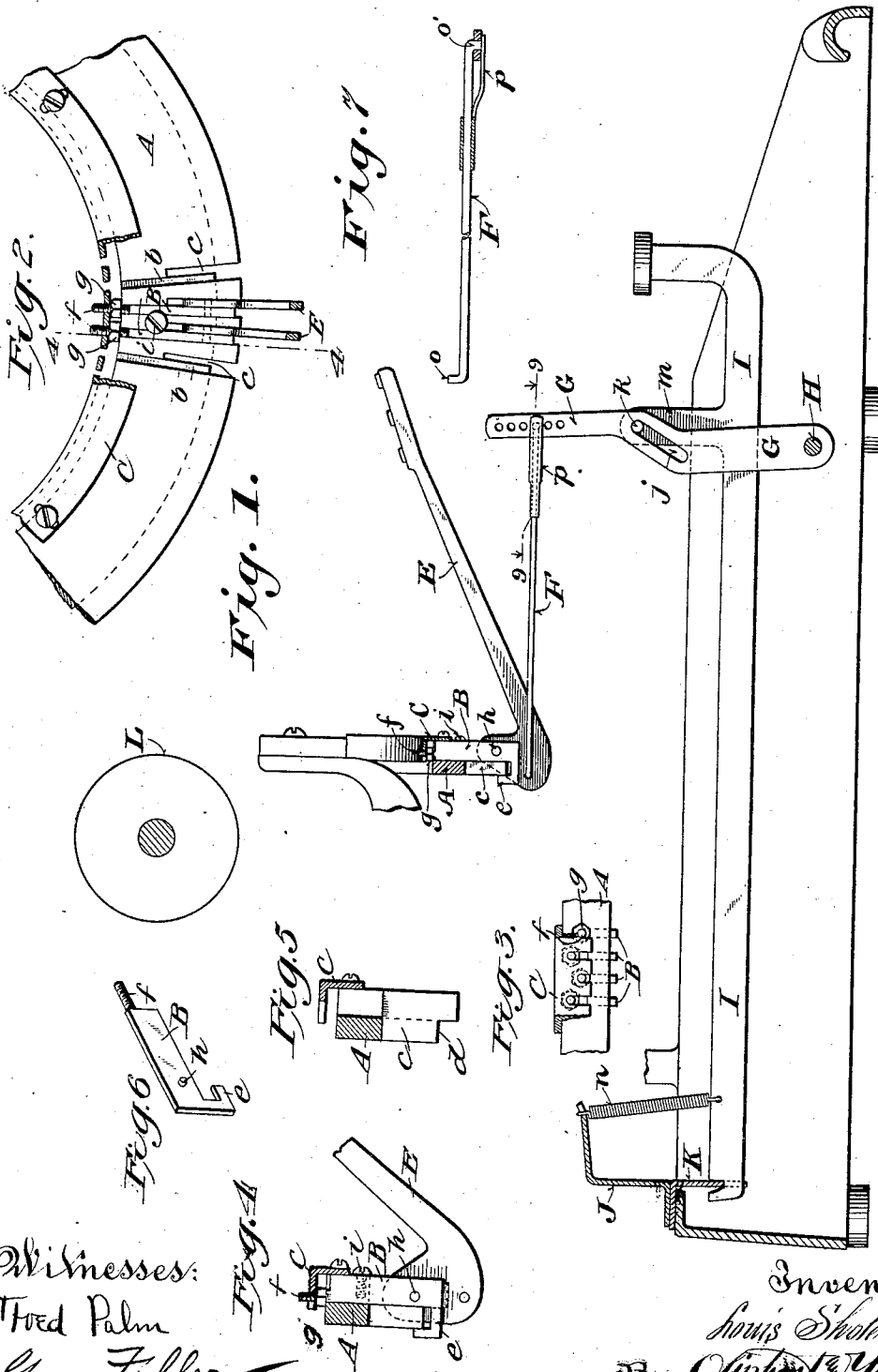


L. SHOLES.
- TYPE WRITING MACHINE.
APPLICATION FILED DEC. 24, 1906.

936,050.

Patented Oct. 5, 1909.



Witnesses:
Fred Palm
George Feller

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UNITED STATES PATENT OFFICE.

LOUIS SHOLES, OF MILWAUKEE, WISCONSIN.

TYPE-WRITING MACHINE.

936,050.

Specification of Letters Patent.

Patented Oct. 5, 1909.

Application filed December 24, 1906. Serial No. 349,338.

To all whom it may concern:

Be it known that I, LOUIS SHOLES, a citizen of the United States, and resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Type-Writing Machines; and I do hereby declare that the following is a full, clear, and exact description thereof.

The invention consists in what is herein shown, described and claimed, its object being to simplify and cheapen the construction of type-writing machines, as well as to provide for perfect alinement of the writing, especial reference being had to type-bar mechanisms in front strike species of such machines.

Figure 1 of the accompanying drawings represents a transverse section view of so much of a type-writing machine as is necessary to illustrate my improvements; Fig. 2, a front elevation of a fragment of a partly finished type-bar segment of the machine and parts in connection therewith, a stop-plate attachment being partly in section, Fig. 3, an upper edge view of a portion of what is shown in Fig. 2; Fig. 4, a sectional view indicated by line 4—4 in said Fig. 2; Fig. 5, a cross-section of said type-bar segment and stop-plate attachment, Fig. 6, a perspective view of a type-bar fulcrum-slide that is independently adjustable in the aforesaid segment, and Fig. 7, a view of a link-rod partly in horizontal section on the plane indicated by line 9—9 in Fig. 1.

Referring by letter to the drawings, A indicates a type-bar segment suitably secured in connection with the main-frame of the machine, this segment being radially recessed and slotted at suitable intervals. Each recess *b* of the segment is intersected by a slot *c*, and an angular notch *d* is provided in the rear lower portion of said segment from end to end of same. Engaging each recess of the aforesaid segment is a slide B having a lower angular hook *e* that is guided in the notch *d* and upon the rear of said segment. The slide is also provided with an upper screw-threaded shank *f* for an adjusting-nut *g*, and a suitably notched angle-plate C in detachable connection with the segment A engages the several slide-shanks over against the nuts on same to prevent working loose of said nuts or tampering with the same.

Each slide is provided with a lateral pivot-

lug *h* that serves as a fulcrum for the lower end of a type-bar E engaging a slot of the segment A adjacent to said slide. To properly align the type-bar, the corresponding slide is adjusted, by means of the nut *g* on the shank *f* of said slide. The adjustment having been effected, the slide is rigidly secured in adjusted position by a binding-screw *i* engaging the segment and arranged to have its head overlap the outer edge of said slide. A right-angle hook-end *o* of a link-rod F connects each type-bar with a rocker G that is loose on a supporting rod H, and provided with an oblique guide-slot *j* engaged by a lateral lug *k* of an arm *m* of a key-lever I, whereby there is a direct approximately horizontal pull of the link-rod on the type-bar and a good impact of said bar, when the key-lever is depressed against resistance of a spiral-spring *n* in connection with it and an angle-bar J of the machine, contraction of the spring serving to automatically return said key-lever and parts controlled by same to normal position, when released after depression. Another angle-plate K of the machine serves as a fulcrum for the several key-levers, and it is practical to make this plate and the one J aforesaid integral.

Each rocker G has the upper portion thereof preferably provided with a series of apertures and a right-angle hook-end *o'* of a corresponding link-rod F is engaged with a selected one of said apertures, a spring-tongue *p* being attached to said link-rod to lap said rocker opposite said hook, as is clearly shown in Fig. 9. By providing for adjustable connection of the link-rods with the rockers, the assembly of the machine and individual adjustment of the several slides B is facilitated.

As is customary in the art, each type-bar may be provided with three type as herein shown, ordinarily an upper and lower case letter and a numeral, punctuation-mark or other character, the platen L being normally in position to have the lower case letter impact against the same and interposed material upon which the writing is done, suitable mechanism will be employed to effect a vertical shift of the platen carriage (not shown) in one direction or the other, in order to permit the impact of an upper case letter, punctuation-mark or other character,

I claim:

1. In a type-writing machine, the combi-

- nation of a segment radially recessed and slotted at suitable intervals, a slide engaging each recess of the segment and provided with a lateral pivot-lug, type-bars hung on the lugs of the slides in the slots of said segment, means for holding each slide in independently adjusted position, and key-lever mechanism in conjunction with each type-bar.
2. In a type-writing machine, the combination of a segment radially recessed and slotted at suitable intervals, a slide engaging each recess of the segment and provided with a lateral pivot-lug as well as a screw-threaded shank, an adjusting-nut engaging the shank of each slide, type-bars hung on the lugs of the slides in the slots of said segment, means for binding each slide in its independently adjusted position, and key-lever mechanism in conjunction with each type-bar.
3. In a type-writing machine, the combination of a segment radially recessed and slotted at suitable intervals, a slide engaging each recess of the segment and provided with a lateral pivot-lug as well as a screw-threaded shank, an adjusting-nut engaging the shank of each slide, a stop-plate in detachable connection with said segment and engaging the shanks of the several slides over against the adjusting-nuts, type-bars hung on the lugs of the slides in the slots of the aforesaid segment, means for binding each slide in its

independently adjusted position, and key-lever mechanism in conjunction with each type-bar.

4. In a type-writing machine, the combination of a segment radially recessed and slotted at suitable intervals, a slide engaging each recess of the segment and provided with a lateral pivot-lug, type-bars hung on the lugs of the slides in the slots of said segment, binding-screws engaging the aforesaid segment to have their heads overlap edges of said slides, and key-lever mechanism in conjunction with each type-bar.

5. In a type-writing machine, the combination of a segment radially recessed and slotted at suitable intervals and provided with an angular notch from end to end, a slide engaging each recess of the segment and having an angular hook guided in said notch and against the rear of said segment, means holding the slide in adjusted position, and key-lever mechanism in conjunction with each type-bar.

In testimony that I claim the foregoing I have hereunto set my hand at Milwaukee in the county of Milwaukee and State of Wisconsin in the presence of two witnesses.

LOUIS SHOLES.

Witnesses:

N. E. OLIPHANT,
GEORGE FELBER.