C. L. SHOLES.
Type-Writing Machine.

No. 207,557. Patented Aug. 27, 1878.

Fig. 1.

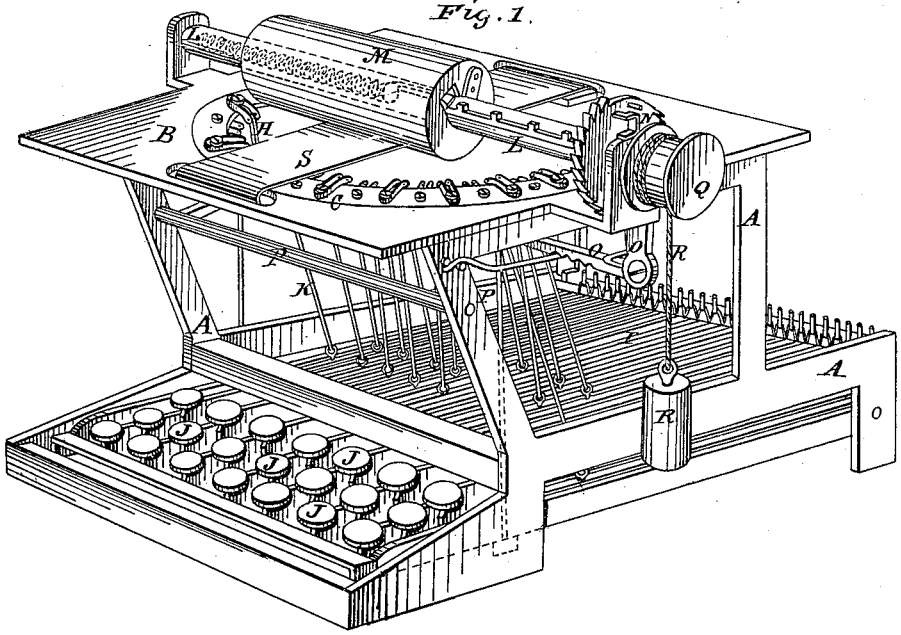


Fig. 2.

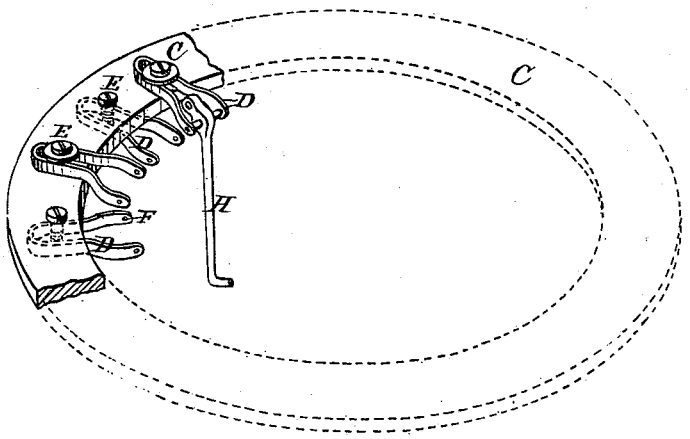
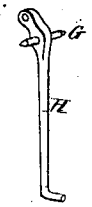


Fig. 3.



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UNITED STATES PATENT OFFICE.

C. LATHAM SHOLES, OF MILWAUKEE, WISCONSIN, ASSIGNOR TO THE TYPE WRITER COMPANY, OF NEW YORK, N. Y.

IMPROVEMENT IN TYPE-WRITING MACHINES.

Specification forming part of Letters Patent No. **207,557**, dated August 27, 1878; application filed April 19, 1878.

To all whom it may concern:

Be it known that I, C. LATHAM SHOLES, of Milwaukee, Wisconsin, have invented Improvements in Type-Writing Machines, of which the following is a specification:

The invention relates to the type-bars of type-writing machines; and its nature is in combining a type-bar which has two trunnion-like journals with a bifurcated adjustable hanger in one piece, which has a journal-bearing in each fork, and in combining a type-bar which has two trunnion-like journals, which have cone-like points on their ends, with a bifurcated adjustable hanger in one piece, which has a journal-bearing in each fork, adapted to receive and fit a cone-like pointed journal, and which forks are elastic.

The accompanying drawings and following description fully illustrate the invention.

The figures of the drawings represent views as follows: Figure 1, a view of a type-writing machine; Fig. 2, a view of a circular annular disk with the invention attached thereto, and Fig. 3 a view of a type-bar which has two trunnion-like journals, with cone-like journal-points at their ends.

The description is as follows: A represents the side plates of the main frame of a type-writing machine; B, the top plate on the side plates A; C, a circular annular disk in a hole and recess in the top plate A; D, a bifurcated hanger or series of hangers, whose forks are elastic, or springs attached at regular distances to and around on the disk C; E, a fastening-screw through a slot in or between the forks of the hanger D and into or through the disk C; F, a journal-bearing in the radially inner end of each fork of the hanger D; H, a type-bar pivoted between the forks of each hanger D; G, a trunnion-like journal on each side of each type-bar H; I, a series of levers under the top plate, B, and between the side plates, A; J, a key on the fore end of each lever I; L, a long axle, in bearings, across over the top plate, B; M, a cylindrical platen on the long axle L; Q, a pulley on the end of the axle L; R, a cord and weight attached to the pulley Q, and S an inking-ribbon attached and arranged so as to move over the striking-point of the types H and under the paper wrapped around the platen M.

The heads of the screws E are large enough to cover and hold down the hangers D, or washers are used for that purpose.

The hanger D may be made by bending a piece of metal in the form of a loop, as shown in Fig. 2, or it may be made otherwise, and the fastening-screw E may pass between the two sides of the loop, as shown in Fig. 2, or through a slot made for the purpose.

Horizontally in or through the inner end of each fork of the hangers D is sunk or bored a journal-bearing, F, which is adapted to fit the journal it is to receive and bear.

If the journal is a straight cylinder, the bearing is bored even through; but if the journal is a cone-point the bearing is made to fit.

Each fork of the hanger D is made elastic or spring-like, and the two are slightly spread apart when the type-bar is hung, so they will constantly press inwardly or toward one another against the cone-like ends or against shoulders at the end.

The journals G are rigidly attached to or integrally part of each type-bar H, and somewhat resemble the trunnions of a cannon.

The slot or aperture in the hanger D, where the fastening-screw E passes through, being longer than the diameter of the screw, the hanger can both be turned on the screw and can be moved radially out and in, and can thus be adjusted to bring the type into alignment.

The adjustability of the type-bars, so as to align the types and hold them rigidly in place when adjusted, so that the types when vibrated will always strike in the same place, are necessary requisites in the art, and the devices here described are well adapted to that end.

The spring-forks of the hanger D constantly press against the ends of the trunnions G of the type-bars H, so they must necessarily always strike at the same place when vibrated; therefore,

What I claim is as follows:

1. The combination of a type-bar which has two trunnion-like journals with a bifurcated adjustable hanger in one piece, which has a

journal-bearing in each fork, substantially as described.

2. The combination of a type-bar which has two trunnion-like journals, which have cone-like points on their ends, with a bifurcated adjustable hanger in one piece, which has a journal-bearing in each fork adapted to receive and fit a cone-like pointed journal, and which forks are elastic, substantially as described.

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