

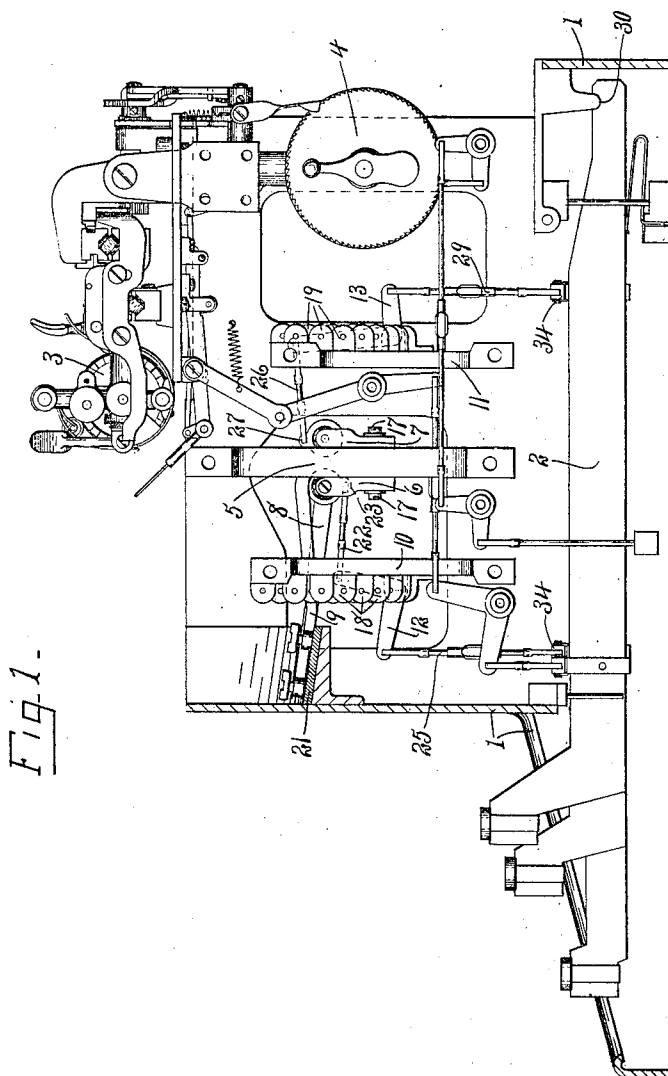
No. 896,283.

PATENTED AUG. 18, 1908.

F. J. DYETT.
TYPE WRITER.

APPLICATION FILED JULY 24, 1905.

3 SHEETS—SHEET 1.



WITNESSES:

Chas. Jones.
Chas. H. Young.

INVENTOR

Frank J. Dyett
Key Parsons
ATTORNEYS

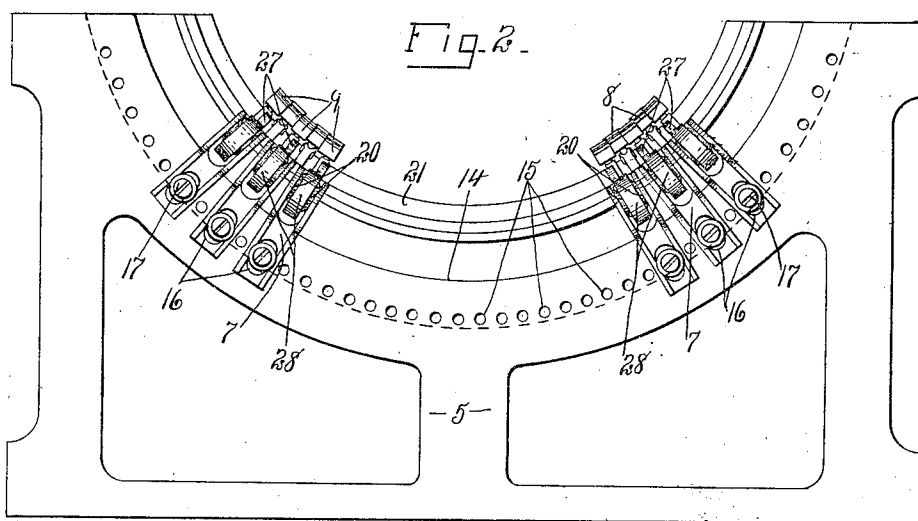
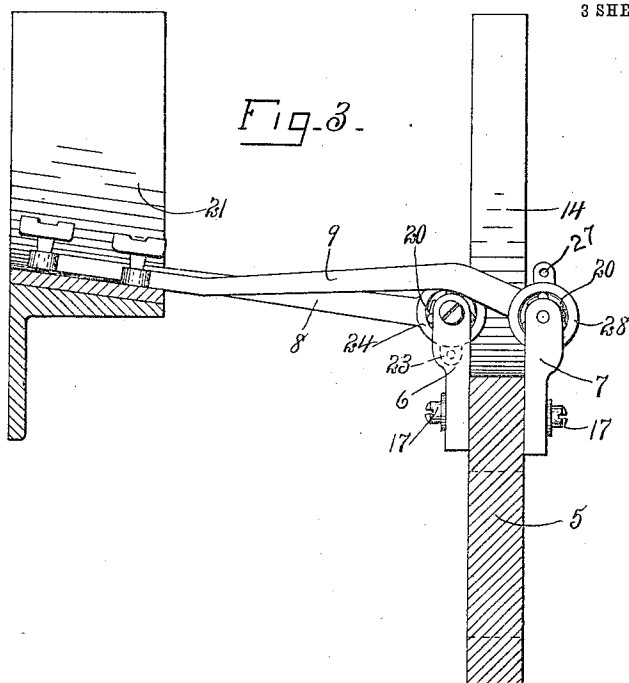
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3 SHEETS—SHEET 2.



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3 SHEETS—SHEET 3.

Fig. 4.

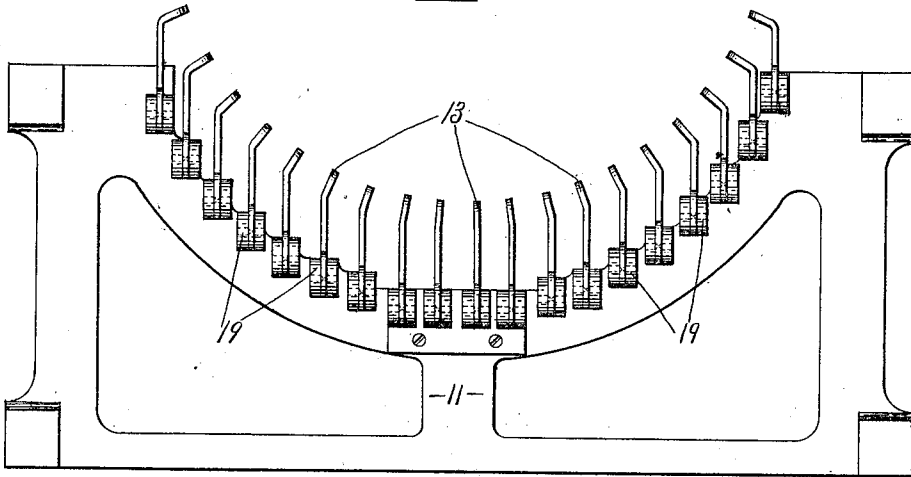


Fig. 5.

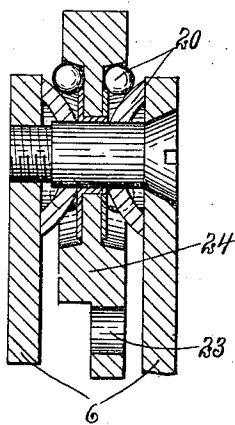


Fig. 6.

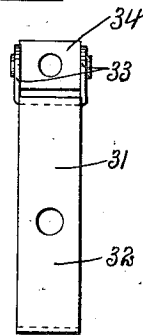
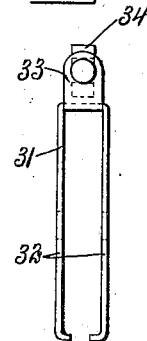


Fig. 7.



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UNITED STATES PATENT OFFICE.

FRANK J. DYETT, OF ILION, NEW YORK.

TYPE-WRITER.

No. 896,283.

Specification of Letters Patent.

Patented Aug. 18, 1908.

Application filed July 24, 1905. Serial No. 270,926.

To all whom it may concern:

Be it known that I, FRANK J. DYETT, of Ilion, in the county of Herkimer and State of New York, have invented a certain new and useful Type-Writer, of which the following is a specification.

My invention relates to typewriting machines, and has for its object the production of a simple and efficient means for supporting the type-bars and coacting mechanism; and to this end it consists in the novel combinations and constructions hereinafter set forth and claimed.

In describing this invention, reference is had to the accompanying drawing in which like characters designate corresponding parts in all the views.

Figure 1 is a side elevation partly in section, of my typewriting machine, parts thereof being omitted. Fig. 2 is an enlarged rear elevation of the hanger-support, a number of the hangers and type-bars, and the bed for the type-bars. Fig. 3 is a vertical sectional view of said support and bed for the type-bars, showing the hangers secured on opposite sides thereof and the type-bars carried by the hangers. Fig. 4 is a face view of one of the lever supports and levers carried thereby. Fig. 5 is an enlarged sectional view of the type-bar joint. Figs. 6 and 7 are detail views of the joint connecting each of the key-bars and the link between the key-bar and type-bar.

1, 2, 3 and 4 are, respectively, the frame, key-bars, platen, and ribbon-feeding and carrying mechanism of a front strike typewriting machine, all of which elements may be of any desirable form, size and construction; and as they form no part of my present invention, further description herein is deemed unnecessary.

This invention comprises a hanger-support 5, hangers 6 and 7 secured to the support, type-bars 8, 9 carried by the hangers, lever-supports 10, 11 arranged at opposite sides of the hanger-support parallel thereto, levers 12, 13 carried by the lever-supports, and connections between the levers 12, 13 and their corresponding key-bars 2, and type-bars 8, 9.

The hanger-support 5 extends crosswise of the frame 1, is formed with a concave or arc-shaped upper edge 14 and with openings 15 extending through opposite sides thereof along said edge 14. The hangers 6 and 7 may be of

any desirable form, size and construction, extend in opposite directions from the support 5, and as here shown, are arranged on opposite sides of the support in two rows, the hangers on one side alternating with those on the other. As shown, the hangers are formed with slots 16 which register, respectively, with the openings 15; and suitable clamping members, as the screws 17, passing through the slots 16 into the openings 15, secure the hangers to the support. As is obvious the hangers can be easily placed in position and adjusted to aline the type.

In the illustrated embodiment of my invention, the lever-supports 10, 11 are also formed with their upper edges concave or arc-shaped, are provided, respectively, with lugs 18, 19 extending outwardly therefrom along the concave upper edges, the lugs 18 on the front lever-support 10 extending forwardly, and the lugs 19 on the rear support 11 extending rearwardly. The type-bars 8, 9, as seen in Figs. 3 and 5, are supported at the upper ends of the hangers and are preferably united thereto by a ball-bearing joint 20; and the outer ends of said type-bars normally rest upon a bed 21 arranged in advance of the front lever-support 10. Said levers 12, 13, Fig. 1, are preferably angular or bell-crank levers pivoted to the lugs 18, 19, respectively, corresponding arms of the levers 12 supported by the front lever support 10 being connected by links 22 to depending bell crank arms 23 provided on the hubs 24 of the type-bars 8 supported on the front side of the hanger-support; and the other arms of said levers 12 being connected by links 25 to the forward portions of the corresponding key-bars 2. In like manner the levers 13 carried by the rear lever-support 11 are connected by links 26 to upwardly extending bell crank arms 27 provided on the hubs 28 of the type-bars 9 carried by the hangers 7 arranged at the rear side of the hanger-support, the other arms of said levers 13 being connected by links 29 to the rear portions of the corresponding key-bars. These key-bars 2 are fulcrumed at 30 at their rear ends in the usual manner. Each of the links 25, 29 connecting the lower arms of the bell-crank levers 12, 13 to the key-bars 2, are united to said key-bars by a universal joint, said joint being carried by a member 31 having arms 32 embracing the key-bars and supporting two upwardly extending lugs

33 between which a block 34, forming part of the universal joint, is pivoted. The lower ends of said links 25, 29 are pivoted to these blocks. Usually the member 31 is stamped from a single blank of sheet metal.

The arrangement of the bell-crank levers and the connection of the links to the type-bar hubs is particularly advantageous in that touch of the keys is rendered light and uniform, as the type-bars supported by the hangers either on the front or rear of the hanger-support, are thrown upwardly by the pull transmitted from the key-bars; also the arrangement of the hangers and type-bars is particularly simple and compact.

The construction and operation of my typewriting machine will now be readily understood upon reference to the foregoing description and the accompanying drawing, and it will be noted that more or less change may be made therein without departing from the spirit of my invention.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. In a typewriting machine, the combination of a hanger support, type bar hangers disposed in a plurality of rows on the hanger support, the type bars mounted in hangers and having bell crank arms extending towards opposite sides of said hanger support respectively and type bar operating means connected with said bell crank arms, respectively, by connections extending in substantially opposite directions from the hanger support.

2. In a typewriting machine, the combination of a frame, a hanger support extending crosswise of the frame, hangers carried by the support, some of the hangers extending forwardly from the support and the remaining hangers extending rearwardly, type bars carried by the hangers, key bars, and connections between the key bars and the type bars, the connections to the type bars carried by the forwardly extending hangers being arranged opposite to those connected to the type bars carried by the rearwardly extending hangers, substantially as and for the purpose specified.

3. In a typewriting machine, the combination of a frame, a hanger-support extending crosswise of the frame and having a concave upper edge, hangers secured to opposite sides of the support along the concave edge, the hangers on one side of said support alternating with those on the other, and type-bars carried by the hangers, substantially as and for the purpose described.

4. In a typewriting machine, the combination of a frame, a hanger-support extending crosswise of the frame and having a concave upper edge, said support having openings in opposite sides thereof along its upper edge, hangers arranged on opposite sides of the

support, type-bars carried by the hangers, and fastening means extending through the hangers into the openings, respectively, substantially as and for the purpose set forth.

5. In a typewriting machine, the combination of a frame, a hanger-support extending crosswise of the frame and having a concave upper edge, said support also having openings in opposite sides thereof along said upper edge, hangers arranged on the opposite sides of the support and formed with slots, clamping means extending through the slots and into the openings respectively, and type-bars carried by the hangers, substantially as and for the purpose specified.

6. In a typewriting machine, the combination of a frame, key-bars fulcrumed at their rear ends, a hanger-support extending crosswise of the frame, hangers carried by the support, some of the hangers extending to the front side of, and the remaining hangers to the rear side of, the support so that strains upon the hangers are transmitted in opposite directions to the support, type-bars carried by the hangers, and connections between the type-bars carried by the hangers extending to one side of the support and the forward portion of the corresponding key bars, and connections between the type-bars carried by the hangers extending to the opposite side of the support and the rear portions of the key-bars corresponding to the last-mentioned type-bars, substantially as and for the purpose set forth.

7. In a typewriting machine, the combination of a frame, key-bars fulcrumed at their rear ends, a hanger-support extending crosswise of the frame, hangers secured to opposite sides of the support, type-bars carried by the hangers, connections between the type-bars carried by the hangers on one side of said support and the forward portions of the corresponding key-bars, and connections between the type-bars carried by the hangers on the other side of the support and the rear portions of the key-bars corresponding to the last-mentioned type-bars, substantially as and for the purpose described.

8. In a typewriting machine, a frame, key-bars fulcrumed at their rear ends, a hanger-support extending crosswise of the frame, lever-supports arranged on opposite sides of the hanger-support and parallel thereto, hangers secured to the hanger-support on opposite sides thereof, type-bars carried by said hangers, levers corresponding to the type-bars pivoted to the lever-supports, connections between the levers pivoted to one of the supports and the type-bars carried by the hangers on one side of said hanger-support and the forward portions of the corresponding key-bars, and connections between the levers pivoted to the other lever-support and the type-bars carried by the hangers on the other side of the hanger-support and rear

portions of the key-bars corresponding to the last-mentioned type-bars, substantially as and for the purpose set forth.

9. In a typewriting machine, the combination of a frame, key-bars, hangers arranged in two rows, type-bars carried by the hangers, lever-supports arranged in front of and at the rear of said rows of hangers, levers corresponding to the hangers mounted, respectively, on the front and rear supports, connections between the levers on the front support and the type-bars carried by the hangers in one of said rows and the forward portions of the corresponding key-bars, and connections between the levers on the rear support and

the type-bars carried by the hangers in the other of said rows and the rear ends of the key-bars corresponding to the last-mentioned type-bars, substantially as and for the purpose specified.

In testimony whereof, I have hereunto signed my name in the presence of two attesting witnesses, at Ilion, in the county of Herkimer, in the State of New York, this 20 day of July, 1905.

FRANK J. DYETT.

Witnesses:

E. H. F. LUKE,
PETER MARHAVER.