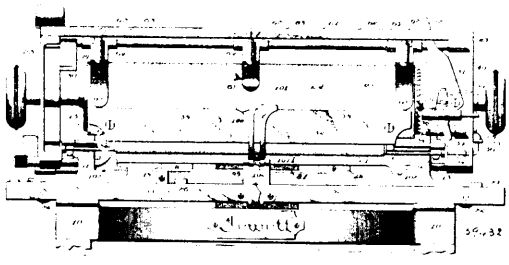
able, spring-friction devices for holding said parts in their adjusted position, substantially as described. 3rd. An adjustable electric light support, comprising rods or pipe-sections B and D, the universal supporting joint A, substantially of the construction described, and an elbow-joint E connecting the rod D with the lamp-socket, substantially as set forth. 4th. The elbow-joint comprising two concentrically pivoted discs, means for adjustably clamping said discs into frictional engagement, and a counter-balancing spring made in the form of a reversely coiled double spiral secured in place between said discs, one end of the spring being secured to one disc, and the other end of said spring being arranged to engage any one of a series of recesses in the other disc, substantially as described.

No. 59,432. Type Writer. (*Clavigraphe.*)



Robert Turner, Des Moines, Iowa, U.S.A., 25th March, 1898; 6 years. (Filed 5th March, 1898.)

Claim.—1st. In a type-writer, the combination of a bar to extend longitudinally of the machine frame and having a V-shaped groove therein, a roller having a grooved periphery rotatably mounted in the machine frame in the rear of said bar, a sliding carriage, a bar fixed thereto and having a V-shaped groove on its under surface bearing balls interposed in said grooves, arms projecting rearwardly from the carriage, a guide rod supported thereby to engage the aforesaid grooved wheel, and a series of anti-friction rollers fixed to the track bar on the machine frame to engage the top surface of the track bar on the sliding carriage frame and a platen-bearing frame hinged to this sliding carriage for the purpose stated. 2nd. The combination with a type-writer platen rotatably mounted, of a ratchet face on one end thereof, an arm pivoted to the platen shaft, a spring for normally holding the arm rearwardly, a sleeve on the outer end of the said arm, a detent in said sleeve to engage the ratchet face, a spring for normally forcing the detent against the rachet face, a lever fulcrumed to a part of the platen carriage, having its one end in engagement with said arm, to rotate the same and means for limiting the movement of the lever. 3rd. The combination with a type-writer platen rotatably mounted, of a ratchet face on one end thereof, an arm pivoted to the platen shaft, a spring for normally holding the arm rearwardly, a sleeve on the other end of the said arm, a detent in said sleeve to engage the ratchet face, a spring normally forcing the detent against the ratchet face, a lever fulcrumed to a part of the platen carriage having its one end in engagement with said arm, to rotate the same, means for limiting the movement of the lever, a cam attached to the platen frame, and capable of a slight movement thereon, and a pin on the outer end of the said detent to engage said cam and hold the detent away from the ratchet face. 4th. The combination with a type-writer platen rotatably mounted, of a ratchet face on one end thereof, an arm pivoted to the platen shaft, a spring for normally holding the arm rearwardly, a sleeve on the outer end of the said arm, a detent in said sleeve to engage the ratchet face, a spring for normally forcing the detent against the ratchet face, a lever fulcrumed to the part of the platen carriage having its one end in engagement with said arm, to rotate the same, means for limiting the movement of the lever, a roller detent mounted in the platen frame adjacent to said ratchet, a pin projecting therefrom, a spring for normally holding the roller in contact with the ratchet, and an arm on the said lever to engage said pin and force the said roller into positive engagement with the ratchet face at the end of the movement. 5th. The combination with a typewriter platen rotatably mounted, of a ratchet face on one end thereof, an arm pivoted to the platen shaft, a spring for normally holding the arm rearwardly, a sleeve on the outer end of the said arm, a detent in said sleeve to engage the ratchet face, a spring for normally forcing the detent against the ratchet face, a lever fulcrumed to a part of the platen carriage, and having its one end in engagement with said arm to rotate the same, means for limiting the movement of the lever, a cam attached to the platen frame and capable of a slight movement thereon, and a pin on the outer end of the said detent to engage said cam and hold the detent away from the ratchet face, a roller detent mounted in the platen frame adjacent to said ratchet, a pin projecting therefrom, a spring for normally holding the roller in contact with the ratchet, and an arm on the said lever to engage said pin and force the said roller into positive engagement with the ratchet face at the end of its movement. 6th. In a typewriter, a suitable platen, a ratchet face at one end thereof, a spring actuated detent normally held in engagement with the ratchet, a pin on the outer end of the detent, means for advancing the detent to rotate the platen, a segmental plate pivoted to the platen frame, a cam on said plate to engage the said pin and hold the detent out of contact with the ratchet until it passes beyond the cam. 7th. In a typewriter, a suitable platen, a ratchet face at one end thereof, a spring actuated detent normally held in engagement with the ratchet, a pin on the outer end of the detent, means for advancing the detent to rotate the platen, a segmental plate pivoted to the platen frame, a cam on said plate to engage the said pin and hold the detent out of contact with the ratchet until it passes beyond the cam, a roller detent mounted in the platen frame to engage the ratchet face, a pin on its outer end, a spring for holding it in contact with the ratchet, means for forcing it towards the ratchet when the other detent is advanced to rotate the platen, and a cam on said segmental plate for engaging said post, for the purposes stated. 8th. The combination in a typewriter, of means for rotating the platen, one or two line spaces, or an indefinite distance, comprising an arm pivoted to the platen shaft, a spring actuated detent in its end, a pin on said detent, a spring actuated roller detent mounted in the platen frame, a pin on the outer end, a lever fulcrumed to the platen frame and having arms to engage the aforesaid arm and also said roller detent, a segmental plate pivoted to the platen frame, and two cams thereon to be engaged by said detent pins or posts. 9th. The combination with a device for rotating a platen, one, two, or an indefinite number of line spaces, of a segmental plate pivoted to the platen shaft and having a segmental slot and three notches therein, a screw passed through said slot into the platen frame, a spring actuated bolt mounted in the platen frame to enter any of said notches, and two cams on the outer face thereof, for the purposes stated. 10th. The combination with a platen of two brackets pivoted at their upper ends to the ends of the platen frame in the rear of the platen, and having openings therein, yielding pressure devices for holding the roller to the platen, a rod rotatably mounted in the platen frame and extended through said angular openings, and cams on said rods to engage said angular openings, and a lever on one end of said rod. 11th. The combination with a platen of two brackets pivoted at their upper ends to the ends of the platen frame in the rear of the platen, and having angular openings therein, a tension roller mounted in the said brackets, yielding pressure devices for holding the roller to the platen, a rod rotatably mounted in the platen frame and extended through said angular openings, and cams on said rods to engage said angular openings, a lever on one end of the said rod, a guide plate pivoted to the tension roller shaft, and yielding pressure devices for normally holding it adjacent to the platen. 12th. The combination with a platen frame and a platen, of a sleeve rotatably mounted on the platen frame in front of the platen, a bolt slidingly mounted beneath the sleeve at right angles thereto to engage a part of the platen frame, a spring for pressing said bolt forwardly, and a paper finger fixed to the sleeve, substantially as set forth. 13th. The combination with a platen frame and a platen, of a sleeve rotatably mounted on the platen frame in front of the platen, a bolt slidingly mounted beneath the sleeve at right angles thereto to engage a part of the platen frame, a spring for pressing said bolt forwardly, a paper finger fixed to the sleeve, and a set screw passed through a slot in the sleeve into the sleeve support to limit the movement of the finger. 14th. The combination with a platen and a platen frame, of a round bar in the platen frame in front of the platen, a bar beneath the said bar having a flat inner surface and a series of notches therein, a sleeve rotatably mounted on the round bar, a bolt slidingly mounted on the under side of the sleeve, a spring for normally pressing said bolt forwardly into engagement with the rear surface of said notched bar, and a paper finger fixed to the sleeve, substantially as set forth. 15th. In a typewriter, the combination with a suitable carriage of a bar fixed to the machine frame, to extend parallel with the carriage, a scale marked on its top, a plate slidingly mounted in said bar and a stop on said plate, means for securing said plate at any point relative to the bar, and a gravity stop pivoted to the carriage frame and having a square edge on its right side and a bevel on its left for the purposes stated. 16th. In a typewriter, the combination with a suitable carriage of a bar mounted on the machine frame to extend parallel with the carriage, a scale marked on its top, a perforated plate slidingly mounted on the inner face of said bar, a stop fixed thereto, a spring-actuated bolt in the said bar to enter said perforations, and a gravity stop pivoted to the carriage frame and having a square surface on its right edge and a bevel on its left, substantially as set forth. 17th. In a typewriter, the combination with a sliding carriage having a feed rack, of a suitable feed dog pivotally mounted adjacent to the feed rack, an arm projecting downwardly therefrom, a rod pivoted in suitable bearings in the rear of the machine frame, a worm gear on its one end and a pin in its central portion, an arm mounted on said rod and extended upwardly therefrom, a rod slidingly mounted with its one end in engagement with said arm and its other with the arm on the feed dog, and a spring on the said pivoted rod having its central portion in engagement with said pin and its end in engagement with said arm on the rod, and a shaft rotably mounted having a worm gear on its one end to mesh with the aforesaid worm gear and a thumb wheel on its other end for the purposes stated. 18th. In a typewriter having a sliding carriage and a feed rack thereon, the combination of a pivoted feed dog, capable of a slight movement longitudinally of the platen, a spring for normally holding the dog to one limit of its movement and a shaft rotatably mounted in suitable bearings having a lever on