

A. A. JOHNSON.
 TYPEWRITING MACHINE.
 APPLICATION FILED AUG. 15, 1918.

1,415,241.

Patented May 9, 1922.
 2 SHEETS—SHEET 1.

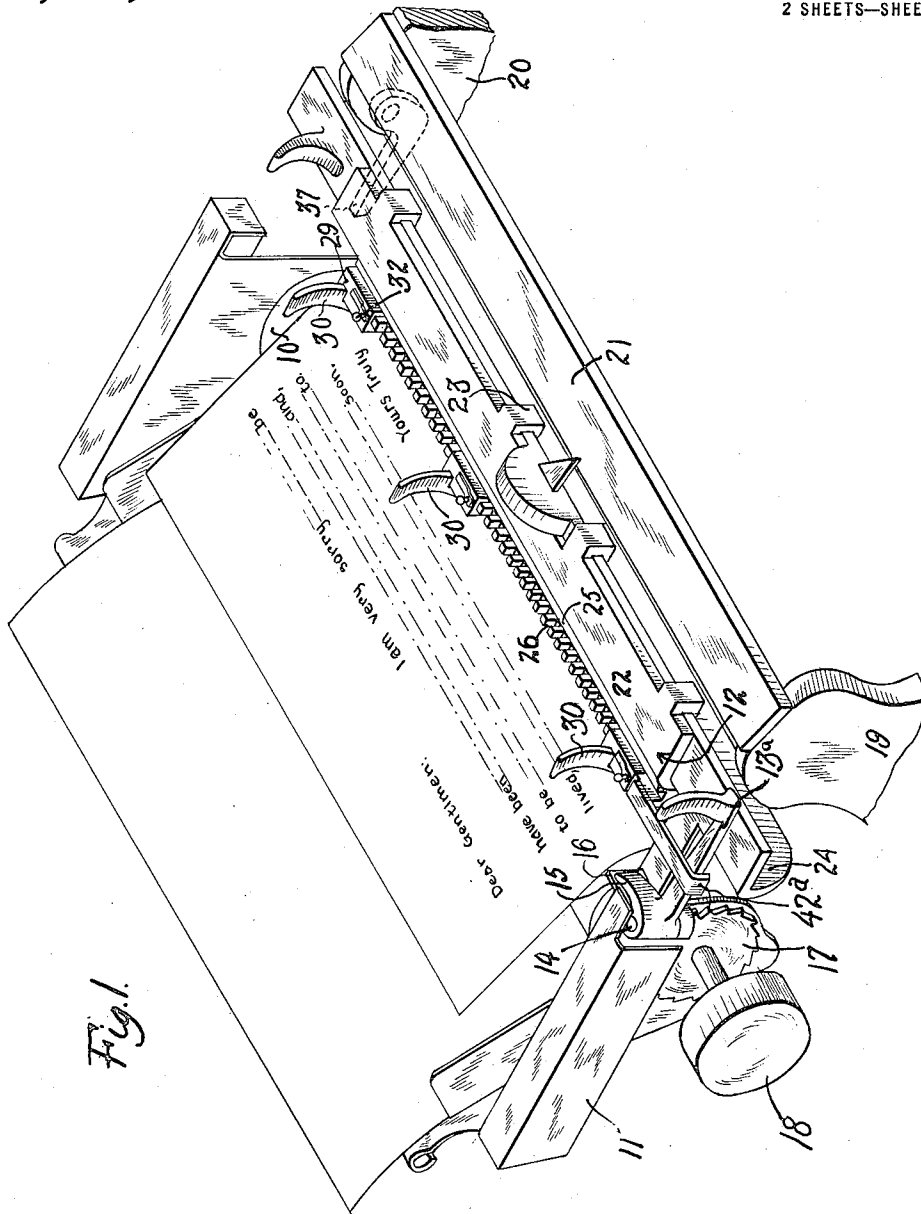


Fig. 1.

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2 SHEETS—SHEET 2.

Fig. 3.

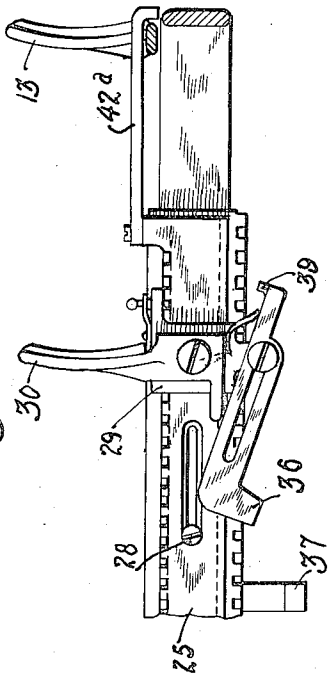


Fig. 2.

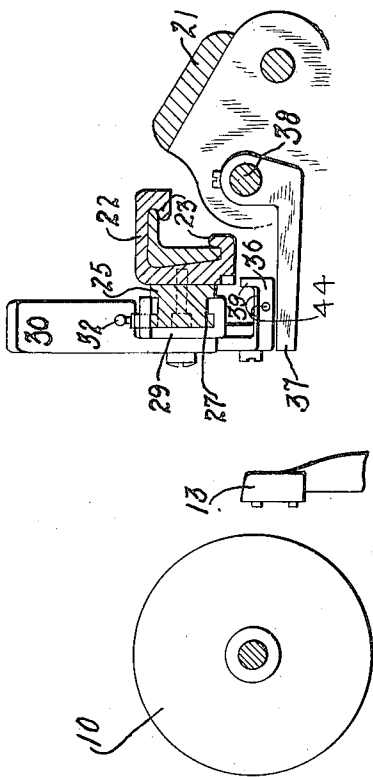


Fig. 4.

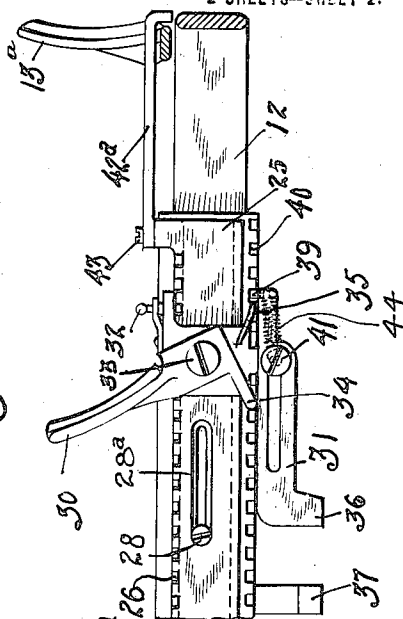
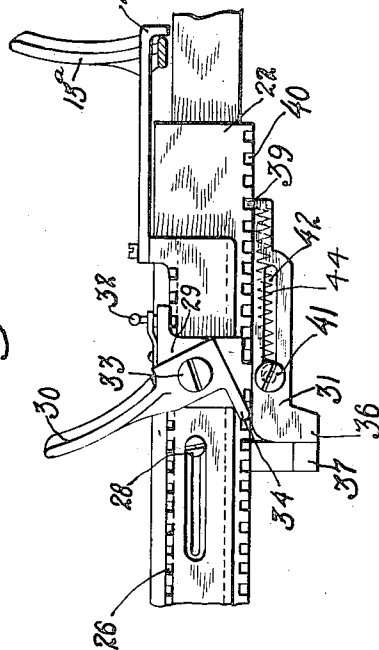


Fig. 5.



INVENTOR
A. A. Johnson

UNITED STATES PATENT OFFICE.

ARTHUR A. JOHNSON, OF NEW YORK, N. Y., ASSIGNOR, BY MESNE ASSIGNMENTS, TO UNDERWOOD TYPEWRITER COMPANY, OF NEW YORK, N. Y., A CORPORATION OF DELAWARE.

TYPEWRITING MACHINE.

1,415,241.

Specification of Letters Patent.

Patented May 9, 1922.

Application filed August 15, 1918. Serial No. 250,090.

To all whom it may concern:

Be it known that I, ARTHUR A. JOHNSON, a citizen of the United States, and a resident of the city of New York, county of the Bronx, and State of New York, have invented an Improvement in Typewriting Machines, of which the following is a specification.

This invention relates to typewriting machines and more particularly to margin-determining or column locating mechanism therefor.

Heretofore the column locating mechanism of the typewriting machine has usually been controlled by keys, or levers which are provided with suitable designation marks, the operated keys determining which column is to be selected. Before operating these keys, the carriage usually has to be returned to the beginning of a new line.

The present invention has overcome certain disadvantages of the above described mechanism by providing mechanism whereby the operator may bring the carriage to the desired column while returning it to begin a new line, and readily determine what key or lever to operate in selecting a column without numbers or other designations. According to the present invention the parts are so arranged that the operator simply points his finger, as it were, at the column to be selected and operates the lever next to his finger, to set a margin-determining stop for arresting the carriage at the selected position, these manually operable stop-setting members or levers being adjustable along the front of the carriage to the different column or paragraph locations.

The specific mechanism of the present disclosure comprises upstanding levers which are, in many respects, similar to the line-space lever of the Underwood typewriting machine. These upstanding levers are arranged in front of the work-sheet and when located in proper positions are directly in front of the columns at which the typewriter carriage will be respectively arrested by them. In addition to returning and arresting the typewriter carriage these keys also perform the line-space operation for the machine. That is, they are connected to line-space mechanism so that when operated the

line-space mechanism is operated therefrom.

Therefore, apart from its other functions, each of these stop-setting keys or levers may be considered as a manually operable line-spacing member.

My device as illustrated in the accompanying drawings, has further advantages. This structure comprises a rack slidably mounted upon a typewriter carriage at the front thereof. Adjustable along this rack I provide my stop mechanisms, each stop mechanism or stop device comprising a member to which the lever is pivoted and also carrying a stop member. The arrangement is such that when the lever is operated the stop member is swung upon the rack into engagement with a part of a cooperating member or second rack on the carriage frame. For the purpose of permitting the first rack to effect operations, a lost motion connection is provided between this rack and the second rack on the carriage frame.

Another advantage of the present disclosure is the simplicity of the device and the ease with which the device may be attached to the typewriting machine.

Other features and advantages will herein after appear.

In the accompanying drawings,

Figure 1 is a perspective view of my invention applied to the typewriting machine.

Figure 2 is a side elevation of my device showing the typewriter platen and the printing type.

Figure 3 is a rear elevation showing the parts in normal position.

Figure 4 is a rear elevation showing the lever swung to set the stop but not operated to return the carriage and line-space the platen.

Figure 5 is a rear elevation showing the lever operated and the typewriter carriage arrested by means of the stop, the line-space operation having been performed by this time.

In the Underwood typewriting machine a platen 10 is carried by a frame 11, on carriage 12, to receive the printing impressions from types 13, which strike upwardly and rearwardly against the face of the platen. The typewriter carriage 12 is moved in letter

feed direction by means of the usual escapement mechanism and the platen 10 receives rotary movements for line-spacing from a line-space device comprising a handle 13^a, pivoted to the carriage frame at 14, and having an arm 15, which engages a slide 16, having the usual pawl which cooperates with a ratchet wheel 17. The platen may be also rotated by means of the usual knob 18. The typewriting machine frame comprises side members 19 and 20, joined by a connecting piece 21, which carries the usual letter space scale, not shown.

The device of the present disclosure comprises a supporting bar 22, which has hooks 23, gripping a bar 24, which forms a front tie rod of the carriage. This supporting bar 22 may be made of malleable material so that the hooks 23 can be bent around the transverse front bar 24, in attaching same. Slidably mounted upon the supporting member or bar 22 I provide a rack 25, having teeth 26, and grooves 27.

The rack 25 is held to the supporting member 22 by means of a screw 28 threaded into the member 22 and passing through an elongated slot 28^a in the rack 25. Adjustably mounted upon the slide or rack 25 is a plurality of stop-carrying members 29, which slide in the grooves 27 and carry levers 30 and stops 31. Each stop-carrying member 29 is adjustably held in position on the rack 25 by means of a detent 32, engaging the teeth 26, thereon. The sliding lever 30 is pivoted at 33, and has a depending arm 34 for engaging its stop member 31. When the operating member 30 is actuated preparatory to returning the carriage, its depending arm 34 engages with the stop member 31, which is held up in normal position by a spring 35, and causes an engaging portion or stop lug 36 to be moved into line with a cooperating stop or lug 37 secured to a rod 38, which is mounted upon the side members 19 and 20. The operator then moves his arm to return the carriage. When the stop member 31 is moved to operative position, a locking tooth 39 on the stop 31 engages in a rack 40, carried by the supporting member 22, so as to be substantially connected to the member 22. When the carriage is returned, it is often the case that the line-space operation does not take place until after the usual arresting lug on the carriage strikes the usual arresting lug on the machine frame. Therefore, I have arranged my mechanism so that this can also be the case with my device. For this purpose I have provided a pin and slot connection between the stop 31 and the stop-carrying member 29. This comprises a pin 41 on the stop-carrying member riding in a slot 42 in the stop 31. Drawing a handle or lever 30 to the right at Figure 1 returns the carriage, and the line-space operation is effected by

means of a hooked portion 42^a overlying the line-space lever 13^a and secured at 43 to the sliding member 25, so that the movement of the slide to the Figure 5 position actuates the line-space lever 13^a. It will be noted that the stop-setting lever 30 forms a line-spacing member which effects line-spacing concomitantly with the return of the carriage 12 to a position determined by the adjustment of the stop member 31.

As has heretofore been said, this line-spacing movement of the slide 25 may take place at the beginning or at the end of the operation, according to the amount of friction of the various parts. When the carriage is returned, the parts reach the Figure 5 position in which the stop 36 engages stop 37, on the machine frame.

Thus, it will be seen, that the stop 31, while connected to the movable slide 25, is nevertheless directly connected to the carriage during the operation thereof. The slot 42 in the stop 31 permits this, while, on release of the lever 30, a spring 44 draws the stop 31 back along the pin 41 to which the spring is fast. It will be noted that the operating levers 30 are connected to the typewriting machine so as to extend directly in front of the worksheets carried by the platen, and in practice these stops will be adjusted according to the stop places desired on the worksheet, as illustrated on the accompanying drawings. Thus, it is only necessary for the operator to point his fingers at the predetermined place at which he wishes the carriage to be arrested and operate the lever 30 directly in front of this.

It is to be noted that each of the levers 30 has a four-fold function. First, by its position along the front of the carriage it indicates on the work-sheet the column or paragraph at which writing is to begin; second, by pivotal movement on the screw 33 it sets or makes effective the margin-determining or paragraphing stop 31; third, by imparting movement to the slide or rack-bar 25 it line-spaces the platen 10; and fourth, by movement transmitted from the slide 25 to the carriage 12 it returns the carriage to the selected position determined by the stop 31. A single push against the lever 30 accomplishes all of the operations.

Having now described my invention I claim:

1. In a typewriting machine, the combination with a carriage having a front bar, of a member slidable along said bar, stops movable on said member, a rack, and means for moving the stops to engage the rack to be held while the member slides.

2. In a typewriting machine, the combination with a carriage having a front bar, of a member slidable along said bar, stops having a pin-and-slot connection with said member, and a rack with which any stop

may engage to hold it while the member slides.

3. In a typewriting machine, the combination with a carriage having a line-space mechanism, of a front bar on the carriage, a stop on the carriage normally in ineffective position, a member slidable along said bar to operate the line-space mechanism, means for moving the stop to effective position and simultaneously sliding the member, and a rack fast to said bar to hold the stop.

4. In a typewriting machine, the combination with a carriage having a platen, of a front bar on the carriage, a stop-setting lever on said bar, a normally ineffective stop on said bar made effective by operating said stop-setting lever, a line-space device for the platen operable by said stop-setting lever, and a line-space lever for independently operating said line-space device.

5. In a typewriting machine, the combination with a carriage having a platen, of a front bar on the carriage, a stop-setting lever on said bar, a normally ineffective stop on said bar made effective by operating said stop-setting lever, a rack on said bar, means for adjustably holding said stop on said rack, a line-space device for the platen operable by said stop-setting lever, and a line-space lever for independently operating said line-space device.

6. In a typewriting machine, the combination with a carriage having a platen, of a front bar on the carriage, a stop-setting lever on said bar, a stop-carrying member on which said stop-setting lever is pivoted, a rack on said bar along which said stop-carrying member may be adjustably set, a normally ineffective stop on said stop-carrying member and movable to effective position by operating said stop-setting lever, a line-space device for the platen operable by said stop-setting lever, and a line-space lever for independently operating said line-space device.

7. In a typewriting machine, the combination with a carriage having a platen, of a front bar on the carriage, a stop-setting lever on said bar, a stop-carrying member on which said stop-setting lever is pivoted, a rack on said bar along which said stop-carrying member may be adjustably set, a stop pivoted on said stop-carrying member, a spring normally holding said stop at an ineffective position, said stop-setting lever having an arm engageable with said stop to swing the latter to effective position, a line-space device for the platen operable by said stop-setting lever, and a line-space lever for independently operating the line-space device.

8. In a typewriting machine, the combination with a carriage having a front carriage-bar and a frame having a front frame-bar, of a lug on the frame adjacent said frame-bar,

a stop-setting lever on the carriage and by which the latter may be returned, a normally ineffective stop on the carriage movable by the stop-setting lever into position to engage the lug to cause the arresting of the carriage as the latter is returned by the stop-setting lever, a line-space device operable by said stop-setting lever, and a line-space lever for independently operating said line-space device and returning the carriage.

9. In a typewriting machine, the combination with a traveling carriage and a platen, of a stop-setting lever, a rack-bar along which said stop-setting lever is adjustable, a stop adjustable along the rack-bar with said stop-setting lever and movable from a normally ineffective position to an effective position by said stop-setting lever, a line-space device for the platen operable by said stop-setting lever, and a line-space lever for independently operating said line-space device.

10. In a typewriting machine, the combination with a traveling carriage and a platen, of a stop-setting lever, a rack-bar along which said stop-setting lever is adjustable, a stop adjustable along the rack-bar with said stop-setting lever and movable from a normally ineffective position to an effective position by said stop-setting lever, said rack-bar being movable together with the stop-setting lever thereon, a line-space device for the platen operable by the movement of said rack-bar, and a line-space lever for independently operating said line-space device.

11. In a typewriting machine, the combination with a traveling carriage and a platen, of a line-space device for the platen, a lever for operating the device, an auxiliary lever for operating the device, a rack-bar along which said auxiliary lever is adjustable, a body carrying said auxiliary lever and comprising means for locking itself to the rack-bar, a stop pivoted on said body and adjustable therewith, a lug for arresting the carriage by the stop, a spring normally holding the stop out of the way of the lug, and a rack adapted to hold the stop when moved to arresting position.

12. In a front-strike typewriting machine, the combination with a traveling carriage and a platen, of a lever on the carriage for returning it, and a normally ineffective stop on the carriage and movable to effective position by said lever by drawing on the lever to return the carriage, said lever together with the stop being adjustable along the front of the carriage to different column locations.

13. In a front-strike typewriting machine, the combination with a traveling carriage and a platen, of a plurality of levers on the carriage for returning it, and normally ineffective stops on the carriage selectively made effective by said levers to variably ar-

rest the carriage, each lever and its stop being together adjustable along the front of the carriage to different column locations.

14. In a front-strike typewriting machine, the combination with a traveling carriage and a platen, of a rack-bar on said carriage, a stop settable along said rack-bar, but normally ineffective, and a lever on the rack-bar for making the stop effective when drawn on to return the carriage and settable along the rack-bar together with the stop.

15. In a front-strike typewriting machine, the combination with a traveling carriage and a platen, of a machine frame, a lug on the machine frame for arresting the carriage, a plurality of normally ineffective stops on and adjustable along the carriage for co-operating with the lug to arrest the carriage, and a lever for each stop to make it effective when drawn on to return the carriage, said lever being adjustable along the carriage with the stop.

16. In a front-strike typewriting machine, the combination with a traveling carriage and a platen, of a machine frame, a lug on the machine frame for arresting the carriage, a rack-bar on the carriage, a plurality of stop-carrying members adjustable along the rack-bar, a stop on each member to be adjusted therewith, means normally holding each stop ineffective, and a lever on each member to be adjusted therewith to make its stop effective to strike the lug when drawn on to return the carriage.

17. In a typewriting machine, the combination with a carriage having a platen and a front bar, of a stop-setting member on said bar, a normally ineffective stop on said bar made effective by operating said stop-setting member, and a line-space device for the platen operable by said stop-setting member, said stop-setting member and said stop being adjustable along said bar to different column locations.

18. In a typewriting machine, the combination with a carriage having a platen and a front bar, of a stop-setting member movable on said bar, a normally ineffective stop on said bar made effective by operating said stop-setting member, a rack on said bar, means for adjustably holding said stop on said rack, and a line-space device for the platen operable by said stop-setting member.

19. In a typewriting machine, the combination with a carriage having a platen, of a rack along the front of the carriage, a stop-carrying member adjustably settable along the rack, a normally ineffective stop on said stop-carrying member and movable thereon to effective position, a stop-setting member movable on said stop-carrying member for moving said stop to effective position, and a line-space device for the platen operable by said stop-setting member.

20. In a typewriting machine, the combination with a carriage having a platen, of a rack along the front of the carriage, a stop-carrying member adjustably settable along the rack, a stop pivoted on said stop-carrying member, a spring normally holding said stop at an ineffective position, a stop-setting member movable on said stop-carrying member and engageable with said stop to swing the latter to effective position, and a line-space device for the platen operable by said stop-setting member.

21. In a typewriting machine, the combination with a carriage having a front carriage-bar and a frame having a front frame-bar, of a lug on the frame adjacent said frame-bar, a stop-setting member movable on the carriage and by which the latter may be returned, a normally ineffective stop on the carriage movable by the stop-setting member into position to engage the lug to cause the arresting of the carriage as the latter is returned by the stop-setting member, and a line-space device operable by said stop-setting member.

22. In a typewriting machine, the combination with a traveling carriage and a platen, of a stop-setting member, a rack-bar along which said stop-setting member is adjustable, a stop adjustable along the rack-bar with said stop-setting member and movable from a normally ineffective position to an effective position by said stop-setting member, and a line-space device for the platen operable by said stop-setting member.

23. In a typewriting machine, the combination with a traveling carriage and a platen, of a stop-setting member, a rack-bar along which said stop-setting member is adjustable, a stop adjustable along the rack-bar with said stop-setting member and movable from a normally ineffective position to an effective position by said stop-setting member, said rack-bar being movable together with the stop-setting member thereon, and a line-space device for the platen operable by the movement of said rack-bar.

24. In a front-strike typewriting machine, the combination with a traveling carriage and a platen, of a member on the carriage for returning it, a normally ineffective stop on the carriage and movable to effective position by said member by drawing on the member to return the carriage, said member together with the stop being adjustable along the front of the carriage to different column locations, and a line-space device for the platen operable by said member concomitantly with the return of the carriage.

25. In a front-strike typewriting machine, the combination with a traveling carriage and a platen, of a rack-bar movable along the front of the carriage, a normally ineffective stop settable along said rack-bar, a member carried by the rack-bar for moving

the rack-bar and movable on the rack-bar for making the stop effective when drawn on to return the carriage and settable along the rack-bar together with the stop, and a line-space device for the platen operable by the movement of said rack-bar concomitantly with the return of the carriage.

26. In a front-strike typewriting machine, the combination with a traveling carriage and a platen, of a machine frame, a lug on the machine frame for arresting the carriage, a rack-bar movable along the front of the carriage, a plurality of stop-carrying members adjustable along the rack-bar, a stop on each stop-carrying member to be adjusted therewith, means normally holding each stop ineffective, a stop-setting member on each stop-carrying member to be adjusted therewith and movable thereon to make its stop effective to strike the lug when drawn on to return the carriage, and a line-space device for the platen operable by movement imparted to said rack-bar by each stop-setting member concomitantly with the return of the carriage.

27. In a front-strike typewriting machine, the combination with a traveling carriage and a platen, of a manually-operable member on the carriage for returning it and located on the front of the carriage at a column-indicating position, to serve as an index or pointer for indicating the column or paragraph at which the writing is to begin, and a normally ineffective stop for the carriage movable to effective position by said member by drawing on the member to return the carriage.

28. In a front-strike typewriting machine, the combination with a traveling carriage and a platen, of a plurality of manually-operable members on the carriage for returning it, and spaced at different column locations along the front of the carriage in positions to point out or indicate the respective columns or paragraphs at which writing is to begin, and a corresponding plurality of normally ineffective stops selectively made effective by said members to arrest the return of the carriage at selected positions, dependent upon which of said manually-operable members is operated.

29. In a front-strike typewriting machine, the combination with a traveling carriage and a platen, of a rack-bar extending along the front of the carriage, a normally ineffective stop adjustably settable along said rack-bar, and a column-indicating member adjustably settable along the rack-bar with said stop and manually-operable for making the stop effective and by which the carriage may be returned to a selected position determined by the adjustment of the stop.

30. In a front-strike typewriting machine, the combination with a traveling carriage and a platen, of a machine frame, a lug on

the machine frame for arresting the carriage, a plurality of normally ineffective stops on and adjustable along the carriage for co-operating with the lug to arrest the carriage, and a plurality of upstanding members arranged along the front of the carriage and adjustable with the respective stops for indicating respective columns or paragraphs at which writing is to begin, said members being manually-operable concomitantly to make the respective stops effective and to return the carriage to selected positions determined by the adjustment of the respective stops.

31. In a front-strike typewriting machine, the combination with a traveling carriage and a platen, of a machine frame, a lug on the machine frame for arresting the carriage, a rack-bar movable along the front of the carriage, a plurality of stop-carrying members adjustable along the rack-bar to different column locations, a stop on each stop-carrying member to be adjusted therewith, means normally holding each stop ineffective, and a manually-operable stop-setting member for each stop-carrying member to be adjusted therewith and movable thereon to make its stop effective to strike the lug when said member is drawn on to return the carriage, said stop-setting members being so located as to serve as pointers to indicate the respective columns or paragraphs at which writing is to begin when the carriage is returned to the selected positions determined by the corresponding stops.

32. In a front-strike typewriting machine, the combination with a traveling carriage and a platen, of a manually-operable member on the carriage for returning it and located on the front of the carriage at a column-indicating position, to serve as an index or pointer for indicating the column or paragraph at which writing is to begin, a normally ineffective stop for the carriage movable to effective position by said member by drawing on the member to return the carriage, and a line-space device for the platen operable by the carriage-return movement of said member for line-spacing the platen concomitantly with the return of the carriage to a position determined by said stop when made effective.

33. In a front-strike typewriting machine, the combination with a traveling carriage and a platen, of a plurality of manually-operable members on the carriage for returning it, and spaced at different column locations along the front of the carriage in positions to point out or indicate the respective columns or paragraphs at which writing is to begin, a corresponding plurality of normally ineffective stops selectively made effective by said members to arrest the return of the carriage at selected positions dependent upon which of said manually-

operable members is operated, and a line-space device for the platen operable by the carriage-return movement of each of said members for line-spacing the platen concomitantly with the return of the carriage to a position determined by the corresponding stop which has been made effective.

34. In a front-strike typewriting machine, the combination with a traveling carriage and a platen, of a manually-operable member on the carriage for returning it and located on the front of the carriage at a column-indicating position, to serve as an index or pointer for indicating the column or paragraph at which writing is to begin, a normally ineffective stop for the carriage movable to effective position by said member by drawing on the member to return the carriage, a line-space device for the platen operable by the carriage-return movement of said member for line-spacing the platen concomitantly with the return of the carriage to a position determined by said stop when made effective, and manually-operable means for independently operating said line-space device and returning the carriage independently of said carriage-stop.

35. In a front-strike typewriting machine, the combination with a traveling carriage and a platen, of a plurality of manually-operable members on the carriage for returning it, and spaced at different column locations along the front of the carriage in positions to point out or indicate the respective columns or paragraphs at which writing is to begin, a corresponding plurality of normally ineffective stops selectively made effective by said members to arrest the return of the carriage at selected positions dependent upon which of said manually-operable members is operated, a line-space device for the platen operable by the carriage-return movement of each of said members for line-spacing the platen concomitantly with the return of the carriage to a position determined by the corresponding stop which has been made effective, and manually-operable means for independently operating said line-space device and returning the carriage independently of said carriage-stops.

36. In a front-strike typewriting machine, the combination with a carriage having a platen, of a plurality of normally ineffective column-stops for the carriage corresponding to different columns of a work-sheet, and a corresponding plurality of manually-operable members arranged along the front of the carriage to correspond with the columns to be written in on the work-sheet, each of said members being movable in the direction of carriage-return for concomitantly making the corresponding stop effective and for returning the carriage to a position determined by said column-stop.

37. In a front-strike typewriting ma-

chine, the combination with a traveling carriage and a platen, of a machine frame, a stop on the machine frame for arresting the carriage, and a stop-device adjustable along the front of the carriage to different column locations, and comprising a normally ineffective stop-member to co-operate with said carriage-arresting stop, and further comprising a manually-operable member movable in the direction of carriage-return for thereby concomitantly making said stop-member effective and for returning the carriage to a selected position determined by the adjustment of said stop-device.

38. In a front-strike typewriting machine, the combination with a traveling carriage and a platen, of a machine frame, a stop on the machine frame for arresting the carriage, and a plurality of stop-devices independently adjustable to different column locations along the front of the carriage, each said stop-device comprising a normally ineffective stop-member to co-operate with said carriage-arresting stop, and further comprising a manually-operable member movable in the direction of carriage-return for concomitantly making said stop-member effective, and for returning the carriage to a selected position determined by the adjustment of said stop-device.

39. In a front-strike typewriting machine, the combination with a carriage having a platen, of a plurality of normally ineffective column-stops for the carriage corresponding to different columns of a work-sheet, a corresponding plurality of manually-operable members arranged along the front of the carriage to correspond with the columns to be written in on the work-sheet, each of said members being movable in the direction of carriage-return for concomitantly making the corresponding stop effective and for returning the carriage to a position determined by said column-stop, and a line-space device for the platen operable by the carriage-return movement of each of said members for line-spacing the platen concomitantly with the return of the carriage to a position determined by the corresponding column-stop.

40. In a front-strike typewriting machine, the combination with a traveling carriage and a platen, of a machine frame, a stop on the machine frame for arresting the carriage, a stop-device adjustable along the front of the carriage to different column locations, and comprising a normally ineffective stop-member to co-operate with said carriage-arresting stop, and further comprising a manually-operable member movable in the direction of carriage-return for thereby concomitantly making said stop-member effective and for returning the carriage to a selected position determined by the adjustment of said stop-device, and a

line-space device for the platen operable by the carriage-return movement of said manually-operable member for line-spacing the platen concomitantly with the return of the carriage.

41. In a front-strike typewriting machine, the combination with a traveling carriage and a platen, of a machine frame, a stop on the machine frame for arresting the carriage, a plurality of stop-devices independently adjustable to different column locations along the front of the carriage, each said stop-device comprising a normally ineffective stop-member to co-operate with said carriage-arresting stop, and further comprising a manually-operable member movable in the direction of carriage-return for concomitantly making said stop-member effective and for returning the carriage to a selected position determined by the adjustment of said stop-device, and a line-space device for the platen operable by the carriage-return movement of each of said manually-operable members for line-spacing the platen concomitantly with the return of the carriage.

42. In a front-strike typewriting machine, the combination with a carriage having a platen, of a plurality of normally ineffective column-stops for the carriage corresponding to different columns of a work-sheet, a corresponding plurality of manually-operable members arranged along the front of the carriage to correspond with the columns to be written in on the work-sheet, each of said members being movable in the direction of carriage-return for concomitantly making the corresponding stop effective and for returning the carriage to a position determined by said column-stop, a line-space device for the platen operable by the carriage-return movement of each of said members for line-spacing the platen concomitantly with the return of the carriage to a position determined by the corresponding column-stop, and manually-operable means for independently operating said line-space device and returning the carriage independently of said column-stops.

43. In a front-strike typewriting machine, the combination with a traveling carriage and a platen, of a machine frame, a stop on the machine frame for arresting the carriage, a stop-device adjustable along the front of the carriage to different column locations, and comprising a normally ineffective stop-member to co-operate with said carriage-arresting stop, and further comprising a manually-operable member movable in the direction of carriage-return for thereby concomitantly making said stop-member effective and for returning the carriage to a selected position determined by the adjustment of said stop-device, a line-space device for the platen operable by the carriage-

return movement of said manually-operable member for line-spacing the platen concomitantly with the return of the carriage, and manually-operable means for independently operating said line-space device and returning the carriage independently of said stop-device.

44. In a front-strike typewriting machine, the combination with a traveling carriage and a platen, of a machine frame, a stop on the machine frame for arresting the carriage, a plurality of stop-devices independently adjustable to different column locations along the front of the carriage, each said stop-device comprising a normally ineffective stop-member to co-operate with said carriage-arresting stop, and further comprising a manually-operable member movable in the direction of carriage-return for concomitantly making said stop-member effective, and for returning the carriage to a selected position determined by the adjustment of said stop-device, a line-space device for the platen operable by the carriage-return movement of each of said manually-operable members for line-spacing the platen concomitantly with the return of the carriage, and manually-operable means for independently operating said line-space device and returning the carriage independently of said stop-devices.

45. In a typewriting machine, in combination, a traveling carriage, a platen on said carriage, line-space mechanism for the platen, a plurality of manually-operable members for operating the line-space mechanism located laterally in spaced relation along the front of the carriage, said members being independently operable, means to enable any of said manually-operable members to operate said line-space mechanism, and margin-determining means controlled by the line-spacing members.

46. In a typewriting machine, in combination, a traveling carriage, a platen on said carriage, line-space mechanism for the platen, a plurality of manually-operable members for operating the line-space mechanism located laterally in spaced relation along the front of the carriage, said members being independently operable, means to enable any of said manually-operable members to operate said line-space mechanism, and a plurality of normally ineffective margin-stops selectively rendered effective by the line-spacing members.

47. In a typewriting machine, in combination, a traveling carriage, a platen on said carriage, line-space mechanism for the platen, a plurality of manually-operable members for operating the line-space mechanism located laterally in spaced relation along the front of the carriage, said members being independently operable, and a plurality of normally ineffective margin-

stops selectively rendered effective by the line-spacing members, each of said line-spacing members being so mounted that movement thereof in the direction of the carriage-return will concomitantly make effective the corresponding margin-stop and line-space the platen and return the carriage to a position determined by the margin-stop which has been made effective.

48. In a front-strike typewriting machine, in combination with a machine frame and a carriage having a platen, of a rack-bar extending along the front of the carriage, a second rack-bar having a longitudinal slidable lost-motion connection with the first rack-bar, a stop-carrying member adjustably setttable along the second rack-bar, a stop mounted upon and having both a pivotal and a longitudinal slidable lost-motion connection with said stop-carrying member, yieldable means for normally holding said stop at an ineffective pivotal position, other yieldable means normally holding said stop slid forward in the direction of the carriage-return movement, a lug on the machine frame engageable by said stop when the latter is pivotally moved to effective position, said stop being engageable with the first rack-bar when the stop is swung to its effective position for holding the stop stationary relatively to the carriage while the second rack-bar and the stop-carrying member thereon slide relatively to the first rack-bar and relatively to said stop by reason of said lost-motion connections, a manually-operable stop-setting member movably mounted on the stop-carrying member and engageable with said stop to swing the latter into effective position and for concomitantly returning the carriage and moving said second rack-bar relatively to the first, and a line-space device for the platen operable by the movement imparted to the sec-

ond rack-bar by the stop-setting member concomitantly with the return of the carriage. 45

49. In a front-strike typewriting machine, the combination with a machine frame and a carriage having a platen, of a rack-bar extending along the front of the carriage, a second rack-bar having a longitudinal slidable lost-motion connection with the first rack-bar, a stop-carrying member adjustably setttable along the second rack-bar, a stop mounted upon and having both a pivotal and a longitudinal slidable lost-motion connection with said stop-carrying member, yieldable means normally holding said stop at an ineffective pivotal position, other yieldable means for normally holding said stop slid forward in the direction of the carriage-return movement, a lug on the machine frame engageable by said stop when the latter is pivotally moved to effective position, said stop having a tooth engageable with the first rack-bar when the stop is swung to its effective position for holding the stop stationary relatively to the carriage while the second rack-bar and the stop-carrying member thereon slide relatively to the first rack-bar and relatively to said stop by reason of said lost-motion connections, a manually-operable actuating lever pivoted on the stop-carrying member and engageable with said stop to swing the latter into effective position and for concomitantly returning the carriage and moving said second rack-bar relatively to the first, and a line-space device for the platen operable by the movement imparted to the second rack-bar by the actuating lever concomitantly with the return of the carriage. 50 55 60 65 70 75 80

In testimony whereof, I have signed my name to this specification.

ARTHUR A. JOHNSON.