The Empire 1 typewriter manual
(transcribed from Mechanical Devices of the Typewriter, R.T.Nicholson, 1920)
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Plate H
SECTIONAL VIEW OF TYPE ACTION

Plate I
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Plate J
DETAIL OF CARRIAGE ACTION
1. **Oiling**

Oil the pivotal and sliding points of the key action at B, D, E, G, H, and K (plate H) once a week. The surface J should be wiped clean with a slightly oiled rag every morning. Oil the dogs of the escapement that play into the rack on the carriage (J 9), and also the post of the spring drum (J 68) twice a week. Other parts may be oiled once a week - particularly the bearings at the end of the paper platen and feed roll shafts in the vertical arms of the carriage, and the vertical slides at the end of the platen; also the pivots at each end of the universal bar (J 178). See that the six rolls on which the carriage travels revolve freely. Wipe clean all sliding contacts before oiling, in order to remove dirt and gum.

2. **Inserting the paper**

Insert the top end of the paper, held in the left hand, face side down over the paper shelf (H or I, P) and under the platen (H or I, M): at the same time, turn the platen by the wheel F 39 till the top edge of the paper is an inch above the scale (K 403). Then lift the scale until the sheet can be placed beneath it: after which, drop the scale into place.

3. **Adjusting the paper**

If the upper edge of the paper is not exactly parallel with the scale, draw back the advanced corner firmly but gently to the proper position. If, however, care is taken to present the whole length of the edge of the sheet evenly to the grip of the feed-rolls, before rotating the platen, this adjustment will rarely be needed.

To obviate the wrinkling or tearing of very thin paper in this adjustment and to ensure its even feed between the rolls, especially in manifolding, press towards you one of the paper release levers (E, F, and G, 30) with the first finger of one hand, while drawing back the paper with the other hand. Either right or left hand release can be used.

4. **The printing point**

The writing line is four notches, or line spaces, nearer the operator than the farthest edge of the scale. The centres of the letters correspond with the degree marks on the scale. Absolute registration can, therefore, be secured as follows: insert the paper, and, depressing either paper release lever (E, F, or G, 30), adjust one of the written lines even with the top edge of the scale. The bottom of the line should be barely visible over the edge of the scale, the letters centring with the scale degrees. While adjusting the paper, note that the line lock (E or G 47) prevents the platen from rotating while the sheet is being adjusted. Then rotate the platen backwards for four teeth (or line spaces) to printing position. Registration may be further verified by means of the ledge or notch (E X, J X) at the right side of the support of the front type-guide (H and I L), moving the carriage to the right and left for the full length of the line, with this object in view. The lower edge of the written line should be exactly level with this ledge.
5. The marginal stops
All paper - wide or narrow - should be inserted centrally with the platen, and the marginal stops should then be set to correspond. The left marginal stop is on the notched rail of the frame behind the carriage. It regulates the beginning of the line, and is moved by raising its spring catch (J 59), and sliding the stop along. With the stop moved well to the right out of the way, first set the carriage to the position giving the desired margin: then slide the stop to the left against the rear rail of the carriage so placed. The right-hand marginal stop is attached to the main frame at the right hand side behind the carriage, and is readily adjusted to the required margin, and secured by means of its thumb screw. The bell-trip (F 152) is on the release-bar (F 53 B) at the right hand end of the paper carriage in front. This should be set by the thumb-screw (F 156) so as to ring the bell four or five letter spaces before the desired end of the line. The bell then gives sufficient warning. In adjusting the bell-trip, make sure that the thumb-screw is securely fastened.

6. The marginal release
Normally, the buffer (J58 B) arrests the return of the carriage towards the right at the point corresponding with its setting. For marginal writing, in returning the carriage for a new line, press the curved lip (J 58A) on this arm backwards. The arm will swing freely out of the way, and allow the carriage to return farther to the right, till stopped by the buffer on the main part of the stop. The marginal notes can then be written. Right-hand margin - The normal right-hand margin is determined by the type-locking device, regulated by use of the type-lock key, in conjunction with the bell-trip and small scale connected with the right-hand side of the carriage, and a small lever underneath the cover of the machine, which throws the type-lock out of action, when desired. If the bell-trip (F 152) is set at 80 - as will be appropriate for ordinary full-width work - the types will lock at a point about four letter spaces before the end of the aforesaid scale is reached. If it is then desired to write two or three letters in that margin to complete a word, press the button, and the lock will be released, so that the additional characters can be written. If the operator prefers to throw the type-lock out of action, so that it will only lock the types at the extreme end of the scale, the bell-trip should be set at 77, and the type-lock should then be thrown out of play by pressing in the lock key, the little lever underneath the cover being reversed so as to catch on a projection on the extension of the lock-bar. It will not then be necessary to touch the button at all.

7. The shift-key
The shift-keys (E and J 69) are placed at the left of the keyboard. Depression of the shift-key marked ‘Caps’ sets the platen in place for writing capitals, or ‘upper-case’ letters. Depression of the shift-key marked ‘Figs’ sets the platen in position for writing the figures and miscellaneous signs. The full-stop is set in all three cases, the comma appears in only the upper-case and ‘Caps’ case.
8. The shift-lock
Either shift-key can be locked by pressing the latch (E and J 74) till it engages the hook (E and J 70) on the lever below. To release it, simply press the shift-key previously locked, without touching the latch.

9. Carriage release
The free movement of the carriage in *either* direction - left or right - is obtained by depressing the carriage release-key (G 53). This key should be held up with the third finger of the left hand, the first and second fingers being at the same time held against the line-space lever (E or G 41). The carriage can then easily be slid to any desired position. In the ordinary operation of returning the carriage for a new line, the key (G 53) may be similarly held up, thus obviating the click of the escapement mechanism. Care should, however, be taken to release the key (53) as soon as the carriage is arrested by the marginal stop, before releasing the lever (41).

10. Beginning a new line
Place the forefinger of the left hand against the spoon-shaped line-space lever (E and G 41), pressing the carriage firmly to the right as far as it will go. The platen is rotated for the new line at the same time, and its proper position is assured by taking care that the lever (41) is pressed to the right till it rests against the ratchet wheel line-lock (E, G, 47) on the end of the platen, forcing the lock firmly into the teeth.

11. Adjusting the line-spacing
Two widths of line spacing are provided - variable by rotation of the knurled head eccentric disc (G 43) to either of its alternative locking positions.

12. Variable line spacing
Turn the small lever at the top of the line lock (E or G 47) so as to throw the small arm against the inside of the platen ratchet wheel: then turn the platen by the hand-wheel (F 39) to proper register for each line, indicated by the notch (J x).

13. The ribbon
The Empire 1 is not fitted with a two-colour ribbon device, but, if it is desired to write in some alternative colour, a piece of carbon paper of that colour can be slipped temporarily between the platen and the front type-guide. The ribbon is sufficiently wide to provide two writing tracks. When one is exhausted, remove the ribbon spools, invert them and exchange them from one spindle to the other. The lower edge of the ribbon will then be brought uppermost, and the second track will be interposed between the types and the paper. It should be seen that both spools revolve freely on their studs without friction.

14. The ribbon reverse
The ribbon winds on to the spool with which the ribbon pawl is in engagement. The pawl can be swung into engagement with either spool at will by means of the shifter-knob (E 144). To wind the ribbon by hand, turn the reel on to which the ribbon is automatically feeding at the time.
15. **Putting on a new ribbon**
   The Empire No 1 uses a ⅞ inch ribbon. Wind the ribbon entirely on to one spool, as directed in Section 14. At the end of the ribbon on the empty spool will be found a metallic spring clip, easily removable by firm pressure between thumb and finger. Place the end of the new ribbon across the hub, and spring the clip back to place round it. After replacing the spools on their studs, see that the ribbon is properly threaded through the rocking arms (J 128) in front of the printing point. Note that the reels are marked ‘Right’ and ‘Left’ and that the appropriate reels should be placed right and left, and not reversed.

16. **The tensions**
   Finger-key tension. Under the space-key in front of the frame will be found a knurled thumb-screw: turn this to the right to make the action harder for high-speed capacity, and to the left for a softer touch. Always adjust to as soft a touch as will allow sufficient speed.

17. **Manifolding**
   When thin paper is used to interleave the carbons, it is well to put a sheet of hard paper against the cylinder to prevent wrinkling.

18. **Removal and replacement of the carriage**
   If it ever becomes necessary to remove the carriage from its track (which should not be the case unless the machine has been allowed to get exceedingly dirty from neglect), the following directions should be carefully observed. First, remove the left margin stop, by slipping it off to the left, being careful that the spring for its extension arm does not get loose: take off the right margin stop, which is attached by a thumb-screw; then unhook the right hand end of the chain from its slot in the carriage arm, being very careful that it does not slip out of the fingers, and anchor it firmly to the pin (E 64 A) in the main frame at the right. This precaution is necessary to prevent the release and unwinding of the main spring in the drum below the left-hand ribbon spool. Next, fully loosen the bell-trip thumb-screw (F 156), and remove the sliding bracket (F 152) from its place on the bar. Press the carriage release key (G 53) and the space-key, at the same time sliding the carriage to the left, when it is easily lifted from the ways (see Plate J).
   To return the carriage to the ways, be sure that its back rail is properly entered between the head of the hold-down screw (at the left end of the rear rail of the frame) and the track roll below, on which it travels: depress the vertically moving portion of the carriage by light pressure on the platen, till the roll (J 84) is seen to enter its path in the centre of the frame properly. With the carriage well to the right, connect the chain in its position, and restore the bell-trip bracket (F 152) to place. After replacement of the right and left-hand margin stops, the machine is ready for work.