

location upon the wheel is provided with a clamping device to secure the rods in any necessary position horizontally. At the right-hand end of the shaft is mounted a ratchet mechanism with an air connection to supply the power to actuate it.

A special em rack is incorporated. This is fitted with an abutment which reaches to a point in line with one of the positions occupied by the rods. A slot in the wheel allows this abutment to pass through when a long measure necessitates it, usually when the attachment is not in use.

The following is the procedure when the attachment is to be brought into use. Position the em rack pointer at zero and turn off the air supply valve which is supplied with the attachment. Place the wheel in a position upon its shaft, most suitable for the rods selected for the columns of the copy to be set. Press the hand release pawl so that the hole for the rod, representing the first column of the copy, is in position. Then fit the rod in the first position and adjust the length so that the correct measure is obtained when the reversing key is depressed. The shaft should then be rotated forward by hand one tooth on the ratchet wheel, to bring the second hole into position. The rod representing the second column of copy should be located and set to give the correct measure. Proceed to repeat these operations until all the rods required are fitted and adjusted to position. The shaft position pin, which actuates the trip pawl, should then be screwed into the hole opposite the number engraved on the teeth of the right-hand ratchet; this is equivalent to the number of columns or rods in use. For instance, if six rods are being used the pin should be screwed into No. 5 hole, marked 6 on the tooth.

When narrow columns are to be set, provision is made to allow the mechanism to trip as near as  $1\frac{1}{2}$  ems from zero, but for normal work it trips at 4 ems, simultaneously with the ringing of the bell.

Turn on the air control valve before commencing copy.

To fit the attachment, first turn off air supply and then remove em rack slide b5KB1, and take off the em rack scale e9KB1, two em rack scale clips a9KB5, two screws a9KB3, adjusting screw head a8KB2, stop rack b7KB1, stop rack hook 7KB2, and spring 7KB3; assemble them on the attachment.

Remove the bell bracket b1KB2K, right-hand cylinder head 36KB2, pipes (a36KB4 and a27KC1), and cylinder ring 36KB3.