

notch on ratchet 13KC5 when lever a2KC1 has come to rest; but it will drop into the next notch when the front end of lever a2KC1 is pressed upward hard with the fingers.

Tighten the lower lock nut 9KC5.

Test the adjustment by depressing and releasing a key, noting that each time the key is struck and released the detent 5KC1 drops into the next notch on the ratchet 13KC5.

When the adjustment is correct, grasp the knurled knob 13KC10 and note that there is a slight amount of rotary play in its shaft. This play may be best noted by watching the teeth on ratchets 13KC5 and 13KC6 (back of 13KC5) where the play should be just perceptible.

This play is necessary to ensure that the work of stopping the movement of the ratchet 13KC6 does not come on the end of the pawl 7KC1 but on the lower fibre washer 9KC6. If there is more than $\frac{1}{64}$ " rotary play to the circumference of the ratchets 13KC5 and 13KC6 it shows that the detent 5KC1, or the pawl 7KC1, is worn and needs replacing, because too much play will prevent the punch holes lining with the marginal perforations in the ribbon with uniform accuracy.

Examine the movements of release plate 8KC1 and its link b8KC2 to see that they do not raise any of the pawls and detents except when the link b8KC2 is pulled forward and hooked over pin a25KC3. When the link b8KC2 is pulled forward and hooked over the pin a25KC3 it raises detent a23KC1 and the pawl b24KC1 from the ratchet 22KC1; the release plate 8KC1 at the same time raises the pawl a6KC1 and the detent 5KC1 from the ratchet 13KC5, and the pawl 7KC1 from the ratchet 13KC6, thus permitting the paper to be turned freely either backward or forward.

PAPER FEED ROD

One Adjustment—length of rod 9KC1.

OBJECT

That the stroke of the lever b4KC2 shall be the same amount on each side of the horizontal centre line.

PRELIMINARY

Turn on the air.

Take off the nut 11KC5, the washer 11KC6, and the plate a4KC9.