



**FIG. 1**

## XII. PICK-UP SET DOWN POSITION

This is adjusted before leaving the Works so as to set the stylus down  $\frac{1}{8}$ " in from the outside edge of the record. Should it become necessary to alter the set down position, proceed as follows:—

- (1) Remove turntable (see Section 1). On later models this is unnecessary as two access holes are provided in the turntable.
- (2) With machine in the switched off position, an eccentric roller (Part No. 5134 Fig. 4) with a screw driver slot can be seen on the top face of the cam gear. This eccentric when turned will make the test track either wider or narrower. Before moving the eccentric mark cam and track adjuster with a pencil. To make the set down position further in from the edge of the record, the test track should be made wider and to make the pick-up stylus drop nearer to the edge of the record the test track should be made narrower.
- (3) It is also possible to carry out this operation from the underside provided there is room in the cabinet to operate a screw driver. In these conditions it is necessary first to disconnect the electricity supply. Operate starting switch and turn cam in direction of arrow (Fig. 1) until eccentric screw appears then proceed as at this section paragraph 2 although in this instance the track cannot be seen.

It may be necessary to carry out this operation a number of times and test after each adjustment until the desired position is obtained.

The machine gives automatic positioning for all sizes of records by "feeling" the outside diameter of the bottom record of a loading, and then setting down on a diameter  $\frac{1}{4}$ " smaller.

## XIII. PICK-UP MUTING

When the machine is provided with a pick-up muting switch the pick-up is short circuited during the entire change cycle so as to obviate undesirable noises being reproduced. Ensure that when the cam gear (Part No. 5270 Fig. 1) is in the "playing" position there is between .010 and .025" clearance between the two contact points of the switch. This clearance can be obtained by slight bending of the contact strips.

## XIV. PICK-UP TRACKING ADJUSTMENTS

Should the pick-up at any time fail to track correctly it may be due to one of the following causes:—

- (a) Pick-up lead trapped or tight.
- (b) Cam following pin touching bottom of cam groove.
- (c) Striker feed lever 5117 (Fig. 2) resting on sub-plate 5243 (Fig. 2).
- (d) Chipped or damaged pick-up stylus.
- (e) Insufficient stylus pressure.

To cure any of the above possible faults proceed as follows:—

- (a) Check that pick-up lead is not trapped and that there is sufficient slack when connected to muting switch or connecting strip.
- (b) Make sure that the cam following pin is not fouling the bottom of the cam when in the "playing recess". To adjust the pin away from the cam turn screw No. 2278 in a clockwise direction at the same time holding nut No. 4998 (Fig. 5). Do not give too much clearance otherwise the follower pin may jump out of the cam groove while the cam is rotating in cycle. The correct setting is for the pin to touch halfway up ramps A & C yet be clear of the cam in position "B" (see Fig. 1).
- (c) The striker feed lever 5117, Fig. 2, must be perfectly free on its pivot "E" and should be in contact with the sub plate 5243, Fig. 2, at its forward end, i.e., under the strike arm 5183, Fig. 2 at the same time it should be clear of the sub plate at its rear end by about  $\frac{1}{16}$ ". Should the clearance at this rear end be insufficient, it may be increased by inserting a screwdriver between the lever and plate and exerting a slight upwards pressure.
- (d) To fit a new stylus bar, lift pick-up arm until the cartridge can be clearly seen, undo small screw holding stylus bar in position, use care not to lose this screw, damaged bar may now be removed. Place screw through new stylus bar and place in position, gently tighten screw at the same time ensuring that the bar locates in the centre of the cartridge.

To remove a pick-up cartridge, undo screw 2954, Fig. 4, when cartridge assembly will drop out, pull lead sockets from cartridge using care not to break soldered joints between sockets and lead wires. Reverse procedure to fit new cartridge.