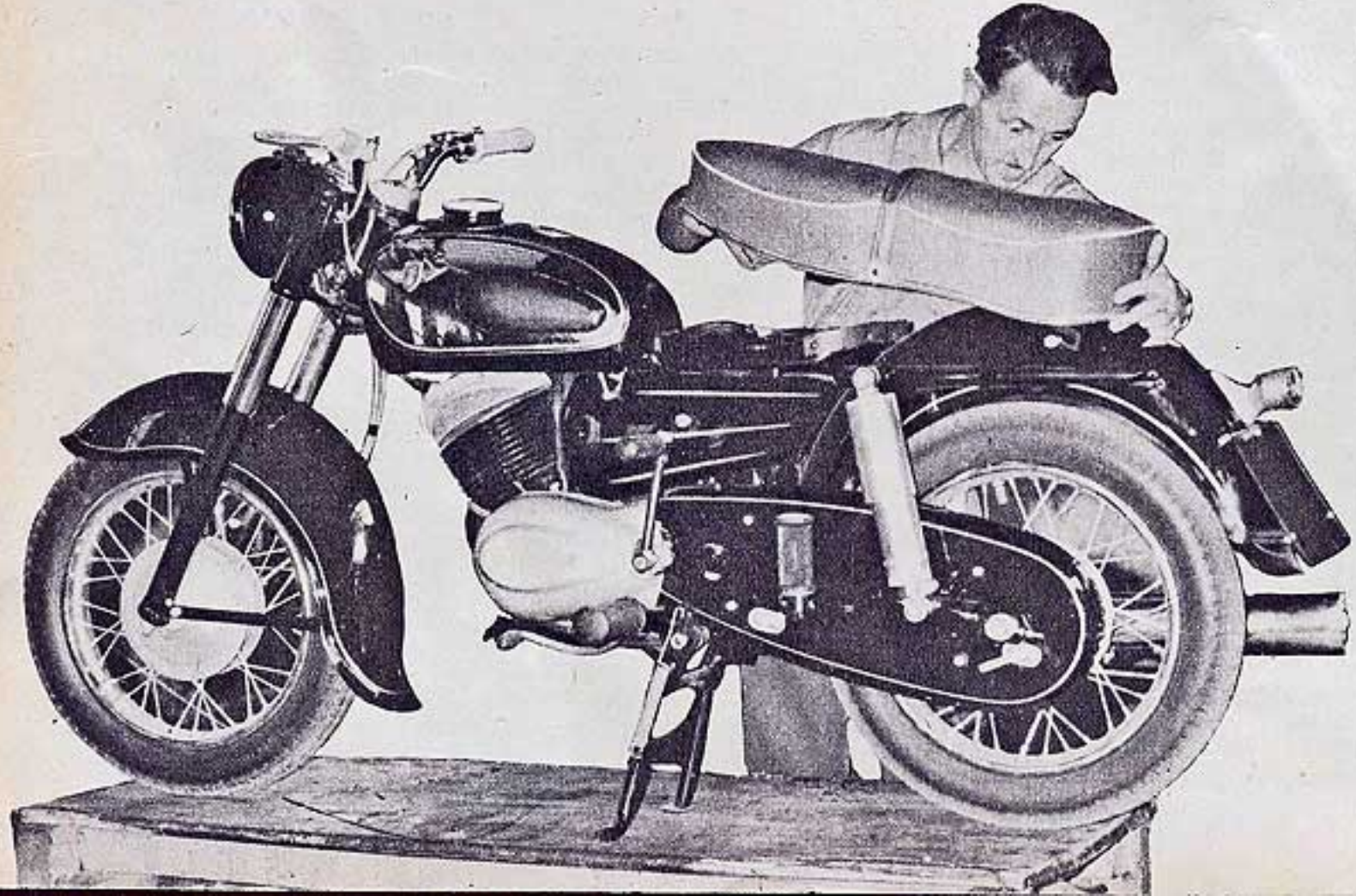
WORKING ON A ZUNDAPP

Zundapp expert Ernie Prince shows how to strip this interesting engine



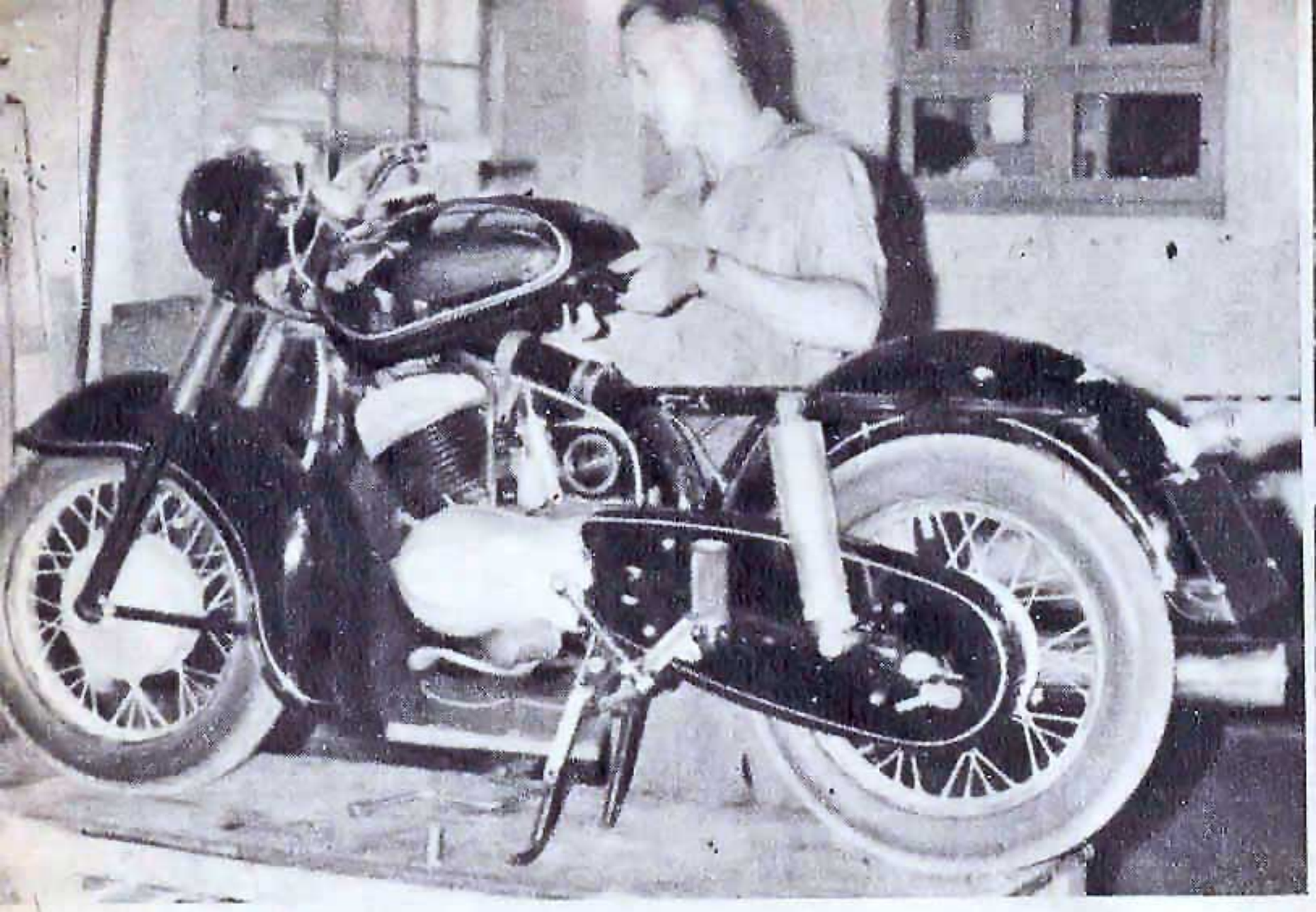
THE German Zundapp 200S and 201S machines have always been very popular in this country. Imports were discontinued for a year or two recently, but a new model, the 250 c.c. Trophy, is now available (price £203).

As far as the engine is concerned the 250 (a single cylinder two-stroke) is virtually identical to the earlier models—this picture strip-down therefore applies to them all.

The engine is straightforward enough to work on, though the primary drive side is somewhat different from what we usually find in this country. Like most Continental machines you need quite a few special tools for the job. Unlike most Continental machines these tools are ridiculously cheap—the whole batch used in this article can be bought for less than thirty bob!

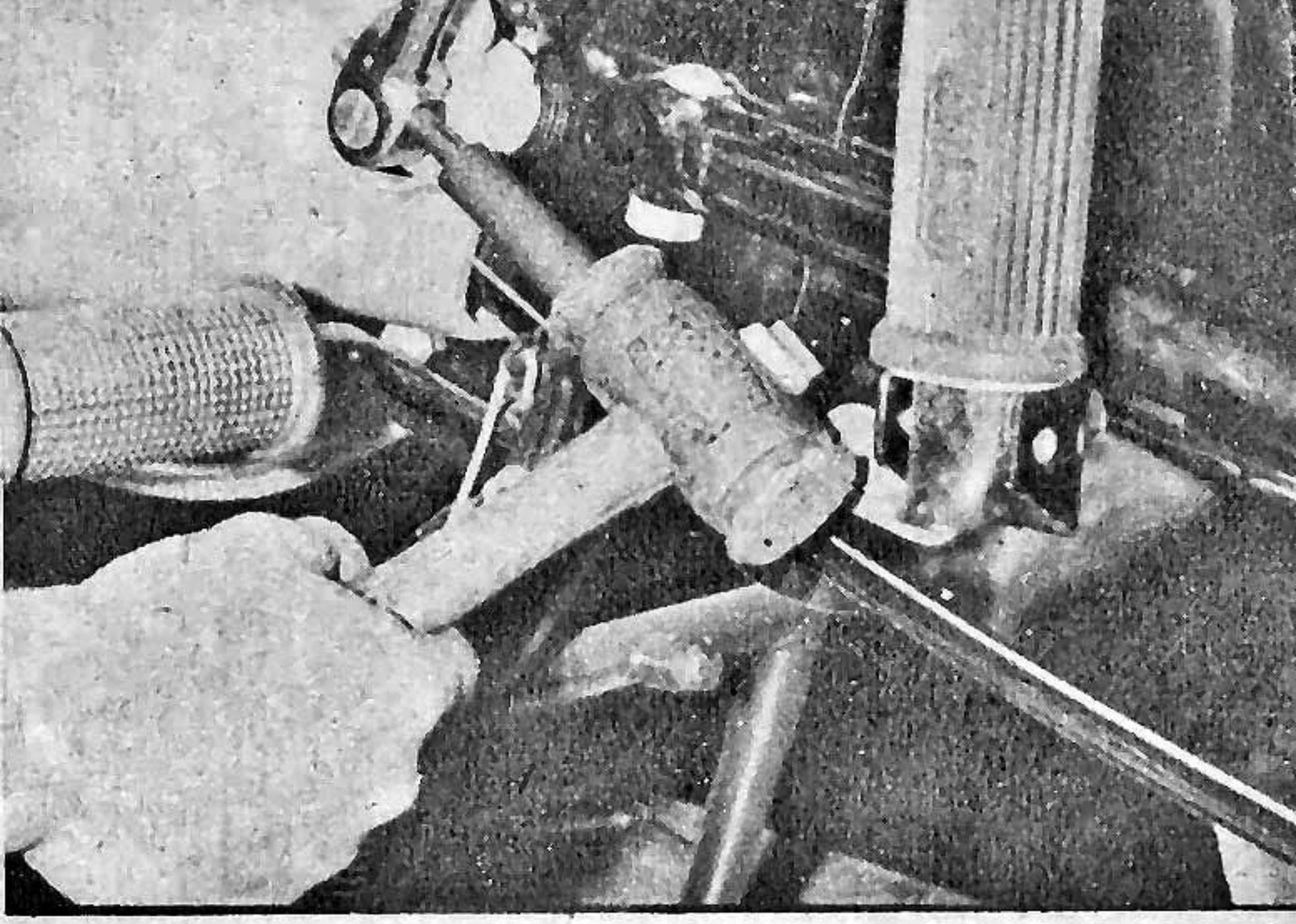
If your dealer has not got them write direct to the Stores Department, Ambassador Motor Cycles Ltd., Pontiac Works, Fernbank Road, Ascot, Berks.

Points to watch: disconnect battery before fiddling with the electrics—it is easier to do most of the stripping whilst engine is still in the frame—always remove all keys from their shafts—when undoing flywheel nut never lock flywheel by wedging steel bar against another part of the engine, but get someone to hold it.

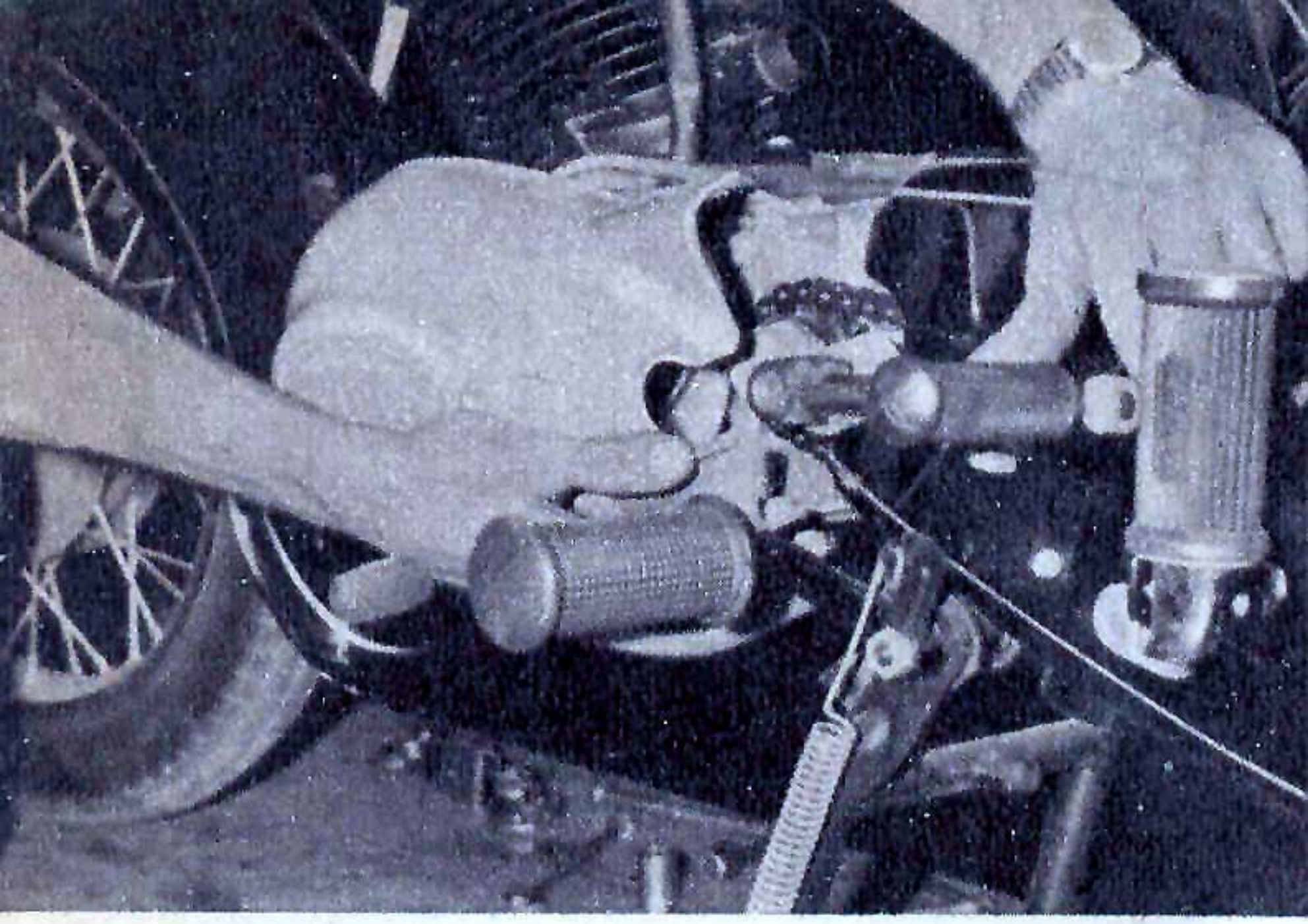


1 After removing the dualseat, side panels and tool pan, the tank can be pulled straight off after you have disconnected the petrol pipe

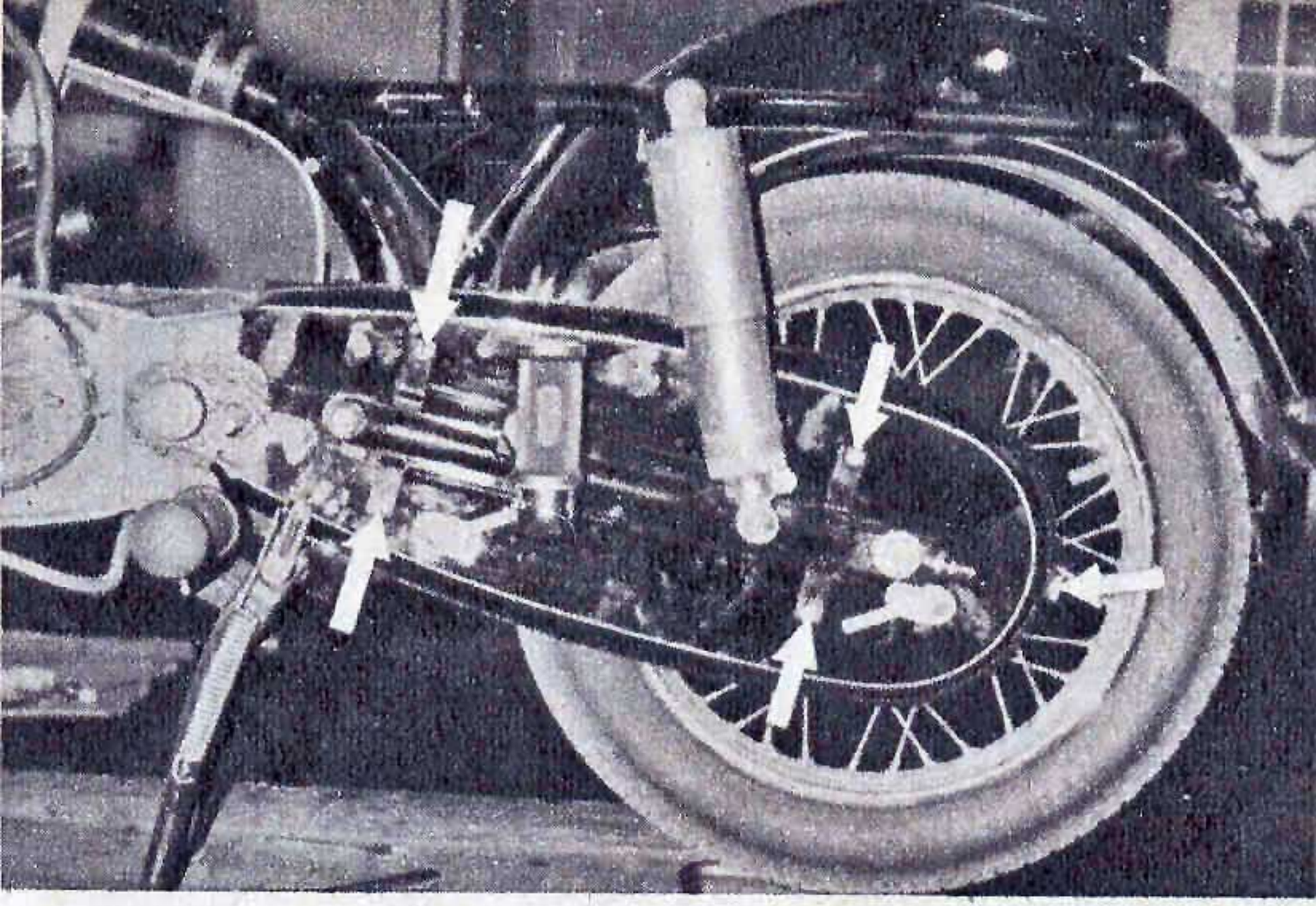
2 *Remove exhaust pipe and silencer, air filter, carburetter. Swivel horn to one side, undo head bolts with tool-kit spanner, lift head*



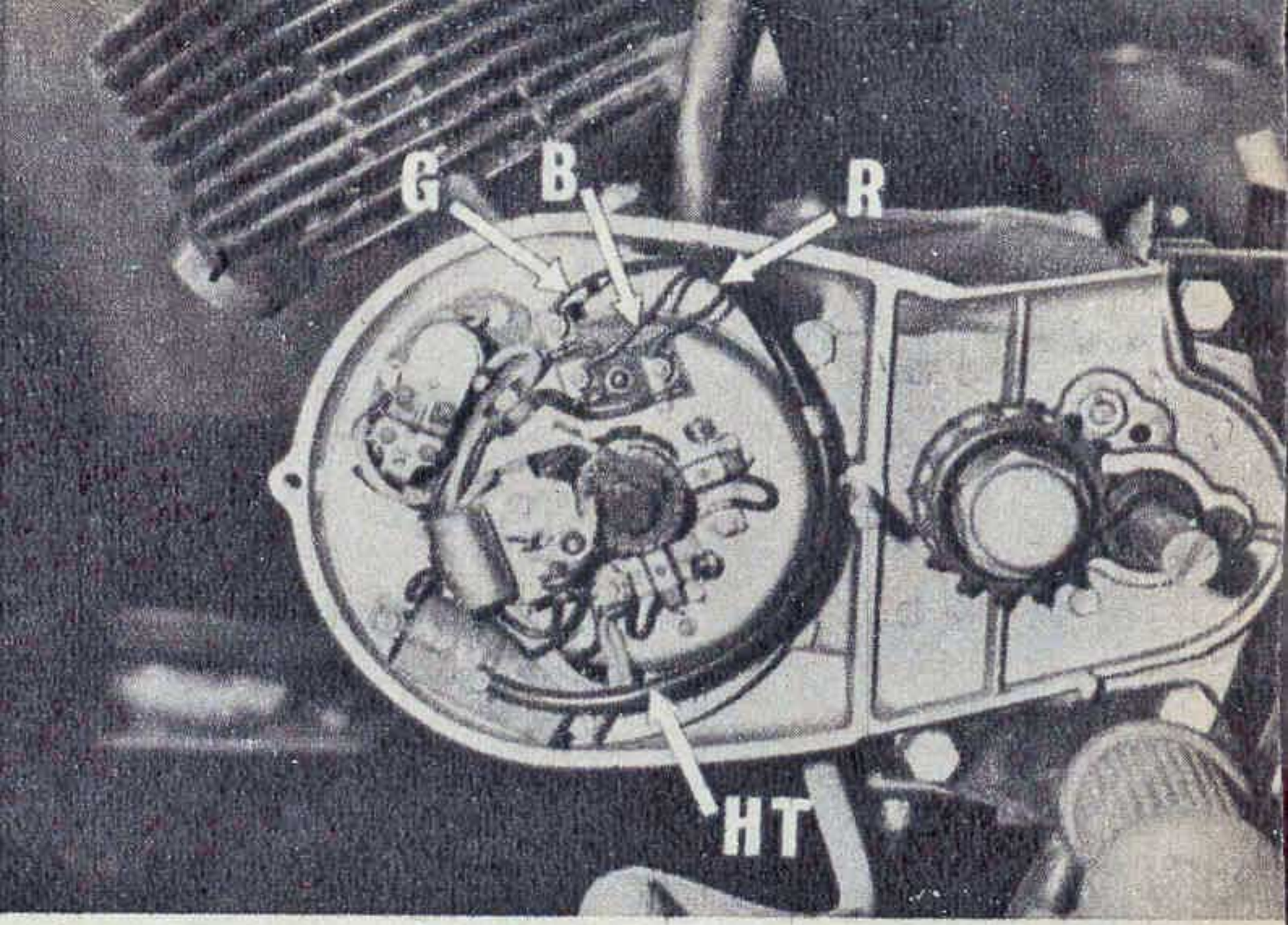
3 *Before the generator cover can be removed you must knock out kick-start cotter pin, preferably using the special tool for the job (6/1)*



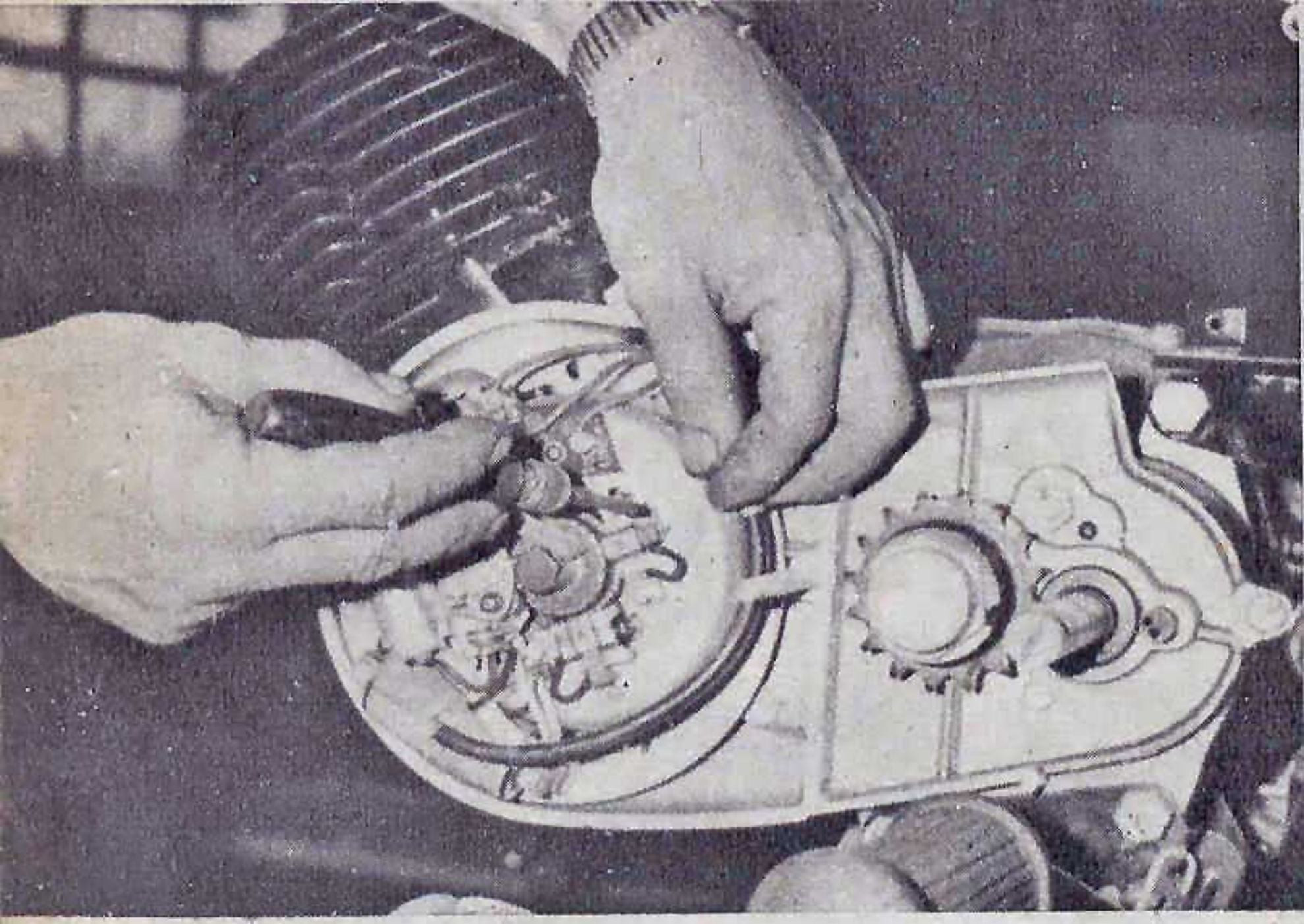
4 With the cotter pin out, hold the kickstart lever in the position shown above, undo the generator cover fixings and remove the cover



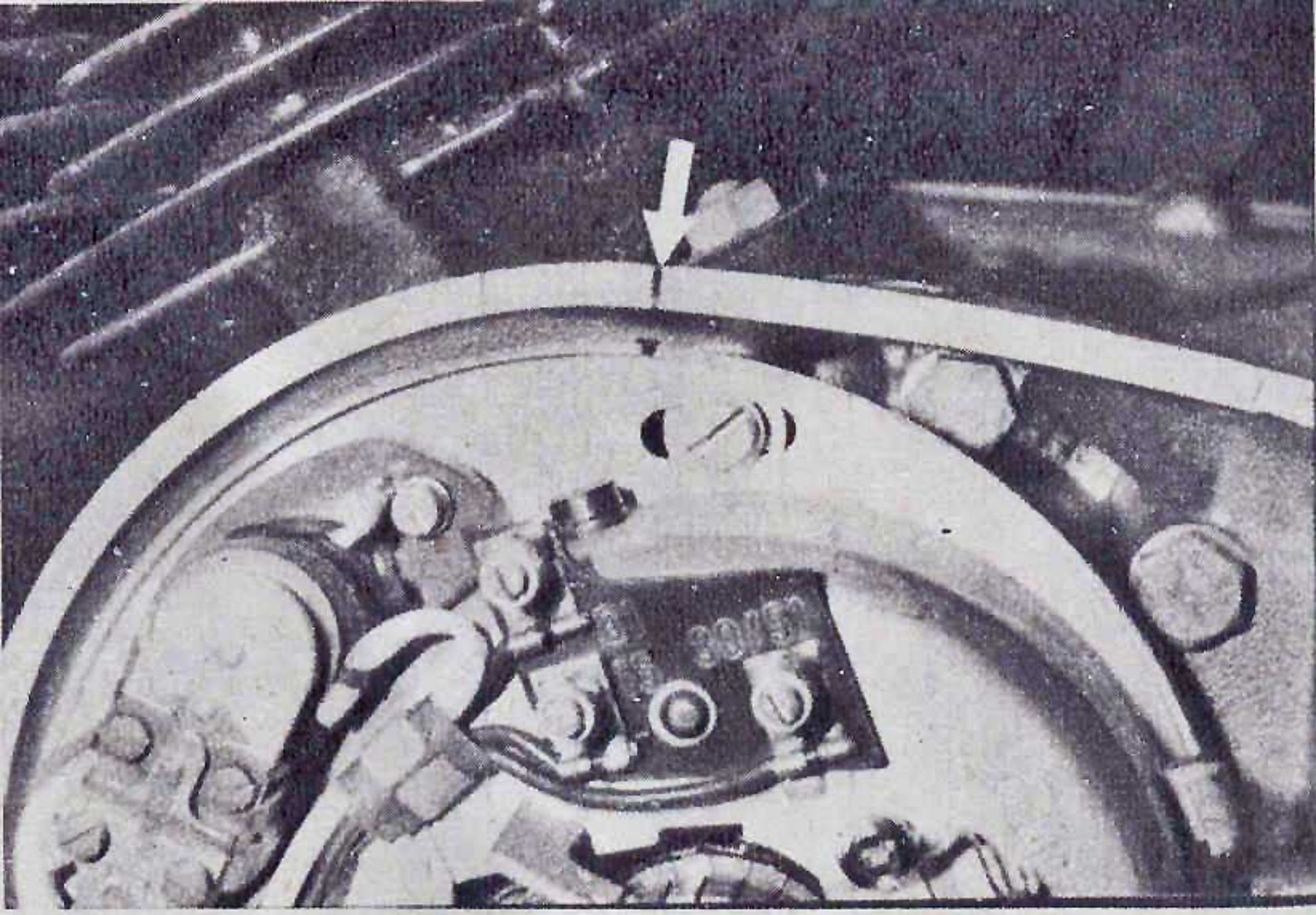
5 *Pull off the kickstart lever and spring. Detach the rear chaincase (five bolts, arrowed), disconnect rear chain and end of clutch cable*



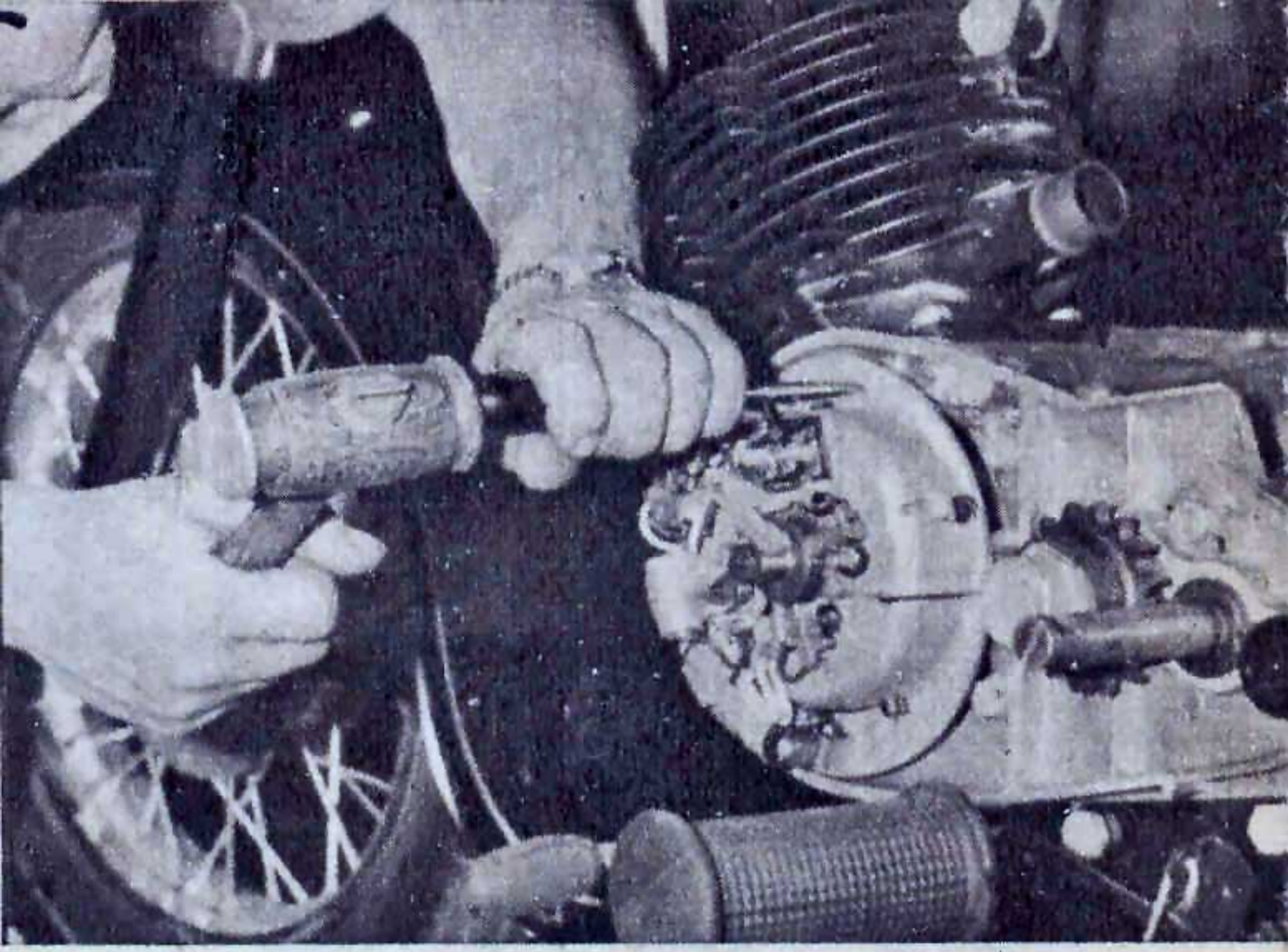
6 *Important—disconnect the battery. Now remove three wires, green (G), blue (B) and red (R), as well as the HT lead (HT). Tuck out of way*



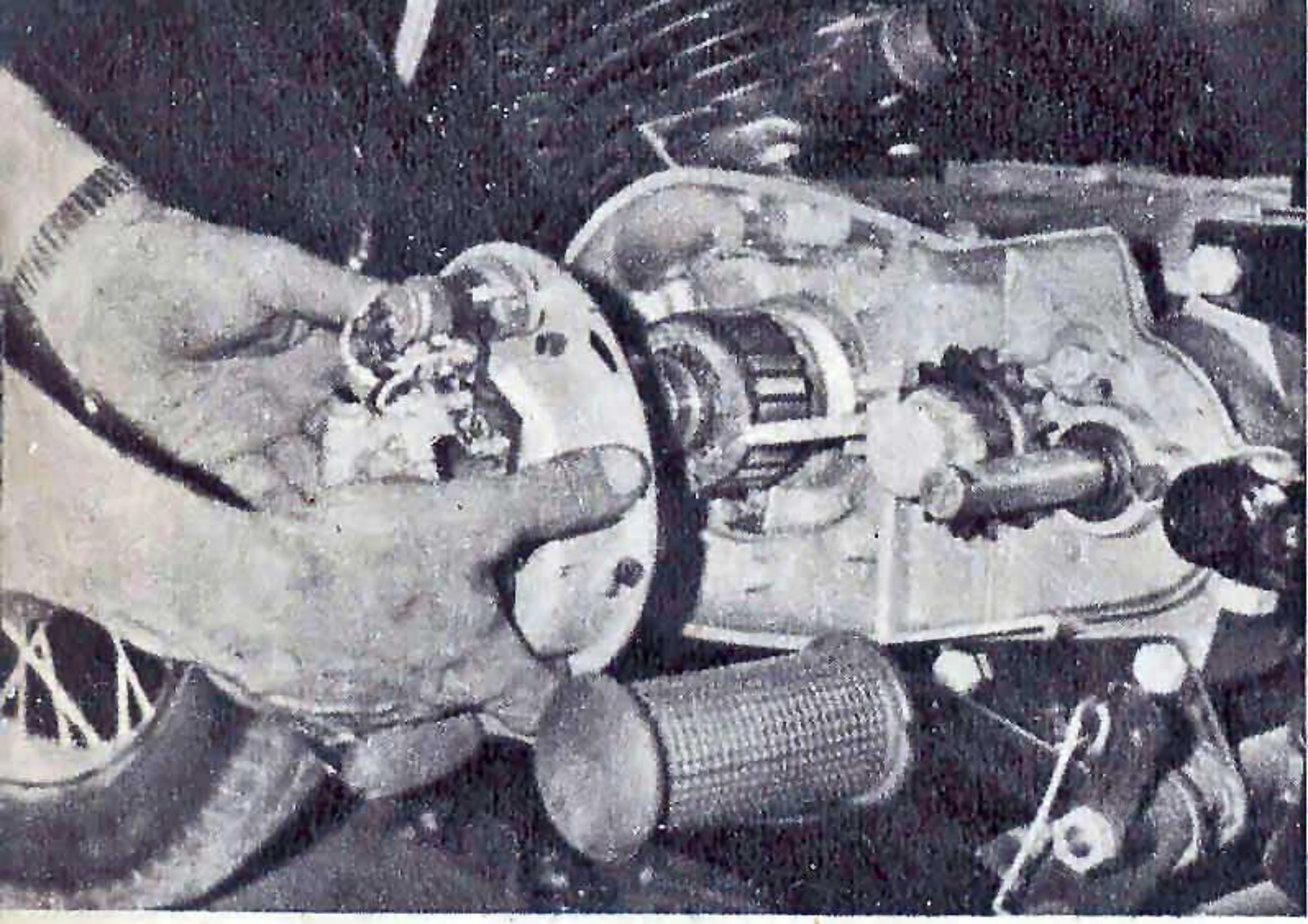
7 Release the dynamo brush springs, and pull the two brushes slightly out of their holders to prevent them binding on to the commutator



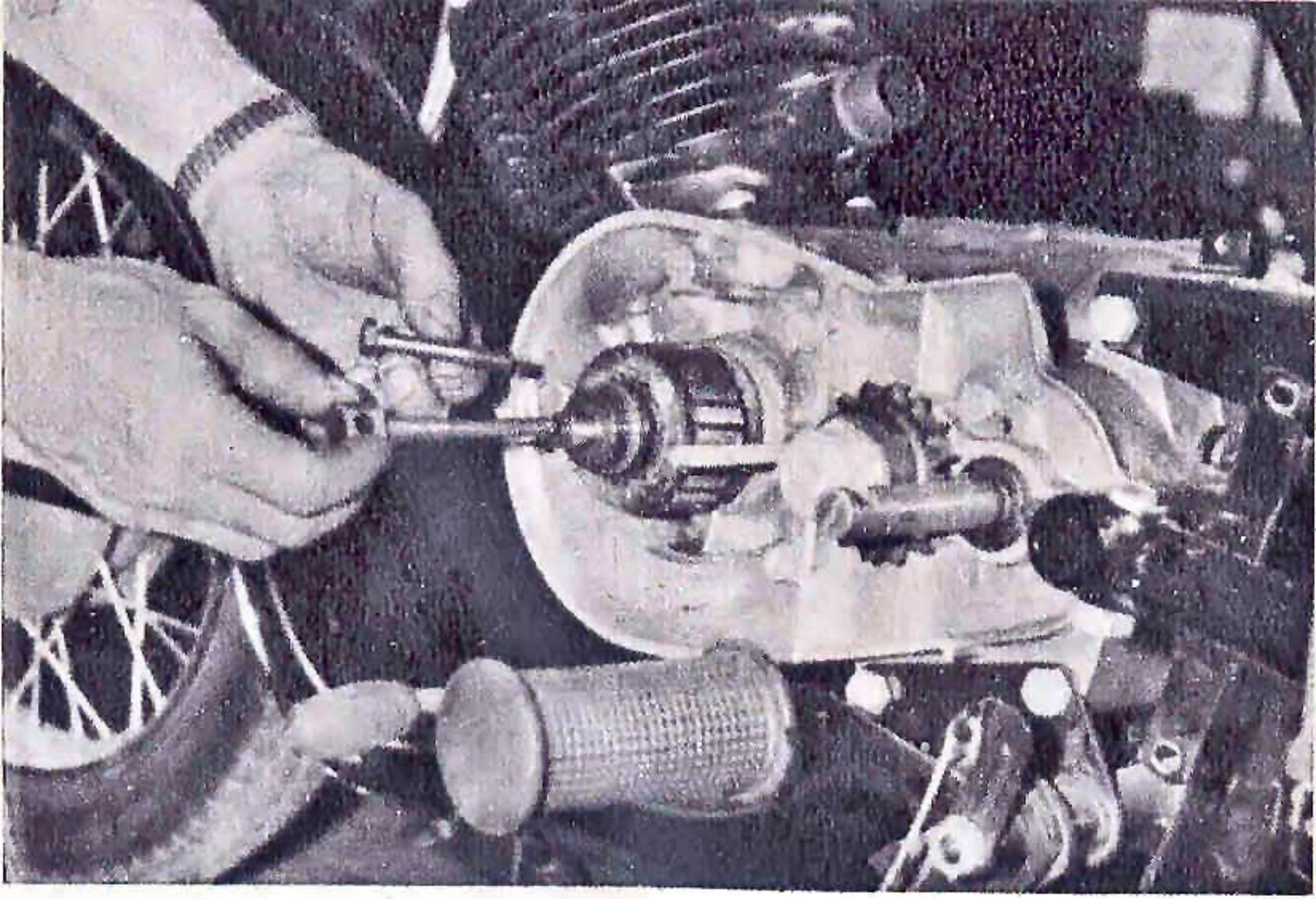
8 *Removing the stator plate results in disturbing the timing. For easy reassembly make a pencil mark on stator and crankcase before moving*



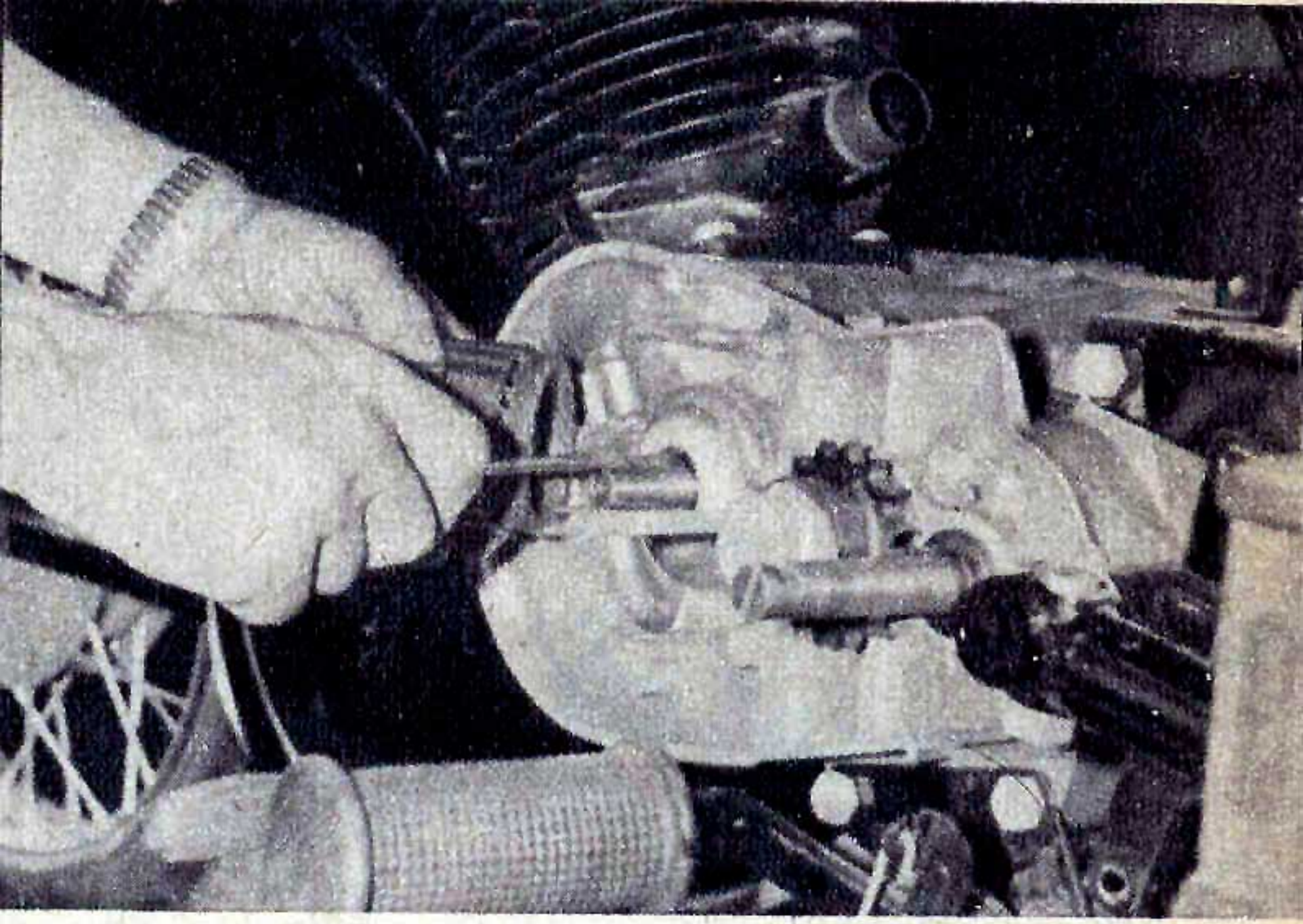
9 *With the timing position marked, you can now set about undoing the three stator screws. If stiff tap screwdriver with hammer to loosen*



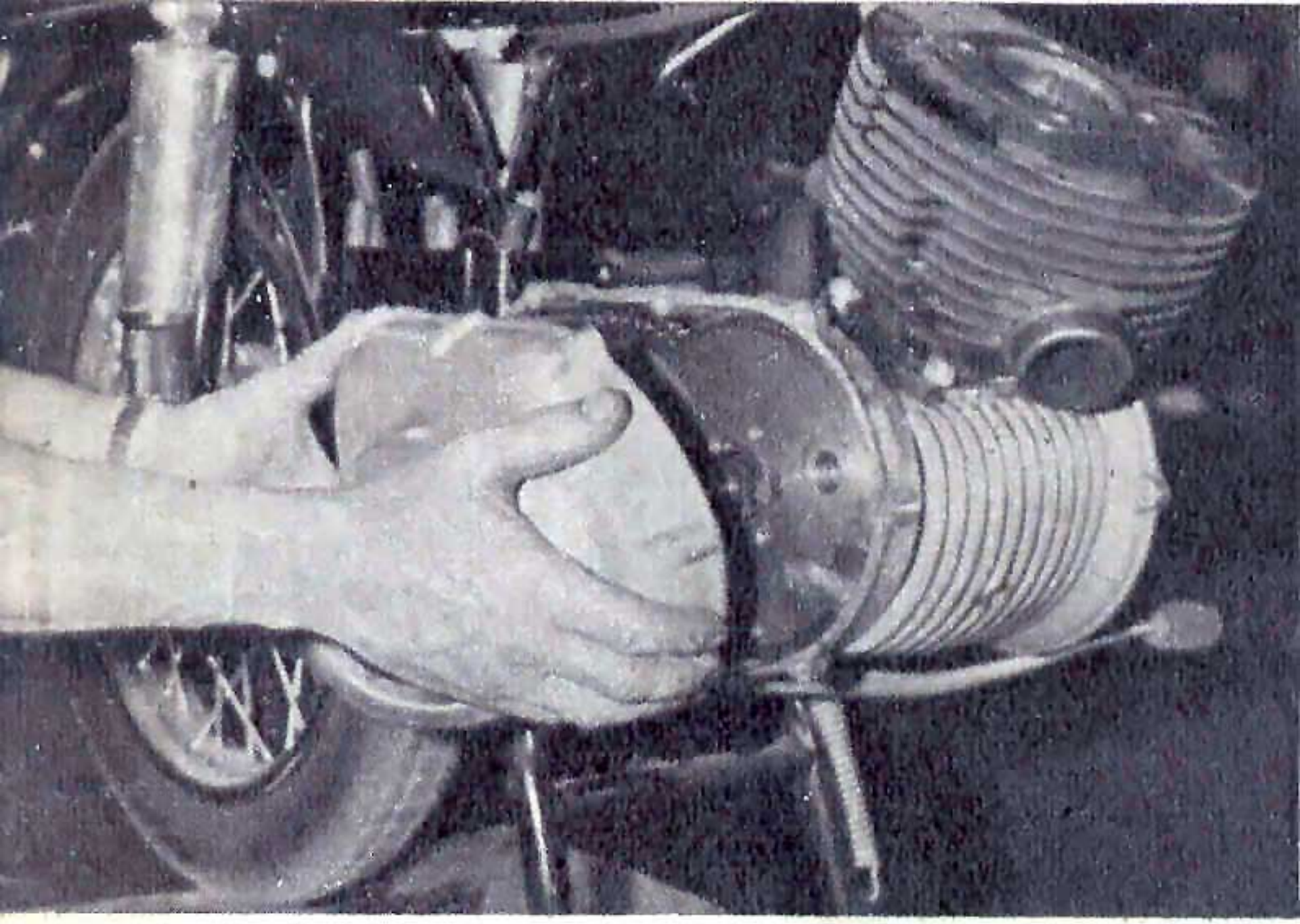
10 With the three screws removed from the slots in the stator plate you should now be able to carefully pull the stator plate off armature



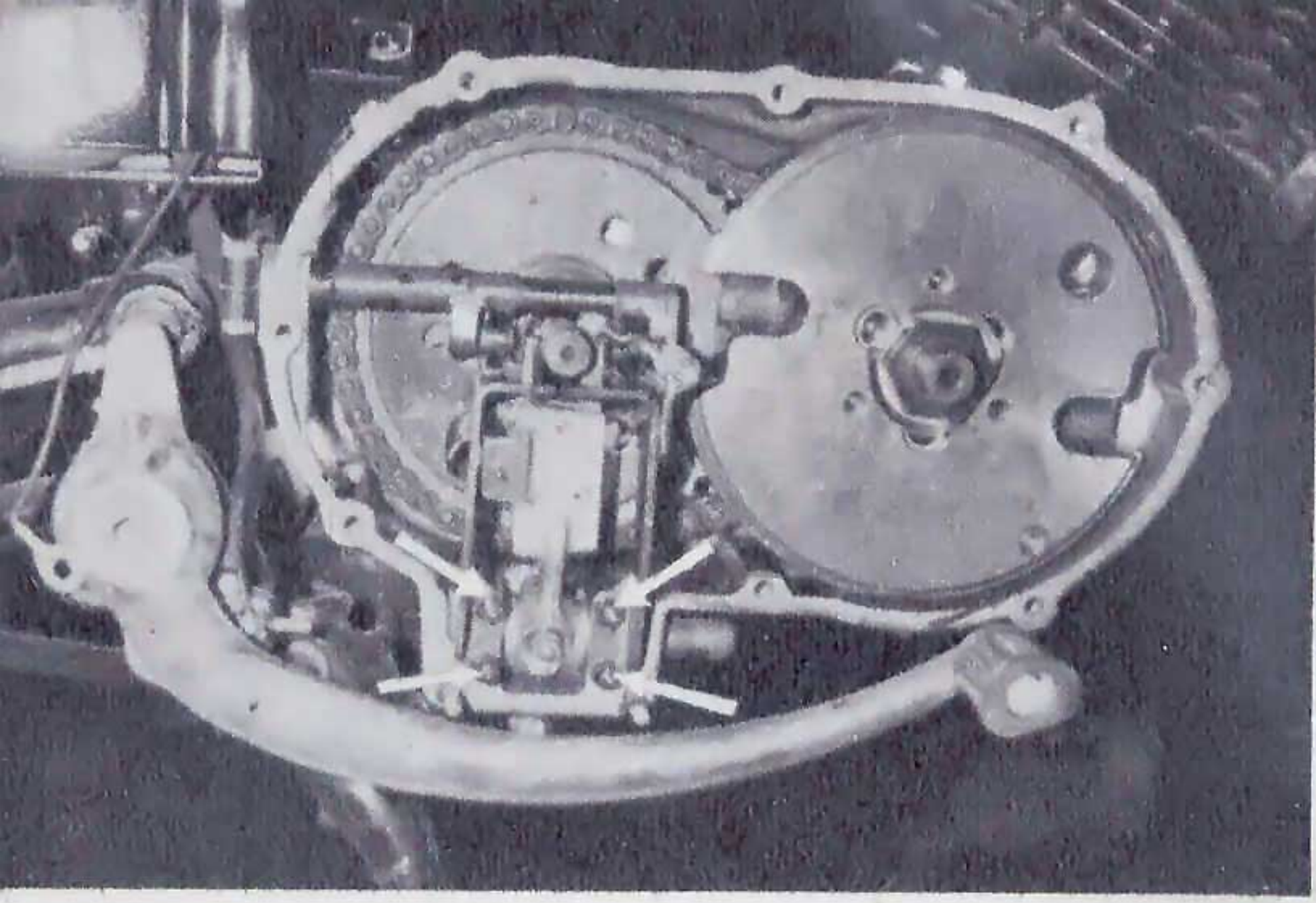
11 *Removing the armature. Undo bolt (tap spanner with hammer if stiff) and screw in extractor. Tighten the extractor until armature pulls off*



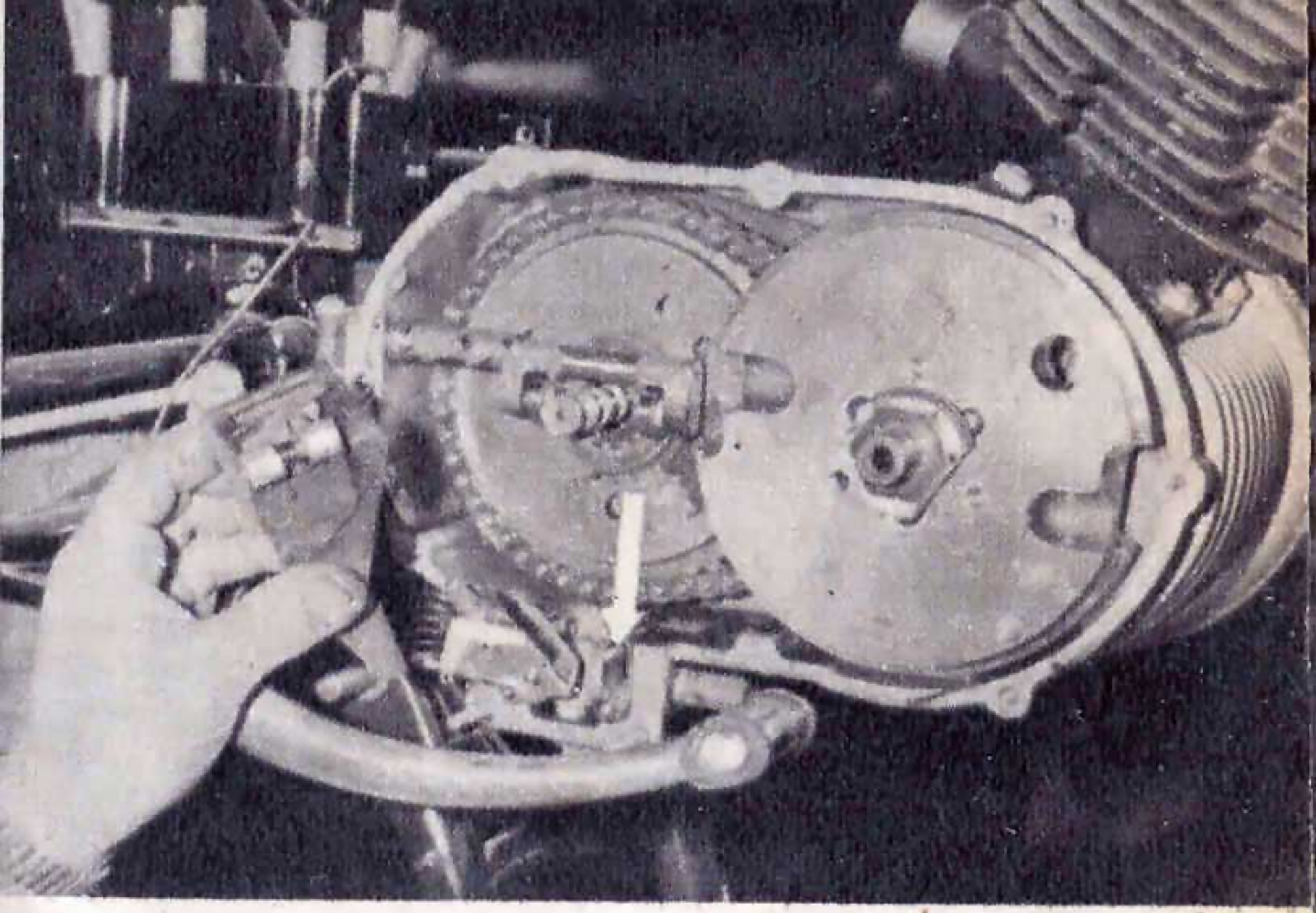
12 *Once it is loose the armature can be pulled straight off. It is very important to remember to remove the small key left in the shaft*



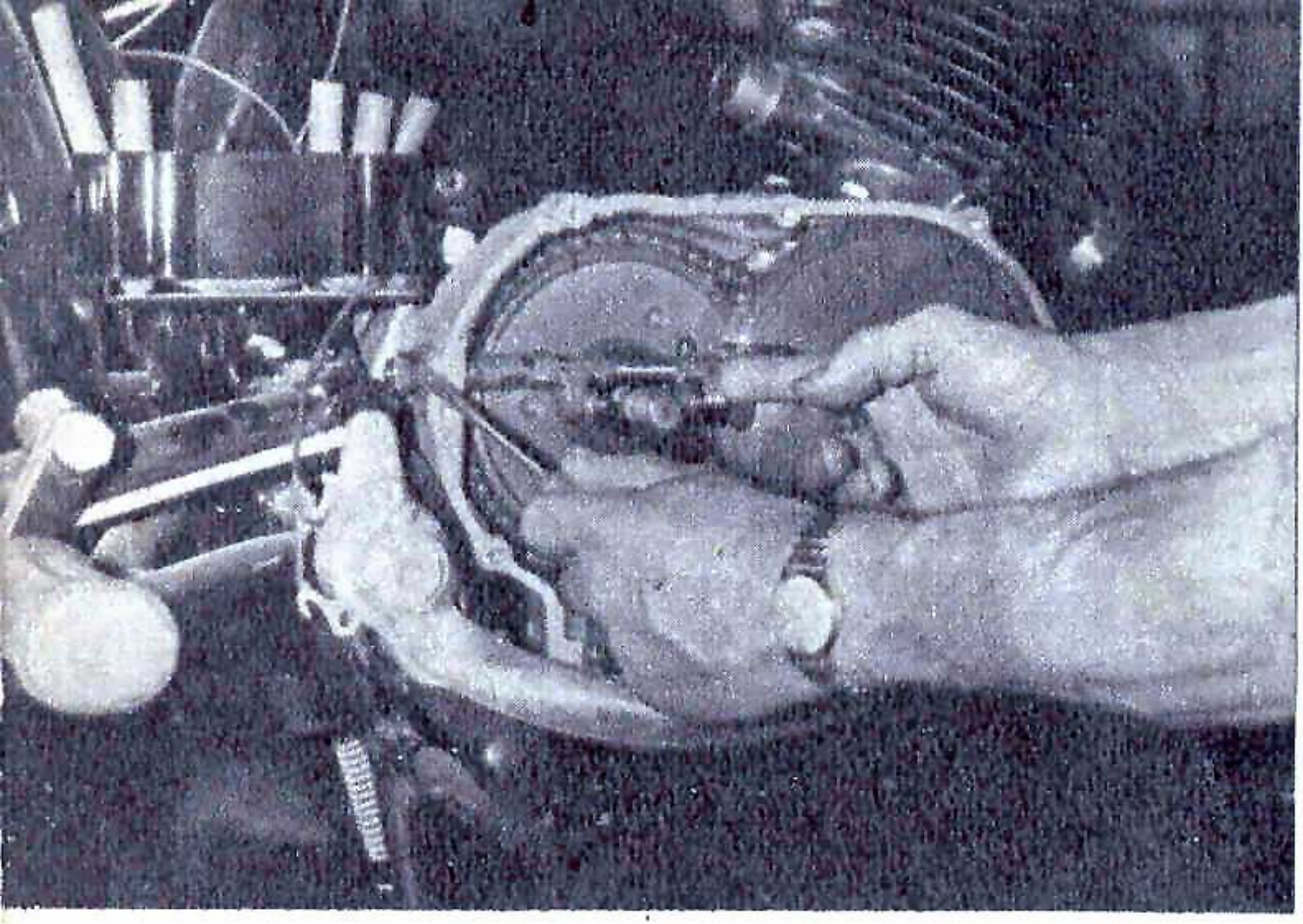
13 *Remove the offside footrest, drain the oil from both drain plugs and remove the clutch cover. This is fixed by two nuts and eight bolts*



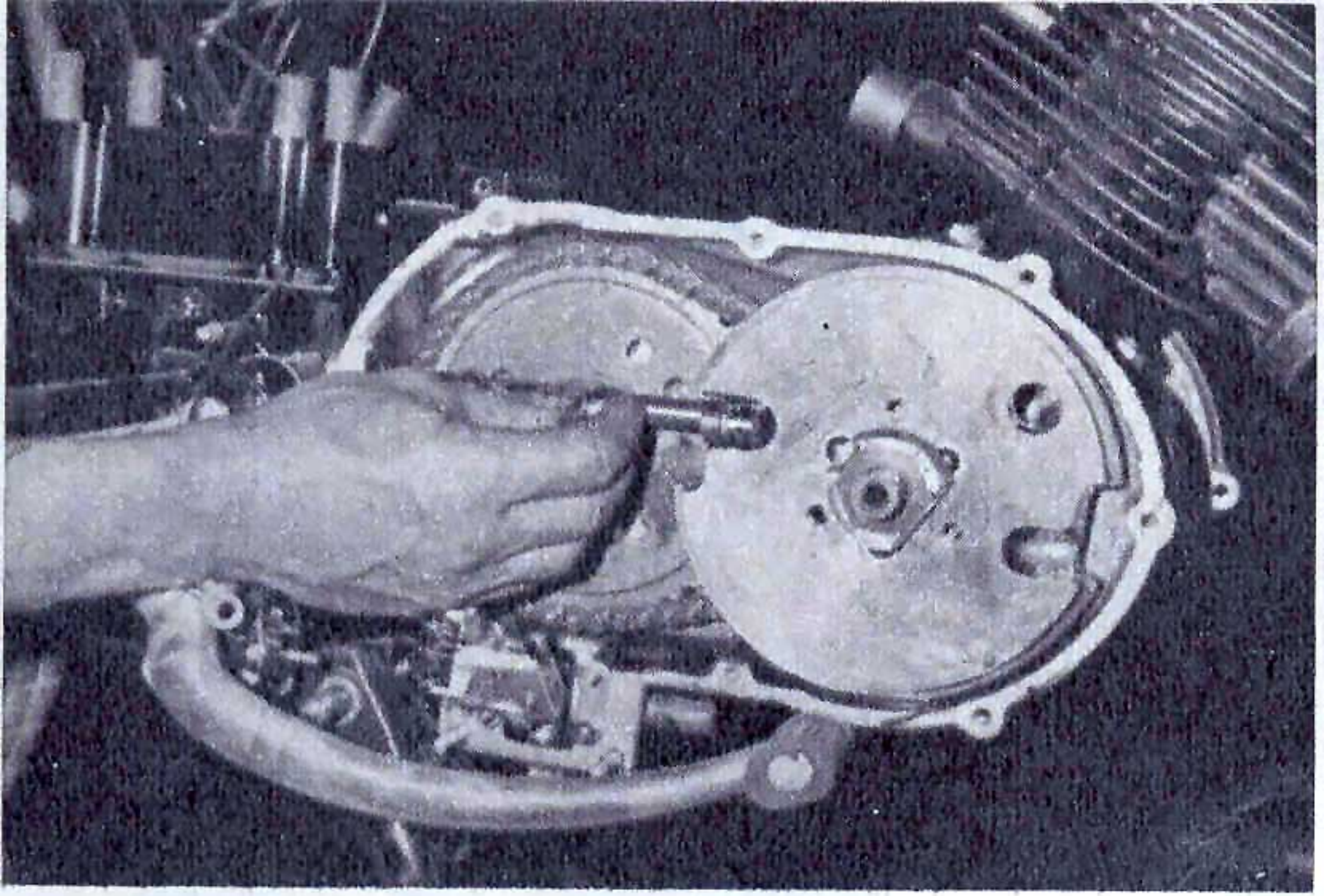
14 *Remove gearchange lever (under the crankcase), undo four nuts holding gear selector support (all arrowed) and pull off the selector support*



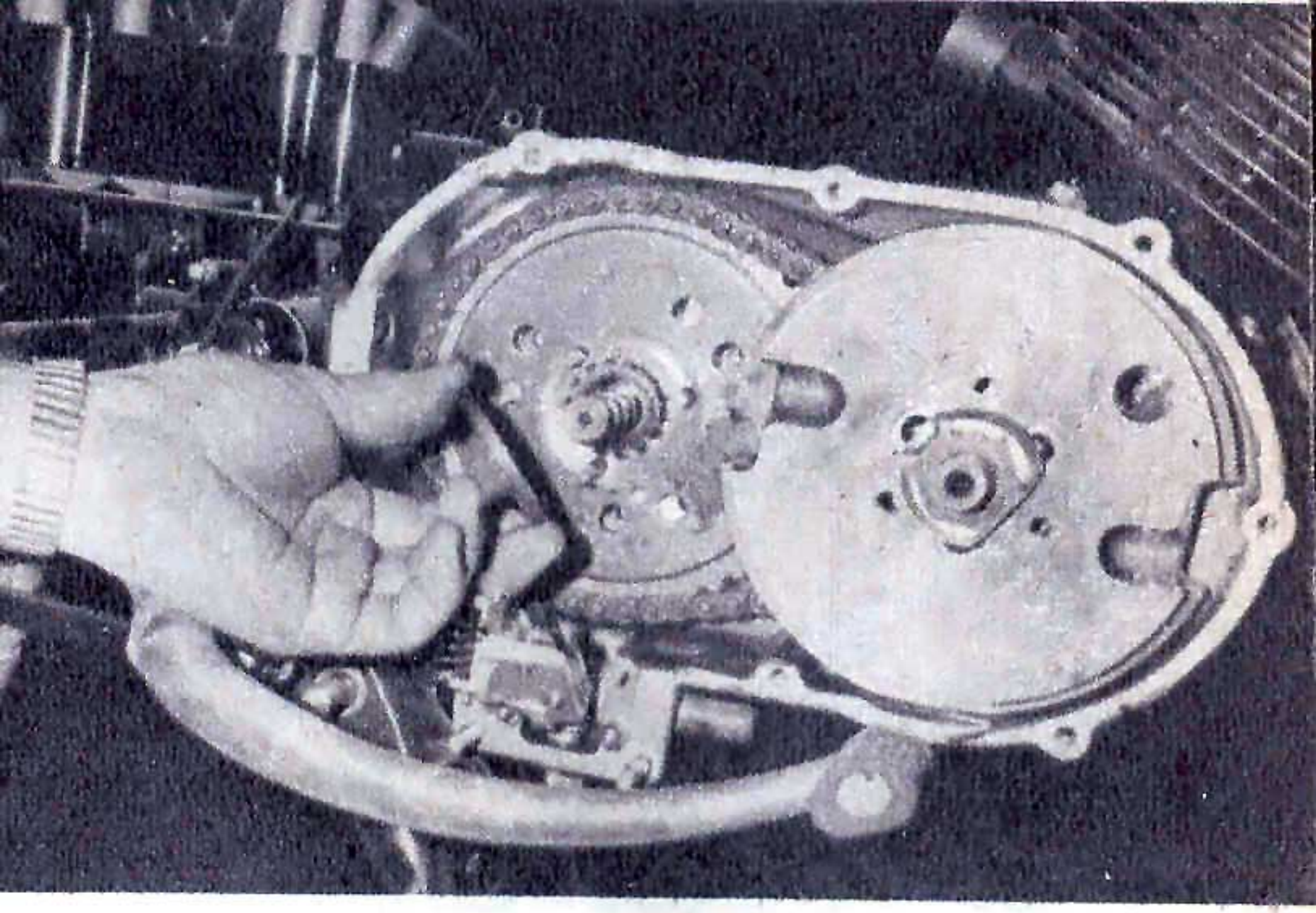
15 *The selector support coming off. The selector fork stays behind. Be careful to replace shims (arrowed) and nuts on studs for safe keeping*



16 *Remove clutch lever on end of the pressure rod, then push pressure rod out so that rubber oil seal can be pulled off with screwdriver*



17 *Swivel pressure rod upwards, then push it forwards until it fits in one of the notches in the flywheel. It is now possible to pull it out*



18 *Having removed the clutch pressure rod it is now possible to pull out the splined clutch pressure plate and the three thrust pins behind*

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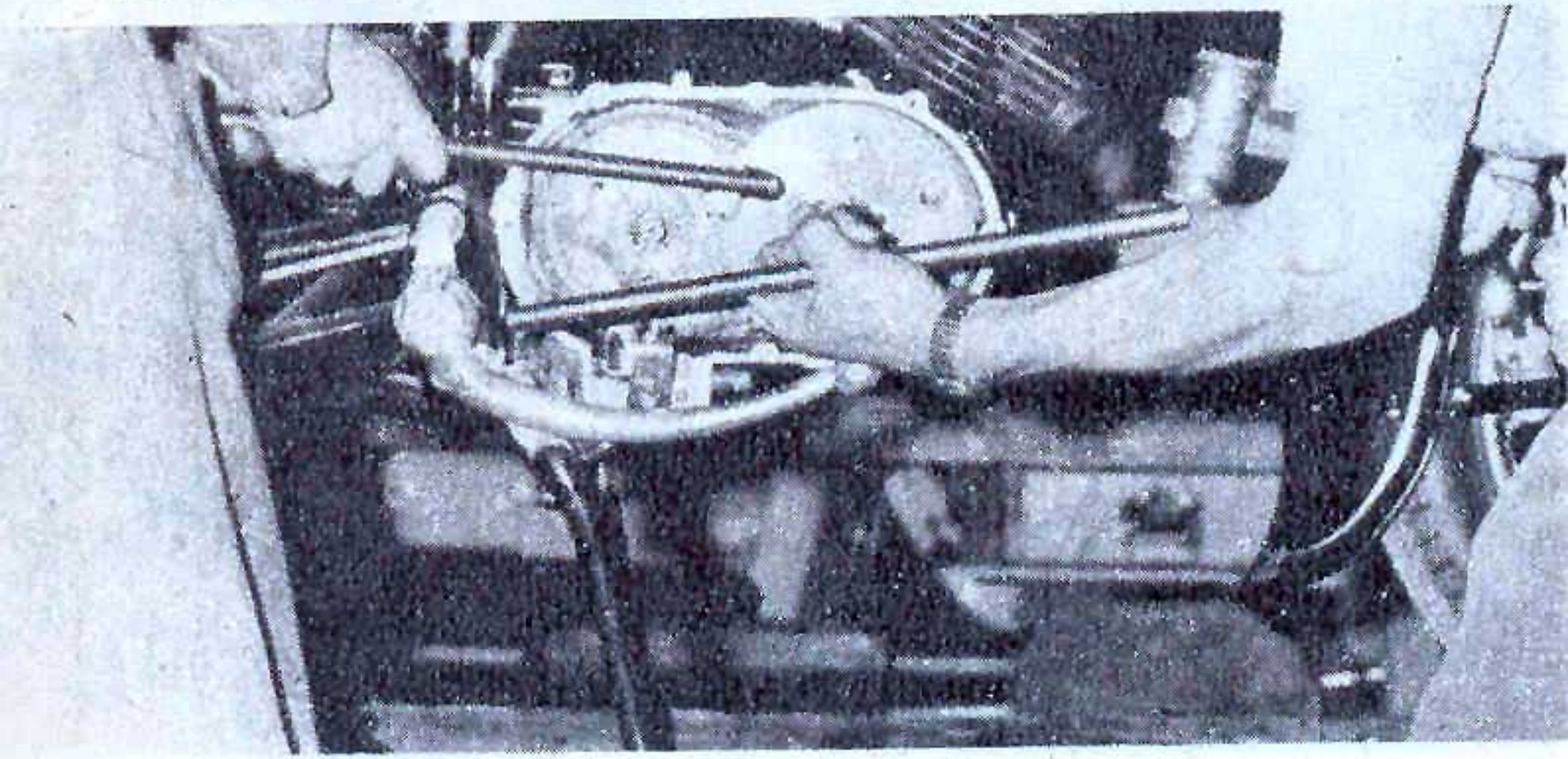
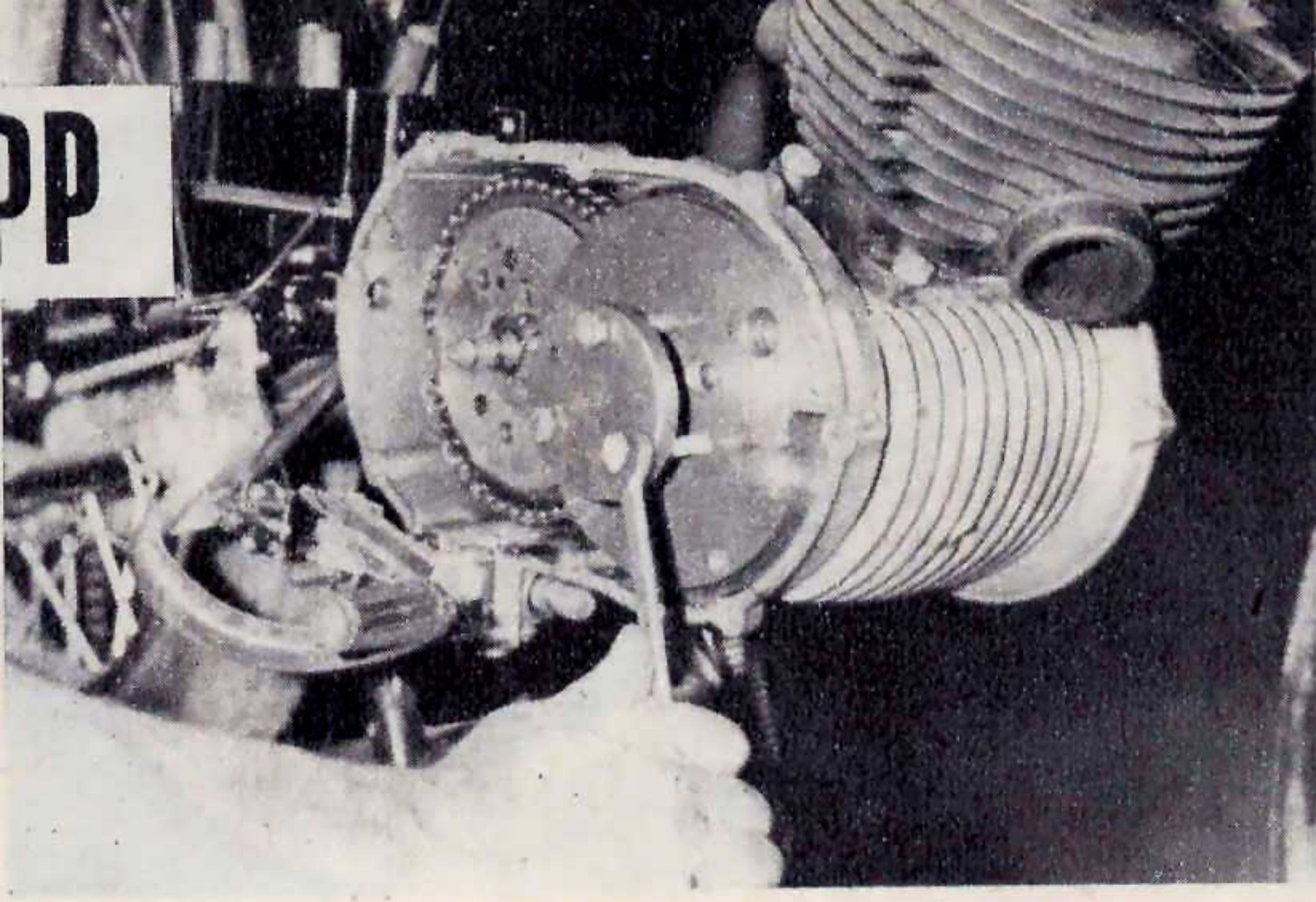
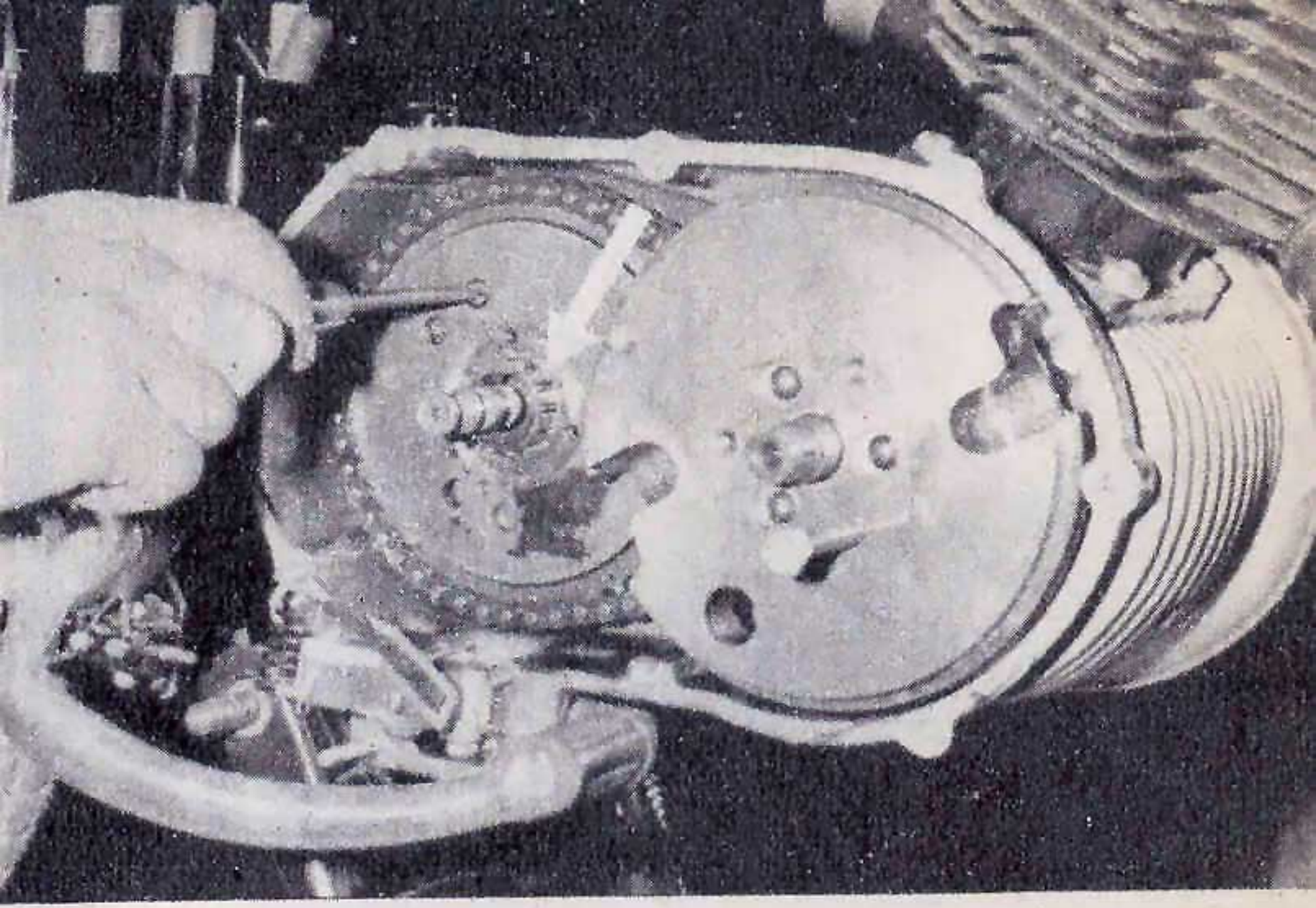


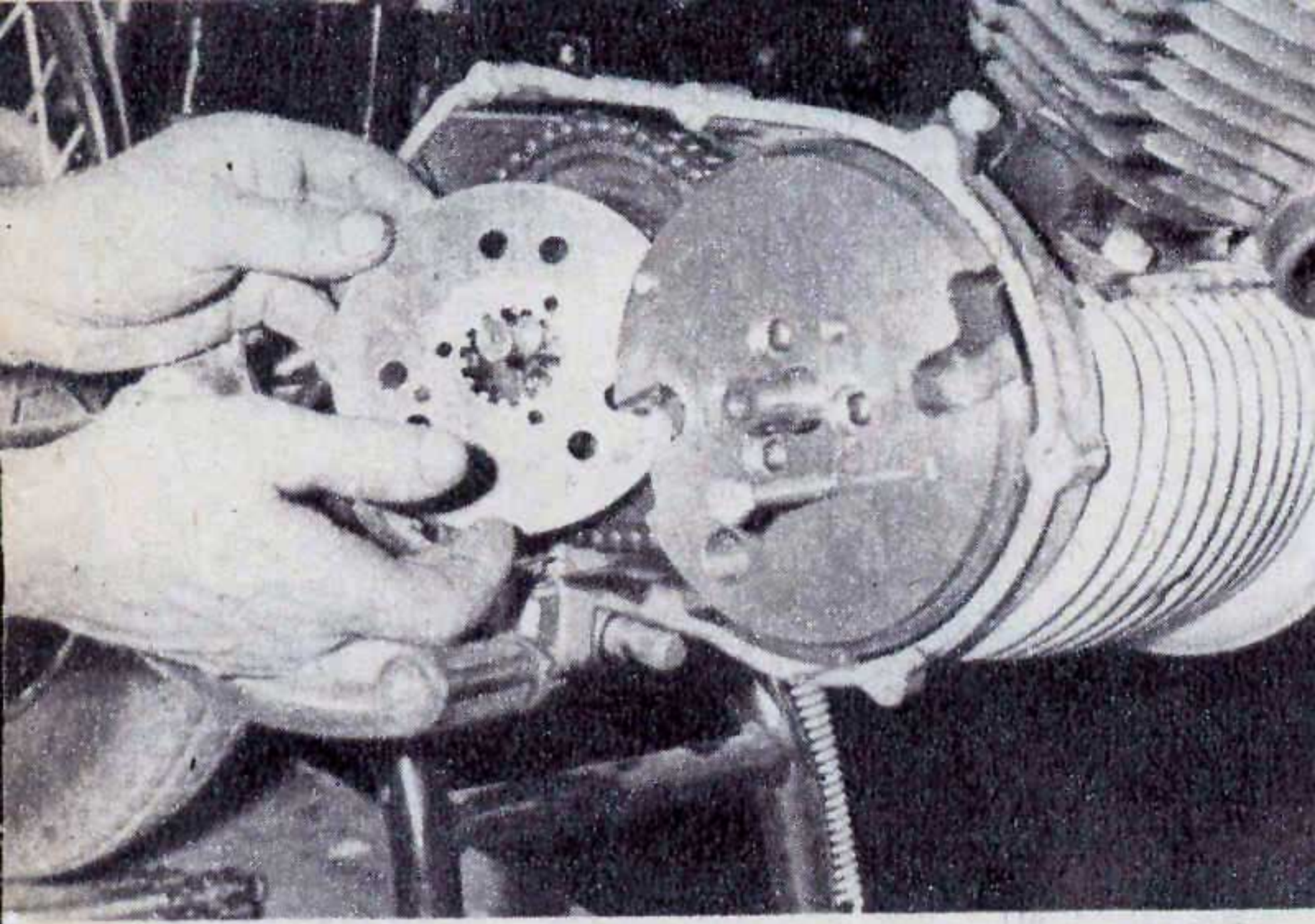
19 *Get a friend to hold a steel bar in one of the flywheel notches to lock engine. Undo left-hand thread flywheel nut with a large spanner*



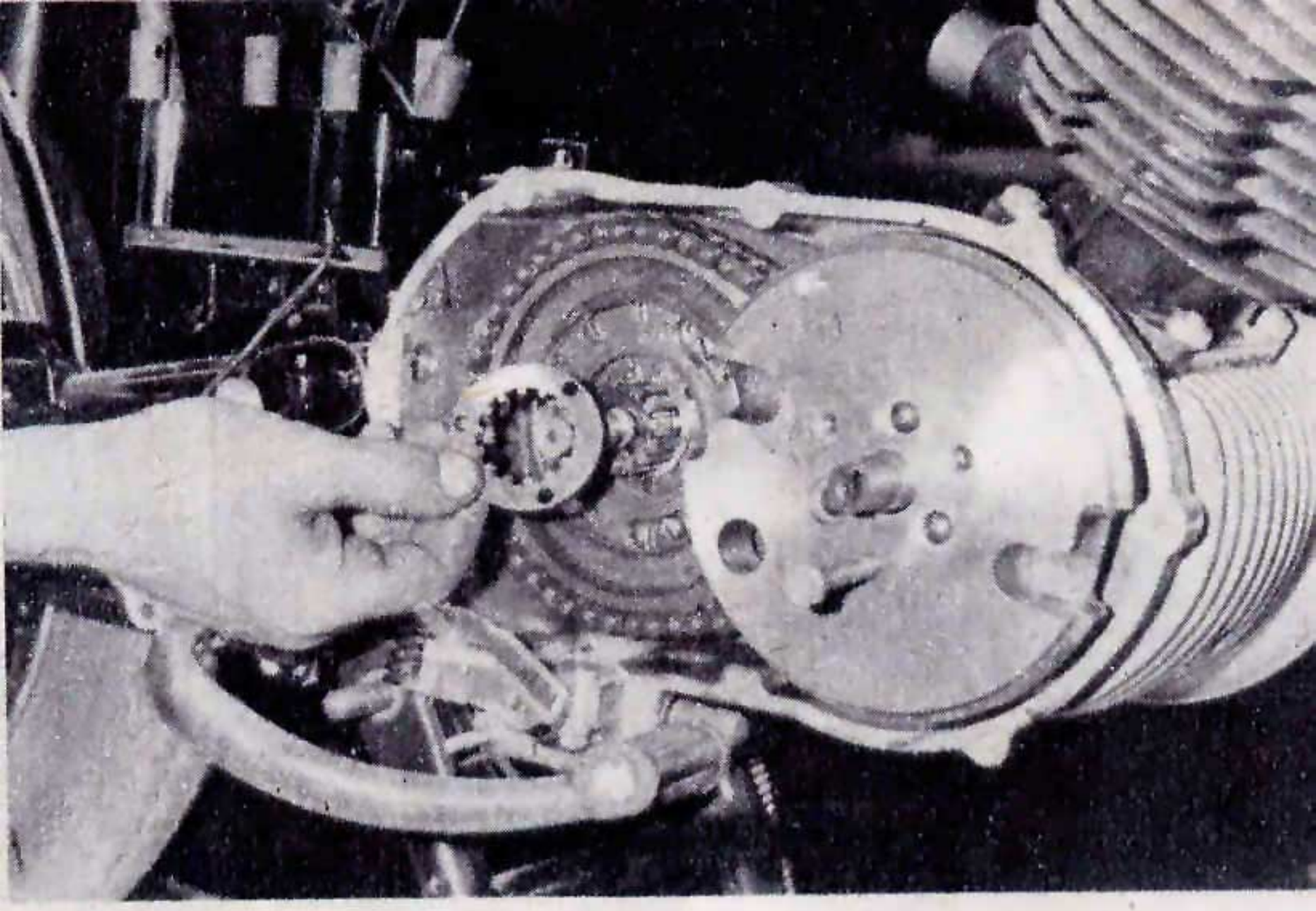
20 *Screw the flywheel puller into the flywheel and tighten just enough to free it from the taper. Remove puller, but screw one bolt back in*



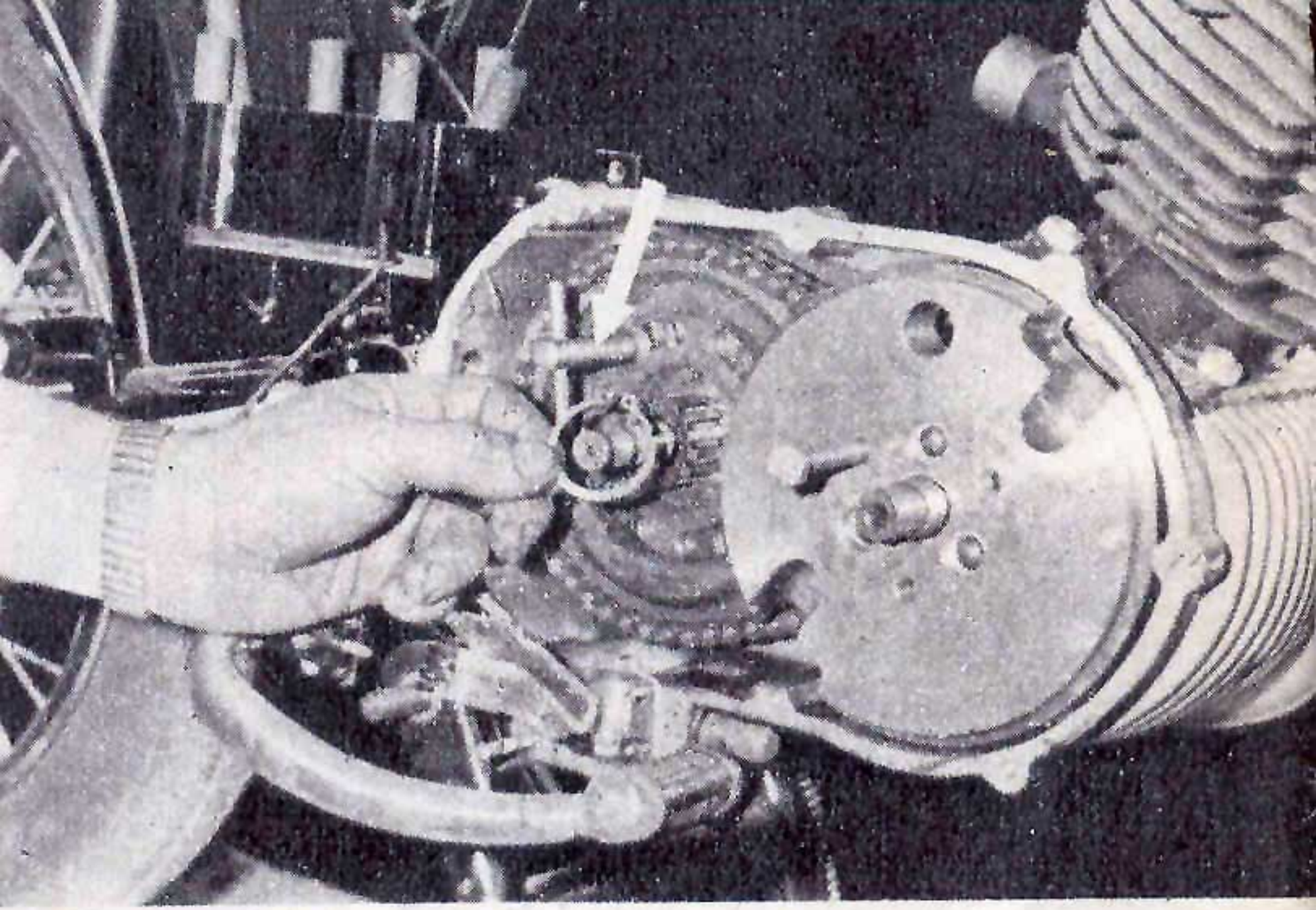
21 *Release the pressure on the clutch plates by screwing in three screws (1/10 a set). When they are tight remove clutch circlip (arrowed)*



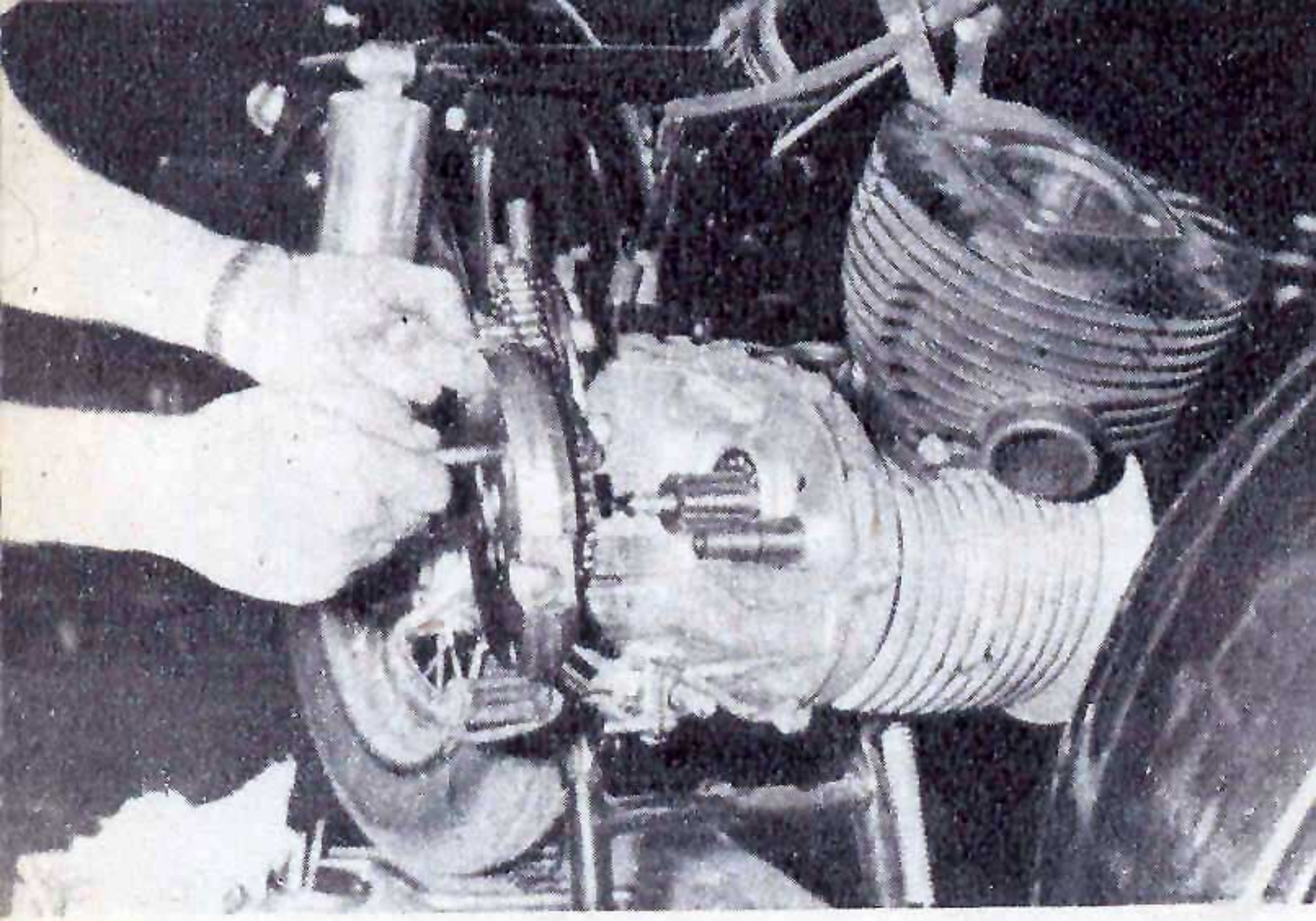
22 With the circlip out, take off the clutch outer plate. You will have to pull the flywheel towards you a little to slide the plate off



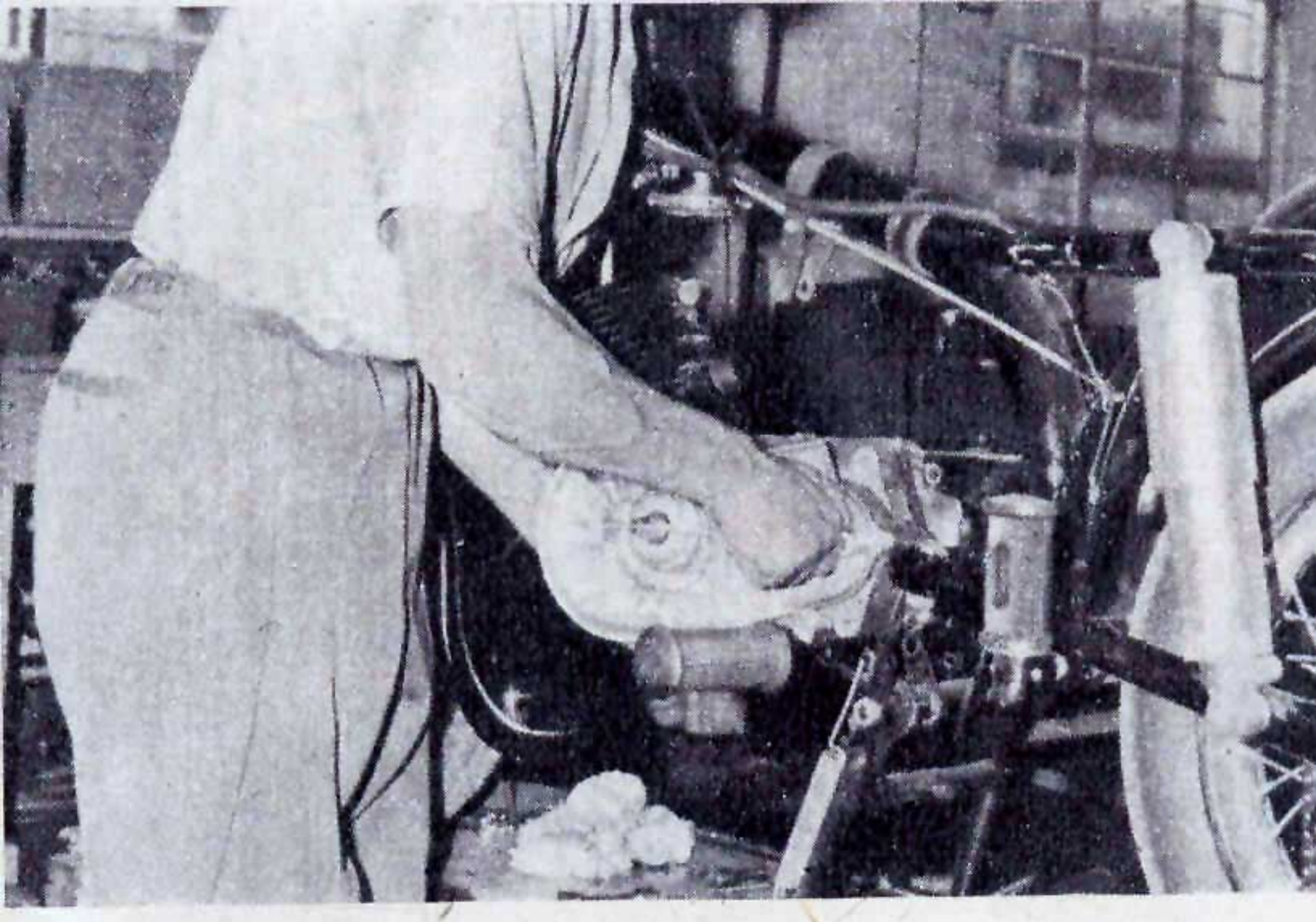
23 *Behind the outside clutch plate is a splined spacer ring. This can be pulled straight off, showing a large circlip seated behind it*



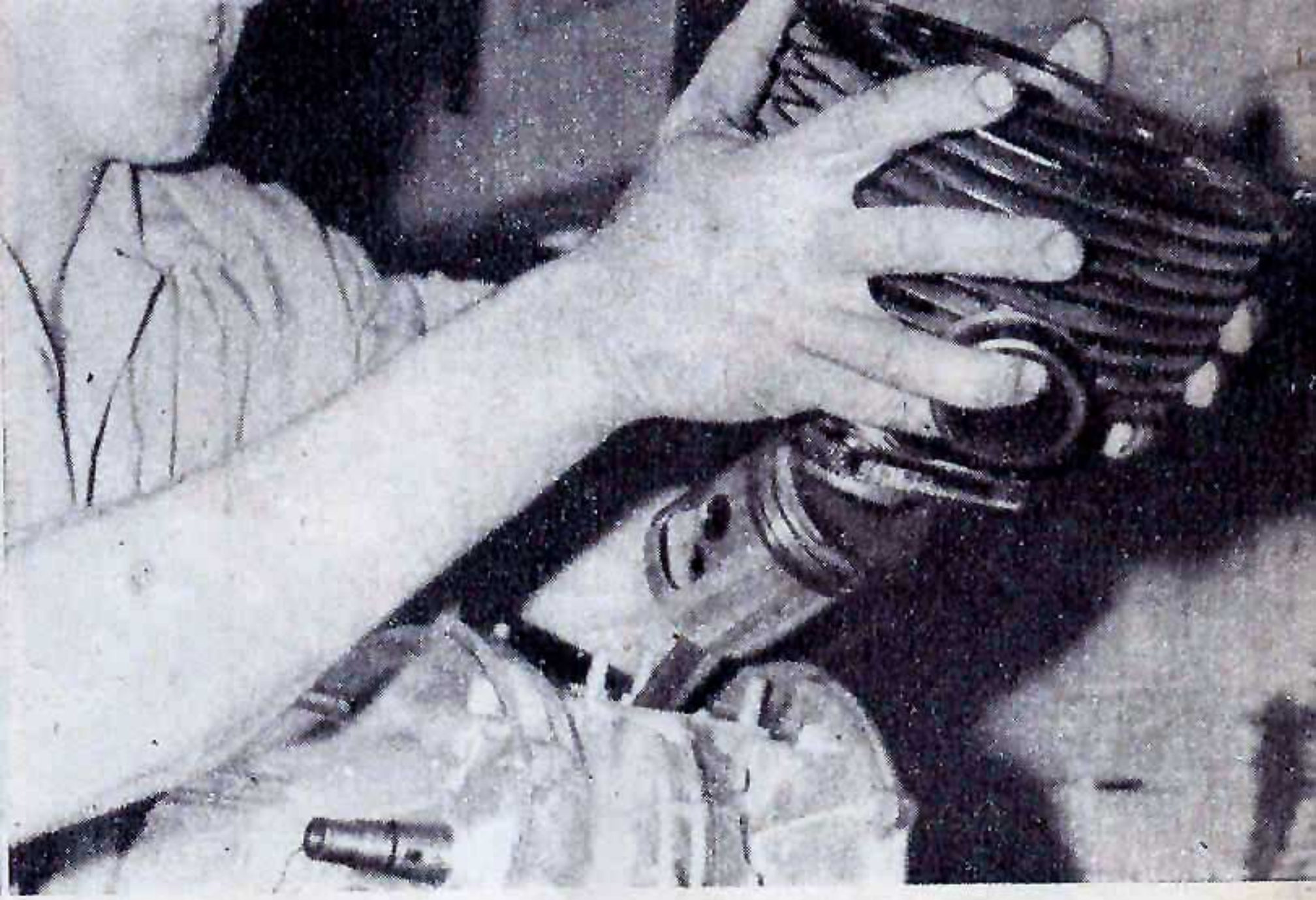
24 *Before removing this circlip, the clutch plates must be locked with a special clamp (arrowed). Then use circlip pliers to remove clip*



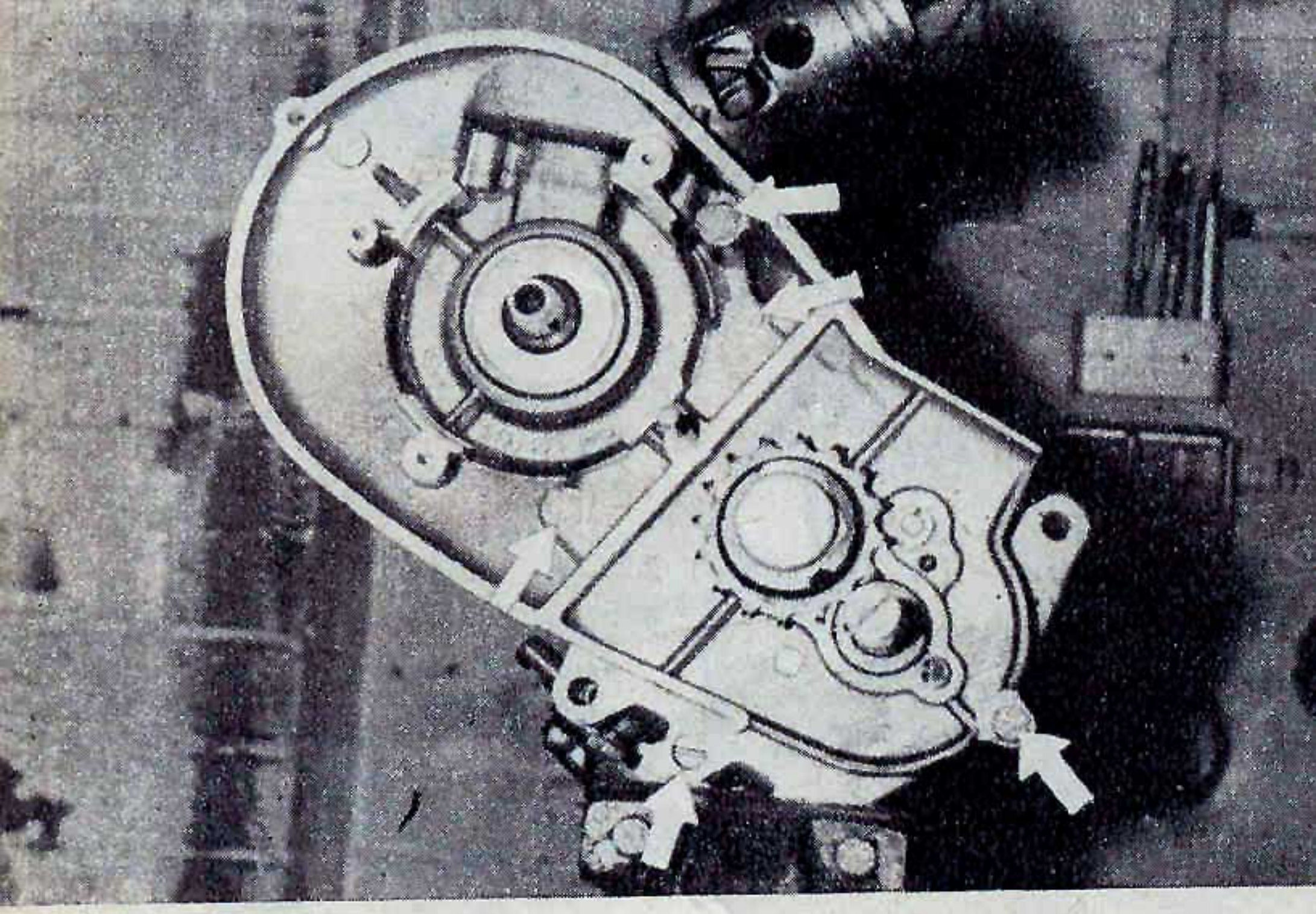
25 *Grasp extractor bolt left in flywheel and clutch plate clamp and pull clutch, flywheel and primary chain out of engine as single unit*



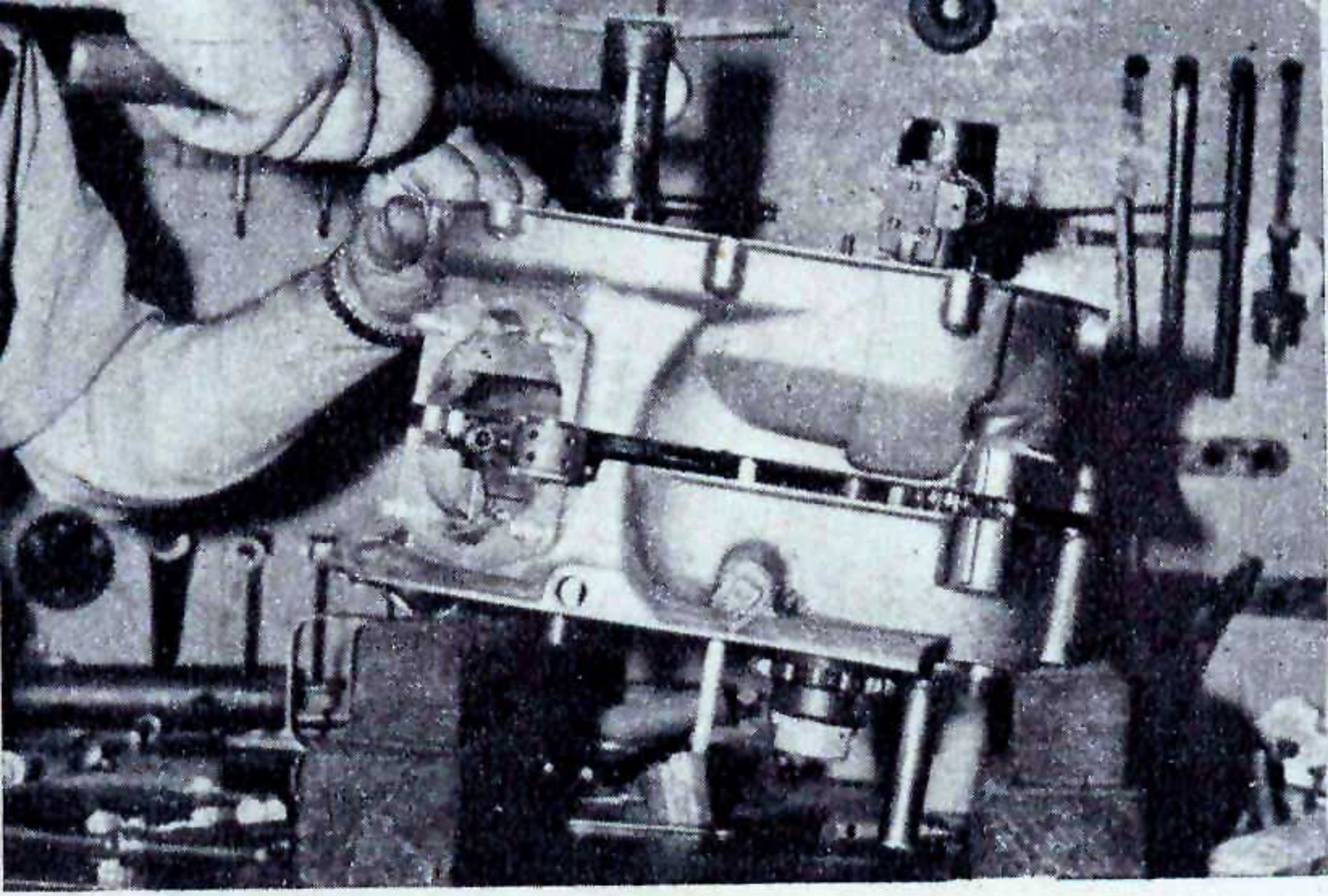
26 *Before removing the engine plate bolts replace the offside footrest. Do up tight to prevent the stand collapsing. Place engine on bench*



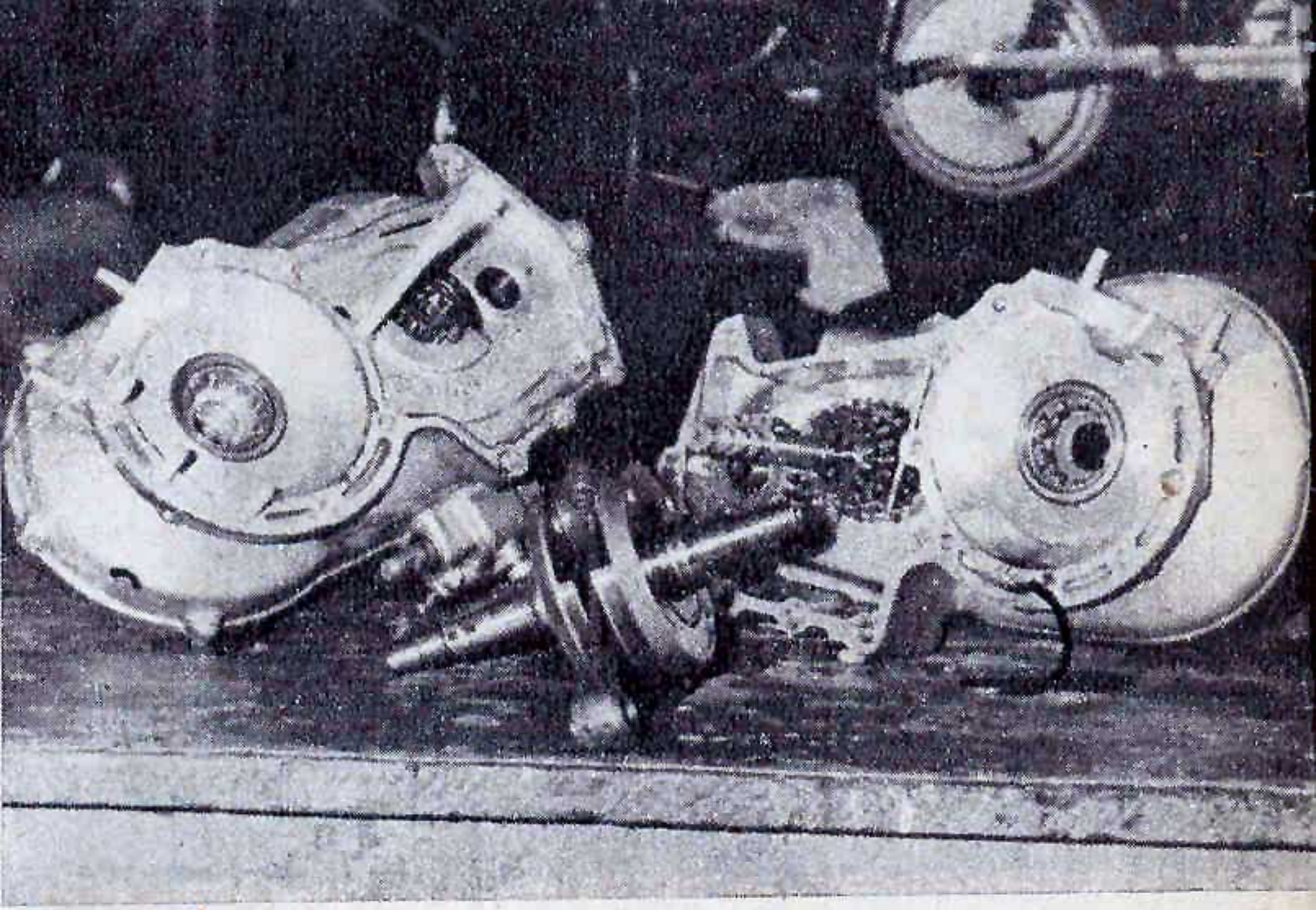
27 *Clamp engine in a vice, and remove the finned engine plate at front. Undo the four cylinder base nuts, pull off barrel and remove piston*



28 *To split the crankcase you must undo three bolts and two screws shown above, as well as three nuts and one bolt in front of crankcase*



29 *Place engine between two blocks with the kickstart shaft hanging downwards and tap end of mainshaft, lifting top case with other hand*



30 *The two halves of the crankcase with the crankshaft assembly just as it comes out. Note that all the gears remain completely undisturbed*