

free to be withdrawn in an upward direction and the fuel needle lever will be free to move sideways and permit the fuel needle to drop out of its seating. Care should, therefore, be taken that this is not lost.

### (39) RE-ASSEMBLY OF CARBURETTER

Fit the fibre washer or washers, No. 6, under the head of the centrepiece and insert this in the carburetter body with the fuel needle and its lever placed in position so that the lever will embrace the centrepiece. Rotate the centrepiece so that the tapped hole in the head of the centrepiece is in the correct position and screw in the compensating tube through the hole in the carburetter body. Replacement of the float cup with its fibre washer and hexagon nut should next be done, not forgetting the small fibre washer between the cup and the hexagon nut. This will secure the centrepiece firmly in position. The choke should then be replaced, noting that the cut-away portion faces the air intake. Secure by fitting the cheesehead screw (27). The throttle spindle and plate can now be replaced and it is very important that the throttle plate is replaced correctly. This is slightly oval in shape and the edges are bevelled at opposite sides, so that this edge rests in the bore of the carburetter correctly when the plate is at a slight angle to the axis. A centre dot is punched on one side of the throttle plate, between the centre hole and outside edge. This punch-mark must be on top when the plate is positioned on the throttle spindle and must also be above the spindle centre when the throttle is fully closed. When inserting the centre screw, with spring washer No. 21, a little stiff grease in the slot may be helpful in keeping the screw on the screwdriver.

Alternatively, a special type of screwdriver which will grip the circumference of the screw will be the most satisfactory method of holding it during this operation. The screw should not be fully tightened until it is found that when operating the spindle the plate does not restrict the full movement of the spindle in the closed position and the most satisfactory method is usually to hold spindle in the closed position while the screw is tightened. Verify that the spindle moves freely after assembly and that there is no air leakage when the throttle is in the closed position. This can easily be tested by blowing with the mouth from the top of the carburetter body.

### (40) CARBURETTER MOUNTING

After checking whether joint face of carburetter flange is dead flat and corrected if distorted, fit a new joint washer between carburetter flange and inlet pipe, fit fixing bolts from underneath flange and tighten nuts. Place governor lever on end of governor crank, then connect the link between governor and carburetter throttle levers. Add a spot of oil to each pivot pin and ensure that the link is free when the nuts are tightened. To set the governor lever, turn the governor crank clockwise as far as possible, then governor lever in the same direction in order to fully open the throttle and then tighten the clamp bolt.

No adjustment to the governor can be made by altering the position of the lever on its spindle and any attempt to do so may cause damage to the engine.

Make sure that the throttle lever and governor control mechanism is in correct alignment and moves freely after assembly. This is essential, otherwise the governor operation will be erratic.

### (41) SPEED CONTROL

The governor spring fitted to the engine is designed to suit the characteristics of the governor and must not be changed. The engine speed is controlled by the tension of the spring, which is adjustable by the nut fitted on the screwed rod. Increasing the tension of the spring will raise the engine speed and vice-versa.

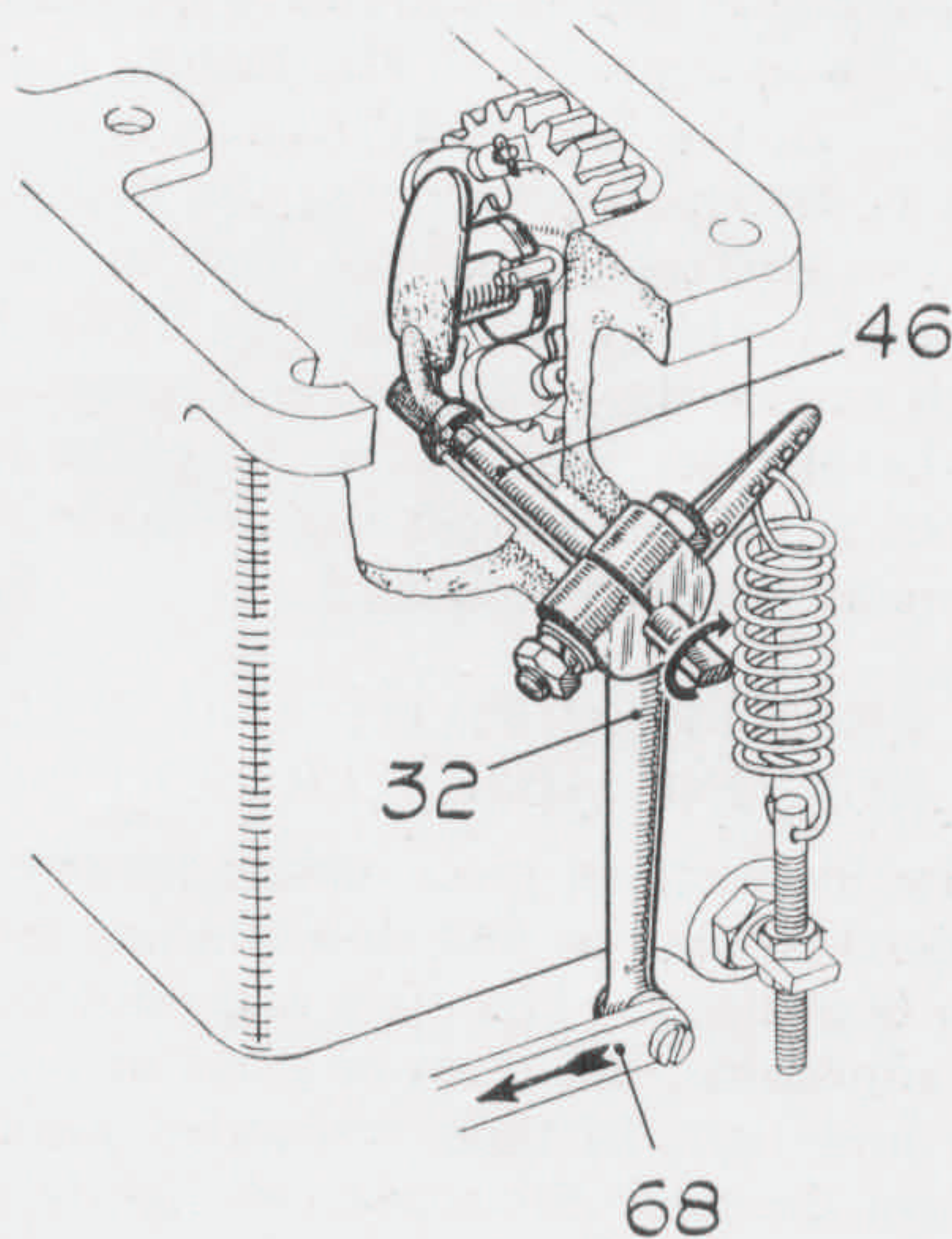


Fig. 23