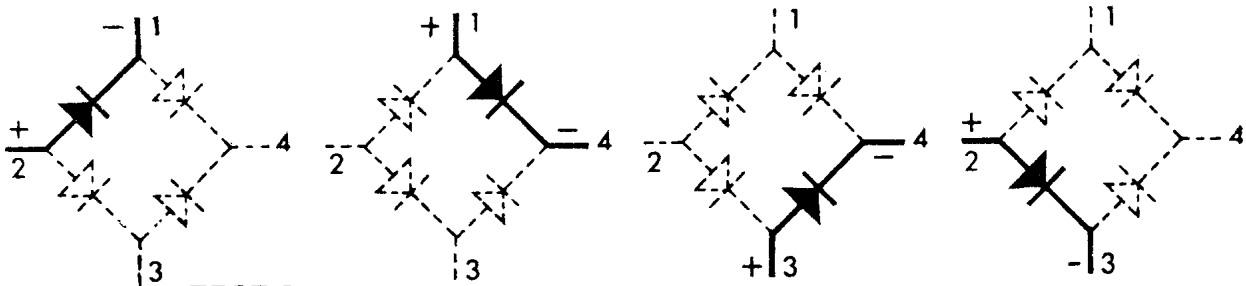
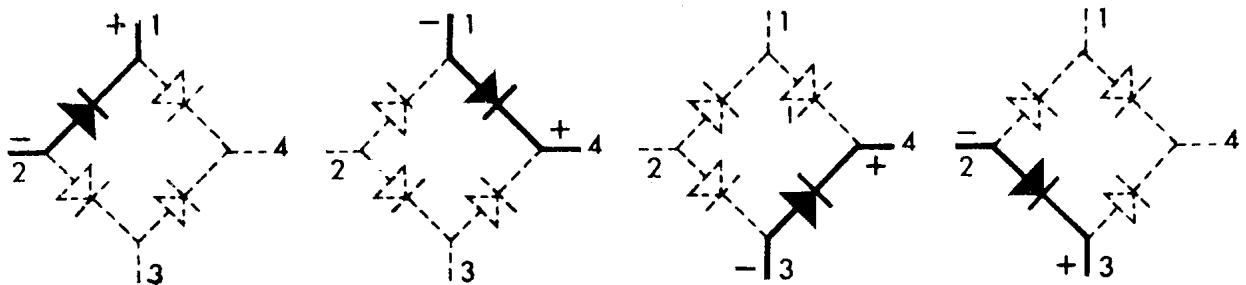


**TEST 1 CHECKING FORWARD RESISTANCE**



**TEST 2 CHECKING BACK LEAKAGE**



**RECTIFIER TEST SEQUENCE FOR CHECKING FORWARD RESISTANCE AND BACK LEAKAGE**

Fig. 31

(b) Repeat this test at the rectifier for the white/green lead.

(2) If no voltage is present at the rectifier central terminal (brown/white), check the voltage at the ammeter terminal. If satisfactory, it indicates that the brown/white wire is open circuit. If not, the ammeter is open circuit.

(3) If no voltage is present at either ammeter terminal, then the brown/blue wire from the battery (—ve) is open circuit, or the fuse has blown.

**98. Constructing a One-ohm Load Resistor**

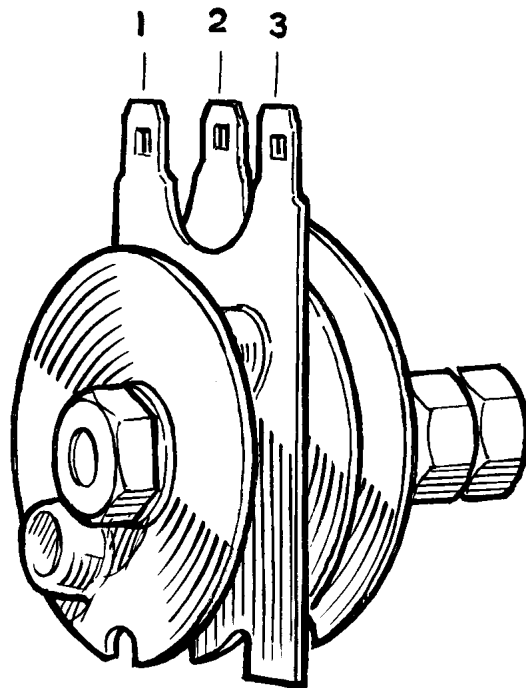
The resistor used in the following tests must be accurate and constructed so that it will not over-heat otherwise the correct values of current or voltage will not be obtained.

A suitable resistor can be made from 4 yards (3½ metres) of 18 S.W.G. (.048 in. (i.e. 1.2 m.m.) dia.) NICHROME wire by bending it into two equal parts and calibrating it as follows:—

(1) Fix a heavy gauge flexible lead to the folded end of the wire and connect this lead to the positive terminal of a 6 volt battery.

(2) Connect a D.C. voltmeter (0–10V) across the battery terminals and an ammeter (0–10 amp) between the battery negative terminal and the free ends of the wire resistance, using a crocodile clip to make the connection.

(3) Move the clip along the wires, making contact with both wires until the ammeter reading is numerically equal to the number of volts shown in the voltmeter. The resistance is then 1 ohm. Cut the wire at this point, twist the two ends together and wind the wire on an asbestos former approximately 2 inches (5 cm.) dia. so that each turn does not contact the one next to it.



**RECTIFIER—SHOWING TERMINAL CONNECTIONS FOR BENCH TESTS 1 AND 2**

Fig. 32