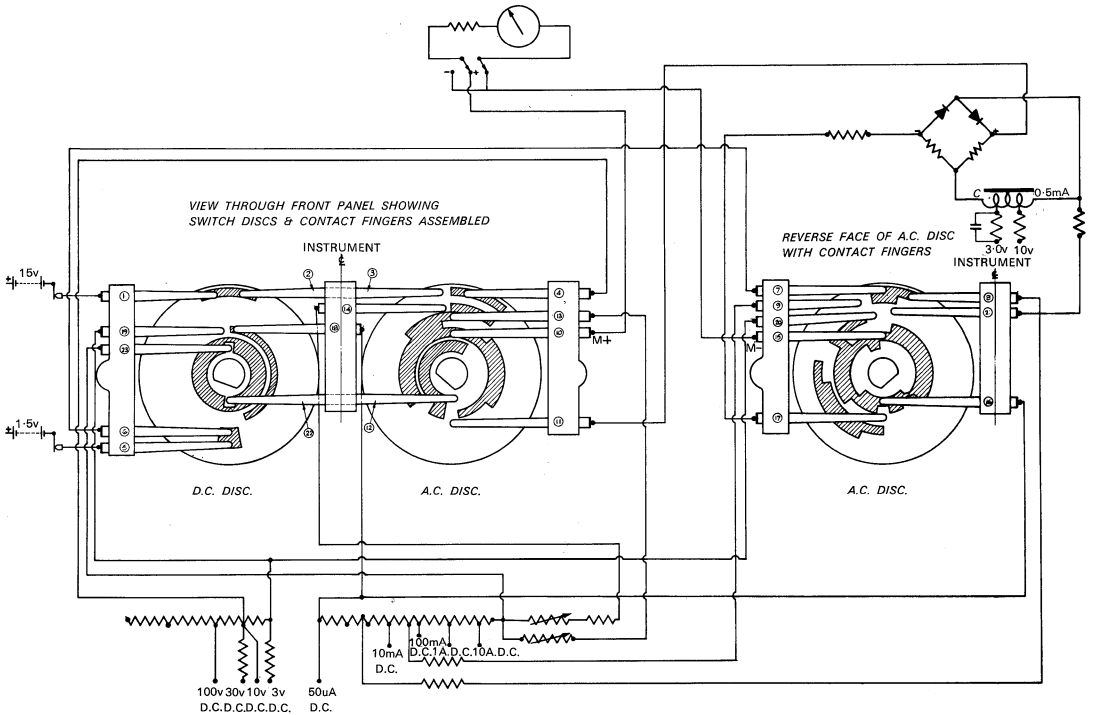SWITCH CONNECTIONS