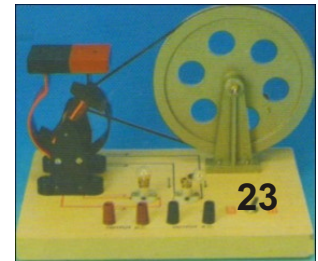


## HIGH-QUALITY PHYSICS INSTRUMENTS

through 4 mm sockets and a low voltage bulb is also provided as a simple output indicator.

### 23. DYNAMO MODEL

With hand wheel, to generate alternating current A.C. and direct current D.C. represented by two lamp holders and bulbs marked A.C and D.C. with the help of driving wheel. Mounted on polished wooden base.



### 24. DEMONSTRATION DYNAMO MODEL 2

This model uses the same basic assembly as the motor No. PH-1238, but is mounted on a base plate 230 x 90 mm approx. which also carries a hand-drive pulley 120mm diameter coupled to the smaller dynamo pulley by a rubber belt to give a step-up ratio. Electrical output is via a pair of 4mm. sockets, and a light emitting diode is provided as simple output indicator. The model may also be used as a motor on 6-8 V.D.C. supply.



### 25. HAND DRIVEN AC/DC GENERATOR

Demonstrate the construction and operation principle behind AC and DC generators. Turning of the hand wheel lights up the bulb. The generator is a permanent magnet rotating armature generator. When the two brushes of the generator are put in the two ends of the commutator, the output given is of alternating current (A.C.) and when the brushes are put in the middle of the commutator, the output is of direct current (D.C.)

### 26. DEMONSTRATION MOTOR , ST. LOUIS

For the study of the fundamental principals of electric motor and generators. The motor consists of a two pole D.C. armature. The brush holder, with two heavy binding post terminals, may be rotated for experiments. The permanent bar magnets are supported by spring-brass clamps which are unadjustable in the horizontal plane to show the effects of pole separation. Complete with two bar magnets, a two pole D.C. armature.



### 27. DEMONSTRATION ELECTRIC MOTOR

A model of the simplest form of D.C. electric motor, having three armature, 2 pole, 3 pole and 4 pole, wound with enameled copper wire, and a permanent magnetic field provided by a removable bar magnet. The construction of the model is completely open and all parts are clearly visible. A disc-type commutator is incorporated and external connection to the phosphor-bronze

