

Gift of the President

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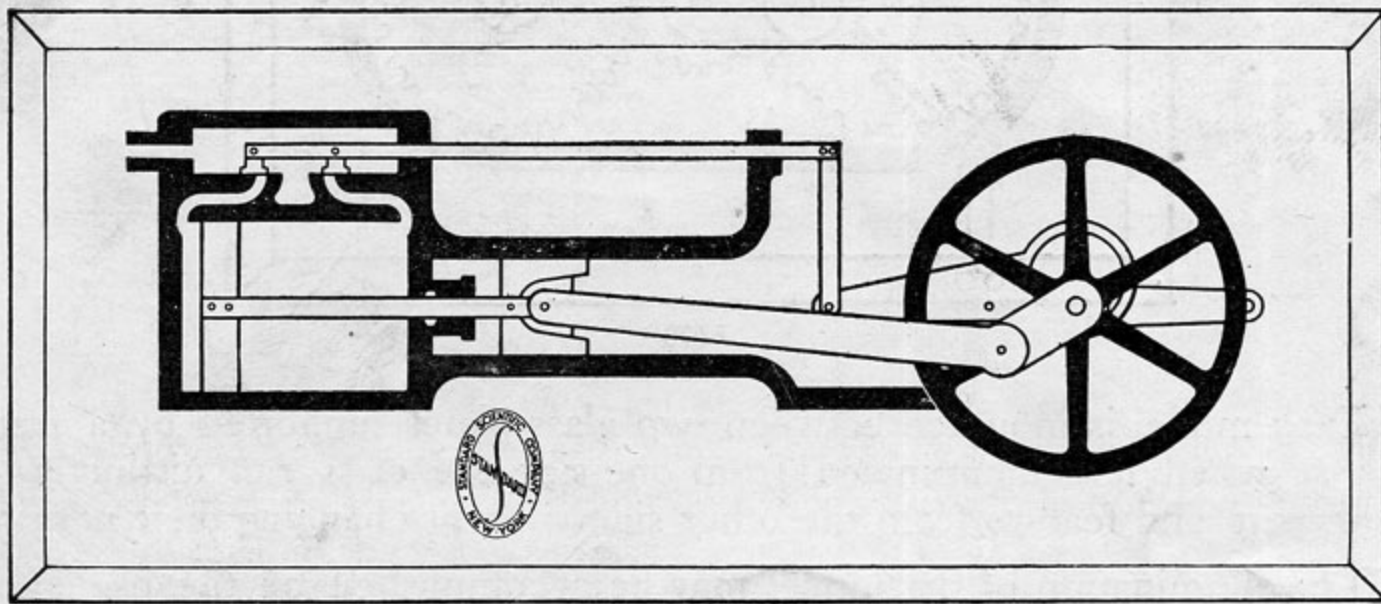
STANDARD SCIENTIFIC COMPANY
147-153 WAVERLY PLACE
NEW YORK

BULLETIN 9

APRIL 1917

Stansico-Eriksen Transparent Models of Engines

**Representing Sectional Views with Working Parts
Operated by a Crank**



F608

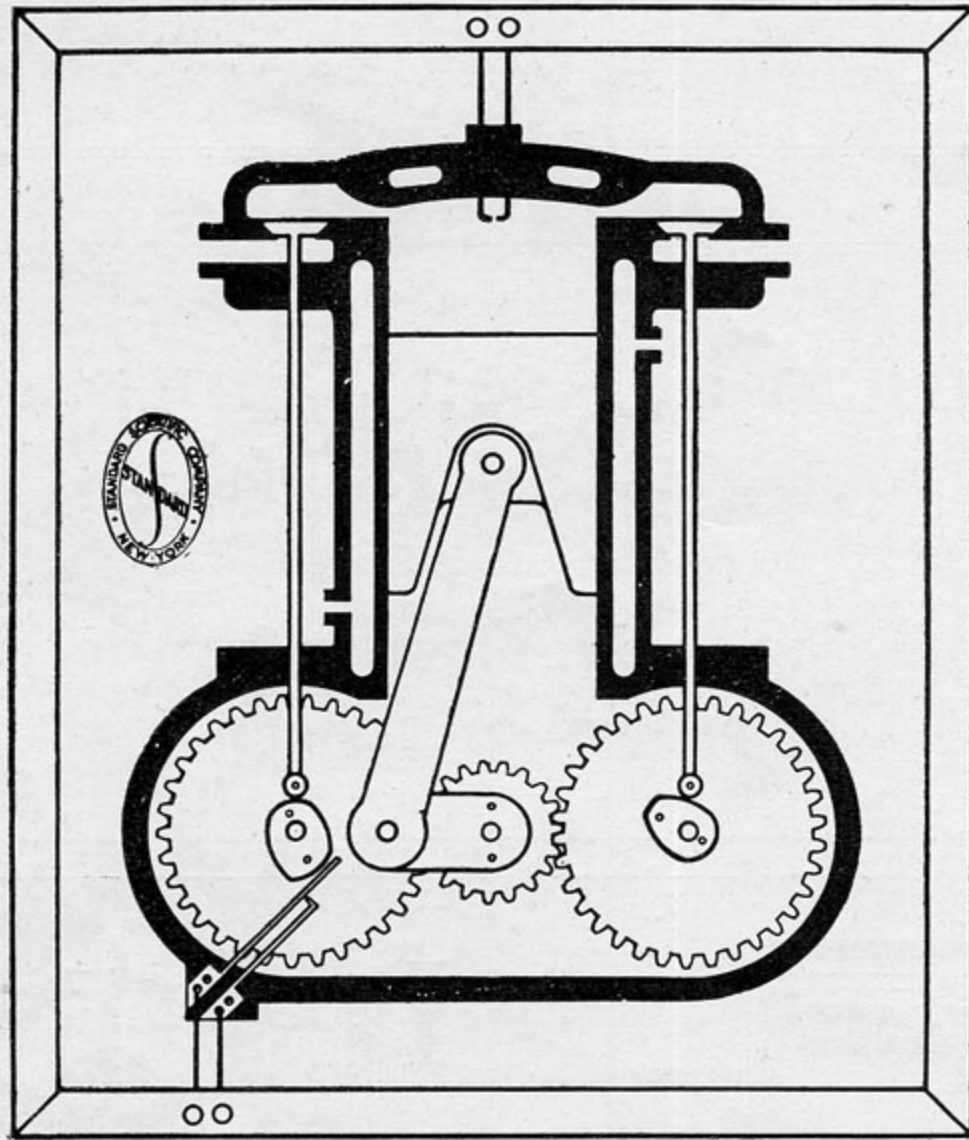
In meeting the need for a set of large demonstration models of modern **GAS AND STEAM ENGINES**, we have been fortunate in securing the use of certain improvements made by Mr. E. B. Eriksen, of the Technical Staff in the Stuyvesant High School, New York.

First of all, permit us to call attention to the fact that the chief criticism of the other models heretofore available, is not only their diminutive size, but that all of the working parts, especially the cams, cannot be observed

in action at the same instant, nor from the same view-point, thus preventing the students from understanding readily and clearly the entire operation of these engines.

These disadvantages, however, have been overcome in our new line of **TRANSPARENT MODELS.**

The working parts of the engines, especially those which overlap, are made of transparent or semi-transparent materials, while the other parts are made of opaque material. This feature makes it possible to clearly see the crank-pin of a steam engine, for example, sharply outlined against the semi-transparent form of the eccentric.



F670

Each model is mounted between two glass plates supported by a frame so that when it is illuminated from one side the class can distinctly see every part and feature from the other side without changing their position.

The illumination of the model may be accomplished by the use of incandescent lamps, or by placing it in front of a window. When furnished in the special box-frame, which is equipped with lamps, sockets and extension cord, all one has to do is to connect it to the lighting circuit in the room. The use of this box-frame is advisable, for it illuminates only the model and no direct rays interfere with the vision of the observer.

From the sizes of the different models it will be noted that they are sufficiently large to permit every one in the average class or lecture room to clearly see the construction details and operation of standard types of engines

PRICE LIST

F670, FOUR-CYCLE GASOLINE ENGINE, WATER-COOLED, T-HEAD TYPE

This model represents the commercial T-head type gasoline engine, showing all of the moving parts, such as the intake and exhaust valves, timing gears, crank, piston, piston-rod, ignition mechanism, etc. The spark plug and contact mechanism are connected to binding posts on the frame, so as to be readily placed in circuit with a battery for showing the spark at the time of explosion. This type is used almost exclusively in automobiles, motor-cycles, motor-boats, etc.

Width 16.5 inches

Height 20 inches

- (a) Price, mounted in frame but not including lamps and sockets.....\$20.00
 - (b) Mounted in box-frame with incandescent lamps (110 v. or 220 v.), sockets and connections for external circuit.. 24.50
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F671, TWO-CYCLE TWO-PORT GASOLINE ENGINE, WATER-COOLED

Commercial type, showing working of principal parts.

Height 20 inches

- (a) Mounted in frame but not including lamps and sockets..... \$18.00
 - (b) Mounted in box-frame with incandescent lamps (110 v. or 220 v.), sockets and connections for external circuit..... 22.50
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F608, STEAM ENGINE, LAP D-VALVE TYPE

The centers of the crank-pin and the eccentric are set 120 degrees apart, but provision has been made for removing the front glass plate so that the centers may be set at an angle of 90 degrees. All the principal parts of a steam engine are shown in one sectional view.

Length 30 inches

Height 12 inches

- (a) Mounted in frame but not including lamps and sockets.....\$20.00
 - (b) Mounted in box-frame with incandescent lamps and sockets (110 v. or 220 v.), with connections for external circuit..... 24.50
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MODELS OF OTHER TYPES OF ENGINES WILL
BE DESIGNED AND MADE TO ORDER

Manufactured and sold only by

STANDARD SCIENTIFIC COMPANY

147 WAVERLY PLACE

NEW YORK





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Physical, Chemical and
Biological Apparatus**

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Bulletin 6, Millikan, Gale and Bishop Apparatus
Bulletin 7, Laboratory Exercises in Optics with
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