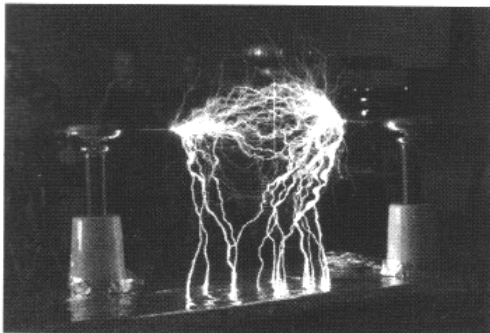


The 6th Western Winter Teslathon will be held March 5, 2011 (Sat.) in Arizona.

Possible location: elementary school gymnasium in Black Canyon City (unconfirmed; call us). We will start setting up around 11:00 A.M. and go until the last coil's final spark. Please bring any high voltage apparatus as:



More Sparks = More Fun!

We are hoping to see you and your coils at this fun event. Young people welcome!

623-465-7979 or toll free 866-690-7291

This is an RSVP event; please reply to Christopher (aka Dr. Spark) @ azdrspark@msn.com

Features: spectacular display of Theremins, Tesla coils, and historical scientific gadgetry.

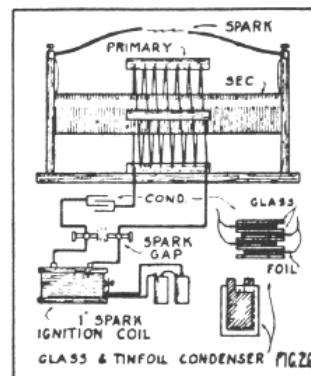
Get involved: preserve scientific history at www.Teslauniverse.com!

TESLA COIL WITH FORD SPARK COIL

Fig. 26 shows one of the most exciting experimental apparatus, a *Tesla coil*. It can be operated on a small spark coil, such as a Ford ignition type or one giving a spark $\frac{3}{4}$ to 1 inch long. The high-frequency coil is readily made from odds and ends found about the home "lab". The primary of the Tesla coil is composed of 8 to 10 turns of No. 10 or 12 copper wire on a diameter of 4 inches, the turns spaced $\frac{3}{8}$ inch apart. The secondary coil is wound on a cardboard tube about 2 inches in diameter and 10 inches long, the winding being one layer of No. 28 enameled or cotton covered magnet wire. The high-voltage condenser is composed of half a dozen glass plates 4 by 5 inches with tinfoil leaves between them. The foil leaves are cut half an inch smaller all around to prevent leakage; and alternate foil leaves are connected to common terminals, as the diagram shows. The spark gap, across the secondary of the ignition coil, may be a couple of zinc rods; brass or copper will also do. This gap is set short, about $\frac{3}{16}$ inch, and the number of Tesla coil primary turns included in the condenser circuit is varied until best results are obtained. A 2 to 3 inch high-frequency Tesla spark may be obtained, when the best adjustments of the primary turns and number of plates in the H. T. condenser are found, by a little experiment-

ing. The sparks from the Tesla coil secondary can be drawn to the hand without shock, holding a piece of metal in the hand preferably.

Ordinary lamps may be lighted by presenting the brass base of the lamp to one of the terminals of the high frequency coil. Other vacuum tubes, such as those used for medical purposes and the well-known Geissler tubes, may also be illuminated by the high frequency discharge.

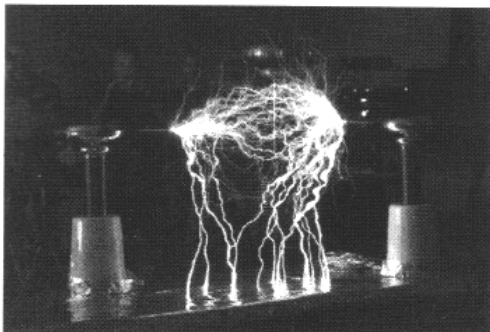


This small Tesla coil will amaze you

Image credit: Gemsback Educational Library No. 9 - (c) 1938 - Printed in US

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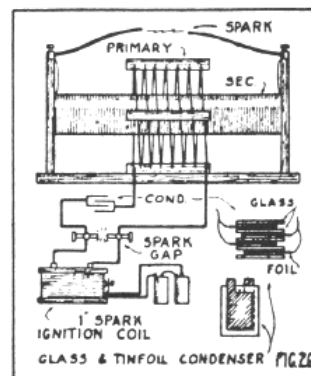
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