

RADIO IN THE HOME

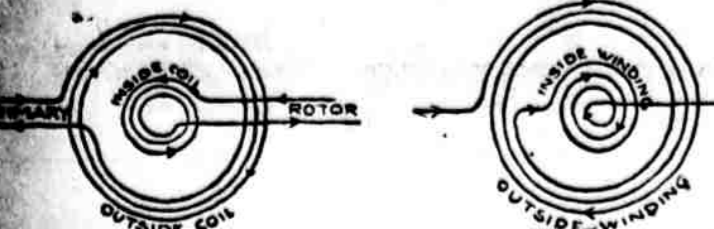
By HENRY M. NEELY



VARIO-COUPLER



VARIOMETER



The difference between a vario-coupler and a variometer. In a vario-coupler the wire on the outside winding has no connection with the wire on the inside winding.

What D'ya Mean—Variometer and Variocoupler?

It sounds like a mean trick to start out on these radio articles with a promise not to be technical and then begin to talk about variometers and variocouplers and all that sort of thing.

When the automobile first came out everybody was staggered by such words as ignition and carburetion and transmission.

Everybody already knows what a coil is. When you buy wire or rope in a store the salesman winds it around his hand and his elbow until he has cut off the hundred feet you ordered.

You can take an oatmeal box, which is cylindrical in shape, or an ordinary mailing tube or a round curtain pole and if you wind a long piece of wire around and around it, you have made a coil.

If you take one coil of wire and place it quite near another coil and make a current of electricity in the first, it will induce a current of electricity in the second, even though the two coils of wire are not joined.

When two coils have no electrical connection—that is, when the wire of one does not actually join the wire of the other—but one induces a current

in the other by magnetism, we say that they are "coupled." The two are then called a coupling coil. And when the first of these coils is wound around a tube like an oatmeal or salt box and the second is wound around a small tube or a ball which is made to turn on a shaft inside one end of the first, we call the apparatus a variometer. The turning of the ball or smaller coil inside changes or varies the amount of electric current induced in the second by the first.

Other kinds of coils are really variocouplers in their results, but we have different names to indicate and identify the different kinds.

When the second coil is around a smaller tube and draws out of and pushes inside of the first, we call it a loose coupler.

Two honeycomb coils or two basket or spider-web coils can be used as a coupler and when they are hinged at one side and open apart and close together like the pages of a book, or draw apart like an opening fan, they vary their induction just as a variometer does.

But the illustration shows the type of coupler that is always meant when radio fans talk of variocouplers. The variometer consists of two coils, too, one revolving inside the other, but in this case the two not only act on each other through inducing electric currents, but they are actually physically connected.

When two coils have no electrical connection—that is, when the wire of one does not actually join the wire of the other—but one induces a current

If you took the variocoupler and made a wire connection from the coming-out wire of the first coil into the going-in wire of the second, you would turn it into a variometer.

And, if you reversed the process and cut the connection between the two coils of a variometer, you would make it a variocoupler.

No! don't forget the cardinal fact—the coupler has no actual connection between the coils, the variometer has.

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Today's Programs

Philadelphia Station (WIP) Newsbridge & Cieliebski. 1:14 P. M.—Late news items from Public Ledger.

3:30 to 4:30 P. M.—Program of Italian music, with introductory notes by Edwynd Lewis. Edwynd Lewis, soprano; Myrtle Strohm, Mezzosoprano; Edwynd Lewis, tenor; Harold A. Simonds, baritone; Loreta Kerk, pianist.

Philadelphia Station (WIP) (Continued)

3:30 to 4:30 P. M.—Program of Italian music, with introductory notes by Edwynd Lewis. Edwynd Lewis, soprano; Myrtle Strohm, Mezzosoprano; Edwynd Lewis, tenor; Harold A. Simonds, baritone; Loreta Kerk, pianist.

4:30 to 6 P. M.—Baseball scores. Philadelphia Station (WIP) (Continued)

6:30 to 7 P. M.—Baseball scores. Philadelphia Station (WIP) (Continued)

7:30 to 8 P. M.—Baseball scores. Philadelphia Station (WIP) (Continued)

8:30 to 9 P. M.—Baseball scores. Philadelphia Station (WIP) (Continued)

9:30 to 10 P. M.—Baseball scores. Philadelphia Station (WIP) (Continued)

10:30 to 11 P. M.—Baseball scores. Philadelphia Station (WIP) (Continued)

photo. Meyerbeer's "The Booming Eyes." McDowell. Philadelphia Operatic Society in

Philadelphia Operatic Society in concert. Opera house, 1079 Chestnut St. First night, 10:30 P. M.

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At last! Philly and the seashore united.

The Tacony-Palmyra Ferry Company Opens This Saturday

Great news for the motorist—direct connection between the Northeast Boulevard and the White Horse Pike. A short route (as the crow flies) between North Philadelphia and outlying districts and the seashore.

Roosevelt Boulevard to Robbins ave., to foot of Levick street, Tacony. Ferry goes to foot of Cinnaminson road, Palmyra, New Jersey. Direct route to White Horse Pike.

Terminal Points: Tacony—foot of Levick street. Palmyra—foot of Cinnaminson road.

Uncommon Sense : Running for the Train

By JOHN BLAKE

THE man who runs for the train sometimes catches it, and sometimes gets tangled up with the wheels and loses interest in subsequent developments.

It is important to catch a train, but not nearly so important as it is to continue in this life with all one's limbs and facial features in the condition they were when one first saw the light.

It may be gathered from the foregoing that this is an editorial on procrastination, which it is.

Now the gentleman who is running for a train does not look like a procrastinator. Yet if he were not a procrastinator there would be no need for him to run for a train.

TRAINS start on schedule time, not whenever the conductor notices that he has a load of passengers aboard.

One who contemplates a journey has abundant opportunity to look at the timetables, and to make his plans accordingly.

No matter how busy he may be, if he really wants to make a particular train, he can do it.

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Now here is a Breakfast



Appetite says so; taste says so—and a sense of well-being says so

CRISP! There's an irresistible appeal to eat the golden Grape-Nuts granules. SWEET! There's the wholesome, natural sweetness developed from wheat and malted barley as the result of over 20 hours careful baking.

There is no other food like Grape-Nuts

Grape-Nuts provides well-balanced nourishment in easily digestible form. It is ready to eat with cream or good milk.

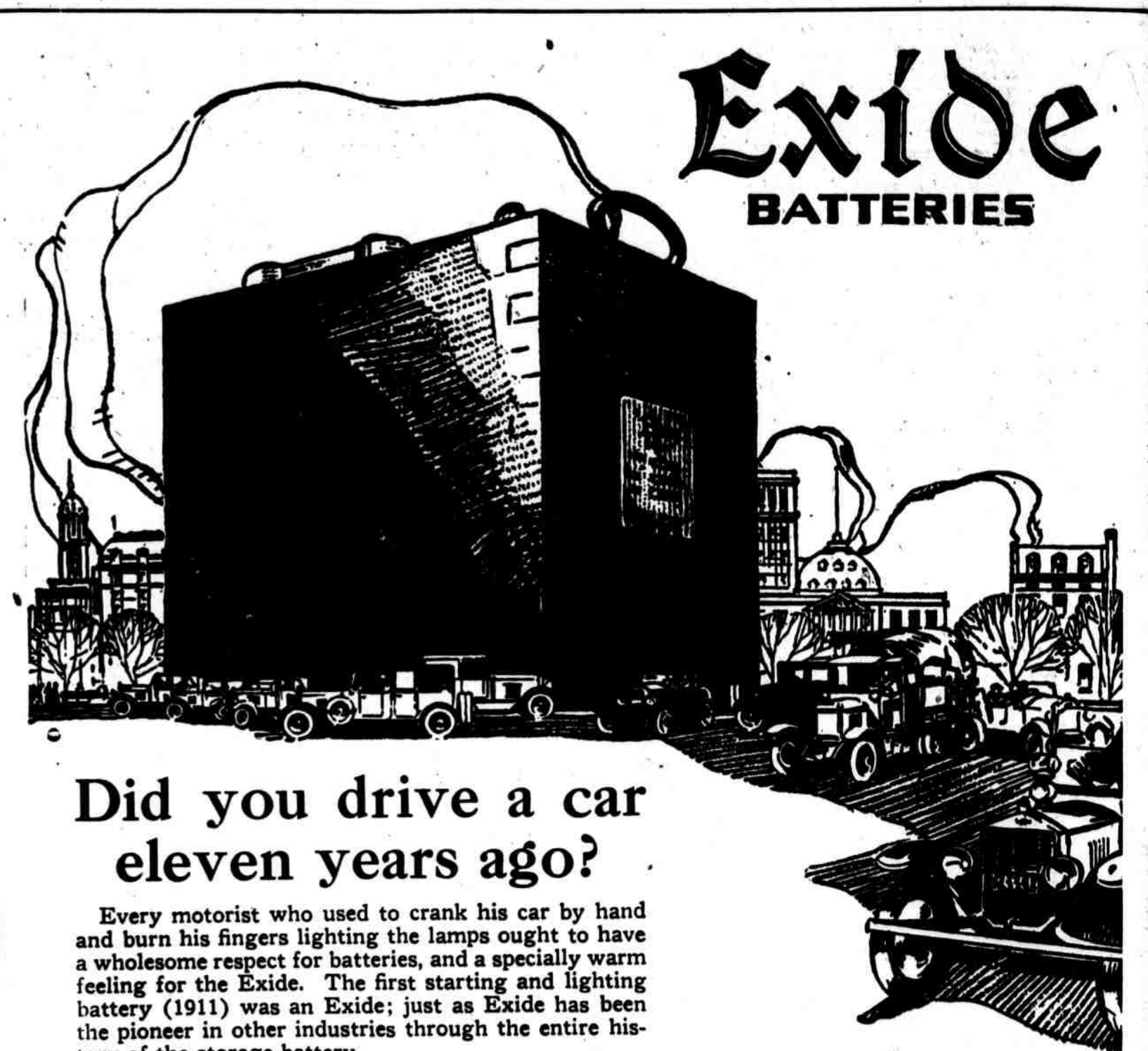
Let this happy food gratify your taste and satisfy your appetite at breakfast or lunch. Especially fine for the children's evening meal.

You can secure Grape-Nuts wherever good food is sold or served.

Grape-Nuts THE BODY BUILDER

"There's a Reason"

Made by Postum Cereal Company, Incorporated. Successor to Postum Cereal Company, Inc., Battle Creek, Michigan



Exide BATTERIES

Did you drive a car eleven years ago?

Every motorist who used to crank his car by hand and burn his fingers lighting the lamps ought to have a wholesome respect for batteries, and a specially warm feeling for the Exide. The first starting and lighting battery (1911) was an Exide; just as Exide has been the pioneer in other industries through the entire history of the storage battery.

This "ancient history" has a distinct bearing on your comfort and economy in motoring, because the experience of the oldest and largest manufacturers of storage batteries in the world is built into the Exide, made for your car. The result is that the Exide gives exceptional service. You can depend on its eager power day in and day out longer than you would believe possible unless you have already owned an Exide.

Check up on these statements with friends who have Exide Batteries in their cars. More cars leave the factory equipped with Exides than with any other battery. Pay a visit to the nearest Exide Service Station and get acquainted with the Exide—the long-life battery.

EXIDE SERVICE STATION Factory Branch

671 No. Broad Street Telephone, Poplar 3385

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- IN PHILADELPHIA: Aratowicz Tire & Supply Co., Inc., 3127 N. Broad Street. Baltimore Automobile Shop, 825 Baltimore Ave. ... PENNSYLVANIA: Allentown, Miller Battery Service Co., 8118 N. Broad Street. ... DELAWARE: Wilmington, Wilmington Storage Battery Co., 210 Front St. ... NEW JERSEY: Asbury Park, Storage Battery, Inc., 8118 N. Broad Street. ...