

# What is the Solution to the Mystery Behind the Two Bronze Spheres of the Ammann Brothers' Electric Car?

THE ARIZONA REPUBLICAN, PHOENIX, SUNDAY MORNING, AUGUST 28, 1921

## SUBSTANTIAL CUT IN PIERCE-ARROW PRICE ANNOUNCED

A substantial reduction in the prices of its touring car models effective after September 1, and a reduction on the prices of its truck models, effective immediately, has been announced by George W. Mixer, president of the Pierce-Arrow Motor Car company.

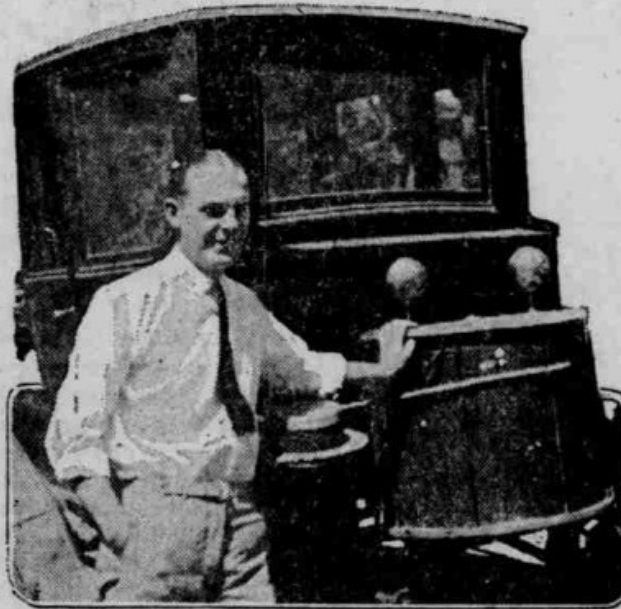
The new price of the standard seven-passenger touring car is \$6,500 at the factory, the included car prices being graded proportionately.

The new prices of its truck models are: \$4,850 for the five-ton size; \$4,350 for the 3½-ton and \$3,200 for the 2-ton.



### This Tire

## ELECTRICITY "TAKEN FROM AIR" DRIVES AUTOMOBILE



C. E. AMMANN AND HIS "ATMOSPHERIC GENERATOR" ATTACHED TO AN ELECTRIC AUTOMOBILE

DENVER, Colo., Aug. 26.—Demonstrations are being made on the streets of Denver of a new electric generator that is claimed by the inventors to take electricity from the air.

The inventors are J. E. Ammann of Denver, and his brother, C. E. Ammann of Spokane, Wash.

To demonstrate, the brothers borrowed an old electric auto, took out the batteries, and after roping their new "atmospheric generator" fast, they got in and rode off at high speed.

"There is nothing inside the drum that moves; the contents consists only of iron, wire and minerals," says C. E. Ammann.

"It can be used to drive any electrical apparatus and can be made in any size."

The brothers are closely guarding their secret, and even take their "brain-child" when it is not in use, to their room in the Argonaut hotel.

So far the brothers have not offered to sell their proposition.

Electrical men in Denver are waiting "to be shown," but they grant the thing works.

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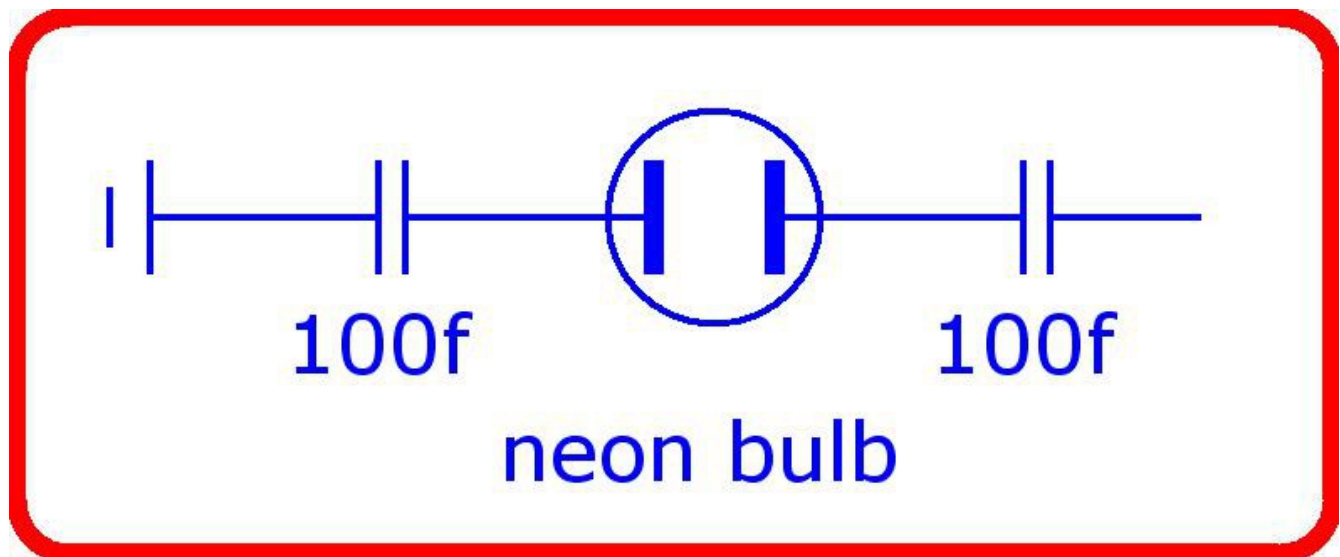
AUTO INSURANCE

balance bodies was the highlight of

When I focus on the power supply to the Ammann Brothers' mysterious device, I focus on the pair of bronze spheres positioned above their barrel and housed within the sockets which formerly had held their car's headlights. And I presume these spheres are hollow.

Then, I want to emulate these spheres in a circuit simulation. How do I do this?

By envisioning a capacitor-sparkGap-capacitor-ground sandwich...



The capacitor is of a very low capacitance...approximately 100 femto Farads in value.

Ten femto Farads, or one pico Farad, won't work. I've tried to use them in circuits and they can't vary too much from this value of 100 femto. I've used values of 135, or so, femto Farads which do the job. But ten times more or less than 100 femto is too far removed from what appears to be ideal.

The spark gap is of a low voltage breakdown...perhaps filled with neon or helium gas to facilitate this?

The non-grounded terminal of this sandwich goes to a circuit whose primary purpose is to accumulate voltage and amperage.

Unfortunately, LTSPICE tends to dislike the accumulation of voltage by consistently throwing up error messages, stating..., "Floating Node", which people on the internet claim means that I need to ground that node to alleviate that buildup of voltage.

The problem is not with the voltage building up. As I see it, the problem is with LTSPICE...and other varieties of Berkeley SPICE, such as: Micro-Cap, ...The problem is that they have a policy of discouraging overunity in defiance of electrical reactance accumulating at a rate in excess of their endeavor to approximate a circuit simulation.

Sure...It's safer not to allow voltage to accumulate. But, hey...How else am I to satisfy myself?

So, I learned to block my LTSPICE grounded floating nodes with a blocking capacitor which accelerated the accumulation of voltage at such a ridiculous rate, that it becomes impossible to regulate them in a useful manner!

Until, now... ;:-)

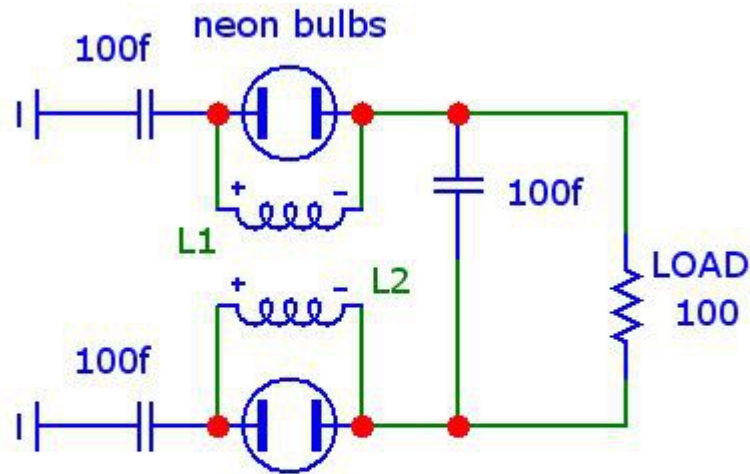
Now, I know better...

By placing a sandwich of unstable (aka, low capacitance) pair of capacitors surrounding a spark gap of low voltage breakdown, and grounding one terminal of this sandwich, I achieve a surprising efficiency of energy accumulation!

I can regulate this buildup in a number of ways...

By shorting out the spark gap with a coil to help encourage the buildup of amperage, etc....

## My Very Own, Private, Utility Grid!



1 = reftol. 10 $\mu$ H and 312 $\frac{1}{2}$  nano Ohms of resistance on L1 & L2 is 10 AWG. 10 milli Ohms equivalent series resistance for all capacitors. 5 micro watts RMS in less than 4 minutes on LOAD without any input of power!

