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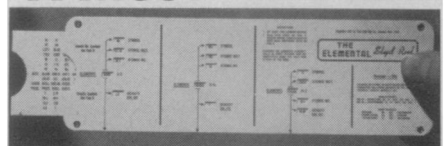


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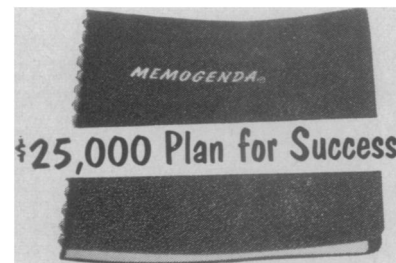
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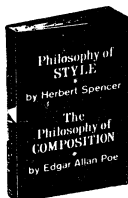
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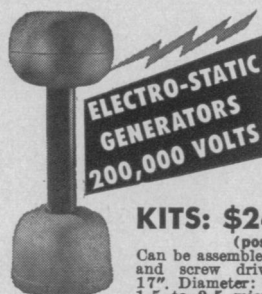
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MEDICINE

New Treatment Devised For Carbon Monoxide

➤ A NEW, inexpensive treatment for carbon monoxide poisoning has been developed, based on an observation made in 1896 of the effect of light on blood.

The treatment, devised by members of the department of surgery, University of Colorado School of Medicine, Denver, so far has been tested only on dogs.

Conventional treatment for carbon monoxide poisoning is to administer high concentrations of oxygen to the patient. High pressure oxygen chambers have also been used, but are expensive and difficult to run.

Carbon monoxide poisons the body by attaching itself to the hemoglobin of the blood. When too much of the hemoglobin in the bloodstream is tied up by carbon monoxide, the blood can no longer carry enough oxygen and the victim dies.

The Denver surgeons noted in a 67-year-old report that carbon monoxide would rapidly separate from hemoglobin under a strong light.

The treatment they devised consists of opening an artery in the leg and circulating the patient's blood through a "bubble oxygenator" that circulates fresh oxygen through the blood.

The same device is used in the "heart-lung machine" that bypasses the heart during surgery. Blood passing through the bubble oxygenator is exposed to strong light from a conventional mercury vapor lamp.

In tests on dogs artificially poisoned with carbon monoxide the device revived 80% of a treated group. A control group of dogs resuscitated with oxygen all died.

Since bubble oxygenators are now in use in many large hospitals, the Denver surgeons point out that this arrangement for treating carbon monoxide poisoning could be set up while a victim is en route to the hospital.

They are now making arrangements to try the device for emergency treatment of humans.

The technique was described in a report to the American College of Surgeons by Dr. Edwin Linder, Dr. Yutaka Sakai and Bruce C. Paton.

• Science News Letter, 85:14 Jan. 4, 1964

Do You Know?

A new class of *atomic states*, in which excited electrons remain in orbit for as long as a millionth of a second before being repelled out of them by the magnetic forces of the neighboring electrons, has been discovered.

The radioisotope *strontium-90*, once considered a waste product, is now finding many uses in self-contained miniature "power plants" that provide energy for satellites, navigational beacons and remote weather stations.

Gallaudet College, Washington, D. C., is the only college in the world dedicated to the education and welfare of the deaf.

• Science News Letter, 85:14 Jan. 4, 1964