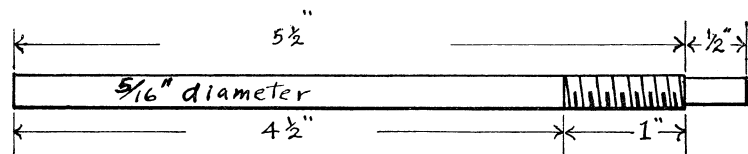
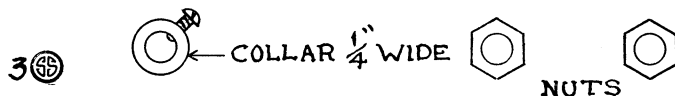


# How to Begin Your Radiovisor

Radiovision



PUT NUTS ON SHAFT AND FACE THEM TRUE IN A LATHE



By C. FRANCIS JENKINS

Just because the radiomovie receiver described in these articles is so simple, do not assume it will not work. It will. You will be able to receive very interesting pictures, small but entertaining and novel. They will be the first of a new sort of communication. They will be mysteriously picked out of invisible space.

In the radiovisor itself there are but three essential parts: A neon lamp, a scanning disc, and a motor to

rotate it. A radio receiving set of good quality, capable of receiving the short wave-lengths upon which radiovision is now broadcast is also necessary. To obtain the best result a radio set with resistance coupled amplifiers is needed. But fair pictures can be had with a radio set of the ordinary sort using transformers in the amplification units. In later articles diagrams for resistance coupled sets will be given, so that those who wish to build their own may do so.

## May Check Monoxide Poisoning

Chemistry

Carbon monoxide victims in closed garages and suicides by the gas route will in future become less numerous if the resuscitation method now being tried out by Dr. Ludwig Schmidt-Kehl of the University of Würzburg works as well on human beings as it has on cats in the laboratory. Cats so far gone with carbon monoxide asphyxiation that they would surely have died have been "brought to" by placing them in a closed chamber of pure oxygen under pressure which was alternately decreased and increased in time with their own natural breathing rate.

Carbon monoxide poisoning, Dr. Schmidt-Kehl explains, is due to the abnormal appetite of the red blood corpuscles for the unwholesome gas. They take it up 250 times as readily as they do oxygen, which is the burden they normally carry to the body cells. The latter, deprived of their ration of oxygen, die of internal suffocation.

With the red corpuscles out of commission, the situation might seem to be hopeless. But the German physiologist points out that the blood fluid itself, which ordinarily carries so little oxygen that it cuts no practical figure at all in respiration, may be induced to load up with an emergency ration by placing the asphyxiated ani-

mal or person in a closed chamber of oxygen under pressure.

If the pressure is kept at a uniform level it must be relatively high; but Dr. Schmidt-Kehl has found that much lower pressures can be used if these are alternately increased and lowered, in time with the breathing rate of the victim. This simulated breathing in a closed chamber, he has found, is much more likely to revive semi-asphyxiated animals than a uniform high pressure.

Thus far the work has been done only with a small experimental apparatus, with a chamber only large enough to contain a cat. Considerable difficulties have still to be overcome before the method can be adapted to clinical use for saving asphyxiated human beings.

*Science News-Letter, September 29, 1928*

Vandals who rob old tombs of China and sell the vases, bronzes, and other art objects to foreigners, have destroyed much of the valuable evidence of China's past.

There are more than 100 organs or parts of organs in the human body that have little or no function to perform, and that are useless relics of a time when they were important.

Only one part, the neon lamp, needs to be purchased. Ask for neon lamp, G-10 A. C. 110 volt. The cost will be 55 cents and it can be obtained at most electric shops.

To make the wood base mounting for the radiovisor you will need:

Piece of  $\frac{3}{4}$ -inch board, 8 inches wide and about 4 feet long, any kind of good wood.

Block of wood,  $1\frac{1}{2}$  inches wide,  $3\frac{1}{2}$  inches high, and 4 inches long, preferably of maple.

Four round-headed wood screws, No. 10,  $1\frac{1}{4}$  inches long.

Half pound of ten-penny nails.

A shaft upon which to mount the scanning disc will also be necessary. It is recommended that this shaft, shown in the accompanying illustration, be made by a model or machine shop. Two brass bearing bushings, each about an inch long with  $\frac{1}{4}$ -inch holes through them, will be needed.

If you do not (*Turn to next page*)

## Soviet Health Problem

Sociology—Hygiene

The government ban on vice in Soviet Russia has turned the age-old problem of disease into new channels. In a book on the venereal disease situation in Russia recently published in Paris, Dr. L. Fridland, a worker in the public hospitals of Moscow, indirectly shifts the blame for the Soviet's mounting disease rate among married couples on the easy divorce conditions prevalent since the Revolution.

In 1917 only two per cent. of the cases of venereal disease seen in Moscow hospitals occurred among married people. In 1924 this rate had risen to ten per cent., Dr. Fridland declares. Out of 100 diseased individuals, only seven infected members of their own families before the war in all Russia, he stated, while in 1918 the figure mounted to 33, and in 1924 had risen to the appalling proportion of 69.

Incomplete cures and the casual marriages that have ensued since divorce laws have become less stringent are believed to be important factors in the situation, which the government is endeavoring to combat by the establishment of "prophylactorium" stations for the disinfection of people at the earliest possible stages of the disease.

*Science News-Letter, September 29, 1928*