

New Wireless Truck of U. S. Signal Corps of 800 Mile Range

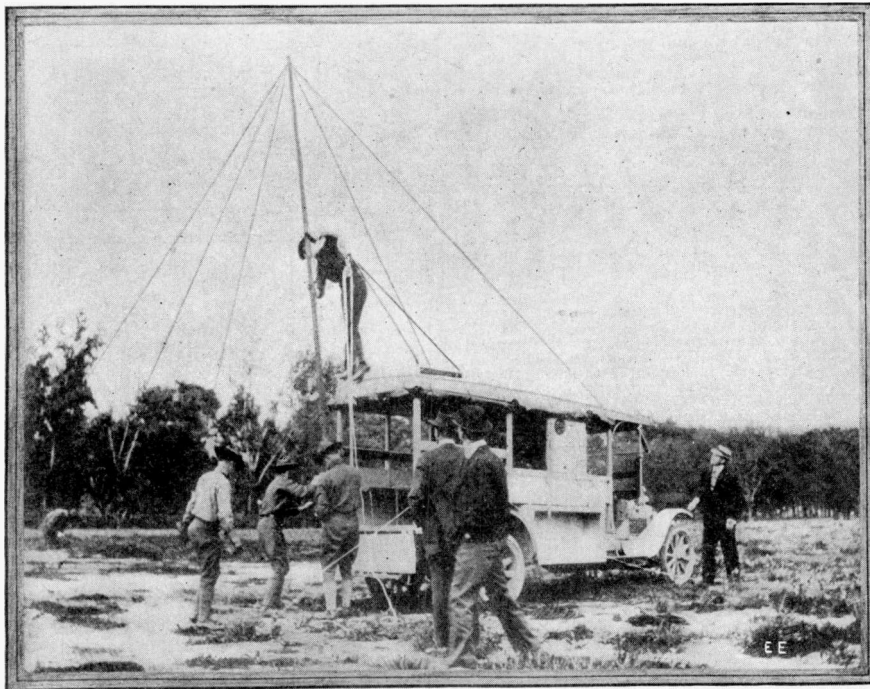
By Frank C. Perkins

THE accompanying illustration shows a new wireless truck of U. S. Signal Corps of 800 mile range, developed at Cleveland, Ohio.

There is a great advantage in Army Field Work from the use of this High Tension Outfit operated by the gasoline power of this motor truck and it is considered a remarkable advance in the construction of portable wireless sets for army field service.

ing when there is less electrical disturbance due to electrical plants of various kinds.

It may be stated that the antennae is of the umbrella type, mounted at the top of an 85-foot mast which is built in nine sections. The first, or top section is raised by hand but the other sections are lifted by a block and tackle suspended from struts mounted on a platform on the roof of the truck. These



Erecting section of 85 foot mast, which can be completed in a few minutes.

It is pointed out that for the next field operations of the army, or for immediate use in Mexico, if necessary, this wireless truck is available and can be set up for use in twelve minutes and send messages within a radius of 800 miles under favorable conditions. In tests that have already been made this set has received messages from points 2,500 miles distant. The electrical pressure reaches 90,000 volts at the top of the antennae. The great range of the new equipment and the speed with which it may be brought into action is due to the employment of a powerful electric generator driven through a train of gears by the 30-horsepower motor of the White truck.

It is of interest to note that the generator delivers electric current of 500 cycles at 110 volts and from 18 to 32 amperes. This current is interrupted by the relay, operated by the sending key, and is transformed so that it leaves the side of the wireless truck at a pressure of 22,000 volts and an amperage varying from 8 to 12. As the current rises to the top of the antennae the voltage rises to approximately 90,000 while the amperage approaches zero. The radiation under these conditions gives a sending ability from 200 miles under the worst conditions in day time up to 800 miles under good conditions obtained in the early hours of the morn-

struts are quickly detachable when not in use. The guy wires are attached to the fifth section of the mast. When disassembled, the nine sections of the mast are carried in long compartments built along both sides of the truck. The counterpoise, or artificial ground, consists of heavy insulated wires radiating from a common center, to which is attached the ground wire of the wireless set. For convenience in grounding there is a socket on the outside of the truck body into which a ground-wire plug fits.

It is claimed that the truck has been subjected to many interesting tests and the wireless officers are pleased with its work. It was sent to the practice camp of the heavy field artillery at Tobyhanna, Pa., last month where artillery guns, set up on one side of a mountain, fired over the mountain at targets on the opposite side. During this test the wireless truck was used to send messages from Tobyhanna to Washington. Prior to the artillery practice it was tested in Washington and messages were received from Boston, Brooklyn, Key West, Porto Rico and ships at sea. At the same time the operators took up one end of a conversation between the operator of the big station at Arlington and the Honolulu station in the Pacific Ocean.

OXYOLINE.

Oxyoline is a special form of curative agent consisting of an oxygenized vapor produced by passing ozonized air into a mixture of Oils from the Eucalyptus and Pinus groups. At room temperature of 70 degrees Fahr. or less, it is visible to the eye as blue or white in color; has a pleasant, fragrant odor; when diluted with atmospheric air and inhaled, is non-irritating; in an undiluted form it is mildly irritating, but may be inhaled without discomfort. The illustration shows a patient about to inhale some Oxyoline thru a special inhaling attachment.

The sponsors for the Oxyoline treatment claim that the action is that of oxygen, nascent oxygen and the Cineols, an alterative increasing metabolism, antiseptic inhibiting germ growth, haematinic increasing the oxygen content of the blood, the red blood cell count, and indirectly increasing phagocytosis.

The Oxyoline generator is similar in general to the well-known Ozonators on the market, which employ some form of high voltage step-up transformer, and in this way to liberate ozone, etc.

Oxyoline is said to be a powerful nerve tonic and sedative by its alterative properties, improving sleep and vaso-motor control, and decreasing nerve irritability, resembling the bromides in action, except that it does not depress the vaso-motor action or check secretions. Its alterative action greatly resembles that of mercury, arsenic, iron, manganese and gold, except that it acts entirely without systemic resistance, and being readily absorbed, its action is more rapid, certain, positive and dependable. Elimination is increased thru the skin, bronchial and nasal mucosae, and renal apparatus. Its action as an antiseptic resembles the results secured from a 10 per cent. solution of carbolic acid or 1-2000 hichloride of mercury solution without the corrosive or irritant properties. It has been found useful in most of the affections associating themselves with the pulmonic, bronchial and nasal mucosae, and has been used with remark-



Patient about to take Oxyoline treatment.

able effects in the treatment of tuberculosis. The treatment is pleasant to take and can be administered by the physician or the patient himself.