

## A Complete Portable X-Ray Plant Used by European Armies

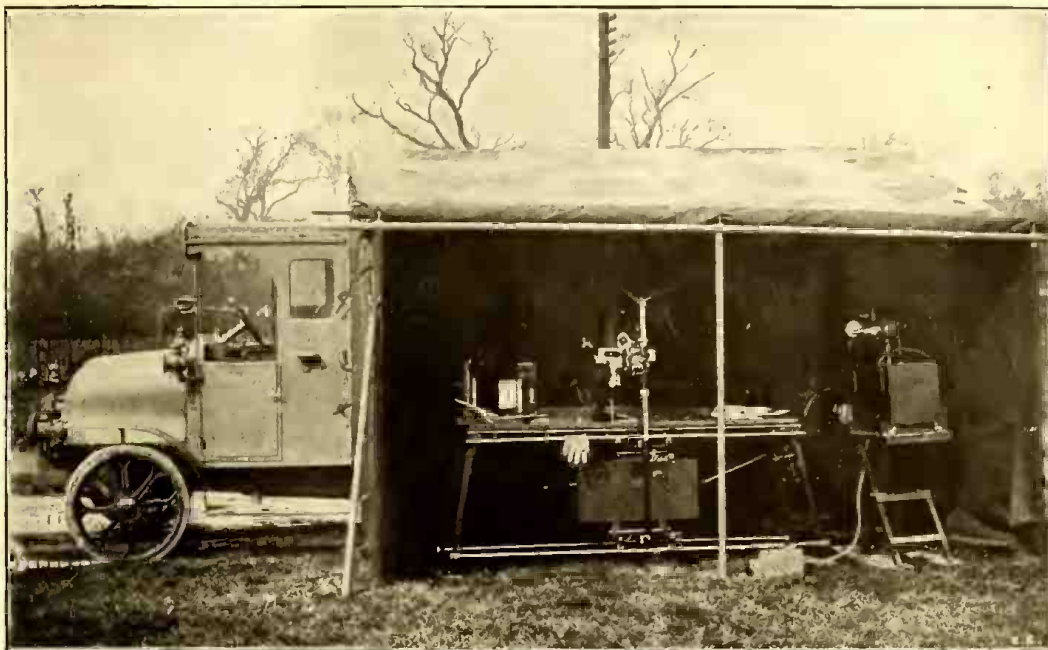
WHEN the English, French or Russian soldier is put out of commission by a sharp-nosed German bullet or a shrapnel splinter, he has one thing to be thankful for in most instances. That is a well organized and equipped hospital corps who, by means of their highly efficient X-ray outfits, can locate most anything in any part of the human body. You are on the firing line banging away with your magazine rifle at the skull of a German officer when zing—you feel faint and drop in your tracks. The light of day fades away and when you at last gain consciousness it is to find yourself strapped to a massive table fitted with a score of handles, rods, and what not. It is the X-ray room of H.M. Medical Corps, a short distance back of the second line trench. They found it—a bullet that just missed your heart. Such an experience occurs hundreds of times daily on European battlefields.

Here we have a photo of one of the finest portable X-ray outfits supplied the British and other allied forces for field operations. These wonderful outfits are veritable traveling hospitals.

The complete dynamo generating set, which is exceedingly compact, occupying a space of only 3 feet by 2 feet by 3 feet, comprises a sin-

gle-cylinder gasoline engine developing 1.5 horsepower at a speed of 1,300 r.p.m., radiator, muffler, gasoline tank, dynamo and switch box. The whole is enclosed in a wooden box provided with carrying han-

The dynamo or generator is mounted at the side of the engine on an extension of the crank case. It is of the reverse compound-wound type, having an output of 10 amp. at 70 volts, and is directly driven by the engine. The latter is put in operation by means of a pulley on the rear end of the



One of the Magnificent Portable X-Ray Outfits in Use by the Allies on the Battle-field. It Includes a High Power X-Ray Tube and Coil which Receives Current from a Special Dynamo Driven by the Gasoline Engine.

dles and also with a receptacle for the necessary tools.

or other place of business.

Two flags on the generating station of the United Electric Light & Power Com-

pany, New York City, are flood-lighted nightly and can be seen for several miles in each direction. Each flag is 15 feet long and is illuminated by three 500-watt, Type C, concentrated filament tungsten lamps, mounted in reflectors 120 feet distant from the flag. Three reflectors are placed directly in front of each flag, two serving to illuminate the flag immediately in front, while the beam from the third lamp is turned across onto the other flag. The flags are lighted at sunset and remain illuminated until midnight. Hundreds of people see these flags each night, and the favorable comments that have been received from civic and patriotic organizations indicate the large amount of interest shown by the public.

Many hotels in the large cities find this a novel and efficient means of attracting attention to their hostelry. One of the largest hotels in New York City utilizes a small electric searchlight, the beam of

dynamo spindle, the necessary initial impetus being given by a strap working on the pulley. In order that the engine shall run at a constant speed, it is fitted with a centrifugal governor, which acts on the throttle valve in the carburetor.

The switch gear, which is entirely enclosed in an aluminum case mounted above the dynamo, is of the rotary type and furnished with outside operating handles. It is arranged to give any of the following combinations: (1) Off position, (2) battery to X-ray coil, (3) battery charging and dynamo and battery in parallel to X-ray coil, (4) dynamo and X-ray coil only, (5) battery and dynamo in series to X-ray coil. The voltages to the coil are approximately: No. 2 position, 36 volts; No. 3 position, 36 volts to 45 volts; No. 4 position, 75 volts, and No. 5 position, 110 volts.

The X-ray bulb supplied is sufficiently large to permit of taking radiographs through the thicker portions of the body. This X-ray outfit complete on its chassis was built by the Austin Motor Company, Ltd., of Birmingham, England, to whom we are indebted for the photograph here reproduced.

### THE PARIS TELEPHONE SYSTEM.

An appropriation of \$24,000,000 has been asked of the French Parliament for improvements and extension of the telephone system in Paris. Six large new exchanges will be established. The three existing exchanges will be enlarged and new multiple switchboards for 12,600 lines installed. Long distance underground lines will also be laid.

There are nearly a thousand electric ranges in use in the city of Winnipeg, Can.

which creates a very mystical effect, as it lights up the American as well as the hotel flag. A white flag for the latter shows up best, with the hotel name spread across it in black letters.

### ILLUMINATED FLAGS ECONOMICAL ADVERTISEMENT.

Illuminating the flag that ordinarily flies



One of the Latest Advertising and Decorative Schemes Is to Illuminate Your Flag at Night. The New "Flood Lighting" Is Utilized in the Present Instance with Highly Effective and Economical Results.

at the masthead during the daytime is one of the latest and happily a very economical method of advertising your factory, office