

Incendiary Bombs Are Described

Dr. Sheppard Gives Informative Talk At Rotary Club Tuesday

Some of the roles that the "infernal mixtures" of the chemist have brewed are playing in this global war were explained by Dr. O. E. Sheppard in a vitally informative talk at Tuesday's Rotary luncheon. Dr. Sheppard was assisted by Dr. Charles N. Caughlan, also of the MSC chemistry department, who gave a number of laboratory demonstrations of the materials used in chemical warfare.

Dr. Sheppard's talk dealt principally with incendiary bombs, for the reason that this kind of warfare is by far the most likely to reach an inland section of the U. S. A., such as this. He described the most powerful bombs developed and the oldest, the thermite bomb. It is made with iron oxide and powdered aluminum, set off by a charge of magnesium. It has the greatest penetration of any incendiary bomb and will go through a heavy steel rail in the matter of a fraction of a second and through two or three feet of concrete in a matter of seconds. The bomb when burning attains a temperature of 4,592 degrees Fahrenheit and will wreck any metal installation. Use of the thermite is limited to attempts to destroy strategic industrial or military installations. It is more costly than other types of bombs and difficult to set off and control.

Most startling development of this war is the use of magnesium bombs. Dr. Sheppard described their effectiveness, in hands of Germans, when used on December 29, 1940, against London. In five hours one night 1,500 separate big fires were set in London. Magnesium bombs, as made by the Germans, weight 2.2 pounds apiece, and over 100,000 of these size bombs were used in that most destructive raid. They spread fire

(Continued on Page Five)