

gestion is offered to the user of a bomb. In all-clear signal, he should be discreetly leaving the shelter, especially if gas bombs are suspected. Contaminated areas adjacent to the reported to the warden.

In a raid, our anti-aircraft guns will throw shells into the air. Protection against these shells is to get off the streets, and staying indoors, away from windows and in a bomb shelter.

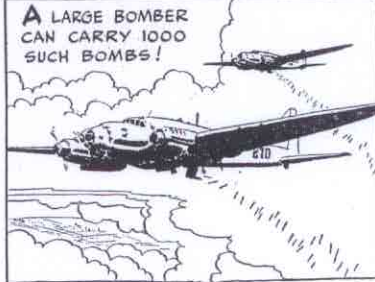
Methods of Controlling Incendiary Bombs

Fire from petroleum or pitch fire is easily extinguished by water, either from a garden hose, the stirrup pump, or a soda-acid extinguisher. Small charges of dynamite, are frequently added to the petroleum to increase the hazard of close approach. A fire extinguisher, a chair, a heavy blanket, or a garbage can. All bombs should be approached in a safe manner. Sunglasses or ski-goggles provide eye-

protection. Live charges are frequently placed in the shells (one in ten) so that it is safe to approach shells only when well protected. Upon striking a roof, floor or ceiling beams, the firing mechanism of the magnesium bomb ignites the thermite. The heat so liberated is conducted through the magnesium wall, melting part of it. The heat also creates pressure within. A time period of from one second to one minute is required for the pressure and temperature to build up, resulting in outward ignition and sputtering of the magnesium metal. This gives off a dense white smoke which is non-poisonous. The pressure when released by flying fragments of burning metal and is a violent combustion of the remainder. The result is to cause the fire to spread rapidly and is a serious reason for immediate fire fighting. A fire extinguisher will be appreciated at this time.

These methods of dealing with such incendiary bombs are: (1) sand, (2) the water and (3) the powdered magnesium. Protection should not be limited to one method. Sand and pitch are effective only on the ground whereas water is most necessary for incendiary bombs already developed. Also, sand will be most effective if a high explosive bomb has broken the nearby tubs are nearly dry.

HOW THE MAGNESIUM BOMB WORKS



A LARGE BOMBER CAN CARRY 1000 SUCH BOMBS!
THEY ARE USUALLY RELEASED 20 TO 50 AT A TIME, SPREAD LIKE SHOT BEFORE STRIKING.

DROPPED FROM A HEIGHT OF 20,000 FEET, THEY DEVELOP ENOUGH FORCE TO PENETRATE AN AVERAGE ROOF...



...THUS, THEY USUALLY START BURNING IN A TOP STORY OR ATTIC

THE THERMITE FILLING OF IRON OXIDE AND FINELY DIVIDED ALUMINUM, IS THEN IGNITED AND DEVELOPS A FIERCE HEAT OF OVER 4500 DEGREES!

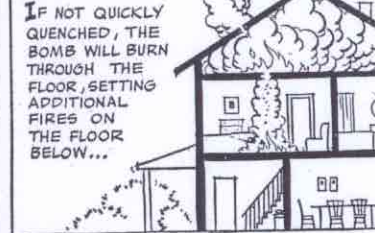


THE FLAME ROARS OUT OF THE ESCAPE HOLES.

THE MAGNESIUM CASING CATCHES FIRE, WITH A SPUTTERING ACTION...



...FLAMING MOLTEN METAL IS THROWN ABOUT AND SURROUNDING INFLAMMABLE MATERIAL CATCHES FIRE



IF NOT QUICKLY QUENCHED, THE BOMB WILL BURN THROUGH THE FLOOR, SETTING ADDITIONAL FIRES ON THE FLOOR BELOW...
BUT, WITH PROMPT ACTION AND SIMPLE TOOLS, A MAGNESIUM BOMB CAN BE QUENCHED!

CONTROLLING WITH SAND

APPROACH THE BOMB IN A CROUCHING OR CRAWLING POSITION. PLACE THE SAND BUCKET, UPSET, TO ALLOW A FULL-ARM SWING TOWARD THE BOMB



TRY TO COVER THE BOMB WITH DRY SAND, TO CONFINE IT'S ACTION, SO THAT YOU CAN GET NEAR ENOUGH TO SCOOP IT UP ON THE SHOVEL



WHEN THE BOMB IS UNDER FAIR CONTROL, SCOOP IT UP ON THE SHOVEL, FIRST RIGHTING THE BUCKET, BUT LEAVING SOME SAND IN THE BOTTOM...



... IF THE BOMB CAN BE DROPPED FROM A WINDOW TO SOME PLACE WHERE IT CAN BURN OUT WITHOUT HARM —

GET RID OF IT THAT WAY!



... OTHERWISE, PUT IT IN THE BUCKET ON TOP OF SAND, COVER IT WITH MORE SAND...



... THEN, HOLDING THE BUCKET ON THE SHOVEL, CARRY IT OUT OF THE HOUSE...



The

Dry sand is poured bomb and with a long-handled shovel rolled onto the sand. Moisture in the sand reduces the intensity of the fire. This permits the operator to use a bucket containing at least one gallon of water. This should be done as soon as the bomb should then be controlled.

The

Prompt attention to a fire is essential. A shower of water to be showered on adjacent objects. If a fire occurs, few other fire-fighting methods increase the rate at which the bomb burns itself out. The usual fifteen or twenty gallons of solid water because of the burning molten metal. A fine spray at the rate of about one gallon per minute is ideal for the control of fires. In Great Britain this method is handled by two people, one holding the bucket behind a protective shield and the other directing the spray hose. Here the rubber shield is used if possible. A convenient substitute is a garden sprayer or even a bucket. A bucket in a bucket forms a good method of control used with great economy but not the bomb. Expect to use six gallons of water are required. The two three-gallon buckets should be filled. After control of the fire, the spray should be directed down the neighboring side of the building to be accomplished at the same time.

From the above description, it is recommended that a garden hose with spray nozzle be used as a simple method of supply. This method is recommended only as a last resort.