

SECTION 11

BOMB SPLINTERS

1101. In many incidents where the damage is slight, the only convincing proof of explosion is provided by the splinters formed by the disintegration of the bomb casing. If the bomb has exploded splinters will usually be found laying on or buried in the earth near by or in the sides of the crater. (The damage illustrated in the first photograph of Fig 9-1 was proved to be due to explosion, by the presence of bomb splinters among the rubble). The effects produced by the splinters while in motion will also be found.

Identification of Splinters

1102. Bomb splinters vary in size from very fine dust particles to sections weighing a number of pounds. It is essential to distinguish splinters formed by explosion from pieces of a bomb which has failed to explode but broken up on impact:

- a. Splinters from exploded thin walled bombs are usually cracked as a result of stretching of the bomb case during explosion (Fig 11-1). They have sharp jagged chisel-like edges (Fig 11-2A).



Fig 11-1: Formation of Splinters from a Thin Walled Bomb.

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- b. Splinters from thick walled bombs show no sign of stretching usually sheer at right angles to the surface and have rough fractured edges (Fig 11-2B). They are similar to splinters from shells and mortar bombs but can usually be distinguished as they are less acutely curved.



Fig 11-2: **Bomb Splinters**

A - From Thick Walled Bombs

B - From Thin Walled Bombs

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- c. Splinters formed by explosion are often blackened and carry the characteristic smell of explosion.
- d. Pieces of casing from unexploded bombs which have broken up on impact show no sign of stretching, have clean cut edges (Fig 11-3) and frequently bear traces of unburned explosive.



Fig 11-3: A Bomb Which has Broken up Without Exploding

Effects Produced

1103. a. Walls may be pockmarked (Fig 11-4).



Fig 11-4: Brickwork Pockmarked by Bomb Splinters

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- b Walls in close proximity to the explosion may have large holes punched through them by the impact of a dense mass of flying splinters.
- c. Ground surfaces may secure furrows radiating from the crater (Fig 11-5).



Fig 11-5: Furrow Marks in Grassland Made by Bomb Splinters

- d. In standing crops, marks may be detected where the splinters have cut their way through.

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