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CHANARD INCENDIARY BOMB

SERVICE HANDBOOK

PREPARED IN THE OFFICE OF
THE CHIEF OF ORDNANCE

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The following publication, entitled "Chanard Incendiary Bomb,"
is published for the information and guidance of all concerned.
[062.1, A. G. O.]

BY ORDER OF THE SECRETARY OF WAR:

FRANK McINTYRE,
*Major General, General Staff,
Acting Chief of Staff.*

OFFICIAL:

P. C. HARRIS,
The Adjutant General.

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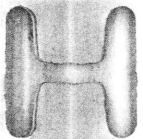
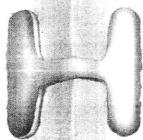


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CHANARD INCENDIARY BOMB.

THE BOMB.

The Chanard incendiary bomb is intended for use against matériel such as buildings (especially temporary buildings), grain fields, ammunition dumps, or anything of an inflammable nature.

The over-all length of the bomb is 28.4 inches and the maximum diameter 4.72 inches. The weight of the loaded bomb is 22 pounds.

This bomb consists of a thin case containing an incendiary mixture *A* (see plate), of nitrated cellulose, turpentine, resin, celluloid, etc. In the tail of the bomb is a quick match *B*, which is ignited by the fuse and which in turn ignites a charge of powder, the incendiary material described above, and also a thermit mixture *C*, contained in tubes which run along opposite sides of the bomb and through the center at right angles to the axis of the bomb.

THE FUSE.

The fuse used in this bomb is a special tail fuse in which a strong spring *H* tends to drive the firing pin *J* against the primer *L*. The motion of the firing pin *J* is, however, prevented by four steel balls *G*, which rest in openings in the hollow firing pin *J*, between the arming vane spindle *E* and a shoulder on the inside of the fuse body *K*. When the bomb has fallen about 250 feet from the airplane the arming vane *D* has screwed the arming vane spindle *E* out so far that it no longer retains the balls *G* in position and they fall inside the hollow firing pin *J*, permitting the latter to fly forward under the impulse of the spring *H* and strike the primer *L*.

A Gros-Andreu nose support is provided for carrying the bomb vertically in the French 120-mm. cells. This support provides a means of suspension only and does not affect the operation of the bomb. The key *P* should be removed after loading the bombs onto the release mechanism.

OPERATION.

When the bomb is released from the airplane and the fuse has functioned as described above, the primer *L* ignites a delay fuse which, burns for 5 seconds, at the end of which time it ignites a powder charge surrounding the ends of the quick-match *B*; this in

turn ignites the thermit in tubes *C*, which, as it burns, melts the tubing and ignites the incendiary charge *A*. The nose and tailpieces, combined with the air pressure on the falling bomb, hold the bomb together until it strikes the objective, when it falls apart, liberating a fiercely burning mass which continues burning for about 15 minutes.

MARKING AND PACKING.

The Chanard bomb is painted red and is marked C. D. 120, with the date of loading, and the number of the lot. The bomb can also be distinguished by a circle surrounded by a white ring near the center of the bomb. They are packed two in a wooden box.

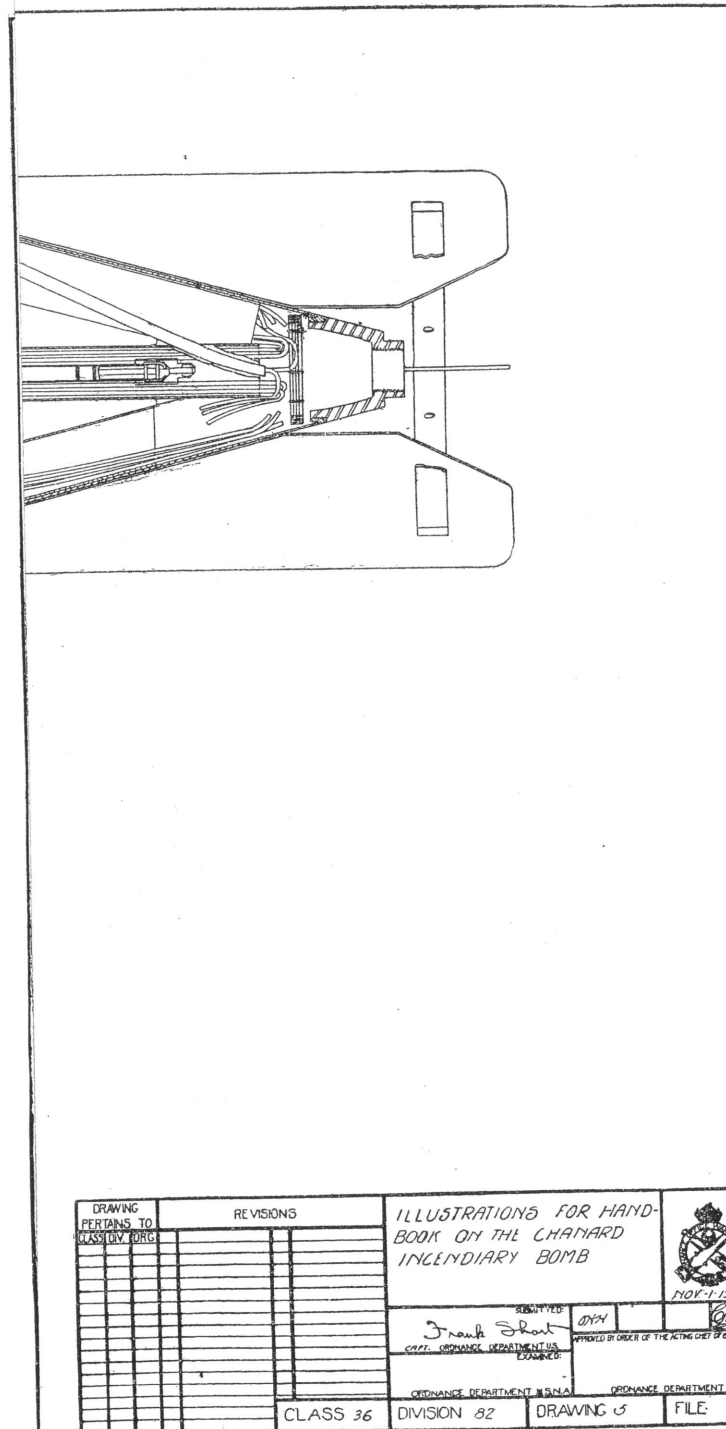
PREPARATION FOR USE.

1. Load the bomb on the release mechanism.
2. Screw the fuse into the bomb.
3. Cut the two iron wires holding the arming vane.
4. Unscrew the arming vane 3 or 4 turns.

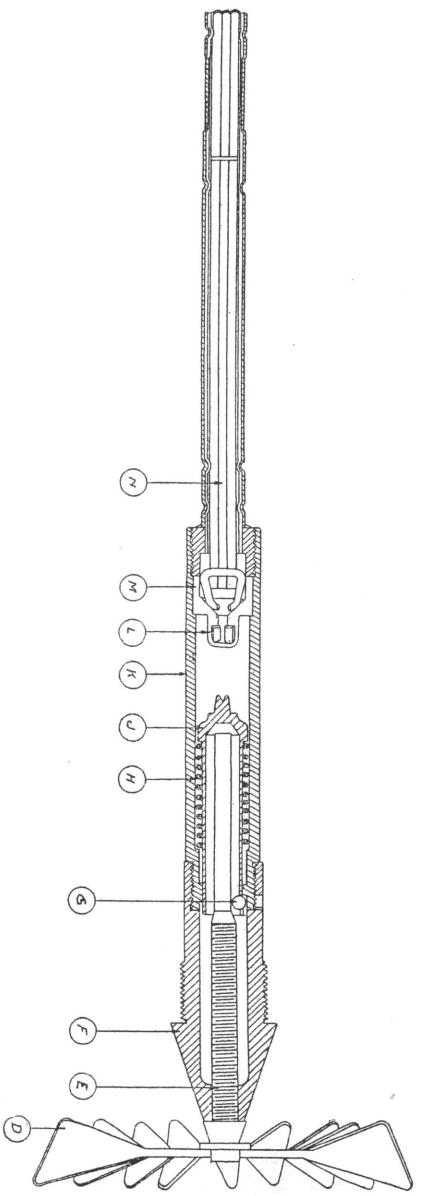
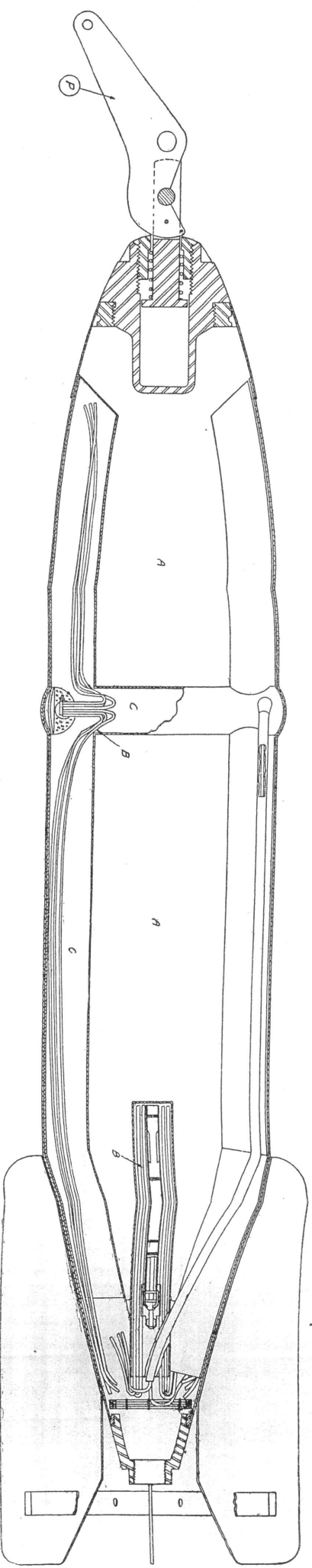
Important.—The fuse functions by unscrewing the arming vane 1 inch of the threaded part. Therefore—

1. Never unscrew the vane more than 3 or 4 turns to loosen it.
2. Be sure, in the carriers, that the arming vane is securely stopped.

NOTE.—To carry this bomb in the release mechanism Mark V, it is necessary to provide the arming-vane stop as described in the addenda to the Handbook on Release Mechanism, Mark V, War Department Document No. 898 (addendum to).



CHANARD INCENDIARY BOMB.



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ILLUSTRATIONS FOR HAND-BOOK ON THE CHANARD INCENDIARY BOMB			DRAWN BY <i>J. M. S. S.</i> CHECKED BY <i>S. B.</i> APPROVED BY OFFICER IN CHARGE OF THE ARTS AND CRAFTS DEPARTMENT		