

[Crown Copyright Reserved.]

FOR OFFICIAL USE ONLY.

EXPLANATORY LIST OF SERVICE MARKINGS

D.G.M.D.

General

287

To be found on ammunition and ammunition
packages in use with the Field Armies.

1918.



LONDON

PRINTED UNDER THE AUTHORITY OF HIS MAJESTY'S STATIONERY OFFICE,
By HARRISON AND SONS, 45-47, ST. MARTIN'S LANE, W.C. 2,
PRINTERS IN ORDINARY TO HIS MAJESTY.

1918.

**Explanatory List of Service Markings to be found
on ammunition and ammunition packages in use
with the Field Armies.**

1918.

Owing to the recent introduction into the Land Service of many new kinds of ammunition and packages, the following list of Markings has been compiled for the use of Officers and others to enable them to more readily identify the various descriptions of ammunition, cases, &c.

This list has been corrected to May, 1918. Any alterations which may be suggested should be forwarded to the Chief Inspector, Royal Arsenal, Woolwich.

CONTENTS.

| 1. CARTRIDGE MARKINGS. | | | | | | PAGE. | PLATES. |
|---|-----|-----|-----|-----|-----|-----------------|------------|
| <i>B.L. Cartridges—</i> | | | | | | | |
| For guns | ... | ... | ... | ... | ... | 5 & 6 | I |
| For howitzers | ... | ... | ... | ... | ... | 6, 7 & 8 | II |
| <i>Q.F. Cartridges—</i> | | | | | | | |
| Separate loading ammunition for guns and howitzers. | | | | | | 8 & 9 | III |
| Fixed ammunition | ... | ... | ... | ... | ... | 9-12 | IV |
| <i>Trench Howitzer Cartridges</i> | ... | ... | ... | ... | ... | 7 & 8 | — |
| 2. PROJECTILE MARKINGS. | | | | | | | |
| <i>Stampings</i> | ... | ... | ... | ... | ... | 13 | } V-XII |
| <i>Body painting</i> | ... | ... | ... | ... | ... | 12 | |
| <i>Stencilling—</i> | | | | | | | |
| Tips | ... | ... | ... | ... | ... | 14 | |
| Rings round head | ... | ... | ... | ... | ... | 14 | |
| Bands round body | ... | ... | ... | ... | ... | 14 & 15 | |
| Weight markings | ... | ... | ... | ... | ... | 16, 17 & 81 | |
| Tracer markings | ... | ... | ... | ... | ... | 18 | |
| Exploder markings | ... | ... | ... | ... | ... | 19, 20 & 21 | |
| Miscellaneous markings | ... | ... | ... | ... | ... | 15, 16, 18 & 19 | |
| 3. BOMB AND GRENADE MARKINGS. | | | | | | | |
| <i>Bombs</i> | ... | ... | ... | ... | ... | 21-23 | — |
| <i>Grenades</i> | ... | ... | ... | ... | ... | 23 & 24 | — |
| 4. FUZE, TUBE AND PRIMER MARKINGS. | | | | | | | |
| <i>Fuzes</i> | ... | ... | ... | ... | ... | 24, 25 & 26 | XIII-XVIII |
| <i>Tubes and Primers</i> | ... | ... | ... | ... | ... | 26 | — |
| 5. GAINE MARKINGS. | | | | | | | |
| <i>Stampings and stencillings</i> | ... | ... | ... | ... | ... | 26 & 27 | XIX |
| 6. SMALL ARM CARTRIDGE MARKINGS. | | | | | | | |
| <i>Stampings and stencillings</i> | ... | ... | ... | ... | ... | 27 | — |
| 7. PACKAGE (CARTRIDGE AND SHELL) MARKINGS. | | | | | | | |
| <i>Cartridge boxes—</i> | | | | | | | |
| <i>B.L. and generally</i> | ... | ... | ... | ... | ... | 27-31 | XXVI |
| <i>Q.F.—</i> | | | | | | | |
| Separate loading ammunition— | | | | | | | |
| Except 4.5-in. and 3.7 in. | ... | ... | ... | ... | ... | 31 & 32 | — |
| 4.5-in. and 3.7-in. | ... | ... | ... | ... | ... | 39 | XXVII |

(B 12400)

| | PAGE. | PLATES. |
|---|---------|-------------------------|
| Fixed ammunition (field) | 32-35 | XXVIII & XXIX |
| Fixed ammunition (anti-aircraft) ... | 35-38 | XXX-XXXII |
| Miscellaneous Q.F. packages ... | 38-40 | — |
| <i>Shell boxes—</i> | | |
| High explosive | 40 & 41 | XXXIV |
| Incendiary | 41 | — |
| Chemical | 42 | XXXV |
| Smoke | 42 | XXXVI |
| <i>Shell slings</i> | 42 | — |
| 8. BOMB PACKAGE MARKINGS. | | |
| <i>Aerial Bombs—</i> | | |
| Boxes... .. | 43 | XXXVIII |
| Crates... .. | 43 | XXXIX |
| <i>Trench Howitzer—</i> | | |
| Bomb boxes | 43-45 | XL |
| Cartridges and detonators in bulk... .. | 45 & 46 | — |
| 9. GRENADE PACKAGE MARKINGS. | | |
| <i>Grenade boxes</i> | 46-48 | XLI |
| <i>S.A. Cartridges and Rods for Grenades</i> | 48 | XLII |
| <i>Bursters for grenades</i> | 48 & 49 | — |
| 10. FLYING CORPS MARKINGS | 49 | — |
| 11. CYLINDERS AND PACKAGES FOR FUZES, TUBES AND PRIMERS. | | |
| <i>Fuze Cylinders</i> | 49-51 | — |
| <i>Fuze Packages</i> | 51 & 52 | XXXVII |
| <i>Tube and Primer Boxes</i> | 52 | — |
| 12. S.A.A. BOXES. | | |
| Boxes and labels for boxes | 53-55 | XXXIII, XLIII & XLIV |
| 13. GENERAL MARKINGS | 55 | — |
| 14. STATION MONOGRAMS, LIST OF | 56 & 57 | — |
| Group and Division Labels and Government Explosive Label. | — | XX, XXI |
| Station Label | — | XXII |
| Composite Group and Division and Government Explosive Labels. | — | XXIII-XXV |

1. CARTRIDGES.

(Plates I to IV.)

The following are the markings to be found on cartridges :—

B.L. CARTRIDGES—

For Guns—

(i) Front—

- (a) Numeral of cartridge.
- (b) Initials or trade mark of maker of empty bag.
- (c) Designation of cartridge, including nature of gun, weight and nature of propellant. The initials indicating nature of propellant are as follows :—
 - “ Cordite ” for Cordite Mark I.
 - “ M.D. ” for Cordite M.D.
 - “ M.D.T. ” for Cordite M.D.T.
 - “ R.D.B. ” for Cordite R.D.B.
 - “ R.D.B.T. ” for Cordite R.D.B.T.
 - “ R.D.B.S.F. ” for Cordite R.D.B. Square Flake.
 - “ BAL ” for Ballistite.
 - “ N.C.T. ” for Nitrocellulose.
 - “ C.S.P. ” for Chilworth Smokeless Powder.
- (d) “ $\frac{1}{2}$ -charge ” or “ $\frac{1}{4}$ -charge, ” as the case may be.

(ii) Back—

- (a) Lot No. of the propellant used and the letters “ A.C. ” when the charge has been adjusted. When a “ grouped ” propellant is used the group letter and number will replace the letters “ A.C. ” When Nitrocellulose powder dried at a temperature of 60 degrees Cent. is used, the letter “ H ” will be stencilled after the lot number, but this will be omitted in future issues.
- (b) Initial or monogram of filling station (or the initials or trade mark of the filling firm), with the date of filling (month and year) immediately underneath. Re-made cartridges have the original

markings placed on the new bags together with the date and monogram of re-making station.

(iii) Igniter—

- (a) Designation of cartridge.
- (b) Weight of powder in the igniter, or "Ig.," followed by "A," "B," &c., denoting the nature of standardized igniter.

(iv) Round the Body—

- (a) Blue band (on 60-pr. gun cartridges, 4 lb. 15 oz. 16 drs. M.D. 11) denoting reduced charge.

For Howitzers—

On each portion—

- (a) Numeral of cartridge.
- (b) Initials or trade mark of maker of empty bags. Designation of the cartridge, including nature of howitzer; Lot No., weight and nature of propellant. Also weight of the actual portion placed underneath the weight of the total charge. In the smaller natures of cartridges the weight of the portion only is shown.
- (c) Initials or monogram of filling station (or the initials or trade mark of the filling firm), with the date of filling (month and year) immediately underneath. Re-made cartridges have the original markings placed on the new bags, together with the date and monogram of the re-making station.
- (d) Number of the portion (in words or figures) on the top or side, as the case may be.
- (e) On the igniter—
"IG.," followed by "A," "B," &c., on larger natures of cartridges, denoting the nature of standardized igniter, together with the initials or monogram of the filling station or contractor (or trade mark of the latter) and calibre of howitzer.

In some cases, however, the initials of the filling station or contractor may be omitted. The initials on the bag of the cartridge will then be taken to apply also to the igniter.

- (f) On the millboard disc (where applicable). Numeral and designation of cartridge and filling station or contractor's monogram, initials or trade mark.
- (g) B.L. 9.2-in. howitzer 13 lb. 12 oz. N.C.T. 22 cartridges have a thick black vertical line above and below the present stencilling on the part 4.
- (h) 5-in. howitzer cartridges for use with light shell have two red bars across the igniter, and the whole cartridge is enclosed in a blue serge bag.
- (i) In the case of 6-in. 30-cwt. howitzer cartridges for use with the 100-lb. shell, "For the 100-lb. shell" is marked on the reverse side of the bags. Cartridges filled with N.C.T. have a blue band stencilled across the igniter.
- (j) Cartridges B.L. 12-in. Marks III to V howitzers (48 lb. cordite M.D. or R.D.B., size 16, in three parts) have a red band across the white igniter. The N.C.T. cartridges (33 lb. 4 oz.) are similarly marked with a blue band.

The Mark II 48-lb. cartridges (in 5 parts) have two red bands across the igniter

The above cartridges also have the words "For Mark III to V howitzers" stencilled on the core portion.

For Trench howitzers—

On base—

1. Contractors' initials or recognised trade name.
2. Date of filling.
3. Numeral of cartridge.

The 165-grain cartridge for 3-in. Stokes Trench Howitzer is made with a red-coloured paper cylinder, the 120-grain cartridge with a green-coloured paper cylinder, and the 95-grain cartridge with an orange-coloured paper cylinder.

The 400 grains E.C. 3 cartridge for the 4-in. Stokes trench howitzer has the words "400 grs. E.C. 3" stencilled in red on the lid in addition to the other markings.

The 95-grain Ballistite cartridges for use in 3-in. Stokes Trench Howitzer are coloured blue.

The 150-grain Cordite size $2\frac{1}{4}$ cartridges for use in 4-in. Stokes Trench Howitzer are coloured pink with 3 black stripes round the body.

Trench Howitzer cartridges made up from UNWATER-PROOFED guncotton will be marked "UN-WP" below the word guncotton.

Q.F. CARTRIDGES—

(i) Separate loading—

For guns—

A paper label is attached to the lid in the recess in the centre, or on the bevel edge if there is no recess, giving the numeral of filled cartridge, nature, weight, and Lot No. of the charge and Lot No. of the cordite cylinder.

For howitzers—

(a) Numeral.

(b) Monogram or initials of filling station or firm, or trade mark of the latter and date of filling, designation of cartridge, including nature of howitzer, Lot No. and nature of propellant, and weight of the particular section or portion.

(c) Number of the portion (in words or figures) on the end nearest the lid of the cartridge.

(d) On the outside of the lid.—Numeral of cartridge, monogram of filling station or firm, or trade mark of the latter; nature of howitzer and propellant.

ii) Fixed—

3-inch—

18 and 13-pr.—

On base of cartridge—

- (a) Nature of propellant with Lot No. and monogram, initials or trade mark of the maker. Date of filling (day, month and year) and initials or monogram of filling station or firm (or trade mark of the latter)
- (b) "A.C." if the charge has been adjusted. When a "grouped" propellant is used, the letters A.C. will be omitted.
- (c) Numeral of cartridge.
- (d) When fitted with H.E. shell the base of the cartridge is painted yellow and the stencilling is red.
- (e) When fitted with chemical shell the base of the cartridge is painted light grey.
- (f) When fitted with incendiary shell the base of the cartridge is painted red (this necessitates the stencilling on the base being in black).
- (g) When fitted with smoke shell the base of the cartridge is painted green.
- (h) When fitted with target shell the base of the cartridge is painted black.
- (i) 3-in. 20-cwt. reduced charge H.E. shell cartridges have a black cross stencilled across the base, except over the primer, and the shell is painted white. A number of cartridges have, however, been issued with the ordinary shell markings, but with a letter "B" stencilled in white above the letters "A.A."
- (j) Q.F. 3-in. 20-cwt. reduced charge practice ammunition (shrapnel shell) have the base of the cartridge

case marked as (i) above, and the shell painted half black and half white.

- (k) Q.F. 3-in. 20-cwt. cartridges made up with charges composed of cordite M.D. re-worked into size 11 will have the following stencilled on the base of the case (typical) :—

“ FIRE or DESTROY by 1/1/19,”

the date being twelve months after date of manufacture.

- (l) Cartridges made up with N.C.T. charges have a black band 1 in. wide stencilled across the base of the case (except the primer) to facilitate identification, and the stencilling is in black.
- (m) 18-pr. shrapnel shell cartridges made up with reduced charge will have the shell painted white from shoulder to driving band, and the base of the case painted white, and the abbreviation “ RED ” stencilled in red, in addition to the usual stencilling.
- (n) 18-pr. H.E. shell cartridges made up with reduced charge will have the shell painted yellow with usual bands and rings, but in addition a white band immediately below the green band. The base of the case will be painted yellow with a 1-inch white band stencilled across, also the letters “ RED.”

For marking on shell, see pages 12 to 21.

2.95-in.—

On base of cartridge—

- (a) Nature of propellant, with maker's initials and Lot No., date of filling (day, month and year) and initials or monogram of filling station or firm (or trade mark of the latter).
- (b) Numeral of filled cartridge.

3-pr. Vickers practice:—

Full charge—word “FULL.”

Reduced charge—word “REDUCED.”

1-pr. cartridges for Mark III gun.

These have “Sp¹” in black on the white ring, and a green cross on the base of cartridge; the green cross will, however, be discontinued in future supplies.

Additional markings on Q.F. Cartridges.—

Fixed ammunition fitted with No. 80 series of fuzes have a small label pasted on the base of the cartridge case and on the fuze cover, giving the fuze correction.

Some ammunition for use in aeroplanes have a green cross on the base of the cartridge case. This cross will, however, be discontinued in future supplies.

Armour piercing projectile cartridges for use in aeroplanes will have the base of the case painted blue.

Cartridges for “Single Tube” guns have the base and rear portion of the cartridge case bronzed.

Cartridges Q.F. 6-pr., and below.—Letters “S.F.G.,” “Spl.” or “GC,” according to nature of the igniter

Cartridges which have charges tied with cotton tape or sewing instead of silk braid or sewing will have the letters “CN” (sense cotton) added to the numeral on the base of the cartridge, except in the case of Q.F. cartridges made up with flake or grain powders contained in bags.

Stampings on base of cartridge cases—

“G” ... On 3-pr and 3-pr. Vickers, indicating that they will only be used for filling for Gunnery Schools, the 3-pr. being restricted to reduced charges.

“CF” or “CR”... On all Q.F. cases filled Cordite, Ballistite, N.C.T., or C.S.P., before filling according to whether the charge is

| | | | |
|-------|-----|-----|---|
| | | | to be full or reduced. An "F" or "R" to be added for each time filled. |
| "P" | ... | ... | On cartridges filled powder (except in the case of blank cartridges) instead of "C" as above. |
| "(A)" | ... | ... | In a circle, followed by a punch mark—on all repaired cases which have been annealed (1½-pr. and 2-pr. cases are not annealed), an additional punch mark being added for each subsequent annealing. |
| "S." | ... | ... | Followed by a punch mark—on all Q.F. 13-pr., 18-pr., and 4.5-in. Howitzer cartridge cases which have been scleroscoped, an additional punch mark being added for each subsequent scleroscoping. |
| "H" | ... | ... | On cases which have been headed under a hammer. |

2. PROJECTILE MARKINGS.

(Plates V to XII.)

The following are the markings on projectiles :—

Painting—

H.E. Shell : Yellow (except for Reduced charge H.E. shell cartridges when the whole of the shell will be painted white; but see below under "bands round the body" with regard to 18-pr. H.E. shell made up in reduced charge ammunition, when the shell will be painted yellow).

Chemical shell : Light grey.

Incendiary shell : Red.

Smoke shell : Light green.

Shrapnel shell : Made up in reduced charge cartridges are painted white from shoulder to driving band.

Target shell : Light green with yellow band round body (see below).

All other shell.—Black (shrapnel shell B.L. 15-pr., Q.F. 18 and 13-pr., have in the past been painted slate colour, but this has been discontinued)

Stamping—

1. Calibre and numeral.
2. Manufacturer's initials or recognised trade mark and date of completion.
3. "GUN" or "HOW" or "GUN and HOW," denoting the use of shell for gun or howitzer, or for both.
4. "H" or "L." denoting "heavy" or "light."
5. "C.S." or "B.S.," denoting that shell is made of cast steel or bored from the bar
6. "A" on 6- and 3-pr. steel pointed shells that have been annealed.

In the case of fixed ammunition the markings 1, 2, 5, and 6 are above the driving band ; for all other shell they are on the base.

Chemical Shell.—In order to assist identification of chemical fillings in shell when the paint and colour bands have become obliterated, all chemical shell will in future be stamped with letters corresponding to the colour bands denoting the chemical filling employed, thus :—

- (1) Shell with bands white, red and white, will be stamped "W.R.W." Shell with red band will be stamped "R," &c.
- (2) Shell filled K.S.K. or S.K. which have no distinctive colour bands to be stamped with letters N.B. (indicating "No band").

The letters will be $\frac{5}{16}$ in. high and be stamped vertically on the shell, commencing $\frac{1}{2}$ in. from the top of the shell.

Stencilling—**(a) Tips—**

White—Shot (except case). Capped shot.

Black—Common and star shell, and on H.E. shell to indicate absence of smoke-producing composition. (When smoke-producing composition is used in H.E. shell the tip will be left yellow.)

Red—Shrapnel shell.

(b) Rings round the head—

White—Steel projectiles (except star, shrapnel and H.E.). This marking will, however, be omitted in future supplies.

White (two)—Armour-piercing shell.

Red—Indicating shell is filled, or a ring of red crosses when shell is filled Amatol for use in hot climates (see Plate V).

(NOTE.—*A number of shell for hot climates have been issued with a ring of yellow crosses over the red filling ring, but this marking is superseded by the red crosses for future supplies.*)

Black (two)—In the case of incendiary shell, which are painted all red, two black rings are painted round the nose, leaving a red ring between them to denote that the shell is filled. (*This marking will, however, be discontinued in future issues.*)

Black (one)—On H.E. shell, denoting that a powder-filled fuze should be used.

Light brown—On cast iron or semi-steel shell.

(c) Bands round the body—

Green (light)—Shell filled trotyl or amatol. In the case of amatol filling the fraction is also stencilled in black below the band, but in future supplies of shell filled amatol 80/20 the fraction will be omitted. When

filled amatol the letters "XOL" replace the fraction below the band. When filled trotyl the word "TROTYL" will be stencilled in black on the green band, and when filled lyddite no band will be painted.

The word "PURE" stencilled after fractions 40/60 or 50/50 denote that Grade II trotyl has been used in the composition of the amatol.

(NOTE.—This green band is to be stencilled just above the shoulder, except on boxed ammunition, when it is to be placed on the body.)

White (one)—Immediately below the green band on H.E. 18-pr. shell when made up in reduced charge ammunition (9 oz. Cordite M.D. size $2\frac{1}{4}$).

Red (two)—Chemical shell filled J.L. mixture.

Red (one)—Chemical shell filled C.B.R. and C.B.R. Mark II. mixture.

Red (three)—Chemical shell filled J.B.R. mixture and White Star mixture.

Red, white, red—Chemical Shell filled C.G. mixture.

White, red—Chemical shell filled V.N. mixture.

White, red, white—Chemical shell filled N.C. mixture.

White (one)—Chemical shell filled P.S. mixture

White (two)—Chemical shell filled P.G. mixture.

White (three)—Chemical shell filled A.K. mixture.

Yellow—On target shell.

(NOTE.—Should the bands on chemical shell become obliterated the fillings (on future supplies) may be identified by the stamping on the head of the shell (see page 13).

(d) Red star on white disc—On the shoulder of all star shell.

Additional markings—

1. Calibre and numeral of shell (except in the case of fixed ammunition).

2. The words "GUN" or "HOW." followed by "H" or "L" (denoting "heavy" and "light") are stencilled


after the calibre, but only where gun and howitzer shell of the same calibre exist, viz., 6-in., 9·2-in. and 12-in.

- 3.—(a) “FUZED” (in red) when the shell is fuzed, with the Lot No. of the fuze thus (typical):—

FUZED LOT 1.

(b) Shell where only one type of fuze (other than No. 101) can be used have the words “Use....Fuze” stencilled on.

(c) 4·5-in. and 6-in. howitzer A.A. shell fitted with No. 44/83 fuze have the words “USE 83/44 FUZE” stencilled on them.

4. “IV FUZE” in red on 6-pr. steel shell fitted with Mark IV base Hotchkiss fuze.
5. Monogram of filling station.
6. Date of filling (day, month and year).
7. The nature of powder with which filled, e.g., “P,” “Q.F.,” “L.G.,” &c.
8. If the shell is fuzed with a base fuze, the head of the fuze or the lead cap covering is to be painted red.
9. The particulars 5 and 6 under the heading of Stamping (see page 13) will also be stencilled.
10. Shell which have been emptied will have the letter “E” and monogram of station placed on the head in white paint.
11. Design No. of method of filling stencilled above the driving band.
12.  denotes the centre of gravity of shell 12-in. and upwards. This marking will be discontinued in future supplies.
13. The following weight markings are to be found on H.E. and powder-filled shell, 3·7-in., and above (except 12-in. and 15-in., which will have the actual filled weight stencilled):—
 - (three discs)—above mean weight to $\pm \frac{1}{2}$ per cent.

•• (two discs)—between mean and $-\frac{1}{2}$ per cent., both inclusive.

• (one disc)—between $-\frac{1}{2}$ and -1 per cent.

The discs (red for powder filling and black for H.E.) are 1 in. in diameter, and are stencilled on the reverse side to other marking. H.E. shell lighter than 1 per cent. or heavier than $\frac{1}{2}$ per cent. show the actual weight stencilled on the same side as follows:—

3·7-in. to 6-in., to the nearest $\frac{1}{2}$ lb.

8-in. and above, to the nearest 1 lb.

The above system of weight markings will, however, be abandoned in future, the variations in weight of the filled shell being denoted by means of the symbols shown below, which indicate the number of units the shell is above or below the mean weight, the units being as follows:—

$\frac{1}{4}$ lb. for 3·7-in., 4-in. and 4·5-in. shell.

$\frac{1}{2}$ -lb. for 4·7-in., 60-pr., and 5-in. shell.

1 lb. for 6-in. and 7·5-in. shell.

2-lb. for 8-in., 9·2-in. (howitzer and gun) and 10-in. shell.

5 lb. for 12-in. (gun and howitzer) shell.

10 lb. for 14-in. (heavy) and 15-in. (howitzer) shell.

Symbols.

+3

+2

+1

0

-1

-2

-3

e.g., “+3” indicates that the shell is 3 units above the mean weight.

On separate loading ammunition the symbols are stencilled on the nose of the shell in line with the calibre and numeral, and on fixed ammunition half way up the ogive. The symbols will be in black figures .75-in. or 1-in. high, and will be stencilled in three equi-distant places on shell above 6-in., and on two places on shell 6-in. to 3.7-in. inclusive.

Incendiary, smoke and chemical shell have the actual weight stencilled on the reverse side as follows:—

4.5-in. and 6-in., to the nearest $\frac{1}{4}$ lb.

3-in. and 18-pr., to the nearest $\frac{1}{8}$ lb.

In future supplies, however, the weights will be marked in units (as described above for H.E. shell) with the exception of Target Shell and Incendiary A.Z. shell.

“HVY” will be stencilled on shell containing *pure* S.K. to denote they are heavy as compared with service S.K. shell.

14. Projectiles fitted for or with a tracer are marked as follows:—

Ⓓ when fitted with night tracer.

Ⓒ when fitted for, but not with, night tracer.

ⒹⒻ when fitted with combined tracer fuze.


ⒸⒹ when fitted for, but not with, combined tracer fuze.

ⒹⒻ when fitted for day tracer, and filled with tracer liquid.

D when fitted for day tracer, but not filled with tracer liquid.

These markings are stencilled on the head in red, except those on H.E. shell, which are black.

15. "G2" on shoulder of shell (above the calibre), denoting that a No. 2 gaine is fitted. This marking, will, however, be omitted in future issues.
16. "A.A." on shell for use against aircraft.
17. "AZ" on shell for use against Zeppelins. When filled with D.W. composition, the batch No. will be stencilled on in block type.
18. "INCDY" denoting incendiary filling. This marking will, however, be omitted in future issues.
19. "44/80" where a No. 44/80 fuze is used instead of a gaine.
20. "PHOS" denoting use of phosphorus.
21. Shell fitted with "NEW NARROW" driving bands will have a longitudinal stripe painted from driving band to shoulder on two sides diametrically opposite (see Plates V., VIII., X.-XII.) The stripes to be black on H.E., Chemical, Smoke and Incendiary shell, and white on all shell the bodies of which are painted black.
22. Where a gun and howitzer of the same calibre exist, projectiles suitable for the gun (whether also suitable for the howitzer or not) will have a black band painted round the body immediately in front of the driving band.
23. (a) All H.E. shell fitted with base adapter inserted with glue are painted black behind the driving band.
 (b) All H.E. base adapter shell with bottom of cavity treated with glue will be chequered behind the driving band, i.e., divided into alternate black and yellow sections parallel with the length of the shell; two sections black and two yellow.
24. The following additional markings as regards exploders have in the past been stencilled on H.E. shell:—
 - (i) "with oz. exploder" and a disc where a powder primer is used (on shell with central

- cavity filled or repaired prior to 2/3/1911)—
Picric powder exploder.
- (ii) "7 dram exploder.," on solid filled shell filled between 28/11/04 and 29/5/10—Picric powder exploder.
- (iii) "EXPLDR" on shell filled since 2/3/11, whether with long exploder or solid filled, together with weight of exploder, numeral, Lot Nos. and initials of maker of picric powder, and with a black disc if a powder primer is used with a long exploder.
- (iv) "EXPLDR PELLETS" on shell filled on or since 30/5/10, and Lot No. of picric powder in exploders—that of the 7-dram exploders being placed over that of the pellets—"PELLETS" indicates compressed picric powder pellets.
- (v) "EXPLDR BAG 4 oz." and Lot No. of picric powder in exploder in the case of A.P. shell filled with lyddite.
- (vi) "EXPLDRS, T.N.T." denoting T.N.T. exploders (with the weight of long exploder where applicable). Lot Nos. stencilled side by side when more than one.
- (vii)  indicates T.N.T. bag exploders—where a long exploder is also used the Lot No. of the bag exploders is placed above that of the long exploder.
- (viii) "EXPLDRS, T.N.T. [3 drs.]" represents 3-dram T.N.T. bag exploder on 3 and 6-pr. H.E. shell.
- (ix) A rectangle, 6 in. by 1 in., denotes that the exploder is in a waterproof cylinder.
- (x) "D.M." denotes dry mixed picric powder. In the case of Mark II exploders the numeral "II"

is placed in the rectangle referred to in (ix) instead of "D.M."

- (xi) "K.C." on shell fitted with an asbestos tube and having the upper surface of the lyddite covered with beeswax composition.
- (xii) "A" above the rectangle referred to in (ix) when the exploders have an aluminium cap.
- (xiii) Shell converted to T.N.T. exploders have the date of conversion, monogram of converting station and Lot Nos. of T.N.T. stencilled on the side, that of the bag exploder being above that of the long exploder. The monogram of the filling station and date of filling is transferred to the reverse side of the shell.
- (xiv) "EXPR-T.N.T." with the alphabetical series letter of the exploder stencilled underneath.

Future Markings as regards exploders will be—

"EXPR. C.E." when shell is fitted with C.E. exploders.

3. MARKING ON BOMBS AND GRENADES.

BOMBS.

Stencilling on all bombs—

- (i) Calibre and numeral of bomb.
- (ii) Monogram of filling station or contractor's initials or trade mark.
- (iii) Date of filling.

Markings on Aerial bombs—

H.E. bombs are painted similarly to H.E. shell, but when filled with ammonal a pink band is painted round the body; "3" under the band denotes alumatol filling; the "3" will, however, be omitted in future issues.

Incendiary and smoke bombs are painted grey, and have the nature of filling composition stencilled on the body. Bombs with correct eccentricity are stencilled "Suitable for use with delay magazine."

230 lb. H.E. bombs filled with Hot mixed 80/20 Amatol will be marked "80/20 H.M."

Markings on Trench Howitzer bombs—

Bodies of all bombs are painted dirty white, except 6-in., and 9.45-in. T.H. bombs, which are issued unpainted and greased. The 6-in. T.H. bombs will in future be painted with paint coloured dirty white.

Red ring on head—denoting that bomb is filled.

Bands on body—

Pink—to denote ammonal filling; "3" under the band indicates amatol filling; the "3" will, however, be dispensed with in future.

Green—to denote amatol filling (together with a fraction indicating percentage of mixture).

White—(1)—denoting filling with "P.S." chemical mixture.

White—(2)—denoting "P.G." chemical mixture.

White—(3)—denoting "A.K." chemical mixture

1 white between 2 red—denoting filling with "G.C." chemical mixture.

Red (3)—denoting "J.B.R." chemical mixture.

No bands—denote that bomb is filled with "S.K." chemical mixture.

Pink with letters "SAB"—denotes that bomb is filled "Sabulite."

Additional Markings—

"Smoke" on bombs filled "Smoke" mixture.

"R.Phos" }
 "W.Phos" } on smoke bombs, indicating Red or White Phosphorus, as the case may be.

"W. & R.Phos" on bombs filled "Equivalent White Phosphorus" (*i.e.*, 2 parts White and 1 part French Red Phosphorus).

"T.700" on 4-in. Stokes bombs (cast iron), which have been hydraulically tested to 700-lbs. per sq. in. This stencilling is in $\frac{3}{4}$ -in. red type.

Three yellow discs are stencilled on the nose of Mark I 9.45 T.H. bombs, which have the exploder pockets sunk .91 in.

"POWDER" on ranging bombs filled powder.

9.45-in., 6-in., and 2-in. Trench Howitzer bombs also have the following stencilled on them to indicate the weight—

9.45-in.—

"HEAVY" on bombs above 153 to 154 lbs. in weight.

"MEDIUM" on bombs 151 to 153 lbs. in weight.

"LIGHT" on bombs 150 to below 151 lbs. in weight.

6-in.—

"L" on bombs from 45 $\frac{1}{2}$ lbs. to 46 lbs. in weight.

"HY" on bombs from 47 lbs. to 47 $\frac{1}{2}$ lbs. in weight.

Bombs above 46 lbs., but below 47 lbs., have no weight markings stencilled.

2-in.—

"L" on bombs 39 lbs. 14 ozs. to below 40 lbs 10 ozs.

"HV" on bombs above 41 lbs. 10 ozs. to 42 lbs. 6 ozs.

Bombs filled PURE S.K. ("K.S.K.") will have the letters "HVV" stencilled on them.

GRENADES.

Stencilling—

Red ring—when filled.

Pink band—Ammonal and AlumatoI fillings.

Green band—AmatoI filling.

1 $\frac{1}{2}$ in. red square on grenades filled "K.J." mixture.

(In the cases of grenades with other fillings the nature of the explosive is stencilled on the lid of box only.)

The No. 36 grenades used for practice purposes are coated externally with zinc, and are packed in boxes stencilled with the word "PRACTICE."

No. 31 daylight signal grenades are painted drab colour, with serpentine lines stencilled to denote the colour of smoke candle.

No. 32 night signal grenades are painted drab colour and have coloured dots stencilled on the side to show the colour and order of the stars. These dots are so placed that when the grenade is in position for firing the sequence of stars is indicated as they will appear after the parachute has opened.

No. 38 night signal grenades are painted drab colour and have coloured bands stencilled round body to denote colour and order of stars.

4. FUZES, TUBES, AND PRIMERS.

FUZES. (*Plates XIII to XVIII*)—

Stampings—

- (i) Number and numeral of fuze.
- (ii) Makers' initials and date of manufacture.
- (iii) Initials of filling station or firm, and date of filling.
- (iv) Lot No. of fuze.
- (v) "R" stamped after numeral of fuzes when refilled; also new Lot No.

Additional Markings—

"T" and "P" fuzes without the percussion arrangement for use in shell for anti-aircraft purposes have a 1-in. blue "T" on the fuze and cover.

(NOTE.—A number have been issued with blue caps to denote this, but this marking has been discontinued to prevent confusion with "delay" fuzes which are so marked.)

A green cap in the case of certain "T" and "P" or percussion fuzes of the No. 100 series indicates that the percussion mechanism has been examined or the needle tested. In the case of the No. 100 series the cap will be partly green and partly blue if filled "with delay."

Blue cap on No. 100 series of percussion fuzes denotes "delay," with the exception stated above.

Fuzes fitted with "G" or "J" designs of shutter will have the letter of the shutter stamped after the numeral.

"E" after the numeral of No. 101 fuzes indicates presence of a shutter, except as regards No. 101B fuzes (*see below*).

Fuze No. 101B (with shutter) have the letter "B" stamped after the numeral, and a red and black band painted round body on the two knurled bands, as an easy means of distinguishing this fuze from the 101E.

Fuze, base, percussion, large, bronze No. 16 with delay have a $\frac{1}{2}$ -in. blue disc on top.

Fuzes having a knurled grooved or black painted band round the body indicates that they have no cocked pellet, but in the case of the No. 103 Mark V cast-iron fuze this marking will be omitted and they may be distinguished from the No. 100 fuze by the fact that they have a cap with a central hole through the screw-driver slot to take the screwed needle. A small platform round its lower edge is formed for securing the cap by punching.

When No. 28 fuze bodies are used in conjunction with bases containing 22-seconds fuze, the figures "79" (in $\frac{3}{4}$ -in. type) will be stencilled in white paint over the stamped figures "28."

No. 83R fuzes have the cap painted black.

No. 88 fuzes have the lower ring lacquered red.

No. 88R fuzes have the lower ring lacquered or enamelled red, and cap painted black.

No. 94 fuzes have both rings lacquered or enamelled blue.

No. 85 fuzes with rings filled grain powder for anti-aircraft purposes have the letter "R" over-printed in red on the label on the base and also stencilled on the cover.

TUBES—

Stampings—

- (i) Initials of firm or factory making the tube.
- (ii) Acceptance mark (inspection) thus †.
- (iii) Filling factory number.

In the case of repaired tubes the old acceptance mark and empty maker's initials will be barred out, the repairer's initials being substituted and a fresh acceptance mark and a star added.

PRIMERS—

Stampings—

- (i) Number and mark of primer.
- (ii) Initials of firm or factory making the primer.
- (iii) Acceptance mark (after filling).
- (iv) Filling factory number.
- (v) Date of filling (month and year).

Repaired primers are marked with date of refilling and filling factory number, the original date and filling factory number being barred out.

5. GAINES.

(Plate XIX.)

Stamping—

- (i) Initials of filling station or firm.
- (ii) Date of filling.

Stencilling—

Blue band, denoting delay.

Yellow band. Contains picric acid pellets. This band will, however, be omitted in future supplies.

Red band. Contains C.E. pellets. This band will, however, be omitted in future supplies.

“W.” in red. Fitted with “R.L.” detonator.

No. 2 Mark III grenades which are slightly high in diameter are marked “H.H.D.”

6. S.A. CARTRIDGES.

The following markings are to be found on the under-mentioned Small Arm Cartridges:—

.44-in.—Numeral of cartridge and “.44” on base.

.44-in. dummy drill.—“ .44 Dummy ” on base.

.442-in. Pistol.—Numeral and “.442” on base.

7.62 mm.—Numeral and “7.62” on base.

Signal cartridges—

1½-in. Red.—Edge of base milled.

1½-in. White.—Half edge of base milled.

1½-in. Green.—Edge of base plain.

Cartridges S.A. Trench Howitzer, 35-grain R.P. powder, for 2-in. and 9.45-in. Trench Howitzers, will have the cap half of the cartridge blacked.

Cartridges with N.C. charges have the letter “Z” after the numeral. This will, however, be discontinued in future supplies, the words “N.C. FILLED” stencilled on the ends of the boxes and the letter “Z” on labels being considered a sufficient means of identification.





Practice cartridges for smoke bombs will be coloured pink.

7. MARKINGS ON GUN OR HOWITZER AMMUNITION PACKAGES, WITH SOME TYPICAL EXAMPLES.










1. For cartridges generally.

(a) Number of cartridges in the package.

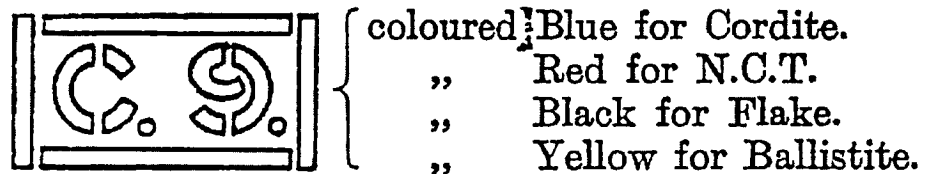
(b) Designation and numeral.

- (c) Nature, Lot No. of propellant.
The letter "H" after "N.C.T." indicates that the cartridges are made up with Nitrocellulose dried at a temperature of 60° Centigrade.
- (d) "A.C." when the charges of the cartridges have been adjusted, this will, however, be omitted when a "grouped" propellant is used.
- (e) $\frac{1}{2}$ or $\frac{1}{4}$ charges, if not full charges.
- (f) "REDUCED Charge" if containing cartridges with a reduced charge.
- (g) Monogram of station and date of filling.
- (h) "For practice only" where service ammunition has been sentenced to be so used.
- (i)  if the cartridges have S.F.G.² powder igniters.
- (j)  if the package contains Q.F. cartridge cases which have been annealed.
- (k)  on packages containing Q.F. 6 and 3 pr. cartridges made up with annealed shell.
- (l)  on packages containing cartridges which are suitable for use with projectiles fitted with night tracer.
- (m) The following symbols will in future be placed on top and on all four sides of cartridge packages and cylinders, in order that contents may be readily identified at night.

The symbols will be four inches in size, and will be painted red when package contains howitzer cartridges and *light blue* when containing gun cartridges, except when packages contain cartridges for High Velocity Howitzers, when they will be white.

| | | | |
|---|-------------------------------|--|--|
|  | 60-pr. |  | 9·2-inch. |
|  | 6-inch 26 cwt. 6-inch gun. |  | 6-inch 30 cwt. |
|  | | 4·7-inch. |  | 12-inch. |
|  | 8-inch. |  | 14-inch. |
| | |  | 15-inch. |

Letters denoting nature of propellant (*i.e.*, "C," "B," &c.) will also be stencilled on all four sides, in red for howitzer cartridges and blue for gun cartridges. When a "grouped" propellant is used these letters will be replaced by the group letter and number, enclosed in a hollow rectangle thus (typical:—



- (n) Packages containing cartridges for use in certain Marks of guns or howitzers will have the natures stencilled thus (typical):—
"FOR 8-INCH Mk. VII HOW."
- (o) Packages containing cartridges for use with star shell will be marked with a 3-inch six pointed star on all four sides and top.
- (p) Cylinders containing long and short range portions of cartridges for 12-in. Marks III to V Howitzers will be marked as follows, in addition to the usual stencilling:—

Long-range portions, Marks I and II, 48-lb. cordite M.D., size 16—

12-in. cartridge symbol in white and one 1-in. white band on body and ends.

Short-range portions—

33-lb. 4-oz. N.C.T., 7 Mark I—

12-in. cartridge symbol in white, and one 1-in. blue band on body and ends.

29-lb. 9-oz. cordite M.D. or R.D.B., size 8 Mark I—

12-in. cartridge symbol in white only.

- (q) Packages containing cartridges for 8-in. Marks VII to VIII Howitzers, made up with such reworked cordite size 8 as falls outside the two groups allocated to 18-pr. cartridges, will have the words "NOT FOR HOT CLIMATES" stencilled in red.
- (r) Boxes containing Flash Reducing Charges for use with 4.5-in. R.D.B. Flake Cartridges, will be distinctively marked to denote that they are only to be used with such cartridges.
- (s) Boxes containing "Detachable Igniters" for 60-pr cartridges will have full particulars stencilled on the lid, and the words "Spare Igniters" on all four sides; also the 60-pr. cartridge symbol on all four sides and lid.
- (t) All wood packages will, in future, have stencilled, branded, stamped or engraved on them a letter denoting their general use, together with a serial number, thus: "C.1.," "C.2," &c., the branding being on the bottom of the box. The initials or trade mark of the maker of the box and date of issue may also be branded on the *ends* of packages, $\frac{1}{2}$ in above the junction of the bottom and ends.

2. POSITIONS OF MARKINGS.

The stencilling is placed to allow room for the group and division label, etc.; and should be in the following positions:—

Zinc cylinders.—On the body, including the number of cylinder. When cylinders have been washed to free them of zinc chloride, a blue disc is to be stencilled under the handle, and a circle $\frac{3}{8}$ -in. diameter stamped above the lug of the handle.

Boxes, cartridge, Q.F. (when used for packing B.L. cartridges).

On the lid. The zinc linings will be stamped on the side with a circle $\frac{3}{8}$ -in. diameter, and a blue disc, stencilled on lid of box, when the linings have been washed to free them from zinc chloride.


Metal lined cases.—On the top.

3. TYPICAL EXAMPLES OF MARKINGS.

BOXES CONTAINING CARTRIDGES, Q.F. 12-PR., AND ABOVE SEPARATE LOADING (EXCEPT 4·7-IN. MARK VI GUN, 4·5-IN. HOWITZER, 3·7-IN. HOWITZER, AND 15-PR.).


On the top—



- (a) Number of cartridges and the words "Cartridges Q.F."
- (b) Designation and Numeral of cartridge.
- (c) Particulars and Lot No. of propellant, with the letters "A.C.," if cartridges of an adjusted weight are being packed. When a "grouped" propellant is used, the group letter and number will be stencilled.
- (d) "Igniters Metal, Mark I" or "Cylr. Cord," and Lot No. of cordite cylinders, as applicable.
- (e) "Adapters" and their Mark or "Primers Electric," with maker's initials, Mark and date, or "Primers Percn., No. 1," and their Mark, as applicable.
- (f) "Cases" and manufacturer's initials, year of manu-

fature, or  if repaired and annealed or "Repd."

if repaired and not annealed, as applicable.

(g) Monogram of station and date of filling.

(h) “  LIDS ” when cartridges are fitted with lids suitable for shell fitted with night tracers.

“ S. LIDS ” when cartridges are fitted with strawboard lids. In addition, a disc ● ($\frac{1}{2}$ -in. diameter) when cartridges have a circular hole cut in underside of lid or in strawboard, or an arc  when cartridges are fitted with lids which are dished, or an arc with a disc,  when cartridges are fitted with lids which are dished and have several holes in strawboard.

On side of box—

Full descriptive label, giving details as stencilled on lid, the number of the box and the Government explosive and classification label.

On inner side of lid—

Full descriptive label, similar to that on the side of the box.

BOXES CONTAINING Q.F. 18 AND 13-PR., AMMUNITION (NOT FOR ANTI-AIRCRAFT). (See Plates XXVIII. and XXIX.).

Shrapnel and Incendiary Cartridges—Boxes stained brown for shrapnel shell cartridges. Boxes painted Red for Incendiary shell cartridges.

(i) **On top—**(in left-hand corner).

(a) “ 80 ” or “ 83,” &c., according to the nature of fuze used.

(b) A 2-in. white disc when 18-pr. shrapnel ammunition of the heavy group is packed.

(ii) **On both sides—**

(a) Nature of propellant (“ N.C.T.” or “ C ” &c., as applicable)

(b) Numeral of the complete cartridge, with the Lot No. of the propellant immediately above,

- (c) Trade mark or initials of empty fuze maker, or, when more than one maker's fuzes are used, the word "MIXED."
- (d) Nature and numeral of fuze used.
- (e) Lot No. of fuze and initials or trade mark of filling factory.
- (f) Setting correction for No 80 fuze (when that series of fuze is fitted) thus $\boxed{+ \cdot 2}$ along right-hand edge of box.
- (g) Until the fuze setting correction labels are in use and when the box is packed with 18-pr. shrapnel ammunition of the normal group, a 2-in. black disc is stencilled in place of the setting correction.

Items (b) to (e) will in future issues only be stencilled on one side of the box ; (a), (f) and (g) however, will continue to be stencilled on both sides.

(iii) On both Ends—

- (a) Monogram of station and date of fuzing.
- (b) Cleats painted black or a black rectangle in the case of 13-pr. ammunition.
- (c) "REDUCED CHARGE" when applicable.
- (d) A 2-in. white disc when 18-pr. shrapnel ammunition of the heavy group is packed.
- (e) Design No. of method of filling shell (applicable only to incendiary ammunition).

High Explosive Shell Cartridges. Boxes stained brown.

(i) On top—

- (a) A 2-in. blue disc ● in left hand top corner when fitted with fuzes with delay action.
- (b) When the No. 106 type of fuze is fitted the fuze symbol is stencilled on.

(B 12400)

(ii) On both Sides—

- (a) to (e) As for shrapnel cartridges above.
- (f) "C.I. fuzes" used to be stencilled under the particulars of the fuze when cast-iron 103 fuzes were fitted. This has been discontinued, but "Brass fuzes" is similarly stencilled on when brass 106 fuzes are fitted.

Items (b) to (e) will in future only be stencilled on one side of the box; (a) and (f), however, will continue to be stencilled on both sides.

(iii) On both Ends—

- (a) Monogram of station and date of fuzing.
- (b) Cleats painted black or a black rectangle in the case of 13-pr. ammunition.
- (c) A 2-in. blue disc "●" when applicable.
- (d) "XX" (two red crosses) on boxes containing shell suitable for hot climates and which have a similar ring of crosses round the head.
- (e) The letters "H.E." or "LYD" when the shells are filled amatol or lyddite respectively.
- (f) Design No. of method of filling shell.
- (g) When No. 106 fuze is fitted the fuze symbol is stencilled on.

Smoke Shell Cartridges. Box painted bright green—

Stencilling follows that for H.E. cartridge boxes above, but the following additional information is stencilled on both ends :—

- (a) The word "PHOS" if applicable, denoting phosphorus filling.
- (b) Words "DECK CARGO."

Chemical Shell Cartridges. Box painted grey.**(i) On top.**

Coloured bands denoting nature of chemical filling used (see pages 14 and 15 for bands).

(ii) **On both sides.**

As for "H.E." cartridge boxes.

(iii) **On both ends.**

- (a) Monogram of station and date of fuzing.
- (b) Coloured bands continued from top of box.
- (c) "C.I." when cast iron shell are packed.
- (d) Design No. of method of filling shell.

Star Shell Cartridges. Box stained brown.(i) **On top.**

- (a) Calibre.
- (b) Words "STAR SHELL AMMN."

(ii) **On both sides.**

- (a) Nature of propellant "C" &c., as applicable.
- (b) Numeral of complete cartridge.

(iii) **On both ends.**

- (a) Monogram of station and date of fuzing.
- (b) Cleats painted black or black rectangle in the case of 13-pr. ammunition.
- (c) A 2-inch six pointed star in black.



BOXES CONTAINING Q.F. CARTRIDGES (ANTI-AIRCRAFT).*(Plates XXX to XXXII.)*

Shrapnel and Incendiary Shell Cartridges. Box stained brown for shrapnel shell cartridges. Box painted red for incendiary shell cartridges.

(i) **On the top.**

- (a) "FOR A.A. ONLY" in red for shrapnel and black for incendiary.
- (b) Monogram of station and date of fuzing.
- (c) Calibre and numeral of the complete round.
- (d) The words "SHRAP FUZED" or "INCENDY A.Z. FUZED" as applicable.

(B 12400)

- (e) Nature and numeral of fuze also manufacturers, initials and lot number.
 - (f) Nature, size and lot number of propellant, with letters "A.C." if charge is adjusted.
 - (g) The symbol  if the shell is fitted with a night tracer.
 - (h) The symbol  if the shell is designed for, but is not fitted with a night tracer.
 - (i) The letter "T" (2-inch type) in blue denoting that the percussion mechanism has been omitted from the fuze.
- (ii) **On both sides.**
Nature of propellant "C" or "N.C.T." &c., as applicable.
- (iii) **On both ends.**
- (a) The letters "A.A." in red for shrapnel and black for incendiary.
 - (b) Cleats painted black or a black rectangle in the case of 13-pr. cartridges; when 13-pr. 9-cwt. cartridges are packed the words "9-cwt."
 - (c) The words "D.W. COMPO" for incendiary shell only, or "F.R. COMPO" for French composition. "FAST CARC" for fast burning carcass.
 - (d) Design number of method of filling shell.

H.E. Shell Cartridges. Box stained brown.

- (i) **On top.**
 - (a), (b), (c) as for shrapnel above.
 - (d) Words "H.E. FUZED."
 - (e), (f), (g), (h), (i) as for shrapnel above.

(ii) On both sides.

As for shrapnel above.

(iii) On both ends.

(a), (b), (c) As for shrapnel above.

(d) "XX" (two red crosses) when containing shell suitable for use in hot climates.

(e) The letters "H.E." or "LYD" when the shell are filled amatol or lyddite respectively.

(f) The letter "L" in 2-inch type when light fuzes are fitted.

(g) Design number of method of filling shell.

Practice Cartridges. Box stained brown.**(i) On top.**

(a), (b), (c), (f) As for shrapnel above.
Word "PRACTICE."

(ii) On both sides.

As for shrapnel above.

(iii) On both ends.

(a), (b) As for shrapnel.

Target Shell Cartridges.**(i) On the top.**

(b), (c), (e), (f), (i) As for shrapnel above.

Words "FOR A.A. PRACTICE" in red, followed by "AT HIGH ALTITUDES ONLY" when smoke shell are used instead of powder-filled shell. The words "AT HIGH ALTITUDES ONLY" will in future, however, be discontinued.

Words "TARGET SHELL FUZED" and a 3-inch yellow band across middle from side to side.

Design number of method of filling shell.

(ii) **On both sides.**

As for shrapnel.

Yellow band continued from top.

(iii) **On both ends.**

(b) As for shrapnel.

Words "A.A. TARGET" in red.

Words "PHOS" and "DECK CARGO."

BOXES, CONTAINING Q.F. CARTRIDGES 6-PR. AND BELOW OTHER THAN "6-PR. SINGLE TUBE." Box painted yellow.

(a) Number and designation of cartridges.

(b) Mark and the word "FUZED" or "PRACTICE" as applicable.

(c) Weight of charge, "CORDITE," and lot number.

(d) "CASES," manufacturer's initials and date;
"PRIMERS," manufacturer's initials and date, or
"CAPS MARK"

(e) "FUZES HOTCHKISS MARK" for service cartridge only.

(f) Monogram of station and date of filling fuze; also series number.

(g) **(S.P.)** if cartridges have S.F.G.² igniters and mark of igniter.

(h) "FOR GUNNERY SCHOOLS ONLY" in case of 3-pr. cartridges made up with cases specially sentenced for such use.

6-pr. Single Tube Cartridges. Top of box painted grey.(i) **On top.**

(a) "6-pr. SINGLE TUBE."

(b) "STEEL SHELL FUZED" or "CASE SHOT" as applicable.

(c) Black band across top from end to end.

(ii) On one end.

Label giving full description of contents.

Boxes containing 6 and 3-pr. practice ammunition have the lid painted yellow, the stencilling being as shown above.

BOXES CONTAINING Q.F. 4.5-INCH AND 3.7-INCH HOWITZER CARTRIDGES. (Plate XXVII.)

(i) On top.

(a) Number of cartridges; word "CARTRGES."

(ii) On both sides.

(a) Calibre of cartridge.

(b) Nature and size of propellant.

(c) Monogram of manufacturer of cordite and lot number.

(iii) On both ends.

Monogram of station and date of filling cartridges.

BOXES CONTAINING 3 AND 6-PR. H.E. AMMUNITION have

"FUZE 19A" (or "19"), or "FUZE 44" or ("FUZE 49") stencilled under the cleat at front and back of box.

BOXES CONTAINING 18-PR. ROUNDS made up with cordite re-worked into size 8 are to have the words "NOT FOR HOT CLIMATES" marked on the box in 2-inch red letters in addition to other markings.

For additional markings to denote nature of fuze, see pages 51 and 52.

Cases, powder, metal or tin-lined. (Whole, half and quarter sizes.)

These are painted red for blank cartridges, and yellow if containing exploders for H.E. shell. In other cases they are either painted "Service" colour, or treated with "oil, mineral, preserving wood."

PROJECTILE BOXES.

H.E. SHELL (*Plate XXXIV*). Box stained brown.

(i) On lid.

(a) Number of shell packed and word "SHELL."

(b) Blue disc "●" when fuze is fitted with delay action.

(c) Red mushroom when shell is fitted with 106 type of fuze.

(ii) On both sides.

(a) "40/60" or other fraction denoting filling composition.

(b) Calibre and numeral of shell.

(c) Design number of method of filling shell.

(d) Monogram of shell filling station and date of filling shell.

(e) Monogram or initials of empty fuze maker; when more than one maker the word "MIXED" to be stencilled.

(f) Serial number and numeral of fuze.

(g) Monogram or initials of fuze filling station and lot number of fuze.

(h) Two vertical black stripes, one at each end, when shell fitted with "new narrow" driving band are packed. 3

(iii) On both ends.

- (a) Number of shell packed and word "SHELL."
- (b) Blue disc "●" when fuze is fitted with delay action.
- (c) "XX" (two red crosses) on boxes containing shell suitable for hot climates and which have a similar ring of crosses round the head.
- (d) The letters "H.E." or "LYD" when the shell are filled Amatol or Lyddite respectively.
- (e) Red mushroom when shell is fitted with No. 106 type of fuze.

INCENDIARY SHELL. Box painted red.**(i) On lid.**

Number of shell packed and word "SHELL."

(ii) On both sides.

- (a) Calibre and numeral of shell.
- (b) Design number of method of filling shell.
- (c) Monogram of shell filling station and date of filling shell;
- (d) Monogram or initials of empty fuze maker; when more than one maker the word "MIXED" to be stencilled.
- (e) Serial No. and numeral of fuze.
- (f) Monogram or initials of fuze filling station and lot number of fuze.
- (g) Two vertical black stripes, one at each end, when shell fitted with "new narrow" driving band are packed.

(iii) On both ends.

Number of shell packed and word "SHELL."

CHEMICAL SHELL. (*Plate XXXV.*) Box painted light grey.

(i) **On lid.**

(a) Number of shell packed and word "SHELL."

(b) Coloured bands denoting chemical fillings (see pages 14 and 15).

(ii) **On both sides.**

As for Incendiary shell above.

(iii) **On both ends.**

As for Incendiary shell above.

Coloured bands continued from top of box.

SMOKE SHELL. (*Plate XXXVI.*) Box painted green.

On top and both sides stencilling follows that for Incendiary shell boxes.

On both ends.

(a) Number of shell packed and word "SHELL."

(b) Words "PHOS" and "DECK CARGO."

The boxes will be branded in a similar manner to the cartridge boxes (page 30), the serial letter being "P."

PROJECTILE SLINGS.

H.E. SHELL. Calibre and numeral on painted battens.

6-INCH SHELL. Alternate battens to be painted black on "gun" shell slings.

CHEMICAL SHELL—

Two battens white—one having the calibre and numeral stencilled on and the other showing the particulars of fuze.

Two battens painted grey in the case of K.S.K. or S.K. filling.

Two battens painted red in the case of chemical filling other than S.K.

"DECK CARGO" on one batten in the case of those filled phosphorus.

8. MARKING ON BOMB PACKAGES.

A.—AERIAL BOMBS have in the past been issued packed in boxes (*Plate XXXVIII*) together with their components, and the following stencillings are to be found on such boxes.

(i) **On lid.**

- (a) Number of bombs contained in package.
- (b) Nature and numeral of bombs.
- (c) Nature of fuzes.
- (d) Monogram of station and date of filling.

(ii) **On ends.**

Weight of bomb.

In future, however, bombs will be issued packed in crates (*Plate XXXIX*), the components being issued separately in boxes. Markings on these crates will be as follows:—

(i) **Side Battens.**

- (a) Number of bombs in crate.
- (b) Nature and numeral of bomb.
- (c) Particulars of filling (*i.e.*, FILLED 80/20).
- (d) Words "WITHOUT COMPONENTS."
- (e) Monogram of filling station and date of filling.

(ii) **Top and bottom of crate.**

- (a) Nature and numeral of bomb.

Component boxes have a full list of the contents stencilled on the top.

B.—TRENCH HOWITZER (OR MORTAR) BOMB PACKAGES.—In future 9·45-inch and 6-inch Trench howitzer (or mortar) bombs will be issued packed in crates (*Plate XXXIX*) and the components separately in boxes. All other natures of bombs will continue, however, to be issued packed in boxes together with their components.

The crates into which the 9.45-inch and 6-inch bombs are packed will be marked as follows:—

(i) **On side battens.**

- (a) Number of bombs in crate.
- (b) Nature and numeral of bomb.
- (c) Particulars of filling.
- (d) Words "WITHOUT COMPONENTS."
- (e) Monogram of filling station and date of filling.

(ii) **On top and bottom of crate.**

- (a) Nature and numeral of bomb.

Boxes containing components for 9.45-inch and 6-inch bombs (*Plate XL*) have a full list of the contents stencilled on the lid.

Boxes containing components and charges for use with 9.45-inch bombs for long ranges will have the words "LONG RANGE" stencilled on each end.

Marking generally on packages containing 4-inch and 3-inch Trench Howitzer (or Mortar) ammunition sets is as follows:—

(i) **On top.**

- (a) Calibre of bomb; words "AMMN SETS."
- (b) Nature, numeral and number of bombs packed.
- (c) List of components packed with bombs.
- (d) Particulars of filling bomb (*i.e.*, "FILLED
AMATOL $\frac{80}{20}$ ")
- (e) Monogram of filling station and date of filling bomb.
- () Gross weight of filled box.

Boxes containing smoke bombs are painted green and have the particulars of filling stencilled on top (the word "FILLED" in red). Smoke bombs have in the past been issued in boxes which have been painted black, but in future, however, the packages will be painted green. In the case of bombs filled with "White"

or "Equivalent White Phosphorous" the additional words "DECK CARGO" are stencilled in red on the battens secured to the lid.

Boxes containing powder-filled bombs are painted black and have the words "FILLED POWDER" stencilled on the lid, the word "FILLED" being in red, and all other stencilling in white. In addition the word "POWDER" is stencilled on each end of the box.

Boxes containing practice bombs are painted pink and have the word "PRACTICE" stencilled on the ends in addition to the usual markings.

Boxes containing incendiary bombs are painted red and all stencilling is in black.

Boxes containing T.H. or T.M. cartridges in bulk have the following stencilling:—

(i) On the lid—

- (a) Number of cartridges packed.
- (b) Word "CARTGES," and calibre of bomb in which used.
- (c) Weight and nature of propellant, and numeral of cartridge.
- (d) Monogram of filling station and date of filling.
- (e) Gross weight of filled box.

When 400 grain E.C.3 cartridges are packed the word "CARTGES" and weight and nature of propellant are stencilled on the ends.

When 350 grain cordite augmenting cartridges are packed the words "AUGMTG CARTGES" are stencilled on the ends and the words ("EXCEPT BOMB SMOKE LIGHT Mk. I") stencilled on the top.

Boxes containing detonators in bulk are painted yellow with the following particulars stencilled on them:—

(i) **On top—**

- (a) Number of detonators packed.
- (b) Word "DETONATORS" followed by nature and numeral of detonators packed.
- (c) Words "HANDLE CAREFULLY" stencilled in red.
- (d) Monogram of filling station and date of filling.
- (e) Gross weight of filled box.

(ii) **On each end—**

A bright green disc 2 inches in diameter.

Packages containing Trench Howitzer (or Mortar) ammunition are at present labelled with the "Government Explosive" and "Classification" (Group and Division) labels, or with the composite label combining both these labels; but on and after 1st April, 1918, these labels will be superseded by stencilling in replica the composite label in the same colours. The packages are sealed with the "Station Monogram" label.

The bomb packages will be branded in a similar manner to the cartridge packages, the serial letter being "B". In the case of T.W. cartridges issued in bulk the series letter on the packages will be "A."

9. MARKINGS ON GRENADE PACKAGES.

(Plate *XLI.*)

Hand or Rifle Grenades have in the past been issued packed together with their components, but certain natures of grenades are now packed separate to their components.

The marking generally on grenade packages is as follows:—

(i) **On one side—**

- (a) Number of grenades packed.
- (b) Nature and numeral of grenades in package.
- (c) The words "WITH ACCESSORIES" where such are included in the same package.
- (d) The word "FILLED" stencilled in red.
- (e) Monogram of filling station and date of filling grenade.
- (f) Gross weight of filled box.

(ii) **On opposite side—**

The words "INSTRUCTIONS INSIDE" where instruction label is pasted inside.

Boxes containing Nos. 28 and 29 grenades are painted light green and have a 1½-inch red square on top and both ends when grenades filled K.J. are packed.

Boxes containing No. 27 grenades are painted dark green and have the following additional stencilling:—

(i) **On side—**

Words "W. PHOS."

(ii) **On top—**

Words "STOW AS DECK CARGO"; "In CASE OF FIRE PLUNGE INTO WATER."

(iii) **On each end—**

Letters "W.P.I."

In future supplies, however, boxes containing grenades filled "S.K." or "K.J." (chemical grenades), will be painted dove grey instead of green.

Boxes containing No. 23 grenades are painted grey, handle cleats dark yellow and the letter "R" is stencilled on each cleat in black.

Boxes containing No. 36 grenades are painted grey, handle cleats bright pink and the letter "R" is stencilled on each cleat in black.

Boxes in which 30 grain ballistite cartridges are contained have the words "FOR S.M.L.E. RIFLE ONLY" stencilled on them.

Boxes containing grenades for instructional purposes are marked "INSTRUCTIONAL" and have a red band painted on.

Boxes containing No. 36 grenades coated with zinc for use as practice grenades have the word "PRACTICE" stencilled on.

Boxes containing grenades for Mesopotamia will have the letter "M" and criss crossing stencilled on each end under the cleats thus:—

" M XXX."

The following is typical of the marking on Boxes containing rods and cartridges for grenades (*Plate XLII*).

(i) On top—

- (a) Number of rods and cartridges packed.
- (b) Nature of grenade for which rods and cartridges are to be used with.
- (c) Monogram of packing station and date of packing.
- (d) Gross weight of filled box.

(ii) On ends—

Letters "W.P.3" as applicable.

The boxes are painted dark green with bright green discs 2 inches in diameter at each end.

The following is typical of the marking on boxes containing bursters:—

(i) On top—

- (a) Number of bursters packed.
- (b) Nature of grenade for which bursters are to be used with.
- (c) Monogram of filling station and date of filling.
- (d) Gross weight of filled box.

(i) On ends—

Letters "W.P.2" as applicable.

The boxes are painted yellow with bright green discs 2 inches in diameter at each end. The words "DETONATORS—HANDLE CAREFULLY" are stencilled in red either on top or in a clear place on the side of the box.

All grenade boxes will be branded as described on page 30, the series letter, however, being "G."

10. MARKINGS IN ROYAL FLYING CORPS' STORES.

A green cross, and in addition after decentralization into wings :—

| | | |
|------------|-----|------------------|
| No. 1 wing | ... | A red circle. |
| No. 2 wing | ... | A blue circle. |
| No. 3 wing | ... | A yellow circle. |
| No. 4 wing | ... | A green circle. |

Also the following symbols (as applicable) :— .

E.R.S. denoted by "E" in green.

2.A.D. denoted by "D" in red.

1.A.D. denoted by "D" in black.

The letter "U" in red on a white ground indicates—

Urgent Aircraft Stores.

11. CYLINDERS, AND PACKAGES FOR FUZES, TUBES, PRIMERS, &c.

(i) FUZE CYLINDERS—

These are painted black, except for fuzes of 2-inch fuze-hole gauge, which are painted green, and for fuzes filled C.E., which are painted yellow.

IN FUTURE, however, the cylinders may not be painted, but will have labels with description of contents, affixed, viz.:—

- (a) Red printing on labels for fuzes containing C.E. in their magazines, viz., Nos. 18, 44, 106, &c.
- (b) Black printing on labels for fuzes with powder filled magazines, or fitted with gaines, viz., Nos. 13, 17, 101, 109, &c., and T. and P. fuzes.

The ground colour of the labels for G.S. gauge fuzes will be white, and for 2-inch gauge fuzes will be orange, with the following exceptions—

- (a) “Long burning” T. and P. fuzes, such as the No. 88. Lemon yellow will be the distinctive colour.
- (b) No. 106 Percussion fuze. White will be the distinctive colour.
- (c) No. 28 Time Fuzes—pink label, with black lettering.
- (d) No. 100 type assembled with gaines, *with “delay”*—blue will be the distinctive colour. No. 101 B. fuze cylinders will have a red and a black band painted round the sides in addition.

NOTE.—When for any reason the correct labels for the under-mentioned cylinders are *not* available, the following distinctive marks will be painted on the cylinders:—

- (a) Blue disc—when containing Nos. 101, 101 E, 102 and 103 fuzes with delay.
- (b) Blue disc and red and black bands—when containing 101 B fuzes with delay and shutter. (Red and black bands only when without delay).
- (c) Red mushroom on cylinders containing No. 106 fuzes, *see below.*

Cylinders containing bursters for No. 28 M.S.K. grenades will be painted red and the lid light green.

No. 100 type cylinders containing four No. 44 fuzes will have the following stencilled on the side:—

“4 No. 44.”

Cylinders containing No. 106 fuze, with "B" exploder have the words "FOR 6-inch AND 60-pr. CHEMICAL SHELL ONLY" stencilled on them.

Cylinders containing No. 83/44 fuzes have a label attached marked "FOR USE WITH 6-inch HOWITZER H.E. SHELLS FOR ANTI-AIRCRAFT PURPOSES."

(ii) FUZE PACKAGES (*Plate XXXVII*)—

The following symbols will be stencilled on both ends of all packages—



2-inch blue disc on packages containing Nos. 100, 101, 102, and 103 fuzes *with "delay."*



Black hollow diamond on packages containing No. 101E fuzes *with shutter and without "delay."*
On packages containing No. 101 XE or EX fuzes, the hollow diamond is red in colour.



Blue disc inside blue hollow diamond on packages containing No. 101E fuzes *with shutter and delay.*



Black hollow diamond with bars extending outwards from each corner on packages containing No. 101B fuzes *with shutter and without "delay."*



Blue disc inside a blue hollow diamond with bars extending outwards from each corner on packages containing No. 101B fuzes *with shutter and "delay."*



Black hollow triangle on packages containing No. 109E fuzes.



Red upright mushroom on packages containing No. 106 fuzes.



Red upright mushroom inside a red hollow diamond on packages containing No. 106E fuzes.



Red sign like an hour glass or two triangles with apices touching on packages containing No. 17 fuzes.



in Red on packages containing No. 44 fuzes.

Packages may also have the labels similar to those described on page 50 for cylinders.

Packages containing No. 106 fuzes with "B" exploder have the words "FOR 6-inch AND 60-pr. CHEMICAL SHELL ONLY" stencilled on them.

Packages will be branded as described on page 30, the series letter, however, being "F."

(iii) TUBE BOXES—

These are painted black and labelled, showing the group and division, manufacturer, and by whom filled or repacked.

Percussion T tubes are distinguished from friction T tubes by having an orange-coloured label.

(iv) TUBES FRICTION without the metal side closing plug are not to be issued to hot climates nor to Italy, and the tin boxes and wooden packages containing them will be distinguished by a green line drawn diagonally across the label from the left-hand top corner to right-hand bottom corner about $\frac{1}{8}$ -inch thick. The tins will be soldered up and not closed by tape banding.

(v) TUBE AND PRIMER BOXES will have two labels pasted on the lid, one outside and the other on the inside.

12. SMALL ARM AMMUNITION BOXES.

(Plates XXXIII, XLIII, and XLIV.)

(A). Marking generally—

Distinguishing labels are placed on each side and on each end of the box.

These labels are as a rule :—

White for ball cartridges.

Blue for blank cartridges

Purple for dummy cartridges.

The distinguishing mark is also printed on the descriptive labels which are fixed, one on the closing plate of the lining and one on top of the box.

The manufacturer's initials will always be found in the lower line of the descriptive labels, in the left-hand corner.

Packages containing cartridges filled N.C. will have the words "N.C. FILLED" stencilled on each end and the letter "Z" printed on distinguishing labels.

(B). Markings on .303-inch Ammunition Boxes.

There is now only one date marked on a box containing .303-inch ammunition, and that is the date of manufacture; this date, together with the manufacturer's initials, is printed on the descriptive labels, and stencilled on each end of the box.

One other detail is required to completely identify the ammunition, and that is the number of the box, which will be found stencilled on the top, and also marked on the closing plate of the lining.

The gross weight is stencilled on one end.

In addition to the descriptive and distinguishing labels, the following are placed on every box:—

| | | |
|--|---|------------------------------|
| Government explosive label | } | Where convenient. Plate XXI. |
| Small label with a number in red ... | | } |
| A label with directions for opening | } | |
| Classification label ... | | } |

In future, however, the classification and Government explosives labels will be replaced by a composite label which combines the group and division and Government explosives in one (*see Plates XXII to XXV*).

Boxes containing S. A. ammunition selected for use by R.F.C. have an additional white label bearing a green cross on side.

Packages containing .303-inch Mark VII S.A. ammunition not in chargers for use in machine guns have a label attached, marked as follows:—

M.G.

BUNDLE PACKED.

S.A.A. .303 VII 1128 ROUNDS.

Since January 1st, 1908, the particulars of the cordite, (*i.e.* Lot number) have not been given. Before that date this information used to be stencilled on the box and printed on the label on the lining.

Small arm cartridge packages will be marked similarly to cartridge packages (page 30), the series letter, however, being "H." It will, however, be stamped or branded, not stencilled.

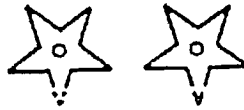
(C). Markings .45-inch incendiary ammunition boxes.

Those containing solid drawn .45-inch M.H. or M.G. cartridges for M.H. rifles and Maxim guns respectively, will be marked as follows:—

“ M.H. rifles only ” or
 “ For .45 Maxim gun only.”

A label is also placed on the boxes giving the following information:—

(Typical)



Airships only.

.45-inch Gardner Gatling chamber (or .45-inch rifle).

October, 1914.


R ↑ L

(D). Boxes containing Revolver ammunition are marked “ NOT FOR SELF-LOADING PISTOLS ” to distinguish them from self-loading ammunition.

Boxes containing self-loading pistol ammunition are marked “ NOT FOR REVOLVERS.”

(E). Boxes containing .256 (Japanese) ammunition are painted red.

13. GENERAL.

Note.—The letter “ E ” within a diamond  stamped on any stores, indicates that they have not been fully inspected.

14. STATION MONOGRAMS AND INITIALS.

The following initials and monograms are used at the several stations mentioned —

| | | | |
|-------------------------|-----|---------------------------|---------|
| Alderney | A | Fort George | FG |
| Athlone | ALN | Fort Halstead | FH |
| Aden | AN | Gibraltar | GIB |
| Ascension | ASO | Guernsey | GY |
| Ashford (Kent) | AD | Harwich | H |
| Aldershot | AT | Hilsea | HA |
| Bermuda | B | Hong Kong | HK |
| Blackness Castle | BC | Hyde Park | HP |
| Barbados | BDS | Hounslow... .. | Hw |
| Bedford | BD | Halifax | Hx |
| Bloemfontein | BFN | Immingham | IMM |
| Burscough | BH | Invergordon | IN |
| Bull Point | BP | Isle of Wight | IW |
| Bombay | BOM | Jersey | J |
| Chatham | C | Jamaica | JOA |
| Colchester | CCR | Khartoum | KTM |
| Clyde | CDE | Kingston, Canada | K |
| Chattenden | CDN | Lydd | LD |
| Coalhouse Fort | CF | Lodge Hill | LH |
| Carrickfergus | CFS | Malta | M |
| Curragh | CH | Middelburg | MBG |
| Cork | CK | Maidstone | MDN |
| Caterham | CM | Mauritius | MS |
| Colombo | COL | Mudros | PM |
| Coquimbo... .. | COQ | Natal | N |
| Chester | CE | Newcastle | Nc |
| Crombie (Rosyth) | CEB | Newport (Monmouth) | NPT |
| Cape Town | CT | North Weald | NW |
| Dublin | DN | Pembrey | PY |
| Dover | DR | Pembroke | P |
| Edinburgh | E | Priddy's Hard | PHD |
| Egypt | EGT | Portsmouth | PH |
| Enniskillen | EN | Bedenham | PHD (B) |
| Esquimalt | ESQ | Marchwood | PHD (M) |
| Exeter | EX | Pietermaritzburg | PMB |
| Faversham | FM | Purfleet | PT |
| Fleetwood | FD | Pretoria | PTA |

| | | | | | | |
|---------------------|-----|-------|-----------------|-----|-----|-----|
| Quebec and Montreal | ... | Q | Tipnor | ... | ... | T |
| Scapa | ... | So | Tower of London | ... | ... | TL |
| Sheerness | ... | S | Trincomalee | ... | ... | TRI |
| Simon's Bay | ... | SB | Tidworth | ... | ... | TWH |
| Stirling | ... | SG | Tientsin | ... | ... | TSN |
| Shorncliffe | ... | SHO | Tilbury | ... | ... | TY |
| Sierra Leone | ... | SL | Tynemouth | ... | ... | TYN |
| Strensall | ... | SLL | Upnor | ... | ... | U |
| Southampton | ... | SN | Woolwich... | ... | ... | W |
| Straits Settlements | ... | SS | West Croydon | ... | ... | WC |
| Simon's Town | ... | ST | Waterford | ... | ... | WD |
| St. Helena | ... | St.H. | Weymouth | ... | ... | WH |
| St. Lucia | ... | St.L | Weedon | ... | ... | WN |
| Selby | ... | Sy | Warley | ... | ... | WY |
| Sydney | ... | SYD | York | ... | ... | Y |

F1. National Filling Factory monogram, the number being the distinguishing mark of the particular Factory.

Ordnance Depots in France:—Letters O.D. and No. of Depot and (F) thus—

O.D. 12 (F.)

EXPLANATION OF MARKINGS ON PLATES I TO XLIV.

CARTRIDGES.

Gun Cartridges.

(*Plate I.*)

| | | | | |
|---------------|-----|-----|-----|--|
| I. | ... | ... | ... | Mark of cartridge. |
| R ↑ L | ... | ... | ... | Manufacturer's initials (of empty bag). |
| 60-pr. | ... | ... | ... | Calibre or nature of gun. |
| 9 lbs. 7 ozs. | ... | ... | ... | Weight of charge. |
| M.D. | ... | ... | ... | Nature of charge. |
| Size 15 | ... | ... | ... | Size of cordite. |
| Lot K 000 | ... | ... | ... | Manufacturer's initials and Lot No. of cordite. |
| A.C. | ... | ... | ... | Adjusted charge. (When a "group" propellant is used the A.C. will be omitted.) |
| W. | } | ... | ... | { Monogram of filling station and month and year of filling. |
| 11/15 | | | | |

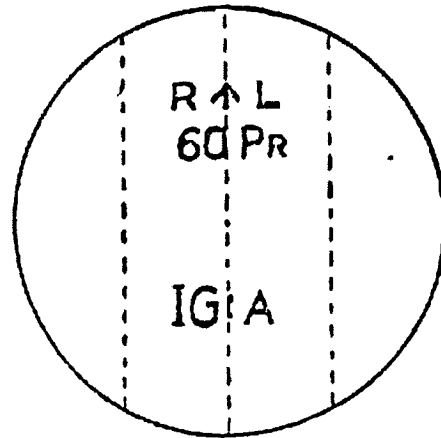
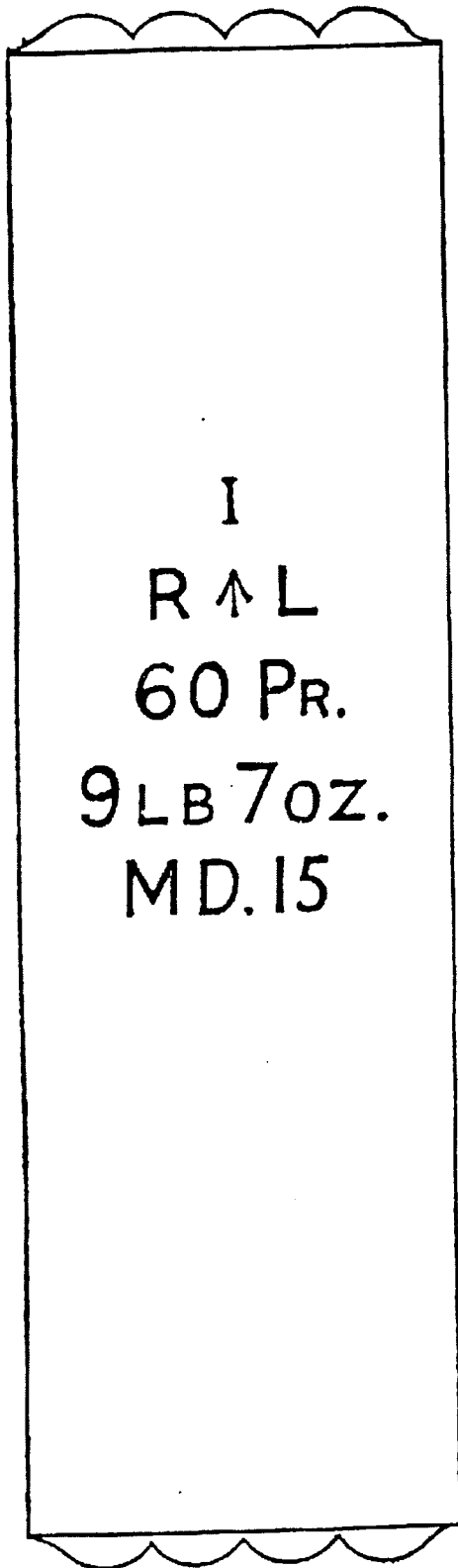
On igniter.

These markings denote a standardized igniter for all 60-pr. cartridges.

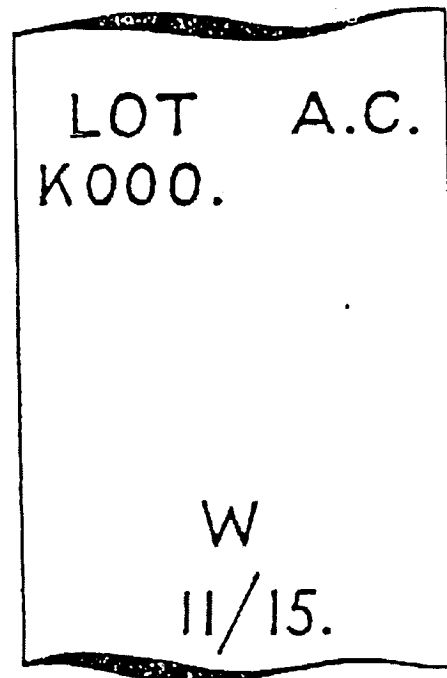
| | | | | |
|---------|-----|-----|-----|---|
| R ↑ L | ... | ... | ... | Maker's initials. |
| 60-pr. | ... | ... | ... | Calibre or nature of gun. |
| IG : A. | ... | ... | ... | Denotes standardized igniter "A" pattern. |

GUN CARTRIDGES.

Typical Markings.

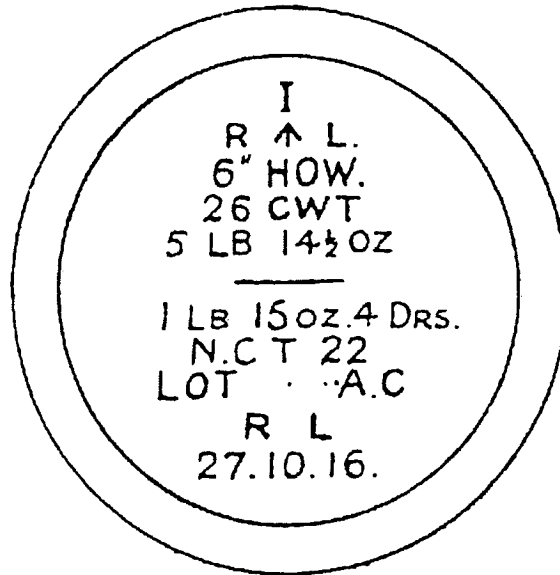
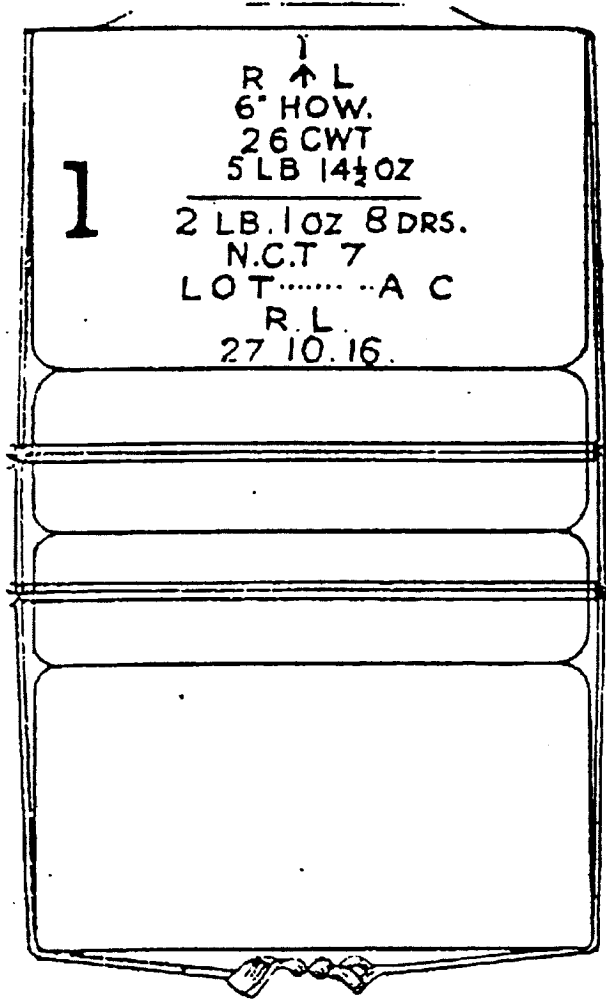


End view showing marking on igniter.



Marking on reverse.

HOWITZER CARTRIDGES. Typical Markings.



Typical for
2, 3 and 4
portions.

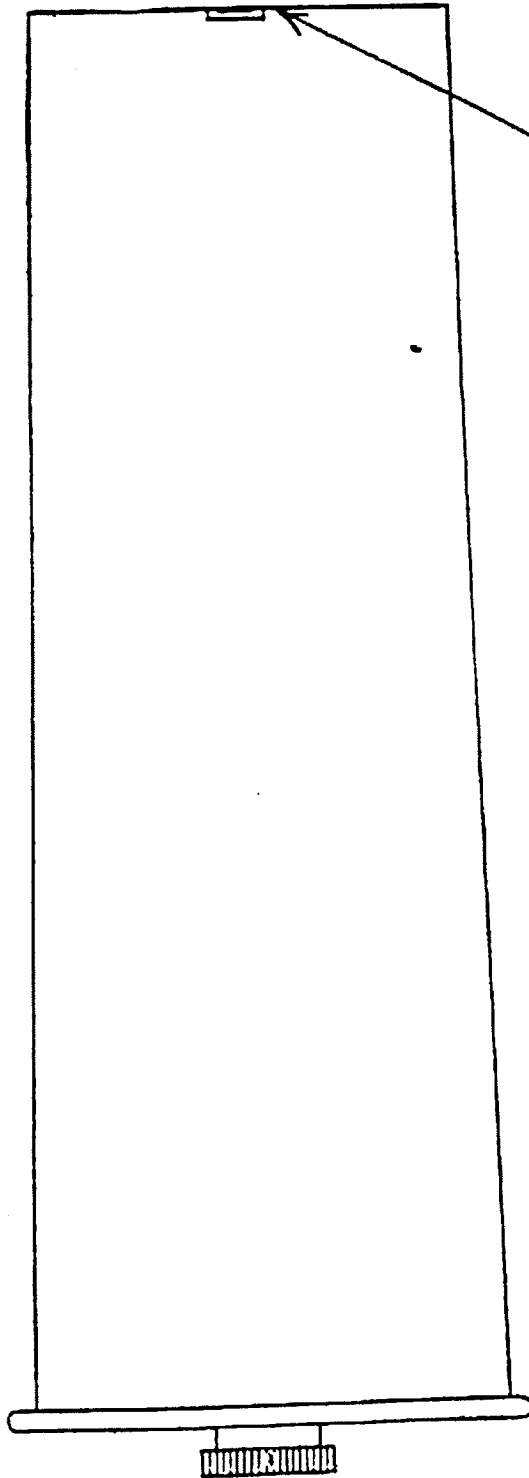
Q.F. CARTRIDGE CASES (separate loading).

(Plate III.)

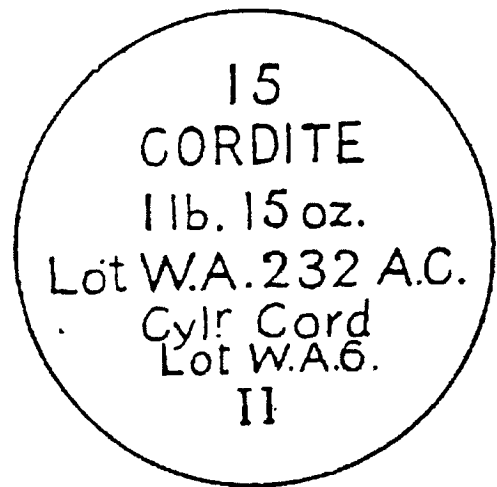
The stamping on the base is the same as that for fixed ammunition shown on Plate IV.

| | | | | Printed on label attached to the lid— |
|--------------|-----|-----|-----|---|
| 15 | ... | ... | ... | Size of cordite. |
| CORDITE | ... | ... | ... | Nature and weight of charge. |
| 1 lb. 15 oz. | | | | |
| Lot W.A. 232 | ... | ... | ... | Manufacturer's initials and Lot No. of cordite. |
| Cylr. Cord. | ... | ... | ... | Manufacturer's initials and Lot No. of the cordite cylinder which contains the igniter. |
| Lot W.A.6 | | | | |
| A.C. | ... | ... | ... | Denotes that the weight of the charge has been adjusted. |
| II. | ... | ... | ... | Denotes that the filled cartridge is Mark II pattern. |


**Q.F. CARTRIDGE CASES (Separate Loading).
Typical Markings on Lid.**



Marking on label on lid in red,



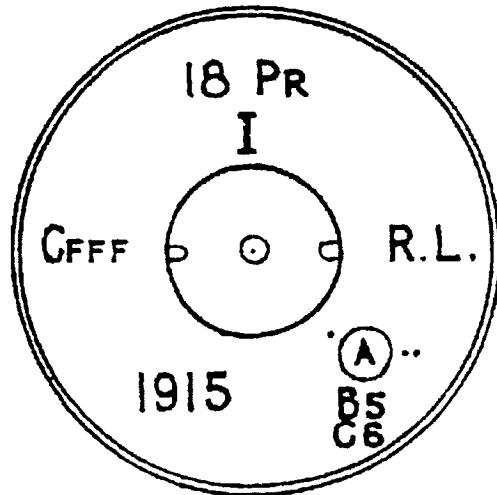
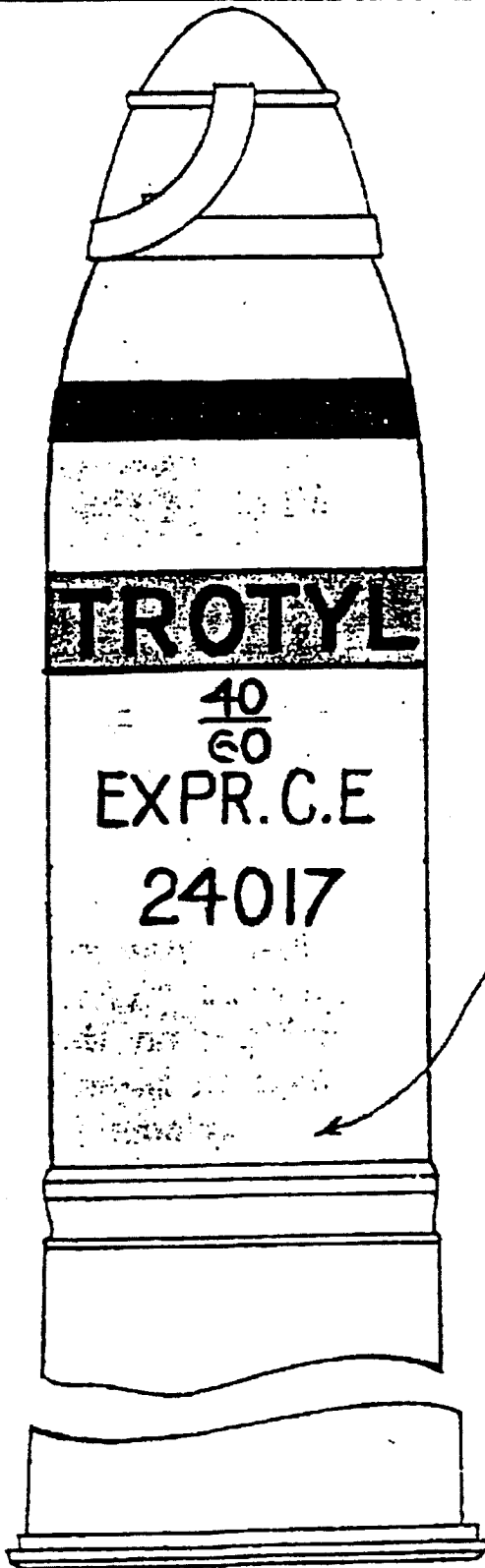
H.E. SHELL.*(Plate IV.)*

| | | | |
|---|-----|-----|--|
| Red ring | ... | ... | Denotes filled shell. |
| Green band | ... | ... | With word "TROTYL" denotes that the shell is filled with "Trotyl." |
| Green band 40/60 | ... | ... | Denotes "Amatol Filled" and shows the percentage of "Ammonium Nitrate" and "Trotyl" respectively (the word "TROTYL" on the green band will then be omitted.) |
| EXPR. C.E. | ... | ... | Only stencilled on the shell if a "C.E. Exploder" is used. |
| 24017 | ... | ... | Design No. of method of filling shell. |
| W.3/7/15 | ... | ... | Denotes that shell was filled at Woolwich on 3rd July, 1915. |
| Stamped on base of cartridge case. | | | |
| 18-pr. | ... | ... | Calibre or nature of gun. |
| I | ... | ... | Mark of cartridge case. |
| CFFF | ... | ... | Life of case. Denotes a cordite charge, that the case has been filled three times and fired twice. |
| R.L. 915 | ... | ... | Case manufactured in Royal Laboratory, 1915. |
|  | ... | ... | Denotes that the case has been annealed twice after firing. |
| B. 5 | ... | ... | } Batch letter and number of annealing. |
| C. 6 | ... | ... | |
| Stencilled on base of cartridge case. | | | |
| N.C.T. 7 | ... | ... | Denotes that the charge is nitro-cellulose size 7. |
| Lot W. 000 | ... | ... | Lot letter and number of nitro-cellulose. |
| A.C. | ... | ... | Adjusted charge. (When a "grouped" propellant is used the letters "A.C." will be replaced by the group letter and number. |
| W. | ... | ... | Denotes that the cartridge was filled at Woolwich. |
| Mark II | ... | ... | } Mark of cartridge. Date of filling cartridge. |
| 22/11/15 | ... | ... | |
| Black band | ... | ... | Denotes N.C.T. charge. |

To face page 64

Plate IV

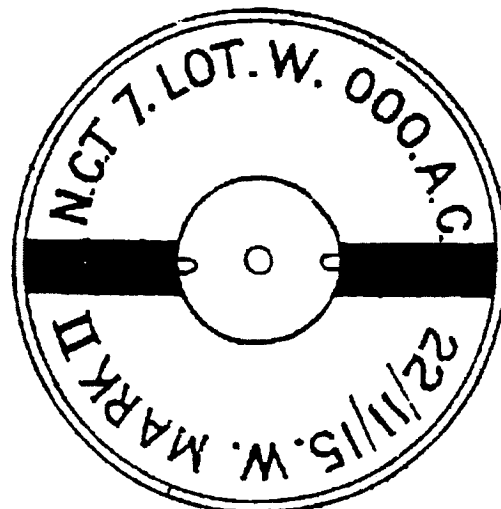
FIXED AMMUNITION. WITH H.E. SHELL



VIEW OF BASE,
SHOWING STAMPING.

ON REVERSE:—

W. 3/7/15



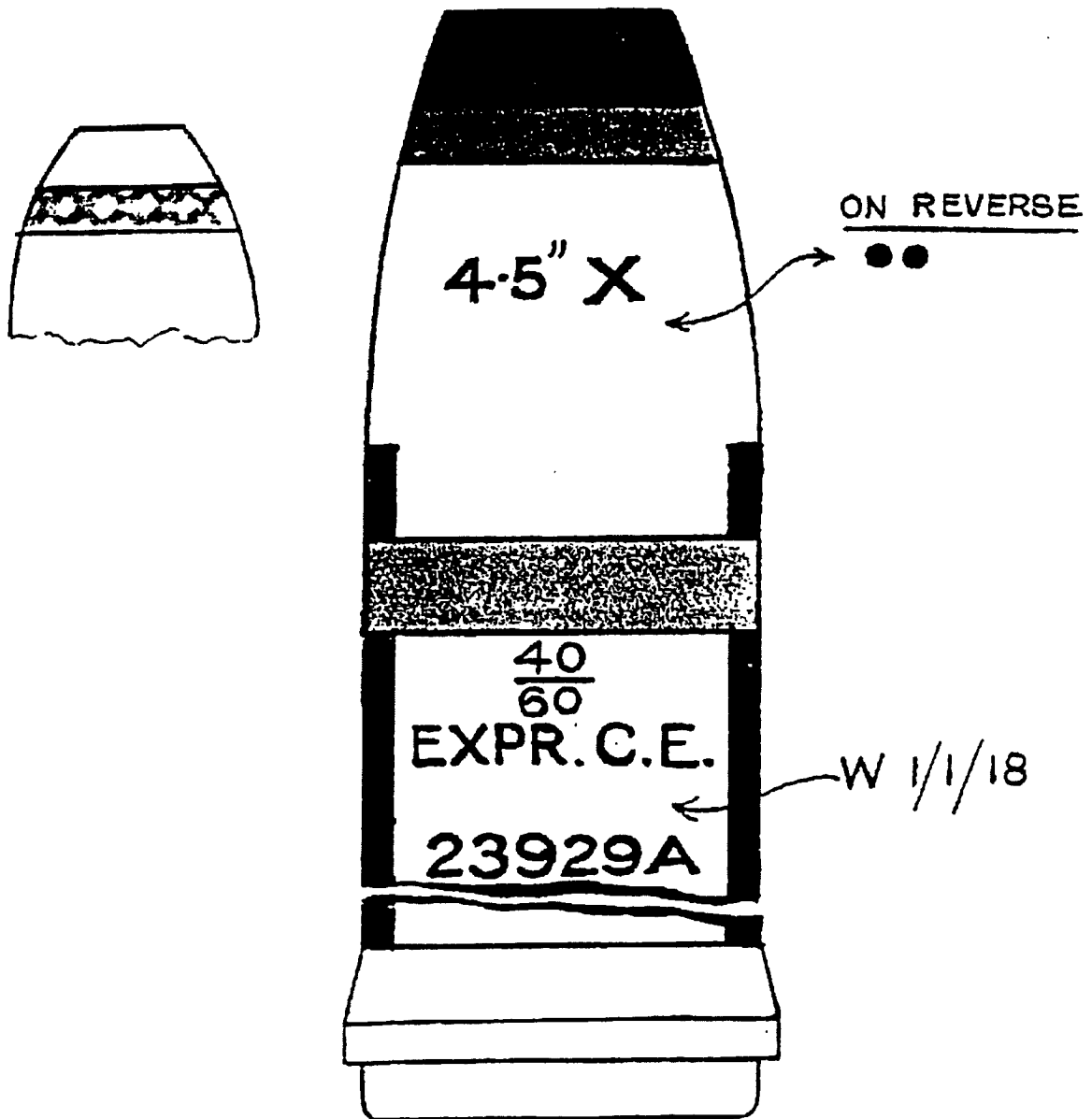
VIEW OF BASE,
SHOWING STENCILLING.

ADDITIONAL MARKINGS ON SEPARATE LOADING SHELL.

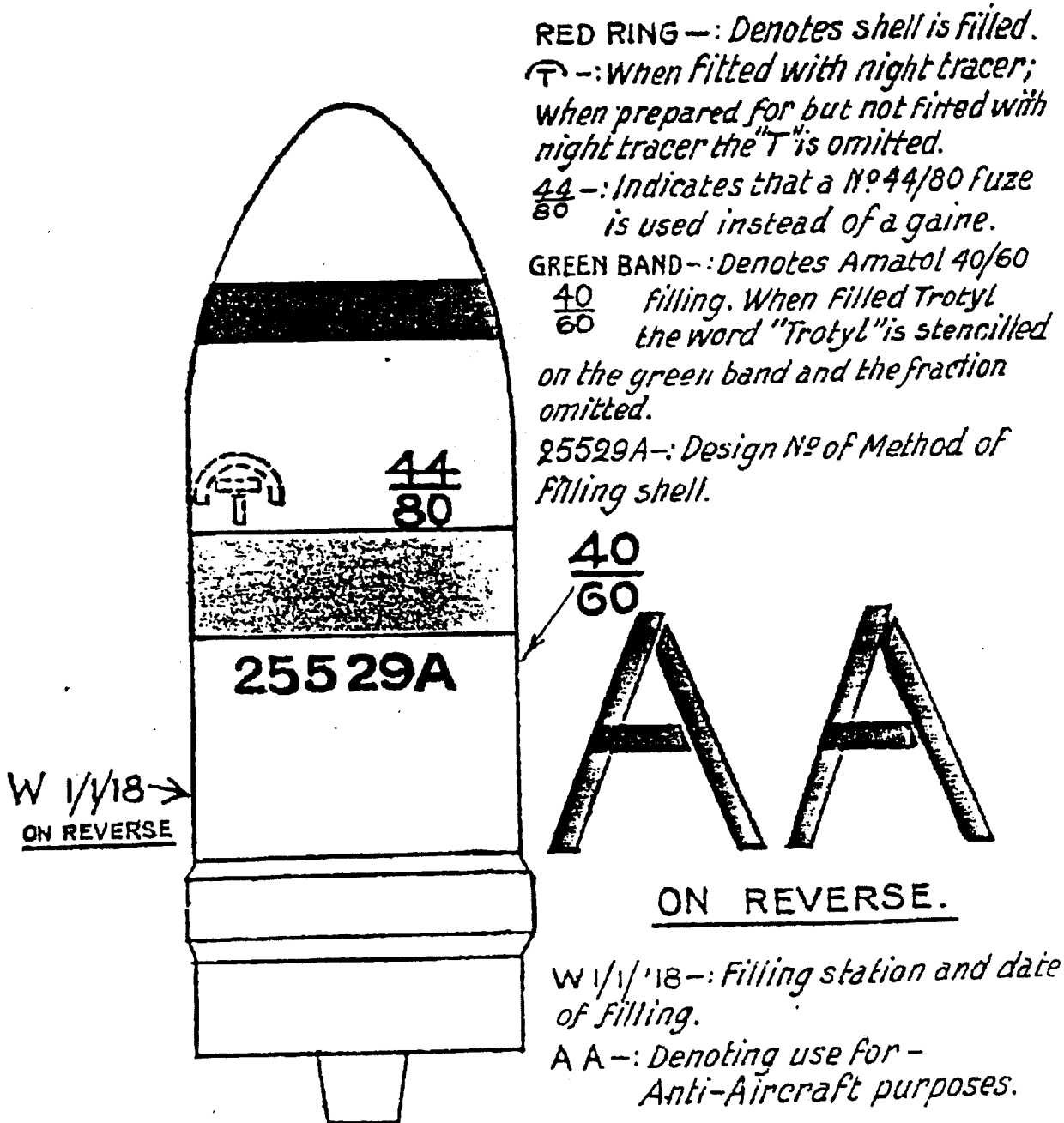
(Plate V.)

| | | |
|---------------------|--------|--|
| Black tip | ... .. | Denotes absence of smoke composition. |
| Red Ring | ... .. | Denotes shell is filled. A ring of red crosses denotes filled shell suitable for use in hot climates. |
| 4.5 X | ... .. | Calibre and numeral of shell. |
| ● ● (two discs) | | Denotes that the weight of the shell filled is between mean and minus $\frac{1}{2}$ per cent., both inclusive (for additional weight markings see page 17 and 18). |
| Green band 40/60 | ... .. | Denotes Amatol 40/60 filling. When filled Trotyl the word "TROTYL" is stencilled in black on the green band and the fraction is omitted. |
| EXPR. C.E. | ... .. | Denotes that a C.E. exploder is fitted. |
| W. 1/11/18 | ... .. | Filling station and date of filling. |
| 23929A | ... .. | Design No. of method of filling shell. |
| Two black stripes | ... .. | When the "New Narrow" driving band is fitted. |

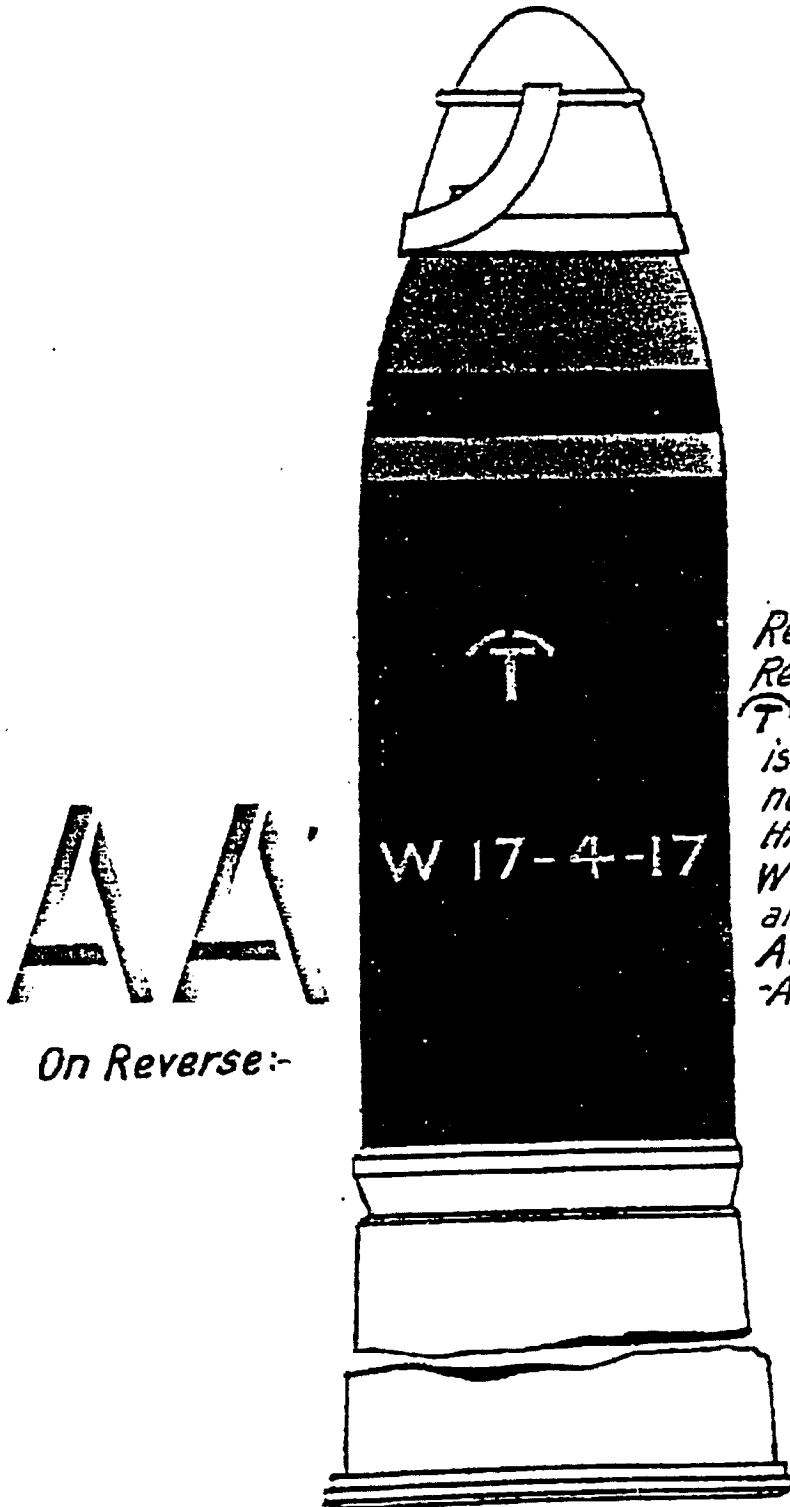
H. E. SHELL
TYPICAL MARKINGS N° I.
(FIELD AMMUNITION).



H. E. SHELL
TYPICAL MARKINGS No 2
(ANTI-AIRCRAFT AMMUNITION)



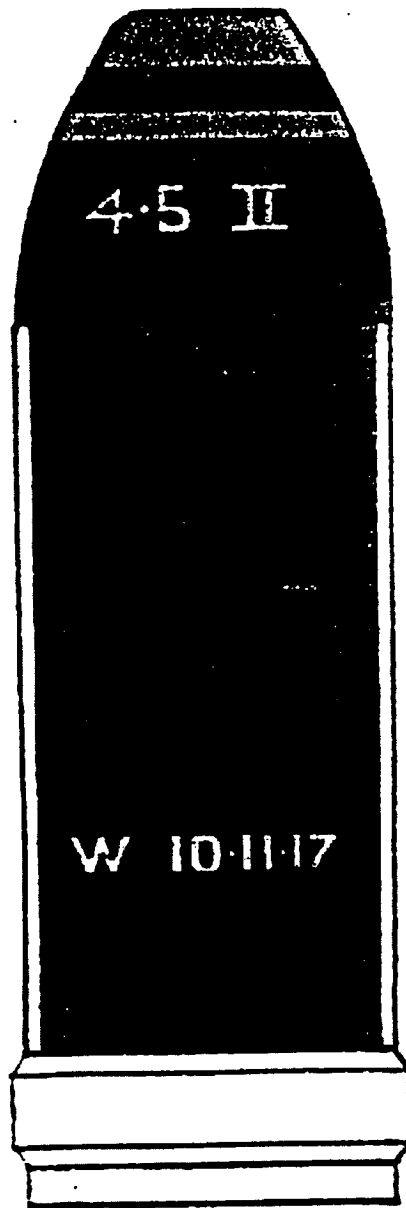
FIXED AMMUNITION.
WITH SHRAPNEL SHELL.
TYPICAL



*Red Tip - Denotes shrapnel shell.
Red Ring - Denotes shell is filled.
T - Denotes that a Night Tracer
is fitted; when prepared for but
not fitted with a night tracer
the "T" will be omitted.
W 17/4/17 - Monogram of station
and date of Filling.
AA - Denotes use for anti-
Aircraft purposes.*

On Reverse:-

SHRAPNEL SHELL
TYPICAL MARKINGS FOR A SEPARATE
LOADING SHELL.

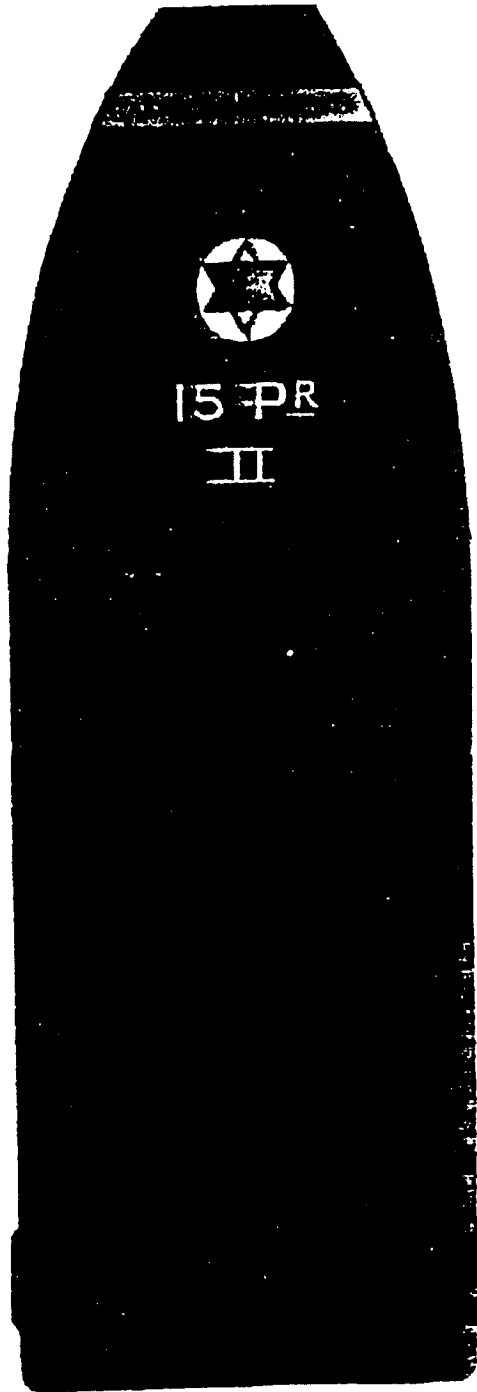


RED TIP - *Denotes shrapnel shell.*
RED RING - *Denotes shell is filled.*
4.5 II - *Calibre and numeral of shell.*

W 10/11/17 - *Monogram of station and date of filling.*

Two white stripes - *Denotes that the "New Narrow" driving brand is fitted.*

STAR SHELL.
TYPICAL MARKINGS.



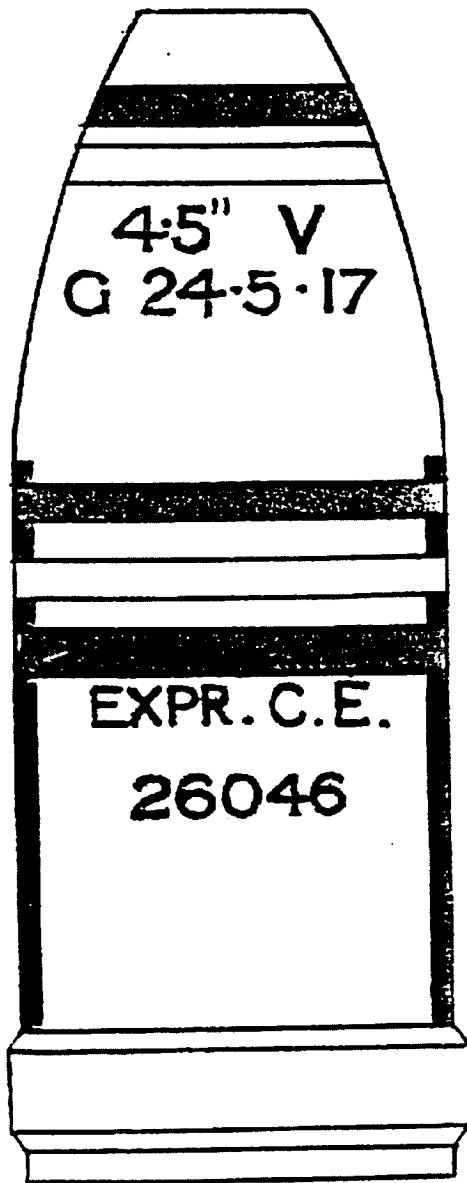
*Stencilling
White for
fixed and
Red for
separate
loading.*

*On Reverse:-
W 1/1/18*

*Red Ring — Denotes filled.
Red star on white ground —
Denotes star shell.*

*15-pr. } Calibre and numeral.
II. }
W. 1/1/18 — Filled in R.L
January 1918*

CHEMICAL SHELL
TYPICAL.



RED RING—Denotes shell
is filled.

LIGHT BROWN RING—Denotes
cast iron shell.

4.5 V—Calibre and numeral
of shell.

G 24.5.17—Monogram of station
and date of filling.

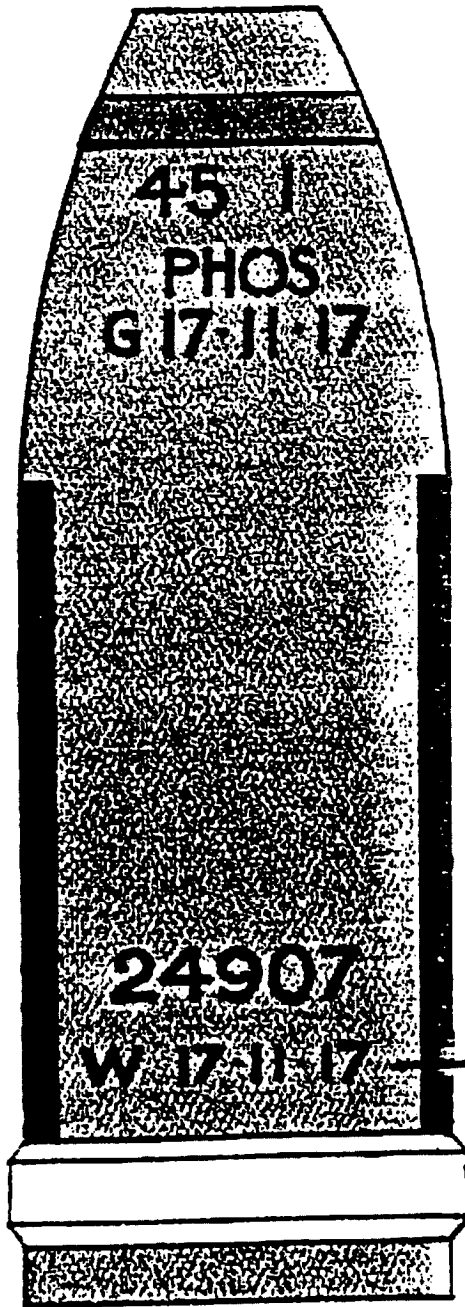
COLOURED BANDS—Red, White,
red, denoting "C. G" filling
(see pages 14 & 15 for other
distinctive bands) When filled s. k.
the bands will be omitted

EXPR. C.E.—When a C.E. Exploder
is fitted.

26046—Design No of Method of
filling shell.

TWO BLACK STRIPES. When the
"New Narrow" driving band
is fitted.

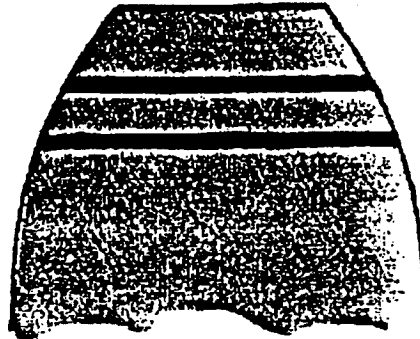
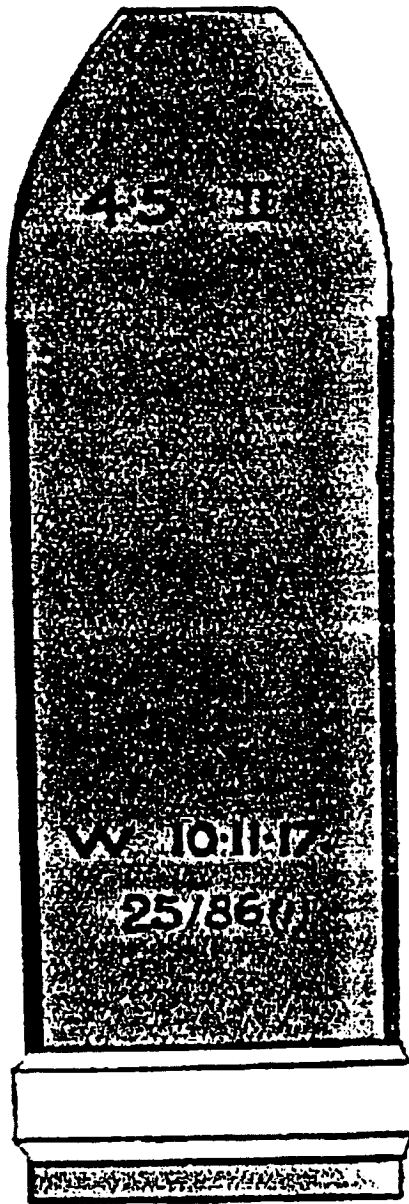
SMOKE SHELL
TYPICAL



*Red Ring—Denotes shell is filled.
4.5 I—Calibre & numeral of shell.
Phos—Denoting phosphorus Filling.
G17.11.17—Monogram of station
and date of Explosive filling.
24907—Design No of Method of
filling shell.
W17.11.17.—Monogram of filling
station and date of Phosphorus
filling.
Two Black stripes.—When the
"New Narrow" driving band
is Fitted.*

ON REVERSE:-

INCENDIARY SHELL
TYPICAL

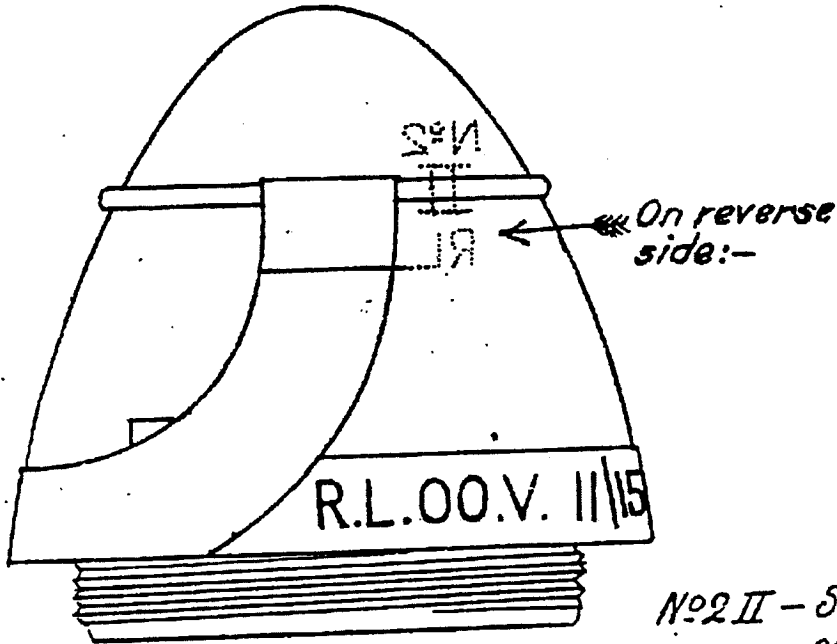


*4.5 II—Calibre and numeral of shell.
W 10.11.17—Monogram of station & date
of filling.
25186 (1)—Design No of Method of filling.
Two Black stripes—When the "New Narrow"
driving band is fitted.*

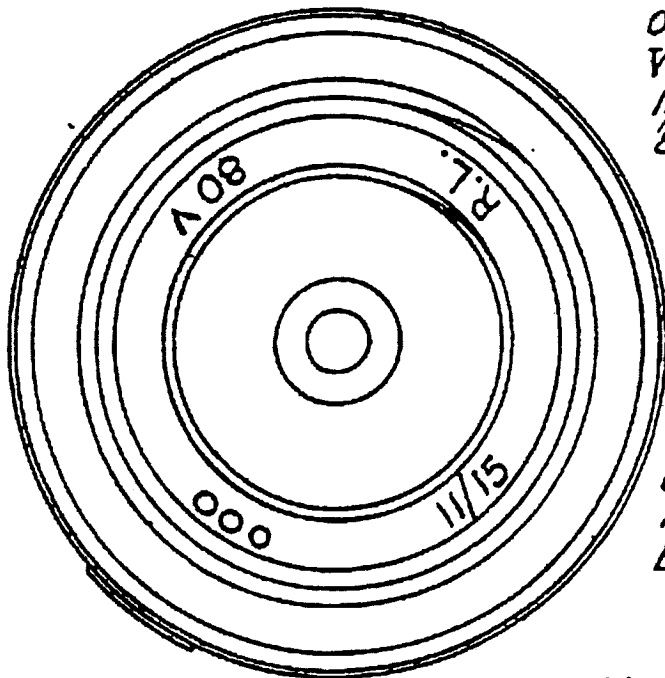
*Note:--Two black rings have in the past
been stencilled round the head to form
the red ring denoting Filling (see small sketch),
but this marking will be omitted from
future issues.*

Plate XIII

**T. & P. FUZES WITH COVERS.
TYPICAL MARKINGS.**



*No 2 II - Serial No and numeral
of fuze cover
R.L. - Maker's initials.
00 - Lot No of fuze:
V - Mark of fuze.
11/15 - Date of filling.
80 V - Denotes that it is
a No 80 Mark V fuze.*

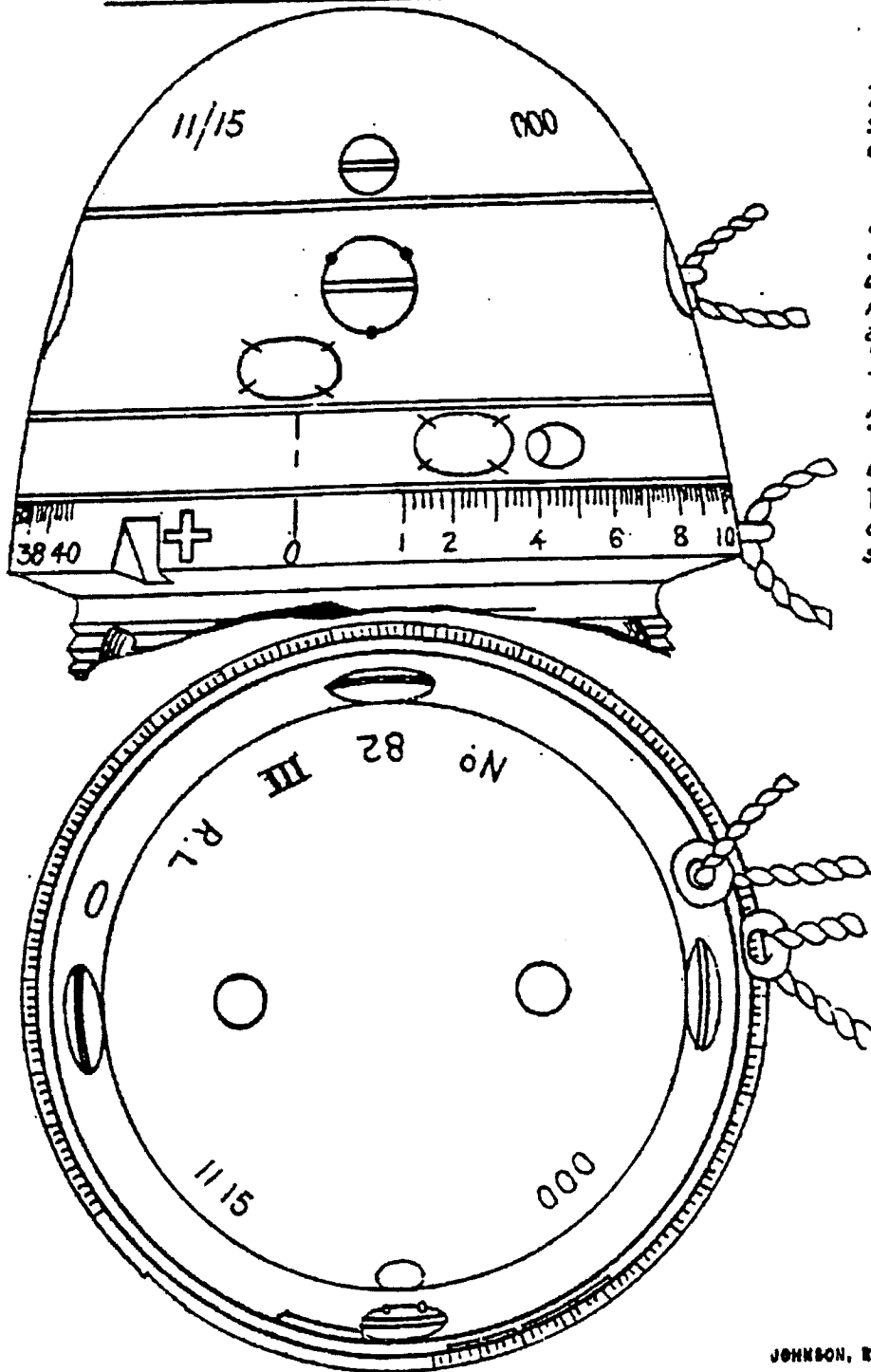


*Alternatively,
the marking
may be placed
on the base plug,
instead of the
body.*

View of Base, Showing Marking

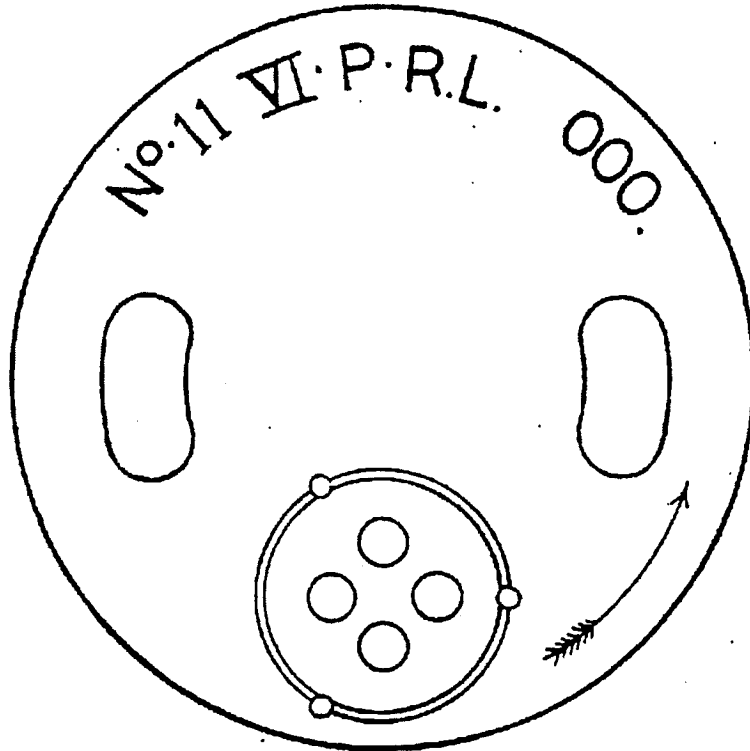
Plate. XIV

T & P FUZES WITHOUT COVERS.
TYPICAL MARKINGS, ALSO FOR TIME FUZES.



The Markings are the same as for those with cover. In addition :-
 + (Red Cross) o.
 ↓ (Black Arrow) on time ring denotes "safety" setting. When this cross or arrow and the reading mark are opposite one another the fuze is set at "safe"; and if fired the "time" portion would not act.
 T (in black) - stencilled over the "time" safety pin
 P (in black) - stencilled over the "percussion" safety pin.

BASE FUZES.
TYPICAL MARKING.



View of Base showing Marking.

*No. 11 VI—Denotes a No. 11 base fuze
Mark VI.*

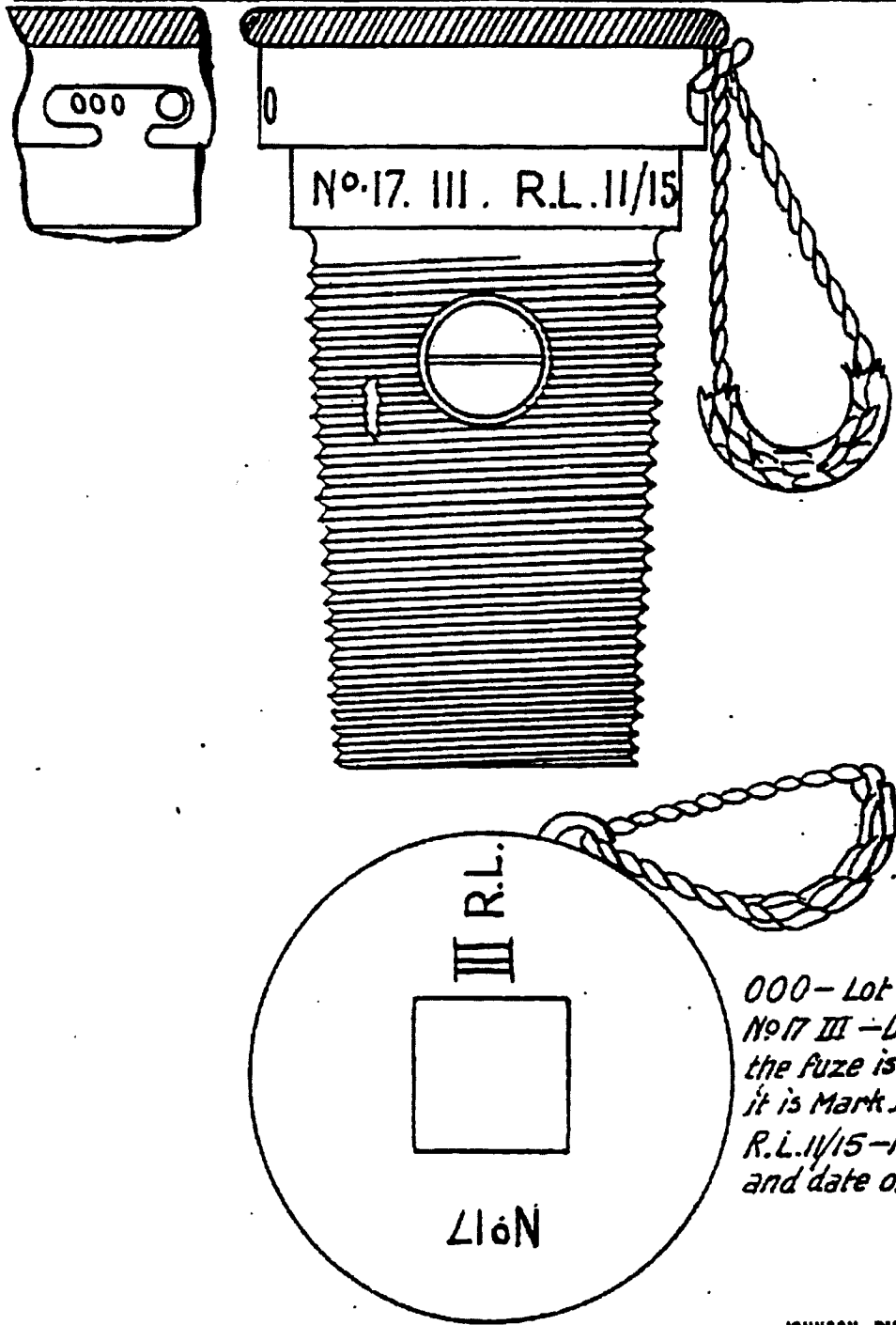
*P.—Denotes that a new pressure
plate has been fitted.*

R.L.—Maker's initials.

000.—Lot No. of fuze.

*Arrow—Indicates the direction in
which the fuze should be turned
for fixing purposes
(left-handed screw thread).*

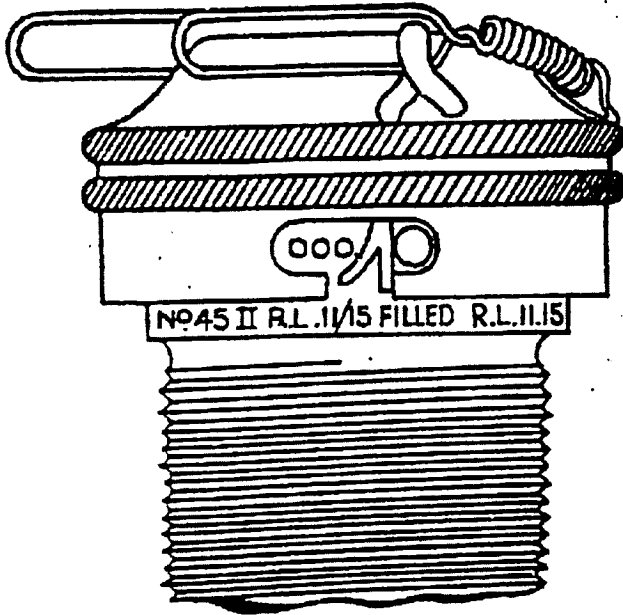
FUZES D.A.
TYPICAL MARKINGS FOR 13,17,18,19 AND 19A FUZES.



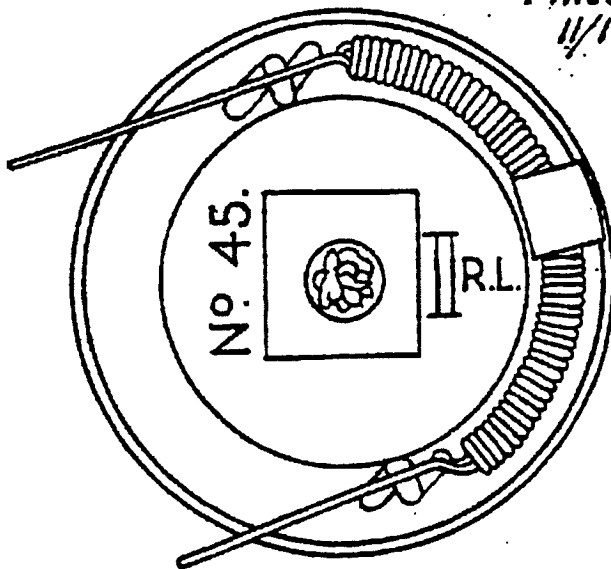
000 - Lot No. of fuze.
N°17 III - Denotes that
the fuze is N°17 and that
it is Mark III pattern.
R.L. 11/15 - Maker's initials
and date of manufacture.

Plate XVII

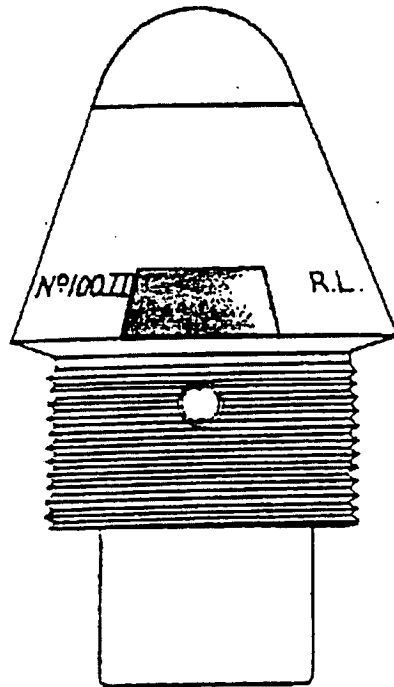
FUZES D.A.
TYPICAL MARKINGS FOR Nos 44 & 45.



*As on Plate XVI and in addition:—
Filled R.L. Place and date
1/15 of filling.*



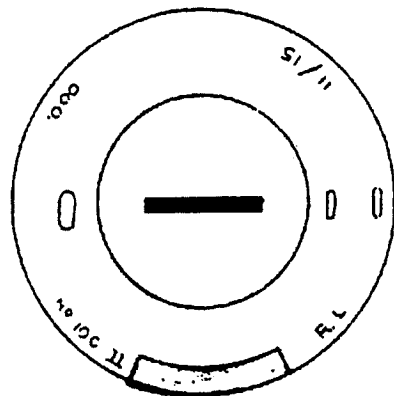
FUZE, GRAZE, N° 100.



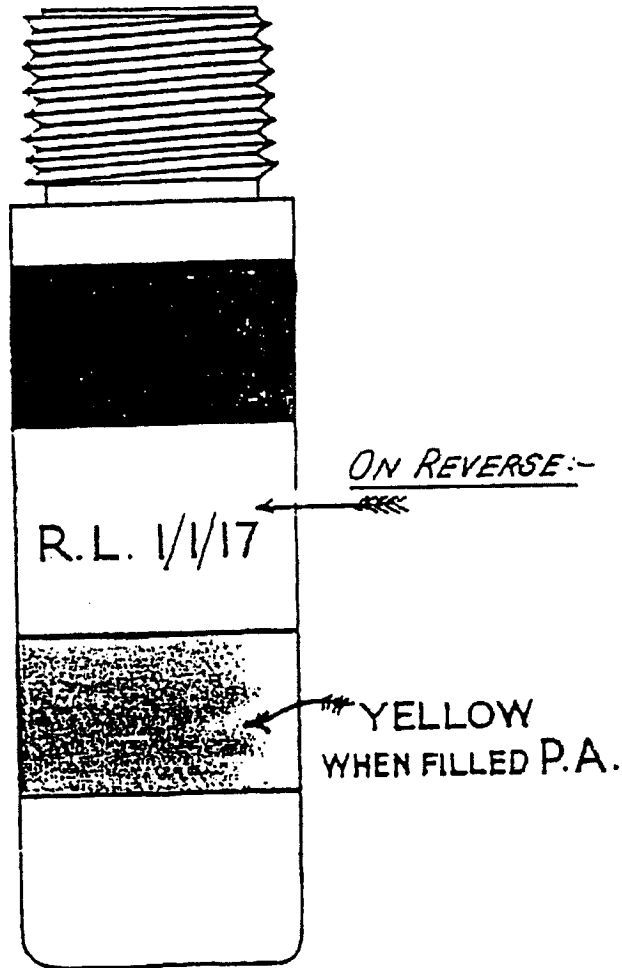
As on Plates XVI & XVII and in addition a "Red Patch" to denote the position of the detonator. When fuzing the shell, the grub screw in the nose of the latter must not bear on any part of the red patch.

Blue Cap denotes that the "Gain" is filled with a delay action.

FOR ADDITIONAL MARKINGS ON FUZES N°s 101 B & C. see Pages. 24 & 25



G A I N E N ° 2
W I T H D E L A Y & F I L L E D C . E .



*Blue Band - Denotes "delay."
R.L. 1/1/17 - Monogram of station and date of filling.
Red or yellow } - Denote filling with
Band } - Composition Exploding
 } or Picric acid pellets
 } respectively.*

*THESE BANDS WILL HOWEVER
BE OMITTED IN FUTURE SUPPLIES
W - Denotes that an R.L. Deronator is Fitted.*

TYPICAL "GROUP" & "DIVISION" LABELS.
DENOTING THE CLASSIFICATION OF EXPLOSIVES FOR
STORAGE & TRANSPORT.



The symbol signifies the number of the group, & the figure thereon the number of the division in the group. in future however the labels shown on plates ~~XXII~~ - ~~XXV~~ will be used.

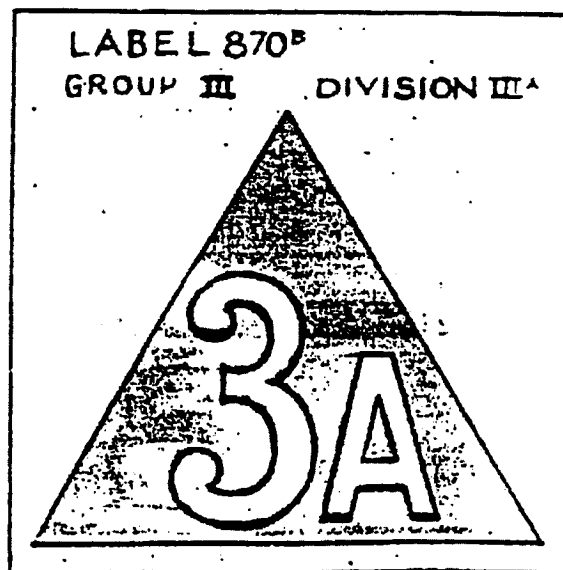
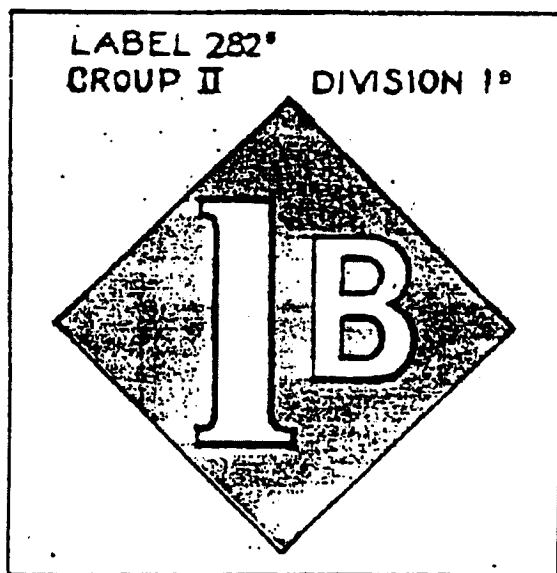
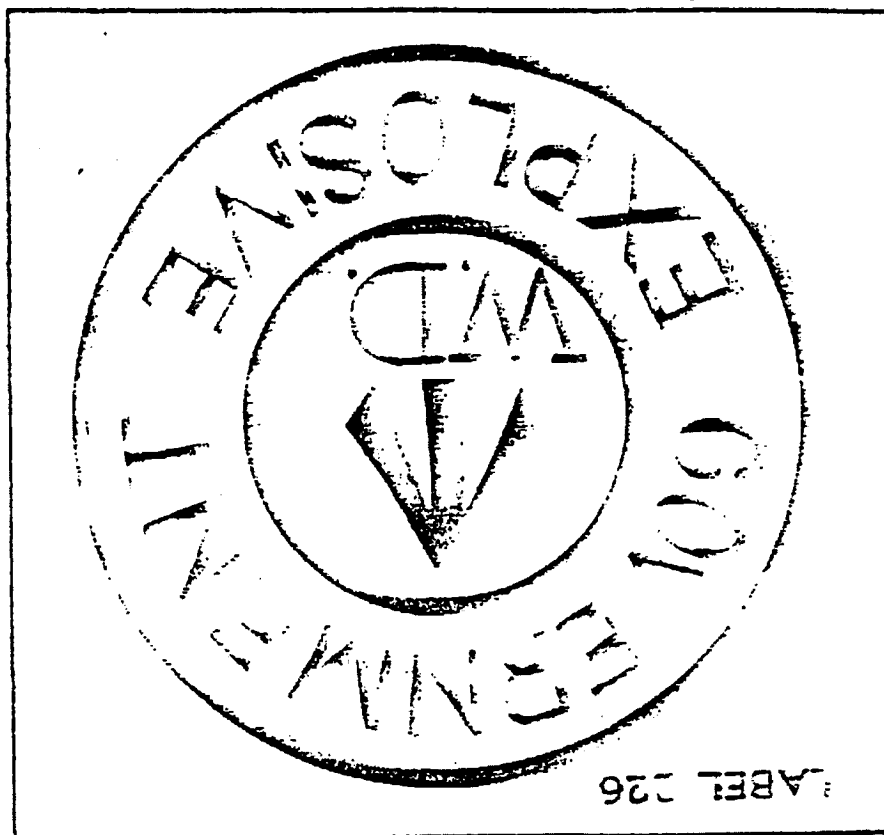


Plate XXI

"Government Explosives" Label :- Placed on all packages containing Government Explosives. For future, however, a composite Group & Division and Government Explosives label (Plates XXII - XXV) will be used.



Typical "Station" Label :- Showing initials of the packing station. E.g. "BC" signifies "Blackness Castle." These labels are pasted over the junction of the lid or bung & body, or over the hasp in the case of 3 & 6 P^r Cartridge boxes, so that they will be broken if the package is opened

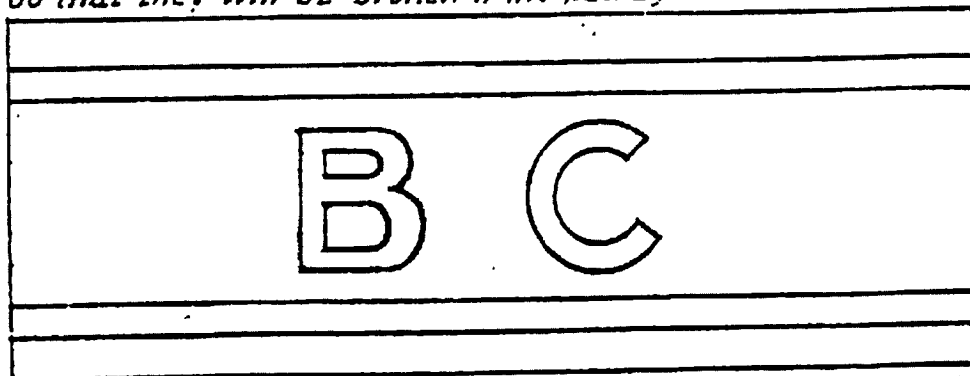


Plate XXII



Plate XXIII

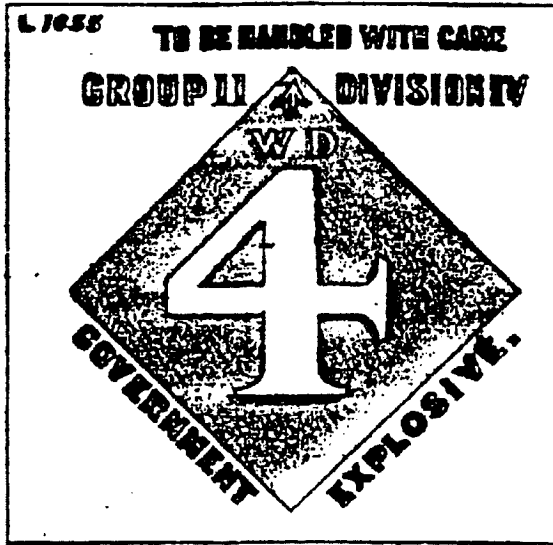


Plate XXIV

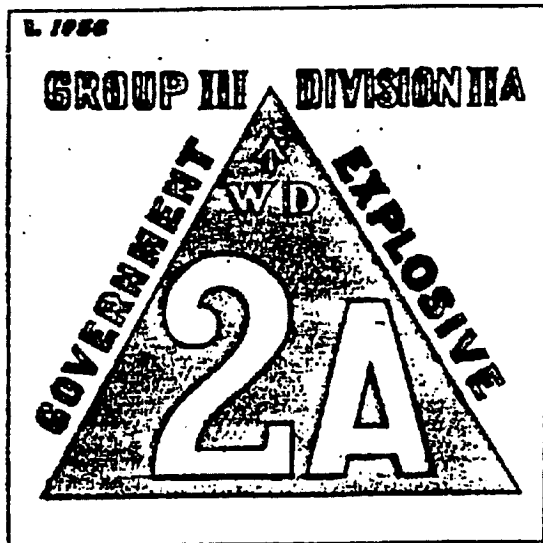
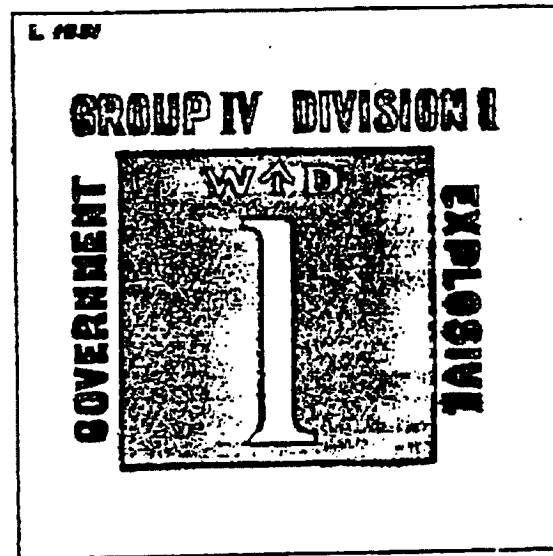


Plate XXV



(Plate XXVI.)

Boxes stained brown.

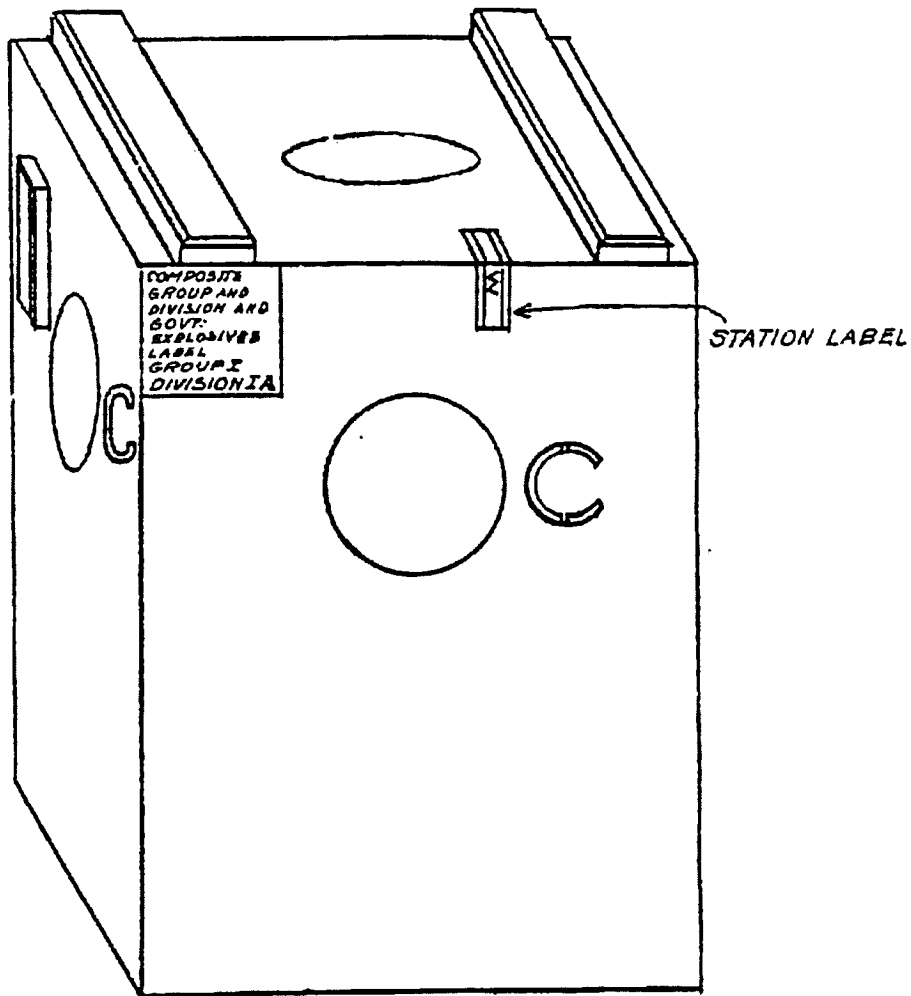
On top.

| | | |
|-----------------------|--------|--|
| 20 CARTGES | ... | Denoting that 20 cartridges are packed. |
| 60-pr. | ... .. | Calibre of gun in which cartridgea sre used. |
| 4 lb. 15 oz. 6 dr. II | | Weight of propellant and numeral of cartridge. |
| M.D. 11 | ... .. | Nature and size of propellant (<i>i.e.</i> , Cordite M.D., Size 11). |
| K. 191 A.C. | ... | Manufacturer's initials and Lot No. of propellant, A.C. denoting that the charge is adjusted. (Should a "grouped" propellant be used the group letter and number (<i>see</i> page 29) will replace the A.C., the group letter and number being placed immediately above the numeral of the cartridge. |
| Blue disc | ... .. | 60-pr. gun cartridge symbol (<i>see</i> page 29). |

On all four sides.

| | | |
|------------------|--------|--|
| Blue disc | ... .. | 60-pr. gun cartridge symbol. |
| C (in blue) | ... .. | Denoting nature of propellant (When a "grouped" propellant is used this will be replaced by the group letter and number (<i>see</i> page 29). |
| "REDUCED CHARGE" | | When applicable. (Denoting that the charges are Reduced). |

B.L. CARTRIDGE BOXES
TYPICAL.



(Plate XXVIII.)

Boxes painted green.

On both ends.

- W. 14/4/17 Monogram of station and date of fuizing.
- " PHOS " Denoting phosphorous filling.
- " DECK CARGO " Denoting that boxes are to be treated as deck cargo when transporting.

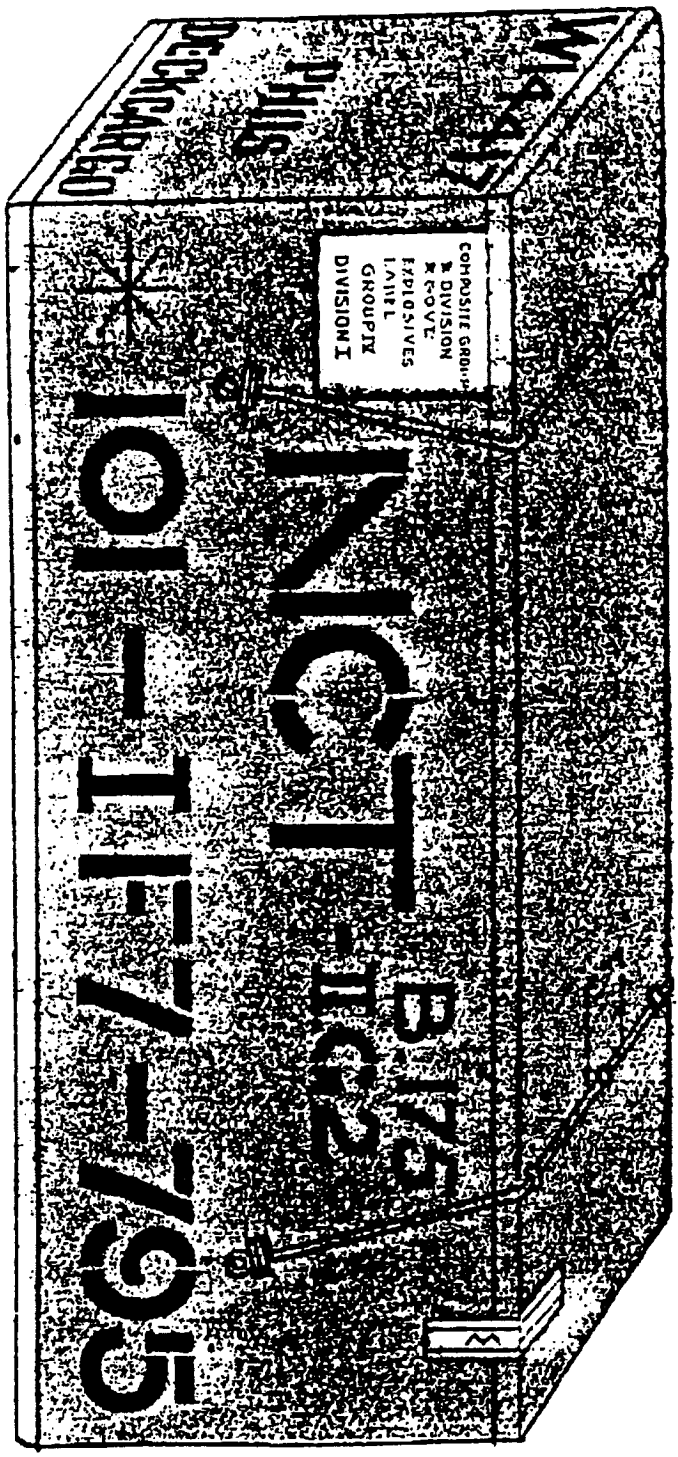
On both sides.

- " N.C.T." Denoting nature of propellant.
- " B. 175 " Denoting lot No. of propellant.
- II.G.2 Numeral of cartridges.
- X 101—I Monogram of empty fuze maker, serial No. and numeral of fuze.
If more than one nature of fuze is packed the word " MIXED " is stencilled.
- F.7—795 Monogram of filling station and Lot No. of Fuze.

In future issues all the above particulars (except the nature of propellant will be stencilled on one side of the box only. The letters denoting nature of propellant will, however, continue to be shown on both sides.

BOX AMMUNITION Q.F. CONTAINING 18 PR
CARTRIDGES WITH SMOKE SHELL.

TYPICAL.



JOHNSON, RIDGLE & CO., LTD., LITH.

To face page 67

Plate XXVIII

(Plate XXIX.)

Boxes painted light grey.

On top.

Coloured bands ... Denoting nature of filling.

On both ends.Coloured bands, con-
tinued from top ... } Denoting nature of filling.W. 14/4/17 ... Monogram of station and date of
fuzing.C.I. ... Denoting that cast iron shell are fitted
to the cartridge.**On both sides.**

N.C.T. ... Denoting nature of propellant.

B. 176 ... Denoting Lot No. of propellant.

III.G.2 ... Numeral of cartridge.

R.L. 102—II ... Monogram of empty fuze maker,
Serial No. and numeral of fuze.
If more than one nature of fuze is
packed the word "MIXED" is
stencilled.F 7—795 ... Monogram of filling station and Lot
No. of fuze.

These particulars will, in future issues, be stencilled on one side of the box only, except the letters denoting nature of propellant, which will continue to be shown on both sides.

TYPICAL FOR
BOX AMMUNITION Q.F. CONTAINING 18 PR CARTRIDGES
WITH CHEMICAL SHELL.

To face page 68

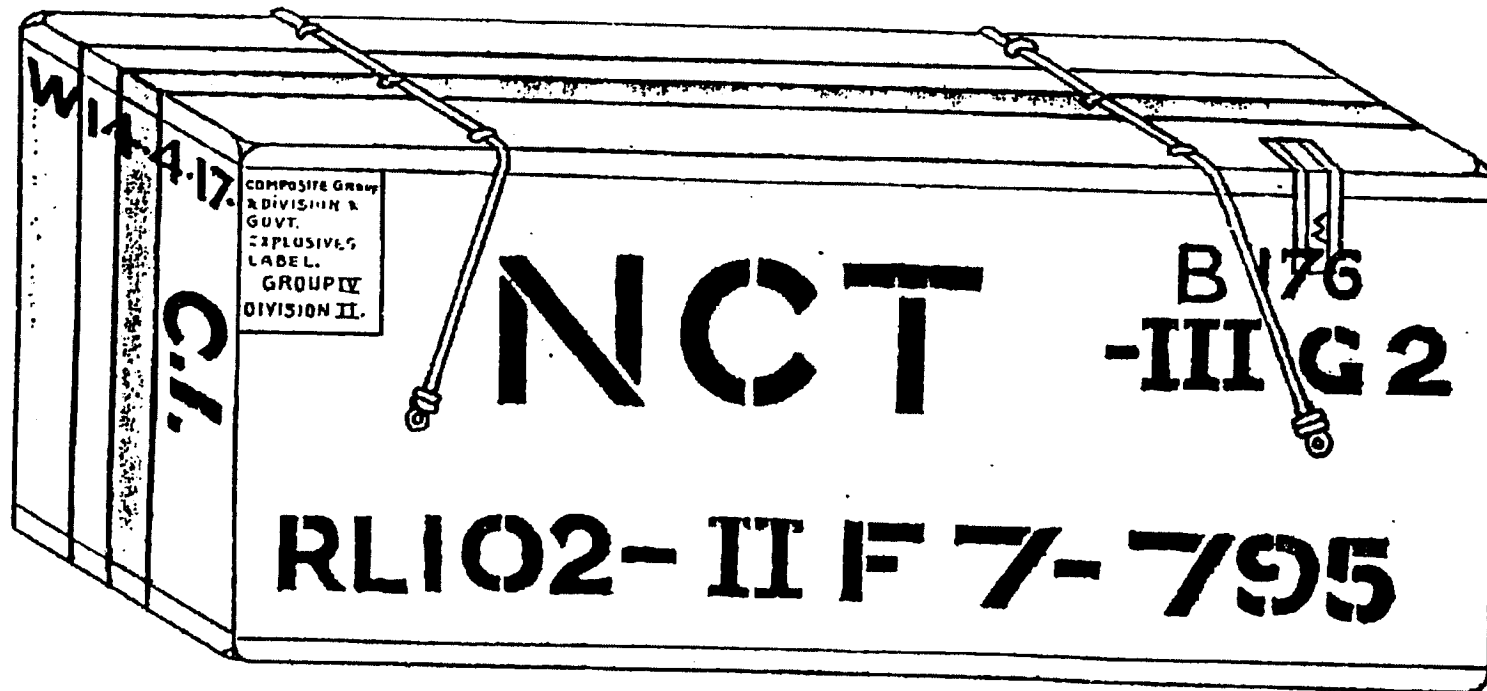


Plate XXIX

(Plate XXX.)

Boxes stained brown.

On top.

- "FOR A.A. ONLY" (in red) Denoting that ammunition is only to be used for anti-aircraft purposes.
- W. 11/11/16 ... Monogram of station and date of fuzing.
- 13-pr. 9 cwt. III NT Calibre of gun in which cartridges are to be used and numeral of cartridge.
- "H.E. FUZED" ... Denoting that shell is filled H.E. and fuzed.
- 80/44—IV—V.S.M.5 } Number and numeral of fuzes, initials
44/80—V—R.L.27 ... } of filling station and Lot. No.
- M.D.8—K.1911—A.C. Nature and size of propellant, makers' initials and Lot No., A.C. denoting that charge has been adjusted.
- Ⓣ ... Denoting that cartridges are fitted with a tracer (see page 36).
- T (in blue) ... Denoting that percussion arrangement of fuze is omitted.

On ends.

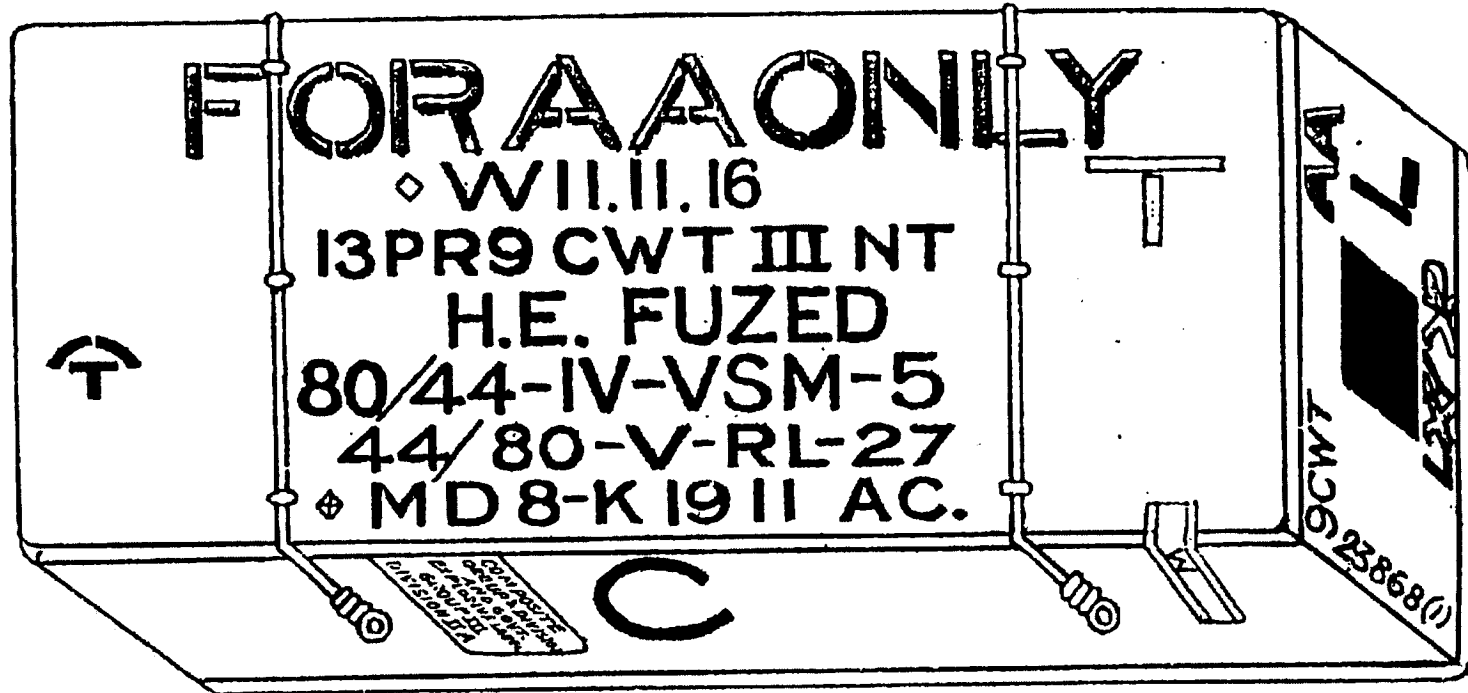
- Letters A.A. (in red) Denoting use for Anti-aircraft purposes only.
- "9-cwt." ... When 13-pr. 9 cwt. cartridges are packed.
- "L" ... Denoting "light" fuzes.
- "LYD" ... Denoting shell filled lyddite.
- XX** (in red) ... Denoting that cartridges are suitable for use in hot climates.
- 23868 (1) ... Design No. of method of filling shell.
- Black rectangle or black cleat Only when 13-pr. ammunition is packed.

On both sides.

- "C" ... Denoting nature of propellant.

BOX AMMUNITION Q.F. CONTAINING CARTRIDGES
WITH H.E. SHELL FOR ANT-AIRCRAFT

TYPICAL



To face page 69

Plate XXX