

E13

ROYAL LABORATORY.

P. H. M. M. M.

Capit. M. M. M.

Fuze Diagrams.

(FOR INFORMATION ONLY.)

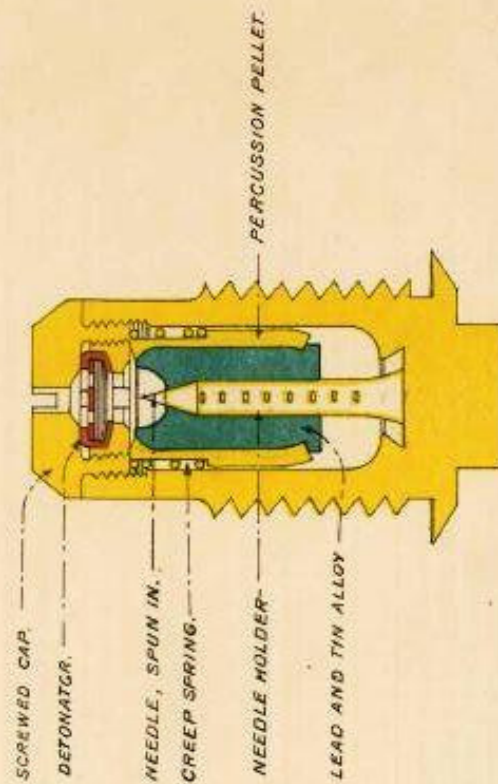
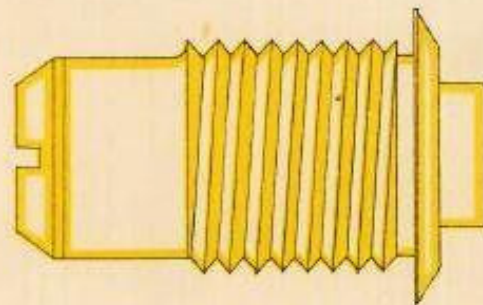
December, 1917.

Part of
N^o 9310 C.

ROYAL LABORATORY DEPARTMENT.

FUZE, PERCUSSION, BASE, HOTCHKISS, MARK IV. / C/.

— SCALE, TWICE FULL SIZE. —

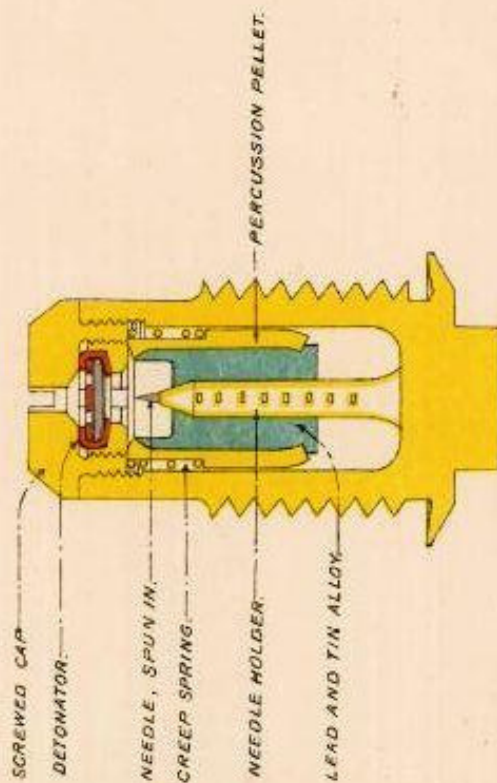
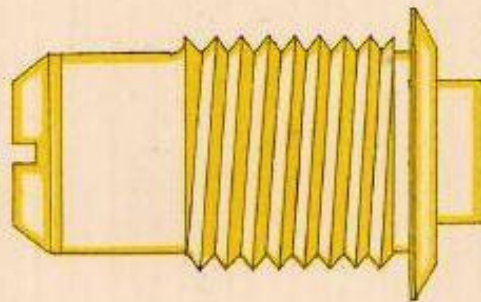


Part of
N^o 23490.
25. 5. 17.

ROYAL LABORATORY DEPARTMENT.

FUZE, PERCUSSION, BASE, HOTCHKISS, MARK VI. / C/.

— TWICE FULL SIZE. —



Part of
N^o 14,500. B.(I).

ROYAL LABORATORY DEPARTMENT.

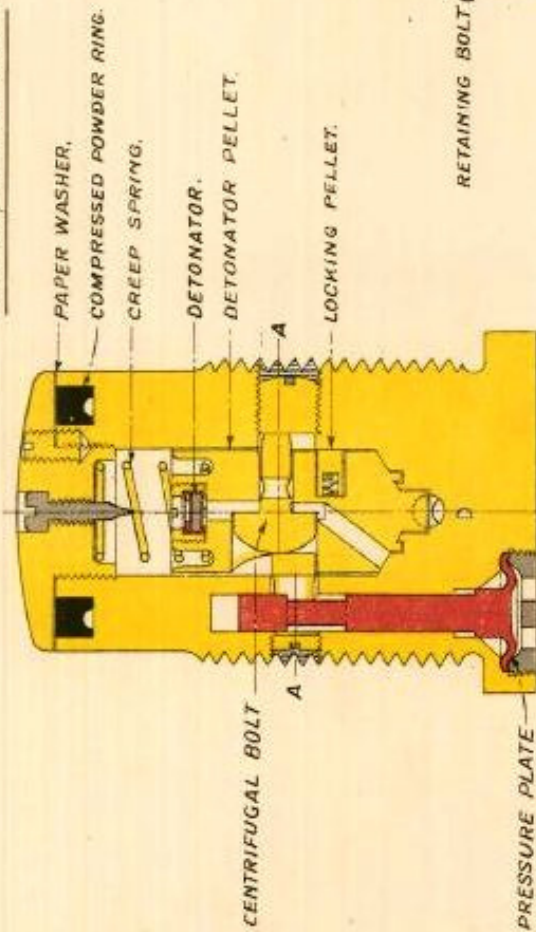
FUZE, PERCUSSION, BASE, LARGE N^o 11, (MARK VI)

FUZE, PERCUSSION, BASE, LARGE BRONZE, N^o 15 (MARK V)

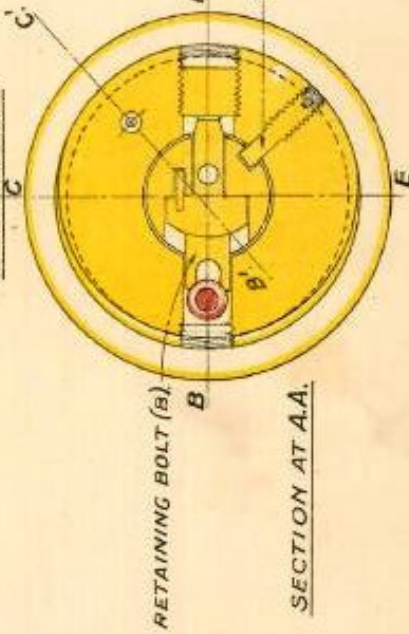
C. METAL

C.

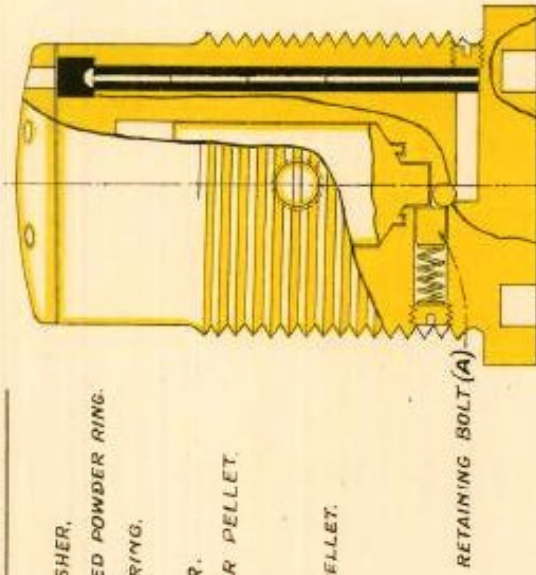
SCALE, FULL SIZE.



SECTION B.B.
C



SECTION AT A.A.



PART SECTION
AT C. E.

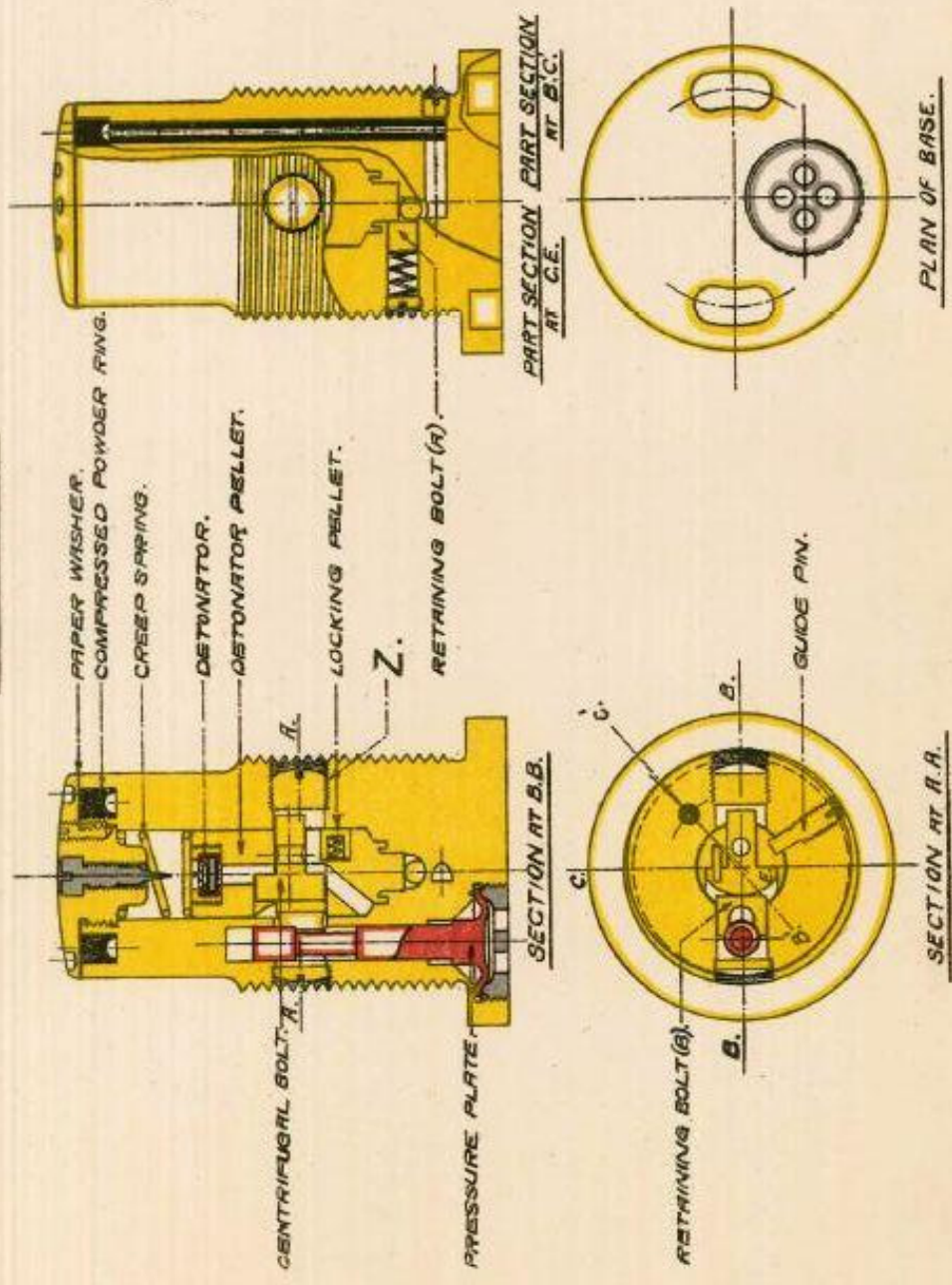
PART SECTION
AT B'C'.

Part of
No 25510

ROYAL LABORATORY DEPARTMENT.

FUZE, PERCUSSION, BASE, MEDIUM, No 12, MARK X/N/METAL.

—FULL SIZE.—



NOTES ON EARLIER MARKS

MARK VIII. THIS IS FITTED WITH A SPUN IN NEEDLE, THE PRESSURE PLATE IS OF A DIFFERENT SHAPE AND THE HOLE MARKED "Z" IS SMALLER IN DIAMETER.

MARK VIII A. THIS IS THE MARK VIII FUZE FITTED WITH THE MARK IX PRESSURE PLATE.

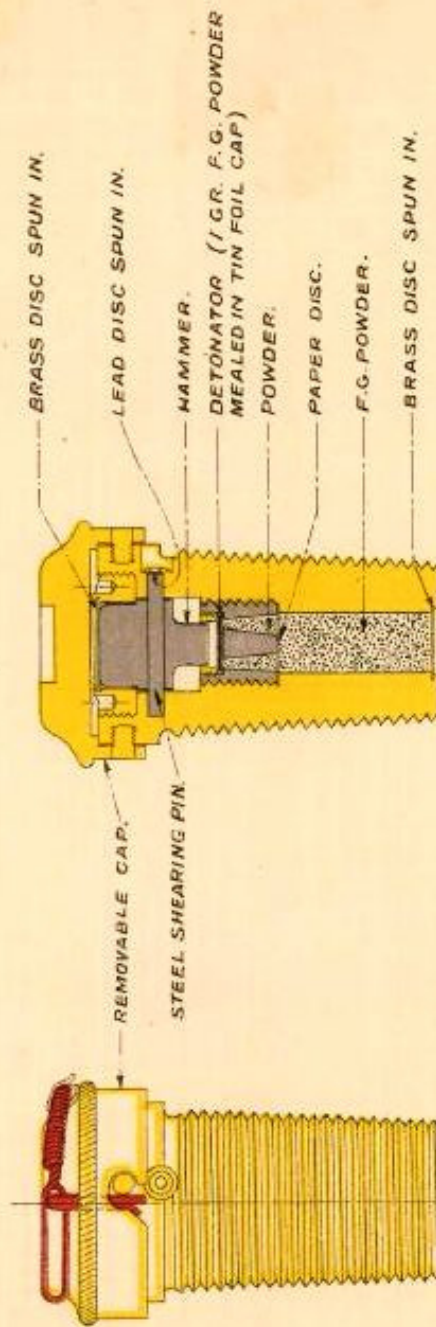
MARK IX. THIS IS THE SAME AS THE ONE HEREON EXCEPT THAT IT IS FITTED WITH A SPUN IN NEEDLE.

Part of
N^o. 17630 D (1).

ROYAL LABORATORY DEPARTMENT.

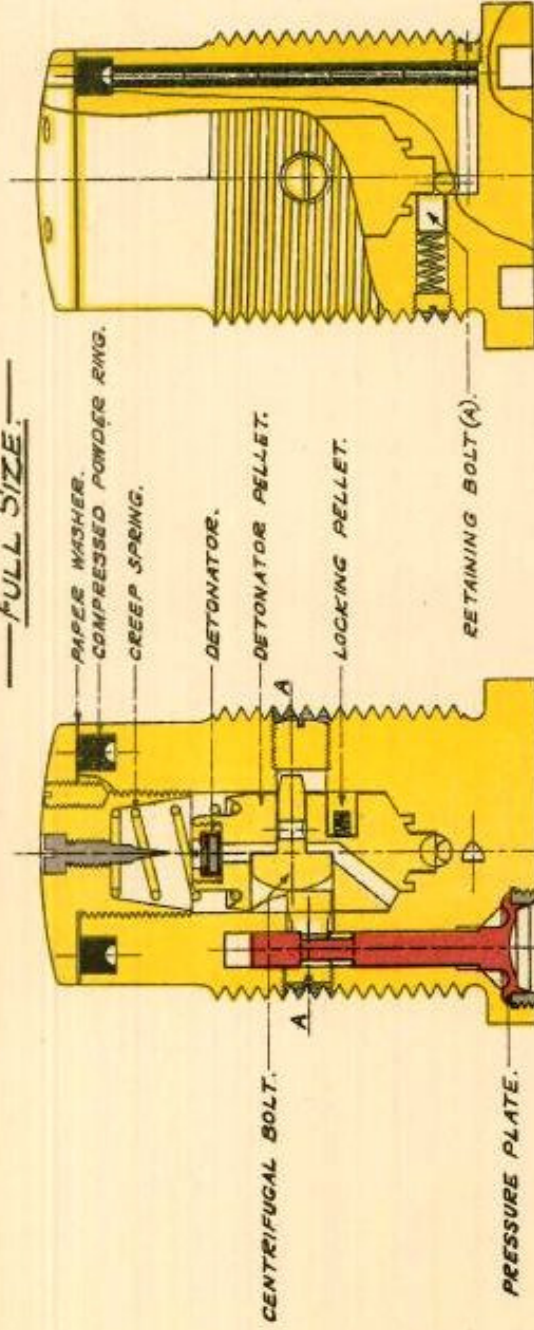
FUZE, PERCUSSION, D.A. IMPACT N^o 13, MARK V. /C/

SCALE, FULL SIZE.



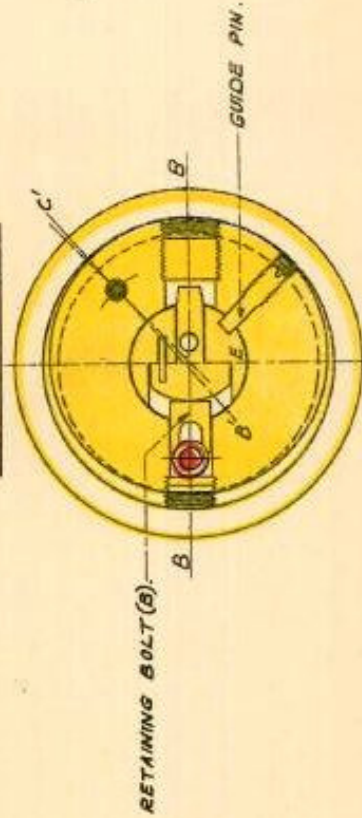
FUZE, PERCUSSION, BASE, LARGE, BRONZE, No 16 MARK III /C/.

— FULL SIZE —



SECTION AT B.B.

PART SECTION AT C.E. PART SECTION AT B.C.



SECTION AT A.A.

NOTE:-

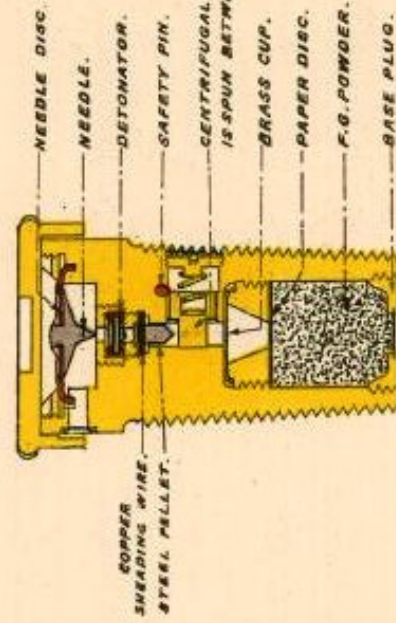
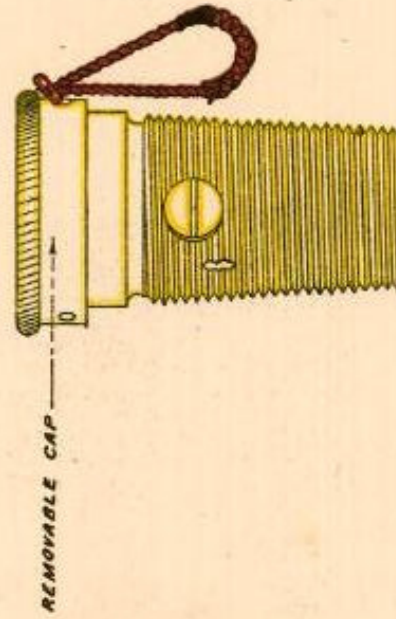
THE MARK II FUZE DIFFERS FROM THE ONE ABOVE IN HAVING A SPUN IN NEEDLE IN PLACE OF THE SCREWED IN NEEDLE. THE MARK I FUZE DIFFERS FROM THE MARK II IN HAVING THE FLASH HOLE IMMEDIATELY OVER ONE OF THE KEYHOLES IN THE BASE.

PART OF
N°16,450A.

ROYAL LABORATORY DEPARTMENT.

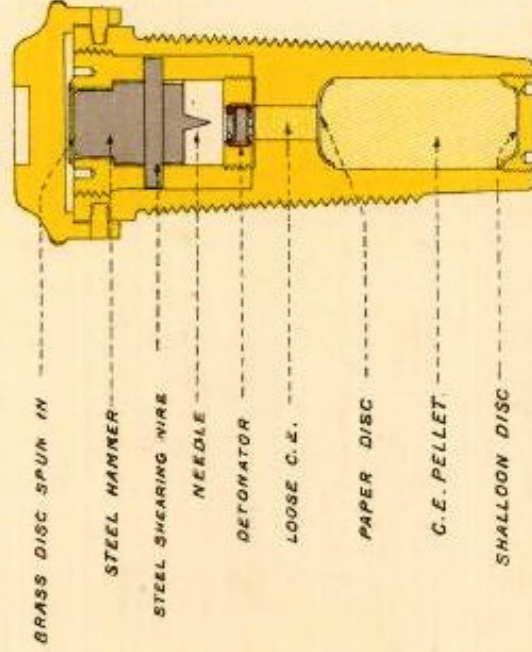
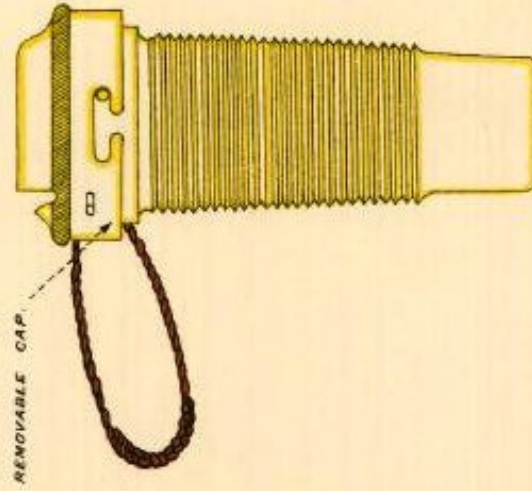
FUZE. PERCUSSION, D. A. WITH CAP N°17. (MARK III. /L/).

— SCALE, FULL SIZE. —



FUZE, PERCUSSION, D. A. IMPACT No 18, MARK II C/

— SCALE, FULL SIZE. —



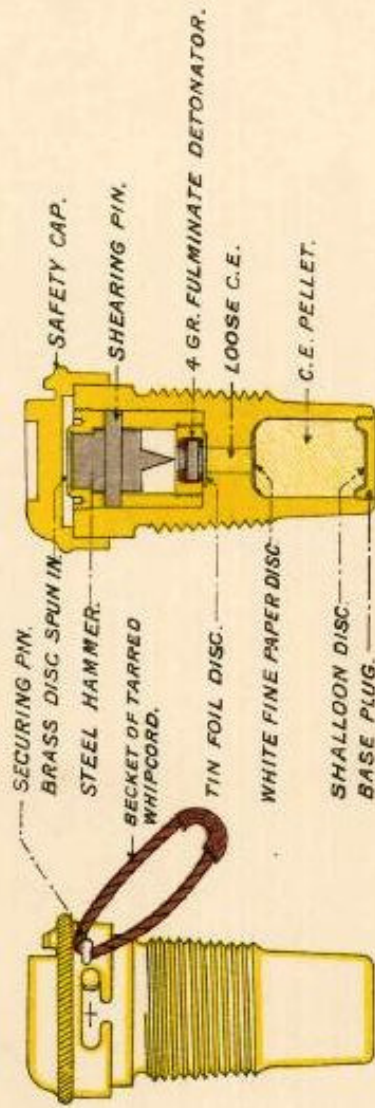
Part of
N^o 20090

ROYAL LABORATORY DEPARTMENT.

FUZE, PERCUSSION, DIRECT ACTION, IMPACT N^o 19A, MARK I. N/

— SCALE, FULL SIZE. —

THIS FUZE DIFFERS FROM FUZE N^o 19 IN
HAVING THE EXTERNAL THREADED PORTION
TAPER INSTEAD OF PARALLEL.

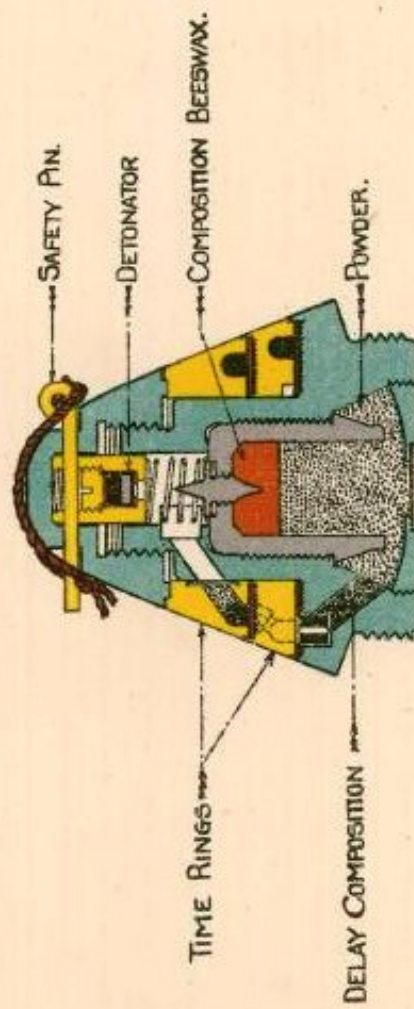


Part of
No 21,880 A.

ROYAL LABORATORY DEPARTMENT.

FUZE, TIME, No 31 MARK II.

SCALE, FULL SIZE.



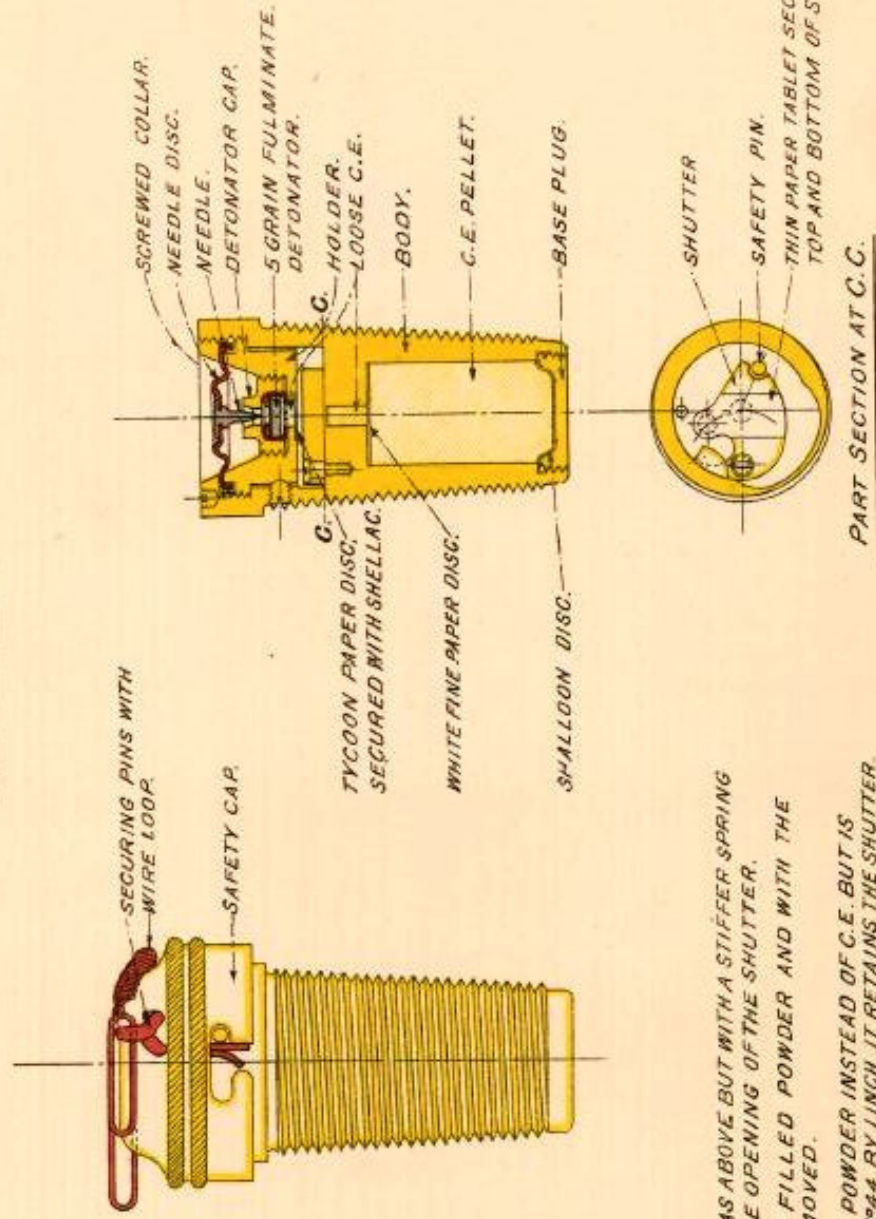
THE ABOVE FUZE HAS A BODY OF THE '87' TYPE
MARK I B. IS A SIMILAR FUZE BUT HAS AN '80' TYPE
BODY WITH THE LIP UNDER THE PLATFORM.

PART OF
N^o 17,080 L.

ROYAL LABORATORY DEPARTMENT.

FUZE, PERCUSSION. D.A. WITH CAP, N^o 44, MARK III. / L.

— FULL SIZE. —



FUZE N^o $\frac{44}{80}$ IS THE SAME AS ABOVE BUT WITH A STIFFER SPRING TO GOVERN THE OPENING OF THE SHUTTER.

FUZE N^o 50 IS FUZE N^o 44 FILLED POWDER AND WITH THE SHUTTER REMOVED.

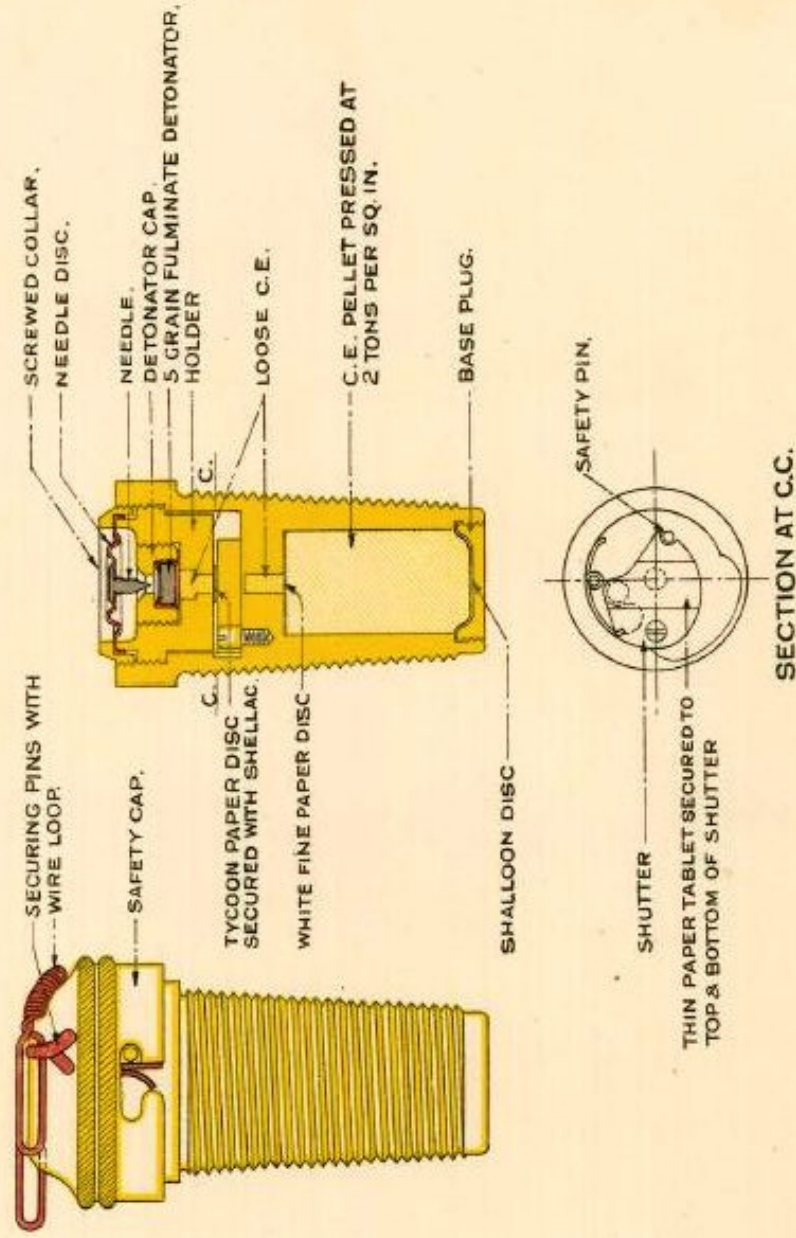
FUZE N^o 51 IS ALSO FILLED POWDER INSTEAD OF C.E. BUT IS SHORTER THAN N^o 44 BY $\frac{1}{16}$ INCH. IT RETAINS THE SHUTTER.

PART OF N° 23,810 A.

ROYAL LABORATORY DEPARTMENT.

FUZE, PERCUSSION, DIRECT ACTION, WITH CAP, N° 44, MARK IV C.

— SCALE, FULL SIZE. —

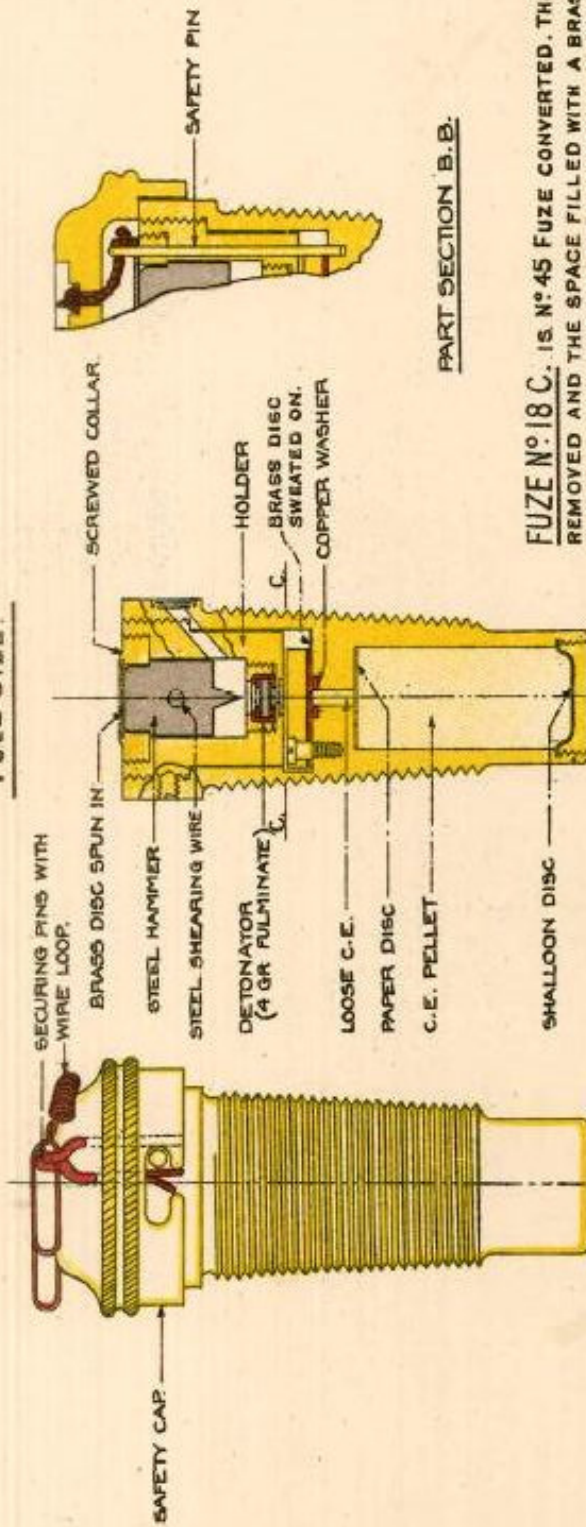


PART OF
N° 16,640.Q.

ROYAL LABORATORY DEPARTMENT.

FUZE, PERCUSSION, D.A. IMPACT, N° 45, MARK II C

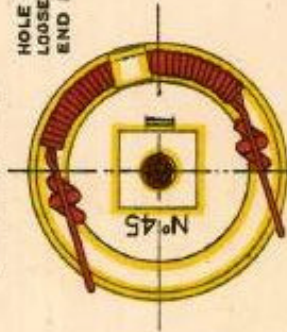
FULL SIZE.



PART SECTION B.B.

FUZE N° 18 C. IS N° 45 FUZE CONVERTED. THE SHUTTER IS REMOVED AND THE SPACE FILLED WITH A BRASS WASHER.

ELEVATION



SECTION A.A.

HOLE IN SHUTTER FILLED WITH LOOSE C.E. AND CLOSED AT EACH END BY PAPER DISCS.

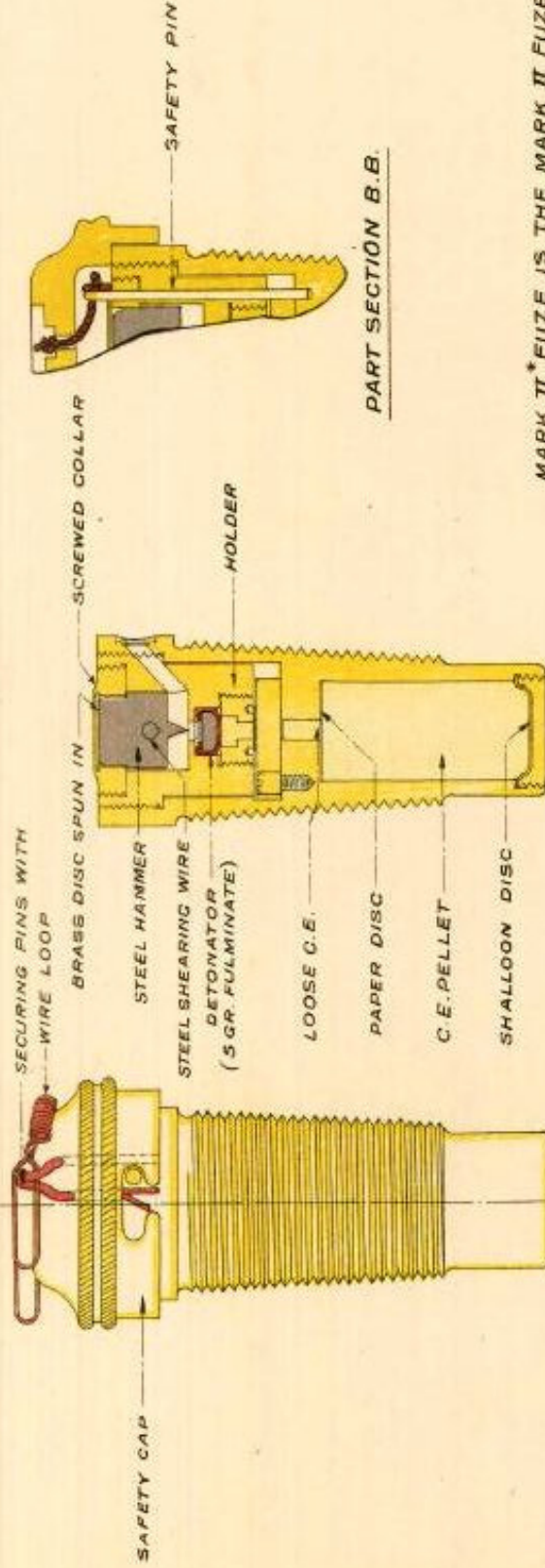


PLAN.

SECTION C.C.

FUZE, PERCUSSION, D.A. IMPACT, N° 45 MARK III / C

FULL SIZE.



ELEVATION.

PART SECTION B.B.

MARK II* FUZE IS THE MARK II FUZE CONVERTED AND FITTED WITH HOLDER, HAMMER, DETONATOR ETC. AS IN THE MARK III FUZE. THE EXISTING SHUTTER IS RETAINED.

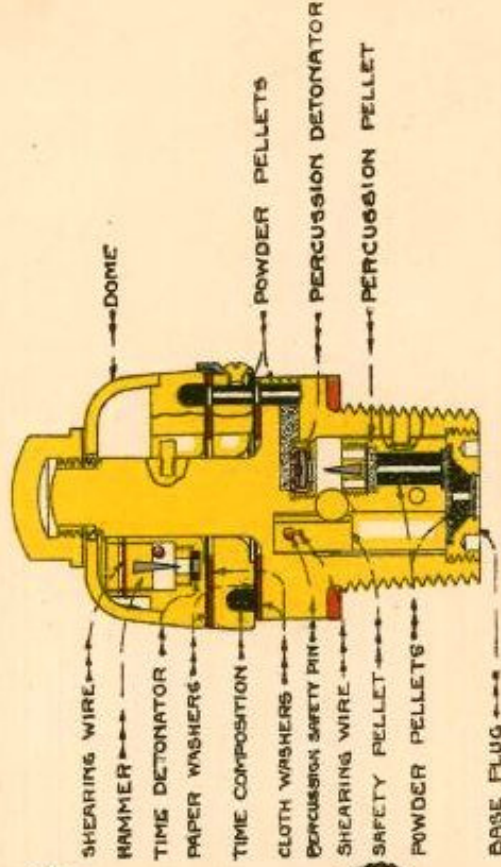
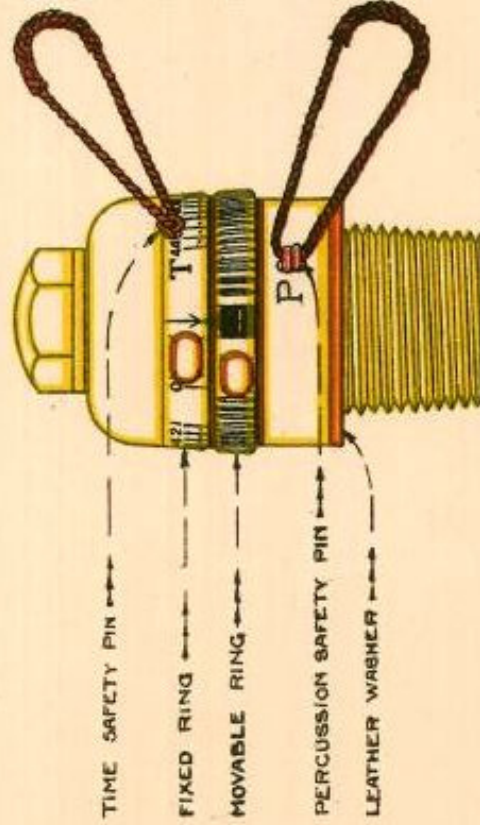


PLAN

SECTION C.C.

FUZE, TIME AND PERCUSSION, N° 65A, MARK I [C].

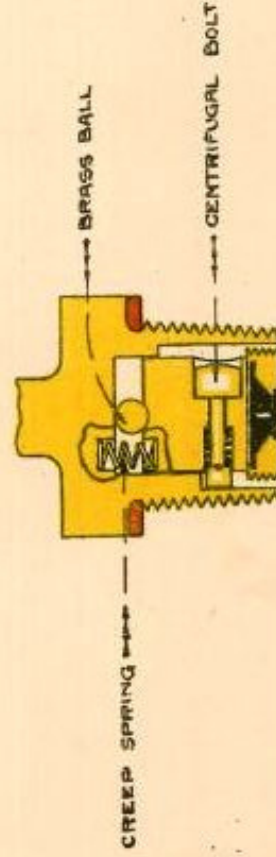
SCALE FULL SIZE



FUZE N° 65 S. ONLY DIFFERS FROM THE ABOVE IN BEING FITTED WITH A WEAKER SHEARING WIRE THROUGH THE TIME PELLET.

FUZE N° 69 IS THE SAME AS THE ONE ABOVE BUT HAS THE RINGS FILLED WITH N° 80 FUZE COMPOSITION TO GIVE A SHORTER TIME OF BURNING.

FUZE N° 70 (FOR USE WITH STAR SHELL) DIFFERS FROM N° 65A IN HAVING A WEAKER SHEARING WIRE THROUGH THE TIME PELLET AND THE PERCUSSION MECHANISM REMOVED.



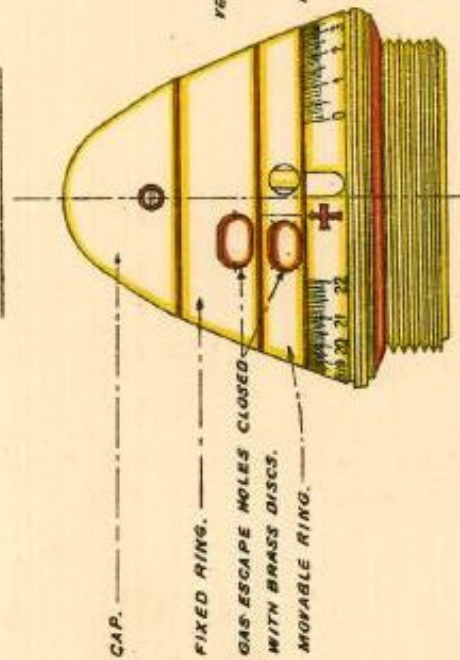
Part of
N° 21860

ROYAL LABORATORY DEPARTMENT

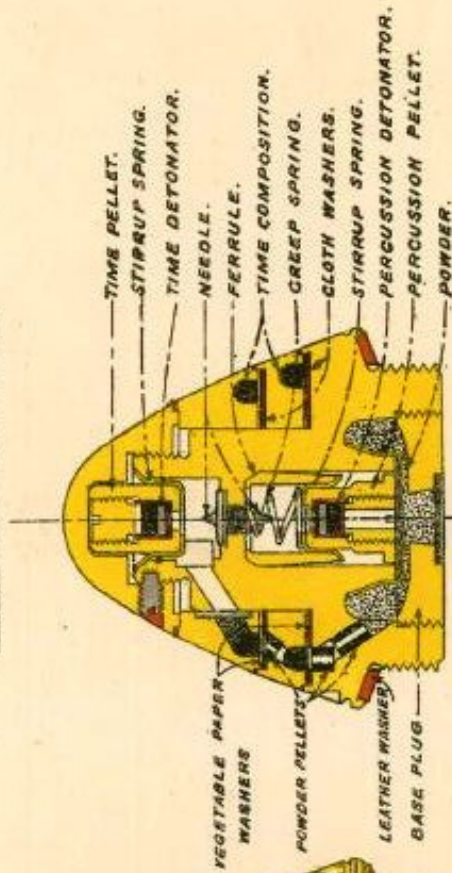
FUZE, TIME AND PERCUSSION, N° 80, MARK VII. /L/.

— SCALE, FULL SIZE. —

SAFETY POSITION.



LIGHTING POSITION.



FUZE N° 87 IS IDENTICAL WITH N° 80 FUZE BUT HAS THE TIME RINGS FILLED WITH LONG BURNING COMPOSITION AND THE LIP UNDER THE PLATFORM REMOVED.

FUZES N° 80 AND 87 ARE THE SAME AS N° 80 AND 87 BUT HAVE THE PERCUSSION ARRANGEMENT REPLACED BY A WOOD PLUG TWO STOPS ARE ALSO FITTED WHICH PREVENT THE FUZE BEING SET BETWEEN 0 AND 2. AND THE MARKING BELOW THE LATTER NUMBER IS EITHER BLACKED OUT OR OMITTED. FUTURE ISSUES OF FUZES WILL HAVE STOPPINS OMITTED.

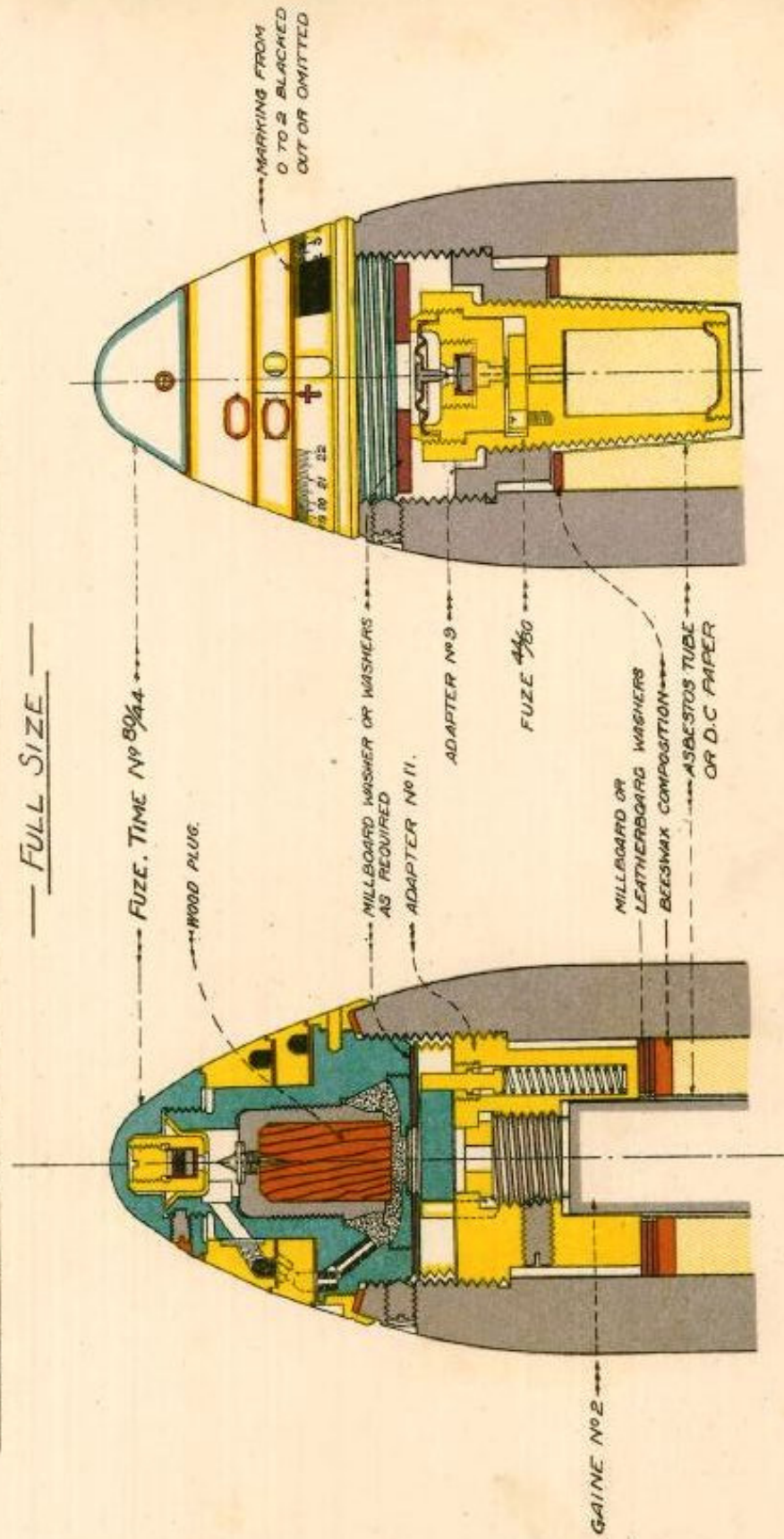
FUZE N° 180 IS N° 80 FUZE WITH THE PERCUSSION ARRANGEMENT REPLACED BY A WOOD PLUG.

PART OF Nos 23770
23319A & 24290

ROYAL LABORATORY DEPARTMENT

FUZE No 8 $\frac{3}{4}$ IN COMBINATION WITH ADAPTER No 11 & WITH FUZE No 4 $\frac{4}{80}$ Mk. IV.

— FULL SIZE —

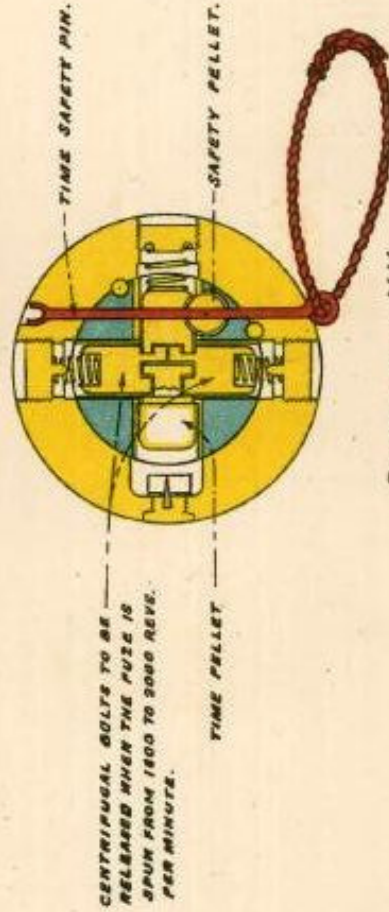
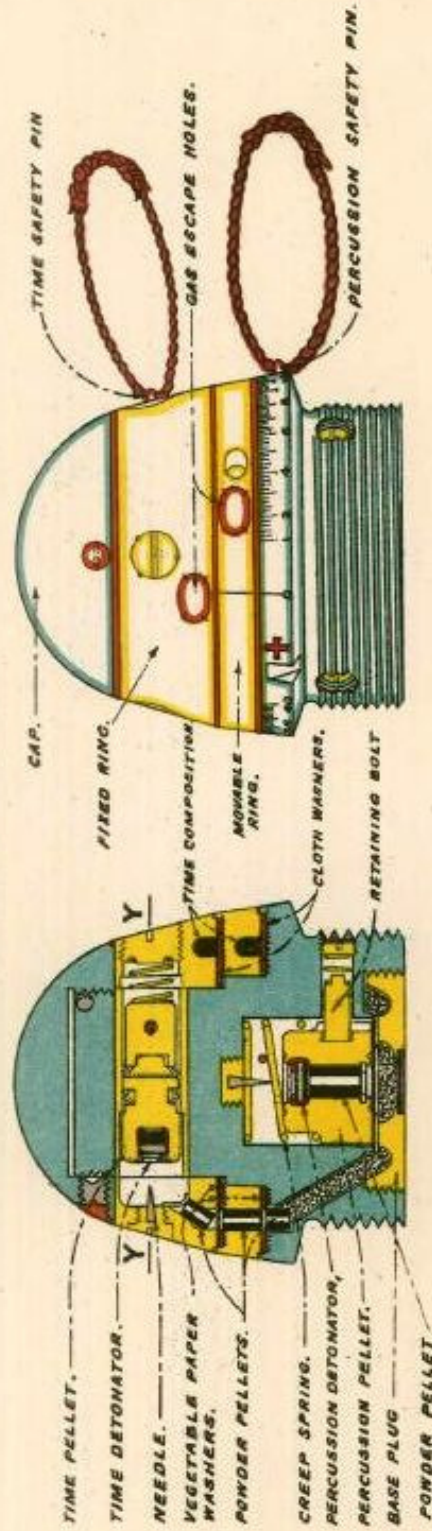


PART OF
N°14,360 S'1,

ROYAL LABORATORY DEPARTMENT.

FUZE, TIME AND PERCUSSION, N°82. (MARK III.)/L/.

—SCALE, FULL SIZE.—



THE MARK IV FUZE ONLY DIFFERS FROM THE ONE ABOVE IN BEING FITTED WITH A SCREWED IN PERCUSSION NEEDLE.

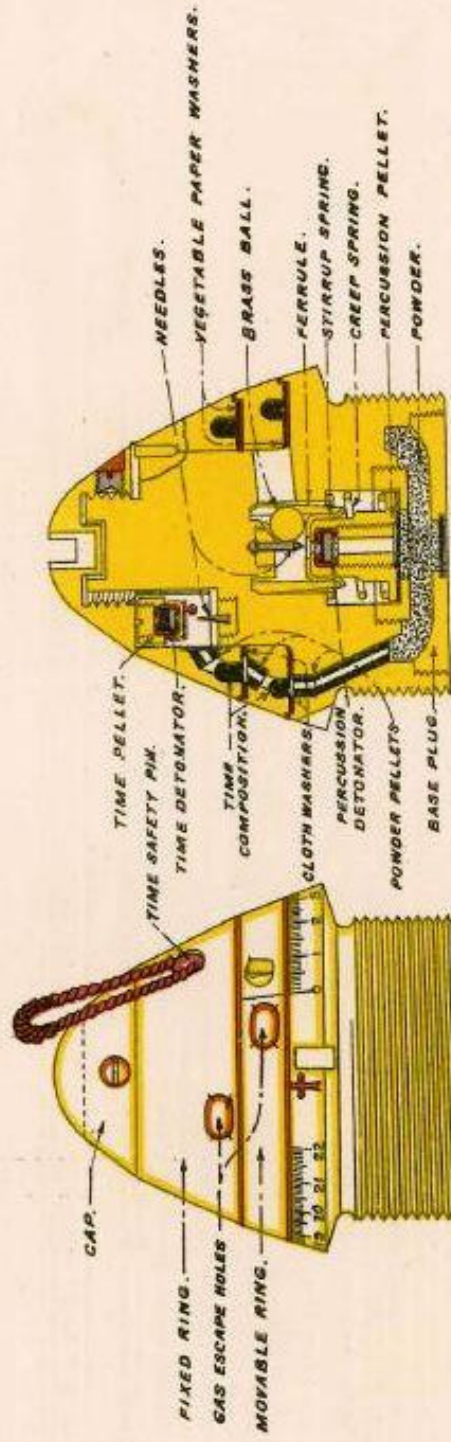
SECTION AT Y.Y.

Part of R. L.
Nº 17210 A

ROYAL LABORATORY DEPARTMENT

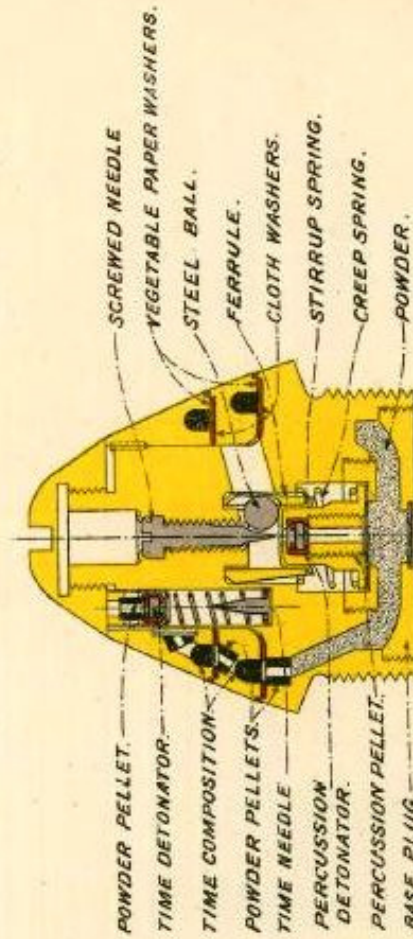
FUZE, TIME AND PERCUSSION, N.º 83, MARK II / L. /

— SCALE, FULL SIZE. —



FUZE N.º 88 IS THE SAME AS N.º 83 WITH THE
EXCEPTION THAT THE LOWER TIME RING
IS FILLED WITH SPECIAL COMPOSITION
TO GIVE A LONGER TIME OF BURNING.

—SCALE, FULL SIZE.—



NOTE:- WITH THE EXCEPTION OF THE TIME RINGS AND CAP, THIS FUZE IS OTHERWISE THE SAME AS N989, MARK I.

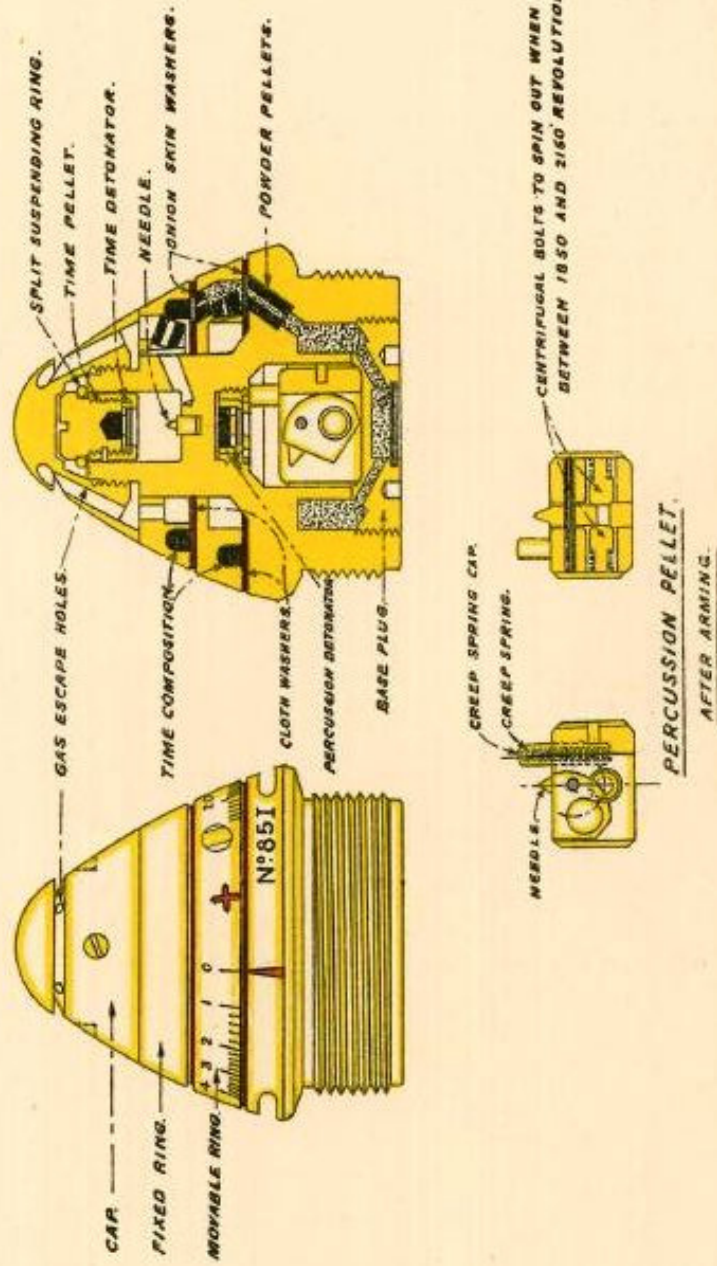
FUZE N°88 MARK III IS THE SAME AS N°83 MARK III WITH THE EXCEPTION THAT THE LOWER TIME RING IS FILLED WITH SPECIAL COMPOSITION TO GIVE A LONGER TIME OF BURNING. THE LOWER RING OF N°88 FUZE IS LACQUERED RED FOR DISTINCTION.

Part of C.I.W.
N^o 1909.

ROYAL LABORATORY DEPARTMENT.

FUZE, TIME AND PERCUSSION, N^o 85, MARK I /L/.

— SCALE, FULL SIZE. —

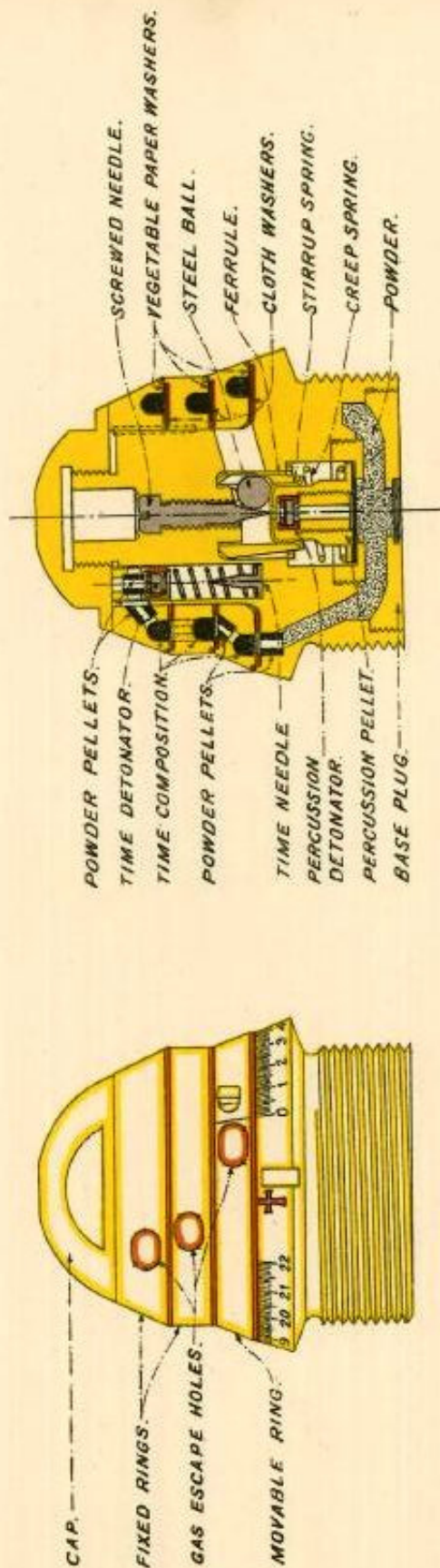


PART OF N° 22,790(1)

ROYAL LABORATORY DEPARTMENT

FUZE, TIME AND PERCUSSION, N° 89, MARK I.

— SCALE, FULL SIZE. —



NOTE: WITH THE EXCEPTION OF THE TIME RINGS AND
CAP, THIS FUZE IS OTHERWISE THE SAME AS
N° 83 MARK III.

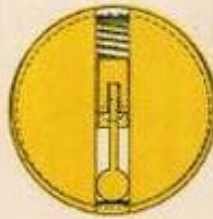
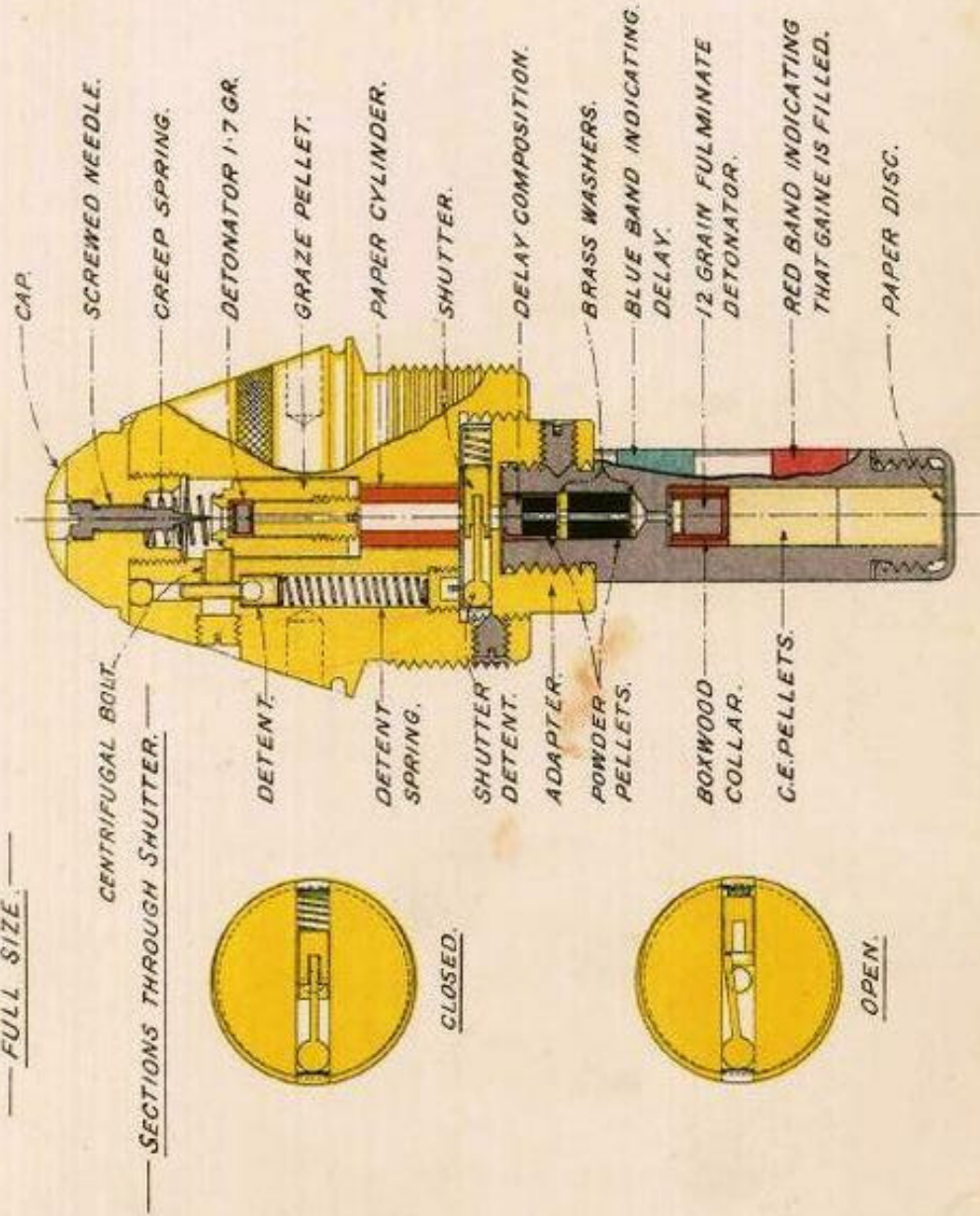
BASED ON R.L. DESIGNS.

25,360
23,000 G.
23,676

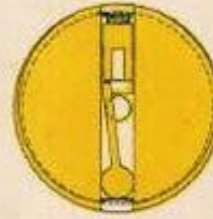
ROYAL LABORATORY DEPARTMENT.

FUZE, PERCUSSION, №101 E, AND GAINE №2, MARK III, WITH DELAY.

— FULL SIZE —



CLOSED.



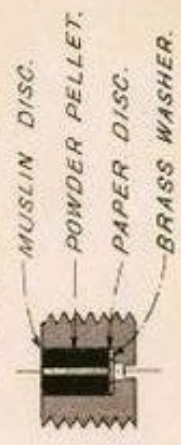
OPEN.

THE SHUTTER SHOWN FITTED TO THIS FUZE IS TO R.L. DESIGN 23,000 G. ALTERNATIVE DESIGNS ARE R.L. 23,000 D.H. & L. FUZE №101 E, OR 101 X, IS THE №101 E. FUZE FITTED WITH A 75% STRONGER CREEP SPRING FOR USE IN THE 6" GUN. FUZE №101 B, FOR USE IN THE LARGER HOWITZERS, ONLY DIFFERS FROM №101 E, IN HAVING WEAKER DETENT AND SHUTTER SPRINGS. THE SHUTTER DESIGN №101 ARE 23,000 J AND K.

FUZE №103 IS A SHORTENED FORM OF FUZE №101 E. IT DOES NOT CARRY AN ADAPTER AND IS NOT FITTED WITH A SHUTTER.

FUZE №109 E, IS A MODIFICATION OF №101 E, FUZE FOR USE IN CHEMICAL SHELL WITH POWDER FILLED HEADS OR CONTAINERS. THE DIFFERENCE CONSISTS IN FITTING THE POWDER RELAY SHOWN BELOW IN THE GAIN RECESS OF THE ADAPTER.

— POWDER RELAY —



PART OF

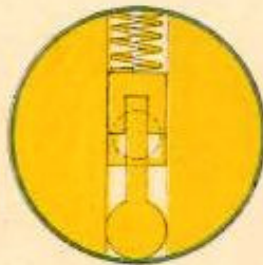
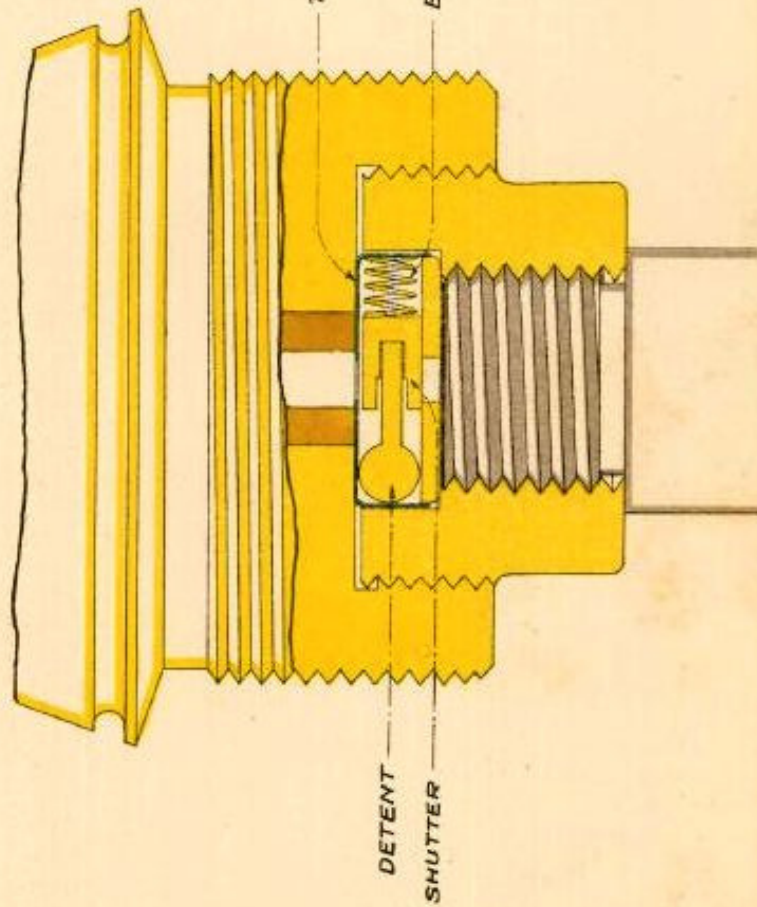
Nº 23,000.D.

ROYAL LABORATORY DEPARTMENT.

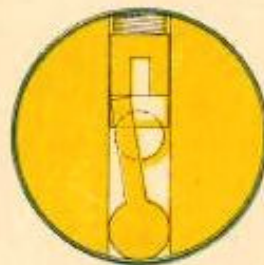
SAFETY SHUTTER FOR USE WITH FUZE, PERCUSSION Nº 101

— SCALE $\frac{2}{1}$ —

SECTIONAL PLAN OF SHUTTER, CLOSED.



SECTIONAL PLAN OF SHUTTER, OPEN.



Part of
N° 21,070 S, P & Q.

ROYAL LABORATORY DEPARTMENT.

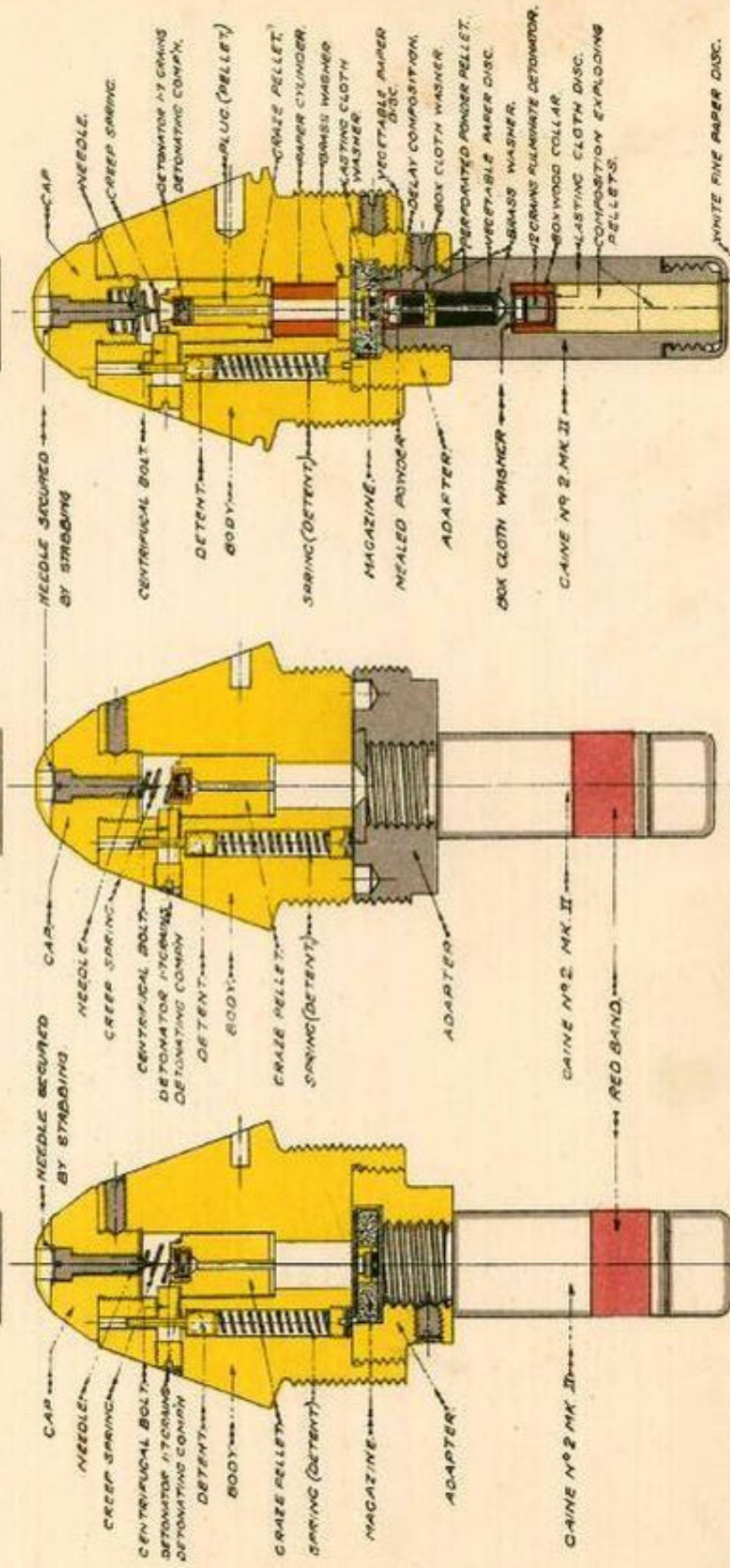
— FUZES, PERCUSSION WITH GAINE N° 2. —

SCALE, FULL SIZE.

— N° 102. —

— N° 103. —

— N° 101. —



FUZE N° 109 IS SIMILAR TO N° 101 AND 102 BUT DOES NOT CARRY A GAINE AND HAS THE HOLE BELOW THE MAGAZINE IN THE ADAPTER PLUGGED.

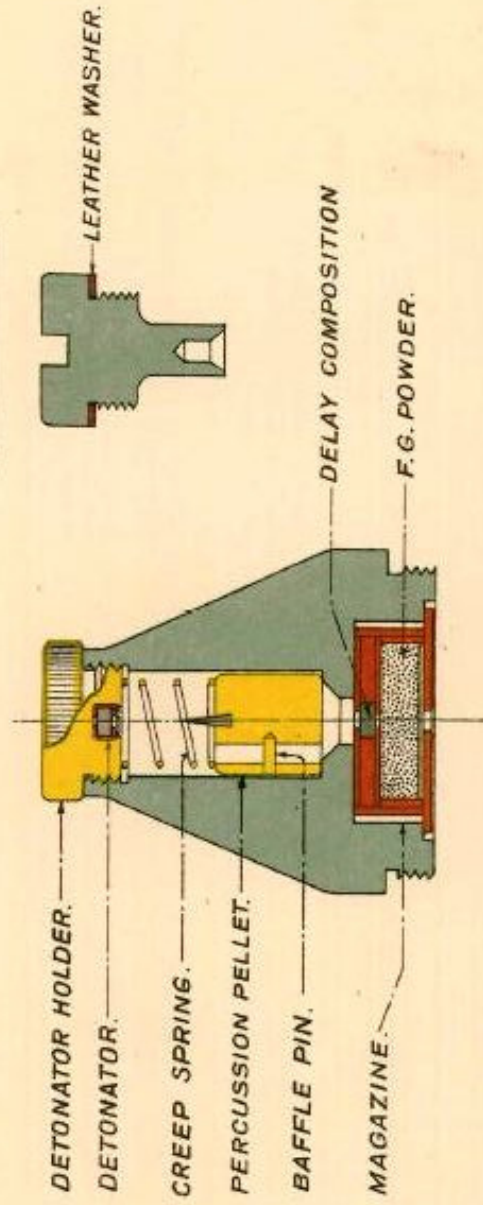
Part of
N°21,900 B. (1)

ROYAL LABORATORY DEPARTMENT.

FUZE, PERCUSSION, N° 105 B. MARK I / L /.

— FULL SIZE. —

TRANSIT PLUG.

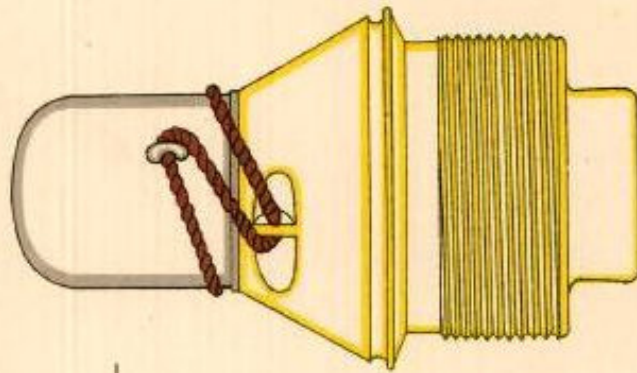


NOTE:-- THE DETONATOR HOLDER REPLACES THE TRANSIT PLUG AFTER THE
BOMB HAS BEEN LOADED INTO THE HOWITZER.

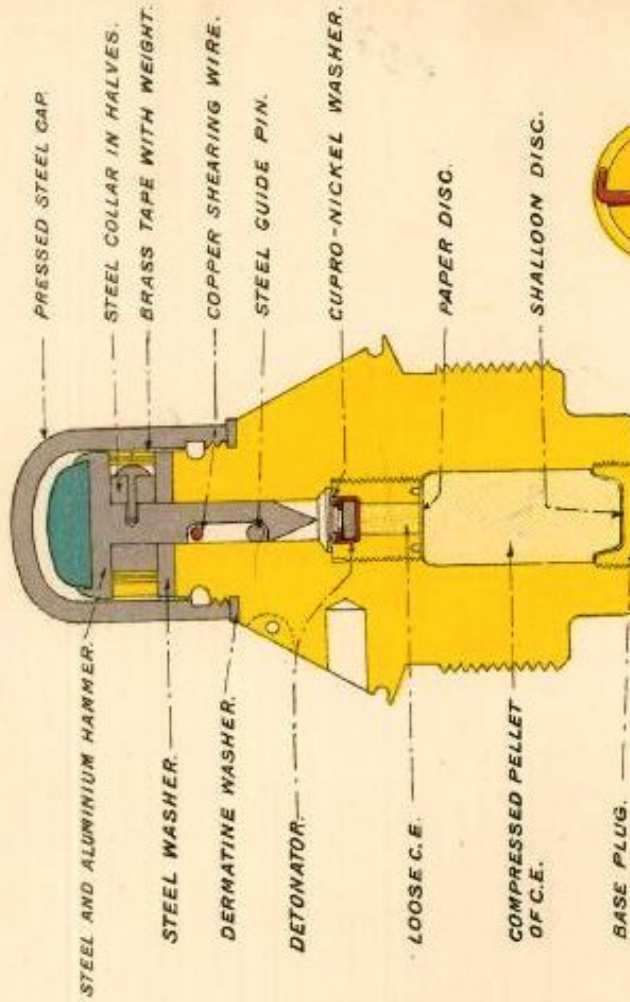
Part of
RESEARCH DEPARTMENT
DESIGN No 212 A.

ROYAL LABORATORY DEPARTMENT.

FUZE, PERCUSSION, WITH CAP No 106. MARK II/L.



— SCALE, FULL SIZE. —



PRESSED STEEL CAP

STEEL COLLAR IN HALVES.

BRASS TAPE WITH WEIGHT.

COPPER SHEARING WIRE.

STEEL GUIDE PIN.

CUPRO-NICKEL WASHER.

PAPER DISC.

SHALLOON DISC.

STEEL AND ALUMINIUM HAMMER.

STEEL WASHER.

DERMATIVE WASHER.

DETONATOR.

LOOSE C.E.

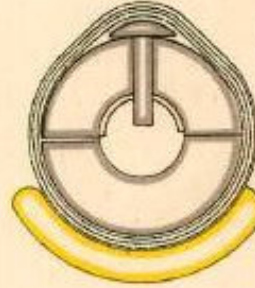
COMPRESSED PELLET
OF C.E.

BASE PLUG.



SECTION THRO' SHEARING WIRE.

SCALE, 2/1.



METHOD OF WINDING BRASS TAPE.
WOUND CLOCKWISE, WHEN VIEWED FROM HAMMER POINT.



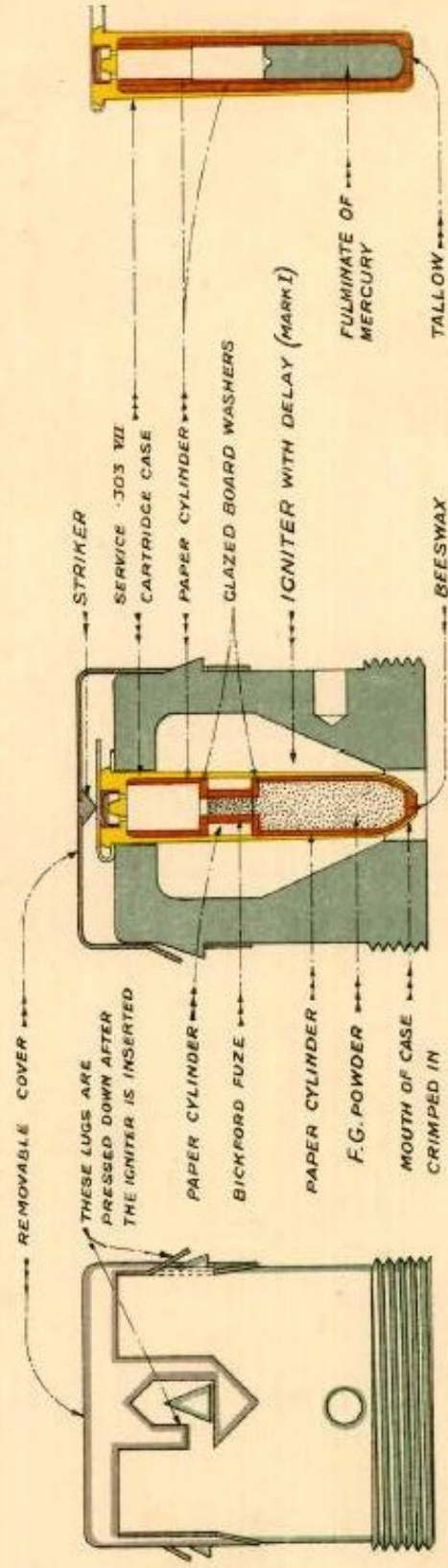
PART OF R.L. N° 22, 120
& C.I.W. N°s 3102 & 3120.

ROYAL LABORATORY DEPARTMENT

FUZE, PERCUSSION N° 107 (MARK I)/L/
WITH IGNITER SHOWN IN POSITION

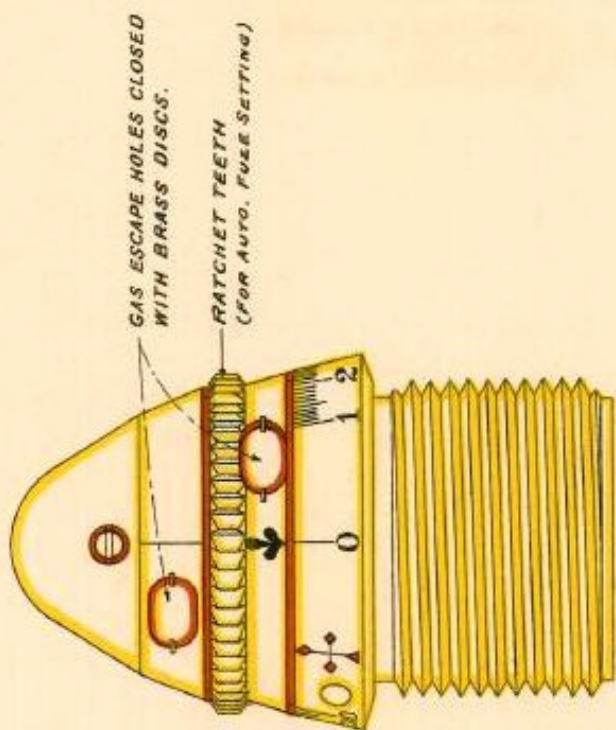
DETONATOR
N° 107 FUZE Mk II/L/

— FULL SIZE —



ROYAL LABORATORY DEPARTMENT.

— SCALE, TWICE FULL SIZE. —

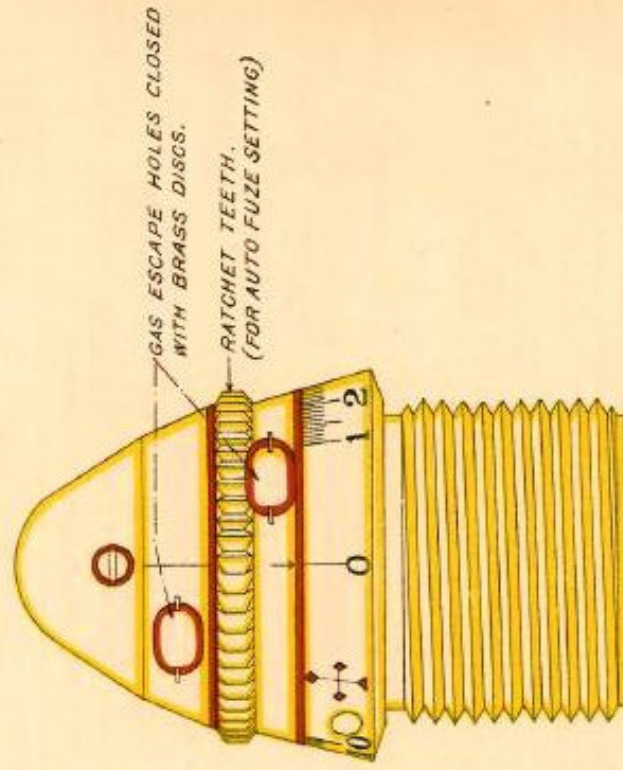
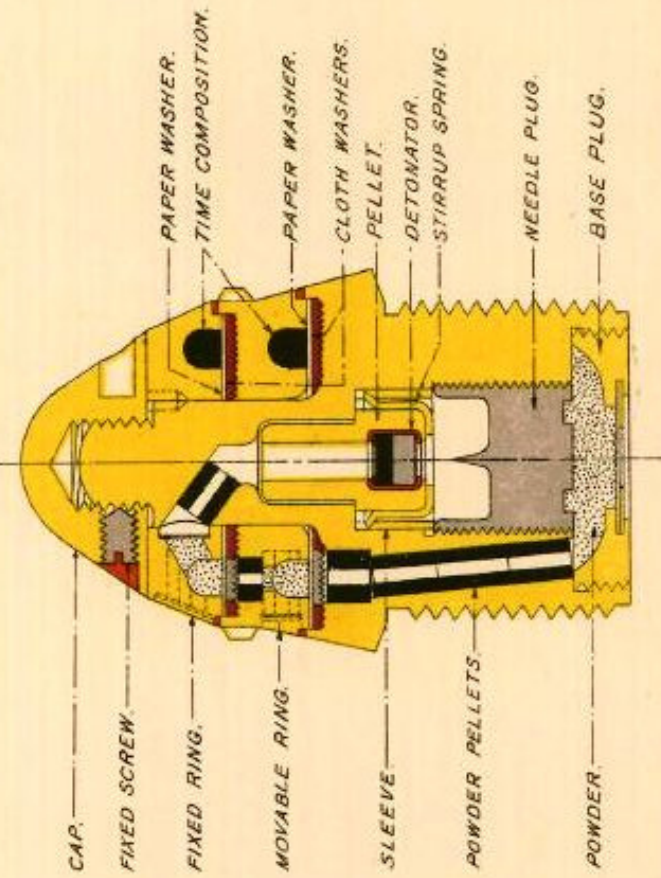


PART OF
N^o 23460 (1)

ROYAL LABORATORY DEPARTMENT.

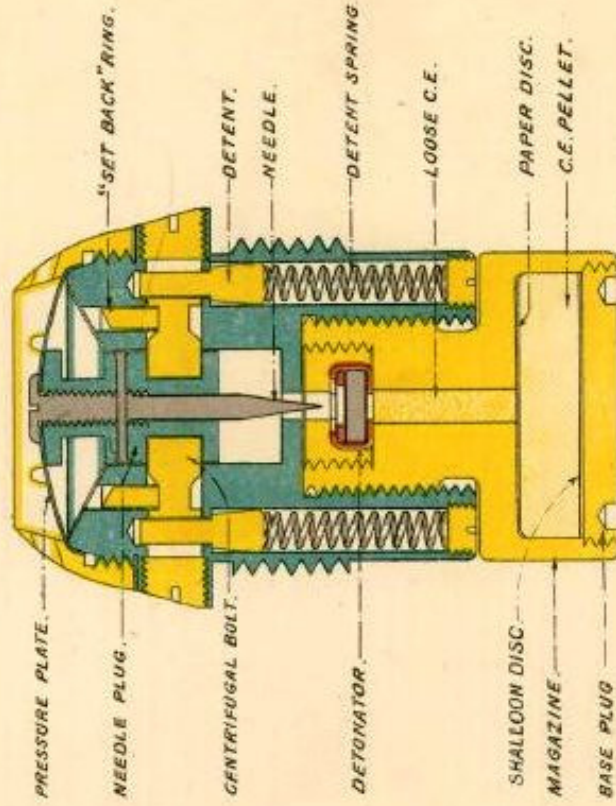
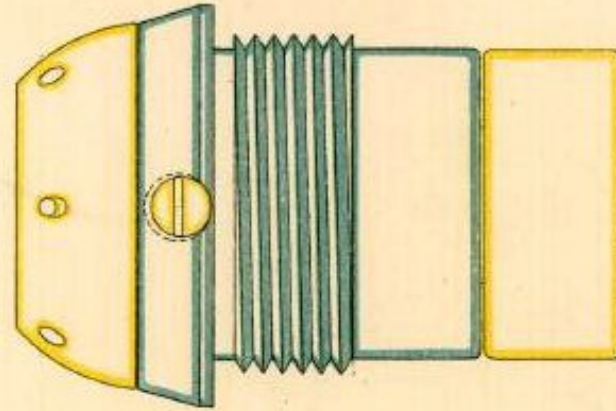
FUZE, TIME. N^o 121. MARK III /C/

SCALE, TWICE FULL SIZE.



FUZE, PERCUSSION, DIRECT ACTION, IMPACT, N° 131, MARK IV.

— SCALE, TWICE FULL SIZE. —



FUZE N° 132 HAS A HOLE THROUGH THE BASE PLUG AND IS FILLED POWDER INSTEAD OF C.E. OTHERWISE IT IS THE SAME AS THE FUZE ABOVE.

PART OF
N^o 22590 C. (I).

ROYAL LABORATORY DEPARTMENT.

FUZE, PERCUSSION, N^o 145, MARK I / L /

— FULL SIZE. —

