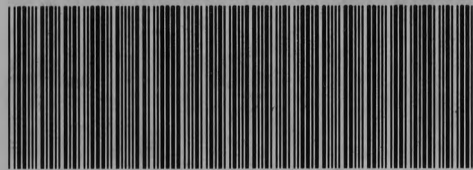


44 - HQ- 38861

6007X1

EBF



\*44-HQ-38861-6007X1\*

*Enclosure*

**X** DO NOT DESTROY  
HISTORICAL VALUE  
NATIONAL ARCHIVES

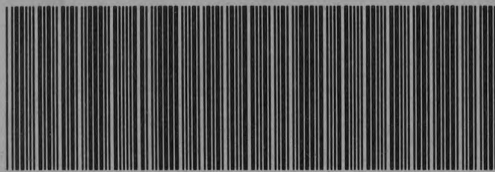
ENTIRE FILE REVIEWED  
FOR HISTORICAL  
DECLASSIFICATION

*44-38861-6007X1*

44- HQ-38861

E6007X1

EBF



\*44-HQ-38861-E6007X1\*

ENCLOSURE

# ATTENTION

BEFORE CHANGING CLASSIFICATION  
OR PROCESSING ANY DOCUMENT  
FROM THIS FILE FOR RELEASE TO  
THE GENERAL PUBLIC, CONTACT  
FOI/PA SECTION UNIT D, EXT. 5767.

FBI/DOJ

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MAY 19 1977 BY *R 348*



**FEDERAL BUREAU OF INVESTIGATION  
WASHINGTON, D. C. 20535**

To: **FBI, Memphis**  
Re: **MURKIN**

Date: **FBI File No. April 29, 1968**  
Lab. No.

Specimens received **4/5/68**

For a complete listing of the evidence, refer to Laboratory report previously submitted to the Memphis Office.

**Results of examination:**

The lead cores of the bullets in the five cartridges Q4 through Q8, were found to vary in composition even though they were all from the same manufacturer.

The core portion of the Q64 bullet fragment from the victim's body is similar in composition to the lead core of the bullet in the cartridge designated Q4 and could have come from a source such as represented by the lead core of the bullet in Q4.

The bullet jacket portion of specimen Q64 is similar in composition to the metal of the jackets of the bullets in the Q4 through Q8 cartridges and could have come from the source represented by these bullets.

# KING CASE Bullet Leads

C 27

Fe 25

Q4 = 1.56 mg 23  $\text{Si}^+ \text{Sb}^- \text{Mg}^+ \text{Pb}^+ \text{Fe}^+ \text{Bi} \text{Cu} \text{Ag} \text{Sn}^+$

Q4 = 1.50 21  $\text{Si}^+ \text{Sb}^- \text{Mg}^+ \text{Pb}^+ \text{Fe}^+ \text{Bi} \text{Cu} \text{Ag}$

Q5 = 1.47 69  $\text{Si}^+ \text{Sb}^- \text{Mg}^+ \text{Pb}^+ \text{Fe}^+ \text{Bi} \text{Cu} \text{Ag}$

Fe 67

Q6 = 1.49 65  $\text{Si}^+ \text{Sb}^- \text{Mg}^+ \text{Pb}^+ \text{Fe}^+ \text{Bi} \text{Cu} \text{Ag}$

Q7 = 1.54 63  $\text{Si}^+ \text{Sb}^- \text{Mg}^+ \text{Pb}^+ \text{Fe}^+ \text{Bi} \text{Cu} \text{Ag}$

Q8 = 1.52 61  $\text{Si}^+ \text{Sb}^- \text{Mg}^+ \text{Pb}^+ \text{Fe}^+ \text{Bi} \text{Cu} \text{Ag} \text{Sn}^+$

April 19 1968

A



# KING CASE COPPER JACKETS

C 29  
Fe 27  
Q64 (1.87 mg) 25  $B^{tr} Mg^{tr} Fe^{vst} Fe^{tr} Cu^{+} Ag^{tr} Zn^{-}$   
Q4 (1.80 mg) 23  $B^{tr} Mg^{tr} Si^{vst} Fe^{tr} Cu^{+} Ag^{tr} Zn^{-}$   
Q5 (1.81 mg) 21  $B^{tr} Mg^{tr} Si^{vst} Fe^{tr} Cu^{+} Ag^{tr} Zn^{-}$

Fe 29  
Q6 (1.79 mg) 27  $B^{tr} Mg^{tr} Si^{vst} Fe^{tr} Cu^{+} Ag^{tr} Zn^{-}$   
Q7 (1.81 mg) 25  $B^{tr} Mg^{tr} Si^{vst} Fe^{tr} Cu^{+} Ag^{tr} Zn^{-}$   
Q8 (1.80 mg) 23  $B^{tr} Mg^{tr} Si^{vst} Fe^{tr} Cu^{+} Ag^{tr} Zn^{-}$

April 19 1968

B

C 73

Fe 71

Q64 69 = 1.565mg Sb<sup>-</sup> As<sup>6+</sup> Mg<sup>+</sup> Pb<sup>+</sup> Si<sup>+</sup> Fe<sup>+</sup> Bi<sup>+</sup> Sn<sup>+</sup>

Q4 67 = 1.545mg Sb<sup>-</sup> As<sup>vit</sup> Mg<sup>+</sup> Pb<sup>+</sup> Si<sup>+</sup> Fe<sup>+</sup> Bi<sup>+</sup> -

Q64 65 = 1.670mg Sb<sup>-</sup> As<sup>vit</sup> Mg<sup>+</sup> Pb<sup>+</sup> Si<sup>+</sup> Fe<sup>+</sup> Bi<sup>+</sup> -

April 22 1968

C

SAMPLE	wst.	µg Sb	% Sb	
Q64A	9.86 mg	132	1.34	} 1.37 % G = .12 Rel. G = 9%
Q64B	10.54	133	1.26	
Q64C	8.49	127	1.50	
Q4A	9.90	156	1.58	} 1.52 % G = .07 Rel. G = 5%
Q4B	9.06	131	1.45	
Q4C	8.14	124	1.52	
Q5A	9.54	207	2.17	} 2.11 % G = .06 Rel. G = 3%
Q5B	9.46	199	2.10	
Q5C	8.50	175	2.06	
Q6A	9.68	220	2.27	} 2.29 % G = .07 Rel. G = 3%
Q6B	9.63	228	2.37	
Q6C	9.60	214	2.23	
Q7A	10.00	68	.68	} .71 % G = .03 Rel. G = 4%
Q7B	8.42	62	.74	
Q7C	9.75	70	.72	
Q8A	9.60	110	1.15	} 1.06 % G = .08 Rel. G = 8%
Q8B	9.30	95	1.02	
Q8C	9.18	92	1.00	

According to Remington - Paterson, these are  
No. Spec. Self Seal Core Lead.

Police's board in 1968

Emm  
4/7/68  
12:30 PM

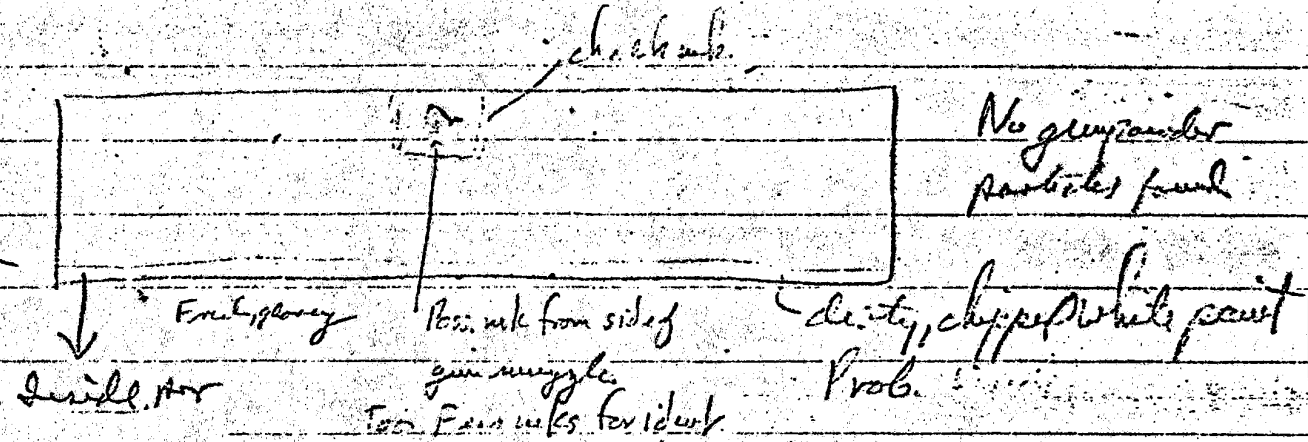
Rec'd by from

4/6/68

T. shirt

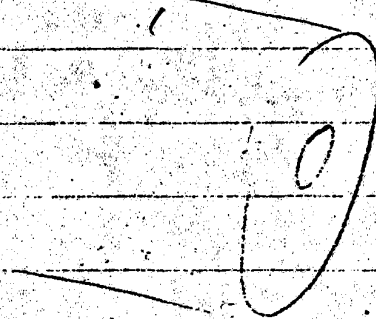
Shirts

Board from window sill



but = type to machine

ink on side of Q2 of muzzle = same as police

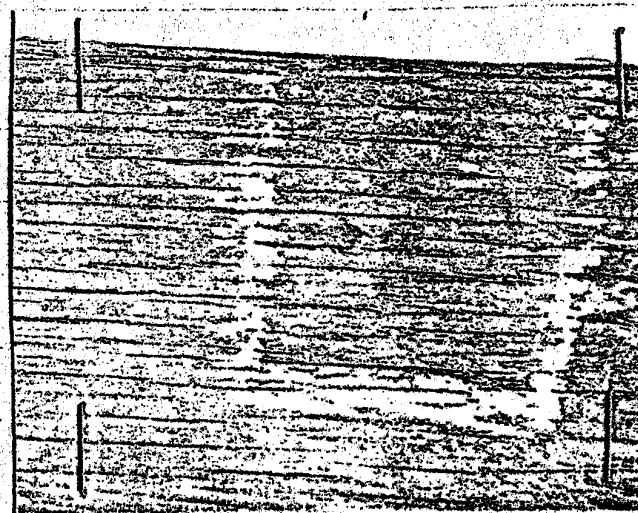
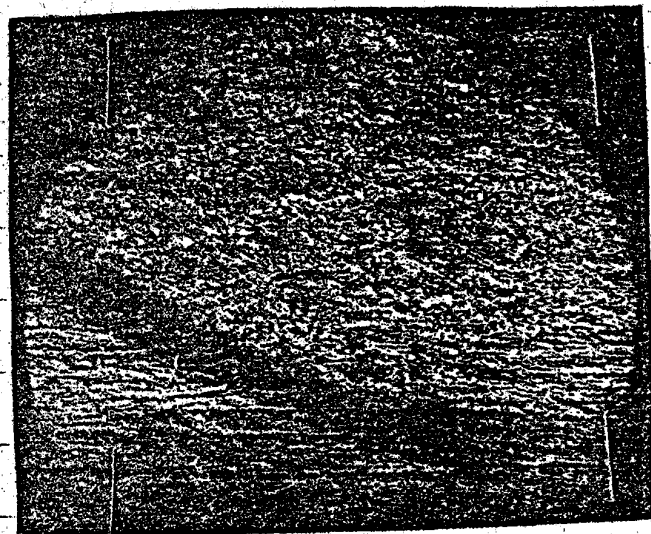


Mrs. not proved by <sup>Q16</sup> tank hammer when by sampling (PC 5422 B2) - Micro M  
Photo of 11 marks on board, 1<sup>st</sup> PM 4/7/68 / R. in attached

Board to

by carrier 4/7/68







FEDERAL BUREAU OF INVESTIGATION  
WASHINGTON, D. C. 20535

To: FBI, Memphis

Date: April 11, 1968

Re: MURKIN

FBI File No.

Lab. No.

Specimens received personally delivered on 4-8-68 by SA  
Memphis

Q69 Undershorts

Q70 T shirt

Q71 Board from windowsill in bathroom

Results of examination:

The undershorts and the T shirt each bears a laundry tag with what appears to be the characters "02B-6." Only a portion of the first character is present on each tag. The Laboratory does not maintain a file of visible laundry marks. No invisible laundry marks were found on the undershorts or T shirt.

The pair of undershorts is small in size while the T shirt is large.

The pair of undershorts does not have a brand label. The T shirt has a "JOCKEY" brand label.

The T shirt label is held flat with a folded piece of 3/4" wide cellophane tape. The piece of tape is about 1" long. One end has been cut, and the other end has been torn.

The crotch seams of the undershorts have been repaired in two places with brown thread. The repaired areas are hand stitched.

No hairs were found on the undershorts or T shirt.

The Q71 board bears a recent dent which could have been produced by a light blow from the muzzle of a weapon such as the Remington rifle, Serial Number 461476

Page 1

RAF:nlb (12)

(continued on next page)

MAIL ROOM ☐ TELETYPE UNIT ☐

Olson \_\_\_\_\_  
eLoach \_\_\_\_\_  
chr \_\_\_\_\_  
ishop \_\_\_\_\_  
asper \_\_\_\_\_  
allahan \_\_\_\_\_  
arad \_\_\_\_\_  
elt \_\_\_\_\_  
ile \_\_\_\_\_  
osen \_\_\_\_\_  
Hivm \_\_\_\_\_  
vel \_\_\_\_\_  
erter \_\_\_\_\_  
e, Room \_\_\_\_\_  
ines \_\_\_\_\_  
ady \_\_\_\_\_

previously submitted in this case. The dent contains microscopic marks of the type which could be produced by the side of the barrel at the muzzle but insufficient marks for identification were left on the board due to the physical nature of the wood. The microscopic marks present are different from the type which would be produced by the duck-bill pliers or tack hammer which were in the blue zipper bag previously submitted. No other marks were found on the board.

No gunpowder or gunpowder residues were found on the Q71 board.

No wood, paint, aluminum or other foreign material was found on the rifle barrel nor were any significant marks found on the rifle barrel.

REPORT  
of theFEDERAL BUREAU OF INVESTIGATION  
WASHINGTON, D. C.

To: FBI, Memphis

Date: April 17, 1968

Re: MURKIN

FBI File No.

Lab. No.

Specimens received

For a listing of the evidence  
see attached pages.



DELIVERED APRIL 5, 1968 BY

MEMPHIS OFFICE

Submitted by Airtel #1 as recovered by Inspector N. E. Zachary, Memphis Police Department in vicinity of 424 South Main Street:

- Q1 Rifle box for Browning .243 Winchester caliber rifle, Serial Number 4744Z5
- Q2 .30-06 Springfield caliber Remington "Gamemaster" slide-action rifle, Model 760; Serial Number 461476, with Redfield telescope sight, Serial Number A17350, with clip
- Q3 .30-06 Springfield caliber Remington-Peters cartridge case
- Q4-Q12 Nine .30-06 Springfield caliber cartridges (five Remington-Peters and four R-A-55) in Peters cartridge box, Index Number 3033
- Q13 Large green and brown cloth

Submitted by Airtel #2 as recovered by Inspector N. E. Zachary, Memphis Police Department in vicinity of 424 South Main Street:

- Q14 "Banner" binocular (Bushnell) 7 by 35, Serial Number DQ408664 (allegedly in zipper bag when recovered)
- Q15 Zipper bag

ITEMS FROM OUTSIDE COMPARTMENT OF ZIPPER BAG

- Q16 Duck-bill pliers and tack hammer marked "MAGNETIC"
- Q17 Box of "BAND-AID sheer strips"
- Q18 Georgia-Alabama Standard Oil map
- Q19 "Commercial Appeal" Memphis newspaper, first section only, issue of April 4, 1968
- Q20 Standard Oil map of the United States

ITEM INSIDE ZIPPER BAG, IN POCKET

Q21 Partial roll of toilet paper

ITEMS LOOSE INSIDE ZIPPER BAG

Q22 Binocular case with instruction booklet, lens cloth and guarantee card

Q23 Binocular box, cardboard

Q24 "Gillette" travel kit purchased at Oliver Rexall Store, Whitehaven, price \$1.89, with razor, lotion shaving cream, deodorant, hair cream and razor blade in dispenser

Q25 Gray paper sack bearing marking "YORK ARMS CO." with receipt dated 4-4-68 in amount of \$41.55

Q26 White and yellow towel

Q27 White handkerchief

Q28 Tube of "Colgate" toothpaste

Q29-Q30 Pair of black socks

Q31 Seven-ounce can of "RIGHT GUARD" deodorant

Q32 Channel Master radio

Q33 Bottle of "BUFFERIN"

Q34 Elastic belt

Q35 Tube of "ERYLCREEM"

Q36 Bottle of "ONE A DAY" vitamins

Q37 Small bar of "Cashmere Bouquet" soap

Q38 Hairbrush

Q39 Bar of "dial" soap, bath size

Q40 Tube of "Head & Shoulders" shampoo

ITEMS LOOSE INSIDE ZIPPER BAG (continued)

- Q41 Can of brown "KIWI" boot polish
- Q42 Can of "PALMOLIVE RAPID-SHAVE" shaving cream
- Q43 Gray-brown button (in sack with beer)
- Q44 Black button (in sack with beer)
- Q45 Toothbrush, "Pepsodent"
- Q46 Safety razor, without blade
- Q47 Plastic bottle of "MENNEN afta" lotion
- Q48 Small bar of "Cameo" toilet soap
- Q49 Small bar of "Cashmere Bouquet" soap, bearing advertisement of Friendship Inns
- Q50-Q51 Two bobby pins
- Q52-Q53 Two cans of "Schlitz" beer, pull tab
- Q54 Plastic "six-pack" carrying device
- Q55 Brown paper sack (containing beer)
- Q56 Small brown paper sack, empty
- Q57 Key
- Q58 Toothpick
- Q59 Metal ring
- Q60-Q61 Two coat hangers
- Q62 Two links from "ADJUST-O" watchband
- Q63 Gray-brown button

Submitted by Airtel #3:

- Q64 Bullet from body
- Q65 Twenty dollar Federal Reserve Note, Series 1963A,  
Serial Number F14002844A
- Q66 Twenty dollar Federal Reserve Note, Series 1963A,  
Serial Number H16164663A
- Q67 Twenty dollar Federal Reserve Note, Series 1963,  
Serial Number F06445143A
- Q68 Fingerprint card for Bessie Ruth Brewer



Results of examination:

FIREARMS - TOOLMARKS EXAMINATIONS

The serial number on the black rifle box, Q1, was determined to be 4744Z5. This box originally contained a .243 Winchester caliber Browning rifle.

The Q3 cartridge case was identified as having been fired in the Q2 rifle. The only marks found on Q3, other than marks made during manufacturing procedures, were one extractor mark which was identified as having been made by the extractor of the Q2 rifle and the marks left on Q3 by the Q2 rifle when Q3 was fired.

The bullet, Q64, from the victim, is a .30 caliber metal-jacketed "soft-point" sporting type bullet of Remington-Peters manufacture which was fired from a barrel rifled with six lands and grooves, right twist. Based on the physical characteristics of the general rifling impressions, the Q64 bullet could have been fired from the Remington rifle, Q2. The Q64 bullet has been distorted due to mutilation and insufficient marks of value for identification remain on this bullet. Therefore, it was not possible to determine whether or not Q64 was fired from the Q2 rifle.

The Q64 bullet is identical in all remaining observable physical characteristics to the 150 grain bullets in the five loaded .30-06 Springfield caliber Remington-Peters cartridges, Q4 through Q8.

Based on physical characteristics, specimen Q64 and the cartridge case, Q3, could originally have been portions of the same cartridge, which would be the same as the Q4 through Q8 cartridges. No marks are present on Q64 of the type which would permit determining positively whether or not the Q64 bullet was originally a portion of the cartridge represented by Q3.

The five cartridges, Q4 through Q8, conform in description to the type of cartridges packaged by the manufacturer in the Peters cartridge box in which they were submitted. Because of the manner in which cartridges are boxed at the factory, it is not possible to determine whether or not the cartridge represented by Q3 or any of the

Q4 through Q8 cartridges were packaged in the same box by the manufacturer.

The Peters cartridge box in which Q4 through Q8 were submitted also contained four U. S. Military cartridges, containing full-metal jacketed 150 grain bullets, different from Q64. The manufacturer's headstamp on these cartridges is "R A 55." The "R A" indicates that these cartridges were manufactured by Remington Arms Company, Incorporated, Bridgeport, Connecticut. Cartridges bearing "55" are those normally manufactured in 1955.

Examination of the four cartridges, Q9 through Q12, revealed no marks indicating these cartridges had ever been loaded into a weapon. The only marks on these cartridges appear to be marks produced by the manufacturer's machines and marks of the type produced by metal-link ammunition belts of the type used with machine guns. The link belt marks on Q9 through Q12 are suitable for comparison with the metal links from which the cartridges were withdrawn. In metal-link belts, each cartridge serves to hold adjacent links together. As each cartridge is withdrawn, a link (which is expendable) separates from the rest of the belt.

No aluminum, screen-type scratches, paint, wood or other foreign material was found on the muzzle or side of the barrel of the Q2 rifle.

No record was located in the National Stolen Property Index or the National Crime Information Center for a Browning rifle, Serial Number 4744Z5, as originally contained in Q1; for the Q2 rifle; for a Redfield 2X-7X variable telescope sight, Serial Number A17350 (which is mounted on Q2), or for the Bushnell binocular, Q14, Serial Number DQ408664.

No serial number which would facilitate tracing was found on the Weaver telescope sight mount and base on Q2. The screws used to secure the sight tube to the mount were "finger" tight. No tool was required to loosen them and no toolmarks of value for comparison are present.

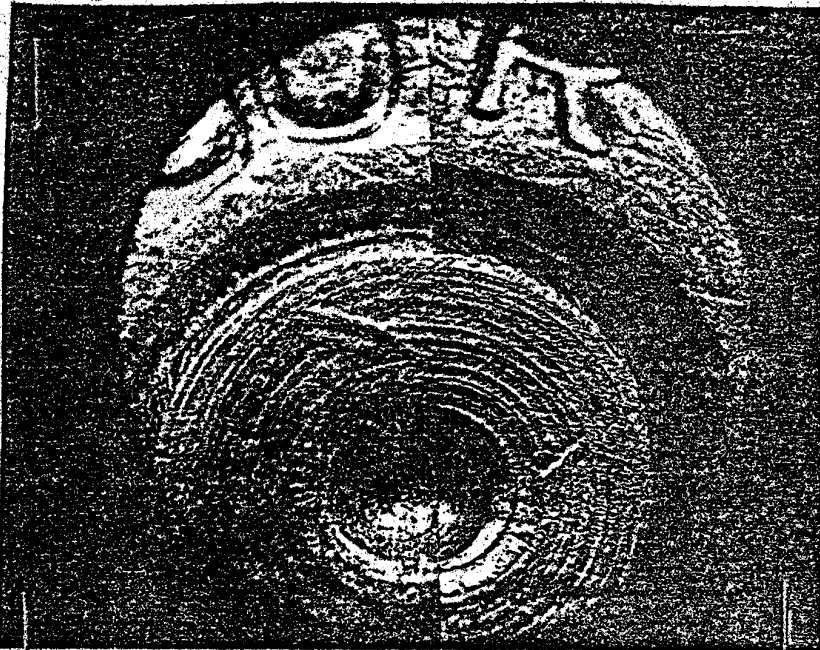
Page 6

(continued on next page)

The magnification setting of the telescope sight tube was "6 $\frac{1}{2}$ x" when the Q2 rifle was received. Therefore, objects viewed would be enlarged to approximately 6 $\frac{1}{2}$  times normal size.

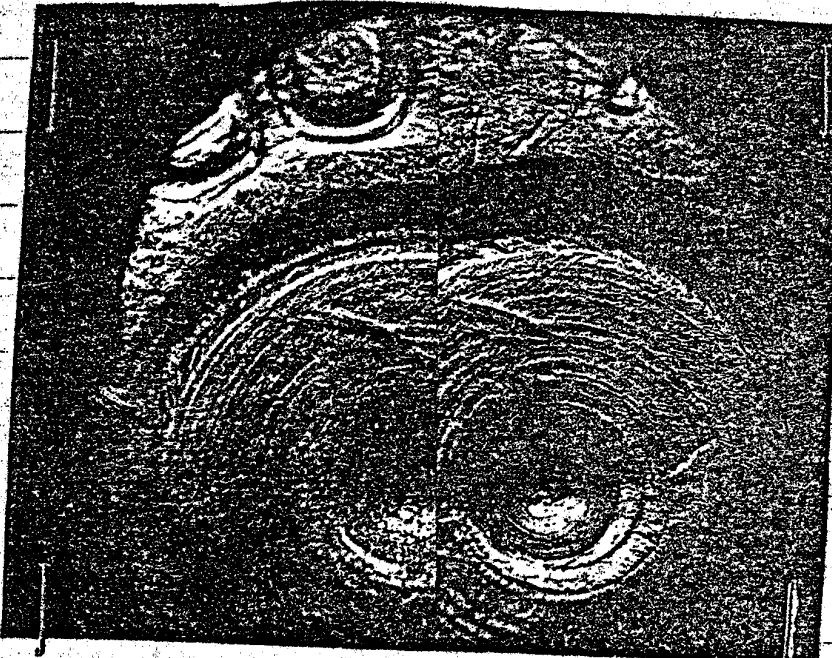
Gen. Notes: Q1. Ident by as from Aeromarine supply  
Q4-Q8 & 4 mol clps Q9-12 in Peters clg bag for  
150 gr P.S.L. bullets (lik 064)



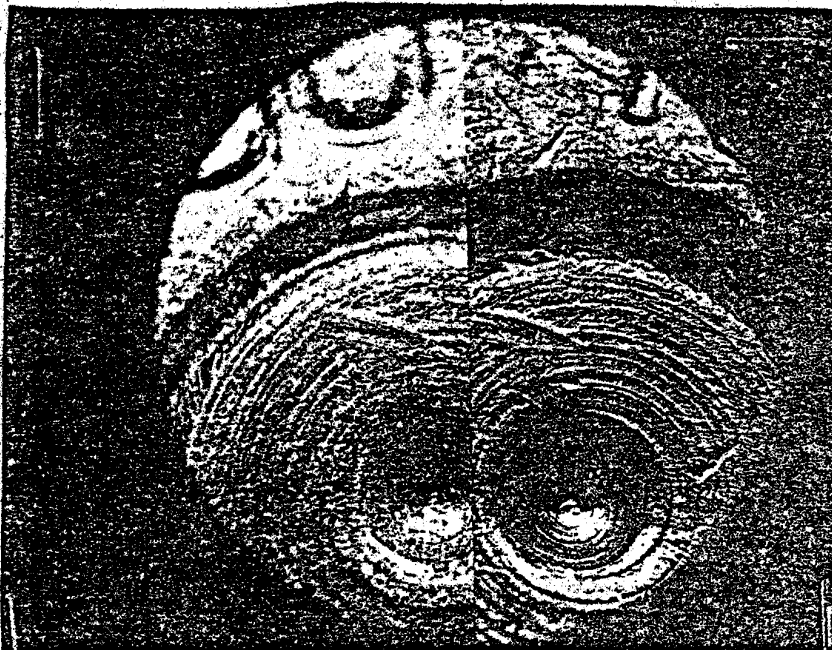


Turning pin - NG  
for comp - purposes

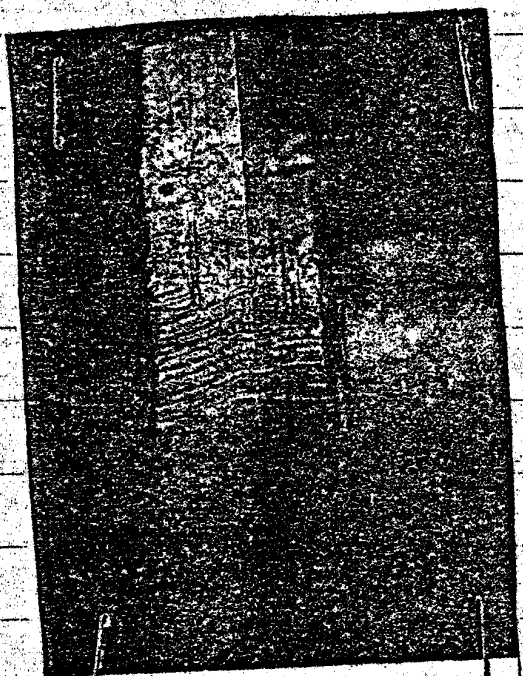
Q3 48mm Q2



Q3 48mm Q2

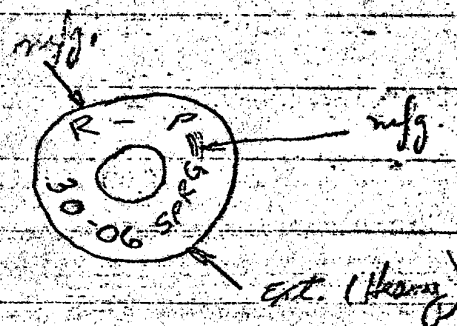


Q<sub>3</sub> 48mm Q<sub>2</sub>



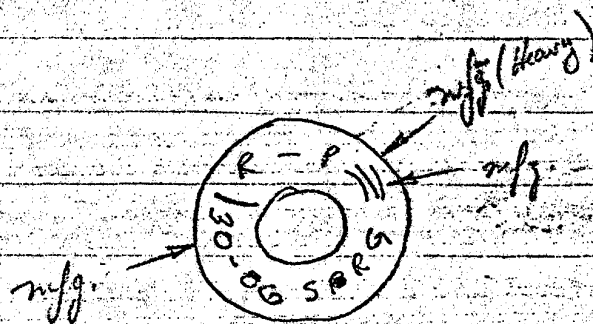
Q<sub>3</sub> 32mm Q<sub>2</sub>

Q4

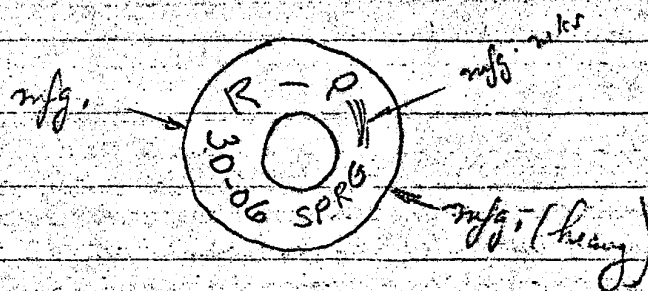


placed into shell holders in lab.

Q5

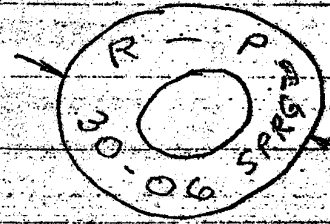


Q6



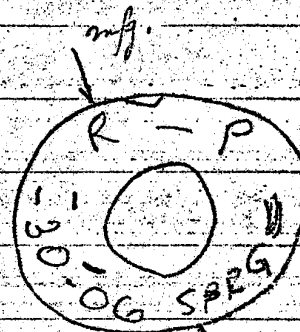
Q7

(very light)  
mfg.



heavy  
mfg.

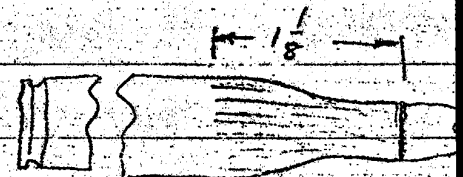
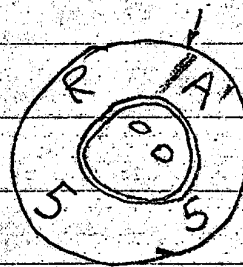
Q8



heavy mfg.

Q9

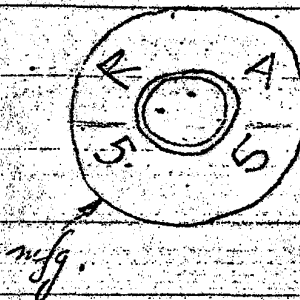
purple H<sub>2</sub>O proofing



heavy mks  
machine gun belt

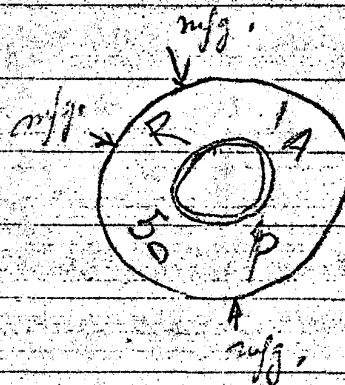
Q10

purple H<sub>2</sub>O proofing  
similar link mks as Q9



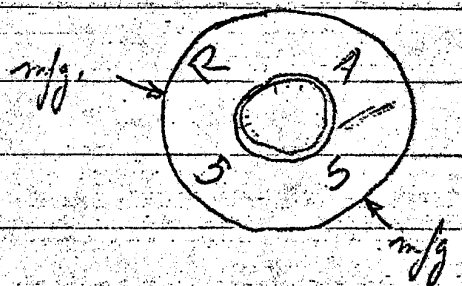
Q11

purple H<sub>2</sub>O proofing  
similar link mks as Q9



Q12

purple H<sub>2</sub>O proofing  
similar link mks as Q9

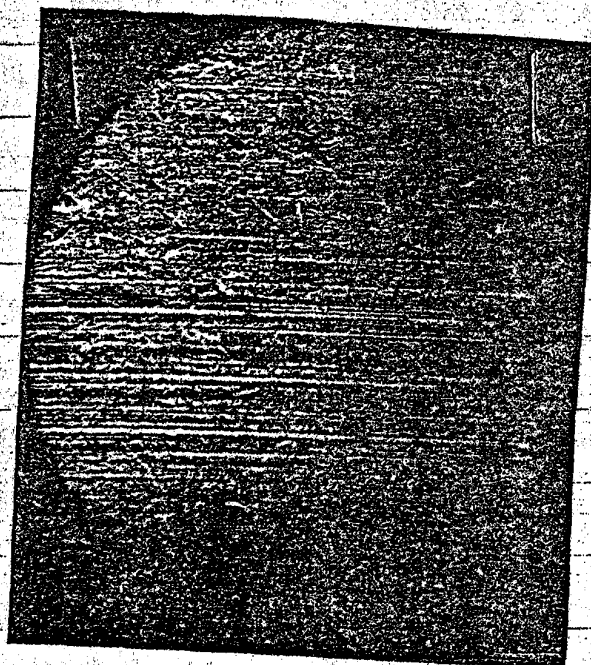




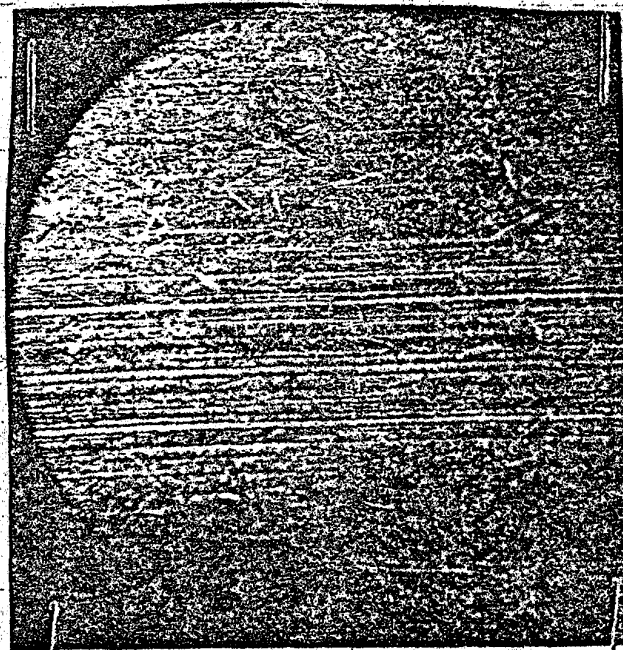


P  
48mm

Q3 Q2



Q3 Q2  
P2  
48mm



Q3 Q2  
P3  
48mm

Q67 MC - c bullet - NC - Q2 mfg - mfg marks of Vol  
Blood and body tissue due to mfg.  
Wt 70.38 (orig. 150gr R-P) Few surface pits  
#L+6 6

Dir Right

Land width .040  $\pm$  .002

Groove width .115

Dia .308 - .3087 - .30 cal.

Length - Mutil

Refly, n -

Savage, Model 219 30-30 110c 30-30 725, 725A, 725B, 725C; Saw. 30-30 99, 110, 110c

Remington, Models 721, 725, 740, 760 30-06 110c

Rem. 30-06 M 722, 760, 600; 30-06 Rem. Mag.

Q64 like bullets in Q4-Q8 & ed by ptg Q3 + etg Q12

Q64 diff from bullets in Q9-12 (military ball)

101 same bullet loaded into 30-06

11 " sold for reloading - 30 cal

# Bullets

# Powder

Q4 wt = 150.75 grs wt = 50.50 grs

Q5 wt = 148.95 grs wt = 50.85 grs

Q6 wt = 149.45 grs wt = 50.90 grs

Q7 wt = 150.25 grs wt = 50.70 grs

Q8 wt = 149.70 grs wt = 50.82 grs  
var 1.80 grs .4 gr var.

Q9 wt = 151.44 grs wt = 49.10 grs

Q10 wt = 151.10 grs wt = 49.50 grs

Q11 wt = 151.50 grs wt = 49.70 grs

Q12 wt = 150.31 grs wt = 49.44 grs  
(Var 1.13 grs) ↑ .6 gr var

Q3 30-06 Spfd R-P cartridge case

Hd side Q3 R Ident Q2 gun

No mks other than ext mks from Q2 and Bif = Flange  
of valve - Some mks under rim apparently by rifling loading  
tools; some <sup>type</sup> mks on Q4-Q8 and Q9-Q12 and  
on clips in 3 boxes this type ammo in test supply lab.

Q3 like clip case portions of Q4-Q8

Q3 and Q64 cd be from same clip - no mks for diff. clip.

Q3 has 1 ext mks - Id Q2

Q3 has rif shell holder or machine mks - loading op.

Q3 has chamber mks - Id Q2

Q3 has no other mks value

Wgmn Rem Model 700 Model

Aeromarine Supply Co.

exchanged for Q2

B/L

Not fired; dismantled in Egypt.

Sgt. A. S. Sabir

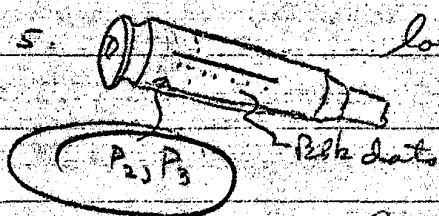
Q<sub>3</sub> Cont. case.

1 - Whed Q<sub>3</sub> R

2 - Black marks show areas ident. w/ Q<sub>2</sub> except BF.

3 - Areas under rim - w/ for ext. - / Q<sub>2</sub> extractor is "horizontal-type"

4 - Rim shows only 1 Extractor mark. See photo P<sub>1</sub>



long scratch ident w/ Q<sub>2</sub> no photo.

See photo



Bussell 7x35

D.P. Bussell Bldg. Co. 639

Bussell Bldg.  
Pasadena, Calif 91107

NR-NCIC 4/5

(Not listed as policy in NSP)

Q2

30-06 Rifle

Item "Saw master" #461476 with scope

to Lister 4/5/68

# A 17350

(with clip)

(NR-NCIC or NSPI)

Gun P... New card except for few scars on stock & barrel & forearm

Scope " " (SN bottom of window adj. plate.)

"Redfield" sticker present on window adj. caps

" " missing from Elev. " "

Redfield Gunsight Co

1315 South Clarkson

(Not listed as ship in 1960)

Denver, Colo 80210

-Standard Weaver Sight mount - 15 ft. scope from any previous sighting. 114 mm. A552419x

Scope serial 6 3/4 X, has medium (prob.) crosshair

Q2 in Box Q1, for 203 in Browning "Safari" scope (List 22" barrel)

with SN 474425 (not 444715 or 444425)

(NR-NCIC or NSPI)

474425 with carb.)

(Citation (Bureau of) shows scope is of 203 in. 2 in. 474425)

No alum. or screen scratches on muzzle of gun

No paint, wood or other foreign material on gun.

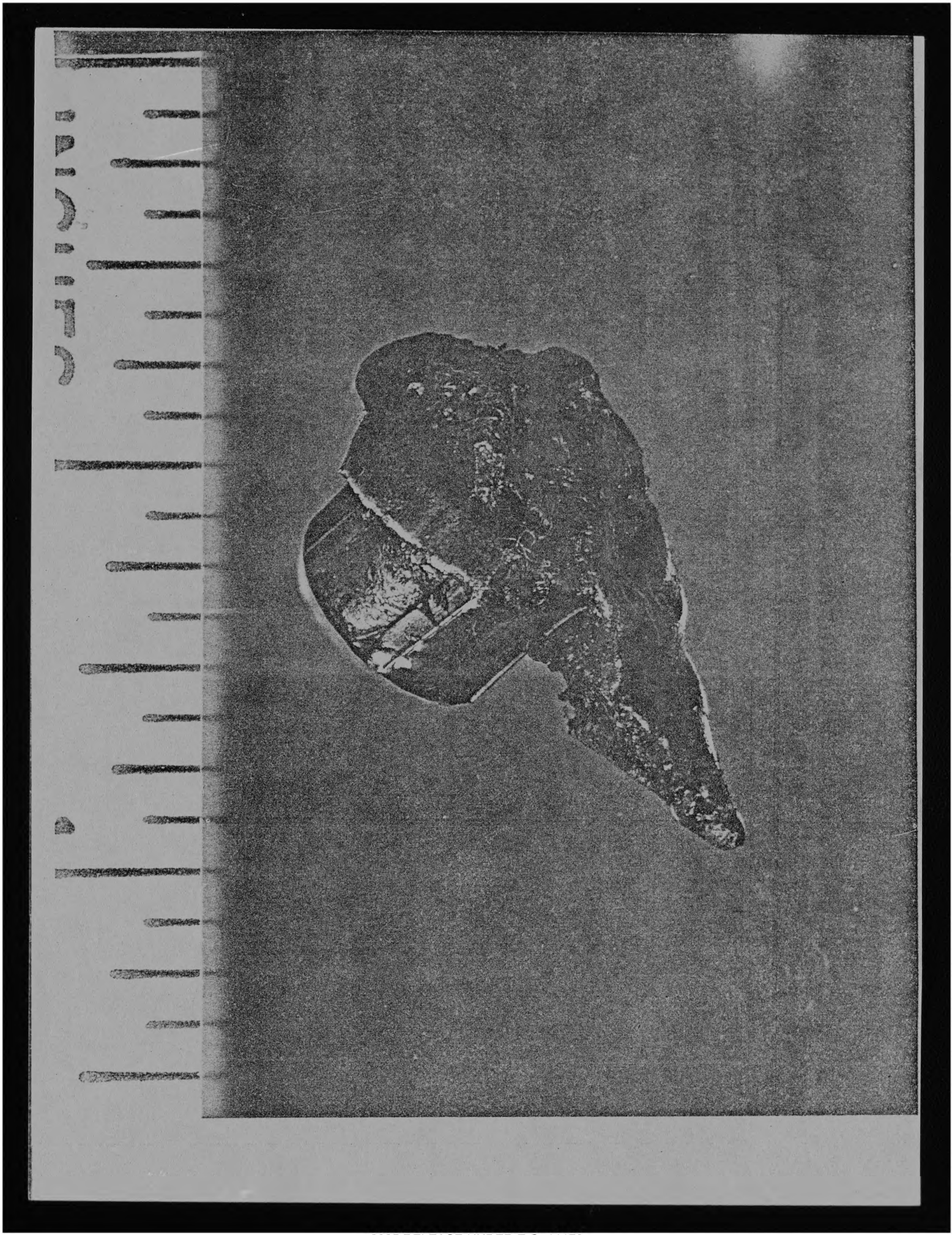
Mfg. ballistic data for 3006 Sp6 150 gr PSP CL R-P  
 ( ~~not~~ listed in 1965 Peters Cat. - Listed in 1963 Cat. Peters  
~~not~~ " " 1948 Peters Cat. " " 1965 Rem Cat  
 listed -> 1955

R-P headstamp origin

		Muzzle Vel					Muzzle Energy					Sight in 200 yds				
Powder spec		100	200	300	400	500	100	200	300	400	500	100	200	300	400	500
150	Hi-Speed	2970	2670	2400	2130	1800	1670	2970	2370	1920	1510	1190	970	1.9	0	-7.5
														22.6		-45.7





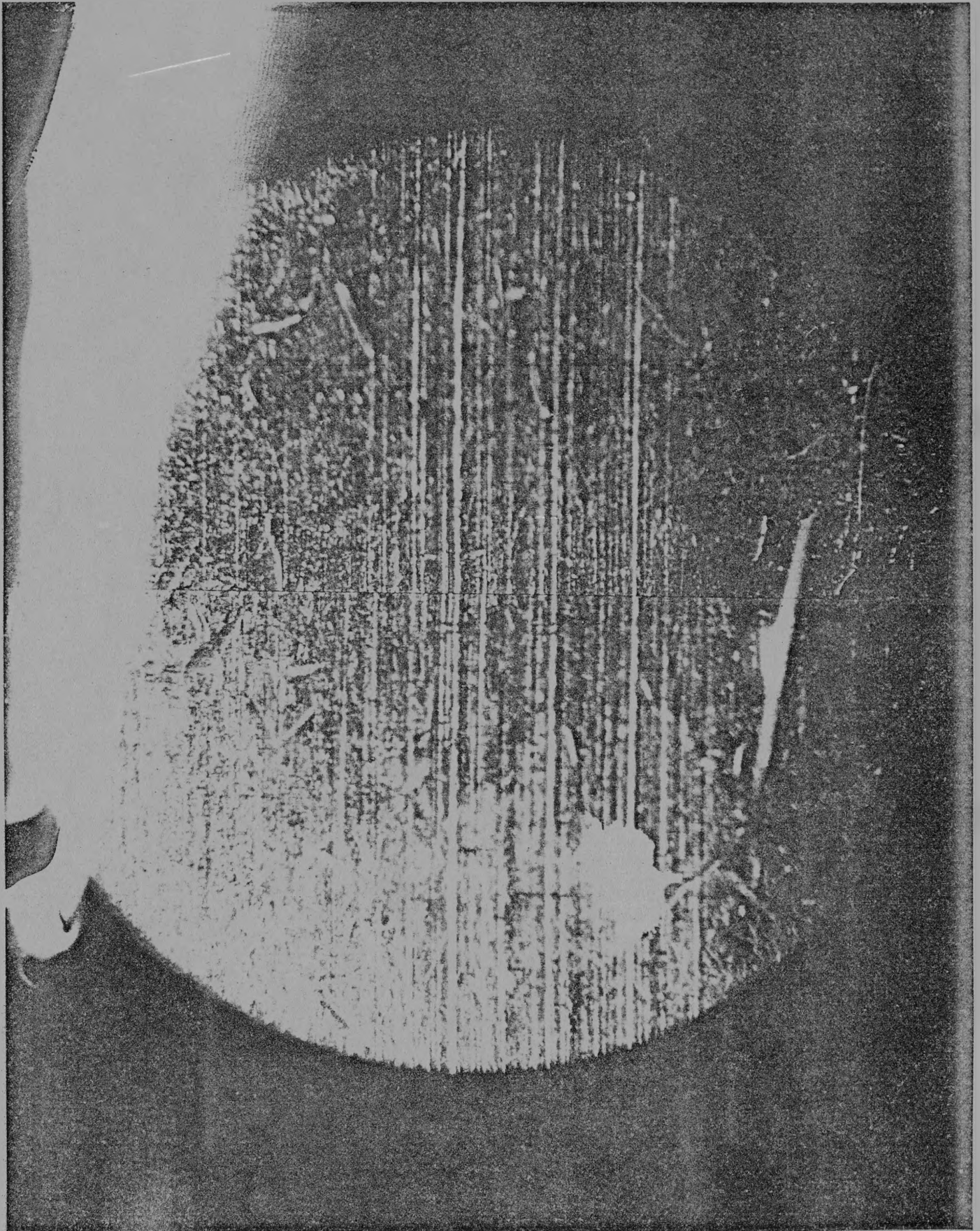


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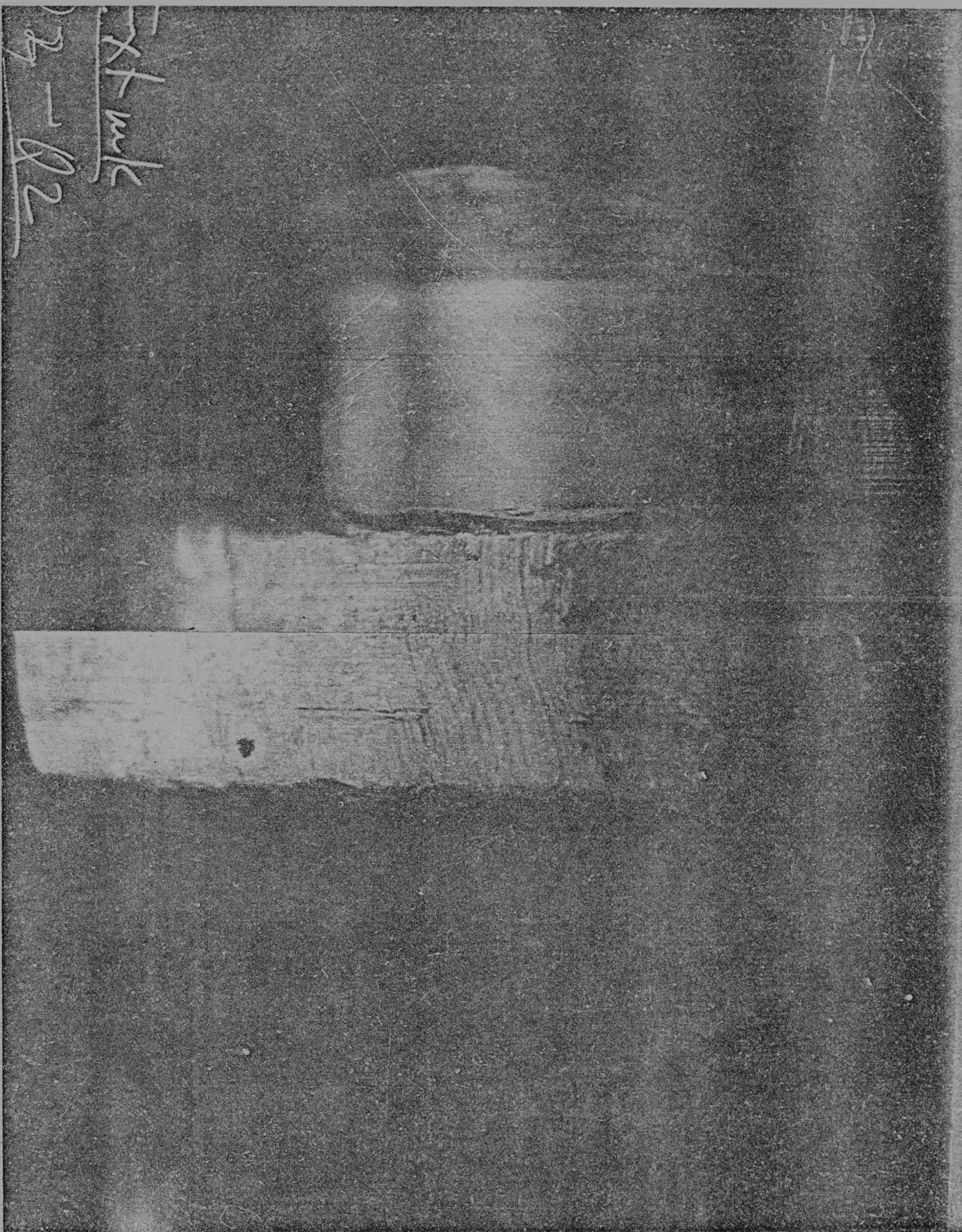


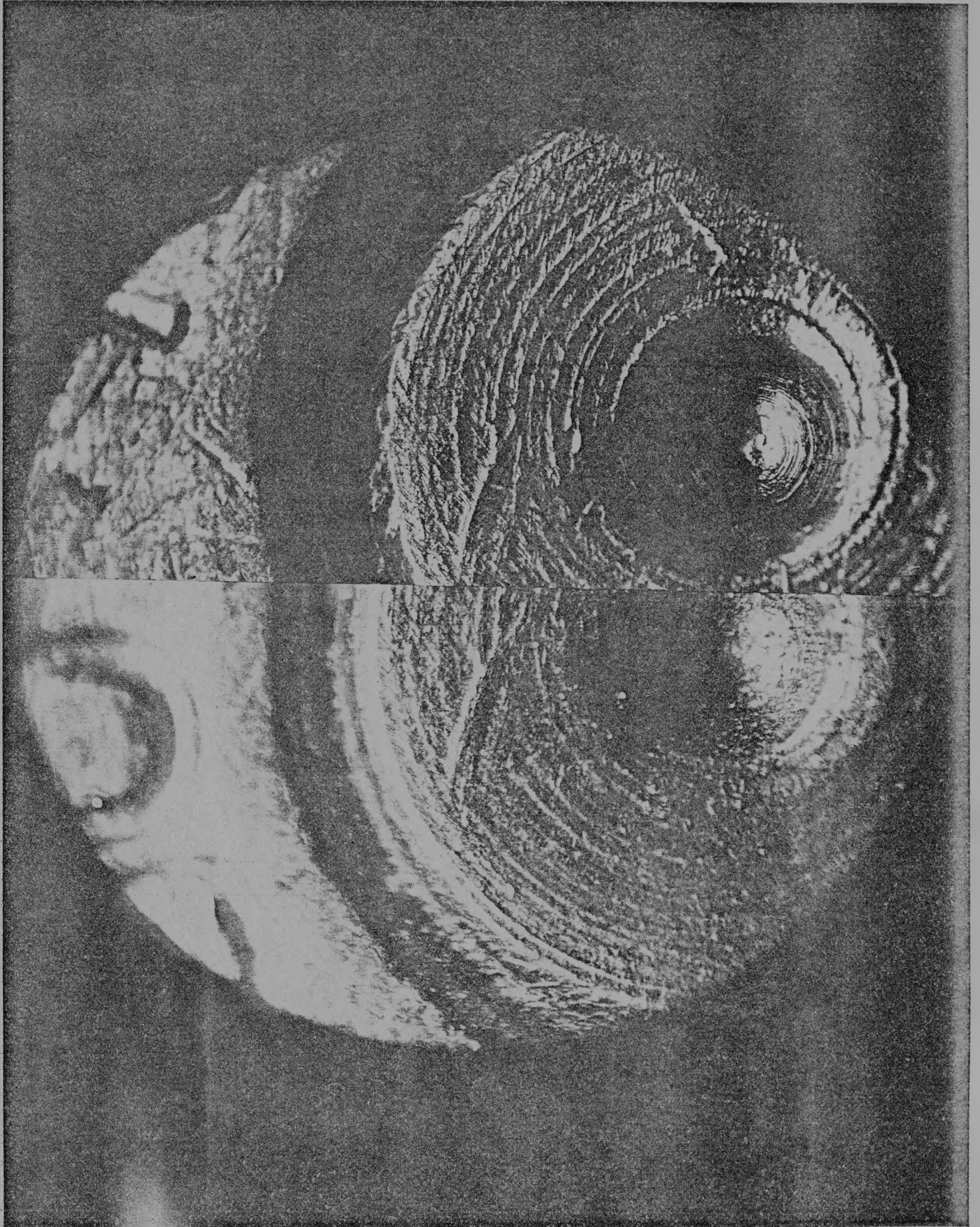
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2025 RELEASE UNDER E.O. 14176

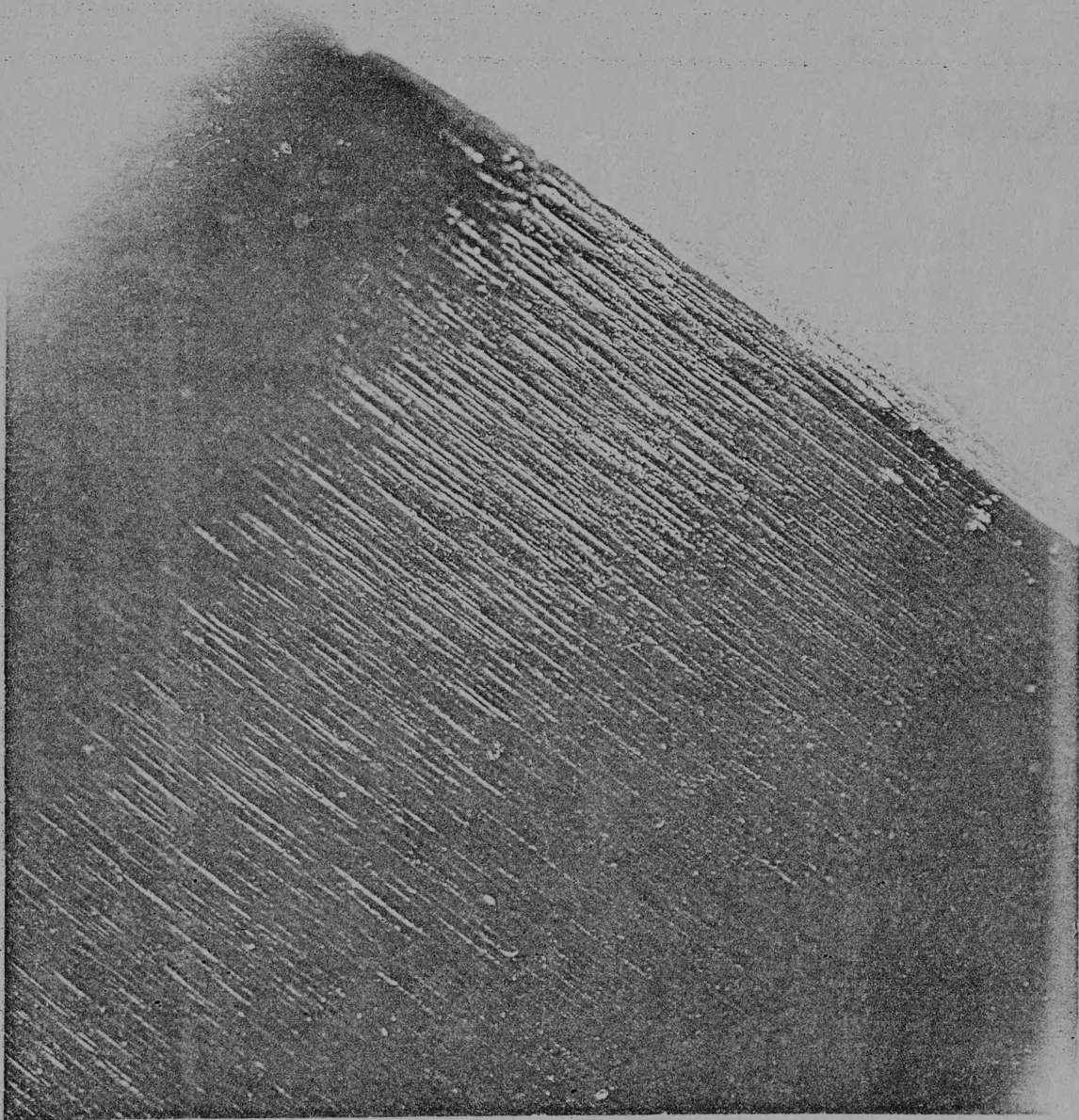






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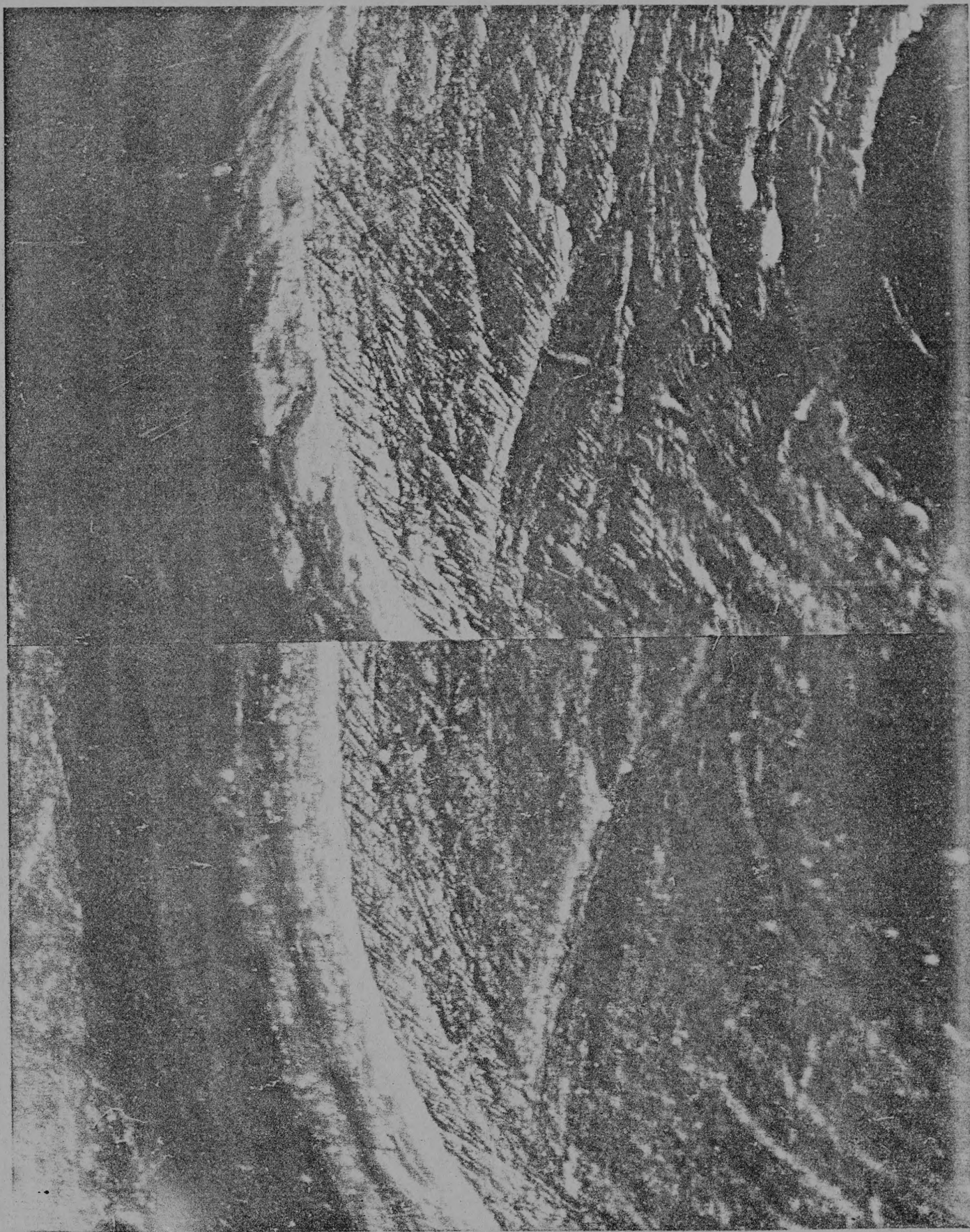


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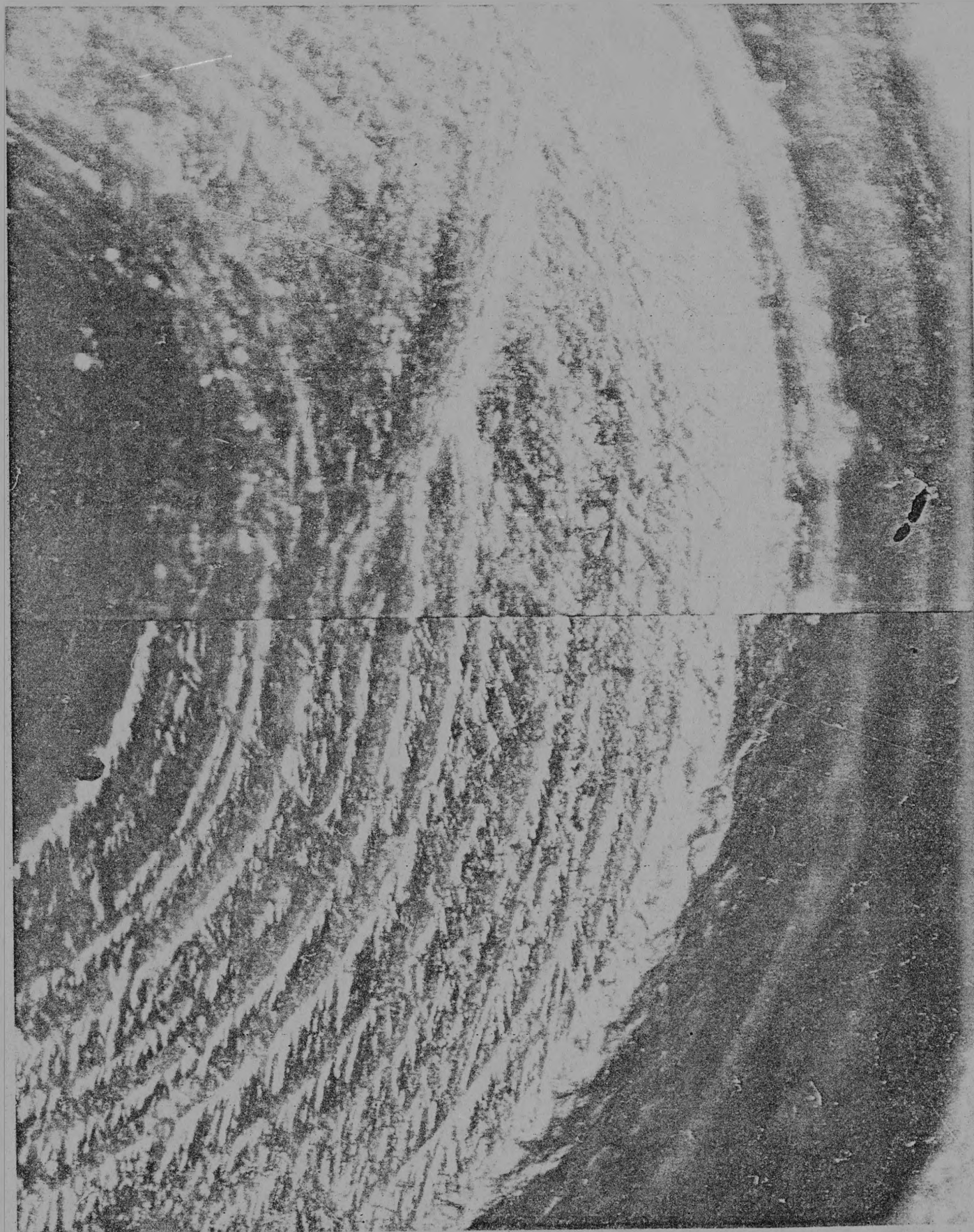


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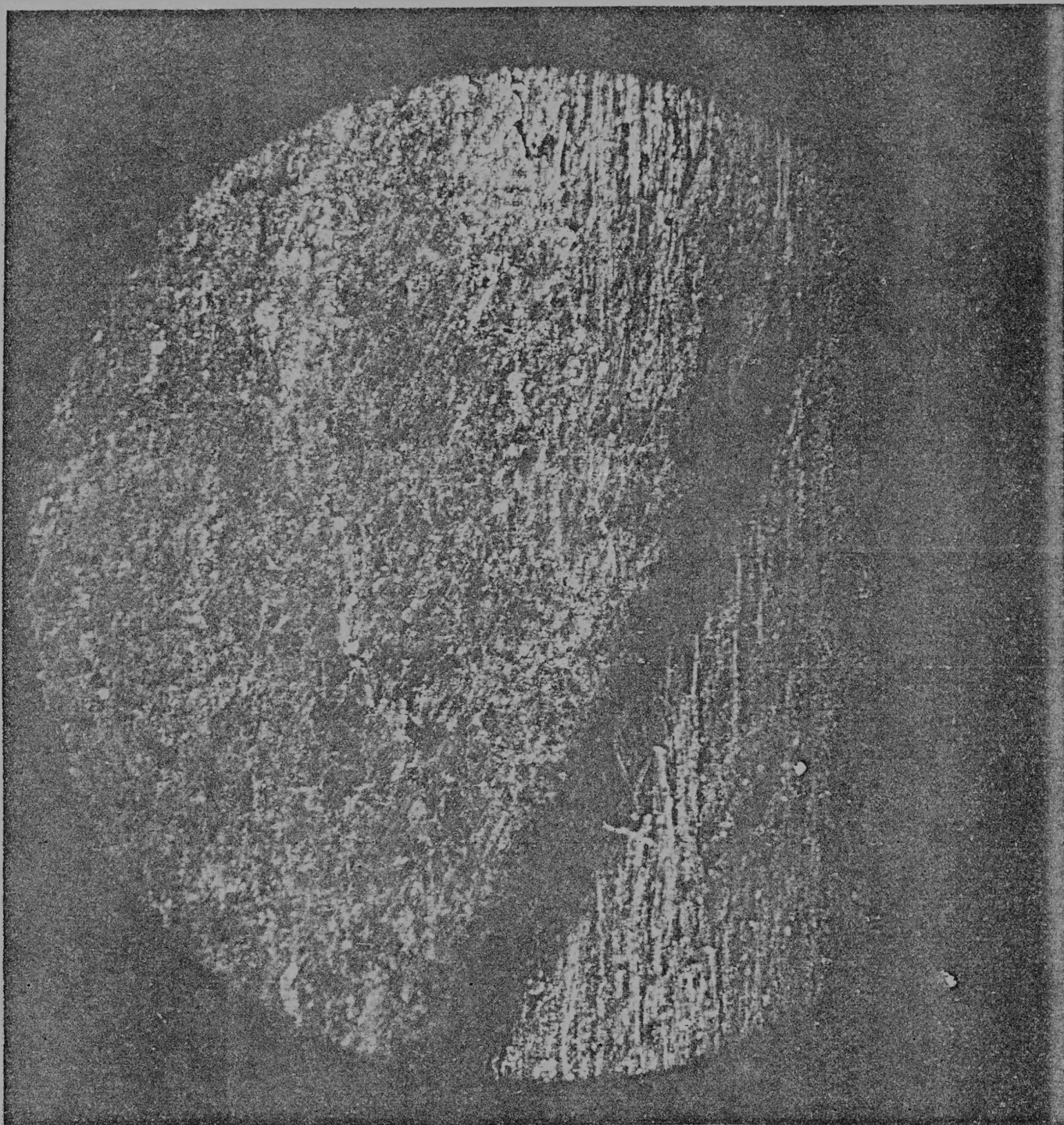
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