

NOTTINGHAM 1973

FISHER GATE

FG 73

SITE NOTEBOOK 16

{ OVEN/KILN H (477)

{ (PREFIX K)

THE OVEN IS FEATURE H (477) IN H
SERIES — ALL ITS LAYERST FINDS HAVE K PREFIX

* It would be simplest to give
all the oven layers a separate
letter prefix rather than re-numbering
and incorporating in Area H.

15/3/74

Although this oven occurs in area H and
is under H stratification, it was separately
recorded by G4.

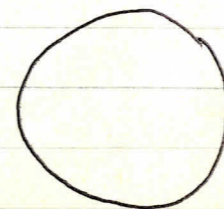
All layers have been given the separate
letter prefix K.

All finds to be numbered

NOTT 73

FG

K



? PLUS ARCHAEOMAGNETIC. →

* Construction c. 1300+.
Destruction when B/S wall
constructed - say mid-14th

* 97 aligns with the
road immediately prior to
Building C. This road has
late 13th pit on it.

SOME GENERAL NOTES ON THE OVEN

(General notes by CY, detailed recording by GY.)

Clearly, this is a corn-drying oven, though possibly
an identification the "corn" may be some other kind
of grain/wheat.

DATING

General
Context

For general dating, the oven may be examined in the
General context of the site-sequence. There are certainly
^{main T.B.} two structures which post-date the oven-filling.

The East-wall post-holes/slot of Building C are cut
into the oven-filling, which is also partly sealed by
Building C clay floor. Provisionally, I'd date Building C
at *c. 1300. Stone-ware (69) which is later than
Building C of course, also cuts the corn-drier.

There is another timber structure, earlier than Building C
(under its floor), which post-dates the corn-drier filling —
if the N-S line of posts in the shallow gully, one cuts
the fill of the shrikehole. *? the date of this, but probably mid-to late 13th.

There are other things too which postdate the corn-drier
filling — stakeholes in it (? a structure); also stakeholes
in the shallow N-S gully, of which 2 penetrate the clay
filling of the shrikehole. Also odd features (sinks) which
post-date Building C, possibly as windbreak for oven (69).
Check plan for anything else.

* provincial first occurrence
of spl. ware - see DH
ditch; nearly all above
silver halfpenny c. 1103

* Green y silt / con
layers in these pits.

3

Also on plan are green-walled P.H.'s which were
cut into the filling of the corn-drier. It is not yet
assigned them to a structure, but they may be the
one mentioned above which immediately pre-dates Building C.

I think it is unlikely that the corn-drier is
inside a structure, though whether wind breaks are
a possibility (cf. Oven (69)). Possibly it occurs at
the rear of a structure to the W, and this is worth
bearing in mind when interpreting the main plan and
T.B. sequence. Most likely, however, the corn-drier is
a free-standing structure in a large open space
because of fire risk.

North of the B/S wall in the area of the corn-
drier there is a thickish layer of charcoal and charcoal-
blackened silt which occurs just above the lowest road
(see Trench B sections). Obviously it cannot be proven,
but this may perhaps be associated with the oven.
The lowest road is difficult to date - it has splashed-
ware on it, so was obviously in use * post-1100, though
this does not date its construction (nor does stuff under
the road, as this is ditch fill and all Iron Age/RB/Saxon)

The corn-drier itself cuts part of the ditch-filling,
but this does not help dating. It also cuts a rubbish-pit
(in W side of trench B) and possibly the remains of
another rubbish-pit, which has slight walls remaining

either side of the urn structure/shelfpit junction (the E. face of
 Ward B, and S. of urn). These are as yet unexcavated
 but should help to give terminus ante quem if there's any
 pot. I think there was some undeveloped Stamford
 found 1971, and the presence of these pits (one had
 fill which had partly re-silted into the structure of the
 con-drier) may well account for any occurrence of
 undeveloped Stamford in the con-drier filling.

Prior to excavation of these pits, and excluding
 any finds from the con-drier filling, we can offer
 a provisional date-range for the con-drier. Probably
 later than c. 1100 (probably same time later) and
 probably earlier than late (13th).

If dating at all by comparable structures, there
 is a similar clay-lined con-drier at the east end of
 the site (S.E. corner of area J) which had a
 should-be-datable pot in it, near the bottom of the fill,
 immediately above first post-use silt. I'd say this
 pot not ~~earlier~~ ^{later} than 1250 but could be ~~later~~ ^{earlier}. Will
 have to check this, as it's an odd combination of ~~late~~ (13th)
 characteristics (pronounced rilling) and spl.-ware (?)
 glazing. [? Similar characteristics to pots from St. Anne's St.
 kiln-site, and ?? Pits Alley's kilns]. Probably this one
 would be c. 1250, +/- 25 to 50 years at most.

I'd say certainly mid-(13). Interestingly this one also
 occurred under red clay floor of a structure which
 could well be contemporaneous with Building C.

I'd say this pot dates
 to late (12) probably, or
 Early (13)

* Check this pot with
 Alan MacC.

5

There is also a quantity of pottery from the filling of the con-drier which has not yet been examined.

From memory, some splashed-ware and Stamford-ware but will have to look through. Possibility of some contamination in the shales, as the large post-pit (64) which cuts the shale hill was not traced till a lower level

[See G4's notes] but may well have come from higher up, possibly from same level as the post socket (see my notes on these posts and the shallow gully).

Any pit in the filling will of course have to be examined in the light of fast-filling or slow accumulation filling of the con-drier itself.

LIST OF LAYERS WHICH BELONG TO "PHASE" A

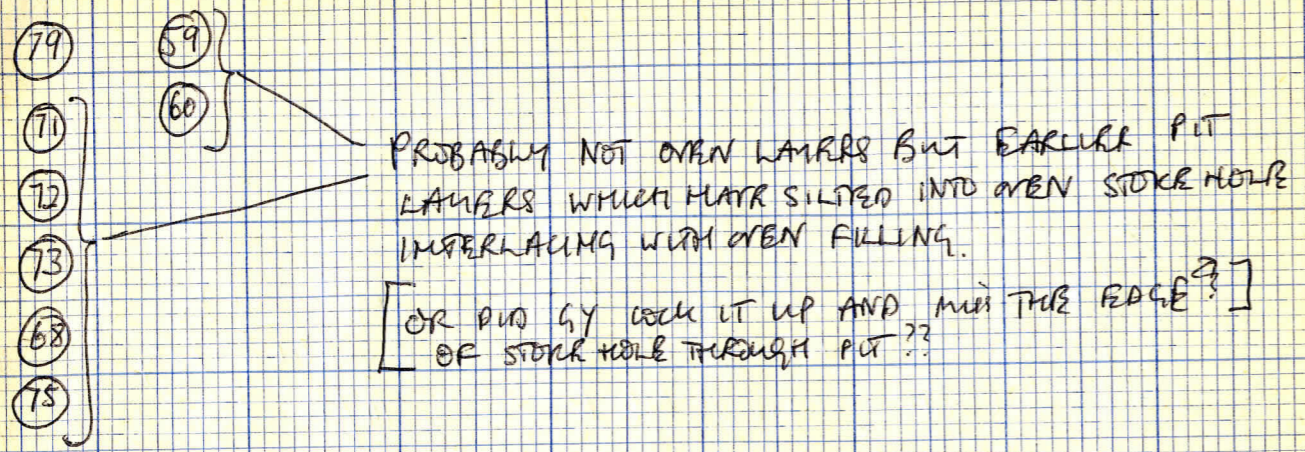


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299	333	369
300	334	370

Side Note
OVER WEAF.

NBI
although 67 has put
59, 60, 67, 68, 71
72, 73, 75 with Phase
A of oven fill, I think
they are probably layers
with the earlier pit,
although they seemed to
interleave with oven fill
at the time of excavation.

LAYERS BELONGING TO "PHASE" BA



M61
 layers 59, 60, 68, 71, 72, 73 are probably part of the oven pit which was on North side of stockhole. But the seemed to interdate, so they must have "silted" over filling layers of the stockhole, although not all of them were like proper silts.

- ie 59 = Sandy
- 60 = Sandy + gravelly/clay
- 68 = silty sand
- 71 = sandy silt
- 72 = silty
- 73 = ? organic stuff
- 75 = organic.

M62
 Layer 79 was the blue/grey oven fill of pit, cut by oven, occurring on North side of oven. Some of layer 79 must have washed into the stockhole of the oven.

Notes.

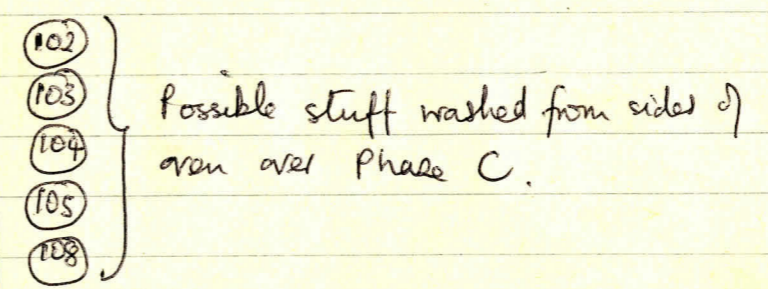
B. IMMEDIATE POST-USE SILTS, BEFORE GENERAL IN-FILLING.

Are there any of these? If so, what like? Should be silt or sand layers — i.e. washes from natural (yellow sands), grey to black thin silts (from silt in oven), reddish v. sandy silts (clay washes), plus any possible washes from exposed grey pits. All might contain bits of red clay (raw) and/or smallish lumps of hard clay (doubt).

Should occur immediately over first lot of seeds. Either under or over collapsed dome, depending on when it collapsed and whether it collapsed in one go or in several goes.

If dome occurs directly on the grain/seeds it means the seeds caught fire and the dome collapsed all at once. Alternatively, seeds might have burnt etc. then the oven stood for some time before the dome collapsed (if so, there should be silts as above under the dome but over the seeds.)

LAYERS BELONGING TO PHASE B.



PHOTOS =

LAYERS WHICH BELONG TO PHASE C

(99)

(107)

(109)

(112)

~~(122)~~

(124)

(106)

(117)

— although under some of (116) I think this layer should go with phase C as some (116) could have slipped over it. (116) was too thick to be a subsidiary layer of seeds (117) is with phase G.

(45)

(98)

(114)

~~(105)~~

~~(108)~~

~~(104)~~

~~(103)~~

~~(102)~~

~~(150)~~

C. PUTTING FIRE OUT

Assuming all the seeds had caught fire, and they tried to quench the fire, there may be stuff immediately on the seeds if they throw it there. Should be a totally different sort of stuff — should be distinct from pits, as there should be nothing round about it could have washed from.

would probably be a pure river sand (eg. with sand).

It should occur UNDER the collapsed dome as they couldn't try to dunn the fire after the dome had collapsed.

PHOTOS =

LAYERS WHICH BELONG TO "PHASE" D

- ~~16~~
- ~~25~~
- ~~29~~
- ~~31~~
- ~~33~~
- ~~38~~
- ~~44~~
- ~~46~~
- ~~47~~
- ~~49~~
- ~~51~~
- ~~94~~
- ~~96~~
- ~~100~~

(93) = MAIN DOME COLLAPSE OCCURRING OVER PHASE C.

(100)

(99) contains lumps burnt daub.

(98) " " " "

94 Main Dome collapse.

D. COLLAPSED DOME

Should be fired clay/daub with water marks. May occur in lots of layers, so mention all them as a separate list.

Where does the MAIN collapsed dome occur?
OVER C?

or immediately OVER E.

List the main collapsed dome layer(s). Be careful about confusing with collapsed sides! Actually, nearly all fired clay should be done as the sides aren't fired, except near the bottom.

* NB. The main deposit of the collapsed dome D in fact occurs over C.

This means there is a sand deposit (putting out fire in the con itself, not putting out primary heat source) over the main grain deposit + collapsed wood frame, E and F, before the collapse of the dome, D, occurs.

PHOTOS =

MAIN CORN DEPOSIT

- | | |
|-----------------|------|
| 115 | 116 |
| 116 | 118 |
| 116A | 119 |
| 118 | 134 |
| 119 | 136 |
| 128 | 128 |
| 134 | 1155 |

SUBSIDIARY WASHES OF CORN/SEEDS

WITH B LAYERS

WITH C LAYERS

? Some 116

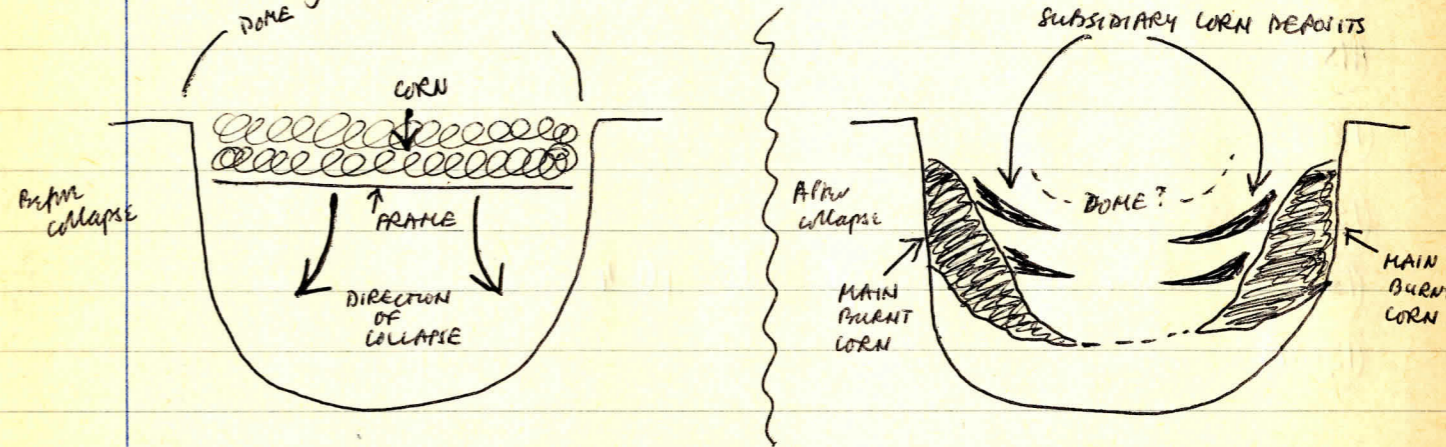
116A

Patch of seeds OVER 109

E. THE GRAIN/SEEDS

← ALSO SOME LOOSE "SEEDS" IN H

Probably I would expect one thick layer all round originally, except at stoker's entrance. I would imagine it piled up the sides as it would have collapsed that way, assuming that there was a frame which bent & collapsed.



May not join in the middle.

There would also be a number of subsidiary layers of corn, probably starchy patches, which would wash off the initial main deposit during the initial silting B. Should occur interbedded with layers of B (or even with layers of C). Maybe under / over D, depending how it collapsed

PHOTOS = MAIN CORN
SUBSIDIARY CORN

LAYERS BELONGING TO "PHASE" F

THE WOOD ITSELF

(115a)

(115b)

(115c)

(115d)

(115e)

(121)

(135)

(134)

(136W)

Some wood is amongst seeds of (134)

IN WHAT LAYERS DOES IT OCCUR?

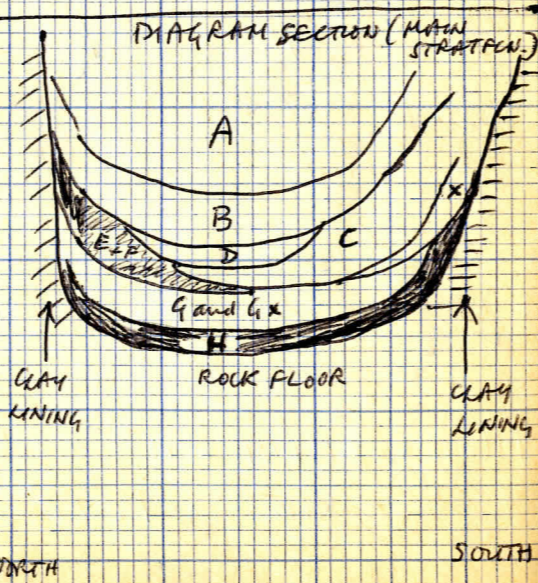
* Some wood in seeds (134)

(135) in (118)

LAYERS BELONGING TO "PHASE" X

(110)

(111)



F. THE FRAMEWORK / DRYING TRAY

The grain (main or subid.? probably main) contained substantial carbonised wood (not being charcoal). Couldn't be the heat source, so may well have been a drying frame UNLESS they deliberately fired all the corn with extra wood.

Logically this should have occurred under E, but may have seemed to be in it, depending on how it collapsed.

If there's high charcoal in the main grain deposit, it could suggest a wickerwork drying tray with steeper wood-frame sides (or even legs! If legs, should be under main grain when followed to ultimate extent.)

Some high charcoal may occur in main grain where it directly under fire source. Please distinguish which.

PHOTOS =

X. EXTRA DEPOSIT

There are some layers just inside the oven pit, S. side, which occur directly under C over G and Gx where E and F do not occur. Thin silvery ashy-colored (but not ashy) and a charcoal-blackened sand, sloping steeply down one side. May belong to group C but more likely to G and Gx. Probably ash and charcoal blackened by wash from H with which it is unambiguous as H also slopes steeply down one side at this point.

LAYERS BELONGING TO "PHASE" G

- (117)
- (120)
- (127)
- (133)
- (138A)
- (138B)
- (139)
- (140)
- (141)
- (142)
- ? (151X)
- (129)
- (130)
- (131)
- (132)
- (125)
- ? (150)
- (126)
- (123)
- (122)
- (170)?

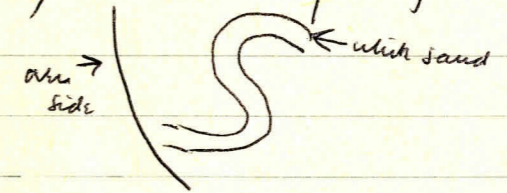
G. PUTTING FIRE OUT (cf. C)

C may occur over main grain, depending how they did it.

G should occur under main grain — if it does, it would suggest attempts to down the fire before all the grain also caught fire and burnt to a cinder, and before the frame/grain collapsed.

Should, like C, be layer(s) from a "foreign" source — eg. white sands, as opposed to yellows etc. May be burnt to some extent, thus being white tinged with any range of colour from slightly reddish brown to dark purplish black, depending on temperature. May also contain blackish marks from the corn etc. if they used water also to down the fire.

[There are odd layers of white etc. in odd configurations — phase describe — possibly reminiscent of being shovelled in from the stockhole, eg.



I would imagine most of these layers were originally all white but burnt to varying degrees. Should all have similar texture.

PTD.

PHOTOS =

G₁ CONT.

Could well have kept buckets of sand nearby, to put fire out. In this case, almost certainly used to douse the fire when it got too hot, either before or after the grain caught fire.

For dousing the fire before collapse / grain-fire, should be under E/F

For attempts to douse the grain itself, should be over E/F (see C) possibly with other layers (silt or grain collapses.)

* Consider they might always of have used sand as a means of temperature control. Should it not and partly cover the heat source if the temperature gets too high. This may have occurred in this case as an alternative to or in combination with dousing a totally out-of-control fire.

G_X - TWO CHARCOAL

There is an extra layer of fine charcoal which occurs in group G. Is this a subsidiary collapse of heat source, if it was piled anywhere? Or could it be debris from collapsing (with) frame? Also contains 1 or 2 lumps of fired clay.

G_X

(137)

LAYERS BELONGING TO PHASE "H"

(151)

(147)

LAYERS TRAMPLED FROM H

? ChCl which is spread in patches over (152)

SEE L - Extra "seed" deposit between G+H

See notes on (147) + (151). We kept all H - charcoal, odd deposit, & same grain. Needs thorough sifting or analysis.

H. THE HEAT SOURCE

Should be under G but may have G mixed with it. May occur under E/F initially, towards the shoreline, if G occurs largely at the "back" (where it would be from shovelling).

H should probably be TURF CHARCOAL. May contain some ash; may contain some mixture of G; may contain some seeds which slipped through the hay. IT DOES

* SEE NOTES ON (147) + (151) IN BOOK 17 - R. Brazier etc.

? Is it a brazier? or HEAP on the floor? how arranged?

* all layers down to H should be the result of one firing as normally would remove the grain when pushed - but the grain is still here. H itself could be the result of more than one firing, depending on how many times the urn was used (are they one-off jobs?) and whether it was cleaned out.

May also be tramples of H through the shoreline.

PHOTOS

LAYERS BELONGING TO PITFALL J

(144)

?

J. ANY ASH?

Should be just over H / or in H / or under H.
Shouldn't be much (if any) from charcoal.

PHOTOS —

LAYERS BELONGING TO "PHASE" K

- (91)
- (152)
- (153)
- (154)

CONSTRUCTION LAYERS BEHIND THE CLAY LINING.

- (41)
- (42)

K. CONSTRUCTION LAYERS

Are there any? Most likely to be clay samples from constructing sides/dams. May be slight silts (yellow/grey) over or under K, depending on circumstances.

K should occur under J

* There may also be construction layers behind the lining, occurring between it and natural, as packing. This may well contain residual pottery, depending on the source of the material.

PHOTOS =

LAMBERS BELONGING TO "PHASE" L

(145) — SEEDS

(146) — SEEDS

L — EXTRA DEPOSIT

Occurs between G and H.

There are some extra "seeds" — these occur against the clay lining on the N+S sides of the area and underlie all layers except the fire-source H (if H is represented by (147) + (151)).

The seeds in question are (145) and (146).

[Don't find any (145) as depicted in with (146) of which there are several holes — (145) was only a scratch — (145) + (146) are stratigraphically =, though not same layer as not continuous]

There are two possible explanations for (145) + (146) —

(i) Arises from previous findings — if so, H has to be considered as more than one firing.
(could be — see (147) + (151))

(ii) Grain that had slipped through the drying tray as postulated. Presumably before any attempts to down the out-of-control fire (no white sand of G occurs between L + H, unless re-interpret (147)/(148)/(149)/(151))

if then I think (ii) is more likely. A third possibility is ambiguous stratification. Examine G's notes on deposition of white sands to see if it's possible that (145) + (146) could postdate them, but don't only because white sands didn't occur where (145) + (146) ~~was~~ existed.

Eg.



Diagram of possible ambiguity

* Must have been during firing if at all, as the oven contains carbonised grain.

18
GENERAL NOTE (Pending analysis of GY's layers, when more detailed analysis can be done.)

As this oven still contains corn, we can only assume two things

- * A. Abandonment for some external reason (War/Death/Catastrophe) or
B. An accident during firing.

To me, B seems the most likely, as temperature in these structures would be difficult to control (unless perhaps there was a door arrangement to control the draught — cf. Booths G. oven — possible with stone double PTH's unless they're just a frame round which the dome is constructed — the other clay lined large FG oven looked like frame posts rather than doorposts).

With this oven it seems to me the fire got out of control. There may have been attempts to douse it, either before or after the corn caught fire (or both), in the clean white sands. Then the corn (and its drying frame) caught fire and collapsed. Possibly the dome collapsed simultaneously, or a little later. Are nasty burn-up.

An alternative to consider is the dome collapsing first and that pushing the corn down to the heat source, thus causing the fire. This however would not explain the occurrence of the "foreign" white sand deposits.

Should get a good analysis of a fair sample of a medieval crop.


* NB 13/3/74

Alan has one box of grain number (128)

To take to CBA Group 14 meeting on Sat. to show Birmingham botany clubs - to ? do it.

* RETURNED 20/3/74

I think alternative possibilities - eg. deliberately burning discard grain - are unlikely - are wouldn't we see an area to do so. Report on the grain should confirm.

Note the grain also contains other seed-pods. A weed or double crop?  with round seeds in ? CORN SALAD
w ???
CORNFLOWERS

The grain should be identified.

Examined for other seeds/weeds.

Examined for insects.

Examined for diseases.

? Pollen analysis if possible with carbonised material Quantitative as well as qualitative analysis.

Full qualitative analysis (crop-type, soil-type, nutritional value etc.)

Grain shows ears and possibly sheaves.

REPACKED NOV. 74 - 32 BOXES

So far we have packed the grain in small boxes 12" x 6" x 2" (internal). Say average 3/4 full at a conservative estimate - some more, some less.

So far we have

MG Box 1 = 11 small boxes

MG Box 2 = 10 small boxes

MG Box 3 = 6⁺ small boxes

MG Box 4 = 6 small boxes

Alan MacC. has 1 small box

(34) Plus any from H.

RETURNED ✓

~~plus any seeds in bottom H~~
plus any seeds in bottom H

* PLUS any "loose seeds" in bottom H (147) + (151) - all this deposit kept in in any bags to sift/analyse

* PLUS 3 BOXES
FROM 146
MAINLY "LOOSE" SEEDS
(NOT EARS ETC.)

* There will also be a few
seeds in bottom gunges
(147) (151) (151A) —
All kept but not sifted etc.
Should be gone thru
probably by whoever does
the seeds.

15/3/74

Now the area is fully excavated we have
34 of the small $12'' \times 6'' \times 2''$ boxes full of grain.
On average, all $\frac{3}{4}$ full (estimated).

We've also kept All deposit H (the big source) = charcoal
in black gung which probably contains a small % of seeds.
This deposit should be thoroughly sifted for seeds [NOT BY US!]
and also analysed. Also the big-charcoal should be
dealt with as a group.

* This totals 31 small boxes.

|| 3 to add to
total

12 small boxes = 1 cu. foot

so we have $\frac{31}{12} \times \frac{3}{4}$ (for unfull boxes) cu. ft.

$$= \frac{31 \times 3}{12 \times 4} = \frac{31}{16}$$

say approx 2 cu. ft.

1 gallon = $277\frac{1}{4}$ cu. ins.

2 galls = 1 peck

8 galls = 1 bushel

OUR TOTAL = $2 \times 12 \times 12 \times 12$ cu. ins.

$$\begin{array}{r} 144 \times \\ 24 \\ \hline 2880 \\ 576 \\ \hline 3456 \end{array}$$

= 3456 cu. ins.

approx = $\frac{3456}{277}$ galls.

= $12\frac{1}{2}$ gallons.

$$\begin{array}{r} 277 \overline{) 3456} \quad (12\frac{1}{2}) \\ \underline{277} \\ 686 \\ \underline{554} \\ 132 \end{array}$$

TOTAL

12 $\frac{1}{2}$ gallons

and this is improved!!

PLUS 3 small $6'' \times 12'' \times 2''$
boxes

PLUS Any sifted from
deposit H

20/3/74

for the grain —

How deep by

M. C. Pearson (was a senior lecturer)

School of Biological Sciences
(Pembury),

Univ. of N. Ham.

(was a friend of Bill Cummings, who's a geology
lecturer and interested in Arch. — did
this section of Castle Stone axis etc.)

could say they put in it at one go
approx. 6 pecks

= approx 1½ bushels.

GRAIN

Must be wheat or barley, I think.
The other pods may be corn salad?
or perhaps cornflowers?
or even poppies?

Alan suggests Carbon 14 dating on the wood.

Scrap there are some v. good fired points in the (13th)

to give close dating.

* Probably best done on the wood from the ? collapsed frame and on the two posts at the entrance, which are part of the structure. ? also on the firing charcoals.

Look up THERMOLUMINESCENT dating as opposed to ARCHAEOMAGNETIC

✓ - ANY SAMPLE WILL DO - NO SPECIAL WAY OF TAKING.

* Possible reasons for not doing archaeomagnetic [SEE SC. IN ARCH. - Clay must have been heated above CURIE POINTS - 580° + 670°]

A. Clay is raw. Hardly any signs of firing, except at junction of over-pit + skeleton (dome is fired but not in situ so useless).

Even the lump of most fired stuff that fell off by over-pit (skeleton junction) probably no more than 500° - 600° C. (A.M. estimation)

[Preferred for Archaeomag. = 800° C +] [CRITICAL = 580° + 670° - MUST BE MORE THAN]

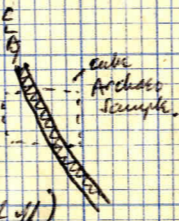
B. Impossibility of getting good samples.

(i) near a hollow

(ii) sides are sloping steeply. So even if could get a horizontal within the frame wouldn't be much clay.

Same applies if do a vertical.

Compan readings just about possible.



C. Clay is only about 2" to 3" thick, probably less (bit that fell off)

Also has wider frame behind - would this carbon affect the Archaeomagnetic?

D. Even with hard pattern, an area couldn't get a good symmetrical pattern range.

E. Only poss. if it was a lot deeper with hard stuff at bottom.

TO DO WHEN ALL FILL IS EXCAVATED

Detailed notes on the structure, eg.

Domed once or twice? ✓

Posts? ✓

Areas of heat? ✓

Weakness in the clay lining? ✓

How to keep up frame? ✓

SH's round outside? = dome or? = part of the wider framework. ✓

Fired once or twice? ✓

When fired? ✓

Fired the lining and/or dome before use? ^{or} Porphy grain in situ? ✓

* SAMPLES FOR ARCHAEOMAGNETIC. X NO - NOT FIRED ENOUGH

Some notes can be done before dismantling. The rest during dismantling.

* C. 14 dating

* Thermoluminescent (?) as best samples of most-fired clays.

NB. of thatford Pot-kilns for the use of
withies in strengthening framework.

HOW THE OVEN WAS CONSTRUCTED (Provincial - see sketch)

IN
GENERAL
TERMS

Cut hole in rock.

Cut postholes at oven-pit / stakelode junction and
stakelodes round the bottom of the oven pit.

Witherwork uprights in stakelodes. Weave the
witherwork in situ round the uprights. Terminate
at two * mainposts in the postholes which may
also carry fire-arch. (i.e. entrance to dome - must
support dome weight).

Fill in behind witherwork with sand to fill cavities
upto natural. Plaster clay on the witherwork,
terminating at mainposts in postholes.

for details - see plans, sections, photos, and
stratification notes.

THE DOME (" " " ")

A problem!

Must have been carried at the fire-arch by
the mainposts in the postholes (no surviving cross-post).

only other evidence = collapsed dome in the
filling and stakelodes round the top of the
oven (see notes 18, nos. 166 167 180 and 185 to 200
inclusive). These stakes are discontinuous with
the oven framework but there are two possible
(internal witherwork)

DOME WAS
BUILT ON WICKER
FRAME. CLAY
DRAINED OUTSIDE
OR BOTH SIDES?

IT IS QUARRED
DOME IN FILL
AS ITS FIRED
LAY - LINING
WAS NOT FIRED
EXCEPT FOR DISTANT
IMPRESSIONS
SURVIVING
IN FILL.

* Witherwork uprights also in
mainpostholes as well as
mainposts.

~~PROBABLY~~
~~POSSIBLY~~ Extra witherwork bundle along N. side
of stakelode to retain soft pit material where
oven cuts pitfill as opposed to natural B/S
elsewhere. →

YES. See 81 / 201 / 205
+ same notes as 207 [207 itself is earlier]

The clay being certainly wasn't fired before using
the kiln, unless the mining dome was.

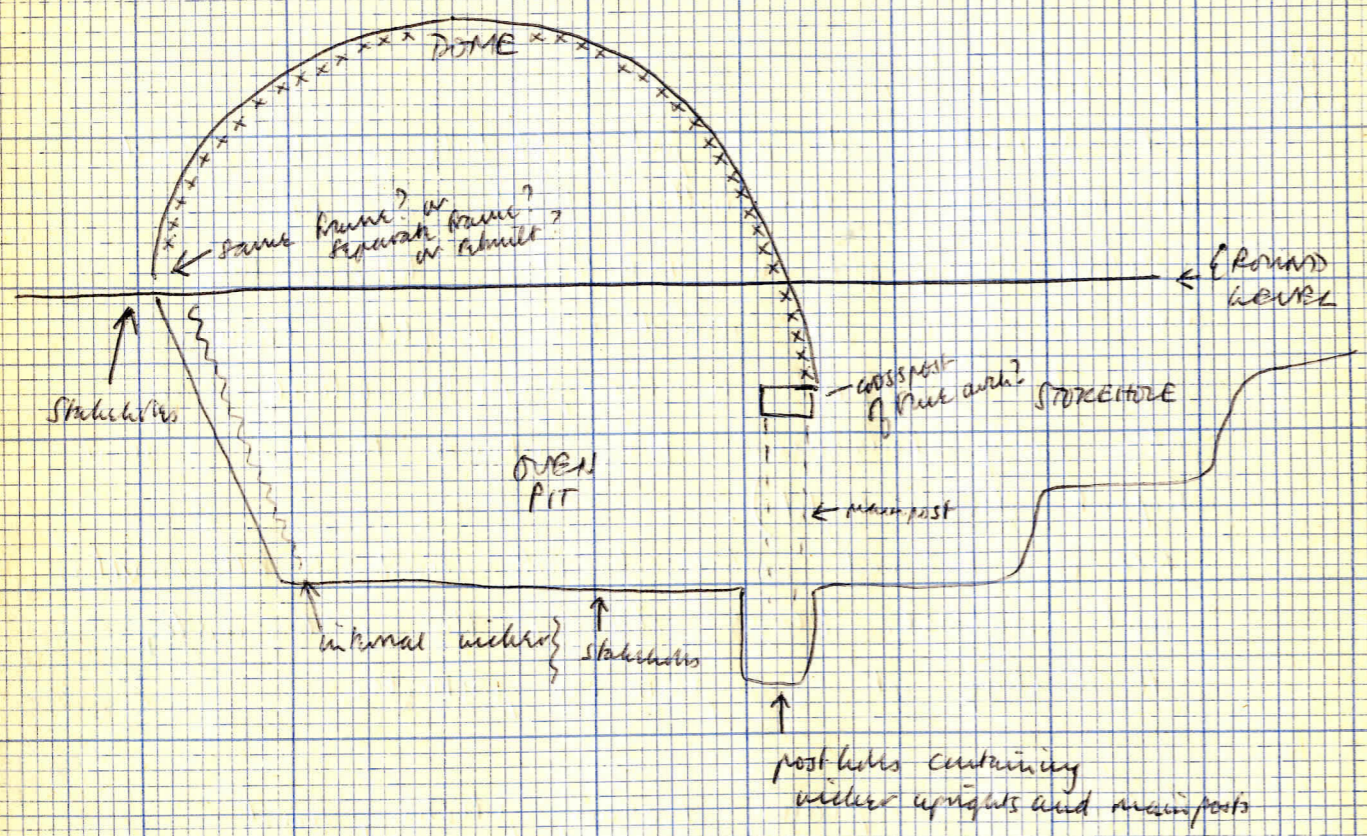
Fired areas of clay seem to be accidental
from the heat source and the accident during
firing.

Similar area at E end of site (S.E. of area J)
showed no sign of heat on the clay itself -
only the burnt rock in the bottom.

DIAGRAM SECTION

WEST

EAST



How do you put stuff in and out?
 Removing dome or directly interesting
 via sketches?

interpretations (mixed or wicker frame)
 A. Original dome was continuous with internal wicker frame but removed after firing and domed again using different stakes round the top (means the use fired at least twice, with different domes)

B. Newer was a dome continuous with internal framework. Separately constructed above ground level with different stakes. Means use fired only once (or several times with same dome).

For details see Plans / sections / wickerwork drawings / photos / and stratigraphic notes.

THE FILLING

* IMPORTANT NOTE

Note after excavation —

I doubt whether the seeds and white sands are actually "layers" as such. Too much inter-cation. It's more of a mixed deposit of collapsed burning seeds, and white sands used to put the fire out. Probably explains the difficulty of attempting to follow as layers.

WHAT THE OVEN WAS USED FOR

Content of carbonised grain means it was a
CORN-DRYING { OVEN of some description.
KILN

(Alan MacC.)... thinks it was a MALT-KILN
for roasting barley for beer.

But, sticking to facts, and pending
identification of the grain etc. (it must be BARLEY
or WHEAT) one can go no further than saying
it's a KILN or OVEN for heating grain to
a not very high temperature (and likely only for
a short time), which had an accident during
firing.

As far as I know, there are THREE POSSIBILITIES
PROCESSES =

A. PARCHING grain for winter storage. This gets done
with wheat, but ? was the process also used
for barley.

B. PARCHING grain so the ears can be crushed.
wheat of the EMMER type can't be threshed
(but were there emmer types in (13th ???)
???. Can this also apply to barley.

26

C. Roasting BARLEY to make BEER — in
which case it's a MALT-KILN.
Look up this process in detail.

Will have to do some research and check on
these three processes and any parallels.
Also find out if there are other processes
besides these three. C.J.

For the WICKER LINING will have to check on
how it's made, what with, and technical
terms.

As far as I know, it was usually made of
HAZEL.

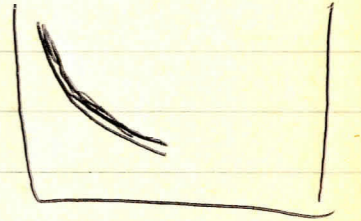
[NB. burnt Hazel chips — with hazelnutshell — in
large square pit in Area J just W. of a
similar one in SE corner of J.]

27

NB. One would expect the grain to be carried on some sort of drying frame. Could the carbonised wood be from this? (occurs collapsed in the filling).

This frame must have been fairly high above the floor — within the height at which collapsed grain layers occur.

(CHECK NOTES)



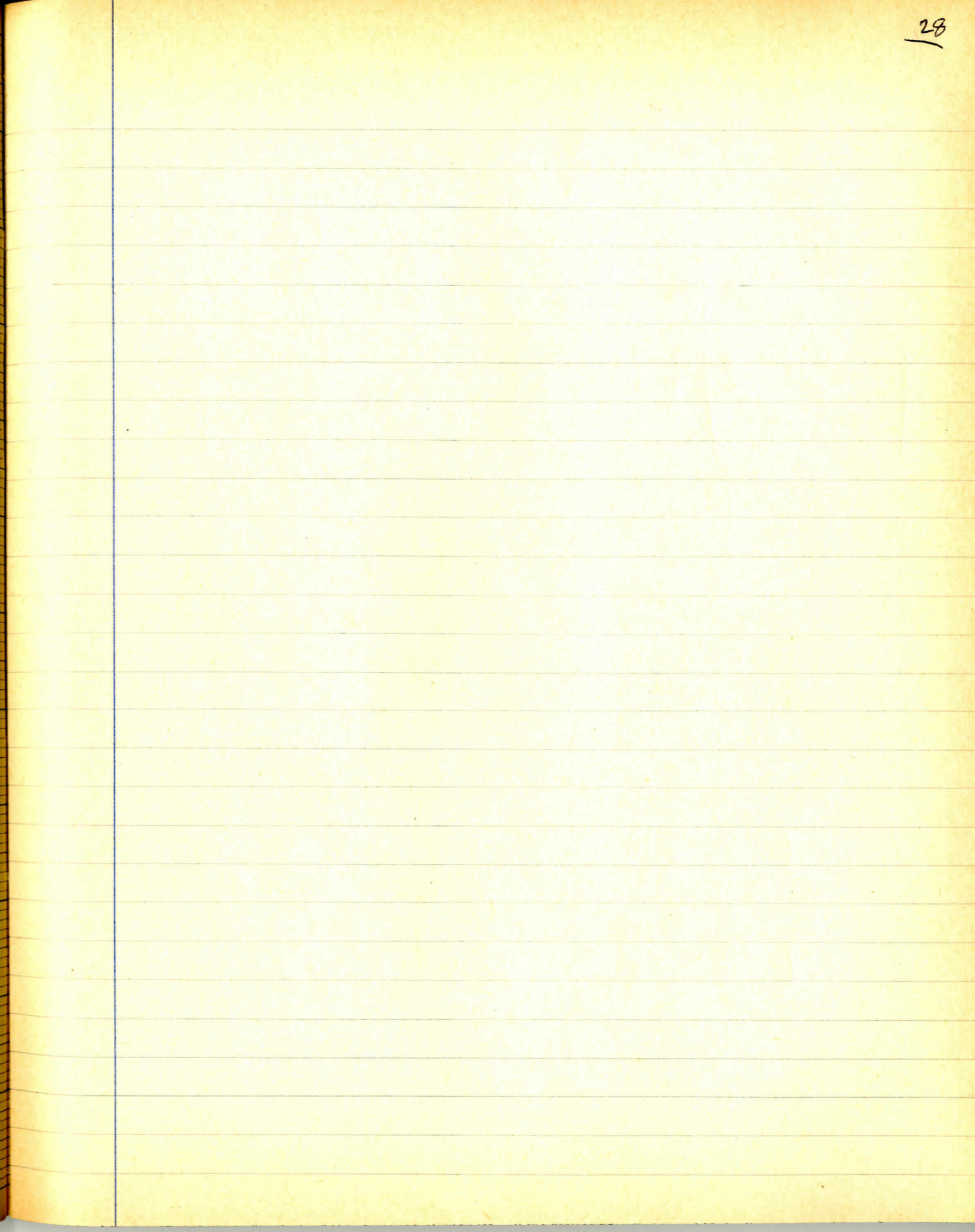
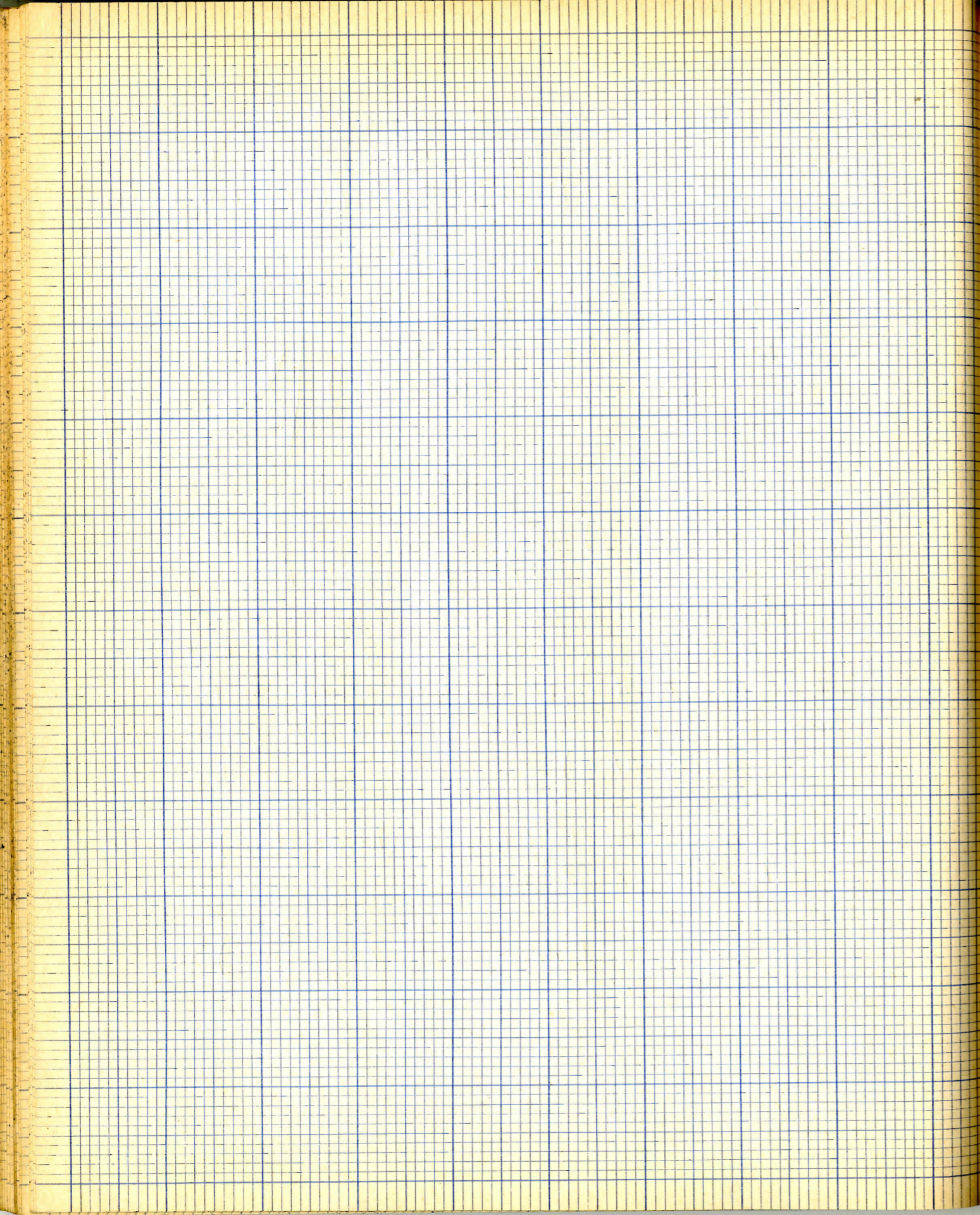
R. Richett (Cardiff) doing research into condensors has some evidence for horsehair frames.

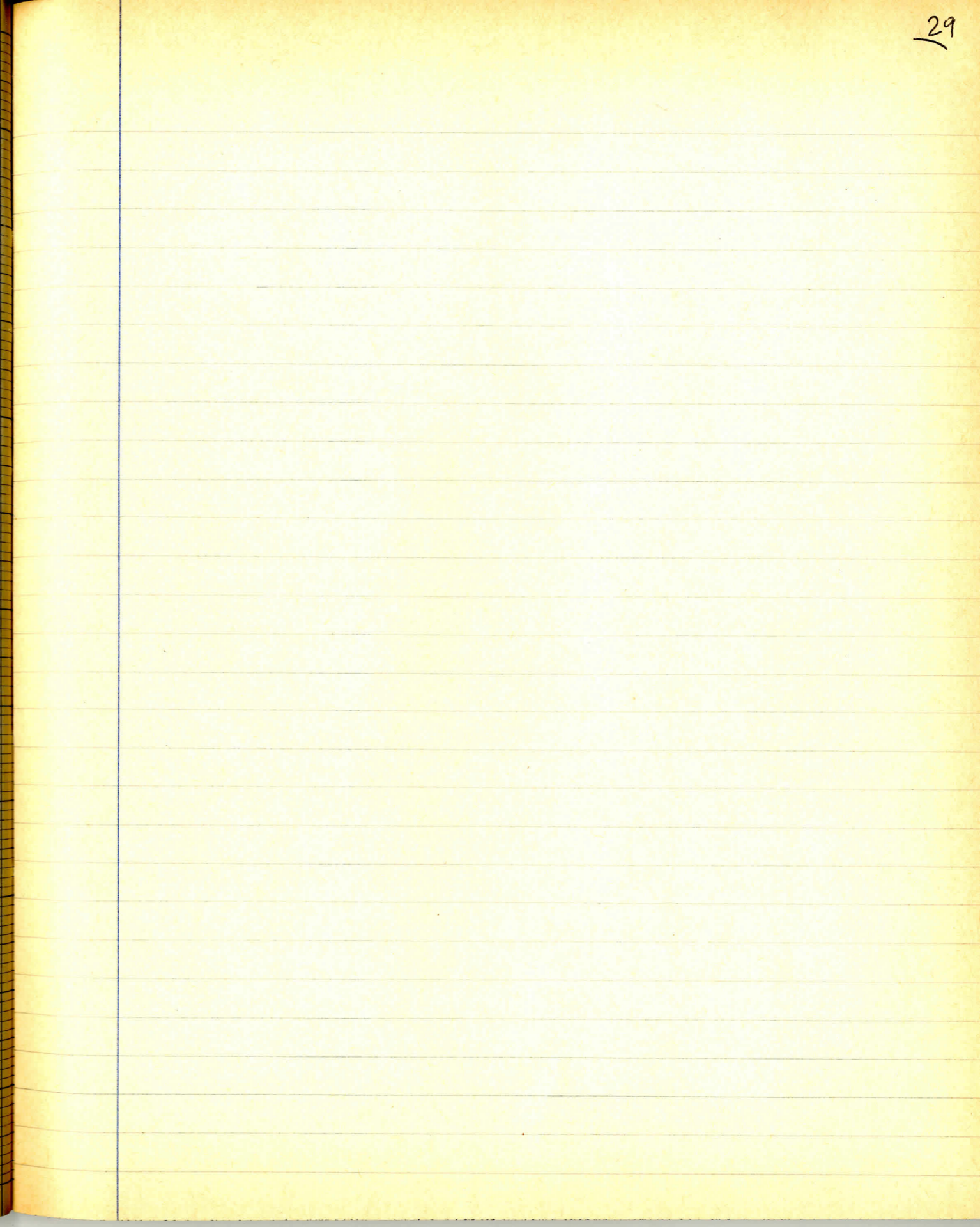
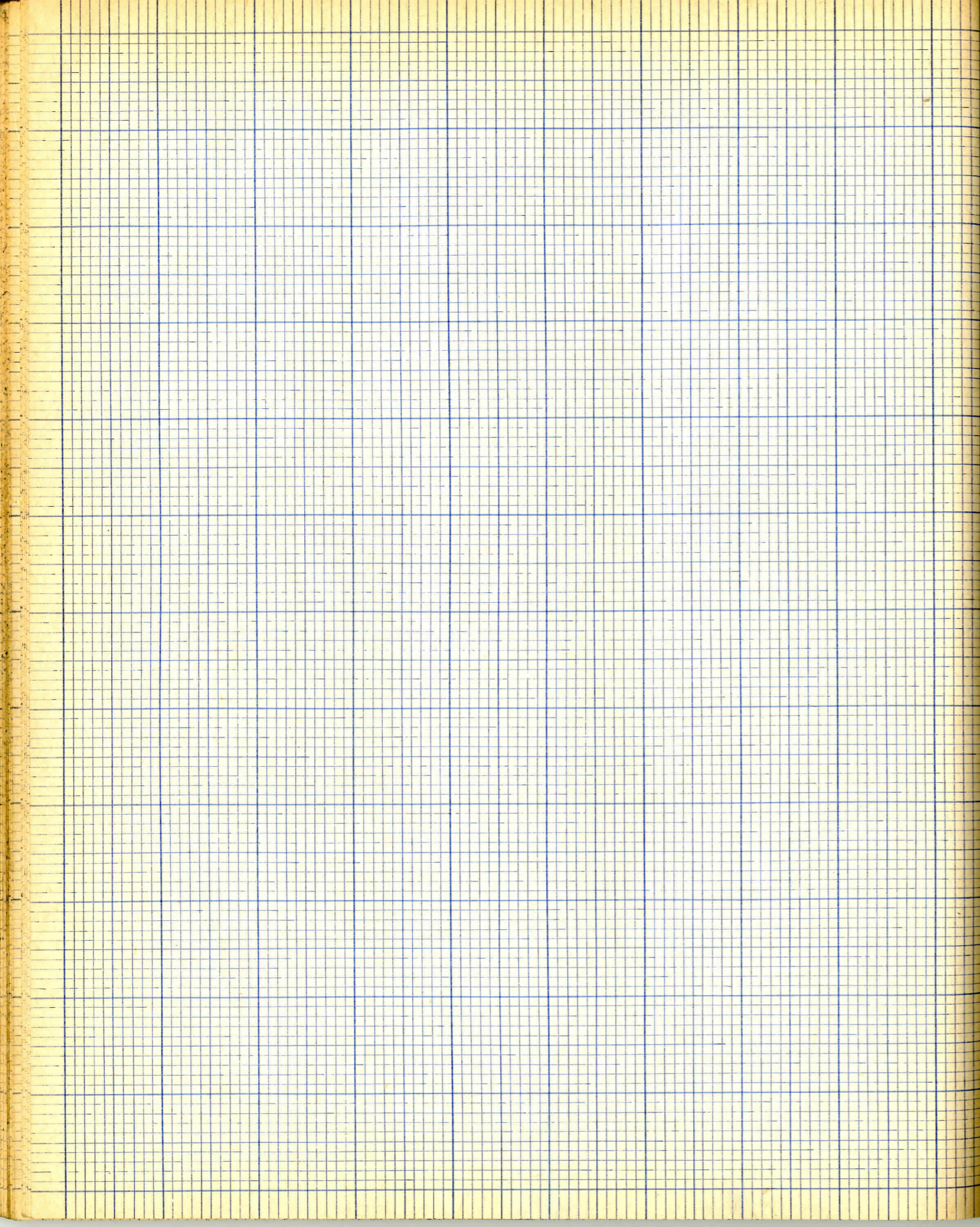
Our shaft will need checking for this.

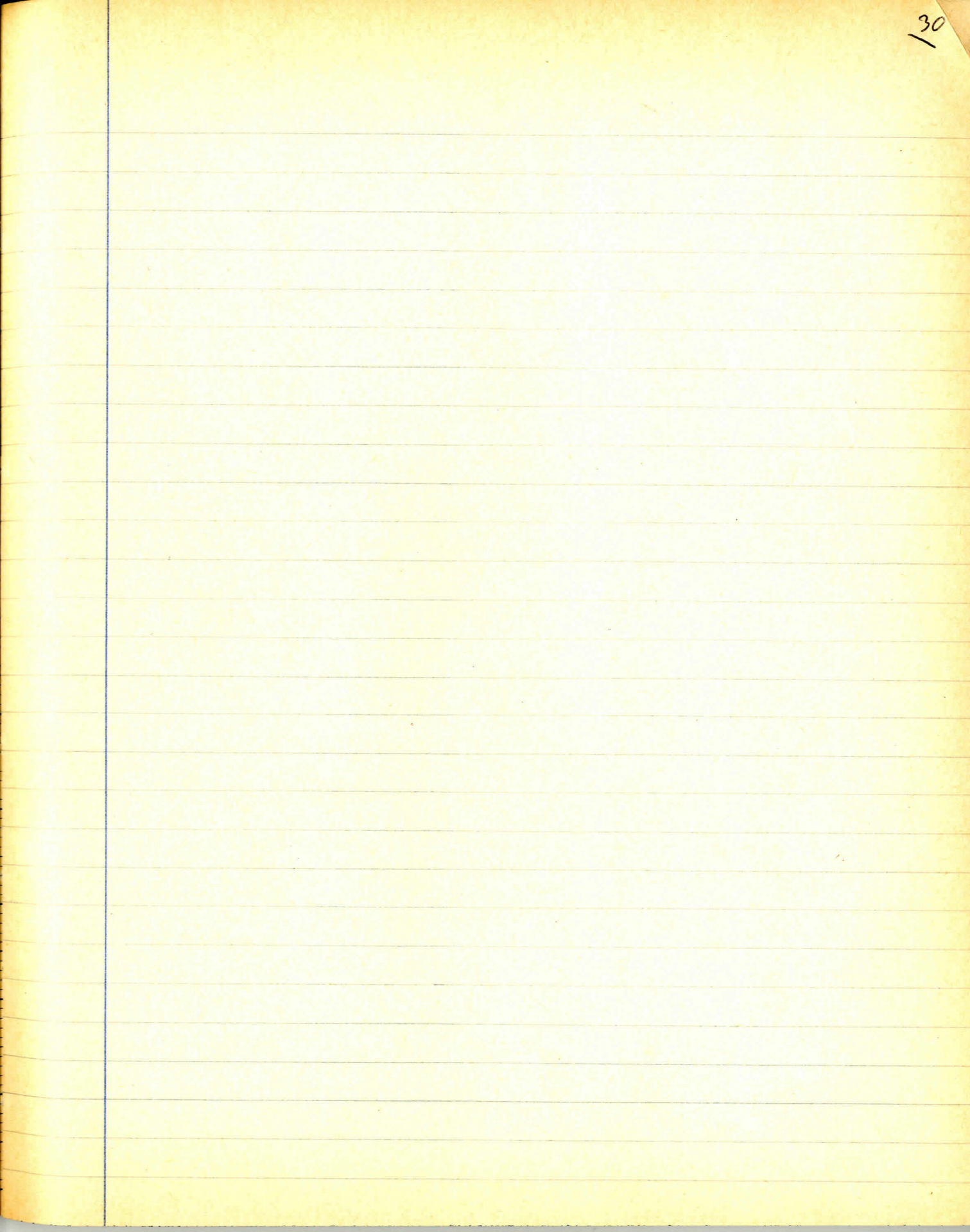
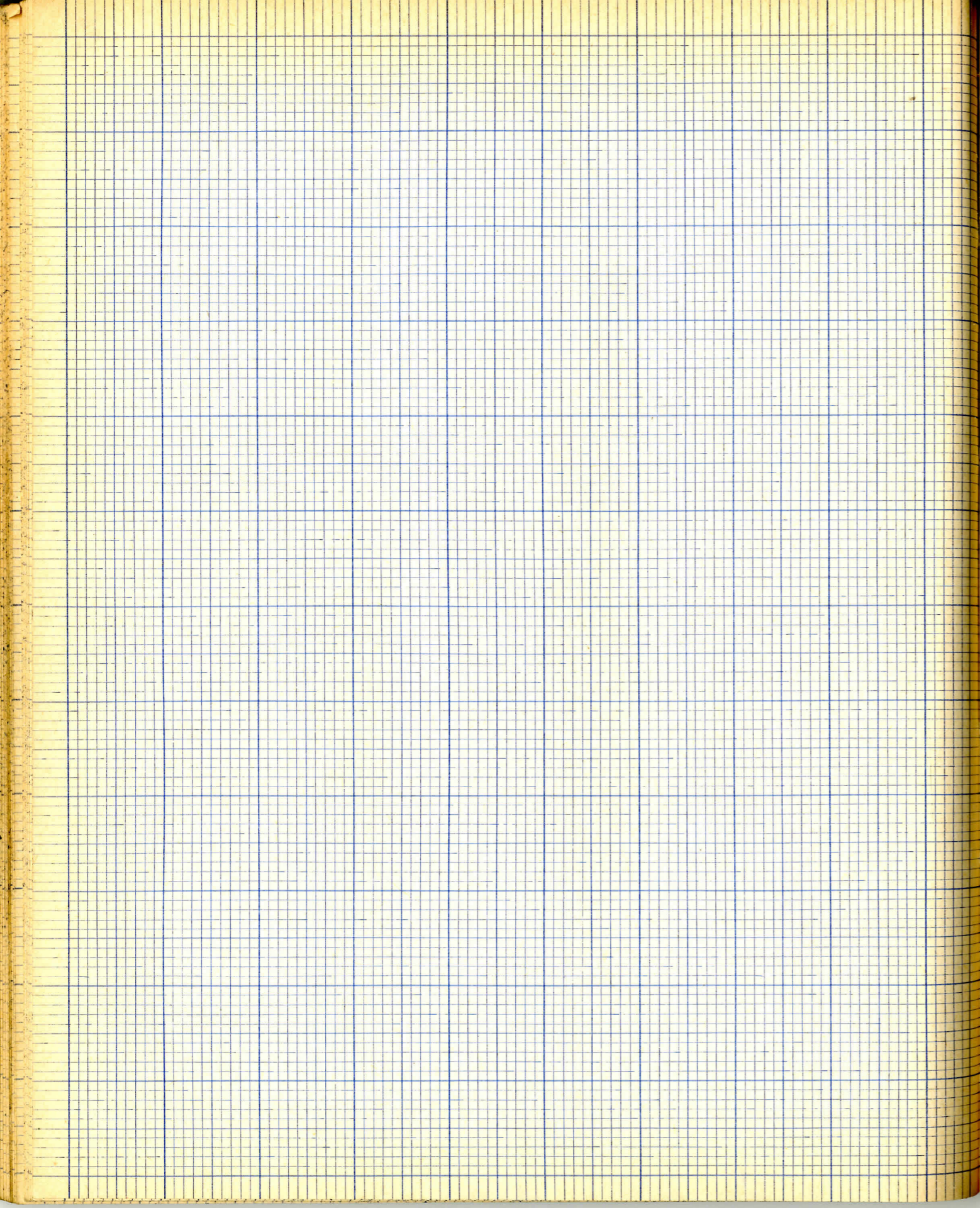
He also thinks condensors were in small buildings, which meant draught control could be such they wouldn't have domes (but all his examples are probably stone).

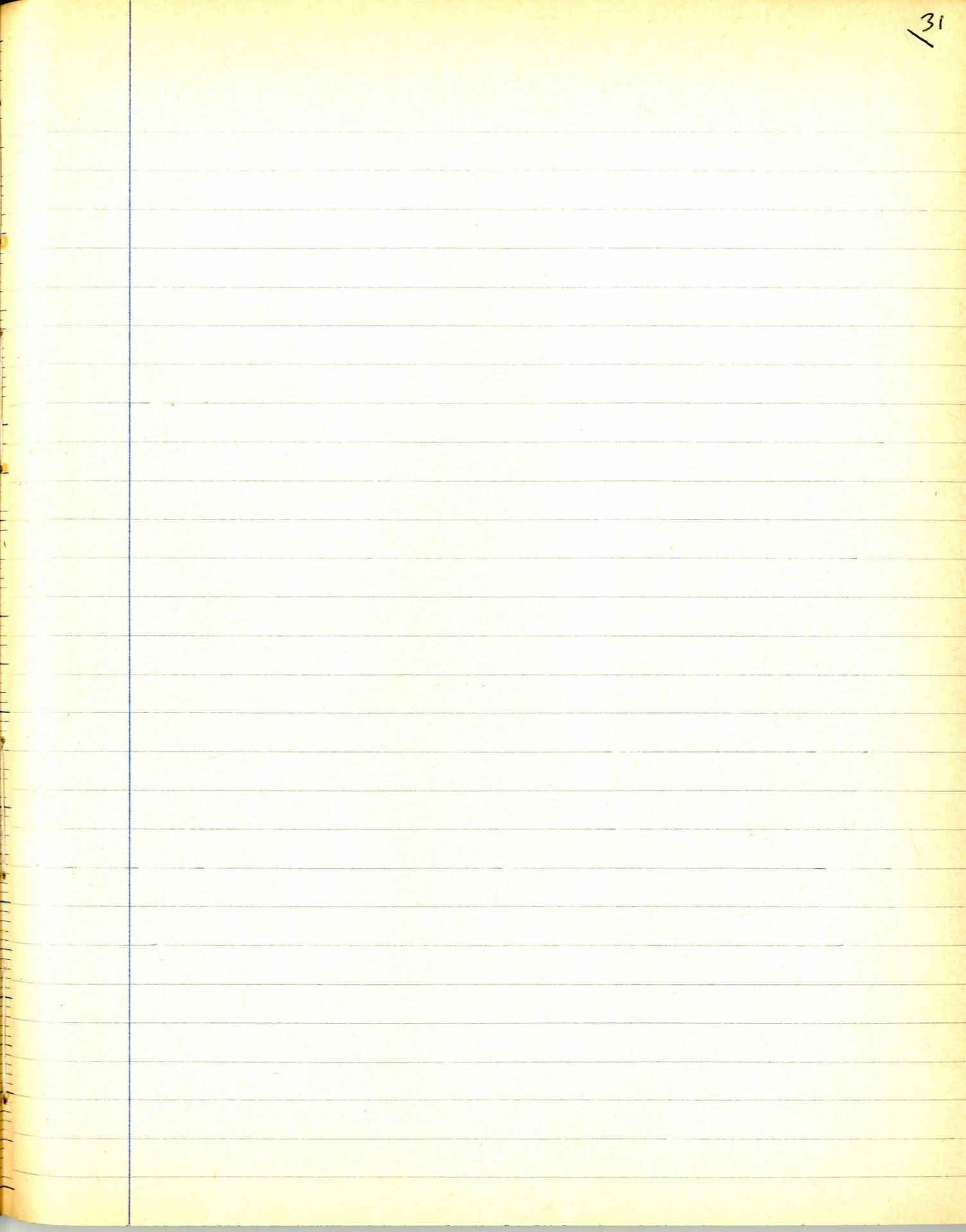
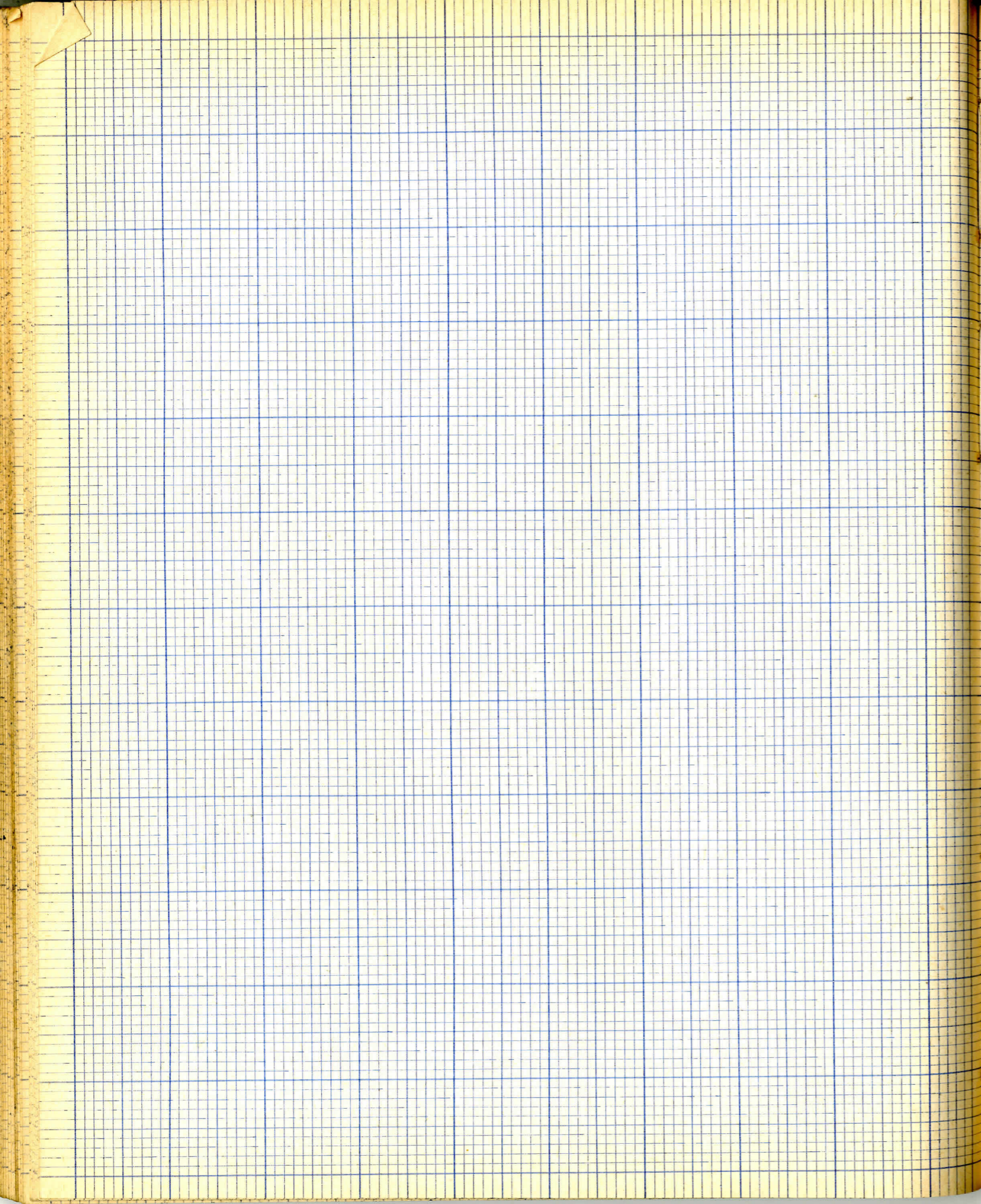
? ans not in a building (arch plans)
∴ it needs a dome.

? ans is in a building (" ")









FINDS FROM THE OVEN

(Written when sifting through windows after the end of excavation) [Nov. '74]
 THIS SUPERSEDES ANY OTHER LISTS EXCEPT FOR THOSE IN FINDS BOOK + ON INDEXES.

CARBONISED GRAIN (recognisable)

<u>NOV. 73</u> <u>FG</u>	K (101)	1 small bag	} in 1 Box
	K (109S)	1 small bag	
	K (115S)		1 Box
<u>TO PHOTO *</u>	K (116)	in good condition, showing EARS of grain	5 BOXES
	K (116A)		1 BOX
	K (118)		4 BOXES
	K (118A)		1 BOX
	K (119)		5 BOXES
	K (128)	3 of these boxes are in good condition	4 BOXES
	K (134)		6 BOXES
	K (143)		1 BOX

CONT. OVER

K (146)

3 BOXES

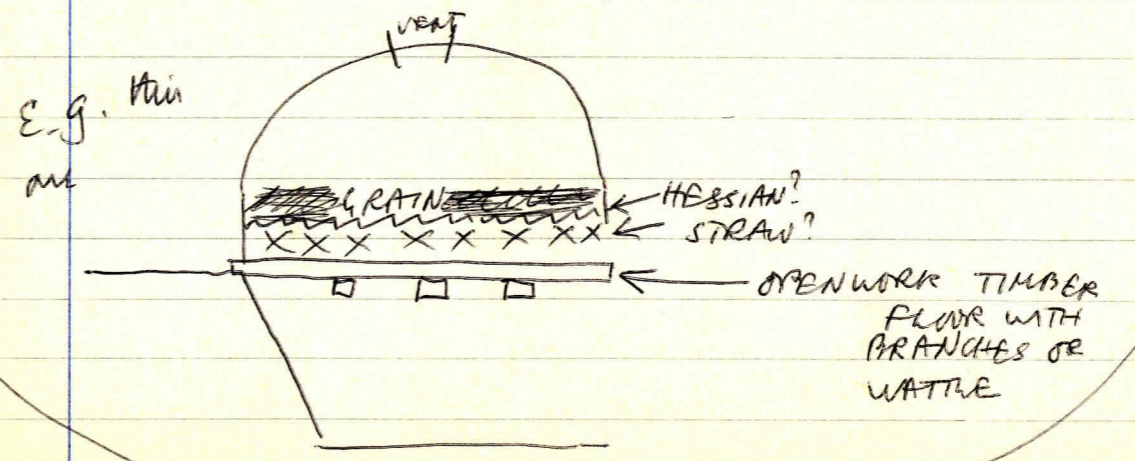
TOTAL 32 BOXES

The boxes referred to are 6" x 12" x 2" DEEP (internal measurements) but are not entirely full. Say average 3/4 full, at a guess? (Could be more/w less).

13/11/80

NB. IF STRAW WAS USED OVER TIMBER + BRANCA FLOOR THE QUANTITY COUNT IS USELESS!

(SCOTLAND: USED SACKING OVER STRAW OVER BRANCHES — REYNOLDS ARCHAEO. J. 1979 ON R-B CORN DRIER)



CARBONISED WOOD (excluding all twig charcoals)

(each box 12" x 6" x 2"
- NOT FULL)

- K (115β) in 1 Box
- K (115c) in 1 Box
- K (115d) in 1 Box
- K (121) in 1 Box
- K (134) in 1 Box
- K (135) in 1 Box

↑ Consider possibility of collapsed drying-frame for these. ↑



- K (171β) MAIN POST, S. SIDE OF OVEN
 - K (170) POSSIBLY DÉBRIS FROM (171β)
- } in 1 Box
12" x 6" x 2"

Possibly (171β) is substantial "wicker work" only, as opposed to being a wooden post →



CARBONISED WICKERWORK

NORTH SIDE OF OVEN

K (158A) VERTICAL

K (158B) VERTICAL

K (158C) VERTICAL

K (158D) VERTICAL

K (158E) VERTICAL

K (158F) HORIZONTAL

Plus

K (165) ODDS + ENDS
? HORIZONTAL



ALL IN ONE Box
12" x 6" x 2"

PTO.

CARBONISED WICKERWORK, CONT.

SOUTH SIDE OF OVEN

K (171A) HORIZONTAL

K (171C) VERTICAL

K (171D) ? VERTICAL

K (171E) VERTICAL

K (171F) ? VERTICAL



ALL IN ONE BOX
12" x 6" x 2"

CHARCOAL (UNSPECIFIED)

CHECK IF ANY ARE CONTIGUOUS WITH BOTTOM DEPOSIT

All these occur in the oven filling. Some may be connected with the use of the oven but are not part of the main bottom deposit ("the fire source"), which has been kept separate. * CHECK THROUGH SITE NOTEBOOKS to see if these charcoals can to any extent be specified further.

↓ CHECK THESE IN DETAIL ↓

- K (2A) SH. later than oven - in top fill
- K (33) oven fill (with burnt clay)
- K (66) oven fill
- K (75) oven fill
- K (81) layer in oven fill, but fills? SLOT for "hurdle" (retaining carbon pit) on N. side of structure
- K (108) oven fill - contains "burnt wood" according to notebook



All in 1 BOX
12" x 6" x 2"

- K (116) ^{IN TWO BAGS} layer of "seeds"
- K (118) charcoal mixed with "seeds". ~~118~~ (118) is a layer of seeds round burnt wood (135)
- K (119) layer of "seeds"



All in 1 BOX
12" x 6" x 2"

K (134)

Layer of "sands"

K (137)

IN TWO BAGS

black silty with burnt wood



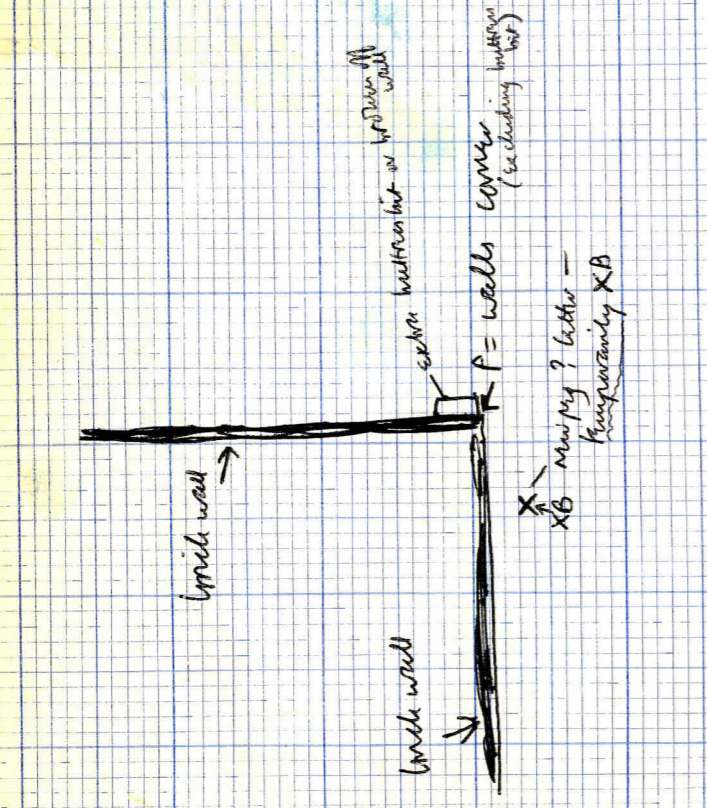
END OF SURVEY

The way the instrument is already on
main plane and in previous survey of
map and in sketches.



wall corner
 P from $XA = 13'10\frac{1}{2}"$
 P from $E = 15'10"$
 P from $F = 24'6\frac{1}{2}"$

Length of brick wall (as I please)
 from PE to SE corner wall junction
 = $42'1\frac{1}{2}"$



XA
 XB
 XE
 XF
 XG
 XH
 XI
 XII
 XIII

XA
 XB
 XE
 XF
 XG
 XH
 XI
 XII
 XIII

XA
 XB
 XE
 XF
 XG
 XH
 XI
 XII
 XIII

SOUTH SIDE BASELINE

check a remaining page

GH 19'6"

HG 12'6 $\frac{1}{2}"$

GF 12'6"

FE 12'6"

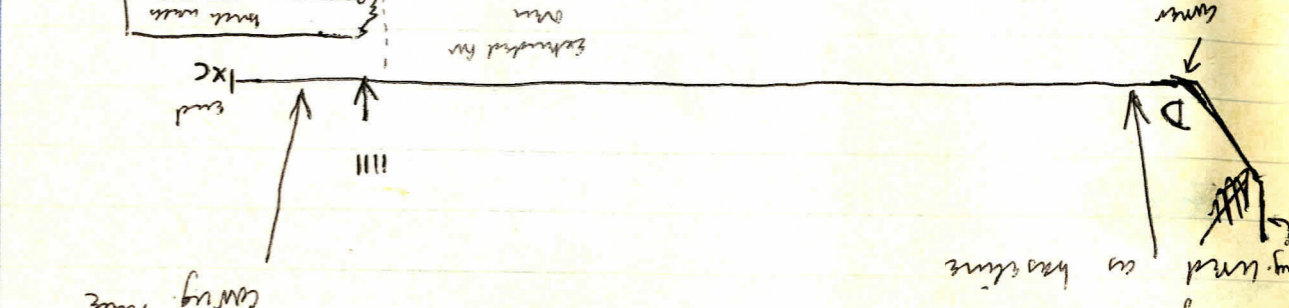
FX 9'0 $\frac{1}{2}"$

XA XB 13'2"

XA has a major letter a
 minor letter

This map
 after adding
 the minor
 letter

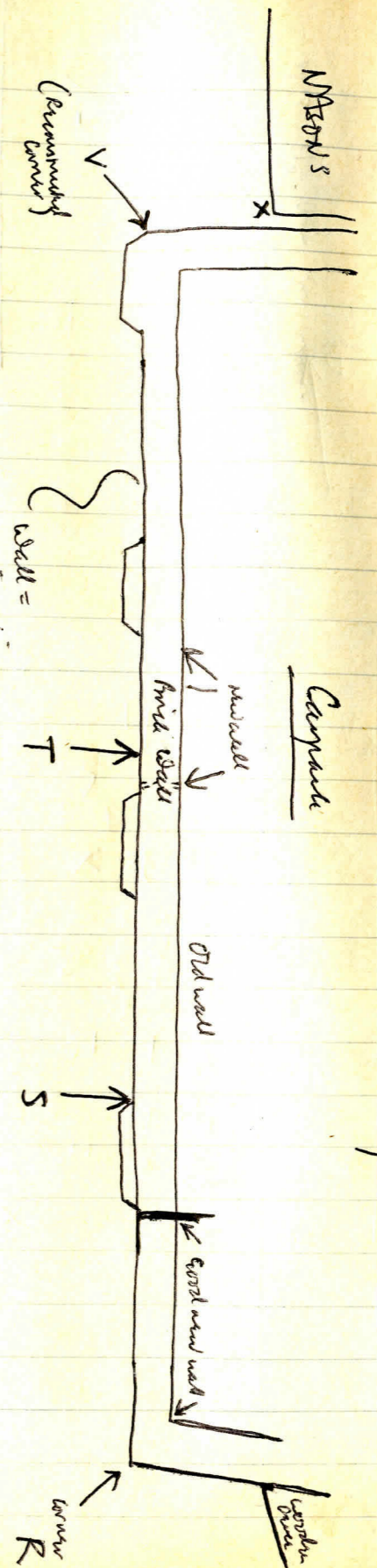
N
 length of
 corner
 from
 D to
 corner



AB = 5'1"
 AC = 4'0"
 BC = 4'9 $\frac{1}{2}"$
 III to C = 2'4"
 III to D = 2'4"
 III to E = 19'5"
 III to F = 19'5"
 III to G = 19'5"
 III to H = 19'5"
 III to I = 19'5"
 III to J = 19'5"
 III to K = 19'5"
 III to L = 19'5"
 III to M = 19'5"
 III to N = 19'5"
 III to O = 19'5"
 III to P = 19'5"
 III to Q = 19'5"
 III to R = 19'5"
 III to S = 19'5"
 III to T = 19'5"
 III to U = 19'5"
 III to V = 19'5"
 III to W = 19'5"
 III to X = 19'5"
 III to Y = 19'5"
 III to Z = 19'5"

A to B
 distance
 from
 corner

III to A = 19'5"
 III to B = 19'5"
 III to C = 19'5"
 III to D = 19'5"
 III to E = 19'5"
 III to F = 19'5"
 III to G = 19'5"
 III to H = 19'5"
 III to I = 19'5"
 III to J = 19'5"
 III to K = 19'5"
 III to L = 19'5"
 III to M = 19'5"
 III to N = 19'5"
 III to O = 19'5"
 III to P = 19'5"
 III to Q = 19'5"
 III to R = 19'5"
 III to S = 19'5"
 III to T = 19'5"
 III to U = 19'5"
 III to V = 19'5"
 III to W = 19'5"
 III to X = 19'5"
 III to Y = 19'5"
 III to Z = 19'5"



- ✓ R-S = 21' 9" ✓
- ✓ S-T = 21' 3 1/2" ✓
- ✓ T-V = 29' ~~1 1/2"~~ 1 1/2" ✓

$T_{from} R = 5' 9"$ ✓
 $T_{from} R = 10' 6"$ ✓
 $S_{from} R = 12' 11 1/2"$ ✓
 $S_{from} S = 4' 7"$ ✓

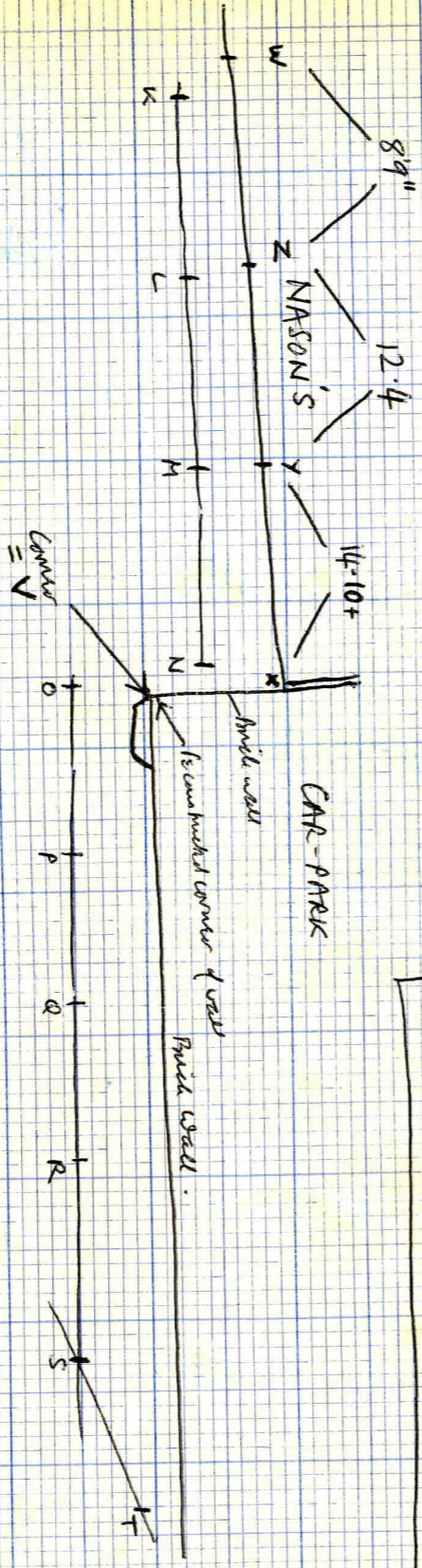
S-T	12'6"
R-S	12'6"
Q-R	12'6" + 1/2"
P-Q	12'6" + 1/2"
O-P	12'6"
M	
N-O	9'0"
M-N	12'6"
L-M	12'6"
K-L	10'0"

Check on legs of main bearings ...

FINAL SITE SURVEY

(SEE MATR PLANS + PLAT @ 8' = 1")

X to reestablish corner V
 = 7'1/2"
 V from O = 4'9 3/4"
 V from P = 14'3"



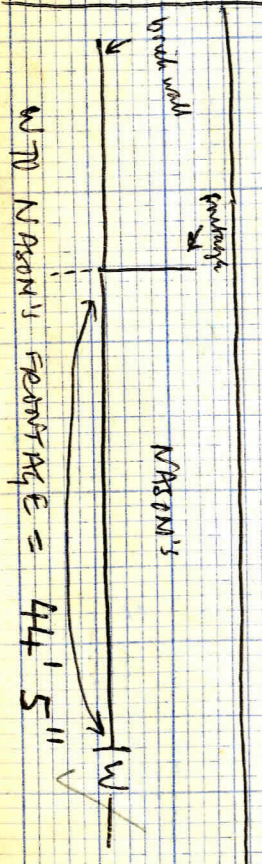
To Nason's Corner at X

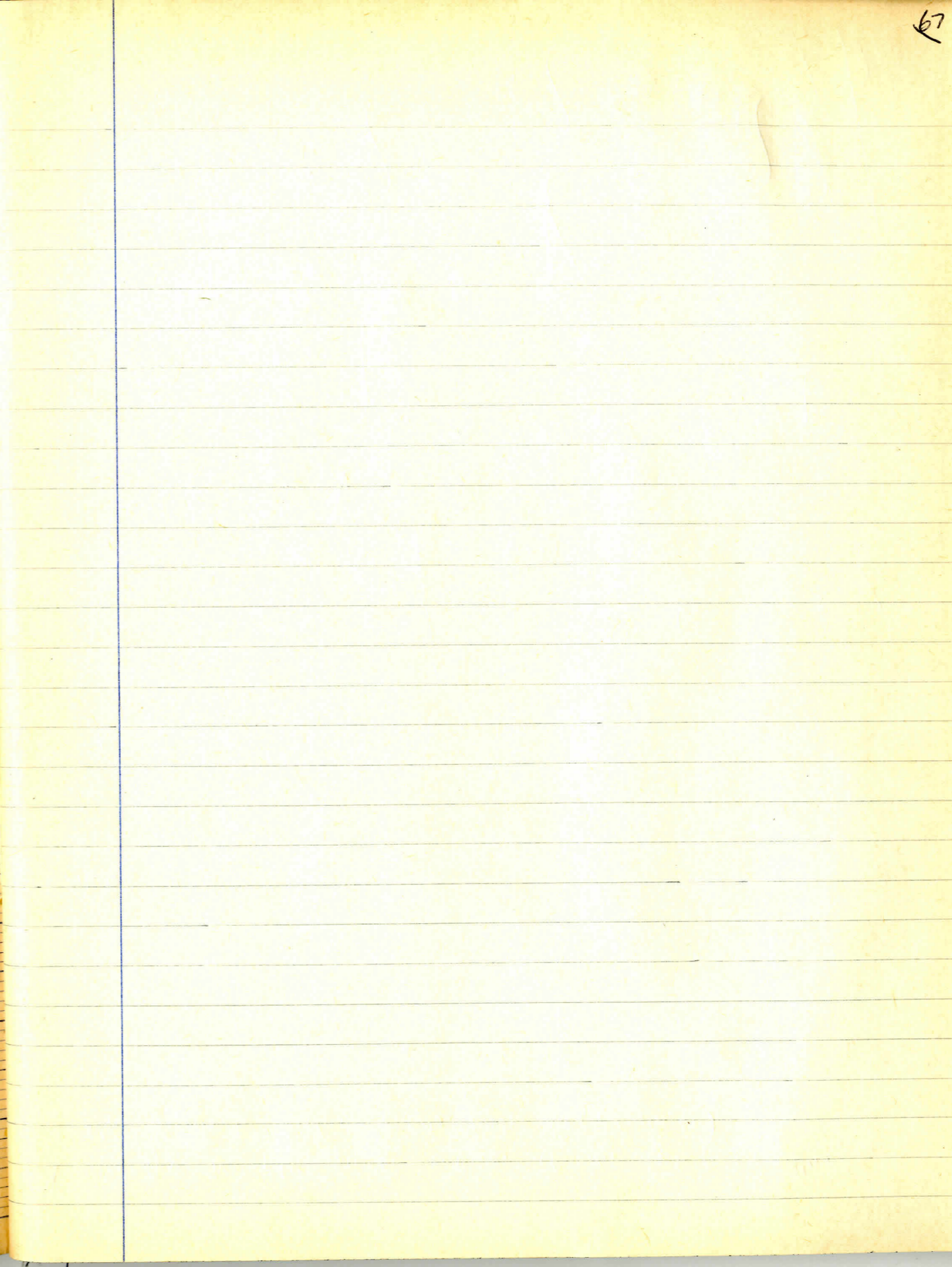
- DX - CARPIT DO - WATER TO WHTY
- DX - 3'2 1/2" ✓
- MX - 13'7 1/2" ✓

KN projected E to mark wall ✓
 N is 11" from the shell. ✓

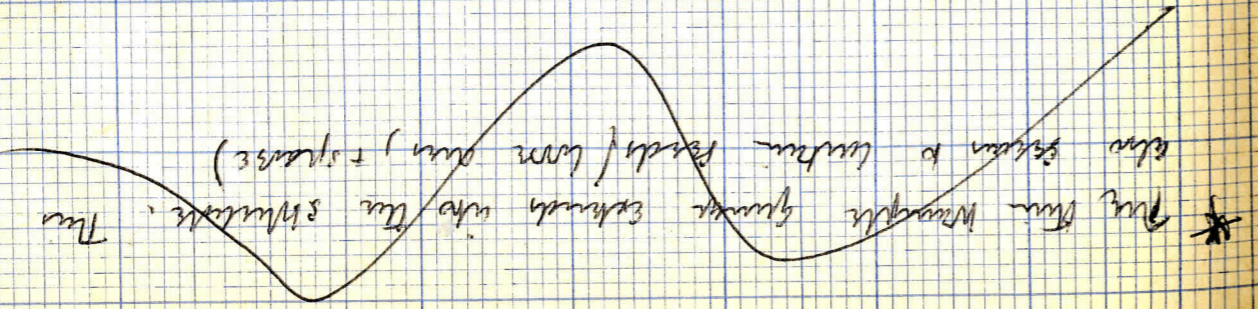
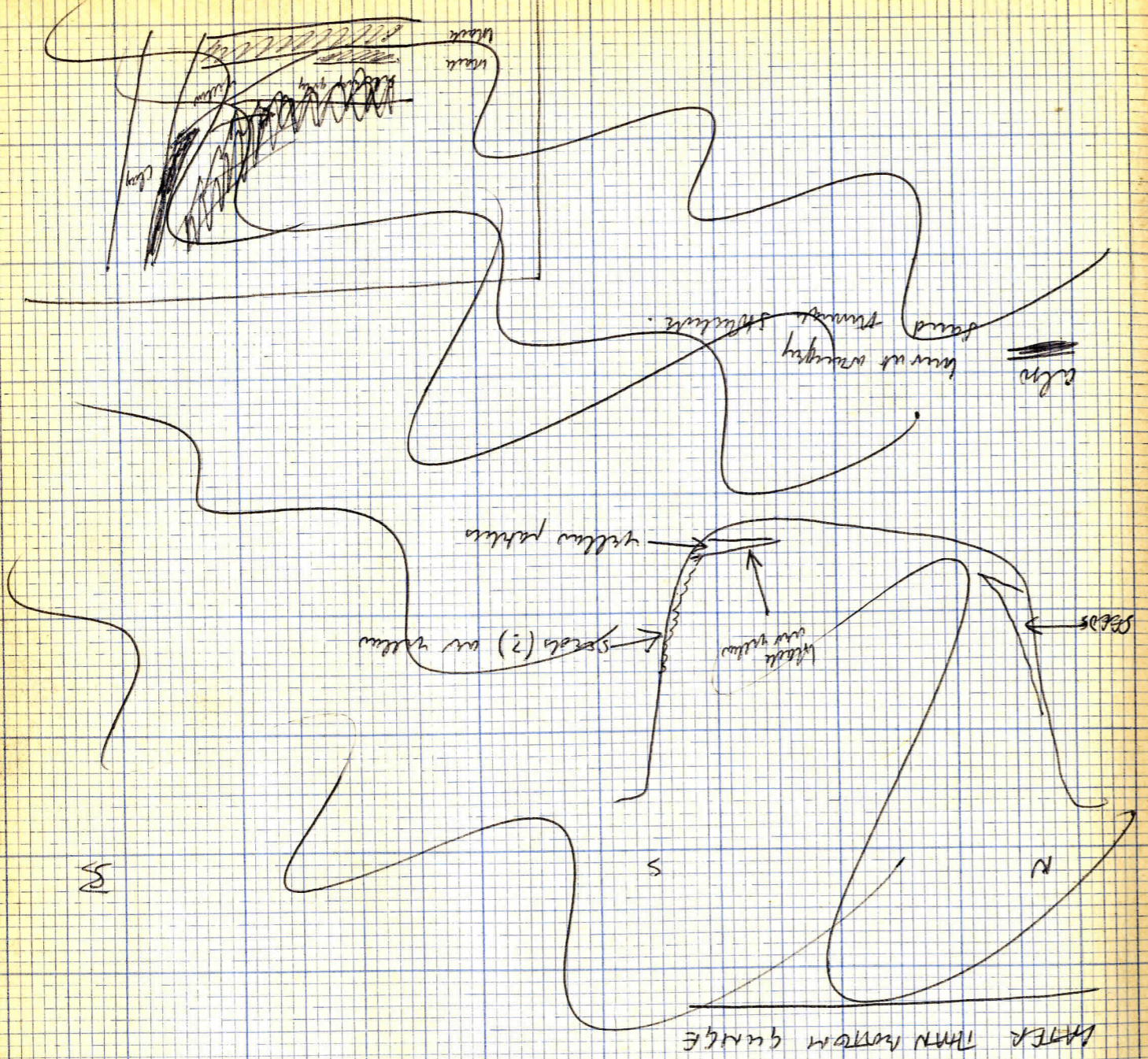
- SIDE OF NASON'S
 at points measured Westwards from X
- Points W ~ Δ K 1'1" ✓ L 10'2" ✓
 - Z ~ Δ K 8'9 1/2" ✓ L 2'1" ✓
 - Y ~ Δ L 11'2 1/2" ✓ M 2'9" ✓

Z from K by compass
 at 90° to line XW
 1/2" from K to Z
 1/2" from Z to Y
 1/2" from Y to M

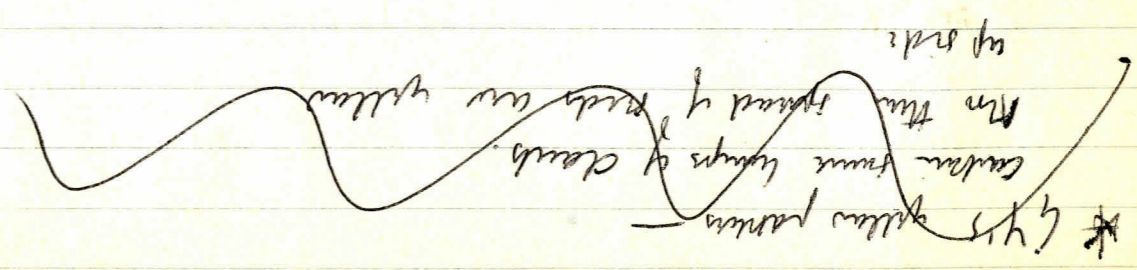
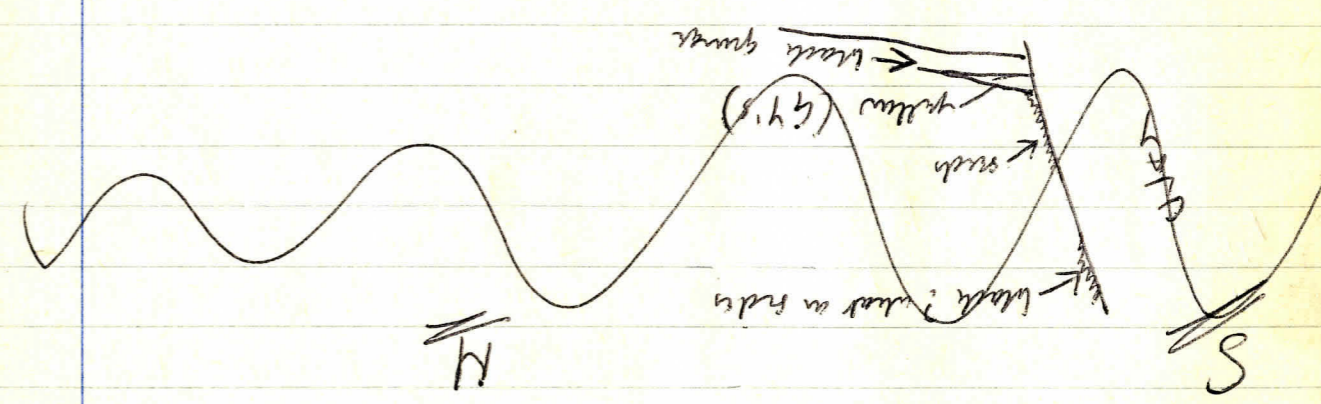




* This time through ground beneath the shrubs. This also seems to be the path of seeds (down, + sparse).

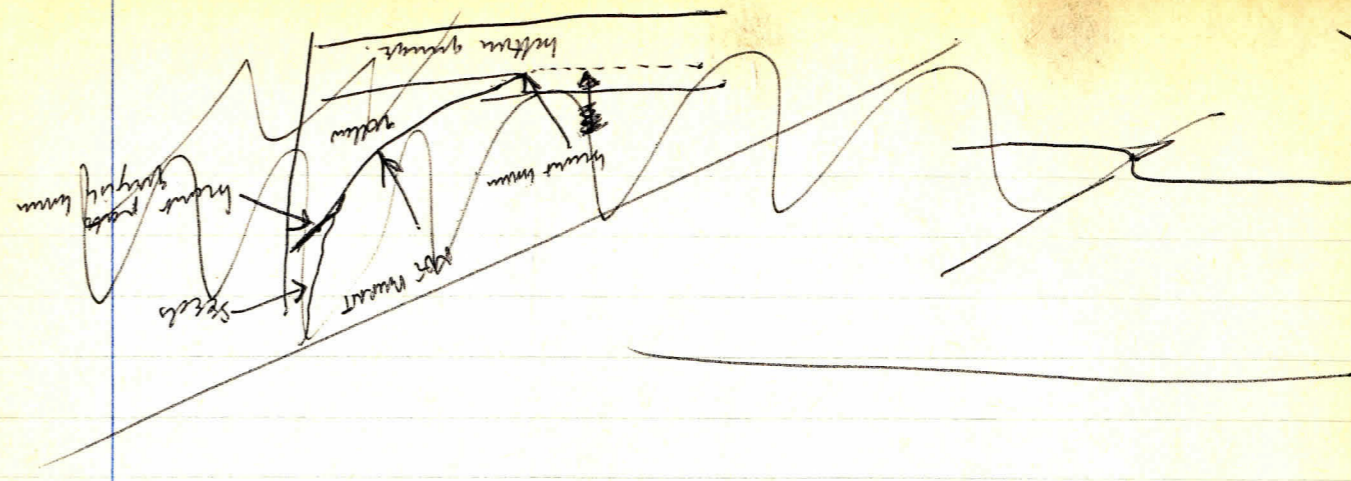



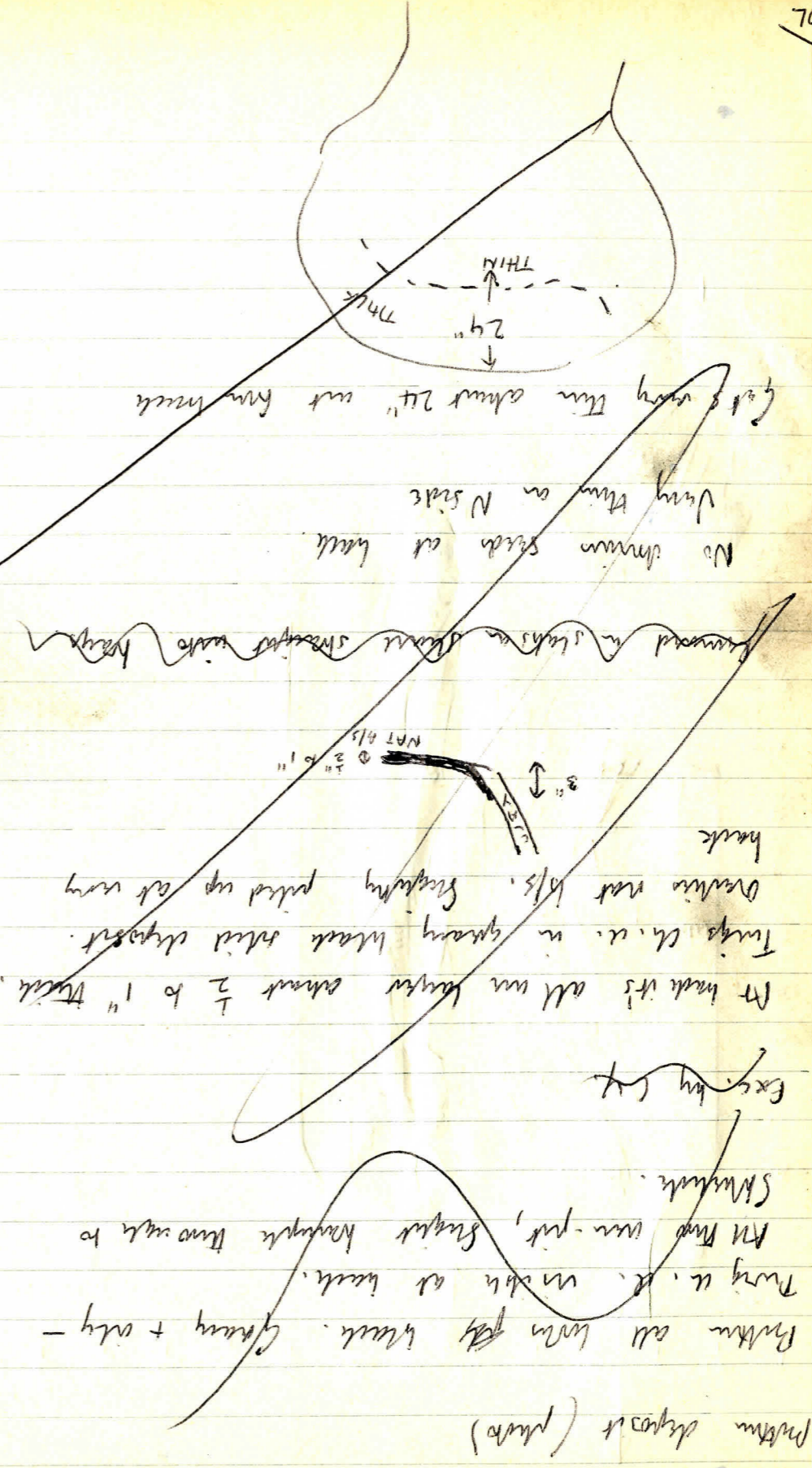
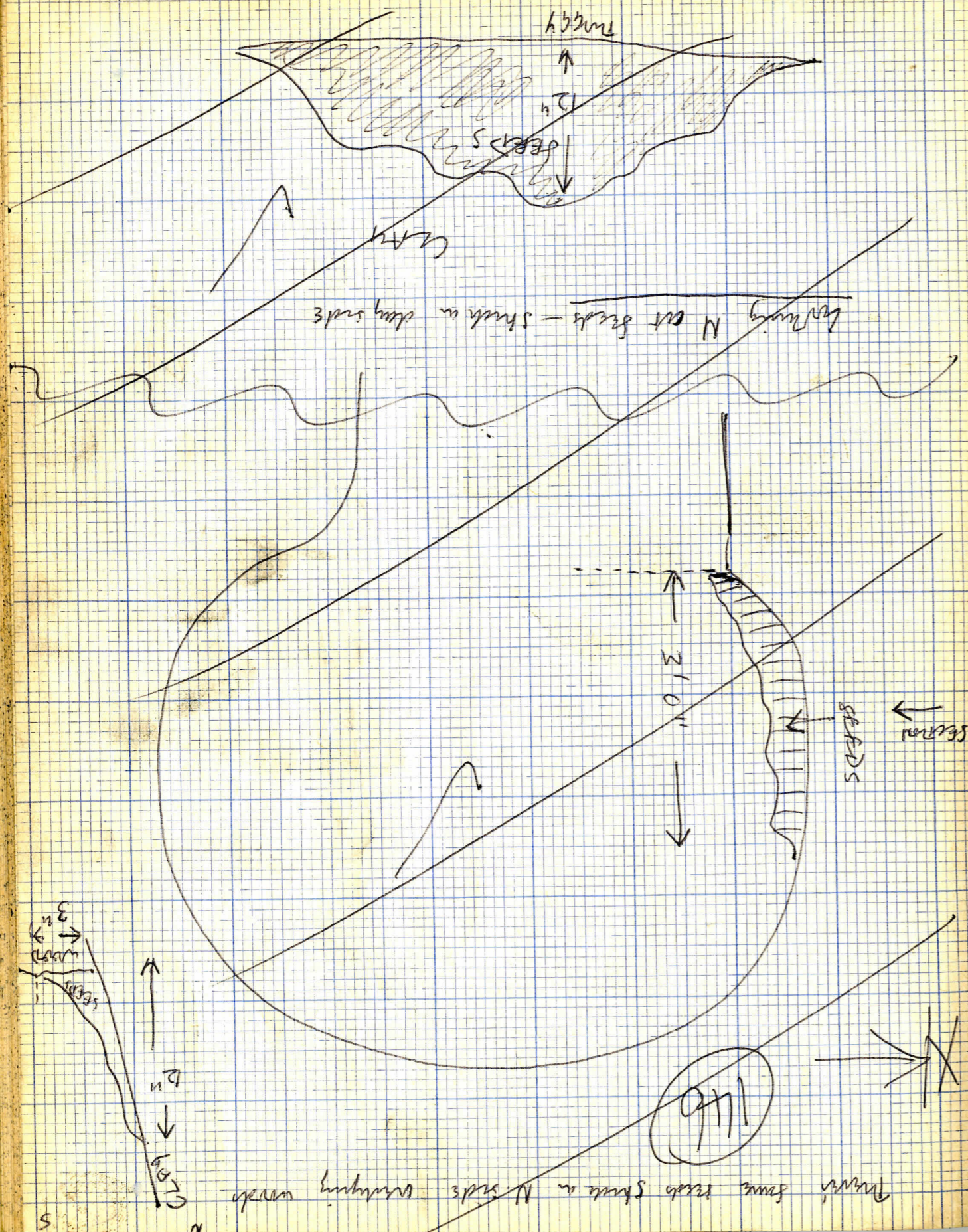
* GY's yellow patches - carbon from layers of death. Run the spread of seeds on yellow up side

* See GY about water on yellow patches.

* Yellow patches on bottom ground.

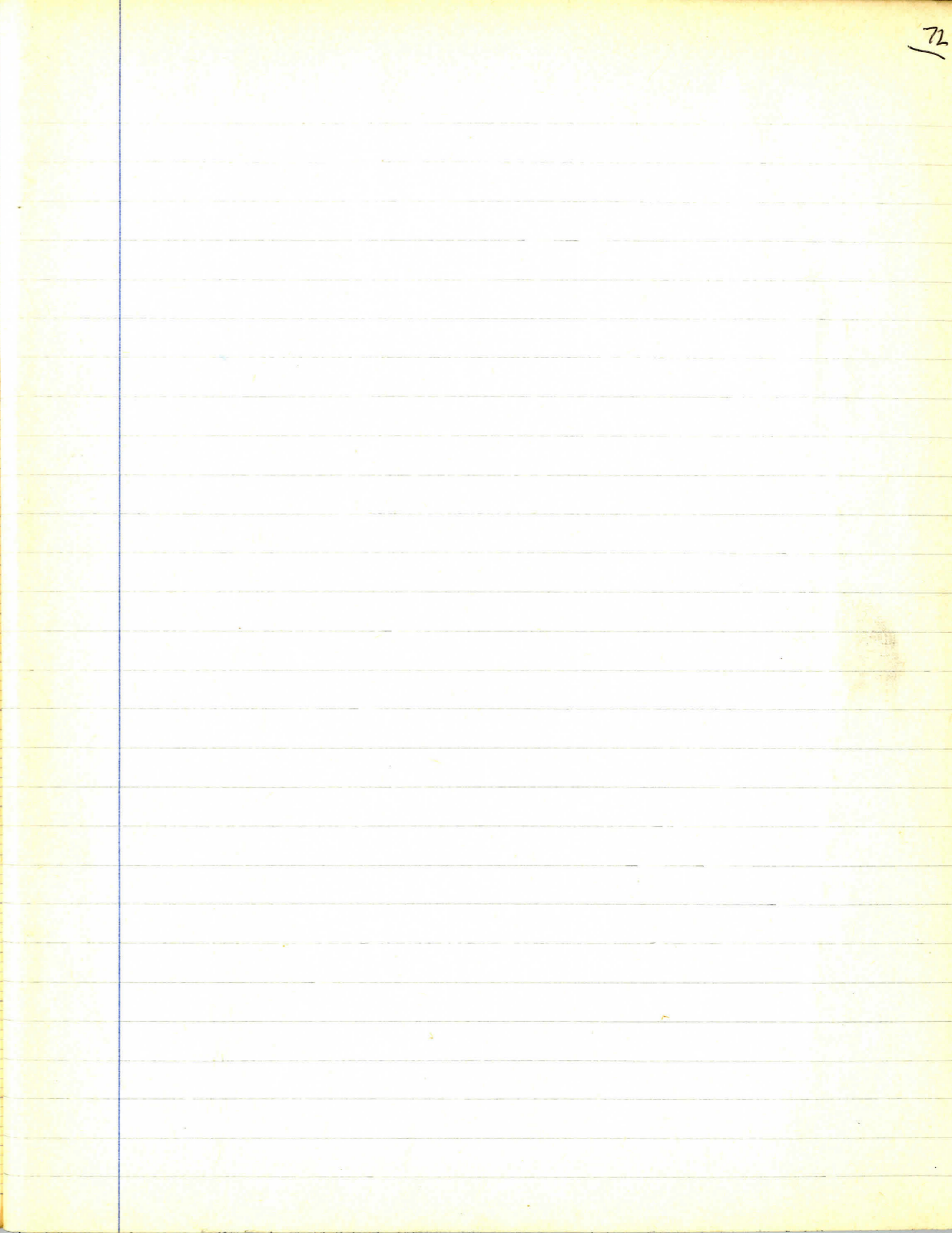
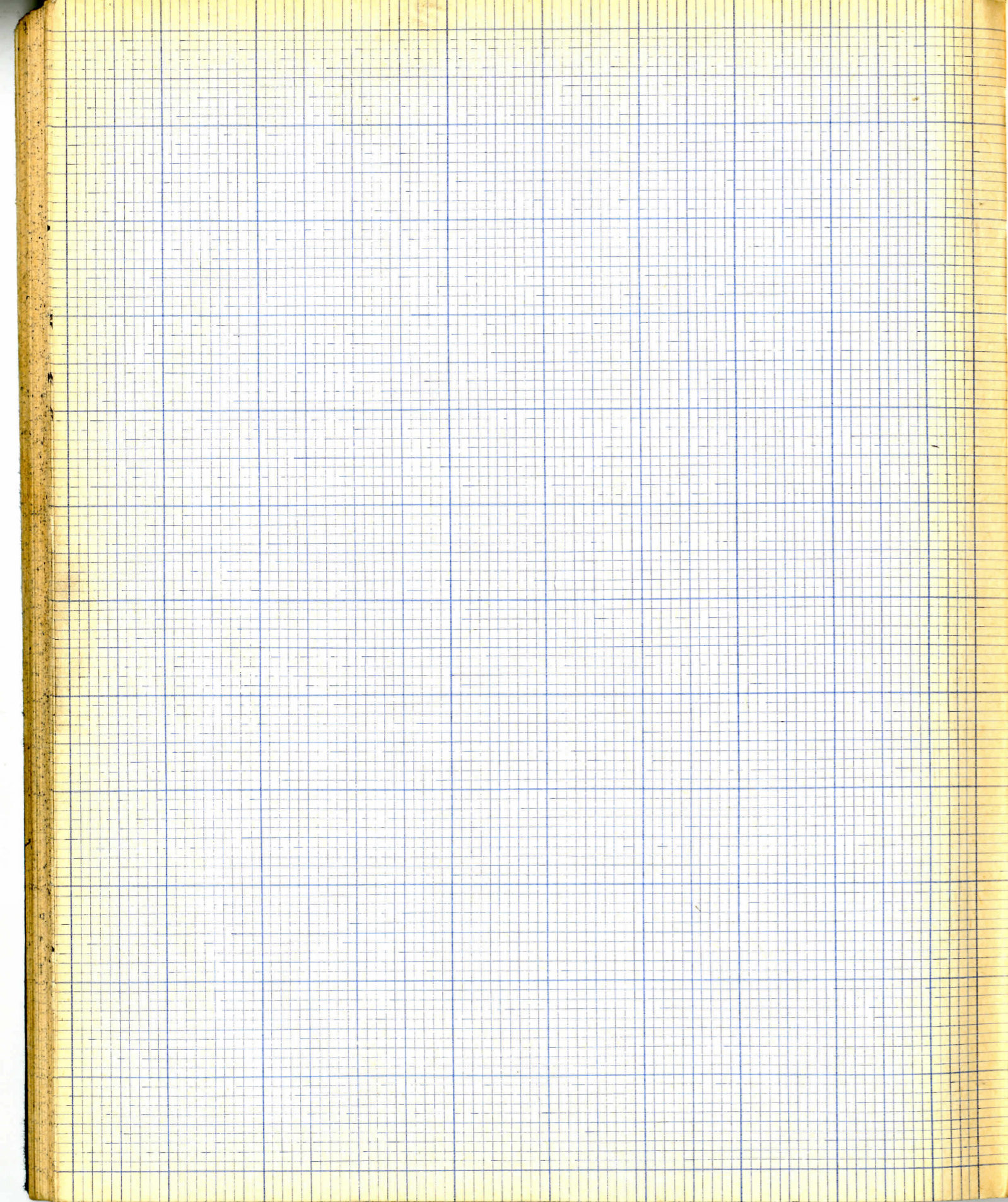




No obvious seeds at back
 Very thin on N side
 Got very thin about 24" out from back

Forward in shells on N side
 No seeds at back
 Tungy ch. is in grayish black silty deposit.
 Troughs not h/ls. Scaly picked up at very
 back
 It looks like all the layers about 1/2 to 1" thick.
 Tungy ch. is in grayish black silty deposit.
 Troughs not h/ls. Scaly picked up at very
 back

Pattern deposit (pans)
 Pattern all from N side. Gray + only -
 Tungy ch. is in black. (Note: some seeds shown on N side including wash)
 N side - 5' thick in clay shale
 Clay
 Tungy



PLANT A

- 3 32 59 87 101
- 4 33 Dem 60 88 102
- 5 34 61 89 103
- 6 35 62 90 104
- 7 36 63 91 105
- 8 37 64 92 106
- 9 38 Dem 65 93 107
- 10 39 66 94 108
- 11 40 67 95 Dem
- 12 41 68 96
- 13 42 69 97 Dem
- 14 43 70 98 Dem
- 15 44 Dem 71 99 Dem
- 16 Dem 72 100
- 17 45 73 101
- 17A 46 Dem 74 102
- 18 47 Dem 75
- 19 48 76
- 20 49 Dem 77
- 21 50 78
- 22 51 Dem 79
- 23 52 80
- 24 53 81
- 25 54 82
- 26 55 83
- 27 56 84
- 28 57 85
- 29 58 86
- 30 59 87
- 31 60 88
- 32 61 89
- 33 62 90
- 34 63 91

PLANT B

- 101
- 102
- 103
- 104
- 105
- 106
- 107
- 108

pulling fire out

109

- 16
- 33
- 38
- 44
- 46
- 47
- 49
- 51
- 96
- 98
- 99
- 100*
- 93*

Seeds E

- 1155
- 116
- 116A
- 118
- 119
- 128
- 134
- F
- 115 A - D
- 135
- 134
- 121
- G
- 127
- 132
- 133
- 138
- 139
- 140
- 144
- 142

137

H

J

K

144?

clay in structure.

Field A	Parva side B	pulling out C	Pome D	seeds E	Wood F	pulling out G	FIX
3 35 67	101	109	16	1155	115a	127	137
4 36 68	102		33	116	115b	132	
5 37 69	103		38	116A	115c	133	
6 38 70	104		44	118 } SAME	115d	138	
7 39 71	105		46	134 }	115e	139	
8 40 72	106		47	119	121	140	
9 41 73	107		49	128	134	141	
10 42 74	108		51		135	142	
11 43 75			96				
12 44 76			98				
13 45 77			99				
14 46 78			100				
15 47 79			93				
16 48 79							
17 49 80							
17A 50 81							
18 51 82							
19 52 83							
20 53 84							
21 54 85							
22 55 86							
23 56 87							
24 57 88							
25 58 89							
26 59 90							
27 60 91							
28A 61 92							
28B 62 93							
29 63 94							
30 64 95							
31 65 96							
32 66 97							
33 67 98							
34 68 99							
34 69 100							

33