

1935-II.

Lewistown, Ill. Aug., 1935

Waterford, Ill.

Otter Creek, Ill.

Havana, Ill.

Erion, Ill.

Chandlerville, Ill.

Green Valley, Ill.

Pekin, Ill.

p. 1

B. Shuck
Fowa City
Iowa

Aug. 26 - Iowa City gas. ^{1.75} oil ^{.32}
 Toll. Ft. Madison ²⁵
 Gas & oil, Canton, Ill. 2.00
 Lewis & Clark Supper .62 Room 1.00 1.62
 Aug 28 - Breakfast Leoda .46
 Dinner - Lewisville .72
 Supper, Havana - .62
 Aug. 29 - Hotel 1.75 breakfast 57 2.32
 Havana - dinner .82
 Pic at Pekin, Ill. 1.90
 Toll - Burlington 1.25
 Supper, Mt. Pleasant .31

Aug. 27, 1935, Tues.
 Left at 6:23 am, 36138.
 S. on 78
 Home 0
 # 2 + # 161 - 26.8
 Mt. Pleasant # 34 - 49.7
 Donnellson # 3 - 72.1/2
 cut in road (sample) 76.62
 # 61 + # 3 81.4 1/2
 Ft. Madison (bridge) 86.9
 E. end bridge ^{approach} 87.5
 # 96 87.9
 Nauvoo 98.5
 Jervis bush 97.3
 # 95 + # 96 106.5 1/2
 Dallas City 113.1
 Disco
 La Harpe - 126.1
 Alandineville # 132.1 1/2
 Sciota
 Good Hope - 142.2
 # 67
 Bushnell ^{150.6} # 9 151.1
 # 41 + # 9 155.0
 Blyton -
 Frith - 170.9
 Canton - 178.5
 Spoon Run - 164.9

St. David ^{pk. 58} 184.3
 Bryan 187.2 1/2
 Lewiston 199.0
 Turn N. - 202.5
 Cut, Aug 14 N. E. 203.3
 Road on return 204.1
 Return 1st big cut 204.2
 Turn to Lewiston 204.6
 205.6 Last cut
 Back to fork 206.7
 Pavement 206.8
 Lewiston # 210.2

3.5 E.
 .8
 4.3

a beautiful, clear day
 at 76.6 on #3, east of
 Souleem, in a cut in road
 shows 4-6 ft of jointy clay
 looking like loess, but heavy
 to the samples.

Cuts on #96 in all - first one
 shows only drifts
 At 90.1 + 90.2 cuts show drifts,
 + several feet of joint heavy
 stuff above - no loess, but
 looks a little like it, except
 for vertical gullies + ridges.
 Other similar cuts follow.
 The valley is narrow at
 Navas.

East on #95 the same gullies
 heavy clay.

At 12.9 mi. on #95 two short cuts
 show same gullies stuff.
^{small} Reticulated gullies + ridges running up +
 down the banks.

At 163.1 - big cut - Spoon River
 bluff - drift + ferritic loam
 then loesslike ridged stuff.

At 165.5 - E. bluff of Spoon River
 drift seems to run nearly to top.

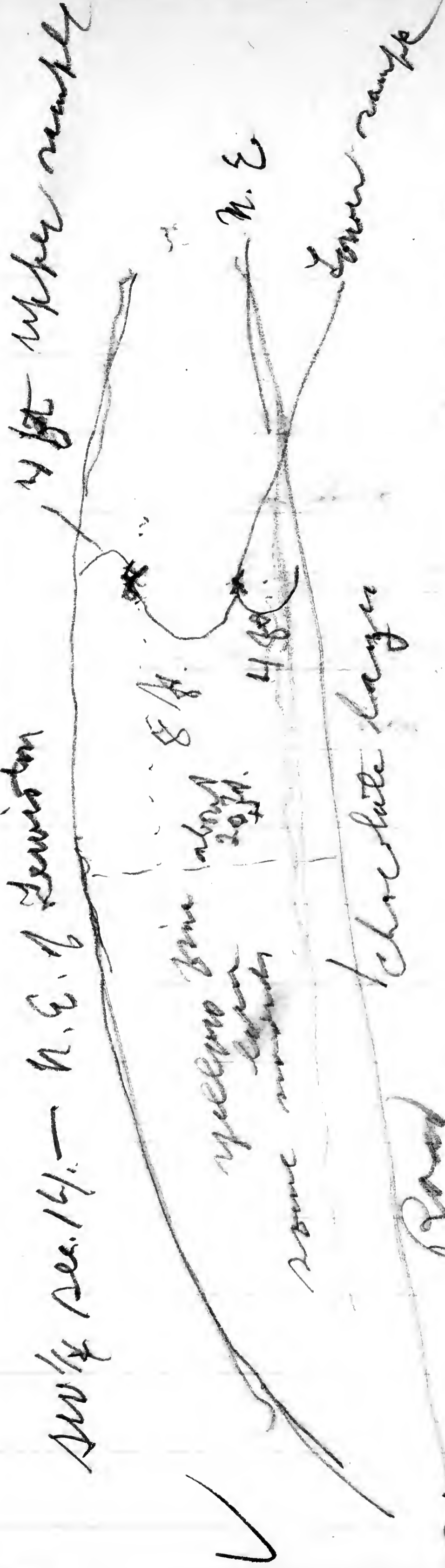
Other cuts E. are similar, some
 with more top gullied stuff.

At 191.7 a group of large trees
 (Cotton oak, etc.) - small gullies -
 otherwise great plain.
 Not far from Spoon River

QX 197.7 on N. & S. rd
 E. of Lewis 10 or more
 feet of light yellow
 laminated soft loam
 No fossils (see sample
 just below turning E.
 S.W.



SW 1/4 Sec. 14. - N.E. of Lewiston



Sto.

Show vertical narrow gullies, but not
 sharp ridges between
 Shales in two layers - about 5 to two samples,
 cut 202.2 on return - slopes SW
 cut a little over 1/2 a tenth 1/2 mile long.

5280

At 2:04, I on return came
to side road (S. & E.) on
^{some distance}
which we went, going out.

Here on main road, is a good
cut. Even looks just like that
in the foundation we are

see. 14, but I saw no fossils.

We drove to fork at end of
granite & drove S. on new

road to cut (see notes for next day)
in which many fossils appear.

This also has fossils in two
layers. Morgan picked the
upper & I the lower layer.

For continuation of description

of this cut, for it is later & we
will return.

See p. 14

We found a number of the
inland cuts without fossils,
but the cut in section 14
gives the Illinoian flat & the
other one is not far from
bluffs.

✓ The loess is light yellow,
very soft & friable (though
very hard on surface) &
makes dust! - friable.

We drove back & stopped
at tourist place on main
str. in Keosauqua.

Aug. 28, 1935. Wed.

Courthouse, Lewiston 211.9
 Turn E. 212.1 1/2
 cut ^{212.9}
 End pavement 215.6
 Turn S. 215.6 +
 1st Fossil cut - 216.6
 cut on Cliff, "way 217.1
 Foot of Cliff 217.2 1/2
 Back to pavement 218.9
 " #24 ^{Lewiston} 222.3 1/2
 Courthouse - 222.6
 Group S.
 at road E. 222.9
 Turn E. 225.4 1/2
 Waterford 229.1 1/2
 Fork road. 229.4
 (below cut) 9
 Back to #24 232.9
 " to Lewiston 235.6

Courthouse 235.6
 Waterford Road 238.3 1/2
 Sharon King 240.3
 #28 - Turn S. 242.7 1/2

Road S, to Emin 243.2 1/2
 Return to #24 243.8
 on #24 - other to 244.7
 Road turn S 245.1
 Turn back 248.2
 other cut 248.3
 Back to #24 - 251.3
 other creek 251.7
 #28 - Turn E. 252.6
 at 253.6 + side road cut
 Bridge - W.
 " - E 259.4
 (Utavana)

General level of prairie

Sample (exp. on weather surface)

1 1/2 ft

Took sample 1 ft from top

Sample 6 ft from top

Reddish (chert) lens

Sample 12 ft from top

A gray compact lens with some bands & clumpy

10 ft

Sample 1 ft above lens

Cut at 212.9 1 1/2
212.1 1/2
7 1/2

Just .75 mi. E. of main highway in Lincoln

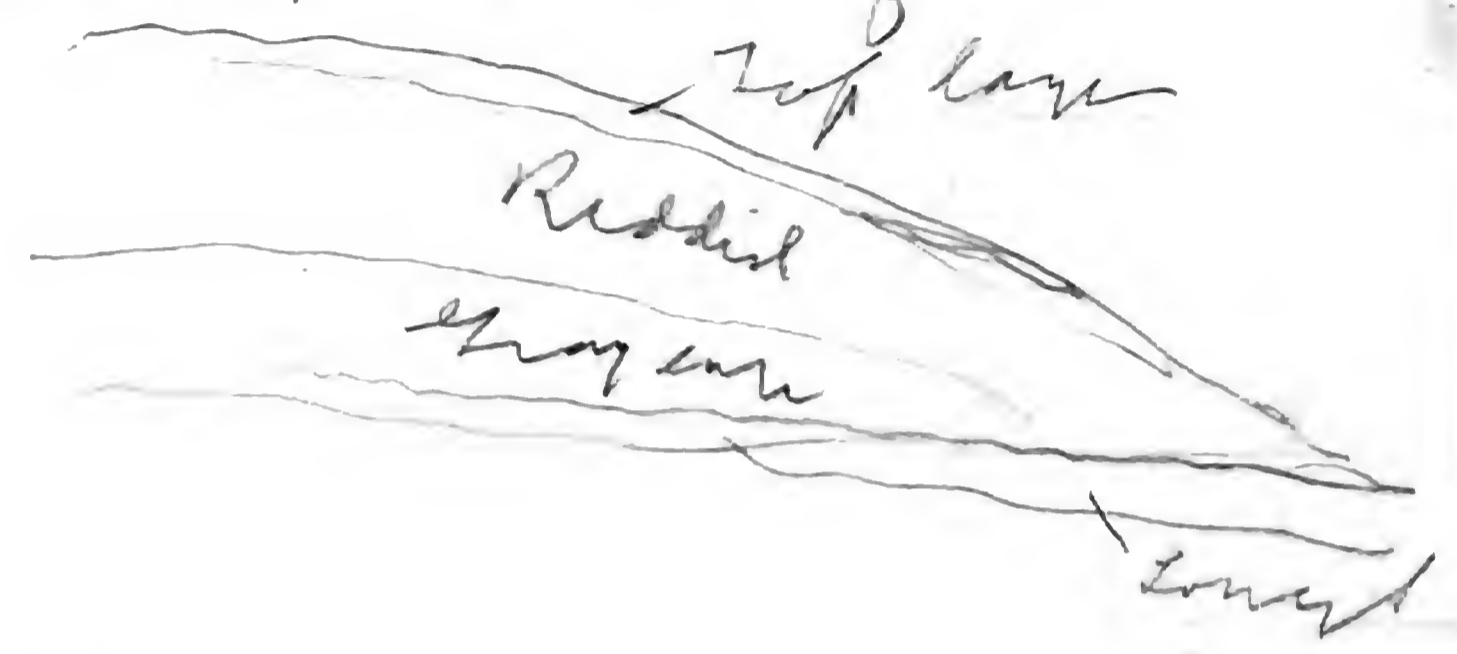
or paved road E.

S. side of cut, sloping down to W.

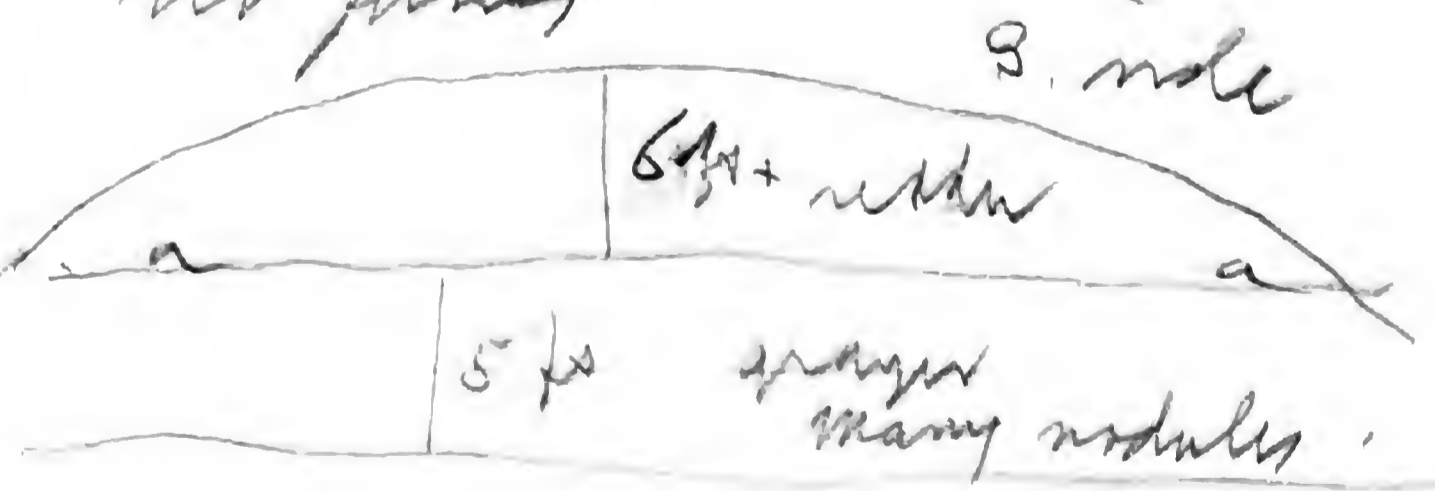
The lower part is cherty & shaly in quite friable, the gray layer is compact & stony. The reddish layer is "lumpy" (colored) & the top grayish lens is also crumbly, but fine fossils were found.

The contact between the two lowest layers is quite rusty. N. side seem to be similar, but is more overgrown.

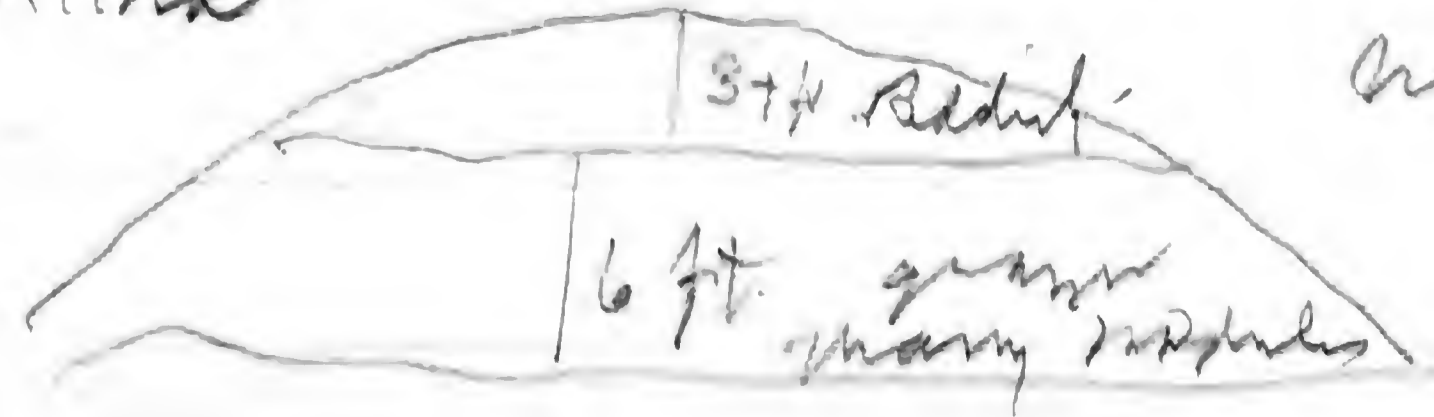
The gray layer runs out before reaching W. end of cut.



at 215.9, on road S., a cut about 8 ft. Shows gray layer below & compact, & redder lens above no fossils.



N. side smaller, similar. N. side



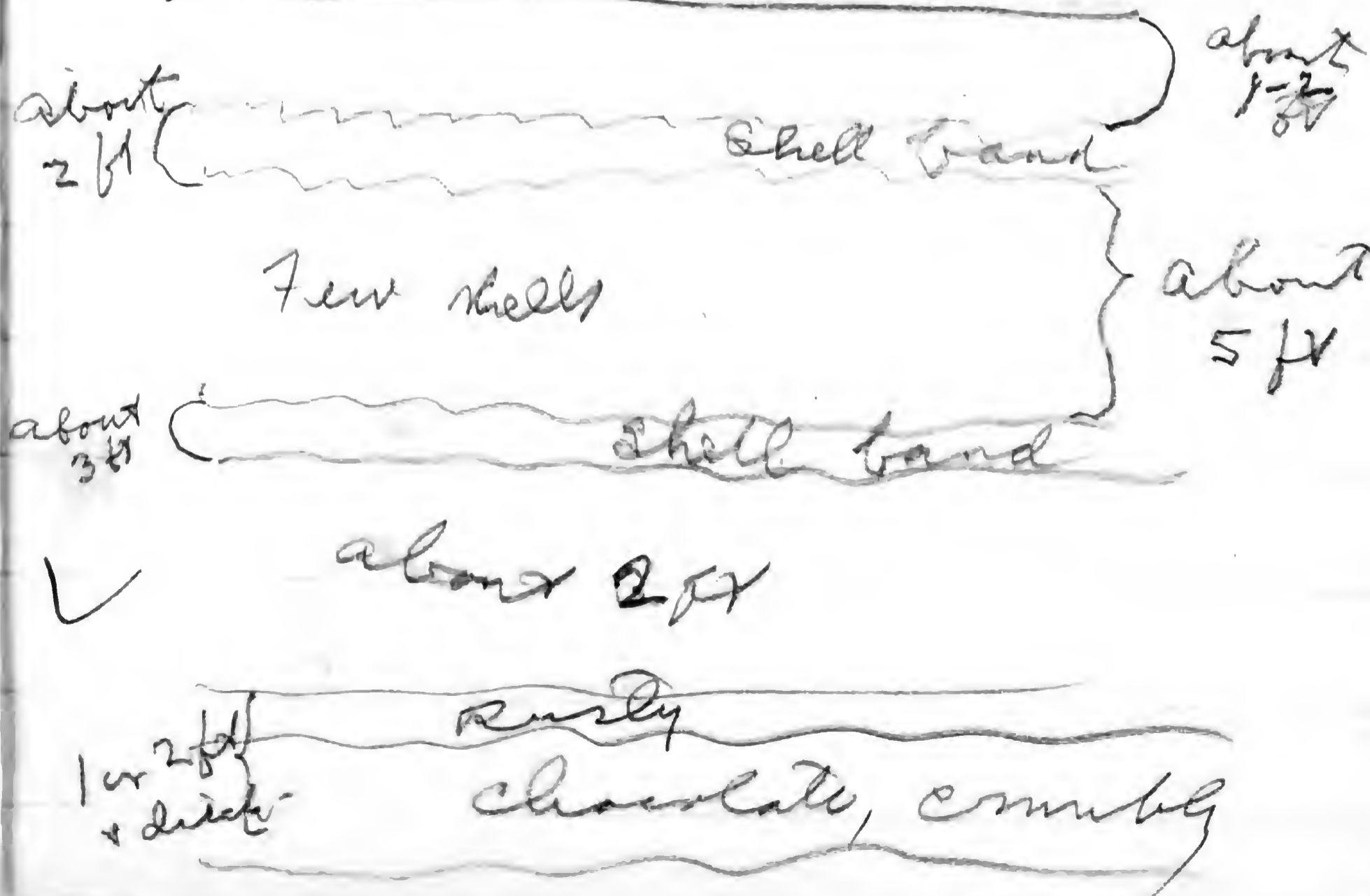
Other cuts S. are similar, but not clear.

At 216.6 - W. end of fossiliferous cut (see yesterday) on road S. of end of pavement E. of Lewiston, (see p. 8)



about 140 paces (420 ft) long
 8" wide in a little higher at N. end
 The gray zone more chocolate
 towards base. Fossils well
 to base into faint chocolate.

Uppermost grayish is friable + gray on exposure. Reddish inside. Took sample less than 1 ft from top.
 Reddish layers - lobular, redder, heavier. Took sample 3 ft from top.
 Gray layers - with reddish coloring and two bands of shells. (see diagram)
 Took sample at 7 1/2 ft. where gray & reddish meet. Zone is quite short.
 Took 3 samples of gray, one in upper band, 1 in middle & 1 in lower band.
 Gray base.



) The shells are more abundant in lower layer.

Marjic also collected on the E. side (only lower part, she saw none above.) The shells are not as abundant as on W. side.

We drove S. & stopped at 217.1. This is just between the two big cuts on the cliff. The upper begins at top, ^{A extends} about $\frac{1}{4}$ the distance down. The E. side is higher, shows gray loam below & a little red soil above. There is a steel beam (intermediate) within the lower 6 ft - could see some

above. This E. side is about 12 ft deep.

The west side is about 8 ft deep & also shows a few spec. fossils, *Polygonum multident.*, etc. Marjic gathered shells on E. side.



The big cut below is higher on W. side.

Marjic found shells from the east side - one lot about 5-6 ft. from top & to about 3 or 4 ft below top (no shells in this) The other (lower) lot she collects from lowest 6 ft., but there

were shells scattered between
 (not much distinction.)
 No shells in uppermost
 3 or 4 ft. of the big cut
 (lower one) on W. side.
 The shells run through
 ✓ upper 1/2 of gray layer in
 this big cut quite uniformly,
 & they are very abundant,
 (many are crushed), esp. Pol.
multilimata.

Took sample of thin upper
 gray fossiliferous layer in rock
 thro' from the big cut.

The foot of the bluff, at
 edge of great Illinois river
 flat, is at 217.2 1/2

at lower end (S.) of
 the big cut at least
 6 ft. of shaly rock
 appears at base,
 ✓ { Road from N.E. comes
 in just at lower end of
 cut.
 Red dirt drift above
 rock - probably 8 or 10 ft

W. side big last cut

708 ft

Reddish

Gray layer many fossils

(see sample) 6 ft or more chocolate

Reddish drift

total cut at least 25 ft.

Fossils many to top of gray
On E. side similar, fossils plenty, more
drift with hebbes low level shows later

On E. side a reddish (rusty) band
shows at top of gray layer.
Gray layer is also rusty where
it meets chocolate layer

Drove back to Lewistown for
dinner + then south toward
Waterford. Stopped at center
of Dec. 31. Cut in road



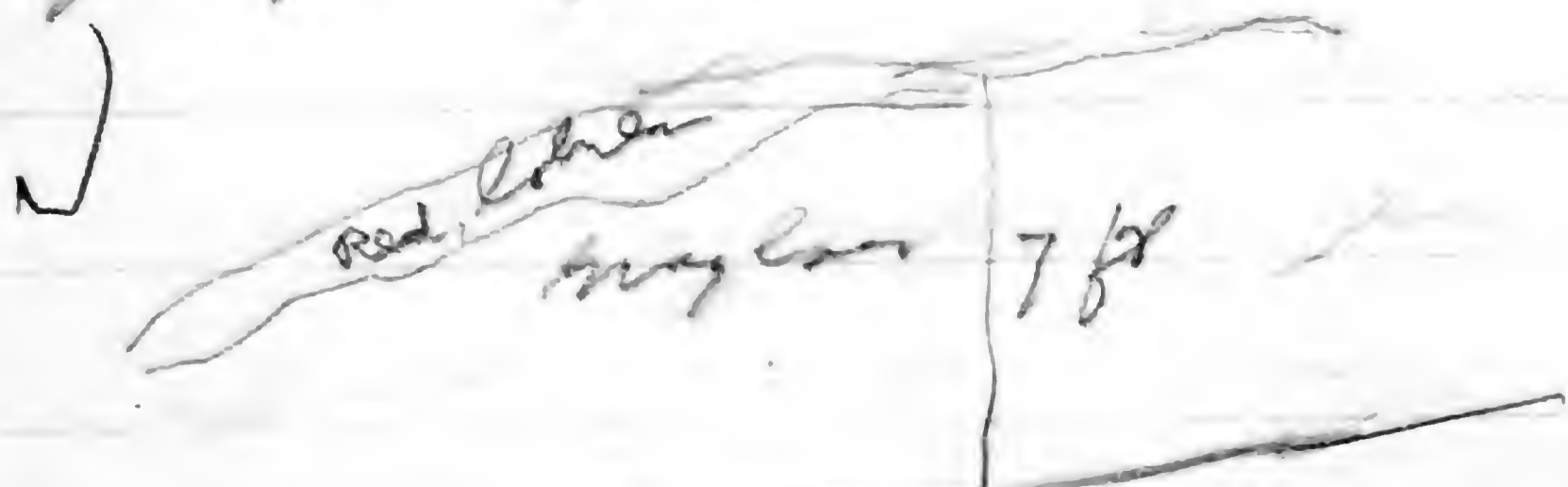
as a cut is about
10 ft, all light yellow
loess. - Shows harder
strata + drift toward
lower slope at (b)

Waterford

Apson River =
240,
S. of Apson River

at 245.1 on #24 - where
road turns S., or cuts in
all down line in. - 8-10 ft,
light yellowish grayish - fine
No fossils.

at 247.2 - on road towards
Enon, Ill. a cut across
small ridge (low down) face
S. shows gray low with
iron bands, lumpy horizontal
lines (may in places) & very
fragile fossils. S. side



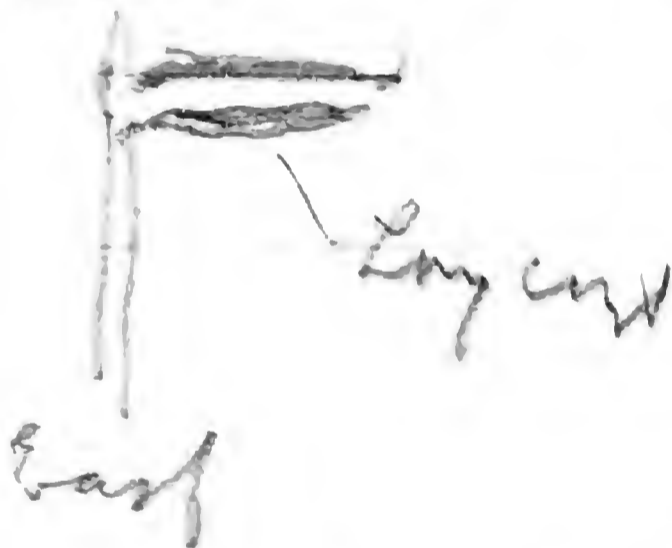
Road

samples of each taken &
some fossils

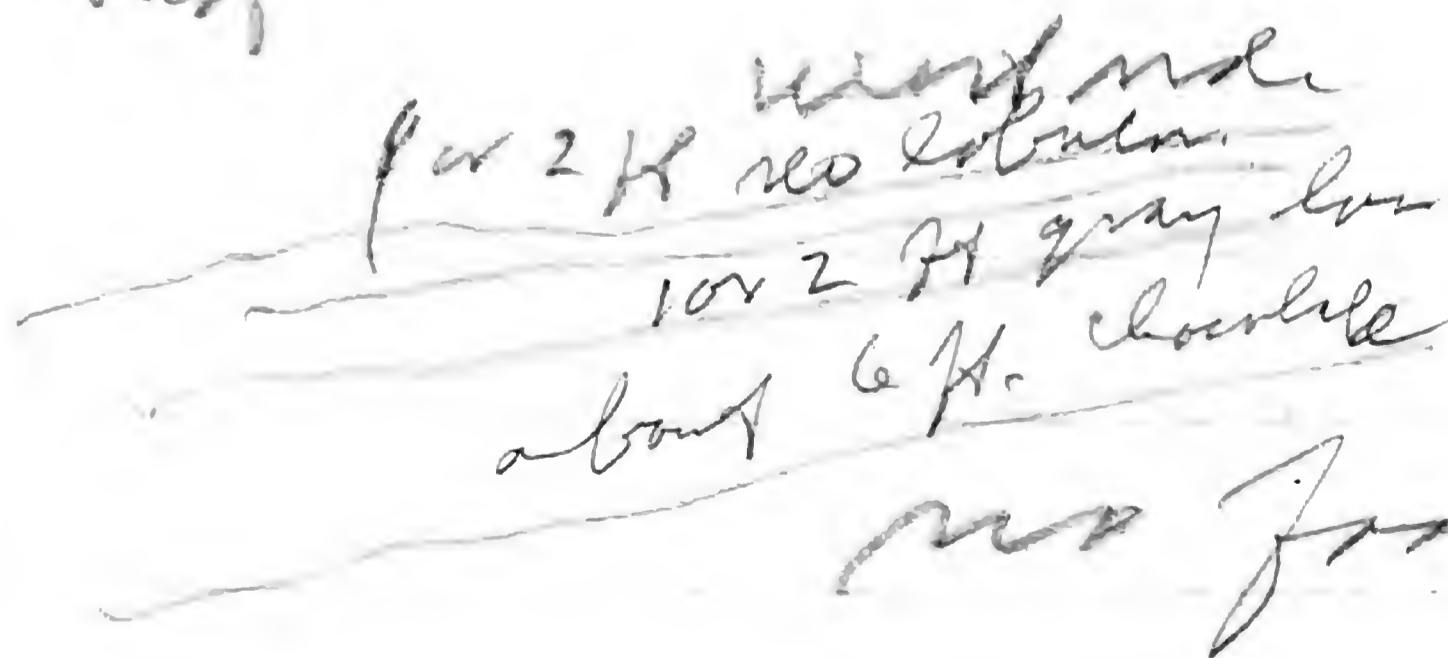
An irregular (continuous) muddy
narrow band separates the two
a few shells run up
into this

In band off 248.6 on
return - may drift or

at on return, going
up hill from fork



There is a long cut



9
 on # 78 toward Havana,
 a side road (north) at
 253.6 to in a narrow cut.
 at least 8 ft. of gray
 fossiliferous loam, with
 nodules & iron clonings,
 (See box of shells)

This is well up - top on
 a level with general
 surface.

9
 Dig out on # 78 just
 east of this shows
 much drift below.

At 255.5 the bluffs
 end & great level
 flat begins.

We drove to Havana & stopped at Hotel

Aug. 29, 1935, Thurs.
 started at 6:25

Hotel-Havana - 262.4	Bluffs ^{RR} - Mackinac Riv 337.1
Bath 271.3	Mackinac River 338.7
Saugamon Riv 280.2	Pekin RR 347.5
Chandlerville ^{RR} 281.3	" - RR. 347.8
Fire cut 283.2	" #1 Business part 348.2
Chandlerville ^{RR} 286.8	#9 (east to cut) 350.7
Saugamon Riv 287.9	at N. cut begin 354.4 1/2
Bath - 296.8	Lower end of cut 354.7
Havana Hotel 305.7	River bridge 356.5 1/2
1 st near N 310.1	turn E.
Road to Zepher 311.7	Turned back 359.8 1/2
Road N. 316.4	Back to River bridge 363.1 1/2
#120 317.2	#28 road 364.4 1/2
Road N. 318.9	Bridge. { 364.7 1/2
#24 - 325.7	#150 - 366.9
Allen RR Sta 328.2	about N side Riv 368.3
Bluffs ^{RR} - 1 mi (low) or N 328.6	Hanna City ^{#78} 377.4 1/2
#122 333.2	Farmington ^{387.5} 388.5 1/2
Brown Valley 335.7	Middle Grove 394.1
Sporckin 405.6 see bottom of 2 nd page	London Mills ^{Road} #41 402.8
	Rosville ^{RR} 410.7
	Rosville - ^{turn} 424.0 1/2
	Rosville ^{turn} 424.2 1/2

Left hotel at Havana at 6:25 AM
 + drove S. on #78, on an alluvial
 plain with numerous timber remnants,
 there are also numerous sandy areas
 and low dunes - In one place large
 area purple with *Eragrostis v. verticillata*
 We drove beyond Chandler's Mill
 on #38, & where road cuts
 into bluff (at 28 B. 2)
 ~ #78 1.9 mi. S. of Chandler's Mill
 There is a fine long cut, on #78
 I worked mostly on E. side
 on upper larger (deeper) part
 shells run all through this
 quite abundantly (some as
 P.D. mounds & P. multiseptata for
 colonies) & extend clear to
 top.

I took a sample from

a foot from top, & another
 12 ft. lower.

The sand grades up gradually
 into fine light yellow loess
 through more than a foot.
 Total thickness of loess is
 about 15 ft. & about
 14 ft of sand below at
 highest part of cut

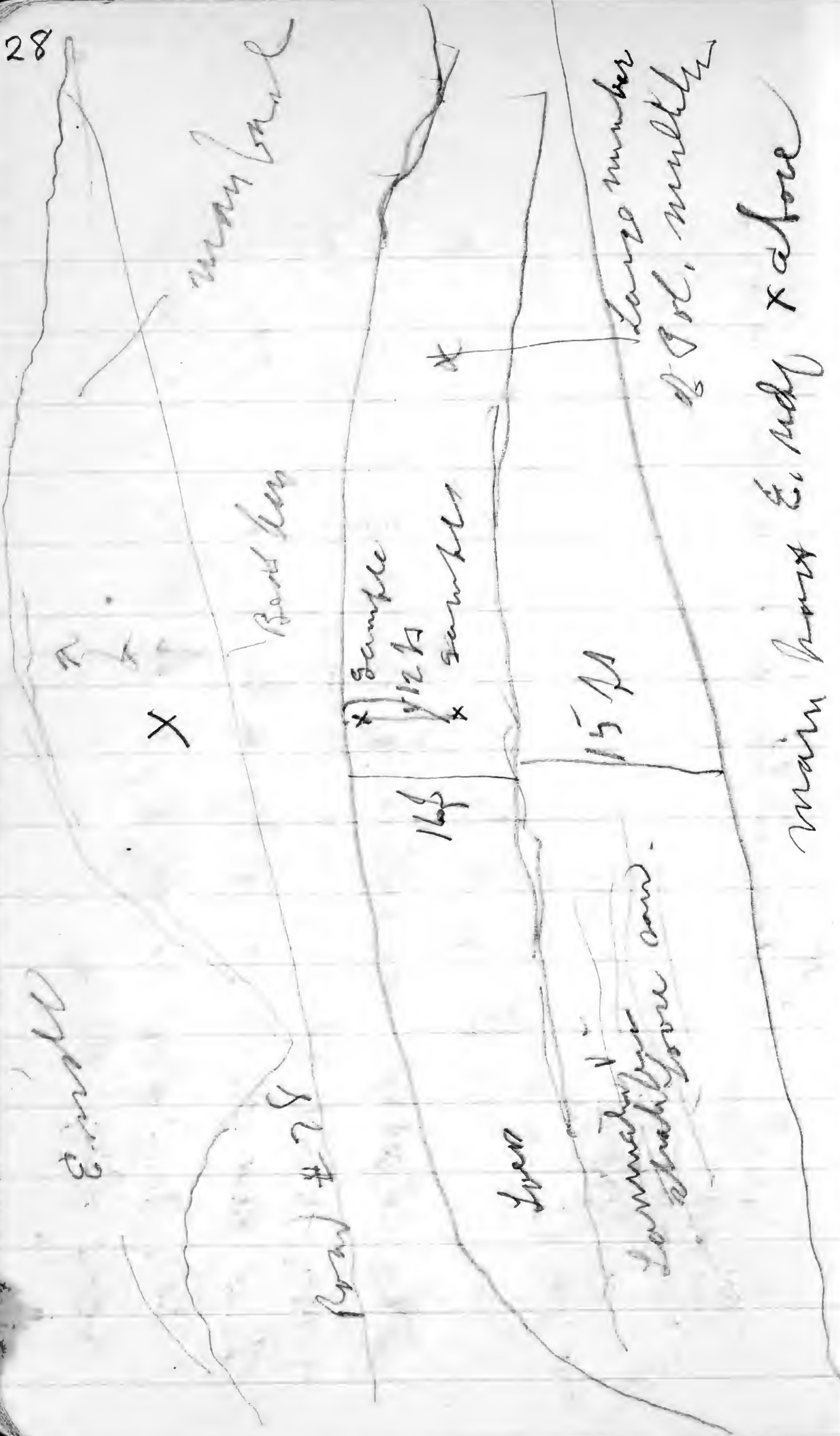
There are many nodules,
 but no sign of iron.
 An old dune.

Took box of clay about
 9 ft from top

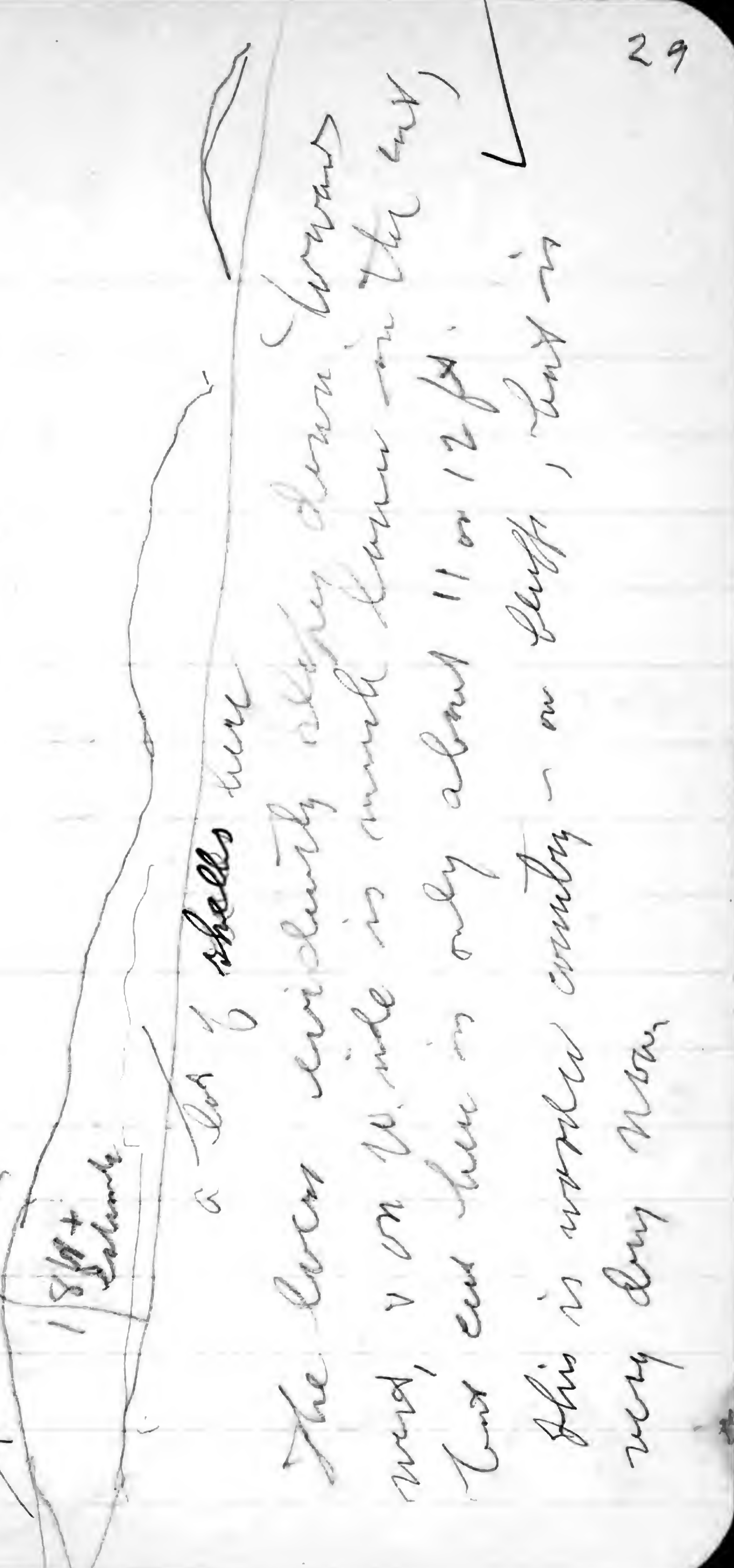
Two spots at same level
 6 ft apart

Media	435.5	Burlington	457.5
#34	445.1	West Burlington	460.6
Keuffner	456	Danville	469.9
Bridge	456.5	Middletown	466.0
Keuffner	448.1	New London	476.4
		Ma. Pleasant	484.8
		Home	534.9
			36673

1897 Nov 19



This is higher ^{on} W. side is lower + more
about ^{like} region



The lower visibility ^{is} down towards
west, & on W. side is much lower in the cut,
cut here is only about 11 or 12 ft.
This is watered country - on bluff, but is
very dry now

The Sangamon has a good many
bars here. Its valley & that of
the Illinois flow here.

What an opportunity for loess! Brown
sandy flats & river bars for source,
wooded low bluffs for anchorage!
These cuts are so overgrown &
slumped that I could not see that
there was interstratification,
the transition where I noted
it was gradual & lower part
of loess was quite sandy (fine).

Returns to Havana and
had luncheon.

We then drove east on
#122 over wide bottomlands,
with scattered low dunes in 1st
few miles - mostly trees on dunes,

Evidence of low dunes everywhere
Wide open flat places - (all
seem to be sandy) evidently
originally treeless.

- Beyond 315 again more dunes.
Gradually better soils appear,
looks as if the rise is gradual,
but low scattered dunes
still appear at 323.0 etc.

At junction with #24 low
bluffs are visible about 1 mi
S. E.

From town at 328.6 - low
bluffs appear about 1 mi E,
No. 24 runs on this flat
plain - no bluffs in sight

at 337-337.1 we drop down
low bluffs to Rk. (low ^{cut} _{in hill})

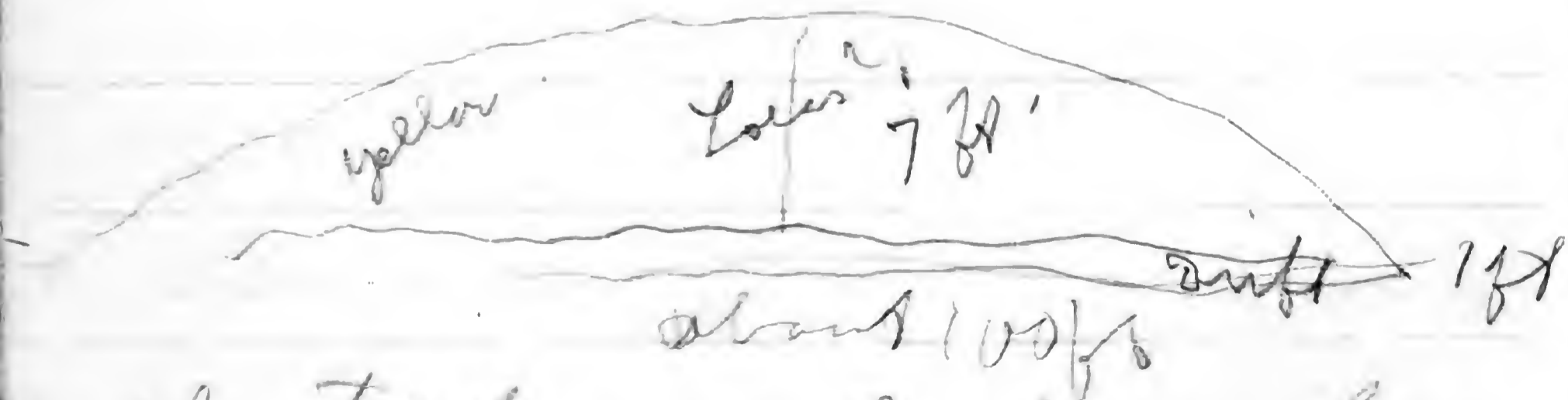
E. of No. Pekin & Pekin
bluffs appear - corner opposite
Pekin.

We drove E. from Pekin
on 24 up the creek valley
Turned back at top of hill
at 359.5₂

A loam like (hard) stuff
yellow when weathered & some bluish
underneath surface, at 370.5

Drove west on #124

At 407.5 a cut



The top layer may be loess, but
it is quite lobular. No fossils
(see samples)

At 447.2 on 34 a good cut
at 447.7 - sand
at 447.8 same & loess
This is a bluff on E. side

1935

	Expenses - Oil & gas	\$ 1.00
9/13	Gas oil - market bank, 2000. Keokuk	2.25
	Hardin, oil, gas	1.81
	Jeromeville - Room supper 40	1.90
9/14	Breakfast	.45
	Waterloo, dinner	.65
	Prairie du Rock - gas	1.77
	Supper, Carbondale	.72
9/15	Hotel breakfast 2.00	3.35
	Shannon - repairs, gas oil 25	1.89
	dinner	.67
	Bridges - toll - Cape Girardeau	1.00
	Supper, Jackson, Mo	.56
	Room, Jackson	1.00
9/16	Jackson breakfast	.50
	Marble Hill	2.22
	Lutesville - tire fixed	.50
	Patterson, lunch 45	.45
9/17	Eminence - River View Hotel	2.50
	Room 4 meals 1.50	2.00
	greasing car 75 gas 1.25	.61
	Galena lunch	2.02
	near Lebanon, Mo. gas 1.40 oil 42	.40
	Camdenton, supper	2.50
9/18	" Hopkins Hotel room	.50
	" Marshall	.85
	Franklin - county	2.01
	Peru - repairs - gas	2.46
	Columbia, gas, oil	

(See last page)

Market + E. 6th St. Alton

184.2

231.1	35
227.3	
3.8	

Sep, 13, 1935. Friday

Started at 37040. - 7:30 am

Home -	0
#2 + #161 -	26.87
Wt Pleasant #38	49.7
Donnellon #3	72.3
#61 + #151	83.3
Keokuk -	83.4
Bridge - W.	93.3
" - E.	94.6
#96 (Turn 5)	95.2
Swato Wash.	99.6
Wasson -	103.3
Return "	105.5
" to #96 -	109.1
Quincy, Turn 8	139.4
Kinderhook #36	161.9
#54 + #36 -	180.4
Pittsfield (Turn 5)	184.4
Detroit (Turn 5)	191.4
Milton -	196.5 1/2
End payment	197.5 1/2
Rear (Detroit)	206
on #100 #38 begin	217.5 1/2
Kampsville	227.3
Hardin (W. end)	
Entered Al.	

at 230.6 - low cut
at 231.8 - Turn tank
Hardin (W. end) 236.3
Grand bridge (turn 8) 236.7 1/2
Fredon, 245.7
Jeromeville, 255.2
Camdenton - 225.2

169.8 - Harrisonville Mo

The day is pleasant, - sky with thin clouds partly covering it.

At about 6 or 8 the pasture & fields are covered with Bidens (trichosperma?) in fine flowers. Same all along - below Downellon.

Evidently the large patches are on corn land lying idle (paid for!) & it is only weeds a nuisance!

In Illinois S. A. Hamilton says patches of Bidens.

Turned to Wascans but found no good cuts. Seemed to be only a thin veneer of loess, - 4-5 ft. & I saw no fossils. Returned to #96 & drove S.

229.6
227.3

2.3

230.6
227.3

3.3

231.1
227.3

3.8

valley of the Mississippi at & below Keokuk is quite narrow, - here little loess. Drove to Hardin, Ill. & then W.

At 229.6 - a cut at top of Miss. bluff - a loose yellow loess. Shells only on surface, - recent? (see sample.)

At 230.6 - a low cut (6 ft) in gray loess with iron belt - (see sample) & 2 shells (loess?) facing E. On low ridge in valley - W. of top.

At gentle slope facing W. on N. side road at 231.1 A yellowish (grainy) loess, with iron tubules & P.C. mules, etc. All shells. Cut long, 10-12 ft deep. A little pebbles, drift shows below

a little farther down.

At 231.5 a similar yellow
loess has fossils. See fossils
& base of clay

This is ~~main~~ foot of
low bluffs at edge of
valley.

Turned back at 231.8

We drove back to Hardin,
and then to Jerseyville, where
we spent the night at a
Tourists Place.

The high ridge (core of rock)
extends between the two rivers
away south, separating the
broad valleys of the Illinois
& Mississippi Rivers

W. end of Cliff str. - Alton
Market + 2. 6th str. "

2nd of ^{year} 1st in
Left on ^{9th} by alley + 1 block

Sep. 14, 1935 - Sat.

Started from Jerseyville, intended
of #38 + #67, at 6:27 AM.

Jerseyville, #38 + #67 -	258.6	Granite City	339.0
Turn #109	267.2	E. St. Louis ^{at bridge} #3	347.2
Brafton	275.2	Cahokia	
Park (turns back)	281.4	Bluffs ^{at} #3 -	355.8
Brafton (return)	288.5	2 nd row, road on flat,	
Turn to Elsoh ^{ess. 6}	294.	Cut into bluff	358.4
Elsoh	297.4	(not main bluff)	
Back to #109,	301.2	Chumbers	360.4
" " #67	304.3	main bluff	361.1
Turn to the Alton		Waterloo	368.0
service	310.	Lean "	369
Alton Terrace -	310.8	Red Bend	382.8
Back to #67 -	311.6	Ruma #155	388.2 1/2
Alton	317.1	Prairie to Raker	395.
" down town	318.1	Turned at	395.4
Return " " "	319.8	Return to #3	402.4 1/2
Yellow loess cut	322.9	Swansville	406.8 1/2
Wood River	325.8	Ellis Grove	412.9 1/2
Hartford ^{at} 6		Chester	422.1
Mitchell	333.5 1/2	skip 5 pt. to 4.75	
Narrow	336.3		

A beautiful morning, - clear and pleasant.

We started S. on #67 & in a turn towards Grafton.

The last part of the drive to Grafton is down a valley or cañon, wooded & with ledges.

We drove up the Illinois to the park, but saw no loess.

Did not yet reach the ridge between the rivers.

There are cliffs & no loess a few muddy places at base.

We drove down (at lower end of Grafton) to where the

Illinois & Miss. come together. They bend quietly.

The points between is sandy & partly covered with shrubs & low trees. The timbered flat between the streams seems to extend up for several miles.

Drove back to #67. and to Alton

Elsah is in a cañon & the cliffs at river are high.

Drove back north to #109

We turned E. to Clifton Terrace, - a rather pretty drive down a wooded cañon to the Mississippi. No prospect for fossils here and we drove back to #67.

Alton, Ill.

At Market & E. 6th str
 There is a fine exposure
 18 or 20 ft high, vertical
 face. It is made up of
 "pink" loess from top to
 bottom & through it are
 scattered shells. Some
 some $\frac{2}{3}$ of the way up.

Mostly large Pol. ammonites,
 in one place crowded
 in a layer 2 or 3 ft wide.

Shells mostly broken
 1 Pol. appears.

Took sample & box

of clay.

We also drove out to
 Cliff street but found our

former exposure, but found it
 covered with stumps & we found
 nothing.

Drove N. to E. St. Louis

At 322.9, 3.1 mi. S. of Alton,
 there is a cut of yellow loess
 on E. side of #67 just a little
 above river flat, on a "bench"
 of the bluffs. Some nodules
 and a few fossils. Took
 sample of clay.

Other cuts appear, esp. on paved
 road to E. at 323.3, but I
 saw no fossils.

Rest of the way to E. St. Louis
 #67 runs on the flats
 wide bottom land all along.

We drove S. on # 3 and about 1 mi. beyond Columbia we cut into bluff and on upland to Waterloo, where we stopped for dinner. Then drove on to Roma on # 3, & turned W. to Prairie de Roche. Dropped down a cañon to river bottom, (Bluff about 1/2 mi. high). A deposit near base is quite sandy.

At Chester we drove toward ferry. Near bottom of hill a big cut (on one side) shows bouldery drift below, heavy reddish clay above & yellow (or pinkish?) loess on top. No fossils. See sample

Look back 5 pages to p. 39, 45

Ferry	423.6	
Chester #150	425.3	Carbondale 470.9
Rockwood	433.3	Marion 487.3
Cora-road	435.3	Harrisburg 509.6
Glenn	440.4	
Crain	447.7	447.6
#144 -	447.6	444.7
with #150.	451.4 1/2	2.9 mi.
Summit bank		1.1 1/2
Back to #144.	455.0	456.1 1/2
Curtain bluffs.	456.1 1/2	455
Murphy bank	462.6	1.1 1/2

(rather) Big bars in river below, but valley not very wide. Bars below not noticeable. Much forested bottomland at about 432 + we follow base of bluffs to head beyond Crain. at 451.4 1/2 we turned back - just about

a high isolated hill, looks
like a high wooded island.

The bottomland here
has a lot of oak -
mostly *Q. palustris*.

Stopped at cut on #144
S. E. of Crain (at 456.1 $\frac{1}{2}$)
and I took a box of clay
with fossils. Many fossils
some shells. A yellow
loam. I took clay
from black which
slipped from upper $\frac{1}{2}$.
This is down near base of
long slope toward in road.
Rock (shale) appears
high above the
fossiliferous loam

on this slope.

The hill at top looks like
that of general upland.

There are numerous cuts towards
Murphyboro, but top layer
seems to be the sharp-ridged
(vertically) tough upper clay.

Rock shows in some.

We followed #13 to Murphyboro,
then to Carbondale, where we had
supper, and on through Marion
to Harrisburg, where we
put up at the Homing Hotel.

A warm day!

Sep 15, 1935 Sunday

Left hotel at 7:15 AM

Entered 1st spur of Ozark
Crew just a little N. of #13) at 515.8

A larger spur does not
quite reach the road further
east.

A low cut (3-4 ft) in road
at 517.1 shows below
heavy (jointed) layer. It
looks like limestone, but is
evidently not limestone.

You can see the Ozark ridge
running E. parallel with the road,
for a long distance.

The spur we crossed is just
a little northward extension.
Small spurs, ^(southern) eastward, cross by road.

Harrisburg	509.7	Vienna	618.5
Ozark spur	515.8	#37	623.2
	516.1		
2 nd spur	516.6	Anna	638.7
#1	524.1	Jonesburg	640.1
Shawmutown	533.0	#150	647.8 1/2
" hill	536.	Ware	652.3
Jarvis bank	536.5	Wolf Lake	652.3
Shawmutown	539.7	Aldridge	656.6
#1	548.7	Jarvis bank	657.6
#142	552.9	to Road 2, -	657.6
#45 Harrisburg	562.4 1/2	Bluff, E. -	659.0
#34	563.0	Jarvis bank	659.1
Rudement	571.5	Back to #150 -	660.5
along 574 - Edge of north		Wolf Lake	663.6
Herod	576.6	Ware #146.	668.1 1/2
Top of low ridge	577.6	#150	679.7
(High pt.)		Bridge	{ E. 682.9 +
Road fork	581.	W. 683.67	
Holcomb #146	595.2 1/2	#25 turn	694.0
at 602.3 - Ozark on		to Jackson -	
Main Barbs	604.2		
Top of spur -	607.8		
Granitsburg	609.9		

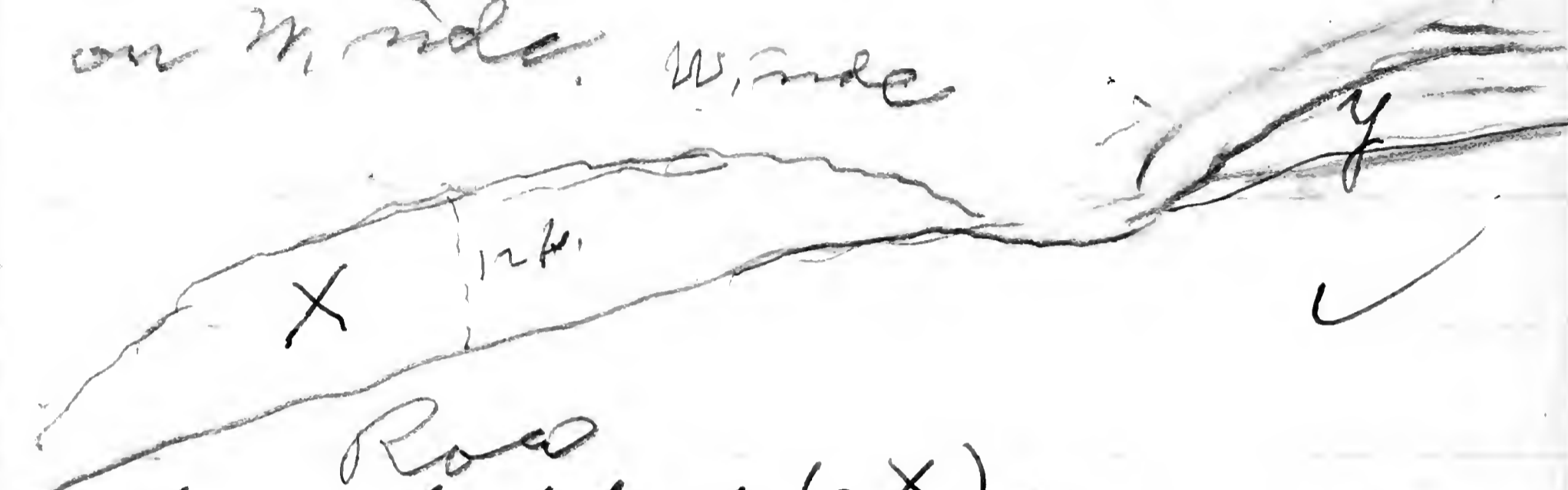
At 521.5 There is a long
low cut, just east of bridge on
N. Fork Saline R. which shows
about a foot of yellow loess
(weathering ^{well} grayish), & about 6 ft
of red joint clay. We found
took sample of loess.

Other cross E. appear similar
The Ozark spur S. of road
evidently crosses E. quite to the
Ohio.

A long spur of the Ozarks
ends abruptly not far (1 mi?)
S. of road.

We had car put in rear
& drove N. to Shawnee town
hill. Here there is a fine
exposure of loess on hill

up to top, but the base is
in the east. Washed mostly
on N. side. Wind



Road
Lower part of cut. (X)
This is a compact heavy yellow
loess of the older type, with grey
streaks & below almost all grey.
The fossils are mostly from the
lower $\frac{1}{2}$, but a few are
scattered above. They are very
fragile.

About 3 ft. from bottom there
is an irregular layer of very
large nodules (see sack) of shells
are plentiful here, - but fragile!

The bank stands up almost vertically.

The upper part of cut is about 1/2 of total

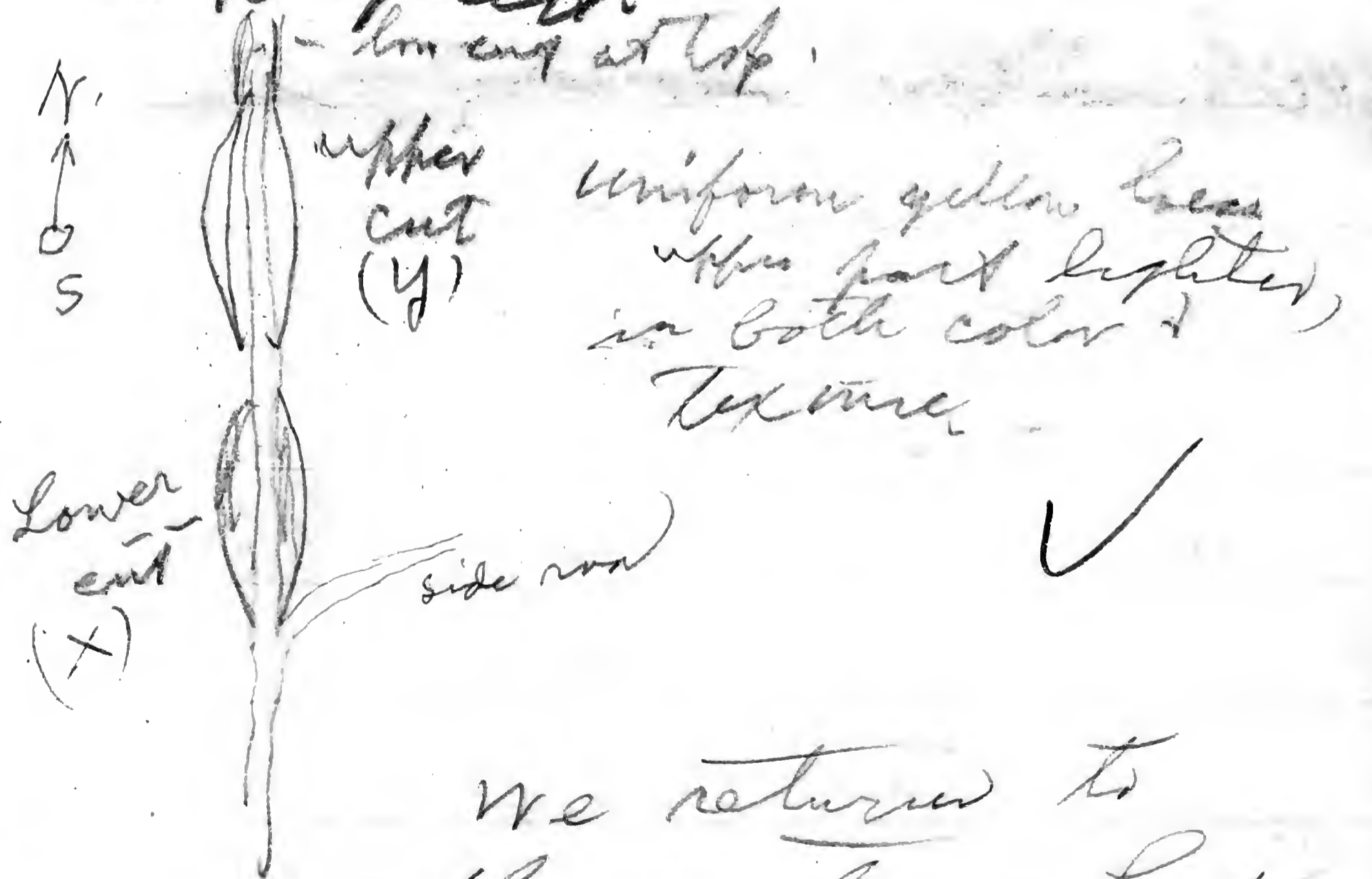
It shows about 4 ft of red mud & about 8-10 ft of yellow loam of same type, but no fossils, as probably very few.

The upper cut (y) shows uniformly yellow loam (fossilif.) capped on top with a layer more or less like loam.

Lower part of upper cut about 12 ft. Collected in loam 4-5 ft. mostly by

digging. Some scattered nodules shells firmer than in lower cut. Took box of clay & sample, also a few nodules.

Cut runs up to top of hill - side road near top part.



We returned to Shawmelow & had dinner. Drove west to #45

at Harrisburg and then took # 34 towards Golconda. We followed a gap in the Ozarks most of the way after we entered.

At Golconda we took #146 west to Anna & Jonesboro.

This is rough country, evidently in the Ozark ridge, but with higher ridges parallel to road some distance N, of it.

We drove to Ware and took # 150 N. to Aldridge, then came back and a mile S of Aldridge we took a new rough road (C.C.G. office) & drove E. to bluffs. There are

great cliffs here & wooded bluff, but I could see no loess and we returned to # 150, and drove back to Ware and to #146, which we followed to Cape Girardeau. We crossed the big bridge and followed #61 & #34 to Jackson, Mo.

We took a room at Daugherty's, had supper, & after deans up, retired!

Just before reaching Grantsburg on #146 east of Vienna, at 609.6, we saw a number of small cypresses on the wooded bottom land.

Sep. 16, 1935, Monday.

We drove along #34 and at #67 x #34 we washed the boxes of saws

N. of Hardin, Ill.

14 x 10 1/2 x 7 1/2 in deep = .62 cu. ft.

Upper cut, Shawmutown hill, Ill.

14 1/2 x 12 x 7 1/2 in = .76 cu. ft.

Red bars - Acton, Ill.

9 1/2 x 10 1/2 x 7 in = .41 cu. ft.

Lower cut, Shawmutown hill, Ill.

16 x 11 1/2 x 6 1/2 in = .69 cu. ft.

Yellow bars, S.E. of Grain, Ill.

13 x 11 x 6 in = .5 cu. ft.

We drove to the Sand. Baker St. Park, but this is chiefly a fishing park, with the St. Francis River a clear

Reading - 37758

at 6:41 am

When we came in 694.

Jackson, Mo. #25	695.6	Ellington	814.3
#34 - left -	699.0	Dear Run P. rd	818.5
Marble Hill	715.6	Park entrance	819.7
Interville	716.4	Tower	824.6
" (back)	718.8	Back to loop	826.8
Glendale	721.9	Back entrance	828.4
Grassy	734.1	#10 p -	829.7
Club	743.4	Ferry, Curran Riv.	839.5
#67 -	750.5	Creek,	848.2
St. Francis Riv.	753.1	Eminence	852.6
Park way	755.0	Entrance - alley	858.1
Entrance Baker	758.1	Alley Spring	858.7
Journ back	759.9	Eminence con 106	864.6
Park end (return)	761.6		
Return to #34	764.7 1/2		
Clark's creek	765.3 1/2		
Patterson	766.2		
Piedmont	775.7		
Leiper road	782.5		
Black River	782.9 1/2		
Sarwood	793.9 1/2		
Dear Run Park Rd	794.3 1/2		
	796.9		
	807.6		
Row to Van Buren	809.6		
& Rubby			

884.6
695.6

189.0

Stream running over a pebbly bottom
 We then ran up to Ellington,
 and on about 5 miles west & southward
 into Deer Run State Park. Road in
 park runs on narrow ridges, and
 in openings I noted following,
 At top of ridge in Deer Run
 Park - opening.

- Euphorbia ~~sp.~~ (l)
- Desmodium (Dum)
- Ambrosia ~~sp.~~
- Erigeron ~~sp.~~
- Helianthus ~~sp.~~
- Panicum capillare
- Rudbeckia hirta
- Ambrosia ~~sp.~~
- Digitaria
- Solidago

We ran down into the creek
 valley & then on a loop up, &
 along the ridge to entrance.

This park is not outstandingly
 attractive and they are just
 making a single-drive road
 on the loop which we followed.
 A C.C. Camp is located here.

We were quite disappointed here.
 We then followed the new
 new gravelled highway #106
 westward to Emine. This a
 fine mountain highway, through
 forest most of the way, with
 occasional clearings and
 mountain shacks, rail-fences
 & little patches of corn or smaller
 patches of sorghum. Few cattle,
 and not frequent razorback
 pigs. We have been passing
 rail fences all day; some were
 8 or 9 rails high. Loghouses

are also quite frequent.

All along #106 there were glimpses of fine mountain scenery, and occasionally from higher, more or less treacherous, stops splendid panoramic views were presented, with prominent wooded ridges & peaks appearing on both sides.

We drove west from Eminence for about 6 miles to Alley Spring State Park.

Here a great spring bubbles up near foot of great cliff.

Some of the E. C. Camp men said the large pool formed over & from the spring

is 48 ft. deep. A part of the stream from spring (at edge of pool) is deflected and ran a grist mill, still standing.

A good sized stream with rocky bottom forms the outlet. From the pool and ^{to a point} down the stream for at least a quarter of a mile the rocks at edge & farther out are covered with Goniolais. Some were clinging to rock in a very swift current at the outlet of the pool & on the most exposed sides, while others favored the sheltered side facing downstream. Collected two bottles of snails in a little while. The water of

The pool is a pale
(washing indigo) blue.

We drove back to
Eminence just about dark
and put up at the
Hotel.

The mountain region has
had little rain and plants
show it. Some of the trees are
beginning to change the color
of the leaves.

We noticed a number of small
tulip trees and a species of
Pinus is common, especially at
higher altitudes. Some parts
have been cut over for lumber,
and in some places a good

Jack's Fork comes from 63
alley spring

many young pines are coming
on - mostly 4 to 6 ft. high, - some
taller.

On #106 we crossed Current
River on a ferry. The stream
here is clear and is said to
provide good fishing.

I could see no snails, but I
could not make a thorough
search.

A bridge is to be built
here.

In quite a number of places
on #106, cement "dips" are
constructed where streams cross
the road (or dry channel) to
provide outlet for floods.
It is simply a depressed cement
pavement. Road dip

Dep. 17, 1935. Tuesday,

Very misty early, but clear up by 7:45 when we started, after having car greased.

We drove to Round Spring Rd along a very fine (new) mountain highway.

The spring is smaller than Big or Alley Springs & the shallow pond is covered with water lilies in fl.

In the rapid stream of along edge, on rock etc snails are plentiful.

(See par + tailed bottles)

Saw cornfields with dead ^{grazed} trees & rail fences.

5- ⁶⁴	10 1645	Esauville Rm 65
	7:45 AM	con # 5
		# 64 - 1031.3
Eminence, #106+ #19,	865.6 ^{1/2}	Bennett Spring 1043.6
Current Riv	878.	Return
Spring Valley Riv		Entrance. 1043.9 ^{1/2}
Entrance	878.3	Back to #5 1054.2 ^{1/2}
back	878.4	Decaturville 1070.1
Current Riv	878.6	Camden 1078.8
Sinking Creek	879.9	
Co River K	903.6	
# E -	908.8	
# 119 -	914.3	
Entrance Montauk	919.2	
Parls		
Entrance - return	921.5-	
# E, -	926.3	
# 32.	930.4	
30 turn	939.2	
Salon,	942.2	
# 72	943.5 ^{1/2}	
# 63.	968.2 ^{1/2}	
# 66 (Rolla)	968.5 ^{1/2}	
Entrance # 66		
Arlington road	980.9	
Little Piney River	981.1	
Little Piney Riv	990.3	
Devil's Elbow (man)		
Waynesville	999.	
Wood group	1015	
* Lebanon	1030.4	
	1030.8	

at about 8.95 we passed
into more gently rolling cultivated
country.

We drove on # K ()
to Montank St. Park. Here
Current River runs. There is
quite a valley with steep slopes.

We drove toward Lebanon
and stopped at the Gasconade
River on # 66 & collected shells:
about 5 species of *Unionidae* &
Goniatina, *Pleurocera* & *Campylaea*,
Ara Planorbis.

The stream is somewhat
rocky and rather rapid.

The *Goniatina* were mostly on
rocks, the *Pleurocera* on mud.

We drove to Bennett Spring Park.
Here a big spring bubbles
right up in a valley &
runs out quite a stream.
The pebbles at edge of big
pool & the stream are dotted
with a little *Goniatina*. In
the more sluggish pool above
I found *Pleuro* & *Helisoma*.
Watercress grows in everywhere
a fishing park.
We drove back to # 5, and
followed # 5 to Caudefonton
where we put up at the
Hopkins Hotel.

This is evidently a resort place.
I packed shells & after cleaning
up, retired.

This part of the Ozark region from Montauk N. & west is not so rugged & higher hills are visible only far to S., S.E. & SW. Even Montauk Park is just at edge of the hills. - at Montauk Park we have the beginning of Current River; here a sure good mountain trout stream

They told us there were about a dozen springs, but we visited only one. None are (evidently) large, but all together make a nice mill race like stream, with

occasional larger pools in which fish could be seen.

We drove up to Rolla and then took #66 to Lebanon rather than risk the poor gravelled roads across from Montauk to Lebanon.

The vicinity of Bennett Spring is also not the most rugged (though somewhat rough) and this is chiefly a fishing & picnic ground.

This days drive was mostly a good continuation of yesterday's fine experience.

12777

Sep. 18, 1935 - Wed.

Another clear morning.

We saw the Lake of the Ozarks & the dam at Bagnell, which, of course, is rather small when compared with the Wilson dam.

The lake, being a channel of the Osage River, is very irregular, long & narrow, with numerous bays. As the whole region seems to be well wooded, it makes an attractive picture. The highway runs on the dam.

We had our gas break 2 mi. S. of Brazito, but we ran to a country station & bought a new belt and then to Brazito, where we had a new fan

started at 6:55 a.m. Feb 84.3 71

6th = 89.5
 = 90.5
 on 5 mi, we were .05 less

Camdenton	1079	8 - 92.4 1/2
Linn	1082	9 - 93.4 1/2
Damuel	1088.1	10 mi. - 94.4 1/2
Lake } 5 - 1091.0 1/2		
Ln - 1091.3		
Osage Bank	1092.8	Columbia #63, 1203.8
Dam - S.	1098.6	" - to city 1204.6 1/2
- N	1099.1	" Broadway K. 1206.5 1/2
#52 -	1107.9	McDonne 1217.9
Aurora Hops	1109.	Back to fork 1221.6 1/2
Eldon -	1111.1	Providence - 1224.6
#18, Pleasant	1114.5 1/2	Back to K 1227.6 1/2
Sterrille -	1117.5	" to Broadway K 1235.2
#17	1121.8	Broadway K 1235.6 1/2
Hickory Hill -	1124.1	Midway. 1246.1
Brazito -	112 -	#3 Apple 1253
Jefferson City #50	1141.6 1/2	- N 1254.2
" Capital #131	1142.	Yellow Bay 1255.7
" " - 1142.1		" " (June) 1255.8
Gray S.	1142.8 1/2	#5 - 1262.5
N	1143.2	Bronze 1264.3 +
Furn 2. m.D.	1143.4	Bronze 1264.1
Wainwright	1149.6	Furn N. 1291.4
Lebbeth -	1155.9	Marshall 1303 - +
Mokane -	1162.9 1/2	
Harris Creek	1170.2	
Fulton #54	1176.7	
Kingdom #54	1184.0	

and water table put in.

We then drove to Jefferson City, where we crossed the river (here without cars) and drove the river road to Mokane, - the last 6 miles over a terrible mud road.

At Mokane, along road N, a cut shows drift & under part the usual jointy clay.

We drove to Fulton on a much better road, & then on to Columbia.

We drove on Co. Road K. to Mokane, but found nothing but non-fossiliferous loess-like stuff.

We then turned back to the fork and drove down to Providence, the latter part of it is rutty & rocky, - about the worst road we have

ever travelled. Marie handled the car remarkably well.

Providence is deserted. The store is closed, the RR Sta. evidently doesn't operate.

The banks are also all overgrown.

We returned, - a hard uphill road, greatly disappointed.

We drove to Columbia, and then west on #40 (we first ran off on a parallel road $\frac{1}{2}$ mile S.) and drove towards Booneville,

at 1255.7, on #40 E of
 Brownville, Mo. There is
 a big cut just at outlet
 of bluffs. yellow loess
 about 12 ft. (see sample)
 No fossils.

at 1255.8 at foot of hill,
 yellow loess (about 10
 ft. exposed) found a few
 scattered fossils of some nodules.
 The fossiliferous section faces the
 valley, the other is further in.
 This is just about at
 entrance to the bluffs.
 We then drove across a
 broad bottomland to
 Brownville, on the S. side of

The Missouri

Sep. 19, 1935 Thurs.

A fine bright morning.

We drove west on #65.

at 13216 (east of Waverly) there is a long low cut (probably 400 ft long). This shows (not quite at bedded joint but nearly) 3 ft of gray loess below 5 feet yellow loess above. No fossils see samples. The gray loess has scattered big root-tubules which end abruptly above. Otherwise it is a uniform light grayish. The yellow loess is slightly streaked with gray. The line between the two is not sharp, but the transition is abrupt.

SW #169

1391.4 210 turns S. Starts at 6:49 (Platte Riv 1481.1)

- Live. Marshall - 1304.0
- Malta Bend 1315.2
- Grand Pass - road - 1319.6
- Waverly #24 1323.6
- S. end bridge 1324.
- markets
- Waverly #24: 1324.4
- Dover - 1334.1
- Lexington #13 1344.8
- Bridge - S. 1345.2
- ~N 1345.8 1/2
- Henrietta - 1349.6
- Bluffs - 1350.8
- Richmond #10 1353
- cornhouse 1354
- Eckhorn 1362
- Excelsior Spring 1369.
- Linden #10 1388.1
- #169 1394.5
- #71 1396.5
- #35 1409.5 1/2
- Platte Riv 1416.5
- #92 1417.0+
- End bluffs 1421 - (city hall)
- Bridges - E. 1423.7
- W - 1424 -
- Bethany

speedometer list

74.5+	79.4 1/2
75.5	80.
76.5	81.
77.5	82.
78.4 1/2	83

#73 1425.9

Lavenworth

Penitentiary 1426.6

Alchism 1449.6

Bridge - W. 1450.3

- E. 1450.5 1/2

Bluffs - #45 1454.2

Rushville - 1456.5

Halls 1461.1

R.R. sta. 1462.8

cloverts Ref. 1463.

Close to bluff at 1464.1

Cut into 1469.3

St. J. 1470

St. J. 1472

#71 #169 - 1474.8

Avenue City

Rochester -

Union Star.

King City -

Stanbury -

#49 #169 -

albany

New Hampton

The country here is gently rolling and was evidently prairie. There seem to be no high bluffs on this side of the Missouri.

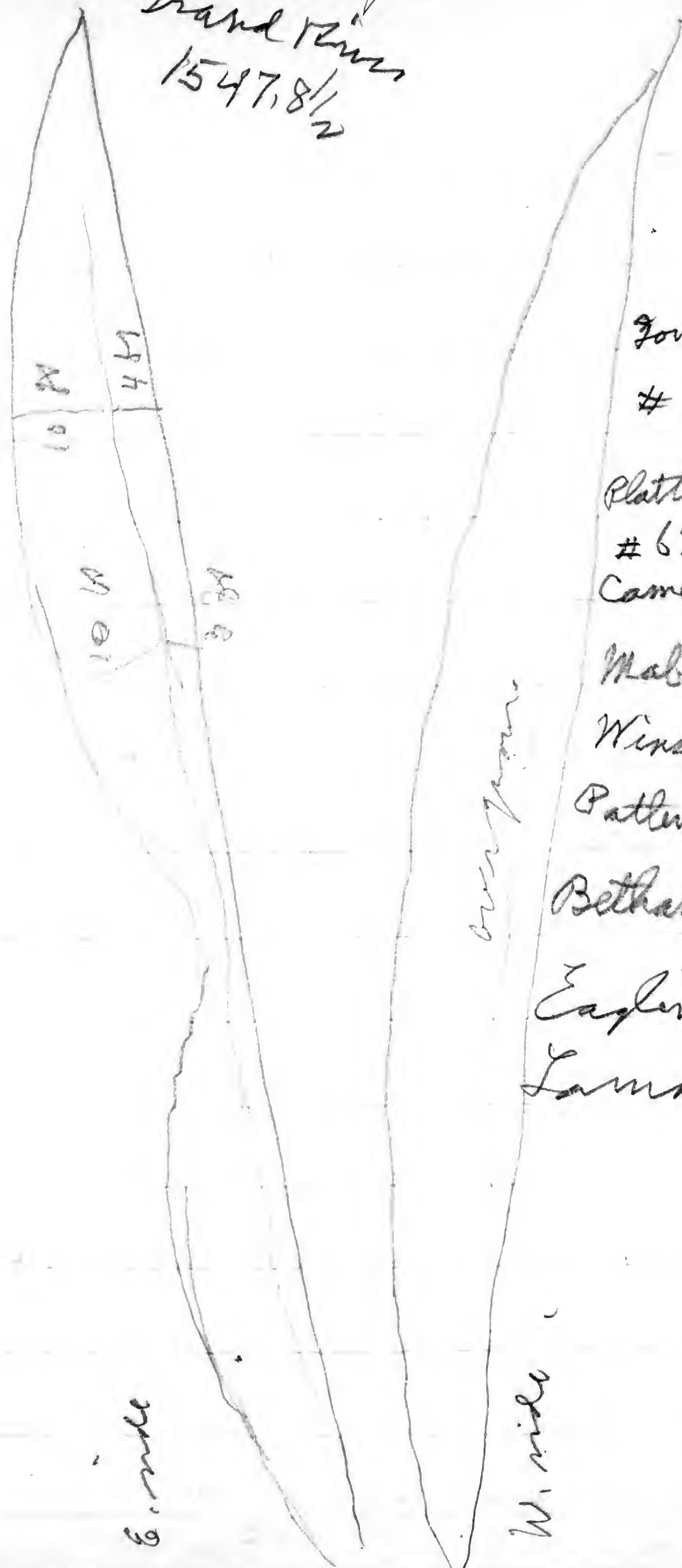
We drove N. from Waverly on #65. The road makes a long cut (about 600 ft) through the low bluff & exposes both loesses - similar to above. I took samples of both - no shells, a few nodules in gray loess.

The west side is nearly uniform in curvature, but overgrown, while the east side consists of two parts and shows much exposed surface.

The bluffs are rather low - as far as I can see up & down

1525
147 1/2

Grand River
1547.8 1/2



Towers 1489.2
#33 1493.7

Plattsburg 1499.8
#69. 1511.9 1/2
Cameron 1525.1

Mabel 15

Winston 1535.7

Patterson 1549.3

Bethany 1567.1

Esquiville 15

Lamson, Ia 15

overgrown

E. side

W. side

the river and all more or less wooded. No high prominent bluffs, — probably not much over 80 ft high.

The river flows down on the side, & the country is flat far north.

I went down to flat below the big bridge. The RR station is 2 blocks above, & near it (just before it 1/2 block) is a section of yellowish loess in which I found a few shells.

The cut is short, about 10 ft deep & the loess is mostly yellowish (one small sample) but in part below is hard & white, with

a few iron tubules, but no fossils.

at Waverly
I walked up road 3, from R.R. station, up to town (this is 2 blocks W. of #65). There is a deep cut, 12-18+ ft. all the way up the hill. Shows loess (similar to that on #65) but no fossils.

I estimated the bluff here to be about 80 ft. above the river flat on which the station stands.

We drove to Lexington & all along there are cuts showing the two loesses. In some cases the line is sharp

No shells.
all evidently prairie, some cuts 12 ft

The bluffs on the side
along #13 are very low
& sloping. In a low cut
at 1351.1 $\frac{1}{2}$ I took sample
of loess-like stuff.

Near foot of hill on #69 at
top there is yellow loess &
below it gray loess, but
no joints. (As before)

at 1396.3

The bluffs join flat here
#71 runs N. right under
the bluffs to 1398.9 $\frac{1}{2}$
& then #71 cuts into
bluff trap valley.

It then runs up over
the uplands.

at 1427 on #73 E,
a cut (10 or 12 ft) rather
low down, shows yellow
loess-like stuff. See sample.
No fossils

In higher places only 5 or 6 ft of
loess? & pebbly & bouldery drift
below.

We crossed at Alcham on
 toll bridge & drove N on
 # 59 towards St. Joseph,
 at 1459 the bluffs
 bow east a half mile &
 run so to 1464.1 & soon
 again turn away about $\frac{1}{4}$
 a mile & gradually more, until
 at 1465 they are about $\frac{1}{2}$
 mile away.

At 1467 a tributary valley
 comes in,

as St. Joseph (Ky Hill)
 the bluff again comes
 close.

Miami (nvs) & Clayton str
 running E. & W., - a big out of
 pale yellow loam - saw only
 one fossil in upper part
 at out perhaps 20 ft
 lower than base of big
 out above, 1 block W. of
 Miami Clayton on ~~Miami~~ (St. J.
~~Miami~~ = Russell str.) there
 are two low cuts (on Russell
 str. S. of ~~Miami~~ - Clayton
 on E. side only about 4 ft. ✓
 exposed - yellow loam top
 cut. On W. side about
 6 ft., gray loam with tubules
 & fossils. Top box of each,
 "Russell" is 1 block E. of # 59

We drove out on # 71, & two good cuts, one at 1474.1 & the other near St. Joe., show plenty of loess, but no fossils. This is well out & was probably prairie. A third good cut at 1474.5 (as least 15 ft deep) is the same. All show heavy gray loess with iron tubules below & heavy yellow (stratified) loess above. No sign of shells in any of these, - all on the upland well out of the St. Joseph crescent basin.

At 1475.5 another similar cut, at 1475.9 $\frac{1}{2}$ another one. All upland

Other cuts W.E. are similar. This is rolling upland country & was probably all prairie

Sep. 20, 1935, Fri

Left Bethany, Mo. at
The U. S. soil erosion work
centers around Bethany &
we saw many signs announcing
cooperation with the government in this
work.

The region between Bethany
and the state line (i.e. that
down to St. Joseph, in a rather
rough Kansan topography,
at 1594.2 The "hills"
are spread again
The country to and beyond
Lamoni is the same
roughly-rolling Kansan
fine country for erosion!

Left 386.31

at 7:55 AM.

Bethany	1567.6 1/2	Left Des Moines	1717.1
Big Creek (4 th cross)	1589.5	Capitol -	1718.2
Gayville	1581.9	#6,	1722.2
State line	1590.6	Mitchellville	1733.2
Lamoni	1594.9	Newton	1750.5
Sand City	1601.7 1/2	Grinnell	1769.2
Grand River	1681.9	Brooklyn	1784.1
Weldon R. 1604.7 1/2	1604.7 1/2	Cornforth ^{MR}	1789.5 1/2
#3	1609.5	Victor	1792.3
Leon	1610.2	Ladora	1798.8
van Wert (val)	1619.8	Marysville	1804.9
Weldon (val)	1621.4	#212	1815.5 1/2
Osceola #24	1630.5	Homestead ^{#29}	1827.8 1/2
after Fe. River		Jiffin	1836.6 1/2
Return to Osceola ^{#69}	1671.3	Home	
		= 38900	
#65	1694.5		
Indianapolis	1700.		
Middle Riv	1705		
Des Moines			
Rock R.	1715.8		
Brown	1717.0		

On this rolling country there was evidently mostly upland drier prairie flora, with other types in the draws. The country is less rolling north of Leon.

At 1623.7 - a low cut sloping up towards the route is about 7 ft. deep. Top one or two feet are the crumbly lobular stuff (see sample) & below that a reddish shaly modified drift (partly modified) rougher ^{again} again at about 1625 -

Drove to ^{the} small road turning S. beyond after to a bit of prairie along RR (up the draw).

- Elymus canadensis fr.
- Sorghastrum nutans fl.
- Helianthus scaberrimus fl.
- Corylus americana
- Lepachys pumila fr.
- Silphium laciniatum fr.
- Aster multiflorus fl.
- Lupinus sativus fr.
- Andropogon furcatus fr. ^{few clumps}
- Salix humilis fl.
- Rosa pratincola fl.
- Prunella pallida fr.
- Silphium integrifolium fr.
- Helianthus grosseserratus fl.
- Corylus americana fr.
- Vernonia fr.
- Aster laevis - fr. fl.
- Composita rubra fr.
- Silene stellata fr.
- Symphoricarpos alba fr.
- 21 Agropyron Smithii fr.
- Panicum

- Physalis - fr.
- 24 Umbrovia aspera fl.
- Asclepias tuberosa fl.
- Rhus glabra fl.
- "Aristida" fr.
- 28 Senecio muricatus
- Apoecynum canadense fl.
- 30 Asclepias verticillata fl.
- Muhlenbergia verticillata fr.
- 32 Achillea millefolium fl.
- Agrostis alba fr.
- Cassia claviata fr.
- Cassia rostrata fr.
- Cirsium discolor fl. fr.
- Helianthus annuus fl.
- weeds
- Further on:
- Diarrhea serena fl.
- Solidago nemoralis fr.

Shells from Shawmuton hill, Ill. 93

- Polygyra multiloba*
- " *profunda*
- " *pennsylvanica*
- " *monarda*
- Anguifera attenuata*
- Discus* —
- Helicidion parvula*
- Haplotrema concavum*
- Retinella electrica*
- 10 *Euconulus fulvus*
- Punctum pygmaea*
- Hawia minuscula*
- Strobilops*
- Columella ebentula*
- Vestigo*
- Gastrocopta aurifera*
- " *contracta*
- Succinea ovalis*
- " *avara*
- 20 *Helicina occulta*
- Carychium exiguum*
- Vallonia*

Oct. 8, 1935 - Tues.
8:20 am. 39080

Home	0	RR - (Interden)	92.3
No. Liberty		RR "	95.4
Curtis Bridge	12.5	Waverly - river	96.4
Shuayull	15.7 1/2	" #218	96.7
#30 - C. Rapids	25.3	RR	99.1 1/2
#11 - Ave B	26.5 1/2	Chamfield - RR	107.2
Rock #11 (29)	26.5 1/2	" town	107.5 1/2
Center Point - Super	26.5 1/2	Nashua	115.0
" " town RR	22.4 1/2	Charles City #18	125.5 1/2
Walker Run Pass	34.9 +	" " main str.	125.9
Co. line (North)	37.8	#18 towns left	130.7
Jurn N.	38.8	Floyd -	131.3
Co. line (Buchanan)	40.8	Cedar Riv. -	131.6
#283	43.8	Floyd Bl. RR	132.2 +
Rowley Rn	49.5	#9	142.0
Wapona	50.5 -	Orange #9 + #218	145.9
Independence #20	58.5	St. Angm road #227	152.2
Bromontsbury -	59.0	Summ E.	152.5
RR crossing	61.4	Jurn N.	154.1 1/2
Hartleton -	67.5	Stony Hill	157.6 1/2
Park - Oclaw	65.7		
Oclawin #10	68.1		
#10 & #11 front	70.2 +		
RR	76.6		
Co. line (Bremen)	81.0		
Wapona Pass	84.0		
Readlyn road	89.4		
#63			

We reached Stacyville at about 2:00 PM. + I worked on my Bibliography.

Oct. 9, 1935 - Wednesday.

I worked all forenoon + part of afternoon. About 2:30 we drove to Hollandale, Minn.

They were still harvesting potatoes and celery, etc.

The crop this year was poor. It was too wet (though not an exceptionally wet season). Last year was very dry and the crop was much better.

The Hollandale large drainage

project is not a great success, even after you mark off the great losses.

2.55
 2.00

 .55
 ~7
 6.2

Do not forget road with Helen &
 Lemna S. of Stayville
 Charles City bypass
 Washburn "

Old road ^S 12.8 - E. of Orage. 99
 Road to Greene 47.2 65.00 Washington
 Oct. 10, 1935 - Thurs. Creamery

Started -	Magwhit R 107.7 (Whose 119)	RR. 151.0
12:32 ^{PM}	39344.1	
George	0	RR. - ^{Way?} 87.7
#218 (middle)	5.4	#10 + #11 { 89.7
Orage ^{#9 + #218}	11.8	#10 end Belwin - 92.2
#9 + #218 ^{turn}	15.6 1/2	E. on #10 - Turn N - 96.6 1/2
Orchard ^{#255}	19.6	Turn E - 97.2
Co. line	20.6	Scott) - 100.0
Floyd RR	25.5	#154 Washington R 106.0
Floyd	26.4	Co. line (Clayton) 108.0
#18	{ 26.9	Strawberry Pt #13, 111.6 1/2
Charles City ^{Sta.}	31.8 1/2	#19 to Park - 113.2 1/2
#18	32.1 1/2	Line #10 - Turn S - 117.1
Nashua	42.8	Co. line (Belwin) 117.5
Co. line	46.1	Turn E. 122.4
Plainfield. line	50.3	back to #13 124.9 1/2
" - RR. Sta.	50.6	old road 129.7
Clarksville Road	55.3	Manchester, #20 131.1 1/2
Turn S.	57.2	Magwhit R 133.1
RR.	58.7	Ryan ^{town} - 141.1
no. 10 + #218	{ 60.2	RR - 141.2
	{ 60.3	Co. line - 144.7
Waverly ^{#218}	61.2	Turn W. - 145.8
River	61.4	Coggan ^{see map 149.1} - 148.3
RR - Interm.	62.4 1/2	Central City - 153.3 1/2
RR "	65.6	Co. farm - 161.4
#63 (middle)	68.4	#161 - 165.4
Readya road	73.9	Marion ^{old road} 167.9
Wapsie. Run ^{2 pm}	76.9	#161 + 1st Co. CR. 173.8
Co. line	81.3	Home 199.2
creeds	87.3	

39543

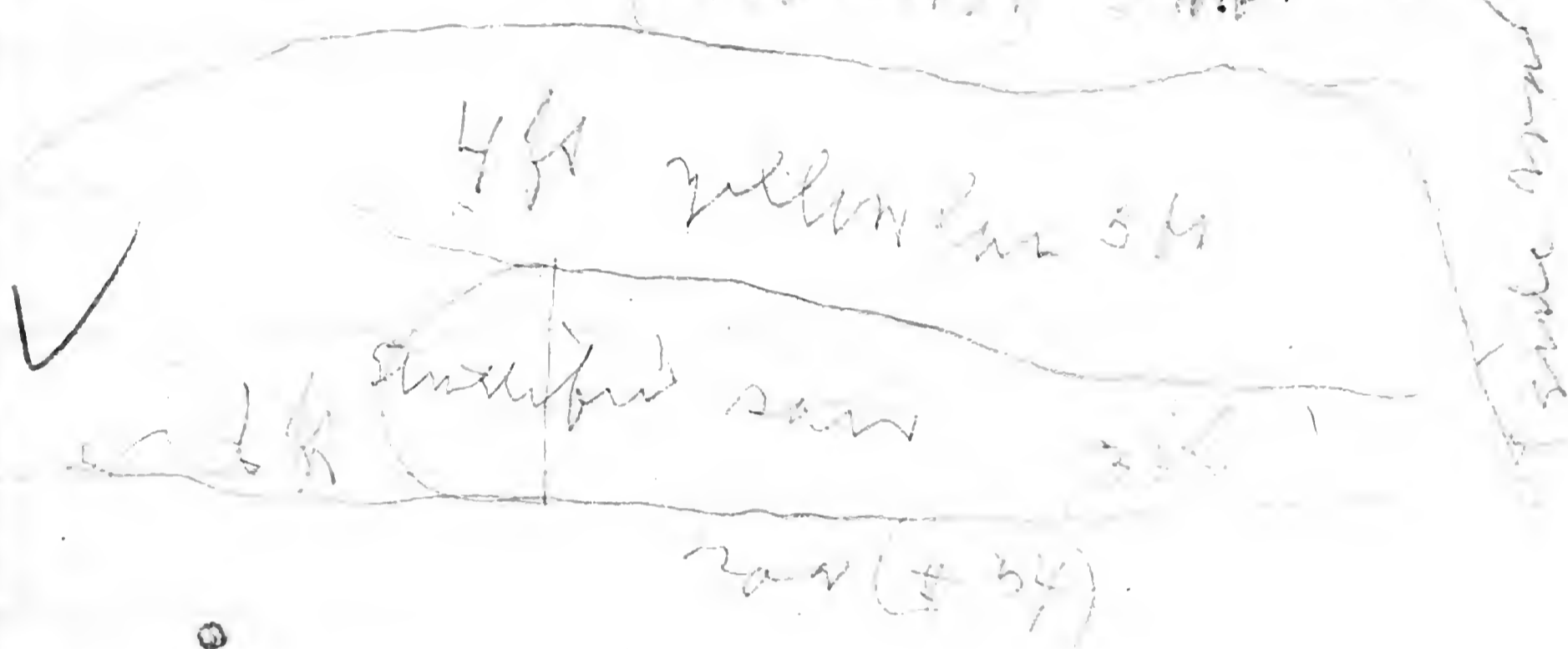
100

101

102 Iowa City oil - 6000

Expenses
 Oct. 13 - Gas. & oil, Iowa City 1.00
 Oct. 14 - Gladstone - gas 1.43

2nd cut - N. side
 (no cut on S. side)



cut 3
 at 86.0 a cut showing sand
 only. On N. side ✓

cut 4
 at 86.5 - a cut (on return 87.7) ✓

cut 5
 at 87.2 - a cut - on return

cut 5 - about 10 ft on N. side only.

Now some sand below & fragments
 of shells in lower - a few
 nodules, mostly overgrown

Brace
 Muscatine 162.0 103

162.5

Home - 201.3 1/2
 4.5 - 4.2
 Jerome: 39790

Oct. 14, 1935, Tues. - To Gladstone, Ia.

Started at 6:22 A.M. at 39584

4.5 mi. E. + 2.4 mi. N. of Olyntha, Ill.

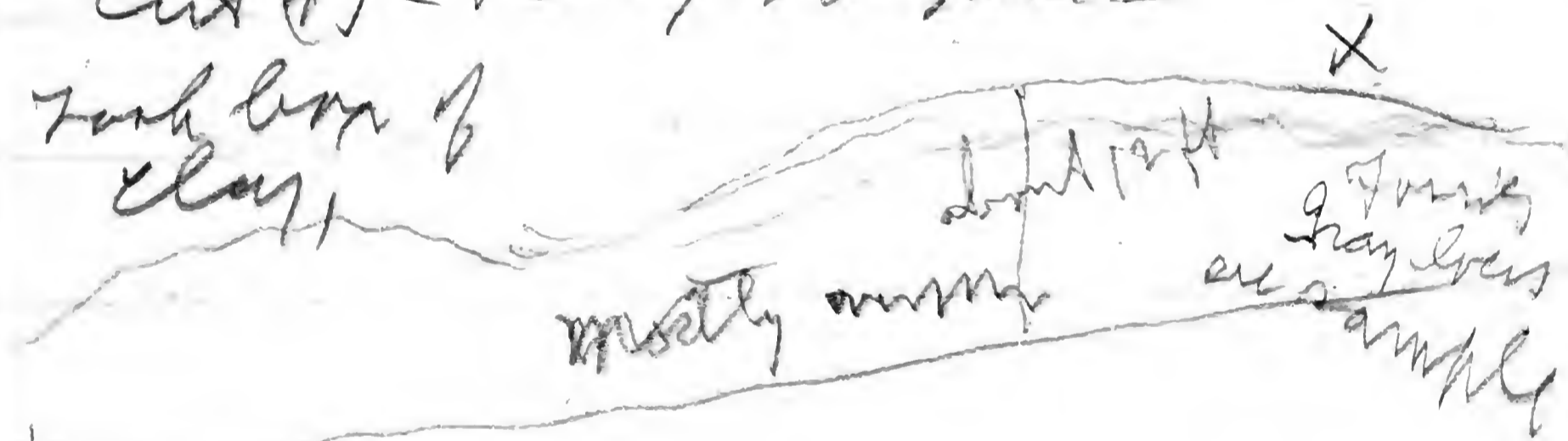
Home	0	Junk #94	100.2
# 2	26.7	102.2 road W. - cut	2
Mt. Pleasant #34	49.5	Jones back to	102.2
New London	57.8	at 102.6 a good cut	
Danville RR. Sta.	64.1	at 102.7 - a dirt	
Middletown	68.0	cross road.	
West Burlington	73.2	past cut - 104.4	
Burlington W. end	76.8	Henderson	105.8
Burlington E. end	77.2 1/2	Jones	106.8 1/2
Olyntha road	85.5	Henderson W.	109.1
Bluff		RR	117.3
2 nd cut	85.9	Jones N.	112.5
Jones back	87.1	Henderson Cr.	113.8
Back to Olyntha	88.7	gc.	115.4 1/2
Gladstone		Henderson W.	117.8 1/2
Jones	89.8	P. O. cut	120.7
Jones back	90.3	also Jones	124.6 1/2
Back to 94	90.8	Jones on	125.4
RR. Gladstone	90.9	Chowan R	127.4
Olyntha	95.7	Royals	137.7
Eater bluff	97.7	#84	141.6
cut at 98.		Edington	146.0
		Henderson	154.1

First stop at 2nd cut at 85.9 m
2nd cut in cliff. A light
yellow loam (see sample) over dune

cut (5) (look back 2 pages)

Cut (4) - Partly overgrown

Top layer of
clay



as top there are 2 to 2 1/2 ft
of reddish loam stuff. no fossils

Fossils appear in gray loam
throughout clear up to ^{or reddish} ~~overgrown~~

The gray loam has many worm
cloudings & some regular tubules

has a few rather small
nodules.

The best part of the
✓ gray exposure below X
is about 7 ft deep (the gray
part of it)

The first cut shows pretty
high 4-5 ft. & above it
about as much more

The Ogma row (94 A) runs
along foot of bluffs to 89.4, then
bluffs recede E. - just before
Glaston is reached.

Turned E. at Glaston - to old
cut. Run from top of hill
down more than half way
& new part is turned
northward (see ahead)

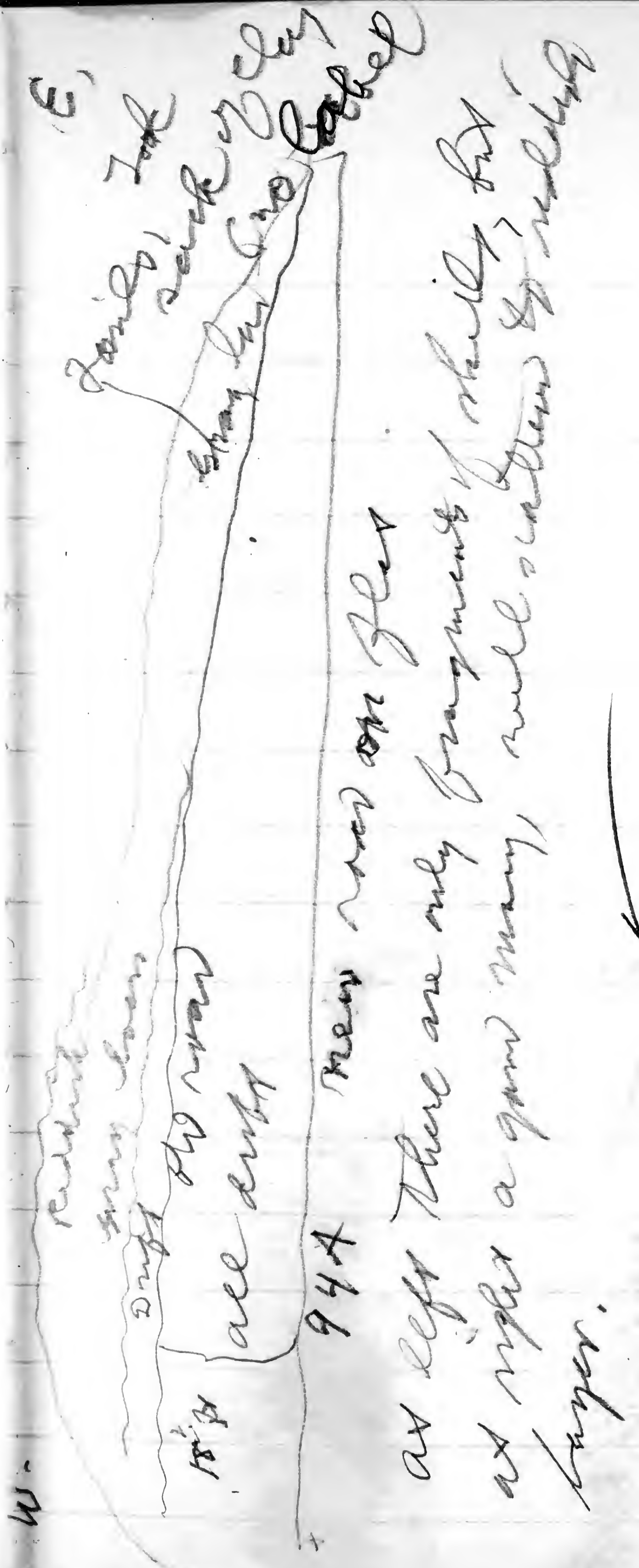
Gladys

✓ cuts lower at this end
 ✓ crops down hill
 ✓ cut 1
 top of hole 90.3

Picked up a few shells,
 took sample & box of clay

N. of Gladstone The Bluffs
 run about 1 mile (or less)
 E. of road. Keep riding north

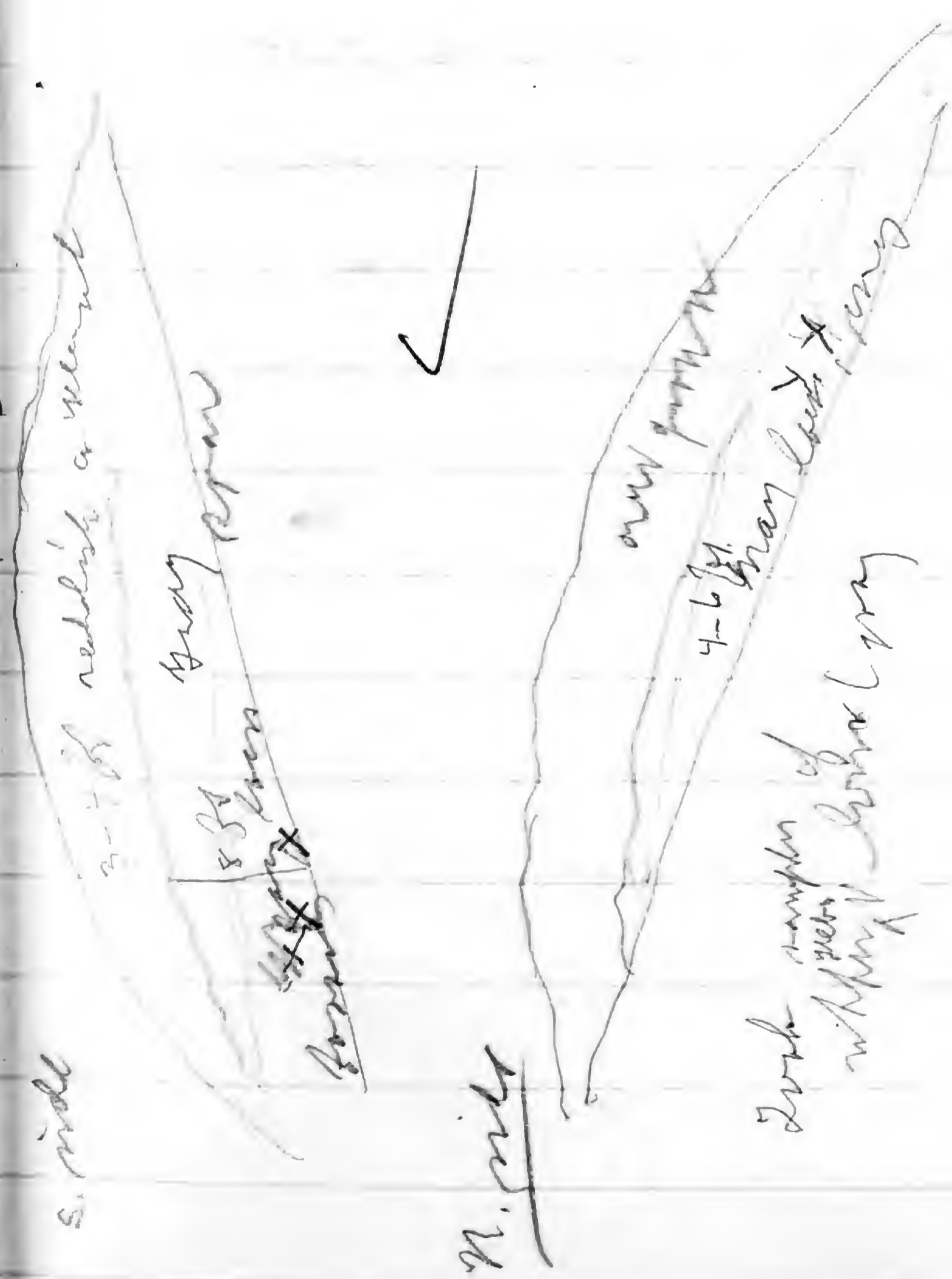
Cut at 98, - 2, 3 mi. E. of
 Oquawka, inside of bluffs
 New road shows only dirt
 Old road above shows gray
 loess. In lower (E) part
 a great many fragile shells



60
30

At 102.2 a side road runs west. A cut begins about 100 ft W. & runs up hill (see next page) The lower part is very loose with rusty streaks & iron tubules & also scattered nodules.

Fossils are scattered all through. As about X there was a boggy place or pond, show many small *Synsphaera*. Farther up hill I saw no *Synsphaera*, but *Puc* *avary*, etc. appear.



next higher cut to is similar - 6 ft + gray lens with reddish lumpy Forams. (see shell)

next cut is also gray lens.

going back to 94A

Last cut (no fossils)	103.5
next (Doubtful)	103.5 1/2
1 st cut	103.6
Road	103.7

1st cut is 1/2 mi. from road #94A

2nd cut is 1/2 west

3rd " 1/4 "

4th (last cut) " 1/2 "

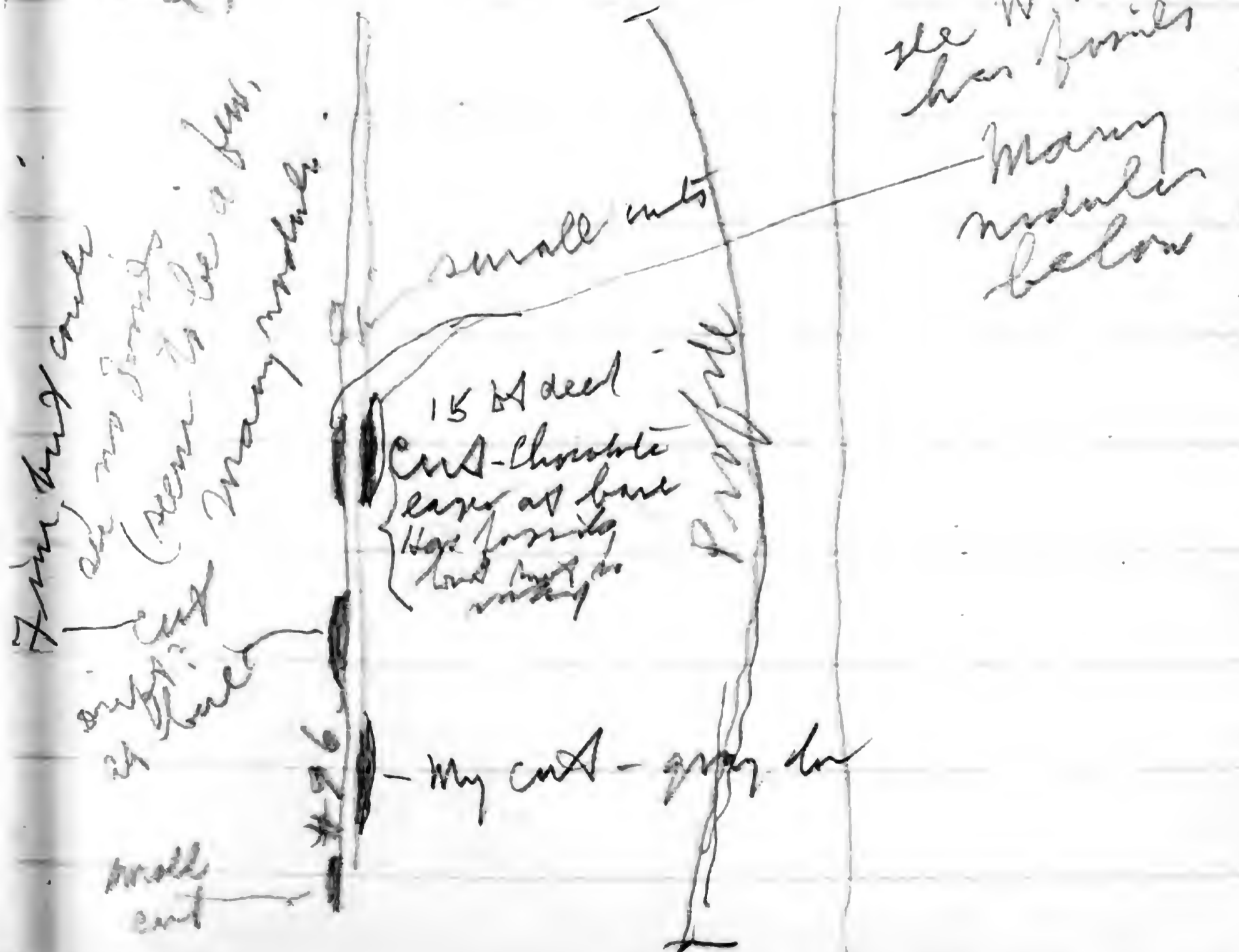
Turned back to 102.2 on 94A

at 102.5+ a fine cut - 45 ft long & about 10 ft deep, on E. side only. Gray lens, with upper yellow, as before

The gray is very bumpy, has nodules & clonings & tubules

Took sample & box

There is a whole series of cuts here.

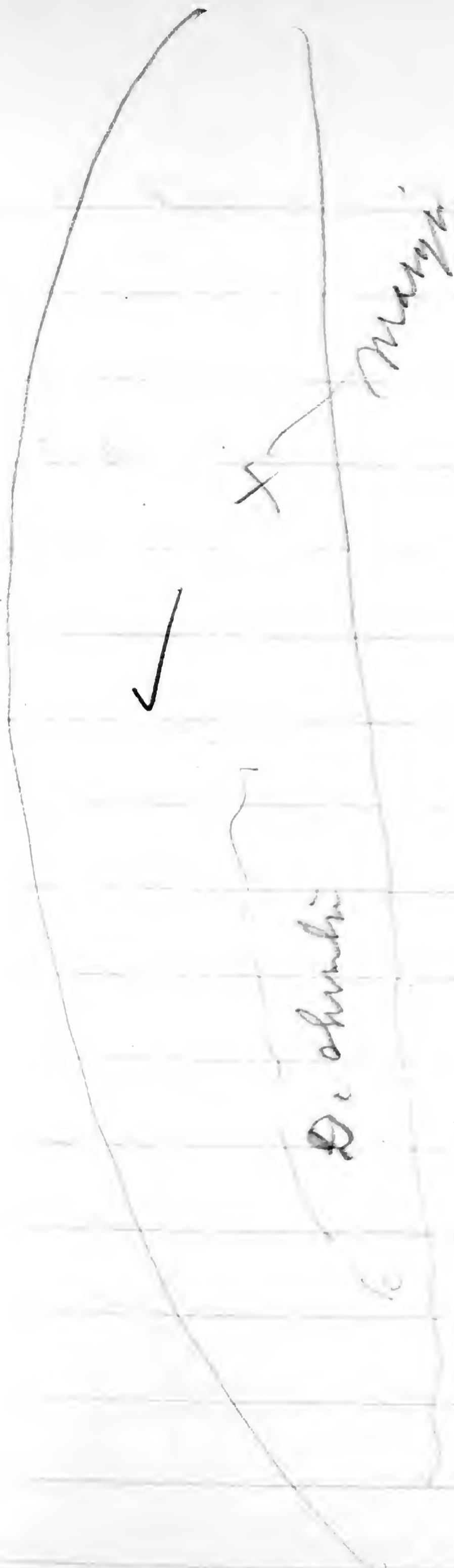


Other cuts N. are mostly overgrown.

The fine Big cut at 104.4 on #9# is over 20 ft deep (25?) & is a yellow loam with many lines on weather surfaces (some effed)

Fossils are scattered. See last box (on label) + 2 boxes of shells also sample of clay.

2. small cut at 104.4



Boxes of green clay for washing

- 1 - sack - not measured.
- 2 - Last box $11\frac{1}{2} \times 8\frac{1}{2} \times 9\frac{1}{2}$ in
- 3 - Gray box cut on E. side #94

Reel - $10\frac{1}{2} \times 10\frac{1}{2} \times 8\frac{1}{2}$ in

Look at last page after
note of Oct. 19, 1935,

Pass soil day 175

Roll Muscatel 20

Burling 25

90.0
88.1
1.95

cramprenter gas + oil 1.61

38

Oct. 19, 1935 - Muscatine & Ill

at 39885 - 6:53 AM.

Home 0 } Cut - Long - 88.4

West Liberty 17.1

Atalissa road S. 21.8

Cedar river - 25.0

Jurn S. #38 - 28.4 1/2

Muscatine - bridge 28.7

Jurn S. at bluff 38.7 1/2

Copper Cr. 41.1

Copper Cr. 44.2

Locas road (low down) 50.4

Jurn S. #57.1

ESB - ~~bluff~~ 57.5

Edwards River 58.8 1/2

Keith's road - ^{granite} 59.9 1/2

Bluff (center) cut 60.0

cut end 60.1

Joy 63.5

Alaska #94 - Jurn S 70.3 1/2

Henderson Cr. 78.1

Road to Alexis Cr. 79.4

Henderson Cr. 81.2

#94 Cr. - Jurn W. 82.4

Henderson Cr. 85.8

cut - "bluff" 86.9

Jurn S. 88.1

at 88.7 - cut

at 89.2 - cut yellow

at 89.8 1/2 cut gray

at 90.0 1/2 - 90.0 -

long middle cut

at 90.4 1/2 back cut

at 92.4 at 102.6

Openable road 94.8

Small Cr. 96.2

#34, signed 99.8

Openable road 104.9

Burling Cr. 113.3

Waltham #16 141.2 1/2

#2 164.2

Home 171.1

40076

90.0
70.3 1/2
19.7

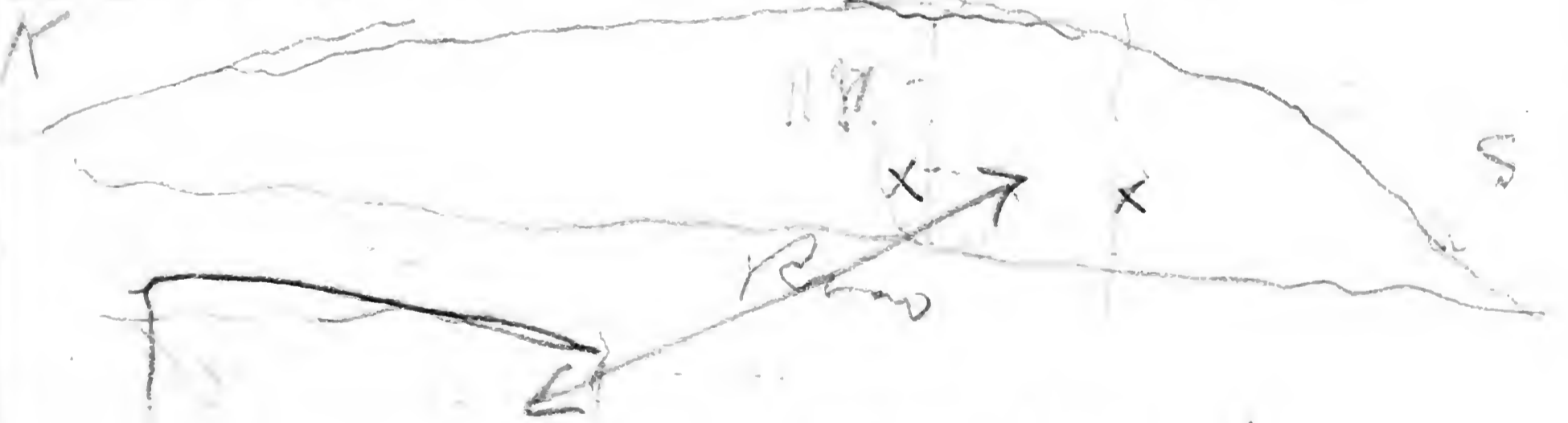
90.0
1.95

Roll Bluff

We drove to Mascatoine, crossed the Mississippi & went down the first road to south, - along the bluff we stopped at cut at 50.4 mi., - 6.2 mile south of Copper Creek.

cut at 50.4 is about 120 ft. long. Flows a little to S. E. side better.

This is along the road & is near base of bluff. Wide bottom west. Best hard for finding between X's.



pebbly bed 3-4 in

Upper part less stratified & more uniformly yellow. Lower part with fine silty like lines + brownish with gray clonings. Parts are sandy esp. below

(shales) Heavy shales

118

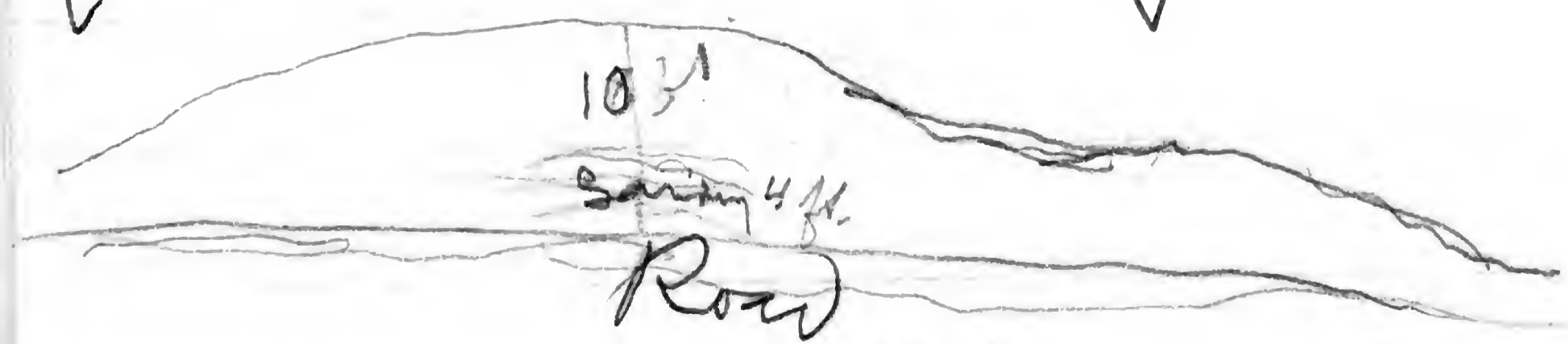
The gravel at base of bank may have been washed from top, or blown in very heavy storm. Also possible that this lower part was subject to overflow. It is about 20^{ft} above bottom. Took samples (middle & near base) + box of loess (all from strip figured in lower part of other page).

a long cut just E. of road at 51.2 shows stratified light like material, with many nodules & lower parts have joint clay, but color of gray loess. No loess.

much gray. Lower 2/3 stratified, upper yellow

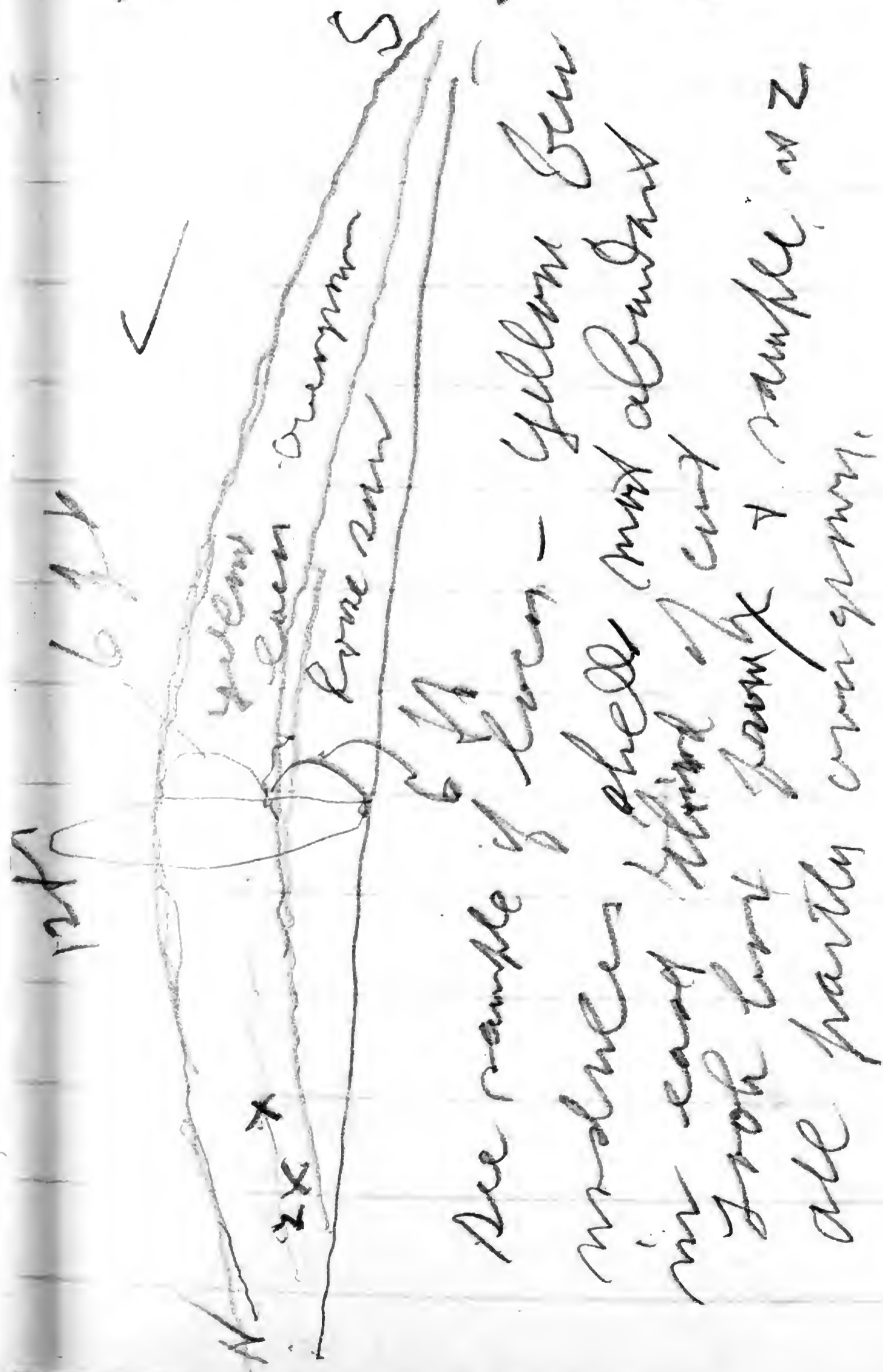
A big cut just as we enter
 bluffs at 60 mi. on #83, is
 about 25 ft. deep, shows beds
 yellow friable loess almost to
 base, but is badly overgrown
 with Robinia, etc. on both sides
 a few birds cutters all
 through. Few round nodules
 see shells, a nodules & samples

at 86.9, on low west "bluff" of
 Henderson Cr. Yellow loess, in
 place sandy.



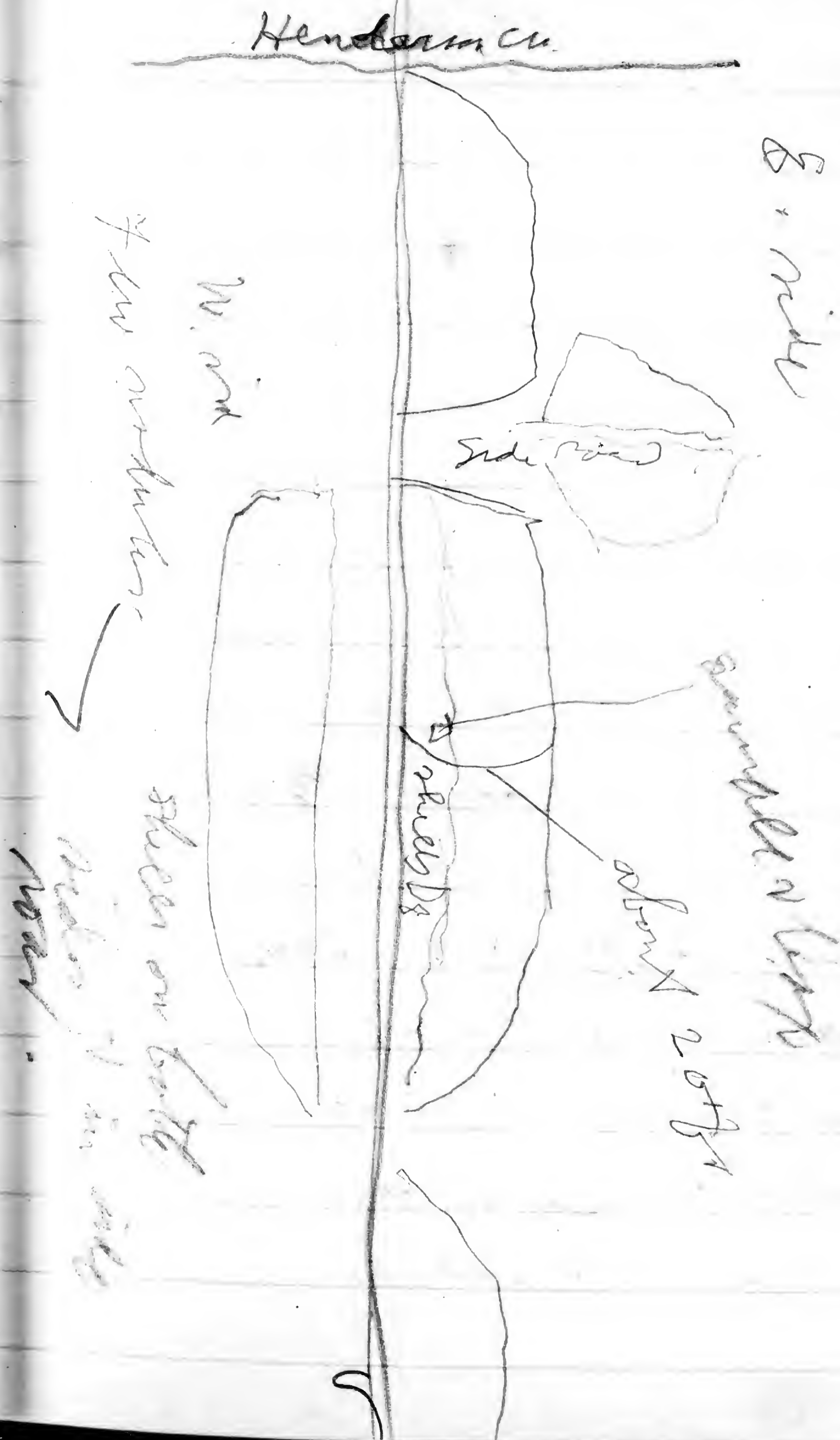
A sandy loam below. (dune)
 Few scattered shells.

cut at 88.4 m. It is on E.
 side of #84 only,
 about 360 ft. long & 12
 ft in depth. Also



Last cut before Henderson Cr.
 at 88.7 on N. bluff is almost
 exactly like the 88.4 cut.
 Fossils, except sand the same
 (Tool same)

At 89.2 mi. just S. of
 Henderson Cr. out # 94.
 This is all a fine yellow
 loess with fossils
 scattered almost to top,
 but most abundant
 within 8 ft. of the base.
 Few nodules.
 Took box, sample &
 shells. a fine
 series of cuts.

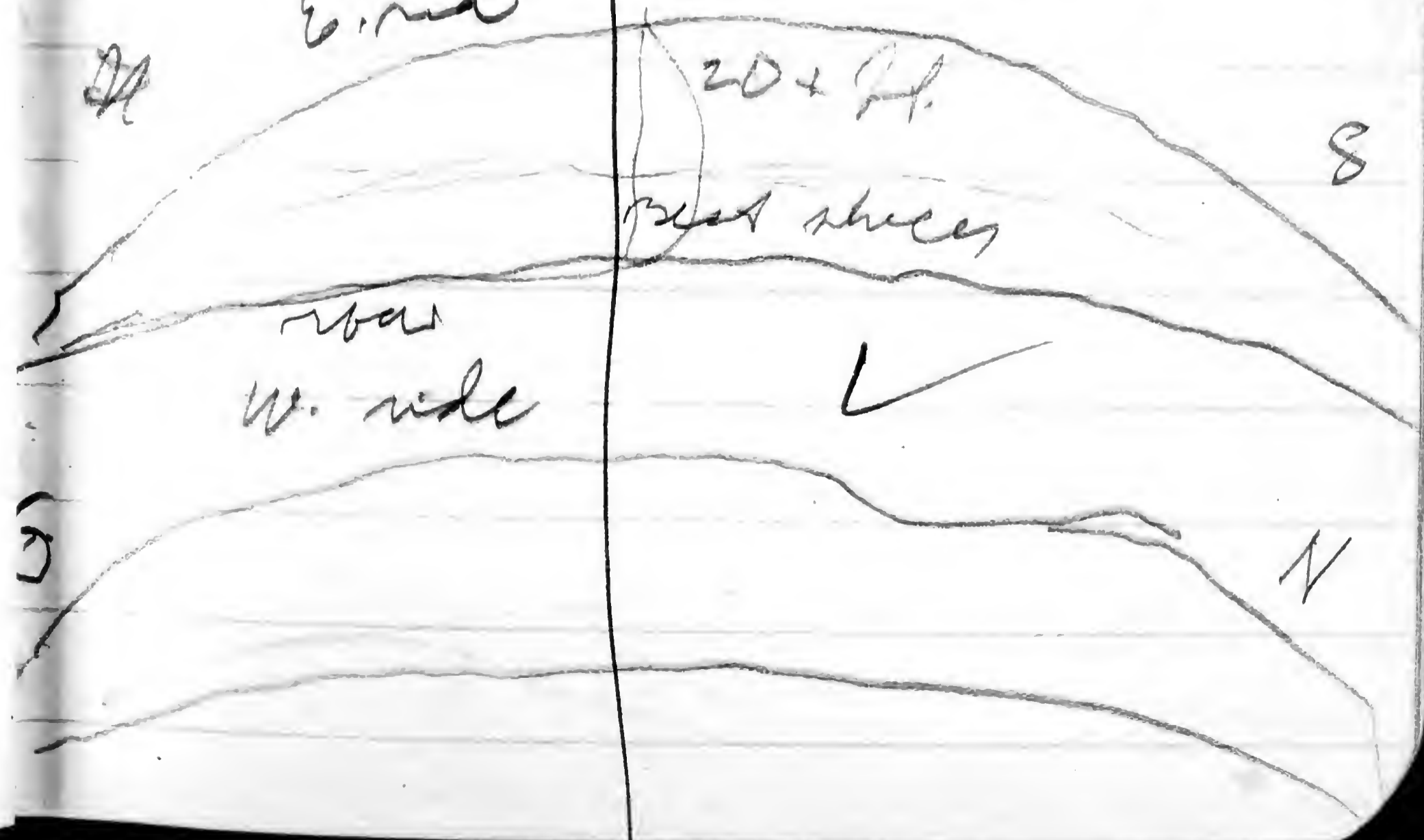


A fine cut W, just began
2.5 mile cut - shows
about same

at 89.8 1/2 - a cut down
hill on #94 towards S.
Gray loam with fossils
scattered through, & iron
stainings & some tubes, (9
modules scattered thru)
about 12 ft high on W
side (better) & capped
with 3 or 4 ft of lobular
heavy yellow loam - no
fossils in yellow part.
Took a small set of
fossils only,

at 90.0 1/2 - a big cut begins
along #94 runs up & over
hill to S.

The loam is grayish &
mottled with iron.
Must be over 20 ft. deep
shells well up, but most
abundant in first 8 ft.
Round nodules, see box
& shells & sample
E. side



at 90.4 1/2 (old locn)
 ✓ took box of clay
 near base
 (6 boxes)

at 92.4 (old 102.6)
 took two boxes of
 ✓ gray loam, one
 near middle of cut (#1) +
 one in middle of lower (S.) half
 We drove S. to #34 (several
 good cuts below Ognawka Row
 or then via #34 to Burlington &
 Mt. Pleasant & then home on #16)
 A bad drive, - Saturday evening.

Washed from boxes taken in
 Illinois, Oct. 14 & 19, 1935

Oct. 14, 1935.

cut # on #34, E. of Burlington.

$11 \times 10 \times 9 \text{ in.} = .57 \text{ cu. ft.}$

old cut 1 - E. edge of Gladstone, Ill.

$11 \frac{1}{2} \times 9 \frac{1}{2} \times 8 \text{ in.} = .5 \text{ cu. ft.}$

Side road off 102.2, Gray loam. (W. of #94)

$13 \times 10 \times 8 \text{ in.} = .6 \text{ cu. ft.}$

sack, Gray loam, old road, 2.3 mi. E. of Ognawka
 (not measured, - less than cu. ft.)

Gray loam, E. side of #94 at 102.6 - side.

$10 \frac{1}{2} \times 10 \frac{1}{2} \times 8 \frac{1}{2} \text{ in.} = .542 \text{ cu. ft.}$

Last cut before dark (= 90.4 below, Oct. 19.)

$10 \frac{1}{2} \times 10 \frac{1}{2} \times 8 \frac{1}{2} \text{ in.} = .542 \text{ cu. ft.}$

Oct. 19, 1935.

S. of Copper Cr. - $9 \times 9 \times 8 \frac{1}{2} \text{ in.} = .6 \text{ cu. ft.}$

at 88.4, E. side #94 - yellow loam
 $12 \frac{1}{2} \times 10 \times 8 \text{ in.} = .58 \text{ cu. ft.}$

at 89.2 - Big cut on #94 - yellow loam
 $11 \times 11 \times 7 \frac{1}{2} \text{ in.} = .525 \text{ cu. ft.}$

at 90.0 1/2 - Big cut - mottled loam.
 $15 \times 8 \frac{1}{2} \times 9 \text{ in.} = .664 \text{ cu. ft.}$

at 90.4, old last cut (of Oct. 14) (= last cut above = 104.4)
 $11 \frac{1}{2} \times 10 \times 7 \text{ in.} = .466 \text{ cu. ft.}$

Old cut (Oct. 14) at 102.6, #1 - at middle.
 $13 \times 13 \times 7 \text{ in.} = .684 \text{ cu. ft.}$

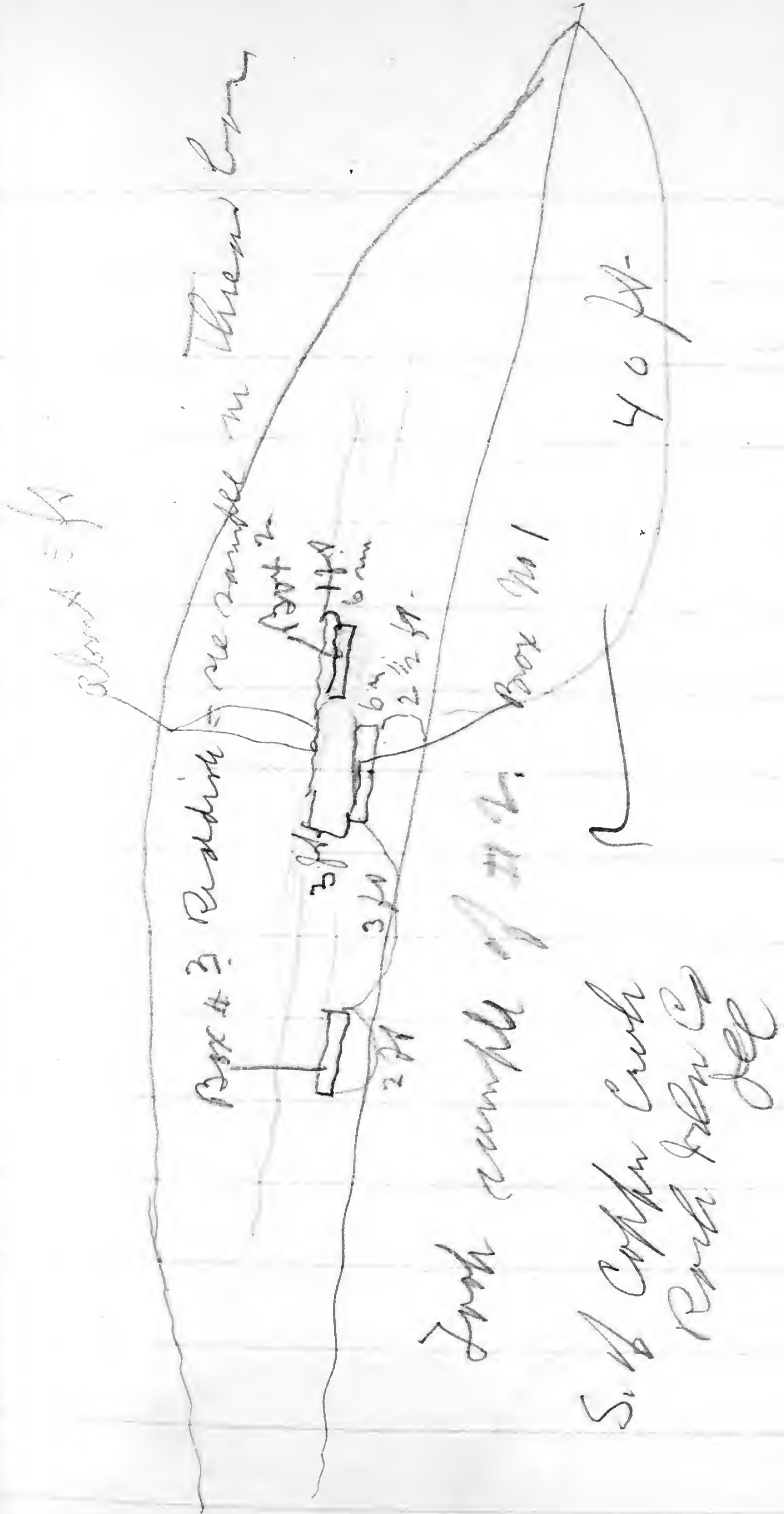
Old cut (Oct. 14) at 102.6. #2 - at S. 3/4.
 $15 \times 8 \frac{1}{2} \times 9 \text{ in.} = .664 \text{ cu. ft.}$

Nov. 13 1935 - Wednesday

Start 1917 at 12:12 PM

Name	191.7	Copper cr.	237.1
Gravelly lg.	193.9	Cur (12)	243.4 $\frac{1}{2}$
cr. & P. Rn	199.6		243.5
Fork, eas. side	200.5		
So. line	202.6		
West Branch road	203.8		
Road 5 (old detour)	206.2		
Bridge (dullion)	206.3 $\frac{1}{2}$		
North crossing	207.2		
W. side - broad	208.0		
R.R.	208.1		
W. side 476	209.3		
R.R. - overpass	213.8		
Abolition	213.9		
Old main road	214.3		
Cedar river	217.0		
	217.4		
	217.5 $\frac{1}{2}$		
Creek bridge	219.4		
#36 turn S.	220.9		
	221.1 $\frac{1}{2}$		
R.R. (Waterside)	228.6		
#27 White Way	229.1		
#61 - 230.3			
2nd street	230.7		
Walnut St.	231.4 $\frac{1}{2}$		
Bridge - W.	231.5		
- E.	232.0		
Turn S - 1st	233.9		
at Hall			

East of Atlatina several low
drains appear. Also S.



132

133

Trip to Ottumwa
July 30, 1936 - Thurs. ^{1/2 mile}
Left at 8:30 AM

8441.7

27.2

Home 441.7

Crawfordsville -

474.6

Wayne -

479.4

Mt. Pleasant #34-492.5

Fairfield

515.2

Ottumwa #63

539.9

Bridge

540.9

#273 (road) 555.5

Maple Park

576.1

#63 (road)

582.7

Bridge (New) #63 } 597.2

Ottumwa } 597.5 1/2

597.6

Agency

603.7

Bellevue -

611.1

Fairfield -

622.4

Glendale

Lockridge

633.9

Mt. Pleasant 645.1

Cool this morning - 66° F.

The day is clear. The country shows effect of drought. Pastures are burned and bare. The corn is in tassel and the tops are badly burned in many places (scattered through fields) - evidently the staminate flowers are ruined.

In some places on upland the lower corn leaves are falling.

138

139

168.

Expenses, (cont.)

1.83
52
1.35

Sep. 18, 1935

Columbia (new pulley)	.50
Jefferson City, lunch	.30
Marshall, supper	.60

Sep. 19, 1935

Marshall Hotel, room	1.25	}	1.70
" - breakfast	.45		
CA. 1384, 3. gas & oil			2.14
Dinner at Peelle City			.50
Atchison, Kan. Toll			.30
Supper - Cameron Mo.			.85

Sep. 20, 1935

Pritham room ^{1.00} ^{out} ³⁰	1.50
Des Moines - dinner (brown)	.75
Gas & oil	1.35
Supper, Newton	.50

