

North Dakota

1835

South Dakota

I.

Black Hills

Nebraska

Colorado

Nebraska

Iowa

Council Bluffs

Illinois

Indiana

Illinois

This book belongs to
B. Shimek.

- 529 Brown Street

Iowa City, Iowa

The notes can be of no
value to the finder, but the
owner will give a suitable
reward for the return of this
notebook if lost.

1.75

1.59

1.79

.50 + 50

1.50

.25 + 26

1.50 + 50

.35 + 35

1.70

.51 + 51

.82 + 82

.31 + 31

1.54

Shimek -

Fare - 35.00 - 33.40

Pullman - 12.00 - 9.50

Room 8.00 -

Board. 16.80 7 days at 2.40

Incidentals 1.00

72.80

|| 23

33.40

9.50

8.00

16.80

1.

68.90

58.57

60 cr. Trip to

Mar. 1st

60

1

2 RR. To Fargo

Expense account trip to Fargo and Dickinson, N. Dak.

RR. rate - Iowa City to: (round-trip)

Fargo, N. D. - 10 days 21.05 Coach - \$18.94

Louper 26.30

Sleeper \$2.50 from St. Paul.

2.50 " Cedar R. to St. Paul

Food 1.25

Dickinson, N. D. - 10 days 33.40 - Coach \$30.03

Louper 41.75

Sleeper - \$4.25

Food 2.25

3 meals 2.25

Gas & oil Iowa City - 5 1/2 gal, 1935 1.75

La Porte City - gas - standard 8 gal, 1.59

Austin 9 gal. oil 1.79

Stevens Lake Cafe - dinner (2) 1.00

St. Cloud - standard 10 gal. gas 1.80

Sage Center - supper - main str. Cafe .45

Alexander Hotel - Room 2.70

Evansville, Minn. oil .21

Fargo - standard gas 8 gal 1.49

Dinner, Gardner Hotel (2) 1.02

Joint dinner (evening) (2) 1.64

Breakfast (2) .36

Lunch 36 Main .72

To Fargo - 29.50

To Dickinson 41.15

Garage Fargo 50

Gas & oil 22 Jamestown, N. D. 1.59

Supper Bismarck - (2) .41

Mandan 9 gal 1.79 oil .22 1.99

May 29, 1935 - Trip to N. Dak.

at 2:00 P.M. 1-32+ 4-138

2-72+ 5-

3-99.6

at 30022

Home	0	5 Austin, Minn. ---	196.8
Curtis Bridge	12.4	4 Ramsey	
Shueyville	15.7	11	
#30 - Cedar Rapids	25.1 1/2	17 Blooming Prairie	211.2
#218 + #30	43.4	17 Bixby	217.3
Winston	57.3	17 Pratt	
Truer road #8	66.7	5 Owatonna #65	229.
La Porte City	75.9 1/2	5 Clinton Falls	232.5
Washburn	83.8	2 Medford	235.5 1/2
Waterloo - Hotel	90.4	9 Faribault	244.4
Cedar Falls #20	97.4 1/2	6 Dundas	256.2
Janesville (Inage)	105.0	7 Northfield	259.5 1/2
Waverly #10	111.0	6 Waterloo	
Plainfield R.R. St.	121.5	6 Castle Rock	
" town	121.9	6 Farmington #65	272.9
Wachua	129.3	6 Lakeville	277.7 1/2
Charles City #18	139.9	6 Orchard Lake	272.
2nd #18	145.0	16 Rosemount	280
Thoyd	145.7	16 Richfield	295.9
Thoyd Station	146.5	16 Bloomington	
Mitchell Co. line	151.5	16 X Minneapolis	296.1
Orchard Point	152.4	#10 + #169	
#9 + #218	156.3 1/2	Robinsdale	
Osage	160.2	6 Osseo	319.2
W. Ancker corner	166.5	5 Anoka #10	319.8 1/2
7 P.M. Stacyville (Geo)	172.0	7 Dayton	326.3 1/2
5/30, 1935 7:43 A.M.		6 Elk River	331.3
Stacyville (Georgia)	172.0	9 Big Lake	340.7
7.0 #218 - 7 mi. west of Stacy	179.2	4 Salida	344.5 1/2
		3 Becker	348.5
		7 Camp Lake	353.8
5.5 Mona	183.4	4 Clear Lake	355.5
State line	184.2 1/2	4 Cable (W)	361.3
Lyle, Minn.	184.4 1/2	5 E. St. Cloud	366.6
X Vaxco		6 St. Cloud	367.1
		Wait Park	

A good day after the rain yesterday. Sky only partly cloudy.

The trip went off nicely and we reached George's in Stacyville at just 7 o'clock P.M.

Northward beyond Charles City the crabs are still in fine flower (ours at Iowa City are about gone). The foliage of leaves is also much less developed, and cultivated flowers, lilac, etc., are also slower. Many trees are whole or partly dead.

We spent the night with George Wata at Stacyville,

178
103
281

May 30, 1935,

We left George's at 7:43 a.m.

The day is cloudy and cool, but doesn't look much like rain.

The distances to St. Cloud are given on page 3.

The continuation follows:

		376.7
		370.98
		5.7
St. Cloud	Miss. Riv. 367.1	Dalton 14
Waite Park	370.9	# 3
4. Sank River		
Saint Joseph	375.5	Fergus Falls 7 488.8
7. Avon	382.9	Carlisle 498.1
7. Albany	389.0	Kitchener
5. Freeport	395.4	Rothsay 506.5
6. Sank Riv. 399.2	*	Lonsdale 513.4
Melrose	401.3	Barnsville ^{CRF} 520.5
# 71	409.7	^{town} 520.7
Picardy		Baker 528.5
2. Sank Center	410.7	Sabin 535.0
8. Arkley Riv. 415.8		Ruthruff ^{only} 538.2
West Union	418.6	2. Moorhead ^{town} 543.8
6. Osakis	424.4	Fargo - N. Dak. ^{wind truck} 544.6
5. Nelson road	429.9	
5. Alexandria	435.4	
12. Brandenburg 442.2	435.4	
Brandon	447.9	
6. Brandenburg 452.9		
Melby		
4. Brandenburg 459.9		
Elbow Lake	466.9	
		Less 3+6
		535.6

The country N. of Austin is flat,
but beyond Bigby a little rolling,
with *Cercaria* groves on knolls.
Then flatter again.

The road runs along R.R. for miles,
& there is a fine strip of prairie
along the valley. *Pedicularis*,
Lithospermum can., *Andropogon furcatus*
in fl., *Hemlock*, etc.

At Owatonna more rolling
again. Then somewhat flatter.
At Clinton Falls rougher & more rolling.
Rolling and wooded at Fairbault.

At Elk River, Minn. I went down on
flat with soft muck. Found
Sol. melil. *Zosteris nitida*
Succ. ovalis *Lymnaea humilis*
" *arvensis* *Physa* *Planorbis*
Discus striatella *Physa* *Planorbis*

The lake just beyond Big Lake
has thrown up a lot of *Planorbis*
campanulatus. Also picked up
moss on bank.
Beyond this prairie is flat.
At Camp Lake at 353.8
I found much fine *Cerastium*
in fl. No shells.
I marked this "Clear Lake".

In a rapid shallow stream
at about 371.7 or 8 I found
a fine lot of *Lymnaea stagnalis*,
L. emarginata, *Physa*, *Planorbis*,
etc.

At Sauk River at 403.2 I
found a few *Physa* & *Lymnaea*.
Sauk river is shallow, mostly
rippling rapids, with vegetation
(*Potamogeton*, etc.) growing in it.
also many naiads.

May 31. Left Alexandria at 8:15
 In shallow "cove" just beyond there
 is a lot of *Reveria palustris*
 in flower around the shallow
 edges - a belt of it left
 side of road.

Very rolling country beyond,
 with numerous peat bogs in
 little bays, also several small
 lakes.

There are many dead trees in
 the small groups (native)

Top soil on ^{mounds} hills is nice, but thin.
 Patches of (dead) willow appear
 in the bays here & there.

This is the wheat country, - no corn.

Some alfalfa.

as ^{England} flatter.

at 462.6 where road cuts a shallow
 hole I picked up 3 *Rhynchospora*
 (clods?) on a board

at 463.1 where the Pomme
 de Terra, just a long trough
 with a thread of water,
 Fergus Falls quite hilly, some timber
 Ottertail River

Beyond Rothsay more gently rolling,
 flatter.

Young Janesville, druggist at
 Barnsville is of Esch descent

Beyond Barnsville the country
 is quite flat:

Trees look better here than in
 the more rolling country, where all
 the tops (or whole trees) are dead,
 we reached Fargo at about 11:15 am,
 and drove at once to the College,

where Dr. Hann

55.5- 746.7

Journal-

Started Fargo - 2:25 PM 554.4

West Fargo 559.8
 Castleton 574.7
 Buffalo (turn W) 593.1
 Fossil City 598.7
 Sheyenne Riv 613.5
 Valley City 614.1
 Bismarck 619.1
 Sanborn 625.1
 Eckelson 630.3
 Urbana 634.
 Spiritwood 637.8
 Jamestown 649.3
 Eldridge
 Windsor 666.0
 Cleveland 669.7 1/2
 Medina 678.3
 Crystal Spring 686.0
 town 686.8
 Ledoys 694.4
 Zappert 700.4
 Dawson Base. below
 Linton below
 Steele 709.8
 Rankin
 Briscoll 720.5
 Sterling (Inn) 729.4

McKenzie RR. ^{to} 735.4
 Menoken 740.8 +
 Apple Creek 751.3
 Bismarck 753.5
 Bismarck 755.6
 Mandan 758.5 + 3
 Judson 786.5
 New Salem 774.75
 Kurty 808.5
 Glen Helen 795.8
 Eagle Nest
 Hebron 825.5
 Antelope 808.0
 Richardson 837.5
 Taylor 828.
 Dickinson 861.5
 arrived at 11:50 PM 874.1
 10:50 Mt Linn
 To Bismarck 758.5 + 5 to km
 Mandan to 5
 Dickinson 103.
 861.5

West of Fargo the region is very flat up to 595.5, & then only slight undulation. Flat again at 597.3 - knoll with casual, occasional low mound ^{or gentle undulation} W. of Fossil City. Prairies absolutely wiped out all along to the north and following more rolling from 608. -
 Quite rough about 619.
 Valley City in valley of the Sheyenne River. Very rough here.
 Undulating beyond - quite rough.
 To N.W. beyond Hebron like a range of high hills, one a conical peak. Iron mines here - ponds & all at 628.2 an alkaline lake, - no life.
 Jamestown also in valley.
 Rolling west of Jamestown, SW. Dusk storm, strong wind from

Trumbled along fences, etc., everywhere,
 towards Dismarch the country is
 rather gently rolling & less mountainous.
 Reached Dickinson after a rather
 hard drive, at 10⁴⁵ Mountain time
 and put up at the St. Charles Hotel.

June 2nd, 1935 (Sunday)
 Arose at 6 AM. Breakfast
 Had a meeting at the local
 (U.S.) experiment station. (see
 notes on sheet.)

In the afternoon we drove to
the Bad Lands at Medora,
and examined the ranges
particularly,

Had supper at a ranch &
returned to hotel.

A cold, windy day.

In the evening we had
another meeting and I
worked on the Iowa statement.

Had a meeting of the committee
to consider committee reports.

went to bed at midnight

June 3, 1935 Monday

Arose at 5:30 am. We had a committee meeting before 8 (7-8) because Dr. Sharpe had to leave at 8:10.

Heard a committee report and I made statement concerning Iowa & Ames relations

After breakfast we had another meeting and we prepared (each) a statement as to needs in the several states. (see copy)

J. S. Weaver left at noon & hence did not go with us on the trip to Kildeer.

We started at 11 o'clock AM. for Kildeer.

Dr. Shelton

Wants people who have influence
with Dept. of Agri.

Who favor our plan

Who know Mr. Wallace anywhere

Lewis

Wants committee an from
Iowa -

Another from Neb. or N. Dak

Name two or three from
each state.

2 men in Dept. of Agri.
with Lewis.

2 others, 1 from Iowa + 1 from
No. Dak. or Neb.

Consent:

J. B. Weaver

Harvey Ingham

Mrs. Henry Frankel.

Rapp, write.

Blissman

W. P. Woodcock.

J. N. Darling - write

Senator Murphy

Get detailed description of law, location,
need and uses.

$$\begin{array}{r} 84.2 \\ 75.1 \\ \hline 9.1 \end{array}$$

$$\begin{array}{r} 84.2 \\ 78. \\ \hline 6.2 \end{array}$$

$$\begin{array}{r} 110.7 \\ 84.2 \\ \hline 26.5 \end{array}$$

$$\begin{array}{r} 126.4 \\ 112.5 \\ \hline 13.9 \end{array}$$

$$\begin{array}{r} 26.5 \\ 13.9 \\ \hline 12.6 \end{array}$$

$$\begin{array}{r} 13.9 \\ 8.1 \\ \hline 5.8 \end{array}$$

$$\begin{array}{r} 110.7 \\ 84.2 \\ \hline 26.5 \end{array}$$

$$\begin{array}{r} 110.7 \\ 84.2 \\ \hline 26.5 \end{array}$$

$$\begin{array}{r} 110.7 \\ 84.2 \\ \hline 26.5 \end{array}$$

June 4, 1935 - Trip at 8:30
 46.5 - Start 30882
 66.3 - rockfield
 Badland stop 75.1 - Painted canyon.
 Vida, et. at 76.8
 Plants at 77.1-4 *Trigonon*, *Juncus* long
Ribes, *Rosa*, etc
 small flat (lower down) at 78.
 (where we stop June 1,)
 large series of plants &
 - *Rosa*, *Grosseria* on moist flat

$$\begin{array}{r} 84.2 \\ 76.8 \\ \hline 7.4 \end{array}$$

$$\begin{array}{r} 84.2 \\ 77.1 \\ \hline 7.1 \end{array}$$

$$\begin{array}{r} 8.11.6 \\ 808.8 \\ \hline 2.8 \end{array}$$
 meadow (low) 84.2
 little meadow in - 84.5
 ridge
 de Mores
 Sentinel Butte - 100.8
 Beach - 108.8
 State line - Montana 110.7
 Turn at 111.6 *Salix*, *Viola*
Lithospermum.
 State line 112.5
 Beach -
 Sentinel Butte - 122.4
 at 126.4 (on return) collect *Astragalus* (2 sp)
Potentilla, etc. etc. on knoll
 (see p. 25)

Rolling prairie west of Dickinson
In the cuts much red silt
appears near the surface.

Used for road-making,
worked on little flat of gravel
at 78 mi. & collected a lot of
plants & lichens also

Suc. grosveneri in moist flat
Drove down canyon to Medora,
had dinner & souvenirs.

Drove along #10 into
Montana, to 812.5, turned &
collected *Phlox*, *Litholomum*, *Carex*,
Vida, etc.

Returns into N. Dakota
we came out of bad lands
about at Sentinel Butte,
West of that it is rolling,

like west of Dickinson,
(return)

De Wore Sta. 127.6

Collected *Papilio blanda* & *Vallonia*
etc. in drift along Little No. Rd
at Medora

841 - Bradley Ranch - on return
Belfield (return) 156.6
South Head roads 166.3

at 166.6 I went to Head
river, ^{South} E. of Head, ~~Rd~~ & collected
a blue *Viola*, *Carex* &
Ranunculus —

Dickinson - Hotel 176.4

at 174.6 pond back

from Head river by dam
plants passed & *Plan.* ^{bi-cant}

26

27

June 5, 1935 Wed.

31012

St. Charles Hotel 0
 Heart run ^{Green} ^{ally} .9
 Lickens ^{at} 18.
 New Enger - 26.9
 Cannonball R. 27.3
 # 21 27.6
 follow 21
 End of pass road 40,
 # 85 42.2
 Midway - 42.9
 creek - 43.8
 Amidon - 52.2
 Turn S. - 54.2
 Bowman ^{ride} ^{down} 75.8
 Turn S. 75.9
 77.0
 State line 93.2
 at 93.5 - 3rd dist
 vine in an.
 at 96.2 - Rumex along road
 at 98.5 - Halimololobos, Artemisia,
 Viola, etc
 Ludlow 101.2
 Buffalo - 123.4
 Grand river 123.8
 Crow Butte 147.4
 # 79 149.8

Started at 8:15 am
 Turn S 154.6
 (creek) ^{at} 156.0
 at 158 - large white
 sandstone, etc
 at 159.4 - gypsiferous
 etc
 Four mile cr. 162.8
 at 165.8 - beautiful
 blue sandstone
 at 170 great
 area of artesian
 water
 at 173, from
 hill near ranch
 Indian Cr. 180.4
 Enter hills 182.
 Enter plain 183
 Owl creek 185.4
 Crow Cr. 194.2
 Belle Fourche 196.7
 lake 205.7 -
 Belle Fourche 214.7
 Spearfish Cr. 222.4
 Spearfish 229.7

A cloudy day, cool but pleasant
 Same type of rolling country as
 west of Dickinson. A few scattered
 buttes (flat-topped) are visible
 most of the way. Few ranch houses,
 & not many cattle. The big heads
 were shipped out last year during
 the drought.

at 18 mi. S. of Dickinson there
 are many rocks (blocks)
 scattered about, & they are covered
 with lichens. (see spec.)

at 413.8 in a creek I swept
 Blau. param & Lymanie
 & down 1 "type - buty"

We drove over some dirt roads
 and finally reached # 85, the first
 part of which is under construction

The same rolling topography,
with widely scattered buttes,
extends to the state line,
Southward fewer buttes, or none.

In So. Dakota at 93.3 I
collected *Vicia* infl.

At 96.2 - along road - a Remy,
Range of hills appear
to SE. & SW.

at 98.5 (So. Dak.) along a little
depression (rills) a nice lot
of *Vicia* (*mirabilis*), *Astragalus*,
Vicia, "Helipais", *Albica reticulata*,
Lesymbium, yellow "Draba", *Mertensia*,
Achillea, etc. *Phlox*, etc. Wheat grass.

at 100 etc. the hills have more
dots with rocks (white)

at about 105 to the west we
could see higher hills with valley
thin (coniferous) forest. Cuts
national forest.

We are still in the same kind
of topography, with scattered buttes.

From 110 the hills S. & SW, are
again rougher. Conifers SW.

Beyond 114 less rugged again,
there are many small gullies
on many of the slopes everywhere,
over grazing?

At 126.8 great heaps (drum)
of dirt were blown up on a
low ridge ^{chuffs} against walls of
roadcut.

At 129 to SW. we could see
another section of the Custer National Forest.

Crow Buttes, at 14706 is
a group of rugged sierrate
buttes, of stratified sand & clay,
seemingly with strata of
concretionary rock.

The whole country is now a
cheerful green - but what it
must have been last year!

At 156 we crossed the S. fork
of Moran Riv, - here a new
creek.

At 158 a large white *Oenothera*
etc. in very gummy soil, which
also became very hard.

The yellow umbellifer is exceedingly
abundant here for several miles,
forming the prairie.

Many *Oenothera* (white) scattered
all through this area.

At 159.4 on a long slope,
granular, I collected *Grygadenum*,
a yellow umbellifer, and a lot of
other plants.

There was much of the yellow
umbellifer.

At 165.8 I collected a fine
lot of blue *Pentstemon*.
It was on a rather low
grassy slope.

At 170 a great area of *Artemisia*
tridentata - in tufts extend
at least a mile.

At 173, from hill, we saw mt
above. Drifts led into a
lower plane.

Much cactus (*Opuntia*) also for
several miles.

At 176 - a desolate, broken
region.

Entered rocky hills from plain

182 - Brecken, rough & eroded,
at 183 enter plain again.

In all this region there
are few ranches and well
poor buildings.

We saw few cattle, some
horns & several flocks of sheep

at 189 we again entered
a group of lower desolate
hills. For a mile or more,

at 192.5 dropped into plain
again & at 193.2 we dropped
into real low plain.

Took a side trip to Lake ^{on #} 212
Belle Fourche, but the
beach is desolate.

Quite a change to drop from
the open plains to Belle Fourche
with trees, lawns, etc. Trees mostly

→ ^{gottmurod}
at about 217 we came to first trees
on a ridge. Scattered *Pinus*
Pinus ponderosa mostly (?) - Small
& rather stunted - on right.

At 218 another ridge on left
on rocks.

all seem to be *P. ponderosa*
Runs along to about 220

at 219.7 I took spec. of
lvs. & cones of *Pinus ponderosa*
This on a rocky ridge.

We drove to Belle Fourche
and on to the Belle Fourche Reservoir
This proved to be barren and

we returned to Belle Fourch
and drove on to Spearfish
We arrived about 6:30 PM
& put up at The Spearfish
Hotel.

52.2
43.7
8.5
4.8
3.7

June 6, 1935. Thurs.

Rained all night.

Left Spearfish on #14 for the
Wyoming. -

Started at 30 = 31242 ^{9:40} on

at 34.6, in open grassy rolling plain
with broken granite, *Lepidium* (?) yellow
with *Junci*, & *Pentstemon*

The trees on the high hills (mts)
to left seem to be all *Pinus*
ponderosa. Mostly growing on & among
rocks. Many *Yucca* on rocky
slopes in places.

Much red soil,

42. - Wyoming State line,

43.7 - Pueblo, Wyo,

47. (Wyo.) On red slope, *Yucca*, etc
collected *Gama*, *Castilleja*, etc.

all red here throughout

52. - on red slope - *Astragalus* (2 sp.)
acutum, etc.

52.2. Turned back,

at 57, on return (3.7 ^{Bendah} 15 mi. W. of state line)
 collected *Lange Oenothera*, *Orysimum* ^{Wheat}
 at 60.6 (on return)
 In Sand Creek, just W. of
 Bendah, Wyo.; I collected a
 lot of *Physa* (many copulid) by
 sweeping the Cham, water-
 cress & *Potamogeton*, also
Valvata-like larvae

State line 62.4 on return

Spearfish (return) 74.4

After lunch we drove
 up Spearfish Cañon to 77.3
 I worked about below, & went up
 on one bench on W. side. Under

sticks I found *Vaccinia*, *Corallipes*,
Dicrus, *Gonitoides*, *Querculus*

We then follow a log trail up
 the mountain on the East side
 3 miles from Spearfish

The forest is mostly *Pinus*
ponderosa. Below were *Cunila*
 and some white Birch.

We went up high enough to
 find a few small spruce.
 We first found a dead
Oreohelix cooperi, and then
 more than 100, among them
 many living. Some were
 creeping about on leaves, & on
 bare spots on the ground. More,
 however, were found under leaves,
 but none under logs or stones.

We came back, changed
 plants, & returned

June 7, 1935 - Friday
a fine, clear day.

Starts about 8⁴⁵ for the 3 mile point.

Reading at hotel = 0. (barometer)

Reading at bottom of valley at 3 mile pt. 110

Found one good *Oreohelix* at bottom

, then none at 260 (+ upward)

The colony visits yesterday begins

at 265.

We found a goodly number of shells (many living) in the same

ravine, & just S. over small

ridge another ravine there

a smaller form more

common.

Picked up *Vidua*, *Ammodramus*,

mass &

Car stopped at 82.9

89.8
~~82.9~~
6.9

6.9
~~2.8~~
9.7

We drove up the cañon to
89.8. Here there is a dense
thicket of *Picea* with many
stubs on ground. Many dead
Oreohelix corpses on the flat
and a few on the base of
slope. There are also a
good many living ones, - a larger
form. They are mostly on
surface or under leaves. A
few were under logs & quite
a number evidently burrows.
Took *Vidua*, *Ammodramus* (one), and
fungi.

Turned back at 89.8.

A wonderful cañon.

Bridal Veil Falls at 92.5 (return)

$$\begin{array}{r} 94.4 \\ 89.8 \\ \hline 4.6 \end{array}$$

$$\begin{array}{r} 99.5 \\ 89.8 \\ \hline 9.7 \\ 4.6 \\ \hline 5.1 \end{array}$$

2.9 mi. to Ornelia stop

$$\begin{array}{r} 94.4 \\ 89.8 \\ \hline 4.6 \end{array}$$

At 94.4 (return) we found many dead large Ornelia corpi on a flat talus^(?) at foot of cliff. One living specimen was found under a log.

Collected *Vida teretica*, *Melania*, *Succinea*

Return to Spearfish 99.5

2.8 mi. ^{from Spearfish} to Ornelia stop

9.7 mi. to last stop (turn)

5.1 mi. to last Ornelia locality

150-250 ft above valley 2.8 mi. S of Spearfish
 1st day 57 living 90 dead = 147

2 nd "	103	80 "
	79	108
	<u>239</u>	<u>278</u>

Last stop 89.8 - 56 living - 328 dead

The scenery along Spearfish cañon is fine, - finer going south. Vertical cliffs + steep slopes covered with pine (*P. ponderosa*) and spruce, - the cañon turning and twisting to make all sorts of exposures. The view coming back (north) is less beautiful because we then face the exposed side and the forests are not so well developed.

We changed drivers in the evening, and I then labelled and arranged the fungi, mollusks, etc

June 8, 1935 - Saturday

a beautiful day. Started at
8:45 am. Reading 0. ³¹³¹² at hole

1.0 - to new road

After turning S. of #85 we went down
a small canyon. (sluffs (cliffs) were
at first mostly with scrub (low) oak,

then *P. ponderosa* some *W. link*

much gnawing up in photo. Mixed forest,

#24. 14.0

June 14.4,

Deadwood is surrounded by tall
hills & some cliffs, some forest
covering - *P. ponderosa*
a dirty creek.

Deadwood 16.5,

Back to #24 - 18.2

There are large layers (below) of black
stuff, looks like tar!

The creek is almost black.

Sturgis 29.4 #14
" (town) 29.8 +
Sielford - 39.4 more open

Turned to Crystal Cave
Return to #14
(to fork return) 44 going

47.3. Crystal Cave -
we went 260 ft down
the fork (return) 58.7
Return to #14. 53.0

Piedmont 56 (return) 56.2 -
Black Hawk - 63 (at 62 - a new find
more ahead)
Rapid City 68.2
Jurn 73
Return to #14 - 77.8

Rapid City 79.2
as 79.5 turn to left for Cannon Lake
Turned at 84.3

Return to #14
Rapid City - gas sta. 89.4
Ran by #16 - 3 1/2 hrs
Return to #16, 90.7 1/2

as 93.8 - high lookout (tells up)
Black Hills

We went down into Crystal cave,
260 ft. down, and found the walls
and ceiling everywhere crated with
dog-tooth open crystals of calcite.

In the lowest part were a
few small stalactites & stalagmites.
In some places the calcium
is colored by iron (red) or green
(copper) or black (carbon?)

We drove back to #14 and
stopped at Piedmont for the
noon luncheon.

Came back to 16 from
Rushmore bowl - 104.6. (Top entrance)

Entrance to bowl 105.2

Rocherville 106.

at 108.9. We saw jumps on side of
Pinnacled Sandstone.

Summit 113.1

Keystone - 113.7

Rushmore - 116.7 - Washington, etc.
117.7 on return to bank.

Summit from top - 119.2.

at 119.9 along mt. stream a few
small shells.

Summit 121.2 after thirsty run

Summit 121.9

Summit 124.4

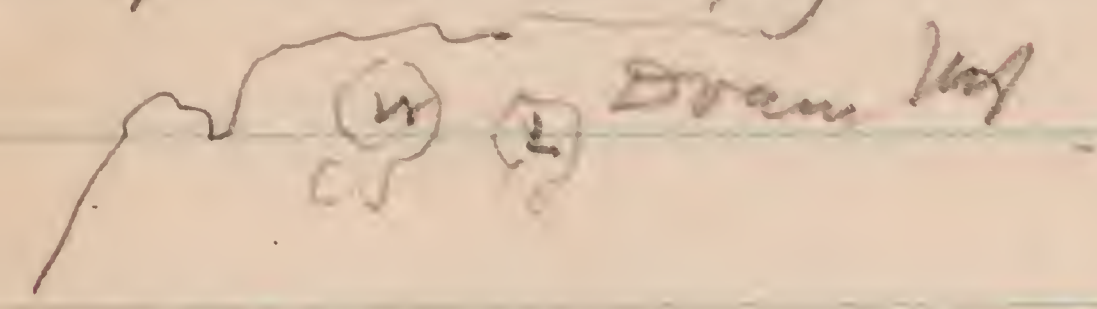
Iron Cr. 126.7

E. W. road 135.6 summit W.

Same road 138.3

A beautiful drive

Doane Mt. - with Washington
fair to left (complete), Lincoln
to right (partly)



The view down the canon (to mt.)
is very fine. We are
in the heart of the hills.

June 9, 1935 - Sun.

Left the State Game Lodge at 7:50^{am}

The sky has some clouds, but
partly clear. Pleasant.

Started at 38.7. (31451)

We drove up the valley of
Grace Coolidge Creek.

39.7 - Camp Galena

White birds very common along

the mountain stream.

At 43, Petrels & Pinnaculum

at 43.9 in a streamlet with
small pools & grass² growing in
them. I swept up about 50

Lynx

#86 (81) 44.4

45.3 - Jumps back

Return to #16 - 46.1

Started back on #81

Drive through Pinus
ponderosa forest.

Quite a number of Picea in
valley. Many rock ledges
along this road.

Saw red fir in hole
in spruce - at 51.1

The white birches occupy
the flats along creek & bases
of slopes - all along.

at 51.9 ^(on left) entered pits &

here Larvin was begun,
53.4 - Tunnel,

54.6 Balanced rock,

at 56.2 a good view of Harney Peak
and also the needles

To 56-

Finest at 56.8 + 57 for
for 57.4 needles

57.2 ^{one set of} base of ^{the} Needles.

57.7 Right across the Needles
To 57.8,

Still other set at 58.00
Tunnel 58.4

Great view as far as of tunnel
Deep gorges & many needles

Five to about to 58.9,

at 59.3 picked up a small
sterile(?) on top of Pinus pondosa.

Sylvan Lake. 59.7 - Swan.

Walk of rock near Hotel
Hotel at 60.

Turn to Custer ~~at~~ 60.3

60.5 #85

Custer 66.8,

Sanatorium 71.9

Sanary 72.5

Pringle 79.6

86.2 - artificial lake

3157 1
7500 22
1549

Wind Cave 87.9

#79 - 93.8

Hot Springs 98.4

Evans

#18 turns E 113.1

Delrichs 127.2

State line 139.8

Waynes

From Hot Springs we drive
down a red ^{cliffs} canyon

at 103.5 I found a *Geophyton* ?

"valvata" on plants in creek

on rather dry, open bank (com.
of prairie slope) there was

a large bed of *Malvastrum*

rich fungus. See spec. at 103.7

104.7. Cheyenne River

121.1 turn E

139.8 Neb. state line

#19

142.1
139.8
23

South from about 103 - it
is open rolling country with
sage-brush, etc

Same rolling country in Nebraska
(a few white capped hills in So. Dak)

Nebraska side shows erosion,
overpastured?

at 142.1 (Neb. N. of Chadron)

collected White Anemone, *Citrus*

etc. on rolling prairie

Oxybaphus along road nearby

Many *bobolinks* along the way

several magpies - near small
groves.

152.6 White Pine - small

156.5 #20 + #19

158.9 #19 turns S. Chadron ^{near}
Chadron in flat valley

Beyond Chadron rougher &
some trees in valleys.

158.9

57

Some of the higher hills
have quite a lot of

conifers. - *Pinus ponderosa*,

165.5 Chudron Crk.

165.6 - " "

166.4 - " "

167.3 Chudron State Park

1674 - Chudron Crk.

1678 - " "

Pinus

169.2

167.3

1.9

169.2 On open grassland bank

(well up) a beautiful pale
blue *Pentstemon*, etc. (see spec.)

171.4 ^{top} Pine ridge

Beyond 173 there is an
extensive flat plain.

175.1 Esther cañon (bottom)

at 175.3, on upland just

beyond Esther cañon, white

Oxytrich, *Comandra*, etc.

158.9

57

14 1/4

42 3/4

158.9

28.5

184.4

Much eroded low hills
(overgrown?)

179.9 Pepper creek

Roughly rolling.

185.3 a creek

185.5 Dunlap - Meador meadow

less rolling, flatter, S.

194.0 #87

197.9 1/2 Turn S.

Alliance - 214.3

Letan

Banner

Angora - 230.7

quite a flat plain beyond

Alliance. Beyond 223 rougher
with hills - dunes. Some

mostly fixed.

At 230.6, in a broad meadow

between dunes. I collected *Dodecatheon*

in low places, *Sisymbrium*, *Alnus* etc.
a pine woods

230.6

214.3

16.3

Large flat areas were
painted with Dodecatheon.

at 234. In front

R. aquatilis in fl. (many)

= *Rumex* along road.

The dunes are broken
by broad meadows, often
quite wet,

after 235 dunes are not
prominent

more dunes S.E. of Laguna
much bare surface.

Enter dunes at 240

Northport 251.

N. North Hill 251.3

Bridgeport 252.3

at 256 low bluff (small
dune)

at 259.1 a cut in dune

which has about 2 ft. of
sandy soil (see sample)
over loose sand.

at 260 another similar cut

260.1-26 turn E.

at 260.4 a deeper cut
through fixed dune, sandy to
top,

several dune cuts follow
beyond this the surface
is flatter, with only low
sprawly dunes.

Dalton ~ 273.8

Gurley - 279.7

Huntzman - 286.6

Sidney - 291.9

at 268.8 on rough ground
yellow *Oenothera*, etc
Sidney 292.1

268.8
252.3
16.5

Stopped at Sidney Hotel

39.3
57.2

18.1

37.5

June 10, 1935 Mon.

A fine, clear day,

Left at 8:30, ready 31,704
292.7

Travelled E. on #30.

(collect 298.8)

Summit 303.5

Lodgepole 310.0

Chappell 319.4

✓ at 294.7 collect White Dents pits
2.5 mi. east of Sidney

#27 turns N. 326.2

Dry farming ridges all through

Turned S. on Co. Road 327.2

✓ at 332.1 - a lot of Malvastrum ^{rich 2}

334.4 - Turn E. (State line)

35.4 - Turn S.

335.5 - State line Colo

✓ at Julesburg, Colo. collect Malvastrum
allium & grass, 337.1

Julesburg - 337.5

Ran S on 51 to low, round bluff

Went to cemetery at 39.4
(on hill just before it)

This is evidently a dune
It is gravelly however, due
to top with a little compact
silt on slope.

Collected *Astragalus* in 60,
yellow comp., *Centauria*, etc.

Went SW. on main # 51

The cuts (road) are also
sand dunes with many
calcareous nodules & mamm.
(see 2 pieces)

Also a few dark pebbles.

This topography is
evidently all dune formation.

We drove to 342. View
beyond is across a rather
level grass-plain.

Cuts on road below are

all sandy & gravelly. This is
SW. of Julesburg

The bars in the S. Platte are
mostly overgrown, trees, etc.
Platte here in main channel
rather rapid.

Reading in Julesburg on
138 - ^{Return} 345, 8 1/2 m. ^{on # 138}

347.7 - State line - (Neb. & Colo.)

357.1 Big Springs

359.2 # 310

368.4 - Brule RR. Sta.

377.4 Ojibala

Many cuts along # 30 are through
dunes.

384.4 Roscoe - RR. Sta.

396.5 Paxton -

Dexter -

408.7 Sutherland -

413.2 O'Fallon -

419.2 School Hershey -

Nichols -

School

great beds of white sandstone
along the way -

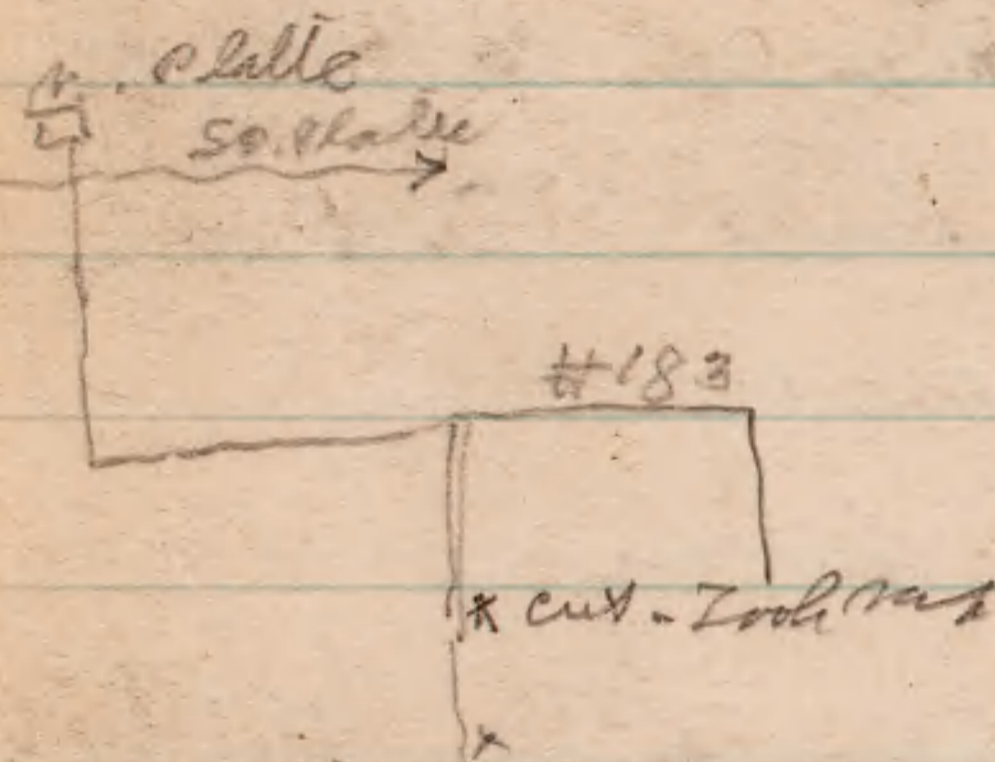
North Platte - #183 - 430.1

#30 turns 430.7

432 - So. Platte

435.3
No. Platte 430.7
4.6

at 435.1 - on slope



at cut on slope
took sample.
2.00 nodules
6 ft. exposure on
2. side

a little further on - low
down, another cut with
similar lacy material

470.4
467.7
2.7

over the silty & nodular
material noted at Julesburg
Higher up there is much
more lacy material

425.3
430.7
4.4

483.9
445.2
38.7

79
38
41

gathered cactus & other
plants at 435.3, on dry
slope

Drove to 436.0 - at the
regulating reservoir - where
cut shows same lacy - no
fossils!

Back to #183 = 437.3
could see some *Lyellia* far to S. S.
We drove on 183 SE. to 439.3

Turned back

Other hills, near to No. Platte
are more like lacy

No. Platte at 230 445.2

No. Platte at 447.7
Maxwell - 458.7 - RR sta.

Brady - 467.7

Froman - 474.8 - only a RR stop

Gothenburg - 480.4

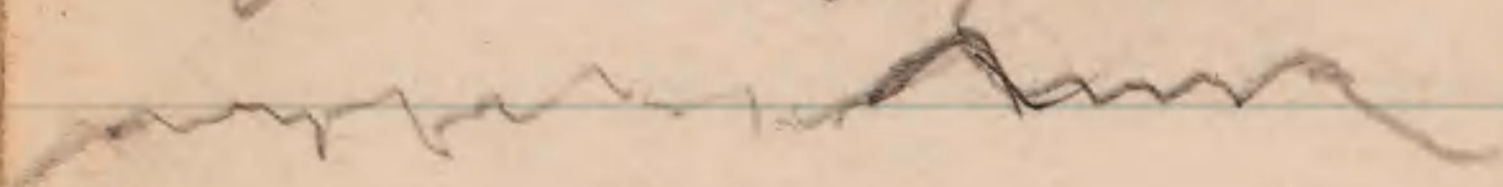
Willow Island - 485.8 to RR sta

Cozad - 490.7

Darr — 496.5

Lexington — 504.6

To the S. could see
 many low ridges
 of low hills
 3rd, 4th, 5th



With interruption these
 hills appeared all
 along the Platte for miles.

At 470.4 (in dunes),
 took 2 spec. of white
 thistle,

Stopped for supper at
 Lexington.

Left Lexington at 504.7

Overton — 515.7

Elm Creek — #83. 524.3

turn S.

Platte R. — N. — 26.9

— S. — 27.0 1/2

At 529.6 a cut in
 a sand dune — there are
 no bluffs, but a series
 of dunes here.

This is all an old dune
 region here with no bluffs.
 No low bluffs E. or W.
 as far as I can see, — all
 old dunes.

A great plain, viewed at
 535, — to Holdrege.

Jc. of #6. — 543.7

Holdrege — 544.3

June 11, 1935 - Tues. clouds
 A cloudy day. ^{departed later} Started for ^{Hotel} Atlanta + Oxford at 8:05 AM

Reading at Holdrege 31956 (544.4)

Holdrege 544.4

559.1

544.4

Atlanta 554.4

14.7

at 555.6 ^{side road} turned S. toward mine

to 556.1 - returned

at #6, 556.6. ✓

Return to RR at Atlanta, 557.5

Walked SW on RR. to cut 1,

Found it as described. Collected
 shells (mostly in lower ^{3 or 4} ft.

of cut where about 7 ft. deep.

Took small carton of boxes.

Started SW. on #6.

This ^{old} cut is in a low broad ridge
 running at right angles to #6,

or anything ^{#6} Ridge cut made at
 angle = 559.1

2 mi. SW. of Atlanta
on #6

at 559.5 - a long cut begins
at top of hill & runs down
SW

559.1
559.5
1.6

559.5

N. side

#6

559.3

shell

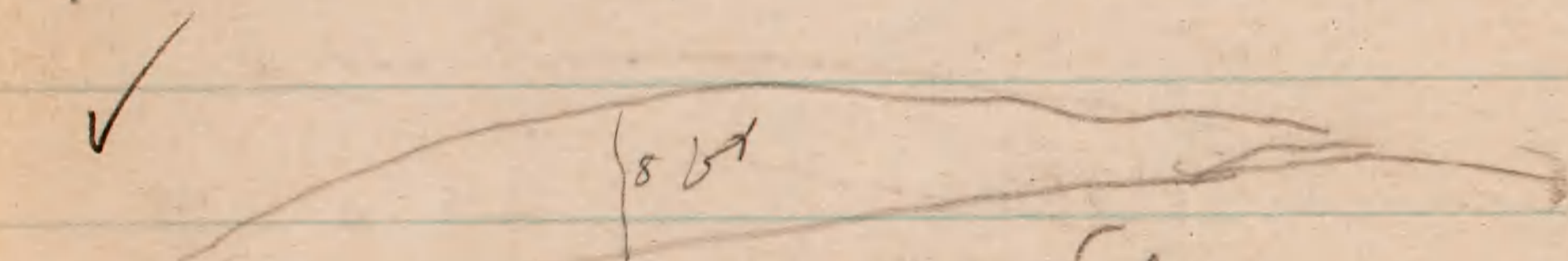
This is low just like in cut, Atlanta
Some brown ridges
The shells are scattered through all the part
indicated - not abundant. No shells near top of
hill,

S. side of #6

shells

4 mi. SW. of Atlanta on #6

At 561.3 - on a slope up to SW
559.9
there is a good cut about
15 rods long & 8 ft in deepest
part. S. side is better



8 ft
S. side
Fossiliferous mostly
in lower 1/3. Looks like
cut 1 - Atlanta. See shells
look multilifer.
This cut also is on a broad
irregular ridge.

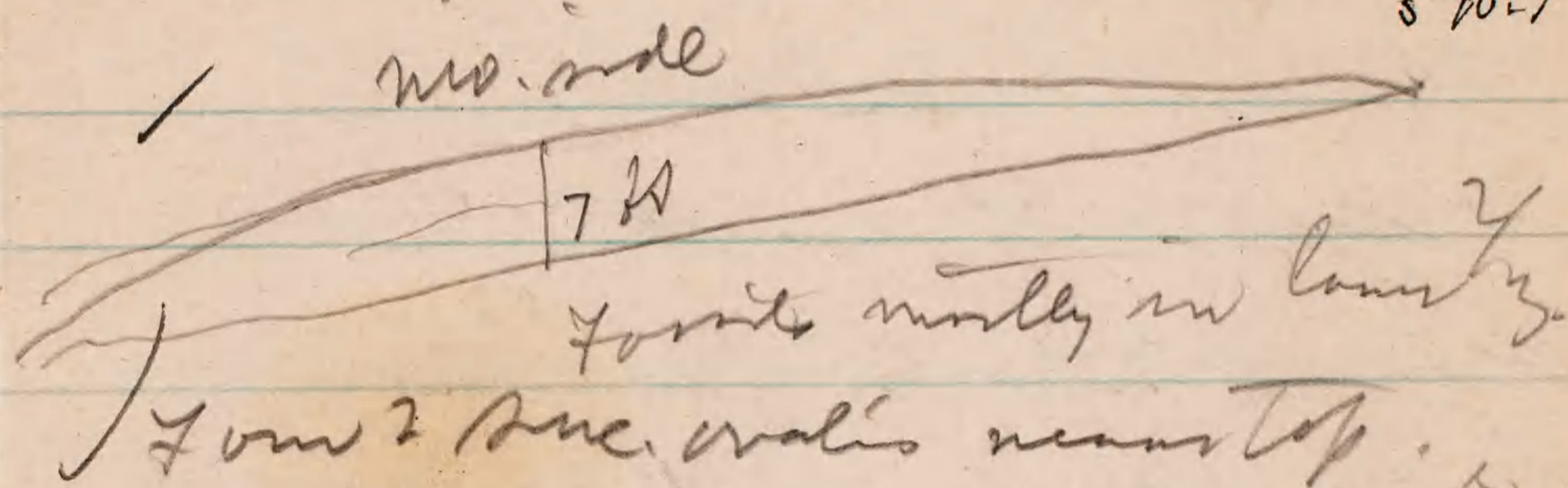
567.8
561.7
8.1

544, H

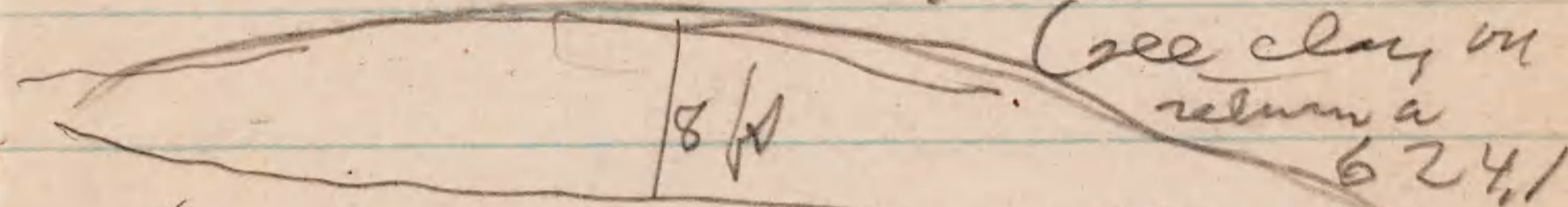
4.4 mi. SW. of Atlanta

At 561.7, the thin cut SW. of
Atlanta, Neb., along #6, slopes SW
It is equally good on both sides.
About 15 rods long & 8 ft. in
deepest part.

~~554.4~~ 561.7
9
570.7



on S. side shells come 1 ft of top
larger above



Shells within 2 ft of top
The full ovalis was up 6 ft.
or more.

567.8 Mascot

- at 569.6 - a good cut, sloping SW down
- another at 569.8 - sloping up, SW
- " at 570.4 - short
- " " 570.7 - "
- " " 571.6 - "

573.0 - #3

Oxford, 573.3

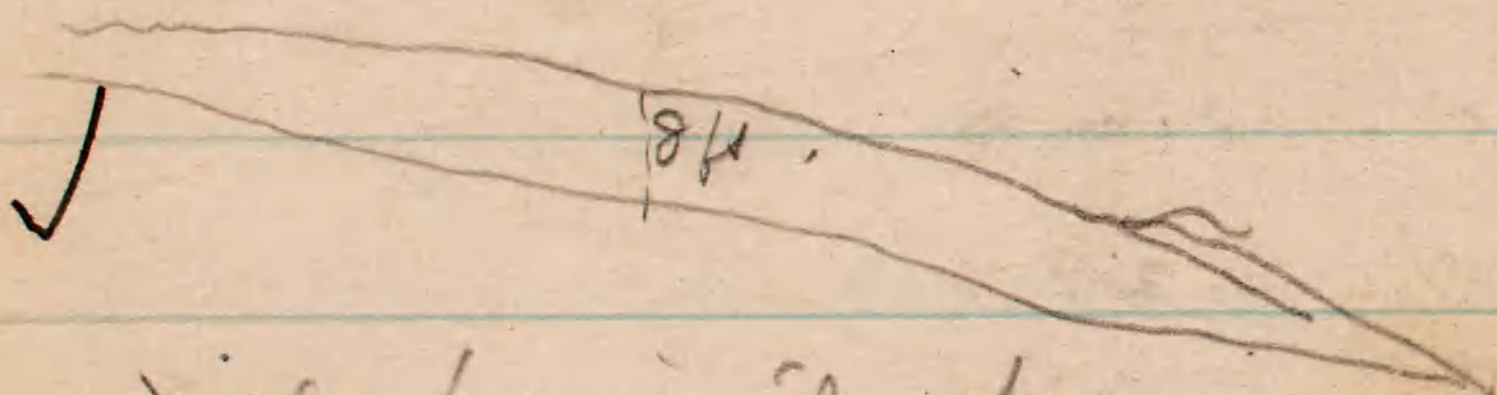
After lunch we drove up the Republican valley on nos. 3+6,

Edison 581.2

Arapahoe 588.8 #21

at 589.4 - N. of Arapahoe, on #21, a good cut runs up hill

The E. side is better



This is similar to the other noted. Took sample of clay fossil.

We ran to 592.7 on #21

in Gordon Co., the cut is

only a little over a foot & shows no fossils, but it

is evidently the same, all this is a Kansan-looking topography with trees on all the flat-topped ridges. These extend far to the west as I can see. Turn back at 592.8.

a gentle cut on 84 - some shells

	Arapahoe #6+7?	596.9	
	Edison	604.5-	
	Oxford	612.7	Return
	cut 8	618.1	
	7	619.0	
	6	619.3	
	5-	619.9	
	4-	620.1	
	3-	628	
	2-	628.4	
	1-	630.4	

at 614.1 a gentle cut on 84 - some shells

at 615.1

at 615.1 - a good cut 2 ft. deep
2 telephone pole supports long,
with wire guard. *Residual*
cuts top & slope NE (down)

616.2 - a rather low cut, Parked

617.5 - a low cut - "

Mascot 617.9.

at 623.8 - a cut well up

at 624. a cut low down

A short ridge cut. Only
upper part may be lower, could
not get to it. Lower part

a good clay (see sample)

No fossils. About 12 ft. deep

at 624.1 on hill, short cut
under

at this place (3rd cut going
out) we worked this AM,
Merged on S. 9 & 7 on 8th

164
265
429

On return took box of
clay (lower part) within
2 1/2 ft. of top.

Return to first cut
this AM, at 626.3.

Took clay from lower
part, about 1/3 up hill,
where I got best shells
this morning.

Atlantic RR. stop 628.2
" " " " 628.4

Heldredge - 638.4.

Frank - 644.8

Axtell - 652.4

Minden - 662.6

#17 - 665.9

Heartwell - 675.3

Junata road 690.2

Hastings - 693.6 - turn in to

Back of #6 - 697.9

698.4

From Holdrege to Hastings
is quite a flat plain. Rd. tin
pressure. Continues much the
same to Sutton, with occasional
slight undulations.

Hastings 698.4

Inland 707.1

Harvard 714.8

Paroville 721.1

Sutton 727.3 1/2

We drove to Sutton, and put
up at the Sutton Hotel.

Changed drivers and went
to bed.

32140
30022
2118

June 12, 1935 - Wed
Arose at 6 am, packed and
had breakfast

Started at 7:20 am.

Readings: 32140 - 727.5

#6 - Sutton - 727.8

Grafton - 736.4

Fairmont road 743.3

Exeter ^{turning} 749.6 - 751.1

Friend - 759.9

Dorchester -

Milford - 779.8

at 793.9 ^{loc.} - Emerald - 794.2

Lincoln 801.8 ^{block} out 2300

more rolling beyond Friend
Loess cuts beyond Milford. Somewhat
rolling.

at 793.9 yellow loam on
S. side of road (across)
on S. side bank half is loam

836.2	847
727.8	128
<u>108.4</u>	19

gray, crumbling loess (as usual)
no fossils!

Rolling (Kauon) topography
to Lincoln

805.7 - Cotner (Campbell)

814.3 - Mavery RR sta

819.8 - Greenwood - RR sta

825.7 road Ashland -

826.7 " " " " " "

828.8 road the Platte

829.1 road " " " "

836.2 between " " " "

847 Millard

859.3 Omaha Burn

859.9 bridge

860.1 main

860.4 E. end

The upper part of Lincoln is now
all trees, improvements, etc

At Cotner College a small town,
Little of Salt Basin was seen.

(east of)
at Ashland - good loess cuts

We drove up to old shell
layers off 10th ave & I

Took box of clay & Massie
find a box of shells

Turned at 865.4 (shell
layers 865.5-)

#6 - 10th ave. 865.8 shell layer

Left this at 12 noon

End detour #7 (4th turn 6) 869.9

on #7
891.0 1/2 junction of #59

893.2 RR
893.6 Oakland town

1000

83

917.7
727.8
190

923

865
58
265
125
140

387

917.7 1/2 turn into Atlantic

Returned to #6 at 918.1

Wiota - 924.5

amita - 931.6

adair - 939.9

Casey - 947.4

Mendo - 953.8

Stuart - 958.5 - back 958.8 1/2

Dexter - 963.8

Redfield - 970.3 road,

Adel - 979.1

Waukegan RR 980 - 982.8 Oatmanville

Waukegan - RR sta 986.6 -

Des Moines - 997.5 - sta. to Cassin district

999.4 bridge

1000, 3 - Des Moines Riv

#60 1001.3

Highland Park 1001.7
or Des Moines 2

Old #6 1005.5

1098.8

-21
1119.8

1120.1

727.5

392.6

Altoma 1010.0

Mitchellville 1016.4

old road

Colfax 1022.8

Stunk River 1026.6 1/2

Newton 1033.7 Courthouse

Kellogg 1041.7

Waukegan 1043.1

1052.2
1058.9

#63

Brooklyn 1067.4

Carnforth RR 1072.9

Victor 1075.6

Ladora 1082.2

Marion #212 1088.3

" (old road) 1088.8

S. Amara 1094.0

cm - 20 P.R. 1097.1 1098.8
#149

Homestead RR, Sta. 1099.5

Co. line 1101.2

Oxford 1104.4 - #109

" 2nd 1105.8

Jaffin 1111.3

Oakdale road - 1114.9

Home 1120.1

1120.1
1075.6
44.5

32540

June 27, 1935. Thurs.

6:42 AM.

33049-

Home	0	Luana -	138.5 1/2
N. Liberty	7.5 1/2	Postville -	145.5
Curtis	12.4	Bastalia -	151.6
#30 C. Roberts -	25.1 1/2	Ossian -	156.7
Annas	27.1	Calmar -	163.2
Marion	31.2 1/2	Clarks road	165.5
#13 + #161 -	33.7	#9	172.7 1/2
Central City, Ind	45.6 1/2	Ridgeway -	182.8
RR	48.0	#139 -	189.8
Coggan	50.7 1/2	Cresco -	191.8
Delaware Co. line	54.2	David Coon -	200.7
Ryan RR	57.8 1/2	Saratoga	206.0
Manchester #20	57.9	Jamerson	211.1
Road #10. W. J. Johnson	57.8 1/2	Riceville RR	213.8
#19 + #3 + #10	79.8	Jura R.	215.9
Strawberry Point -	84.8	Little Cedar	223.6
Osborn -	94.2	Jura #22	229.9
Elkader -	99.8 1/2	Jarvis -	226.7 1/2
#128 -	102.7		230.3 -
#52 -	111.5		121.7
#52 + #17	111.9		109.6
#18 -	112.5		
Grand (Pines)	113.2		
McGregor Hotel	119.5		
" (retam)	121.7		
#13 + #18 -			
Froelich -	129.9		
Monona -	135.2		

1-32,
2-70
3-102.7

June 17 1935 - Mon.

Left at 11:47.

32614 - Home = 0.

Home 0	Newton -	85.6
Coralville - 3.0 -	Skunk Riv. -	92.6
Oakdale road, 5.1	Colfax down -	95.7
Tiffin - 8.7	" -	96.4
Oxford - 1 st - 14.0 +	Mitchellville -	102.8
" 2 nd #109 15.4 1/2	Acton -	109.2
Co. line - 18.7 -	Des Moines Ave #6 -	113.8 -
Homestead sta - 20.4	" " Capitol	117.9
Road #14.9 - - 20.9	" " river	
C.M. & St. Paul Ry. 22.7		
So. Amana 25.8		
Road #149 - 27.8		
Marango (olms) 30.9 1/2		
" #212 - 31.3		
Ladora - 37.5		
Victor - 44.0		
Cornfork RR, 46.7		
Brooklyn - 52.1		
#63 - 57.6		
#63 - 60.4		
Grinnell - RR, { 67.0		
Kellogg - 1 st ent. { 67.2		
" 2 nd - 76.2		
(N. Skunk R. 76.4)		

a sultry, rainy day,
Much *Phalium* decayed
on part of RR. prairie towards
Ladora.

June 28, 1935. Fri.

Left at 1:52 PM. 33280

Ulastis - Tracyville, O	#199 Van Horn	126.7
#218 - + #229. 5.4 -	RR -	127.1
Osage -	#30 + #218.	129.8 -
#9 + #218 -	Road S.	131.7
Orchard road -	Road N.	132.6 1/2
Co. line -	Road S, #201 Young	134.6 1/2
Floyd Sta. (RR).	Road N, Atkins	138.6
Floyd	Co. line -	139.6
RR. 30.6	Road S.	142.6
Charles City ^{main str.}	Junk W.E. -	144.1 +
#18. 32.3	#30 + #161	148.5 1/2
Washburn	Cedar Rapids	
Green road, 47.3	#30 + #161	152.3 1/2
Plainfield -	Prairie Cr.	155.1 1/2
RR 45 -	Airport -	156.1
58.9	airport -	159. -
#10 - 60.4 -	Co. line -	160.9
Waverly #10	Shneyville -	161.9
56.7 1/2	Curtis body S. line	165.2
Janesville (bridge)	Young	166.5
67.5 -	Dexter garage	168.0
Cedar Falls #20. 75.1	N. Liberty -	170.1 -
Waterloo (hotel)	Junk E.	171.4 +
92.1	Shimick m.	172.1
Washburn ^{92.2 below} _{92.3 above}	Wichita	173.0
La Porte City -	Panther ^{173.4} & Chul.	173.7
#8 (Tracy)	Butter's bridge	175.3
106.2	None -	177.7
Old road - #198		
114.3		
Vinton -		
115.8		
#202 -		
119.8		
(33457 1/2)		

bus fee

Wasson - Marshallton	1.79
Larcher, Ames 51	.51
Coner, Tama	1.10

25.0 miles
 .05
 12.50

1- 37.5
 2- 77.2
 3- 110.7

1-
 2-
 3-
 63/63.0

July 6, Sat. 1935. To Ames

At 6:52 am. 33521
 1:15 PM 33647

Home	0	campus entrance	0
Zeffin	8.7	Ames #69	16.1
Homestead #road	21.0	River	2.3
So. Amara	25.9	Nevada	9.6 1/2
Marengo #212	31.5	Colo road -	16.8 (16.6)
Iowa river	44.4	" #65	17.1
Belle Plaine #30	47.0	State Center	24.9
Chelsea 1st road	53.1	Marshallton RR	39.3
"	53.8	RR (Quarry)	44.7 1/2
Gladstone	60.1	Le Grand	47.8
Tama 1st road	63.3	Marshall Co. line	50.5
" 2nd "	64.5	Montour	53.1
RR - over	64.5	old road -	5
Iowa river	67.6	Iowa river	57.0 (turn)
Montour	71.9	back to #30 -	57.3
Marshall Co. line	74.5	Iowa rd #30	57.9
Le Grand 1st road	77.1	RR	59.2
RR. (Quarry)	80.2	Old road -	circled
Marshallton RR	85.7	Return to RR	62.1
State Center	100.0	Old road	62.3
Colo - #65	107.9	Tama - 1st road	63.9
" - road	108.2	" - 2nd "	65.1
Nevada	115.8 1/2	Gladstone	68.2
Ames - #69	123.9	Chelsea	74.5 1/2
Campus entrance	125.0	" - 2nd "	75.2
		Belle Plaine #2	81.3 1/2
		Iowa Riv.	83.9
		Marengo #149	96.8
		Homestead #	107.3
		Zeffin	119.5

128.0
 128.0
 128.0

Had a conference with Dean Kildee. He was very cordial & treated the grassland case very sympathetically. He will present & support it at the Planning Board meeting on Monday.

Dr. Martin showed me the husband's garden & told of danger to part which is to be taken for golf links!

The garden is arranged systematically & it is intended that each family shall be arranged in a belt, with the open places planted in the new garden, the wood species in the adjoining Pammel preserve & the swamp species in the creek valley below. I promised to write to

President Hughes, to show need of its preservation.

We drove back in the afternoon and reached Iowa City a few minutes before 5 P. M. The day has been quite clear, but hot.

Many cornfields are still weedy, after the heavy rains, and where possible the farmers are busy plowing.

Many fields are still flooded or wet in flatter places, & there has been much wash from the hills, - and spread out below.

July 11 - Gas 1.93 oil .35 2.28
 July 12 - Toll, Keokuk .25
 7 Campsville, Ill. gas 1.79 oil .20 1.99
 Jerseyville 10 10
 Nathan - Alton .60
 Mount Pleasant, Collinsville 1.50

July 13 Breakfast, Collinsville .55
 Chester, gas 1.58 soda .10 1.58
 Soda, " " - Keokuk .20
 Dinner, Murphytown .72
 Harrisburg - supper .57
 " gas + oil 2.04

July 14 -
 Shawneetown - hotel 1.50 Ferry 1.00 2.50
 Morganfield, Ky. Breakfast .42
 Zoll Henderson .30
 Evansville - dinner .50
 Mt. Vernon, gas 1.57 (Texaco) oil .25 1.79
 Car Hotel, Mt. Vernon room 1.50 supper 70 2.20

July 15 - Breakfast, Cafe 40
 Lunch, New Harmony 50
 New Harmony gas 1.54
 Supper 1.00 room 1.50 2.50 4.94

July 16 - Breakfast 95 Toll 50 1.45
 at 950.1 - Red Crown Alton, gas 1.73 1.73
 Supper 50 room 1.50 2.00

July 17 - Breakfast, Good Cafe, Vincennes .50 5.15
 Lawrenceville, Ill. supper 93 1.03
 Clark Centre, gas 1.79 oil .21 2.00
 Efferytown - soda 1.20
 Taylorville - supper 30
 Mason City, Gas 1.08 Hotel 1.50 2.58 6.61
 Breakfast, Pekin, Ill. .67
 Dinner, Brandon, Ill. .52

July 12, 1935, Fri. So. Ill. + Ind.

33808 4.51 am.

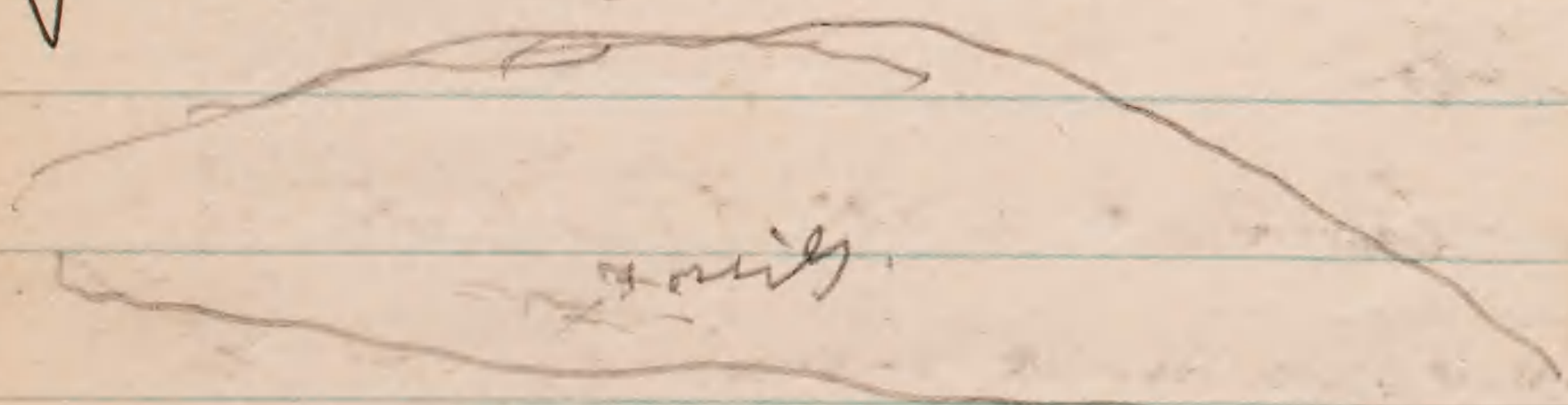
Home #2, 26.7 0
 Mt. Pleasant #24 - 49.5
 Keokuk - bus 92.5
 Hamilton, Ill. #96 95.1
 Marshalline - 115.6
 Mountbark - 117.3
 (at 117.6 - cut)
 Marshalline - 119.
 Quincy -
 Pagon - 144.3
 Plainville 148.
 #26 153.3
 Kinderhook 154.9
 Barry road - 161.5
 town 161.9
 #54 - 173.4
 Pittsford - 177.3
 June 3, Ill.
 June 6. - 189.8
 Beal - 199.4
 Bee Creek road 200.8
 Cliffsdale -
 Kampsville - 211.6
 Highway 215.5
 Hardin (with) 220.8
 " " E! 221.1
 " " E! 230.1
 Jerseyville (#67) 239.6

McKluskey
 E. Newbern 247.2
 Melville 254.
 Alton
 W. end of 261.6
 left Alton #67 263.
 Wood River 267.2
 #159 - 268.1
 269.7
 Edwardsville #27 277.
 " town 278.1
 on lot
 #157 283.4
 #40 288.7
 Collinsville 291.3

We drove south on #161 + #61 to Keokuk, crossed the Mississippi and turned S. towards Quincy.

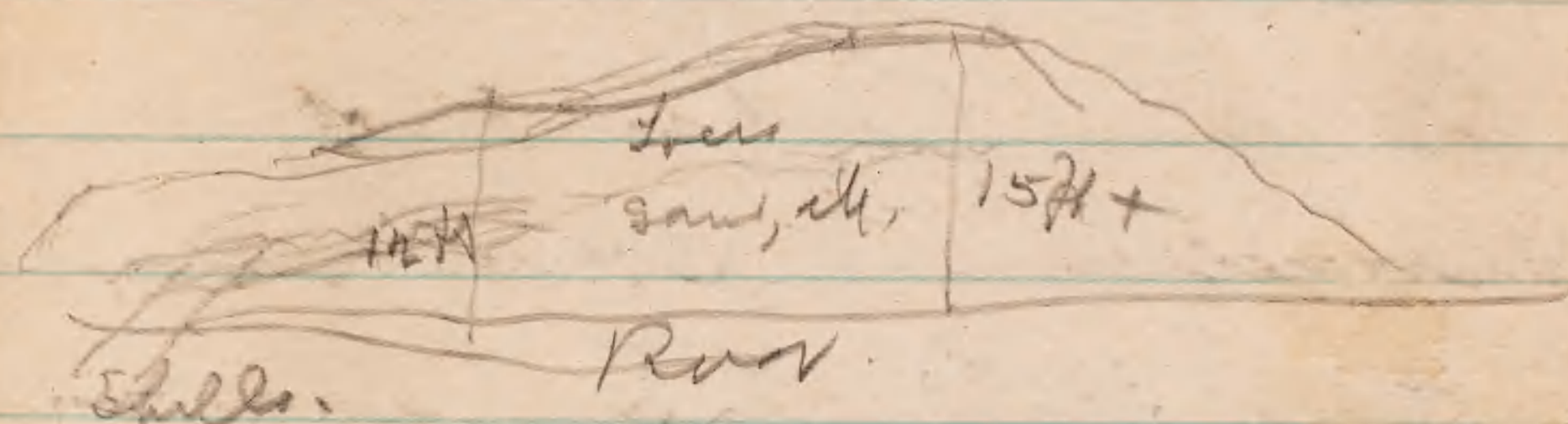
We drove south to the village of Marcelline, Ill., and then turned west on a gravelled road towards the Mississippi River.

At 117.0, at 2.4 mi. W. of Marcelline, Ill. Cut in road is about 12+ft. deep - yellow loess (see sample) Fossils abundant near base (1st 2 ft) (see box) - on S. side



This rise (Eastward) from a narrow upper terrace of the river valley, west of it is lower flat.

at Kinderhook, Pike Co., Ill. just at S. end of village a cut on E. side of road comes down to river. It is yellow sandy loess (said below) & has some nodules & shells, (see spec.)



Towards Pittsfield is the orchard country.

We turned S. at Pittsfield, to Mebo & then E. to Pearl and S. to Hamlin & E. to #67 at Jerseyville.

Drews W. side of Cliff etc.
in NW. Alton, Ill.

Found Polygona, etc, mostly
washed out. Found sample
from bank (only fragments
of fossils) & also part with
shell, probably washed
down. Shell were only
in lower part, - above
drift(?) - see three boxes
of shell.

After eating supper at the
Eli Restaurant we drove
to Wood River on #67 & took
159 for Edwardsville, then
south to Collinsville
stopped at Columbus

Summer - 20812

July 13th - 1935 Sat

Start 34100. 5.29. am.

Collinsville (291.4)	Carbondale #51	427.6
Turn to country 292.1	Road to Alto Pass.	440.8
#40, #159, 298.8	Alto Pass.	
250, 304.1		
Bellefonte #158	Return	451.4
#13, #158	#51 -	456.8
Mustard	Colden -	456.3
#3	Anna #146	461.7
Waterloo #156	Jonestown	463.1
Valmeyer	Turn back	465.5
Valmeyer	Jonestown	468.0
(Turn off)	Anna (#51)	469.3 1/2
Trucks 156	Colden -	474.8
Waterloo #3	Carbondale #13	490.4
Red Bud #170	Road to Alto	477.2
Ruma -	Marion -	507.
Evansville -	Crab Orchard -	513.7A
Kaskaskia riv. 374.0	Dallasport -	
Ellettsville -	Harrisburg -	528.7
Chester #150	Junction -	545.9
Rockwood	Shawneetown	552.-
Cora vord		291.4
Glenn		260.6
Terain -		
#144 + #150		
Murphree #13		

296.9 at cut
298.8 40 + 159

We drove about looking for
cuts in Collinsville. Finally drove
out to cut along #40 opposite
St. John's Cemetery, W. of
Collinsville (1.9 mi. W.)

Here there is long cut along road
looking to west the cut runs
about 12 to 15 ft., and fossils
seem to be scattered at least
through lower $\frac{2}{3}$.

The loam is mottled with much
iron. See shells & sample.

Took small box of clay

We drove to Waterloo (via Bullsville)
& turned on #156 to Valmyre
Found nothing & returned to
Waterloo & took #3 for
Chester,

The cuts on the hills
all along show a reddish
loam (?) which washes easily
& has no fossils. Took sample
from 20 ft. cut, - 1st one below
Chester on #150.

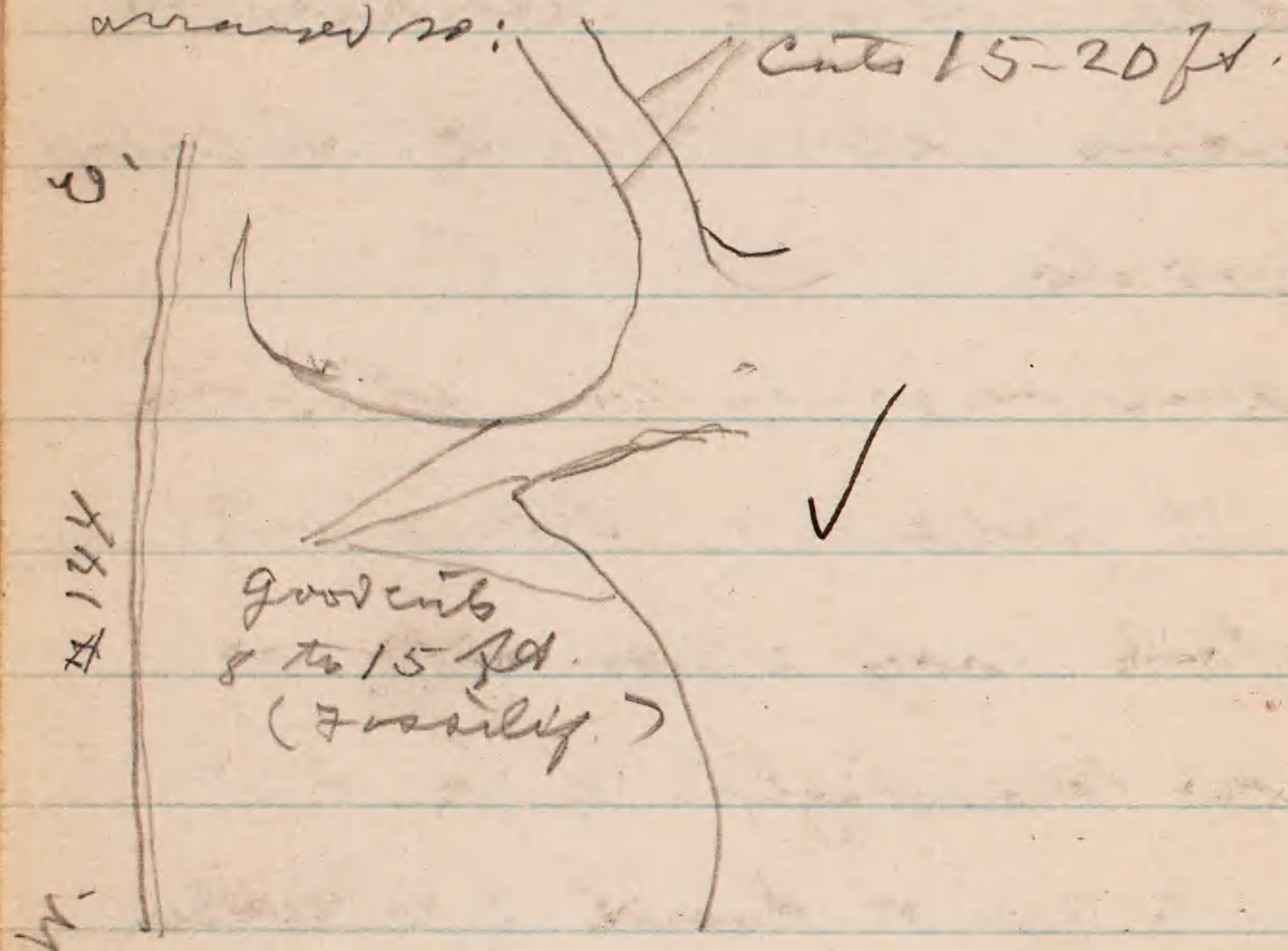
at 390.7 (beyond Chester) I turned
to right on a side road (down
hill). Several good cuts,
but all - the reddish stuff &
there were no fossils.

I scratched among the leaves
in several places in the fine
wood on the slope, but found
no signs of living shells.

A fine clear day with a
nice breeze has made this fully
as comfortable as yesterday.

When #144 enters the sluffs
(at 413.3) there are fine cuts

arranged so:



The shells are scattered
through it — nowhere abundant —
but mostly in upper 6-8 ft.

The material is redder below
(more like loess^(?)) from the
hills, & has no fossils.

The fossiliferous (upper) part is
mostly finer & lighter, —

yellow not reddish, but
even the redder part of the
redder stuff, grading into
yellow loess, had a few
fossils.

Several new cuts east show the
usual repland under stuff.

Reddish drift shows in places

Beyond Murphysboro a big cut
shows 3-4 ft. of drift & reddish
loess above & rock below.

We had dinner at Murphysboro
we then drove to Alto Pass &
searched about for "Inch's Hollow"
but to no purpose drove into the Ozark
town Bald Hill & then back to Alto.

Drove to Jonesboro, but
found nothing & returned to Alton.

Drove N. on #51 to Carlondale
 & then E. on #13. We had
 supper at Harrisburg, & drove on to
 Shawneville. We put up at
 the big hotel, some a quiet
 place, but now even without
 running water!

We could see higher lands
 and ridges south, - evidently
 a part of the Ozark Mass.
 Towards Shawneville it came
 close to road (indeed crossed it)
 but nearer Shawneville
 all is flat.

July 14, 1935

Crossed river at 6: AM, at 34361
 Shawneville

Hotel	552.2	#66 turns R.	669.9
Ferry landing	552.4	Mr. Larson	687.8
Morganfield #60	565.4	Cut #62 west	689.3
Flourmoly, 1/2	568.6	Back to #69,	705.8 1/2
Waverly, 1/2	571.4	Turned S.	
Corydon	578.4	Turned W. at	707.2
Henderson	587.9	Return to #69	710.
to #60.	589.3	Turn N.	
Bridge S.	592.8	via Mackey Ferry Road	711.3
" N.	593.2 +	where we turned	712.
Evansville #62	598.9	from #62	
to #60	600.9	Crossed	712.7
to #61			
Smylee			
Chandler	612.3		
Bobroville	617.8		
De Goin	624.4		
Turned back	633.4		
#45	634.7		
De Goin	642.5		
Brownville	648.6		
Chandler	645.8		
#41 + #62	654.1 1/2		
#62 right	665.5		
Evansville	667.9		

We crossed the river on
the ferry. On town #56 a cut
at 556.2 (about 10 ft.) looks
like good loess (see sample)
with a somewhat redder
granular layer above of
about 3 ft. No fossils.

granular red
yellowish - loam?

same as

cuts all along look like
figure.

Drove to Evansville across
the bridge & then follow
#62 to Brownsville.

At the east edge of
Brownsville there is a dry
pit showing as follows:

2-3 ft. granular reddish (as before)
2-4 ft. lighter color
several feet shale.

This at 518.8.

also collected Allium in fl.
on dry bank.

Drove to De Gonia, but a small
roadcut shows only a gray
bank (hard + with iron
material), with a granular
reddish layer above. No shells.

At place where we turned
back on #62 there are
several cuts, & others along
#62 appear about the
same.

There is here an upper joint
clay, looking reddish, 2 or 3 ft.
Below it a grayish band of
very hard whitish stuff,
about 3 ft. or more.

Below this a broken rock
layer - exposure 2-4 ft.

Evidently no loess here.

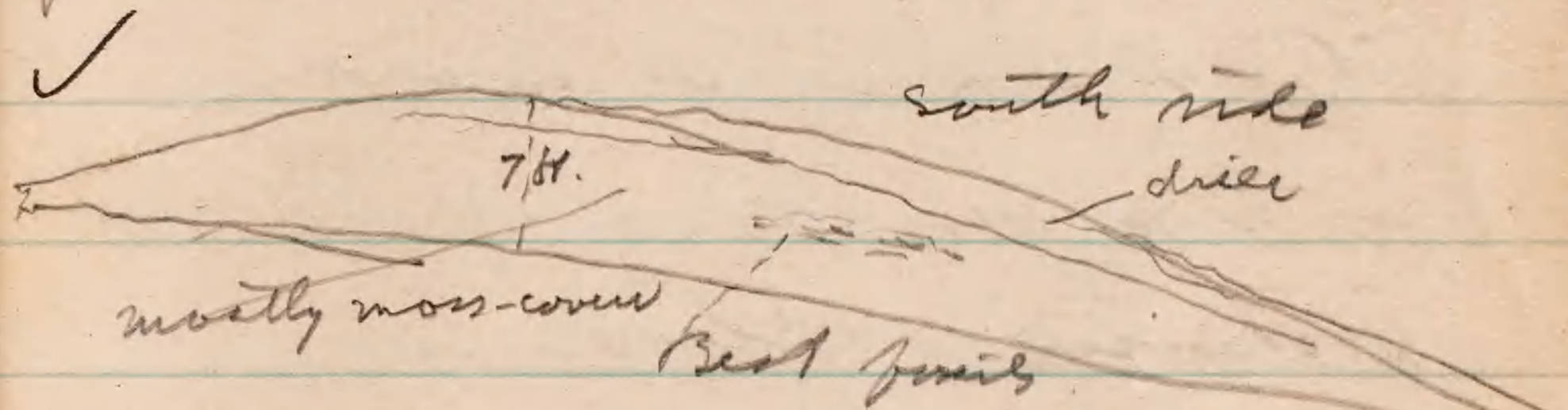
Some other cuts show more rock
on the return I stopped
at the Brownville pit &

found the middle, grayish
yellow layer (looking like loess)
a hard joint clay (see sample)

& the upper layer similar,
but more reddish & more
"lobular" (granular).

There no resemblance of loess.

We drove back through Evansville
on #62, to Mt. Vernon & followed
#62 northwest. At 691.7 there
is a good level cut on a rather
gentle slope to west, in nice woods.



The loess is yellow & fine, with the
shells scant & scattered all through,
but mostly about 3-5 ft. from top.
The upper 1-1 1/2 ft. is drier & has no
moss on it. Lower part (below
this) is nearly all covered with young
moss. See small set of shells
(with 2 or 3 modern) & a sample.

The north side is similar, perhaps
5 ft. high, not as clear, with shells 5 or
6 ft. down, few, & coarser stuff with
many lime nodules near base.

In the wood nearby I picked
up fungi on a fallen stick.

Took loc. v fossils of flowering
dogwood. At loc. and
same place.

This is really at edge of
low "bluffs". The surface
westward is flat

at 695.5 (westward) a gravel
road leads N. - My cut on
return #62 -

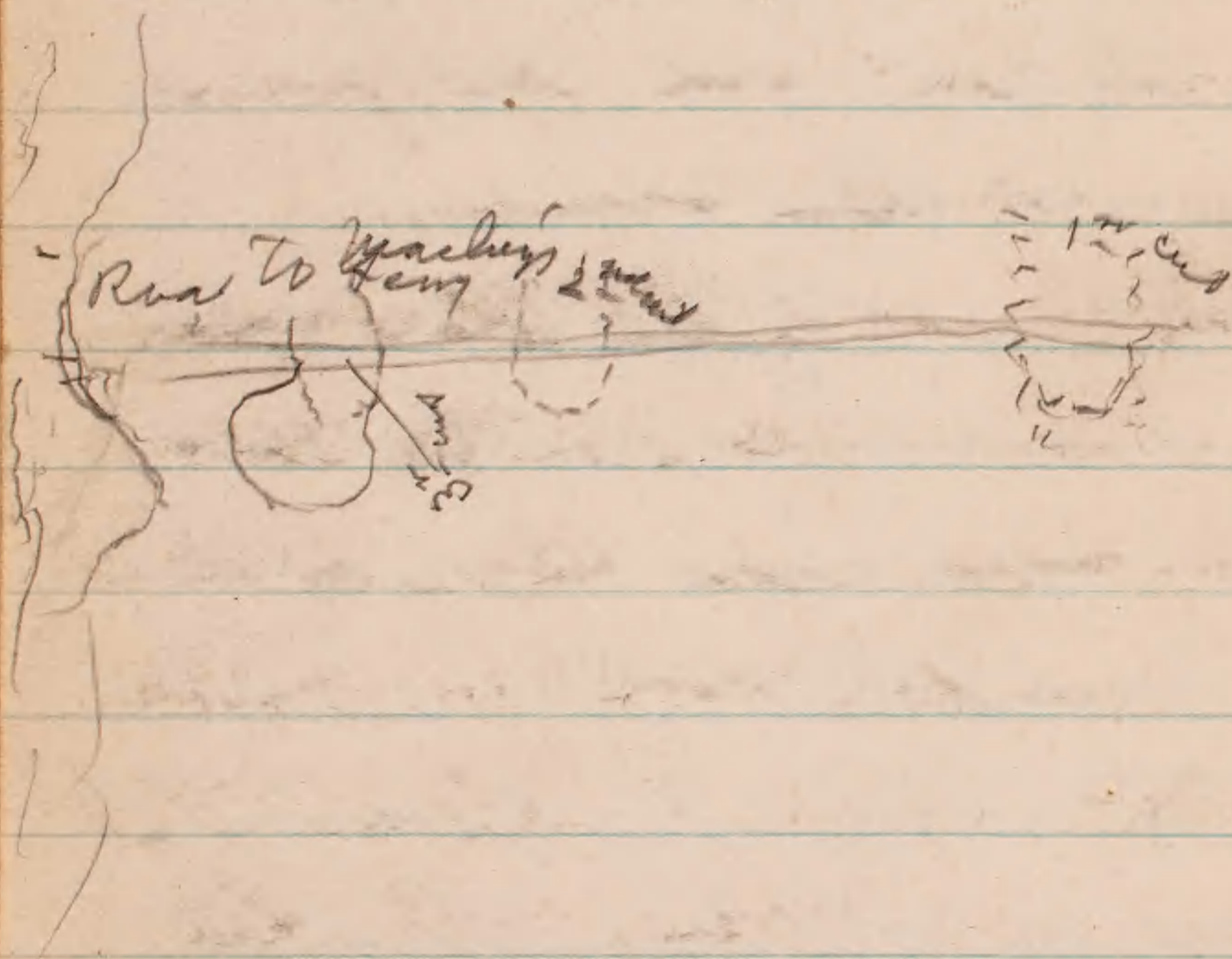
On return at 698.6 I examined
the first cut on #62 NW. of
Mt. Vernon. There is no loess,
but the same joint clay (quite
reddish here) that we saw
everywhere eastward. No sign
of shells, of course. Very hard,

The loess seem to be only

At 699.2 (at gas station) turned
S. At 699.4 struck 69
at 700.1 turned to Mackey
Berry road. At first cut, at 700.1
miles, there is a fine exposure of
the same kind of loess as in
preceding, with fossils. Took
sample & nice set of fossils. The
later I found scattered through about
the lowest 6 ft. of loess. I could
not reach above this.
The cut is overgrown, but more
exposed on north side. Roughly
estimated at 12 or more feet. No
nodules.

Another cut at 701.1. This is about
7 ft deep on N. side & 5 m south. It is

the end of a spur coming
from north, Hard redish stuff.
void



at 701.3. - Another lower on
a third spur, about 4 to 5 deep
& shows only the red joint clay
not loess.

at 702, 4 1/2 - cut in a flat ridge
edge, about 6-7 ft deep, shows
nothing but the red joint
clay, mostly overgrown.

On the W. side of this flat ridge
the cut runs about 12 ft. deep.

On the north side there is about
6 ft. of yellow loess (see sample),
no shells. Below it about 3 ft
of sand, with little alternately
loess bands in parts of it.

Below that about 4 ft. of a
gray loess (?), rather heavy, with
streaks of iron, & in places

signs of lamination. No fossils
 On the south side the cut
 is similar, with 5 or 6 ft of top
 yellow loam,

3 ft of interlaminate loam
 (gray) and sand. - The loam bands
 are irregular, some $\frac{1}{2}$ thick, some
 nearly two inches, & laterally
 fading out or blending.

Some of the sand layers are
 6 in. or more thick & irregular.

Took sample of loam
 gray stuff, 1 ft. from its
 top. No fossils,

This is last ridge westward, &
 on its W. side at last cut
 the sand (& also loam above)
 came from the great flats

west & southwest. This was
 in fact in part a dune.

East of it the ridges all
 end just below road (S. of it)
 but there are isolated knobs
 visible to the S. & S.W., but E.
 of the last ridge which is
 more or less continuous for a
 long distance, - must be a mile
 or more.

These three ridges (represented
 by cuts) are all fingers from
 the broader ridge ^{near} on the W. edge
 of which the fossiliferous cut on
 #62 is found.

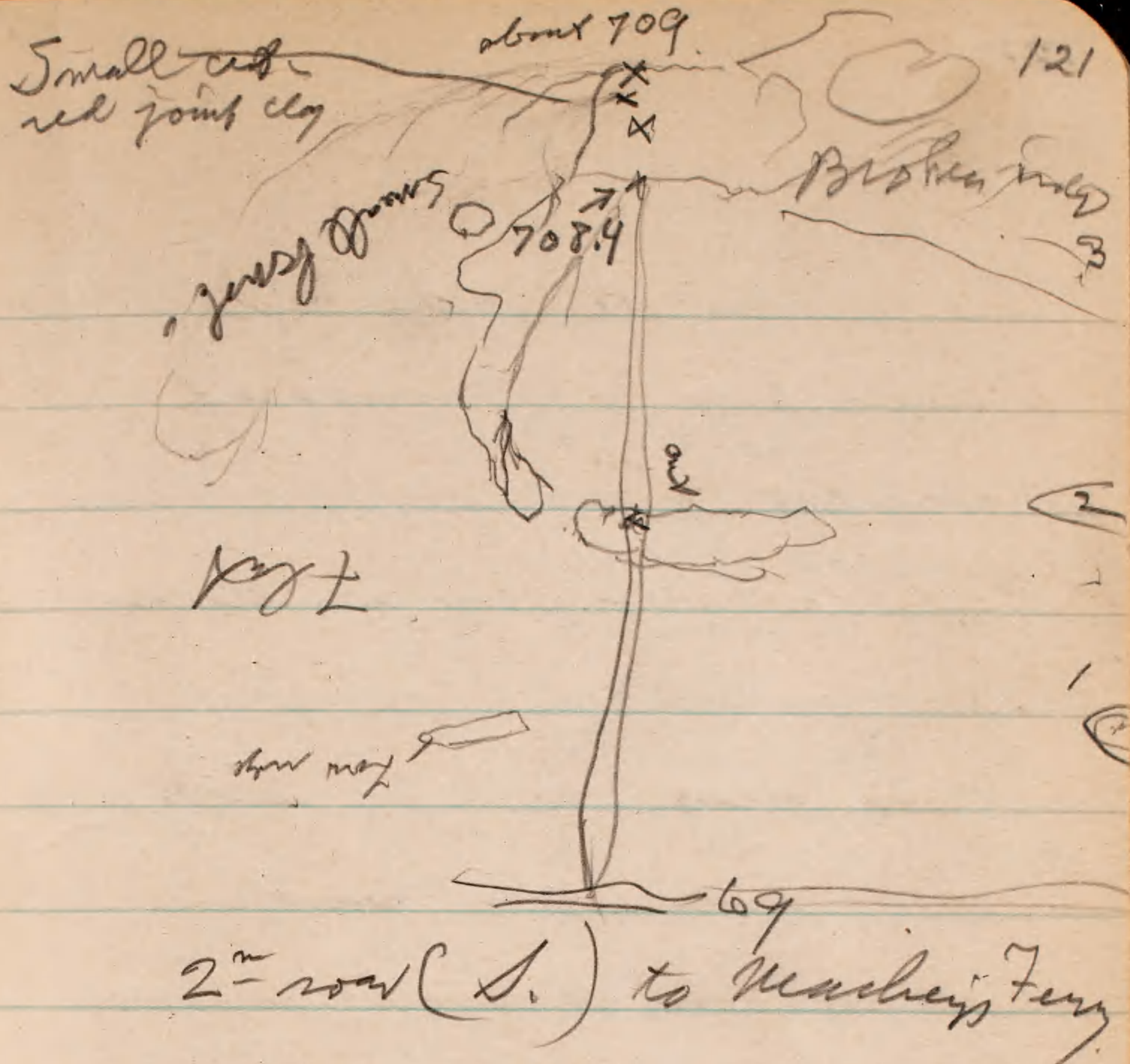
The low "bluffs" on W. side of
 last ridge have a dome like
 look also isolated knobs,

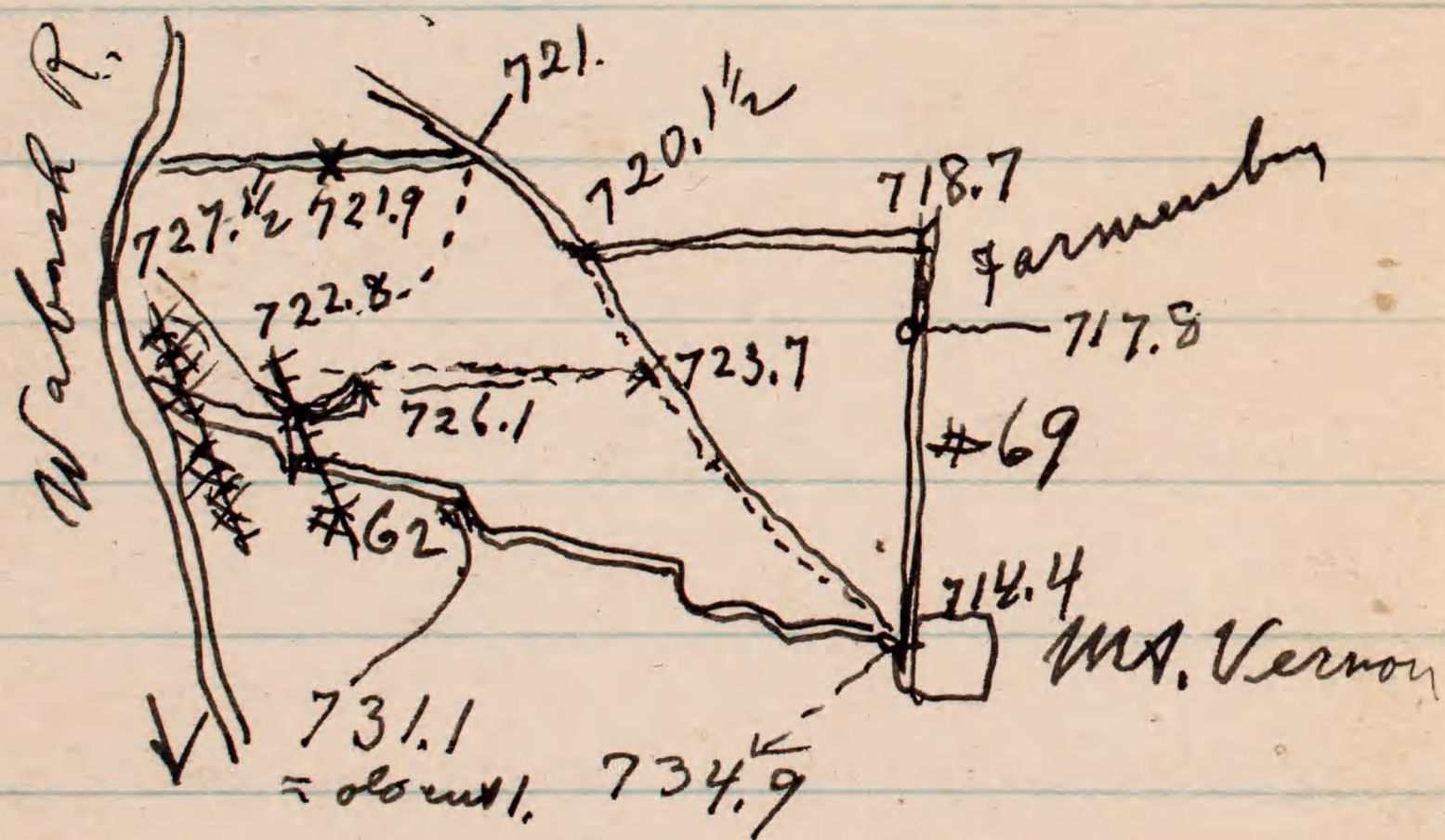
The few isolated knobs to the S. (E. of last low ridge) look like dunes.

The first cut is across a narrow ridge.

We drove back to #69 & went S. at 707.2 we turned west on another road washed to Mackinac Ferry.

First little ridge 707.5. Low cut, Gurgon. Just beyond it a broad knob or short ridge, - low road rocky here!





734.9
 727.7 1/2

 7.1 1/2

766.9
 1.7

 765.2

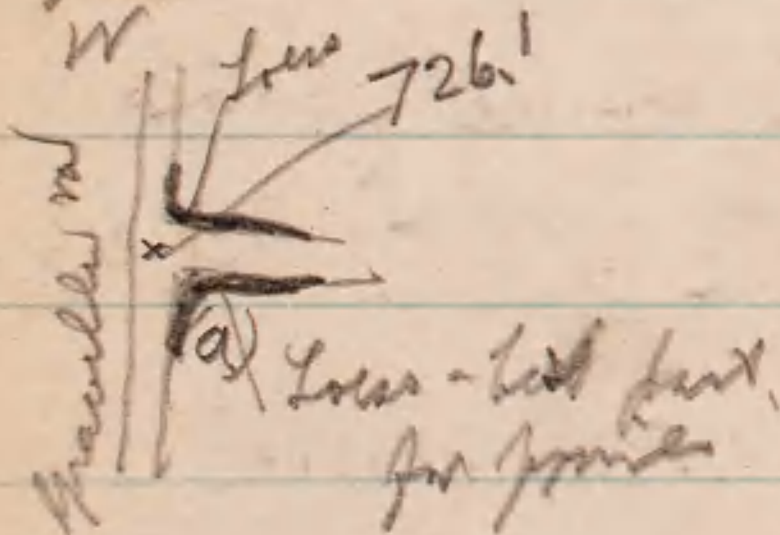
July 15, 1935 Mon. 5:13 am

Courthouse -	714.4	at 749.8 - a cut of road from #2
Farmersburg	717.8	Turned on road to old dam past the cemetery.
Road west -	718.7	Turned back at 752.3
n.w. road	720.1 1/2	Back to old dam on 753.0 1/2
Turn W.	721.0	to old dam, (gate) 754
Turn back	721.9	Drive to river, at 754.7
Back to n.w. road	722.8	" " " " 755.0
at coming on S.W. road, S.E.	723.7	Cut at 757.9 -
To road, W.	723.8	Cut at 758.1
Turn W.		
Crossing	725.4	
Cut across (N)	726.1	#69 again, 758.3 1/2
Turn S. & SW	726.5	#68
Turn W.	727.0	New Harbory 759
Stop at cut	727.1 1/2	#66 - 760.7
RR at foot	727.2 1/2	a 763.9 - cut across road
#62	727.7 1/2	turner to Stewart'sville 765.2
Over cut, edge of bluff #62	731.1	Stewart'sville 766.9
Court House, MA. Vernon	734.9	Back to #68 768.6
Turn N. on #69		a cut at 770.9
Farmersville	738.2	Poseyville 771.8
solitude		city limits
Road W. to ferry -		Town 772.4
Turn to old dam	746.0	at 774.51 - a cut (not low)
Turn back	747.0 1/2	Cynthiana #65 777.0
Back to #69	747.9	#68 turn E. 778.4
		at 781.1

We drove n. on 69 to first road
going west U. of Farmersburg.
Then west to N.W. road, then NW
along this road to first turn W.,
then west to cut, where we
turned back.

This cut shows no loess, but
the red joint clay only.
It looks a little rough west,
and wooded.

At 726.1, on road west, there are
good cuts.

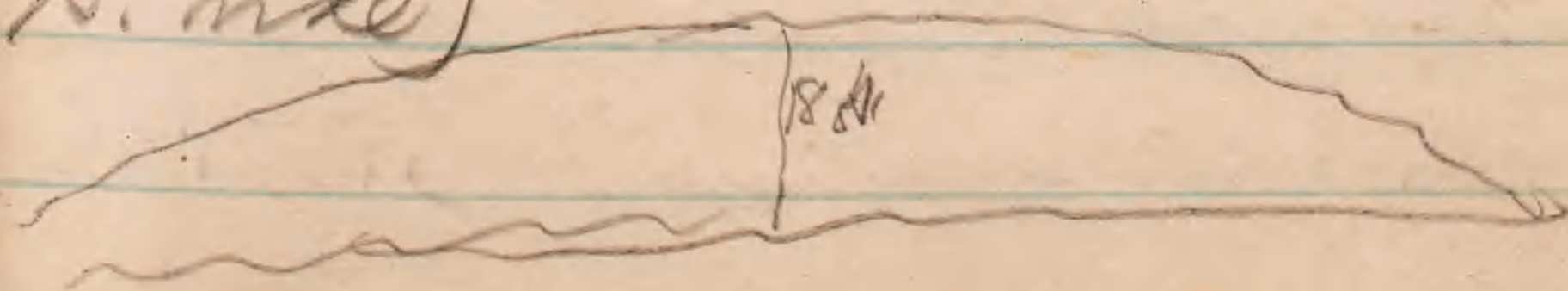


The same yellow loess with
shells scattered all through, but
nowhere abundant.

The cut at N.W. side (marked a)
✓ has about 5 ft. of fossiliferous loess
below, & above it about 3 or
more feet of reddish joint
stuff. See samples of both,
& shells from loess.

The upper layer is really not
a joint clay, but a harder, con-
✓ crete(?) with some stratification.
It is redder than the light
yellow (or slightly brownish loess.)

We drove west to last cut
at 727.1/2. This is a fine
loess exposure, about 18 ft deep
on N. side (less & overgrown on
S. side)

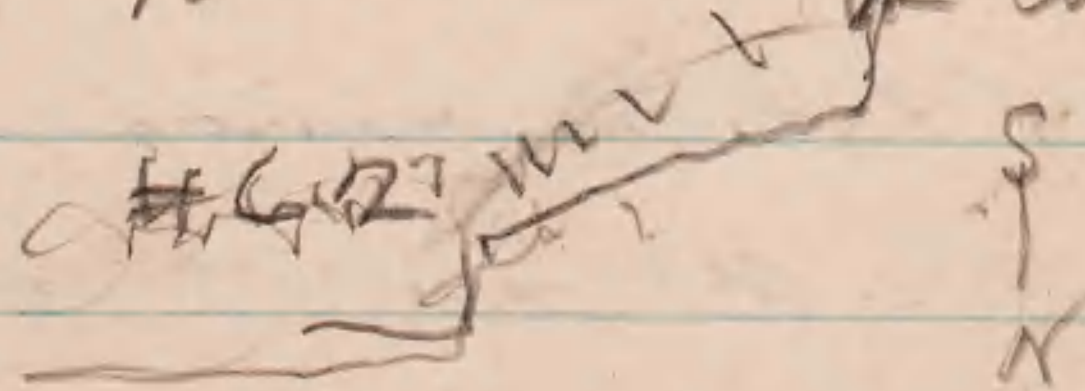


The shells are scattered
all through as far as I
could see. Took sample
& box of clay. See shells. ✓
The loess becomes gray
in lowest part, with
many iron nodules.

Drove on to #62

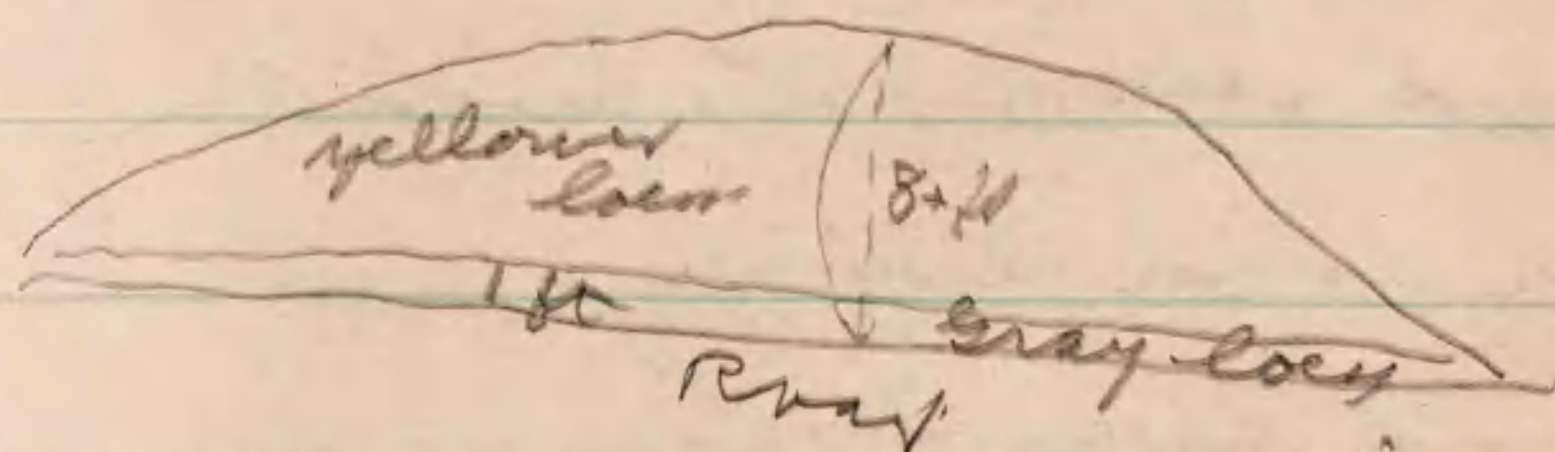
The RR. runs just along the
"bluffs" & #62 runs quite
a ways on the flat

A farmer says the Walack
has many bays bars at low cut
water.



We returned to Mex. Vermon, had
breakfast & drove N. on #69

At 749.8 a road comes in from
S.E. & along #69 on E. side there is
a nice cut across a short spur



It runs about 8 ft. in highest
place. The shells are scattered all
through quite to the top & into
gray layer (about 1 ft. exposed)
at base. Nodules scattered irreg-
ularly through upper layer
gray loess is smooth, uniform
gray, with only occasional clumps
of iron. The upper loess, which
looks yellow on older surface, is
nodules & streaked with iron.

more pronounced below.

The fossils are about equally scattered through both,
 as about 750.1 There is a long cut along E. side of road (none on west side). The loess here runs about 12 ft., & seems to be all gray. The lower 10-13 ft. of the cut is a hard joint clay with pebbles scattered through it, - especially downwards. A few shells were found in slumped chunks of gray loess, -

12 ft gray loess

13 ft Drift - reddish, with pebbles.

We drove to left on road past the cemetery, leading to old dam. We drove on past the road to old dam & then turned back & drove to gate leading to old dam, & drove on to 754.7 to the river bank. Looking down the river I can see large bars (most mostly covered).

Drove to river at 755, +
got a lot of mussels.

Drove back toward
New Harmony
on return at 759.9 on rd
✓ dam road a cut about
12 ft, on N. side road shows
the yellow loess. Found only
3 shells, - very scant
another small cut at 758 -
similar.

✓ at 758.1 (return) a larger cut
shows similar loess

This is fully 12 ft. high on SE. from
to the dam, ✓ shows mostly

✓ gray loess. Shells scattered

See net, - just at edge of town

This is opposite cemetery.

We drove to New Harmony for lunch

at 763.9 on # 68, there is a good
cut, with 8 ft. dry reddish loess?
lower 2-3 ft yellowish softer, more
moist. Saw only fragments (few)

of shells,

small cut $\frac{3}{4}$ ft. of Newark in
overgrown.

at 770.9 there is a fair cut,
but so badly overgrown it is
hidden. Looks like that of 763.9

at 774.5 $\frac{1}{2}$, there is an 8 ft
cut (7 ft. on S. side) which is hard
& reddish, - not true loess.

at 781.1 a reddish cut

782, 2 - Turn W. to Mounts?

Turner back at 783, 1

#68 again 784
Turn N.

Poseyville 793, 82
Road to Stewartville

#66 801.9

(Travel road 802.2)

New Harmony City limit 802.9
#66 804. RR. 807.8 1/2
Returns to Siffin gravel - 804.9 1/2

Drove to within 1/4 mile of Kilroy 809.9

Turner back, + at 810.9

turned back again towards
Kilroy to road which

runs to right (East)

Cut at 811.4 - Turner back
to Kilroy road + drove

to New Harmony

Kilroy road - 811.7

Siffin road (to right) 812.4

#68 - 816.4

RR - 816.6

#66 817.4

New Harm. Hotel 818.9

Drove N. towards Griffins

The road runs about 1/2 mile
from bluffs & parallel to them
(they are east)

at 808.0 The bluffs veer
more to N.E. + my road turns
E about 1/4 mi. - close to bluffs
bluffs bow a little farther out
1/4 mile

Turn E at 808.7 to bluffs.

Turn N. - 808.9.

at 809. There is a cut
with about 6 ft. of loess (yellow)
exposed, but no fossils
road runs right at base
of bluffs

at 809.1 1/2 road goes N.W. or
one follows bluffs.

at 809.7 a road runs E.

at 809.9 we are near
 what is left of Kilroy.
 (1/4 mile away). We turn
 back - ~~at~~ 810.9 turned
 back again to road going
 E. at 811.1 1/2

Went up this road E. to
 cut where it climbs
 hill. The cut is about
 12 ft. deep & shows the
 yellow heavier iron
 becoming gray below.
 There are scattered nodules
 & the shells are scattered.
 This gray below was not
 banded. See shells
 This cut is at 811.4

Drove up hill to 811.4 1/2
 & turned back

903.9
 2.75
 906.65

July 16, 1935 Tues.

started from the Tavern at 819.7

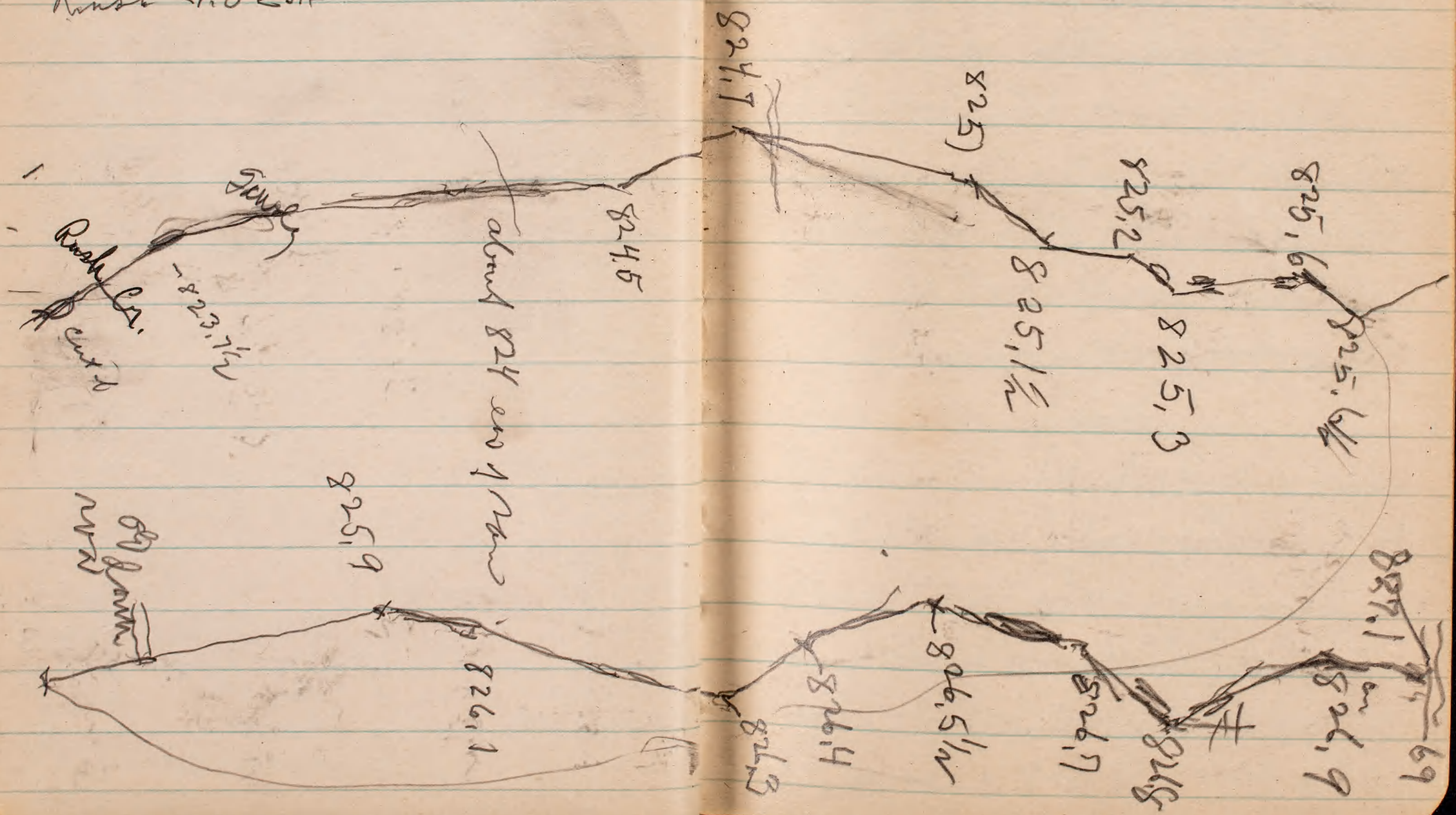
on #65. Turn at 819, 1/2

Went S. - ^{Lower} on Mt. Vernon Rd

Junction	819.8	Return to #1 near Carmi
m =	820.0 ¹ / ₂	very low bluffs near 867.6
l =	820.3	Turn N. 868.1
cut	821.6	Spurth 870.3 872.1
Back to #69	827.1	Turn W. 874.3
Hotel	827.8+	#1, turn N. 880.7
" left -	828.-	Crossville ^{detour} 881.7
Bridge ^{832.4}	828.3 ¹ / ₂	Calvin -
for return ^{832.5}	828.5	Grayville - 888.8
Crossville Jct. #1	835.5	Turn to Keensby 889.0 ¹ / ₂
Carmi	841.9	Turn back 893.1
Turn E. to Spurth		Keensby fork (-1.6)
Turn back at	847.1	at 897.3 a cut
Back to #1	852.2	Cowling ^{at N. 1/2} 898.0
Carmi	853.2 ¹ / ₂	Keensby 903.9
Turn to Spurth	854.2	Low cut at 906.3
turn S.	856.4	Mr. Carmel ^{bridge} 912.6
Spurth	858.2	E. end ^{bridge} 913.2
Turn E.	860.4	Turn on side ^{cut} 918.3
at low cut	860.9	Back to #64 918.6
reached back	864.6	#65 920.4
Maning	864.5 ¹ / ₂	Long cut - 922.8
		Pharmacia #41 924.3

See p. 143

Start at Rush cr. cut (e²) at 823.5.
 This cut is now at least 12 ft. deep on
 both sides. Shells are scattered
 through both sides, - rather more
 abundant within 3 or 4 ft. of base
 Took sample from each side & shell
 Rush cr 823.6



823.5
 819.1 1/2

 4.4

Mr. & Mrs. W.H. Knight run
 the "Favern" now. She was a
 nurse, - spent some time (3 yrs?) in
 the hospital at Iowa City

We drove back to the hotel
had breakfast, & drove on
into Illinois.

We drove to Carmi, then E,
on road to Epworth, but we
went straight, then returned
& again drove, this time to
Epworth.

At 860.9 there is a low cut
(3-5 ft) showing only the
heavy red (tabular or jointed) clay.

On Keensburg road, at 897.3,
a fair cut, but all hard
reddish stuff.

At 906.3, beyond Keensburg, a low
cut (4 ft) on W. side of road

shows same hard stuff (?)
two smaller similar cuts a little
beyond.

At 910. - just before Mt. Carmel
a deep pit (^{shown} purpose?) shows
very hard granular (jointed)
stuff.

A low cut, about 4 ft, near where
(^{cross}) road crosses RR. - Shows red stuff
below, & possibly a couple of
feet of gray-yellow loess (?)
above. No fossils.

No bars in Wabash here except
an orange island below.

At 919-4 - there is a low cut
where road runs up first low
bluff. It is very sandy, - no
loess visible, - may be a little on top

at 919.8 we drop again
great plain. This is evidently
an isolated ridge.

at 922.8 we went up another
long low hill or bluffs. Cut
badly overgrown. Saw only
the hard red stuff.

at 923 - another cut -
overgrown.

Several cuts N. of Princeton
show red.

Turn on gravelled road NW. from
Patoka. At 929.3 an exposure
on E. side of road shows
sand, only, where exposed. Overgrown
sand on road further along.

Lots of melons planted
evidently a lot of low dunes
here.

see p-137

Princeton #41	924.3	954.5 - Rev cut Back to #56 941.4 #65 — 951.4 Back to 56+65 - 952.4 Down to Bluffs (low) 955.3 Bluffs (high) 957.8 Peterborough #61, 959.5 at 960.8 1/2 by cut White River bridge 960.9 Monroe City - 969.7 Vincennes - 10.5 mi. back to room
Patoka -	928.7	
Back from Turn N.W.	930.5	
Patoka #41	932.2	
at 933.2 1/2 - a cut		
Hopkinton -		
Turn S.W.	938.1	
Back to #41 -	938.3 1/2	
Hopkinton #56	939.0	
Lawrence	939.9	

a cut at 933.2 1/2 (about 6 ft)
partly overgrown, shows nothing
but red stuff

at 934.1 - a very low cut (about
2 or 3 ft) now overgrown, - in
places shows nothing but
granular red stuff.

Another at 934.5 shows red stuff
This is 5-6 ft. deep
at 935.5 - a deeper cut - red stuff.

at 938.0 $\frac{1}{2}$ we turned of
 about 150 ft. to right on
 side road. A good cut 10W
 12 ft. down over stuff above
 lower has pebbly drift.
 The uppermost red is softer,
 but still quite gritty.

Found Pleurodon on bank
 here. Came from White River
 gravel used on road.

On the first gravel road turning
 to left after #56 crosses the
 RR. at Hazelton, a fine
 graded terrace shows about
 9 ft. of gray loess (with very
 little iron discoloration)

with shells scattered all
 through. See small set.
 Took sample.

The loess exposure faces
 White River

Drove along the gravel road
 to 940.6 and turned back
 White River has bars

Small cuts along #56 all
 show red stuff

at 945.5 - a bank about
 5-6 ft high shows red stuff

Took sample.

at 946.7 a long run cut - 5-7 ft
 other smaller cuts - all reddish.
 Several good ones.

At 960.8 a big cut just
 S. of bridge across White River,
 Ind. on #61.

The cut is over 25 ft deep - but
 on E. side.

at top about 5-6 ft. of reddish
 loess. Then heavier loess, some

parts gray, about 5 to 6 ft.
Then red drift about 18
or 20 ft.

We picked out a lot of
the purple shells from
fallen lumps.

The loess when dry is
very hard & the shells
very fragile. It is mostly
properly a gray loess, but
nowhere it is yellow.

An island & a few small
bars visible in White River

The cut on N. side (W. side
- the E. very low) shows
drift, etc. There may be a
little loess on top, - not
distinct, overgrown

Windo may all be new. 147

3-5 ft Loess ??
5 or 6 ft Red loess
6 or 7 ft Red drift
4 ft gray drift

Just N. of bridge across
White River, on #61.
at 962.0.

No loess on lower part on
E. side, & probably none
on W. side. Only finer
granular red material
above.

The red stuff makes in little
vertical gullies, - loess never
several cuts on way to Vincennes,
but too dark to see!

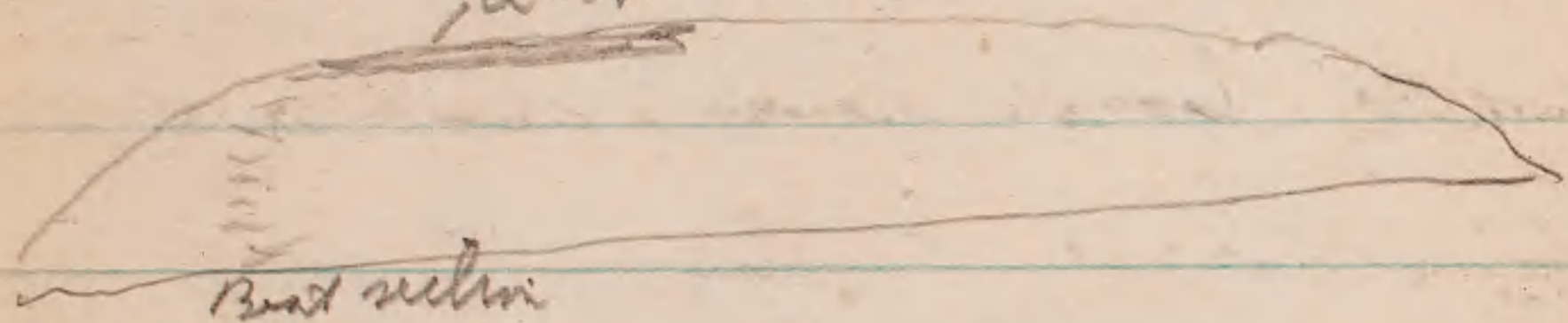
We stopped at a tourist's place
on 6th st.

July 17, Wed, 1935

Started at 6:15 am 34791

State Union	982.6	Embarras River	1033.6 1/2
Back on #1 -		Pinkstaff road	1037.5
985.5 - a room		Birds - "	1040.2
986.5 - Inn N. -		Flat rock "	1044.5 1/2
Jewett	986.3	Burnsville "	1048.3 1/2
Bridge, watch,	987.0	by road #163	1052.0
watch	987.2 1/2	Robinson	1054.5
Embarras Riv	994.9	Trumble -	1059.3 -
Lawrenceville	995.9	Grayville Riv	1
#1	996.2	York road	1066.9 1/2
Cor. Inn C -	1007.0	York	1067.4
St. Francisville	1009.8	" RR	1067.5
Inn N	1012.55	#1 (return) -	1068.0
Inn N.	1011.6	West Union	1071.3
Return to main rd	1014.1 1/2	Walney Prairie	1072.9
Inn N.		Ernst -	1078.2
Franklin	1018.4 1/2	Marshall #40	1083.7 1/2
St. Francisville	1019.4	Back 10 8 1/2	
Left " "	1019.7	return #40	1093 -
#1 -	1022.4	Martinsville	1102.7 +
cut	1027.4	Casy -	1102.0
Lawrenceville #58	1032.1	Veray Park	1112.4
" Courthouse	1032.6	Greenup #130	1118.3
#1 - Inn N.	1032.8	Jewett RR #	1118.9
		Woodbury	1123.7 + ob
		Montrose -	1126.4 (Lake
		Zentopolis -	1131.8
		Effingham	1137.3
			1141.1

Drove to 1st cut E. on H. 61, at
983.8. A very interesting
cut. It runs up a moderate
grade, eastward. Much of cut
is overgrown, especially on S. side,
a long cut
at top soil?



9 ft. of sand.

2 ft. sandy loess - Succinea

2 ft. sand.

2 ft. - fine loess

2 1/2 ft. - red drift

8 ft. red, pebbly drift

The lower loess is soft, yellow,
seems to have no nodules, &
shells (one box) are scattered

all through & extend down to
the sharply defined red stuff.

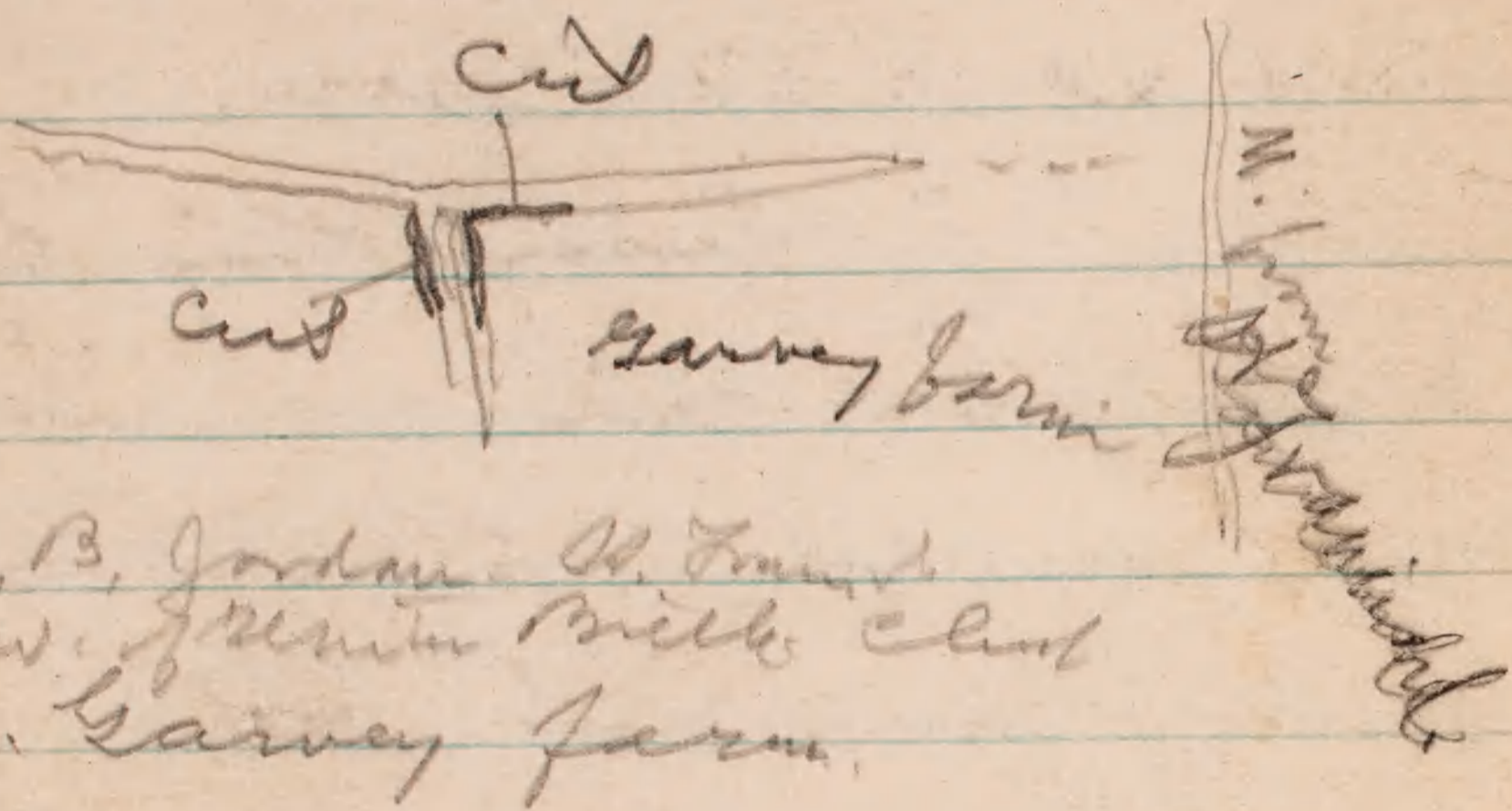
The upper loess is sandier &
contains only Succinea.

Evidently two dry periods brought
sand, a poor period (at this
locality) brought many shells, & the
upper loess represented a more
moderate period.

The layers do not run
uniformly along the cut, but
their exact relation could not
be determined on account of
overgrowth.

Returned from 984.0 to Vincennes
& had breakfast

cut at road $2\frac{3}{4}$ mi. W. of
St. Francisville



On return at 1018.4 there
is sandy going up hill to right.
It shows a long cut, 7 or 8 ft
deep. Could see yellow loess
above & then sand -
mostly overgrown

Mr. A. B. Jordan gave me
location as Sec. 6-4-16

These cuts are on face of low
bluffs bordering the Wash.

1205
982.6
223

The reported cut NW of St. Francisville
corresponds to my cut E. of Vincennes
cut at 1027.4 (going N.) on #1
show only heavy lobula stuff.
all other cuts along this
road (on upland) appear the same.
Drove on road E. to York.

at RR. crossing there is a cut on
N. side, but it shows nothing
but drift stuff. at 1067.5.

Drove to Marshall and Turner

SW. on #40, see p. 149	Millersville	1194.5
Effingham -	Dwanro	1197.5
Turner #129	Velma	1200.7
#129 & #40 separate	Jaylorsville	1205.3
Stewardson	Sharpshury	1211.6
Strasburg -	Edinburg	1215.2
#16 reconstruction	Breckinridge	1218.6
Shelbyville	Berary	1221.2
Lower Hill -	Rochester	1225.5
Pana #2	Springfield #46	1232.3
	see p. 155	1232.9

we drove S. - P.W. of Marshall
 & returned to #40, following it
 S.W. my cut at 1094. - Red, no loess
 We crossed Mill Cr. at 1094.2
 at 1094.5 ^{big red int.}
 we crossed Big Creek at 1095.5
 my cut at 1095.4 - all red, my cut
 all the big cuts ^{on new part of road} here show
 red loess & upper hard,

colored stuff
 Creek (with ^{West Mill Cr.}) 1096.3
 all new cuts at West Mill Cr.
 show red drift,
 great pipeline tanks (large
 number) at 1104.

Beyond Effingham a
 large cut, but all reddish
 drift. at 1144.2 the

Little Wabash.
 all the cuts on #129 n. of Effingham
 show the hard colored stuff -
 in granite (on surface)

1263.9
 982.6
 271.3

Fleet (my red prairie) over most
 of region from Marshall to Effingham
 (except for creek valleys) & from
 Effingham to 1171

Drove through Springfield to
 Mason City & put up at
 the Missouri Hotel.

(Business hour 1233.2
 Springfield 1232.9
 Cantrell R.R. 1243.3
 Athens 1246.1 1/2
 1247.4
 Greenview 1256.3
 Mason City 1265.9 66.3

E. side big cut see p. 161
at 1305.6

Rusty crumbly layer 5-6 ft
gray loess - fossiliferous many nodules
chocolate layer

Pebbly drift,

gray loess has many nodules & many rusty
clonings
The drift is reddish in upper 6 ft
ft & dark below.

This is back a short distance up a trap range
front edge of bluffs at 1306.2

Back to 24 1295.9 44, 2
1296,

July 18, Thurs. 1935

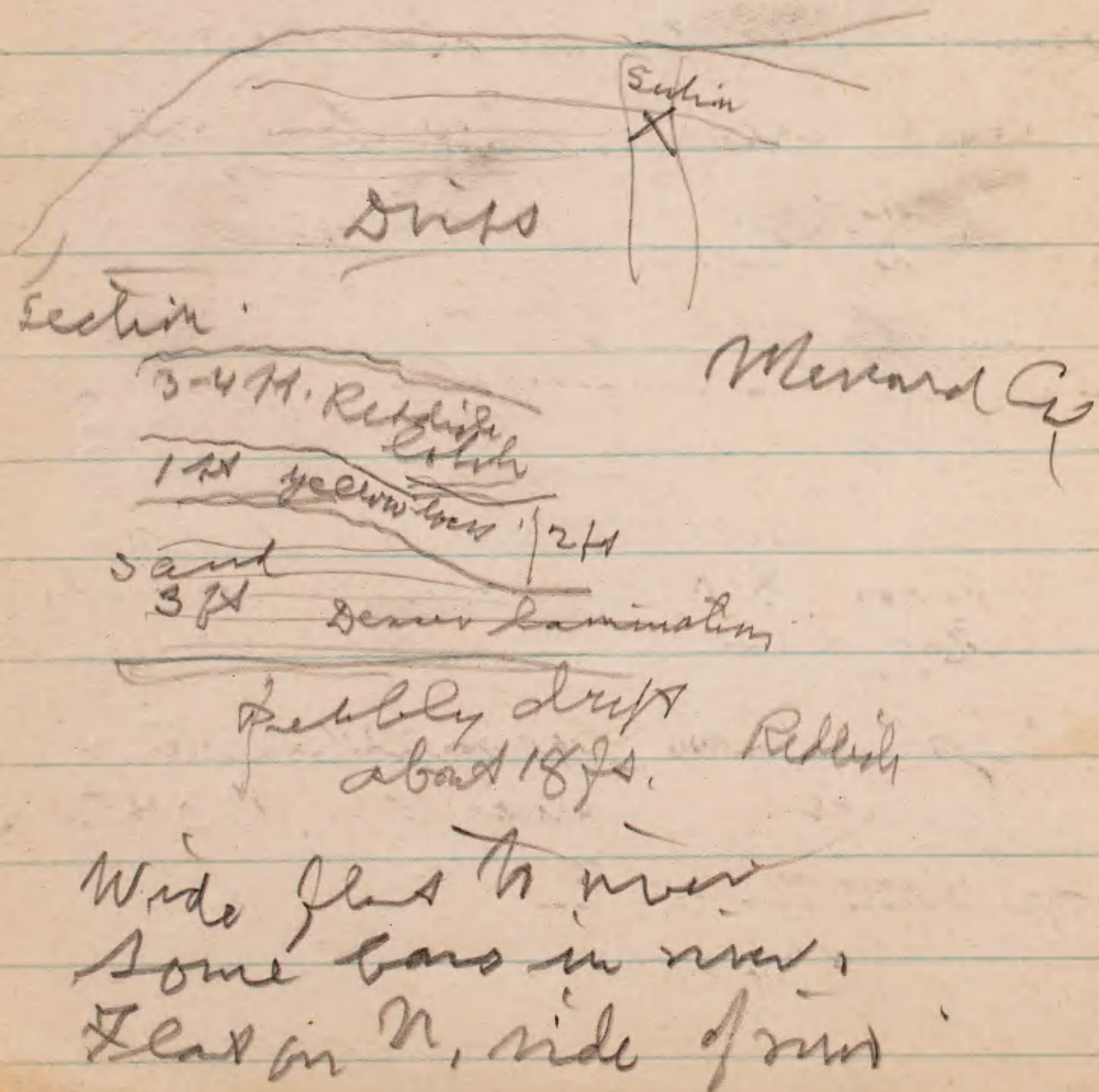
Left Mason City at 5.47 am.
35075

Mason Cy.	1266.4	Back to Nyant ^{no 5.}	1368.1
Allen -	1276.0	Jones -	
Green Valley -	1283.5 1/2	Return to #6	1370.1
cut - 1285.0 - bluff		go north	
Mackinaw River -	1286.1	Turn east	1374.1
Peekin. R.R. sta.	1295.7	stopped at	
12 City	1296.	cut at	1375.2
at 98.6 Turn S		Return to #6	
cut at	1299.6	at Nyant	1382.1
Return to #24 #9	1381.9	Turn W. at #10	
big cut -	1305.6	Sheffield - #8	1387.0
E. end of Peekin -	1308.6	Sheffield -	1390.1
W. end -	1309.1	Smith Coal Cr. Club	
124 #88 Peekin	1310.8	C.C.C.C.	1392.3
Peekin Heights	1315.1	Sheffield	1394.5
Mossville		Mineral -	1400.2
Edelstein	1328.1	annawan -	1403.8
Laron Ridge	1330.3	Atkinson -	1409.6
Camp Grove	1337.5	Geneseo -	1417.8 1/2
Bradford	1345.8	Colona -	1430.5
Lombardville		Carbon Cliff -	1432.6
Buda #88 #1	1357.4	Alvin -	1434.7
#L	1360.0	E. Moline	
Nyant -	1365.3	Moline	1440.
cut. 1. 701.	1366.5	Rock Island	
		Davenport - City	1444.2
		John	1447.1

Davenport - home. 1504.7 1/2

all very flat from Merouitz
to

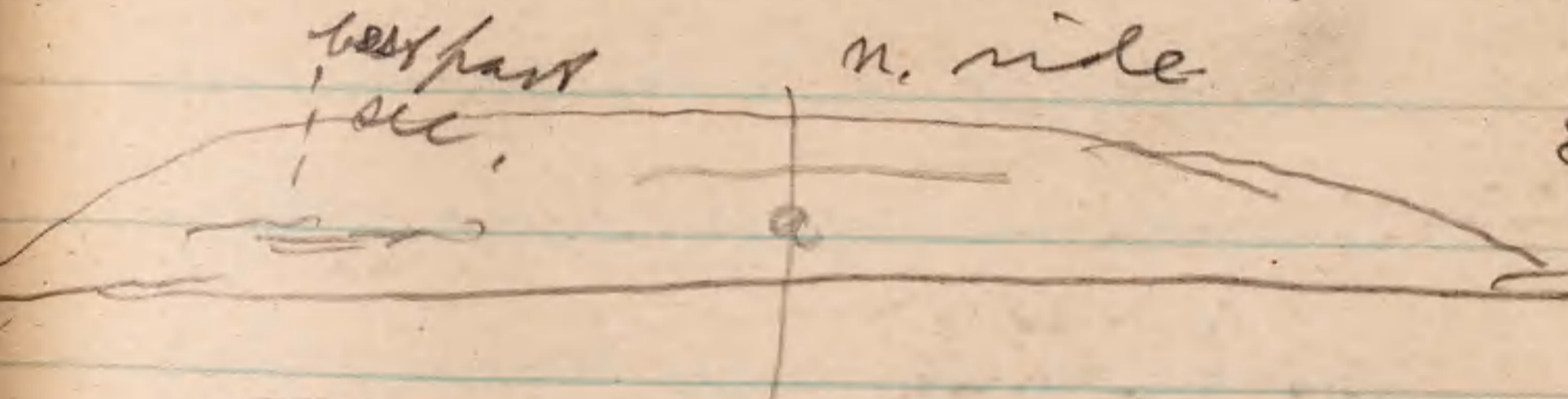
We stopped at 1285, just N.
of RR. on #24, beyond Green
Valley, Ill. This is a gravel
pit on left side road.



low^{er} the ^{low} bluffs on N. side slope up very
gently to a gently rolling plain.

We drove to Pekin, after
breakfast, we drove E. on #9 to
the low bluffs.

The first cut is right at
edge of bluff, at 1299.6. It is
about 500⁺ ft. long, & shows partly on
N. side, the S. side being overgrown.



about 8 ft. of sand, with a little
clay in it.

yellow loess, with fossils (one sample
& shells) at least 5 ft. exposure

Road

The sandy part above is somewhat clayey in parts. The loess shades up into sand, being sandier upwards. The shells were mostly 1-2 ft. below the sand. It was hard to determine because of overgrowing.

There were a few very small lime nodules in the yellow loess. See shells and sample,

Farther E., at a, no loess appear, but lower 4 ft. are gravelly, & upper 4 are sandy.

Evidently the strata do not run regularly.

We drove to 1300, where a big creek-cut shows much

grayed drift & a cattle band above may be loess, - or may reddish stuff - Probable 2-4 ft., no true loess

At 1299.8 or 9, a big cut on S. side of stream drift, pebbly.

Returned to #24 & drove north at 1305.6 There is a long & deep cut, looking N.

The uppermost 5-6 ft. is a strongly red layer - probably upper part of gray loess.

Gray loess just below is about 5-6 ft. deep, & below that is a chocolate layer & below that a pebbly drift.

See diagram on next page, 156.

Herbarious garden
Wild-life preserve
White President -
Lake Long,

East E. Vincennes, Ind

- Angiosperm alternata
- Dicran
- Helicodiscus parallelus
- Polygonum profundum
- " multilobum
- " hirsutum
- " fraterum

- Pupilla muscivora
- Limnaea ovalis
- " ovata
- Helicium punctum

Ames

Prof. Carl J. Drake
Traskie -
Rikman

Dr. Kiedde -

a definite authority in charge

University?

Conservation Board?

Lakeview Park?

Biological Survey?

Mr. Norton - Regional
Director

Spearfish - June 6 - Breakfast	.55
Gas 2.07 oil .21	2.28
Dinner (lunch)	1.80
Dinner (lunch)	1.50
June 7 - Breakfast + sandwiches	1.90
Supper 60 cards 30 Soda 10	1.00
June 8 - Breakfast Hotel 3 day 5.25	5.85
Crystal cave 2.00, cards 25	2.25
Predmond - lunch	.50
Rapid City gas	2.05
Bowl - bubbler 15, entrance 25	.40
Rushmore - bubbler, view 10	.35
June 8 - State Game Lodge, supper	.90
June 9 - " " " Breakfast	.60
Room 2.00	2.60
Custer, photos 45 paper 10 mtn 10	.65
Hot Springs gas 1.63 oil 21	1.84
Supper	1.00
Gas + oil - all around	11.49
Supper, Sidney	.38
June 10 - Sidney, breakfast, hotel	2.00
Julienburg soda etc.	.21
Lunch - Ogallala, Neb	.70
Gas - 1.66 oil 75 "	2.41
Mo. Plate - Gas	1.22
Lafayette - paper + mtn supper 70	.90
June 11 - Hotel (Charles) room 75, breakfast 50	2.25
Oxford - sodas 10 lunch 70	1.80
Oxford gas 1.60 coca 10	1.70
Hastings - supper	.60
June 12 - Sutton Hotel 1.50 breakfast 50	2.00
" Gas 1.95 oil 25	2.23
Joel - Omaha 70, Atlantic lunch .61	.81
Anita, 10 rd. gas, oil 21	1.91

National Research Council.

To - B Shinnick

address of Chairman: 527 Brown St., Iowa City, Ia.

Limiting dates - May 30 to June 5.

RR. Fall. Iowa City, Ia Dickinson, N. Dak. Round trip (limit) \$ 33.40

Rollins - West City to Dickinson 4.75
- Dickinson to West City 4.75

Hotel & meals. 26.80

Cab & car fares .60

Incidentals \$ 80

1.61 Drexler breakfast June 3

1.46 Keller dinner June 3

1.02 supper - Drexler - June 3

Breakfast - June 4 - 51.

car - greasing 1.25, garage 1.50

misc

June 5 - Hotel St Charles. Room 14.00

Breakfast \$.46

Prismen - gas 1.98 oil dinner 56 apples 24 2.78

Dinner at Buddy Raoul, Medora

June 1 .50

Medora June 4 .82

Car & room " 162 " " 4 .82

Medora - gas oil " " 1.84

Supper - Merrill .71

Dr. Victor E. Shelford (Chicago) - Champaign, Ill
b. 1877, N.Y. Prof. of Zool. - Insects, An. Ecol.

Dr. John E. Weaver (Minn.) Sta. A. Lincoln, Neb.
b. Villisca, Ia, 1884. Prof. of Plant Ecol

Dr. B. Shimek (Prague) 529 Brown St, Iowa City, Ia
b. Iowa, 1861.

Dr. Walter P. Taylor, (Cal.) 1746 E. 5th St.
Tucson, Ariz.
b. Wis., 1888. Prof. Econ. Zool.

Dr. Benjamin C. Sharp, (Tex.) 206 Bellevue Place
Austin, Tex.
b. Tex., 1885. Assoc. Prof. Bot. - Tax. + Ecol.

King, Kenneth M. (M. S. Sask.) Dominion Entom.
Saskatoon, Sask, Can.
b. Mont. 1896. Anim. ecol. of crop rotation.

Dr. Asa O. Weese (Ill.) Univ. of Ok., Norman, Okla
b. Hutchinson, Minn., 1885. Prof. Zool. - An. Ecol.

Dr. Herbert C. Hanson (Neb.) N. Dak. Ag. Coll., Fargo, N.D.
b. Faribault, Minn., 1890. Prof. of Bot. Ecol.

add A. S. Jacques, Mt. Plim

Dr. Stevens

41.75
5.00
4.50

In report to Dr. Lewis by M. Sulf

Lower

1 - Nearby land

only railway water remain

40 acres should be purchased

to reconstruct prairie

Fencing + shelter

640
5
3200

2 - Distant land

About 5 square miles of poor land
should be purchased for the
Labor Lab.

This would cost about
Fencing on "Emergency" funds

40,000
4,000

J. A. Munro, Entomologist
State College Plin, Fargo, N. Dak

Oreohelix cooperi (W. G. B.) - Spearfish
creek, 1 to 3 mi. above Spearfish, S.D.

3700 - 4300 ft. in forest (limestone)
N. B. Baker, 9/13 1931 *specimen* = 3647

No. 2 Miss. Lime & Material Co.
St. Louis, Mo.

The Union
Indianapolis
Ind. will change

Dr. Parker - at Dickinson, Shotwell, Minnesota

J. G. Minner - Embury J. E. Melhus

Dr. Sharpe - wants paper on prairies.

