

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 the  
note book if lost.

1.75  
1.59  
1.79  
1.50 + 50  
1.55  
1.25 + 25  
1.53 + 50  
1.35 + 35  
1.70

.51 + 51  
.52 + 52  
.51 + 51

Shimek -

Fare 20.75 - 23.40

Prisoner 12.00 - 7.50

Room 8.00

Board 16.50 7 days 115.50

Incidentals 1.00

72.86

11 23

60 cr. Trip to  
New York

60



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

Louger 26.30

Sleeper \$ 2.50 from St. Paul.

2.50 " Cedar R. to St. Paul

Furniture 1.25.

Dickinson, N. D. - 10 days 33.40 - Coach \$30.00

Louger 41.75

Sleeper - \$ 4.25

Furniture 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 21 1.79

Stevens Lake Cafe - dinner (2) 1.00

St. Cloud - standard oil - 10 gal. gas 1.80

Samp Center - supper - Main Str. Cafe .45

Alexander Hotel - Room 212 2.70

Evansville, Minn. oil .21

Fargo - standard oil 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 5.35 535

{ To Dickinson 41.15 37.45 26.75

Garage Fargo 53.50 50

Gas & oil 22 Jamestown, N. D. 1.55

Supper Bismarck - (2) .41

Mandan 9 gal. oil 1.79 1.99

May 29, 1935 - Trip to N. Dak. 3

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

2- 72+ 5-

3- 99.6

5 Austin, Minn. --- 196.8

Home --- 0

Curtis Bridge - 12.4

Shueyville - 15.7

#30 - Cedar Rapids - 25.1 1/2

#218 + #30 - 43.4

Winston - 57.3

Freer road #8 - 66.7

La Porte City - 75.9 1/2

Washburn - 83.8

Waterloo - Note - 90.4

Cedar Falls #20 - 97.4 1/2

Janesville (Inage) - 105.0

Haverly #10 - 111.0

Plainfield, R.H. St. - 121.5

" town - 121.9

Wachua - 129.3

Charles City #18 - 139.9

Low #18 - 145.0

Flloyd - 145.7

Flloyd Station - 146.5

Mitchell Co. line - 151.5

Orchard Road - 152.4

#9 + #218 - 156.3 1/2

Osage - 160.2

W. Anson corner - 166.5

7 P.M. Stacyville (Georgia) 172.0

5/30, 1935 9.43 am Stacyville (Georgia) 172.0

7.0 #218 - 7 mi. west of Stacyville 179.2

5.5 Mona - - - - 183.4

State line - - - - 184.2 1/2

Lyle, Minn. - - - - 184.4 1/2

X Wapco - - - -

4 Ramsey - - - -

11 Blooming Prairie - 211.2

17 Bixby - 217.3

Pratt #65 - 229.

5 Clinton Falls - 233.5

Medford - - 235.5 1/2

9 Faribault - - 244.4

6 Dundas - 256.2

7 Bridge Water - 259.5 1/2

Northfield - - - - 259.5 1/2

6 Waterloo - - - -

6 Castle Rock - - - -

6 Farmington #65 - 272.9

6 Lakeville - - - - 277.7 1/2

Orchard Lake - 272.

16 Rosemount - 280

Richfield - 295.9

Bloomington - - - -

16 X Minneapolis - 296.1

#10 + #169 - - - -

Robinsdale - - - -

Osseo - - - - 319.2

5 Anoka #10 - - 319.8 1/2

7 Dayton Road - 326.3 1/2

6 Elk River - 331.3

9 Big Lake - 340.7

4 Salida - - 344.5 1/2

3 Becker - - 348.5

7 Camp Lake - 353.8

Clear Lake - 355.5

6 Cable (W.D.) - 361.3

5 E. St. Cloud - 366.6

6 St. Cloud - 367.1

Waite Park - - - -



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

The trip went off nicely and we reached George's in Stacy 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's at Stacyville, Ia.

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
Waite Park	370.9	# 3
4. <del>Sank River</del> <sup>Sank River</sup>		
Saint Joseph	375.5	Fergus Falls
7. Avon	382.9	Carlisle
7. Albany	389.0	Kitchener
5. Freeport	395.4	Rothsay
6. <del>Sank Riv.</del> <sup>Sank Riv.</sup>	399.2	Lonsdale
Melrose	401.3	Barnsville
# 71	409.7	Baker
Picardy		Sabin
2. Sank Center	410.7	Rothruff
8. <del>Arkley Riv.</del> <sup>Arkley Riv.</sup>	415.8	Woodhead
West Union	418.6	Fargo
6. Oakley	424.4	
5. Nelson	429.9	
5. Alexandria	435.4	
12. <del>Brandon</del> <sup>Brandon</sup>	442.2	
6. <del>Brandon</del> <sup>Brandon</sup>	447.9	
6. Melby	452.9	
4. <del>Edgemoor</del> <sup>Edgemoor</sup>	459.9	
Edgemoor	466.4	
		9.
		535.6



The country N. of Austin is flat,  
but beyond Big Bend a little rolling,  
with bur oak 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* var.  
*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. mobilis* *Zosteris nitida*  
*Anc. ovalis* *Lymnaea humilis*  
" *arvensis* *Physa* *alabamensis*  
*Dreissena striatella* *Physa*

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 and 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 shells.



May 31. Left Alexandria at 8<sup>15</sup>  
 In shallow "sals" just beyond there  
 is a lot of Lemna palustris  
 in bloom around the hollow  
 edges a belt of it left  
 side of road.

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

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

Top soil on <sup>mounds</sup> hills is nice, but thin.  
 Patches of (dead) willow <sup>are</sup> appear  
 in the bogs here & there.

This is the wheat country, - no corn.

Some alfalfa.

as <sup>England</sup> ~~the~~ flatter.



a 462.6 where road cuts a shallow  
 hole I picked up 3 *Pyrrhia*  
*(C. ad.?)* on a board

at 463.1 where the Pomme  
 de Terra, just a long trough  
 with a thread of water,  
 Fargo Falls, gentle hills, some timber  
 Ottertail River

Beyond Rothom, more gently rolling,  
 flatter.

Young Janesville, suggests at  
 Barnsville is of fresh 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

Summit-

Started Fargo - 2:25 PM 554.4

West Fargo 559.8  
 Castleton 574.7  
 Buffalo (turn W) 593.1  
 Tower City 598.7  
 Sheyenne River 613.5  
 Valley City 614.1  
 Bismarck 619.1  
 Sanborn 625.1  
 Eddison 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  
 Ladoga  
 Zappen 694.4  
 Dawson Base 700.4  
 Below  
 Linton Below  
 Steele 709.8  
 Rankin  
 Briscoll 720.5  
 Sterling (Inn) 729.4

Mckenzie RR, <sup>to</sup> 735.4  
 Menden 740.8+  
 Apple Creek -  
~~Verndale~~ 751.3  
 Ft. Lincoln  
 Bismarck 753.5  
 Bismarck 755.6  
 Mandan 758.5  
 Judson 755.6+3  
 New Salem 774.75  
 Kurty 786.5  
 Glen Ullin 808.5 795.0  
 Eagle Nest  
 Hebron 825.5 808.0  
 Antelope  
 Richardson 837.5 822.5  
 Taylor 828.  
 Dickinson 861.5 846.1  
 arrived at 11:50 PM 674.1  
 10:50 Mt Linn  
 To Bismarck 758.5 + 5 to km  
 Mandan To  
 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 <sup>or gentle undulation</sup> occasional low mounds W. of Tower City prairie absolutely wiped out all along to the north and following more rolling from 608. -  
 Quite rough about 619.1  
 Valley City in valley of the Sheyenne River. Very rough here.  
 Undulating beyond - quite rough.  
 To N.W. beyond 628.2 like a range of high hills, one a conical peak. Soil massive here - porous & all.  
 At 628.2 an alkaline lake, - no life  
 Jamestown also in valley.  
 Rolling west of Jamestown  
 Dried storm clouds would form



Fumblewood along fences, etc., <sup>scattered</sup>  
 Towards Dismal the country is  
 rather gently rolling & less monotonous.  
 Reached Dickinson after a rather  
 hard drive, at 10<sup>45</sup> Mountain time  
 and put up at the St. Charles Hotel.

June 2<sup>nd</sup>, 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. Harpe 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 Kildier.

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



Dr. Shelton

wants people who have influence  
with Dept. of Agr.

Who favor our plan

Who know Mr. Wallace and here

Lewis

wants committee an from  
Iowa -

Another from Neb. or N. Dak

Maine two or three from  
each state.

2 men in Dept. of Agr.  
with Lewis.

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

Consent:

J. B. Weaver

Harvey Brigham

Mrs. Henry Frankel.

Rapp, write.

Blissman

W. P. Woodcock.

J. M. Darling - write

Senator Murphy

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



84.2	84.2
75.1	78.
<hr/>	<hr/>
9.1	6.2

110.7
84.2
<hr/>
26.5

126.4
112.5
<hr/>
13.9

8.1 make line

26.5
13.9
<hr/>
12.6

f 26.4

11.6

June 4, 1935 - Trip at 8:30

46.5 - Start. 30882

66.3 - rockfield

Badland stop 75.1 - Painted cañon.

Vida, et. at 76.8

Plants at 77.1 - *Traximon*, *Juncus long*  
*Ribes*, *Rosa*, etc

small flat (lower down) at 78.  
(where we stop June 4)

large view of plants &

Barre, *Grossum* on moist flat

Medon (hole) 84.2

Little Mission Rin. 84.5

Rider

De Mores

Sentinel Butte - 1028

Beach . 1088

State line - Mountain 110.7

Sum at 111.6

State line 112.5

Beach

Sentinel Butte - 122.4

at 126.4 (La Selva) collect *Astragal* (3 sp)  
*Potentilla*, etc. etc. on knoll  
(see p. 25)

84.2	84.2
76.8	77.1
<hr/>	<hr/>
7.4	7.1
	6.8

811.6
808.8
<hr/>
2.8

*Achlys*, *Viola*  
*Lithosperm.*



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

Used for road-making,  
worked on little by way of Juncus  
at 78 mi. & collected a lot of  
plant & lichens also  
Succ. groenlandica in moist flat

Drove down canyon to Medora,  
had dinner & souvenirs.

Drove along #10 into  
Montana, to 812.5, turned &  
collected Phlox, Lithospermum, 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 Mores Sta. 127.6

Collected *Papilio glaucus* & *Lalage*  
etc. in drift along Little No. River  
at Medora

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

at 166.6 I went to Head  
River, <sup>South</sup> E. of Head, ~~to~~ & collected  
a blue *Viola*, *Carex* &  
*Ranunculus*

Dickinson - total 176.4

at 174.6 pond back

from Head River by dam  
plants grass & *Plan.* bread



26

27

June 5, 1935 Wed.

31012

at Charles Hotel 0  
 Heart river <sup>at</sup> 9  
 Lichens <sup>at</sup> 18  
 New Enger - 26.9  
 Cannonball Pa 27.3  
 # 21 27.6  
 Follow #21  
 End of pipe road 40  
 # 85 42.2  
 Midway 42.9  
 Creek 43.8  
 Amidon 52.2  
 Turn 51 54.2  
 Bowman <sup>up</sup> 75.8  
<sup>down</sup> 75.9  
 Turn 5 77.0  
 State line 93.2  
 at 93.5 - <sup>in</sup> <sup>at</sup> <sup>at</sup>  
<sup>at</sup> 96.2 - <sup>at</sup> <sup>at</sup>  
 at 98.5 - <sup>at</sup> <sup>at</sup>  
 Ludlow 101.2  
 Buffalo - 123.4  
 Grand river 123.8  
 Crow Butte 147.4  
 # 79 149.8

Started at 8:15  
 Duran 154.6  
 (cr.)  
 Moran Pt. 156.0  
 at 158 - <sup>at</sup> <sup>at</sup>  
 at 159.4 - <sup>at</sup> <sup>at</sup>  
 Four mile cr. 162.8  
 at 165.8 - beautiful  
 blue Boulder  
 at 170 great  
 view of <sup>at</sup> <sup>at</sup>  
 at 173 from  
 hill <sup>at</sup> <sup>at</sup>  
 Indian Cr. 180.4  
 Ester hills 182  
 Ester 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-tops) are visible  
 most of the way. Few ranch houses,  
 & not many cattle. The big herds  
 were shipped out last year during  
 the drought.  
 at 18 mi S of Dickinson there  
 are some <sup>at</sup> <sup>at</sup>  
 scattered about, & they are covered  
 with <sup>at</sup> <sup>at</sup>  
 at 43.8 is a creek & small  
 Blain farm & <sup>at</sup> <sup>at</sup>  
 & down 1 "Lige-hill"  
 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* ind.

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

at 98.5 (So. Dak.) along a little  
depression (side) a nice lot  
of *Vicia* (*mutabilis*), *Astragalus*,  
*Vicia*, "Helipais", *Adiantum reticulatum*,  
*Lesquerina*, yellow "Draba", *Mercurialis*,  
*Achillea*, etc. *Phlox*, etc. Wheat grass.

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

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

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

From 110 the hills S. & SW. are  
again rougher. Coniferous 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 <sup>chuffs</sup> 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 sierrita like  
buttes, of stratified sand & clay,  
alternating 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,  
gravelly, I collected *Grygadenia*,  
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 *Trifolium*  
*tridentatum* - in tufts extend  
at least a mile.

At 173, from hill, we saw mt  
above. Dropped back 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 & rocky.

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 <sup>on #</sup> 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

→ cottonwood

at about 217

we came to first trees  
on a ridge. Scattered *Pinus*

*resinosa* 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* *resinosa*  
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 Fourche  
 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 on the  
 Wyoming. -

Started at 30 = 31242 <sup>9:40</sup> on

at 34.6, in open grassy rolling plain  
 Lithopen arctica, Lepidium(?) yellow  
 with gray, & Penstemon

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 - Bendah, Wyo.

47 - (Wyo.) On red slope, Yucca, etc -  
 collecta sama, Castilleja, etc.

all red here throughout

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

52.2 - Turned back.



at 57, on return <sup>3.7</sup> (15 mi. W. of state line) <sup>Bendable</sup>  
 collected Large *Oenothera*, *Orysimum* <sup>whent</sup>  
 at 60.6 (on return)  
 In Sand Creek, just W. of  
 Bendable, Wyo.; - I collected a  
 lot of *Plysa* (many copulid) by  
 sweeping the Chaucer, 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 *Vallonia*, *Corbicula*,  
*Dicars*, *Goniatoides*, *Gonoculus*

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 *Conocarpus* 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 8:45 for the 3 mile point.

Reading at hotel = 0. (barometer)

Reading at bottom of valley at 3 miles 110

Found one good *Oreohelix* at bottom

then none at 260 (+ upward)

The colony visible yesterday begins

at 265.

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

ravine, & just S. over small

ridge another ravine shows

a smaller form more

common.

Picked up *Vidua*, *Ammodramus*,

grass &

Car returns 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  
ticks on ground. Many dead  
*Oreohelix* shells 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 burrow.  
Took *Vidua*, *Ammodramus* (one), and  
fungi.

Turned back at 89.8.

A wonderful cañon.

Distal Vase Falls at 92.5 (return)



94.4  
89.8  
4.6

99.5  
89.8  
9.7  
4.6  
5.1

2.9 mi. to Orebolia stop

94.4  
89.8  
4.6

At 94.4 (return) we found many dead large Orebolia corpi on a flat talus <sup>(?)</sup> at foot of cliff. One living specimen was found under a log.

Collected *Vidua teretica*, *Melospiza*, *Sturnella*

Return to Spearfish 99.5

2.8 mi. <sup>from Spearfish</sup> to Orebolia stop

9.7 mi. to last stop (stura)

5.1 mi. to last Orebolia locality

~~150-250 ft above valley~~ 2.8 mi. 5.1 Spearfish  
1<sup>st</sup> day 57 living 90 dead = 147

2<sup>nd</sup> " 103 80 "  
79  
239 278

Last stop 89.8 - 55 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. <sup>31312</sup> at hole

1.0 - to new road.

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

then P. ponderosa some Wh. Birch.

Much gnarling asp 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 +  
 Sieford - 39.4      more open  
 turned to Crystal Cave  
 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 <sup>rec = 63.1</sup> at 62 - a new find  
 Rapid or Cambridge 68.2      v more ahead  
 Turn 73.1      64.54 - Boyd's  
 Return to #14 - 77.8

Rapid City 79.2  
 as 79.5 turn to left for <sup>Cr. Canyon</sup> ledge  
 turn on to Rapid Cr. Canyon  
 turned at 84.3

Return to #14  
 Rapid City - gas sta. 89.4  
 Saw Coyne #16 - 3 6 ft  
 + Return to #16, 90.7 1/2

as 93.8 - high lookout (tells up)  
 sandstone, plain,  
 Black Hills

We went down into Crystal cave,  
 260 ft. down, and found the walls  
 and ceiling everywhere crated with  
 dog-tooth spar crystals of calcite.  
 In the lowest part were a

few small stactolites & 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 fossils on side of  
Pinnacled Mountain.

Summit 113.1

Keystone - 113.7

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

Summit from Mt. - 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 turn W.

Home Rd 138.3

A beautiful drive



Doane Mt. - with Washburn  
fair to left (complete), Lumber  
to right (partly)



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

June 9, 1935 - Sun.

Left the Plate Game Lodge at 7:50<sup>am</sup>

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

Stops at 38.7. (no 31451)

We drove up the valley of  
Grace Coolidge Creek.

39.7 - Camp Galena

White birds very common along

the mountain stream.

At 43. Birds & Brown feathers

at 43.9 in a streamlet with  
small pools & grass<sup>2</sup> 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 Pines  
ponderosa forest.

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

Saw red flicker in hole  
in pine - at 51.1

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

at 51.9 <sup>(on left)</sup> entered gate &

here barvin road begins,

53.4 - Tunnel,

54.6 Balanced rock,

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

To 51 -

Finest at 56.8 + 57 for  
hot 57.4 needles

52.2 base of <sup>one set of</sup> 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  
sternum on top of Pines finding

Sylvan Lake. 59.7 - Swan.

Walk of mile near Hotel  
Hotel at 60.

Turn to Custer ~~at 60.3~~ 60.3

60.5 # 85

Custer 66.8,

Sanatorium 71.9

Sanary 72.5

Pringle 79.6

86.2 - artificial lake



31571  
50022  
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 drove

down a red <sup>cliff</sup> 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*

with fungus. See spec. at 103.7

104.7. Cheyenne River

121.1 turn E

139.8 Neb. state line

#19

142.1  
139.8  
139.8

South from about 103 - 114  
is open rolling country with  
sage-bush, 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 Pine, *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  
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 Creek  
1678 - " "

169.2  
167.3  

---

1.9

Pinus  
169.2 On open grassland (bare  
covered up) a beautiful pale  
blue Pentstemon, etc. One also.

171.4 Pine ridge  
Beyond 173 there is an  
extensive flat plain.

175.1 Esther canon (bottom)  
at 175.3, on a plain just  
beyond Esther canon, white  
Oxytrich, Comandra, etc.

158.9  
57

158.9  
28.5  

---

184.4

14 1/4  
42314

Much eroded (can't hear  
Lovergrove?)

179.9 Pepper creek  
Roughly rolling.

185.3 a creek

185.5 Dunlap - Nioban river  
less rolling, flatter, S.

194.0 #87

197.9 1/2 Turn S.

Alliance - 214.3

230.6  
214.3  

---

16.3

Letau

Banner

Angora - 236.7

quite a flat plain beyond  
alliance. Beyond 223 rougher  
with hills - turns. Some  
mostly fixed

At 230.6, in a broad meadow  
between dunes. I collected *Dodecatheon*  
& in low places, *Sisymbrium*, *Alnus* etc.  
a pine woods!



Large flat areas were  
painted with Dodecatheon.

at 234. In form

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

Bradport 252.3

at 256 low bluff (small  
dune)

at 259.1 a cut in dune

268.8  
252.3  
16.5

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

Huntsman - 286.6

Sidney - 291.9

at 268.8 on rough ground  
yellow D. dentata, etc  
Sidney 292.1



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

(elevation 298.8)

Sunset 303.5

Lodgepole 310.0

Chappell 319.4

✓ at 294.7 collect White Feather, etc.  
2.5 mi. East of Sidney

#27 turn N. 326.2

Dry farming ridges all through, vuvu

Turned S. on Co. Road 327.2

✓ at 332.1 - a lot of Malvastrum Tuck 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

Run S on 51 to low, round bluff

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

This is evidently a dune  
It is gravelly, however, due  
to top with a little conifer  
along slope

collected *Astragalus* in 60,  
yellow comp, center, etc

Went SW. on main # 51

The cuts (road) are also  
sand dunes with many  
calcareous nodules & masses

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 - <sup>Return</sup> 345, 8 1/2 m. <sup>out # 138</sup>

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

357.1 Big Springs

359.2 # 310

368.4 - Brule RR. Sta

377.4 Ogallala

Many cuts along # 30 are through  
dunes,

384.4 Roscoe - RR. Sta

396.5 Paxton -

Dexter -

408.7 Sutherland -

413.2 O'Fallon - School

419.2 School Hershey -

Nichols -



great beds of white limestone  
along the way -

North Platte - #183 - 430.1

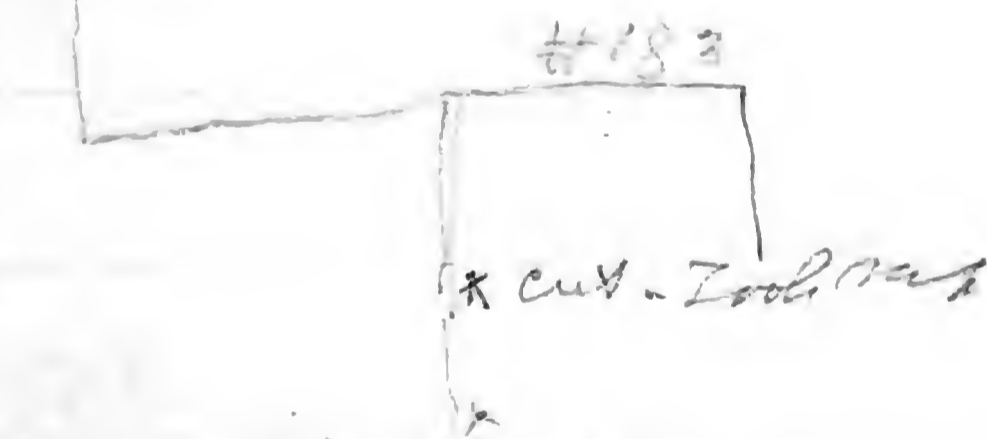
#30 turns 430.7

432 - So. Platte

435.3  
No. Platte 430.7  
4.6

at 435.1 - on slope

So. Platte  
So. Platte



at cut on slope  
took sample.  
Two nodules  
6 ft. distance on  
E. side

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

over the pebbly & nodular

material noted at Julesburg

Higher up there is much

more heavy material

470.4  
467.7  
2.7

425.3  
430.7  
4.1

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 limestone  
beds!

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

Turned back

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

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  
hazy horizon & ridges  
of lower hills

3rd horizon



With interruption these  
hills appeared all  
along the Platte for miles

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

Stopped for camp at  
Lexington.

Left Lexington at 504.7

Overton — 515.7

Elm Creek — #83. 524.3

turn S.

Alatte 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. & 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 Charles  
 A cloudy day. <sup>leaved later</sup> Started for <sup>Hotel</sup> Atlanta + Oxford at 8:05 AM

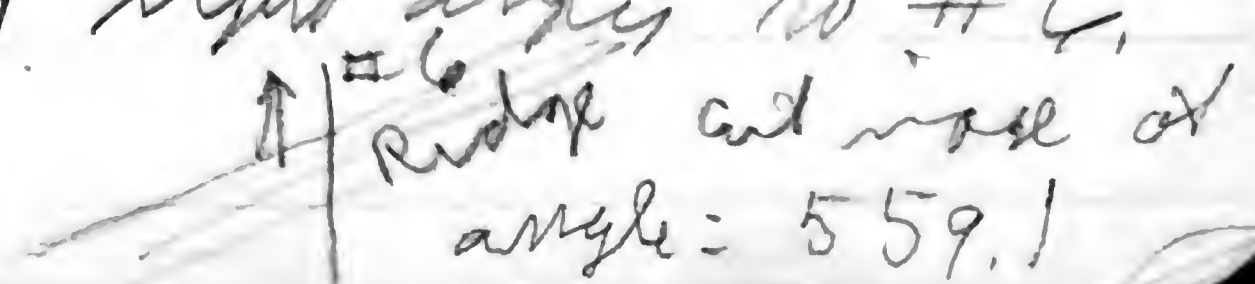
Reading at Holdridge 31956 (544.4)

Holdridge	544.4	559.1	
		544.4	
		<hr/>	
		14.7	side road
Atlanta	554.4		
at	555.6		turned S. toward mine
	to 556.1		returned
at #6,	556.6		✓

Return to RR at Atlanta. 557.5

Walked S.W. on RR. to cut!  
 Found it as described. <sup>3 or 4 ft</sup> shells (mostly in lower part of cut where about 7 ft. deep.  
 Took small carton of loess.

Started SW. on #6.

This <sup>old</sup> cut is in a low broad ridge  
 running at right angles to #6,  
 or anything  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 case of 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 depth  
flat. S. side is better

✓



S. side  
Fossiliferous mostly  
in lower 1/3. Looks like  
cut 1 - Atlanta. See shells  
Zona multilifer.

This cut also is on a broad  
irregular ridge.

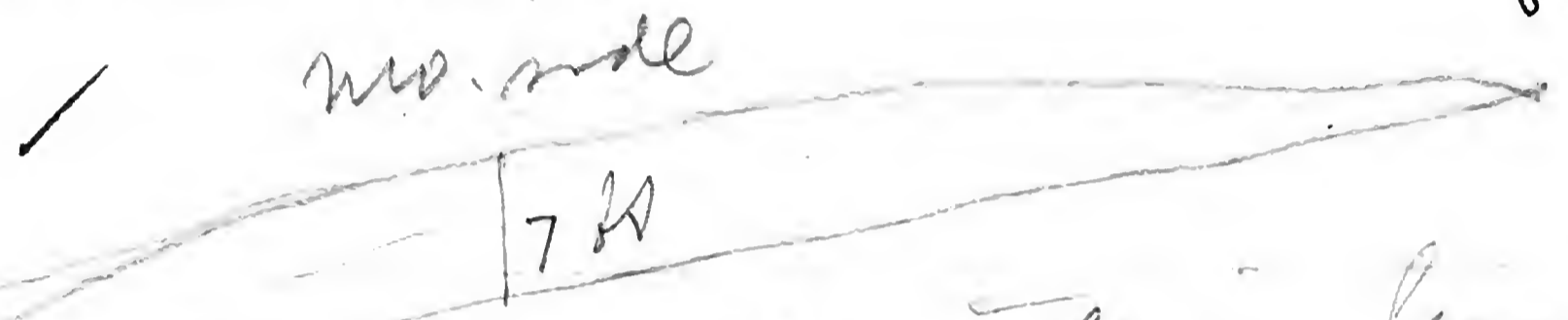
567.8  
561.7  
8.1

544.4 H

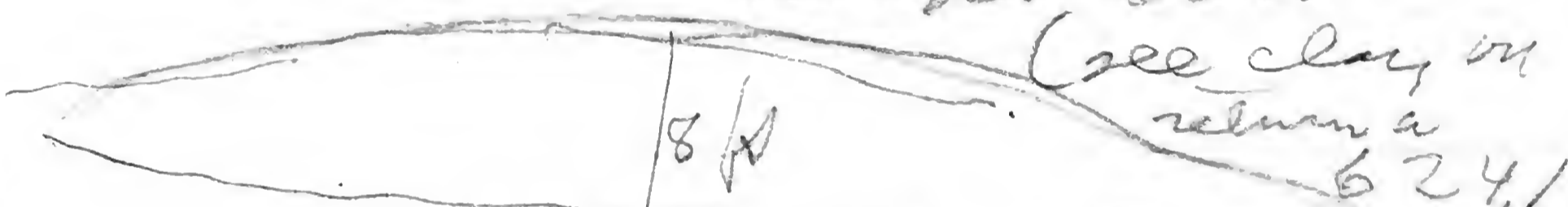
4.4 mi. SW. of Atlanta

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  
depth flat.

~~554.4~~ 561.7  
9  
570.7



Fossils mostly in lower 3/4.  
Zone 2 Bone. walls near top.  
on S. side shells come 1 ft of top  
larger above



(see clay on  
return a  
624.1  
Shells within 2 ft of top  
The Bone walls were not 6 ft.  
or more.

567.8 Mascot

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



573.0 - #3

Oxford, 573.3

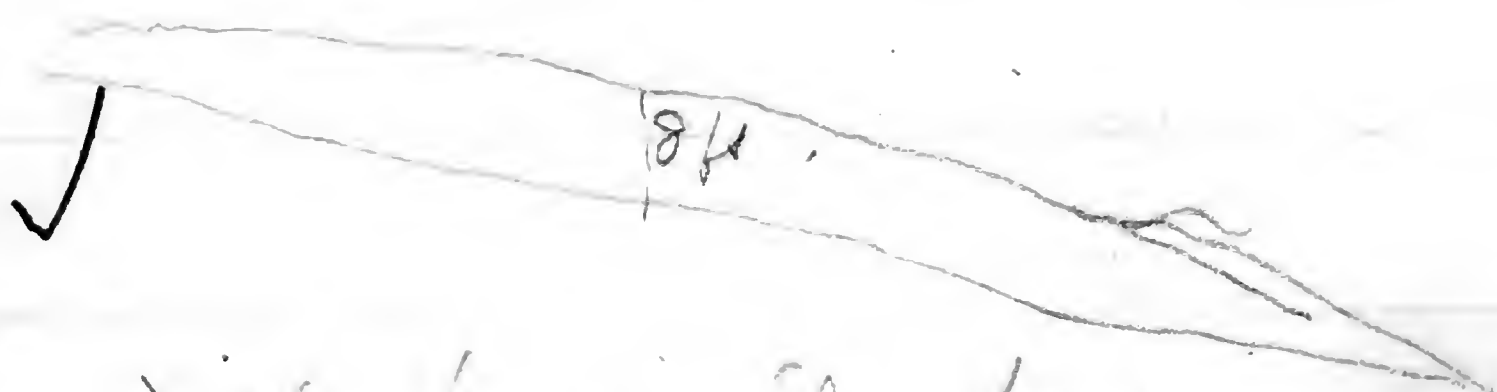
After lunch we drove up the Republican valley on nos. 3+6,

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 level on all the flat-topped ridges. These extend far to the west as I can see. Turn back at 592.8.

at 614.1 a round cut  
 at 615.1 and 8 ft - some shells  
 at 619.9  
 at 615.1

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 615.1 - a good cut 2 ft. deep  
 2 telephone pole supports long,  
 with cross guard. ~~partially~~  
 ✓ cuts top & slope NE (down)

616.2 - a rather low cut, Parked

617.5 - a low cut - "

marked 617.9.

at 623-8 - a cut well up

at 624. a cut low down

A short ridge cut. Only  
 upper part may be low, could  
 not get to it. Lower part  
 a good clay (see note)

No fossils. About 12 ft. deep

at 624.1 on hill, short cut  
 under

at this place (3<sup>rd</sup> cut going  
 ↓ out) we worked this AM,  
 Marie on S.E. & J on S.W.

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.

Alanta - RR. stop 628.2  
 " town - 628.4

Heldredge - 638.4.

Frank - 644.8

axtell - 652.4

Minden - 662.6

#17 - 665.9

Heartwell - 675.3

Juniata road 690.2

Hastings - 693.6 - turn on to  
 city - 697.9 city

Back of #6. 698.4



From Holdrege to Hastings is quite a flat plain. W. tier prairie. Continues much the same to Sutton, with occasional slight undulations.

Hastings 698.4

Inland 707.1

Harvard 714.8

Paroville 722.1

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 <sup>turning</sup> 749.6 751.1

Friend - 759.9

Dorduxton -

Milford - 779.8

at 793.9 <sup>loc.</sup> Emerald - 794.2

Lincoln 801.8 out 2300 <sup>clock</sup>

more rolling beyond Friend  
Lower cuts beyond Milford. Somewhat  
rocking.

at 793.9 yellow tan on  
S. side on N. side (occasional)  
on S. side some half in on



836.2	847
727.8	728
<u>108.4</u>	<u>19</u>

gray, crumbling loess (see south  
in fossils)

Rolling (Kauon) topography  
to Lincoln

805.7 - Cotner (Cathedral)

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 bridge " "

847 Millard

859.3 Omaha Burn

859.9 bridge

860.1 main

860.4 E. end

The region east of Lincoln is now  
all trees, improvements, etc

At Cotner College a small town,  
little of Salt Marsh was near.

(east of)  
RR, Ashland - good loess cuts

We drove up to old shell  
layers off 10<sup>th</sup> ave & I

Took box of clay & Martin  
found a box of shells

Turned at 865.4 (shell  
layers 865.5-)

#6 - 865.8 <sup>at 10<sup>th</sup> ave</sup> shell layer

Left this at 12 noon

End detour ~~#4~~ <sup>7 (+ turn 6)</sup> 869.9

on #7  
891.0 1/2 junction of #59

893.2 RR  
893.6 Oakland town

Return



83

917.7  
727.8  
190

923  
865  
58

73  
115  
265  
125  
140

387

917.7 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 Ensign district

999.4 break A.

# 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

Mitchell 1016.4

old road

Colfax 1022.8

Stunk River 1026.6 1/2

Newton 1033.7 Courthouse

Kellogg 1041.7

Winnell 1043.1

1052.2  
1058.9 -

#63

Brooklyn - 1067.4

Carnforth RR. 1072.9

Victor - 1075.6

Ladora - 1082.2

Marango #212 1088.3

" (old road) 1088.8

S. Armana - 1094.0

cm + 30 P.R.R. 1097.1 1098.8  
#149

Homestead RR, Sta. 1099.5

Co. line 1101.2

Oxford. 1104.4 - #109

" 2nd 1105.8

Jiffin - 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	138.8 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
Anna's	27.1	Calmar	163.2
Marrion	31.2 1/2	Clarks road	165.5
#13 + #161	33.7	#9	172.7 1/2
Central City, bus	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	Davis Corn	200.7
Ryan RR	57.8 1/2	Saratoga	206.0
Manchester #20	57.9	Jamaison	211.1
Road #10. W. J. Shunk	57.8 1/2	Riceville RR	213.8
#19 28.3 #10	79.8	Jura R.	215.9
Strawberry Point	84.8	Little Cedar	223.6
Osborn	94.2	Jura #22	229.9
Elkader	99.5 1/2	Jarvis	226.7 1/2
#128	102.7		230.3
#52	111.5		121.7
#52 + #17	111.9		108.6
#18	112.5		
Keard (Pines)	113.2		
McGregor Hotel	119.5		
" " (return)	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 olms -	95.7
Tiffin - - 8.7	" -	96.4
Oxford - 1 <sup>st</sup> - 14.0 +	Mitchellville -	102.8
" 2 <sup>nd</sup> #109 15.4 1/2	actona -	109.2
Co. line - 18.7 -	Des Moines Ave #6 -	113.8 -
Homestead sta - 20.4	" " Capitol	117.9
Road #149 - 20.9	" " river	
C.M. & St. Paul Ry. 22.7		
So. Amara 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 <sup>st</sup> sat. { 67.2		
" 2 <sup>nd</sup> - 76.2		
(N. Skunk R. 76.4)		

a sultry, rainy day,  
Much *Phalidrum* decayed  
on part of RR. Prairie towards  
Ladora.







June 28, 1935. Fri.

Left at 1:8 1/2 PM.

33280

Wlastis - Stuegills, O	#199 Van Horn	126.7
#218 - #229. 5.4	RR -	127.1
Osage - 11.8 1/2	#30 + #218.	129.8 -
#9 + #218 - 15.7	Road S.	131.7
Orchard road - 19.6 1/2	Road N.	132.6 1/2
Co. line - 20.6 1/2	Road S, 201 Young	134.6 1/2
Floyd Sta. (RR) 25.6	Road N, Atkins	138.6
Floyd RR 30.6	Co. line -	139.6
Charles City <sup>main</sup> #18. 31.9	Road S.	142.6
Washburn <sup>green road</sup> 42.9	Junk NE. -	144.1 +
Clairfield - 50.4	#30 + #161	148.1 1/2
" RR 50.8	Cedar Rapids	
RR #10 - 60.4 - 58.9	#30 + #161 -	152.3 1/2
Waverly #10 61.4	Prairie Cr.	155.1 1/2
Jameville (bridge) 67.5 -	Airport -	156.1
Cedar Falls #20. 75.1	airport -	159. -
Waterloo (hotel) 92.1	Co. line -	160.9
Washburn 92.2 <sup>dine</sup> 92.3 <sup>short</sup>	Shueyville -	161.9
La Porte City - 97.0	Curtis bldg <sup>S. line</sup> -	165.2
#8 (Zaner) 106.2	Young -	166.5
Old road - 109.3	Young -	168.0
Vinton - 115.8	Decker garage	169.1
#202 - 119.8	N. Liberty -	170.1 -
(33457 1/2)	Junk E.	171.4 +
	Shimek m.	172.1
	Wich's <sup>173.4</sup>	173.0
	Panzer <sup>173.4</sup> & Child.	173.7
	Butler's Critzo	175.3
	Home -	177.7







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 herbaceous garden & told of dangers 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 Pannal 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 mud in flatter places, & there has been much wash from the hills, - and spread out below.



July 11, 1935, 35  
 July 12 - Toll, Keokuk 25  
 17 Campsville, Ill. gas 1.79 oil 20 4.99  
 Jerseyville 10 1.60  
 another toll 1.50  
 Tourist Home, 1.50  
 56.78

July 13 Breakfast, Collinsville .55  
 Chester, gas 1.58 soda 1.0 1.58  
 Soda 1.0 - Keokuk .20  
 Dinner - Murphyboro .72  
 Harrisburg - supper .57  
 " gas & oil 2.04  
 5.66

July 14 -  
 Shawmilton - hotel 1.50 Ferry 1.00 2.50  
 Morganfield, Ky. Breakfast .42  
 Tell Henderson .30  
 Evansville - dinner .50  
 Mt. Vernon, gas 1.57 (Jerseyville) oil 25 1.79  
 Carr Hotel, Mt. Vernon room 1.50 supper 70 2.20  
 7.71

July 15 - Breakfast, Cafe 40  
 Lunch, New Harmony 50  
 New Harmony gas 1.54  
 Supper 1.00 room 1.50 2.50 4.94  
 1.45

July 16 - Breakfast 95 Toll 50  
 at 950.1 - Red Crown Station, gas 1.73 1.73  
 Supper 50 room 1.50 2.00  
 5.15

July 17 - Breakfast, Good Cafe, Vincennes .50  
 Lawrenceville, Ill. soda 1.0 dinner 93 1.03  
 Clark Centre, gas 1.79 oil 21 2.00  
 Effery Home - 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 #34 - 49.5  
 Keokuk - bus #5152.9 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.  
 #36 153.3  
 Kinderhook 154.9  
 Barry road - 161.5  
 town 161.9  
 #54 173.4  
 Pittsford 177.3  
 June 3, 189.8  
 June 6. - 189.8  
 Pearl 199.4  
 Bee Creek road 200.8  
 Cliff Hill -  
 Kampsville - 211.6  
 which road 215.5  
 Harden (but) 222.8  
 " " E 221.1  
 " " E 230.1  
 Jerseyville (#67) 239.6

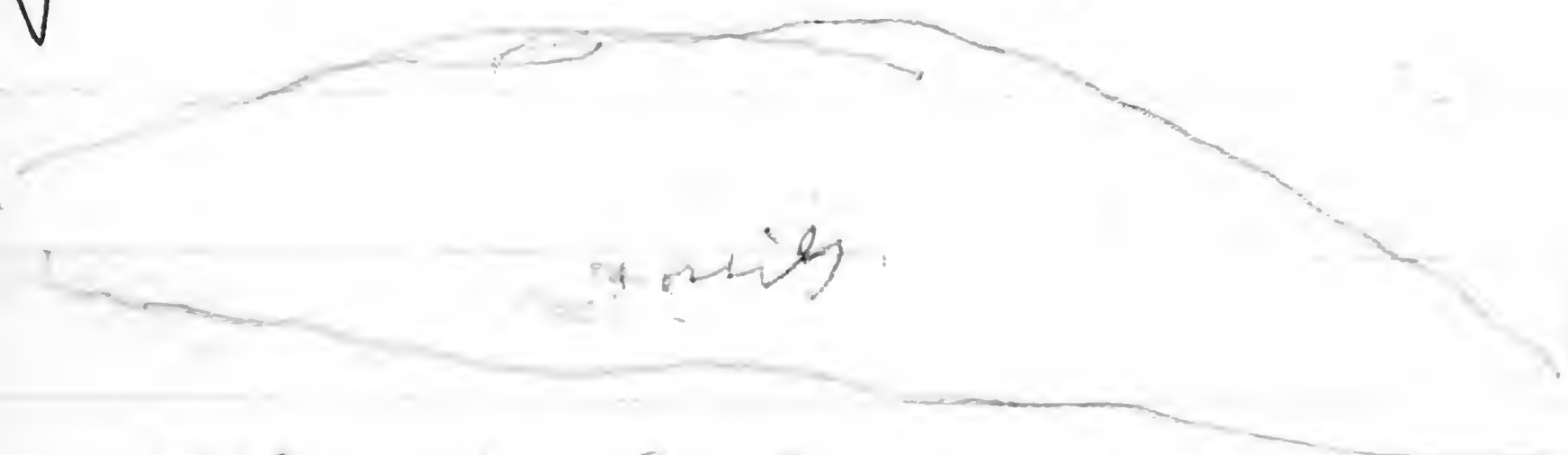
McKluskey  
 E. Newbern 247.2  
 Melville 254.  
 Alton  
 New City 261.6  
 left Alton #67 263.  
 Wood River 267.2  
 #159 268.1  
 269.7  
 Edwardsville #9 277.  
 " town 278.1  
 on lot  
 #157 283.4  
 #40 288.7  
 Collinsville 291.3



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

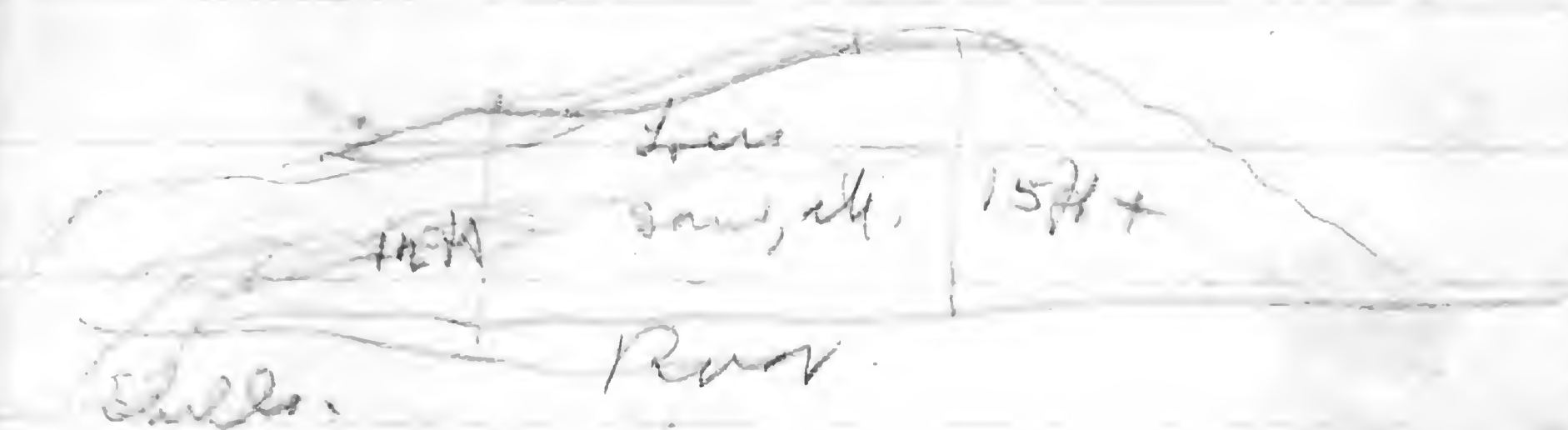
We drove south to the village of Marcelline, Ill., and then turned west on a gravelled road towards the Mississippi River.

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 (see 280) (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 entrance of village a cut on E. side of road comes down to river. It is yellow sandy loess (see below) & has some nodules & shells, (see above.)



Towards Pittsfield is the orchard country.

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



Drove to ...  
 in New ...  
 Found ...  
 made out ...  
 from bank ...  
 ✓ (of ...)  
 stick ...  
 down. Hill ...  
 in ...  
 ...

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

Sumner - 20812

July 13<sup>th</sup> - 1935 - Sat

Stable	34100	5.29 mi.	
Collinsville (45)	291.4	Carbondale #51	427.6
Drove to country	292.1	Road to Alto Pass	440.8
#40 + #159	295.8	Alto Pass	
750. 1304 1/2		" " Return	451.4
Belleville #158	309.7	# 51 -	455.8
#13 + #158	310.7	Colden -	456.3
Murphy	316.8	Anna #146	461.7
# 3	322.5	Junction	463.1
Waterloo #156	329.8	Turn back	465.5
Valmeyer	339.4	Junction	468.0
Valmeyer	340.8	Anna (51)	469.3 1/2
Turn off	341.1	Colden -	474.8
Back to 56	341.3	Carbondale #13	490.4
Waterloo #3	350.8	Road to Alto	477.2
Red Bud #10	364.4	Marion -	507.
Ruma -	369.7	Crab Orchard	513.7A
Evansville -	374.2	Dallasville -	
Kaskaskia riv.	374.0	Harrisburg -	528.7
Ellettsville -	380.3	Junction -	545.9
Chester #150	389.6	Shawneetown	552.-
Rockwood	397.9		291.4
Cora vord	399.9		260.6
Glenn	405.0		
Crain -	409.2		
#144 + #150	412.1		
Murphy #13	420.		



296.7 at cut  
298.8 40 + 159

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

Here there is long cut along road  
justifying to reach the cut  
about 12 to 15 ft. and looks  
down to be continuous as well  
through lower 1/2.

The lower is micaceous with much  
iron. See table & sample.

Took small box of clay

We drove to Waterloo (via Bellefonte)  
& turned on #156 to Valmeyer  
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, - 1<sup>st</sup> 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.

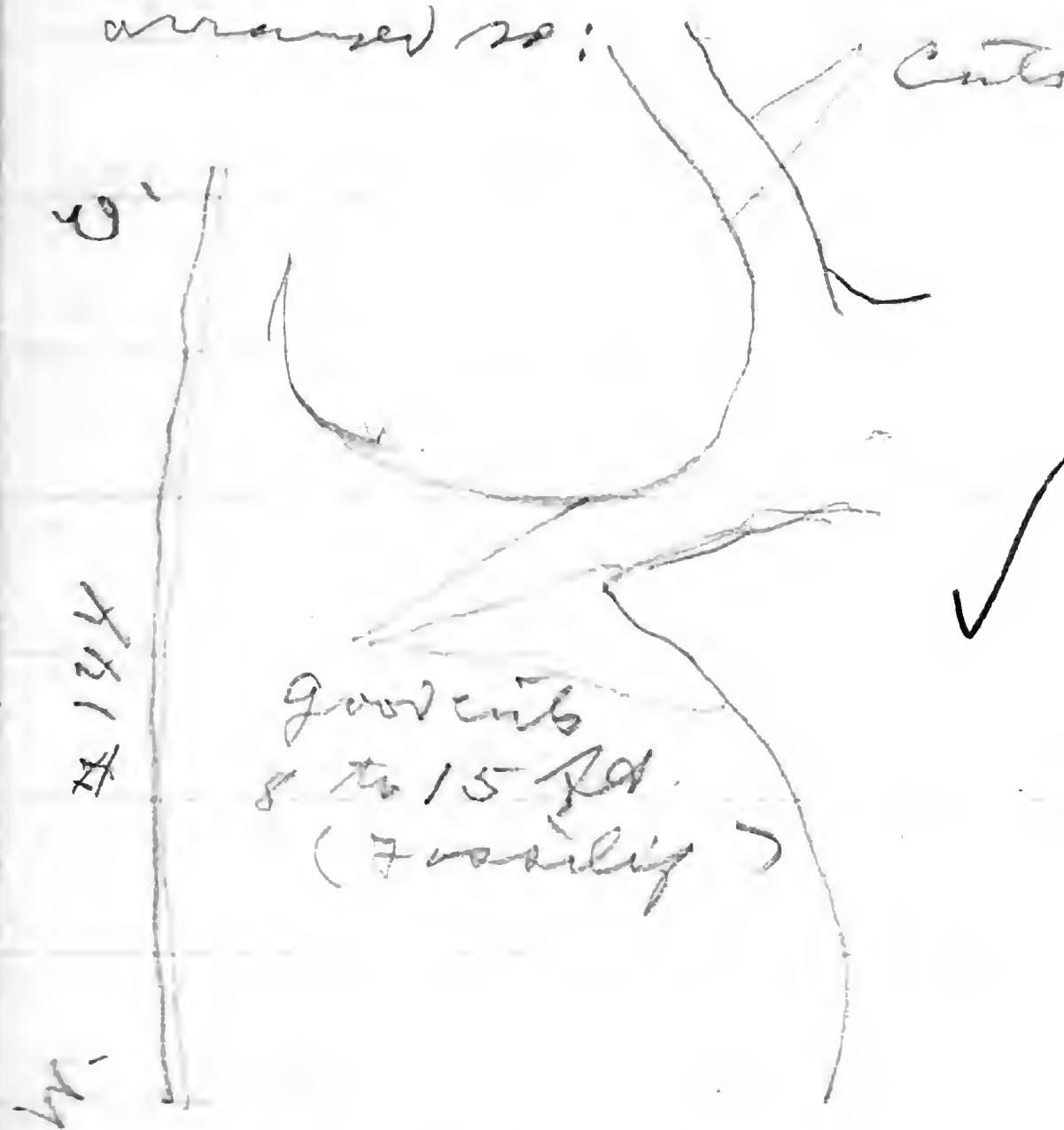
I scratched among the leaves  
in several places in the fine  
wood on the slope, but found  
no signs of living shells.

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



When #144 enters the hills  
(at 413.3) there are five cuts

arranged as: cuts 15-20 ft.



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

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

The fossiliferous 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 "Turtle 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 Harrison, & drove on to  
 Shawneville. We put up at  
 the big hotel, some a great  
 place, but soon were without  
 running water!

We could see higher hills  
 in ridges south, - evidently  
 a part of the Spanish system.  
 Towards Shawneville it became  
 low (low raised areas)  
 but some Shawneville  
 all as by road.

July 14, 1935

crossed river at 6: 41, 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
7 Clowndy, Ky.	568.6	Back to #69,	705.8 1/2
Waverly, Ky.	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	to Mackey Ferry	711.3
" N.	593.2 +	where we turned	712.
Evansville #62	598.9	from #62	
to #61	600.9	Crossed	712.7
Amylea -			
Chandler -	612.3		
Bobroville -	617.8		
De Gonia	624.4		
Turned back	633.4		
#45 -	634.7		
De Gonia -	642.5		
Brownville -	648.6		
Chandler -	645.8		
	654.1 1/2		
#41 + #62 +	665.5		
#62 Right	667.8		
Evansville			



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

Granular red  
yellowish - loam?

Loam red

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 clay  
pit showing as follows:

2-3 ft. granular reddish (as before)

2-4 ft. lighter colored

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  
loam (hard + with iron  
mottling, 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.



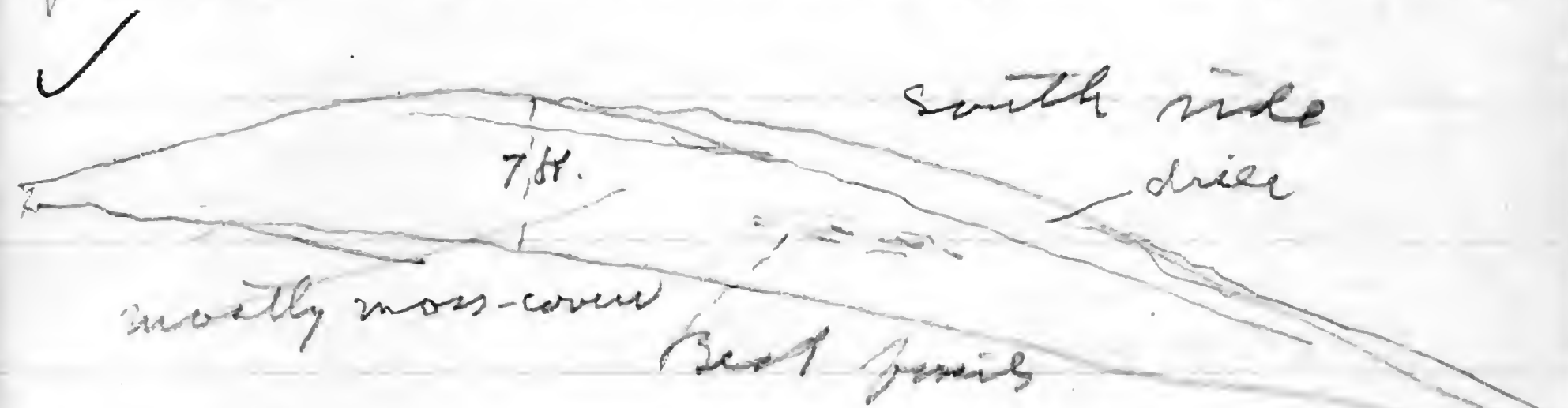
There is here an upper joint  
clay, looking reddish, 2 or 3 ft.  
Below is a grayish band of  
very hard whitish stuff,  
about 3 ft. or more.

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 semblance 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 net 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  
day now. At loc. and  
same place.

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

at 695.5 (northward) a gravel  
road leads N. - My cut on  
return - 696 -

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

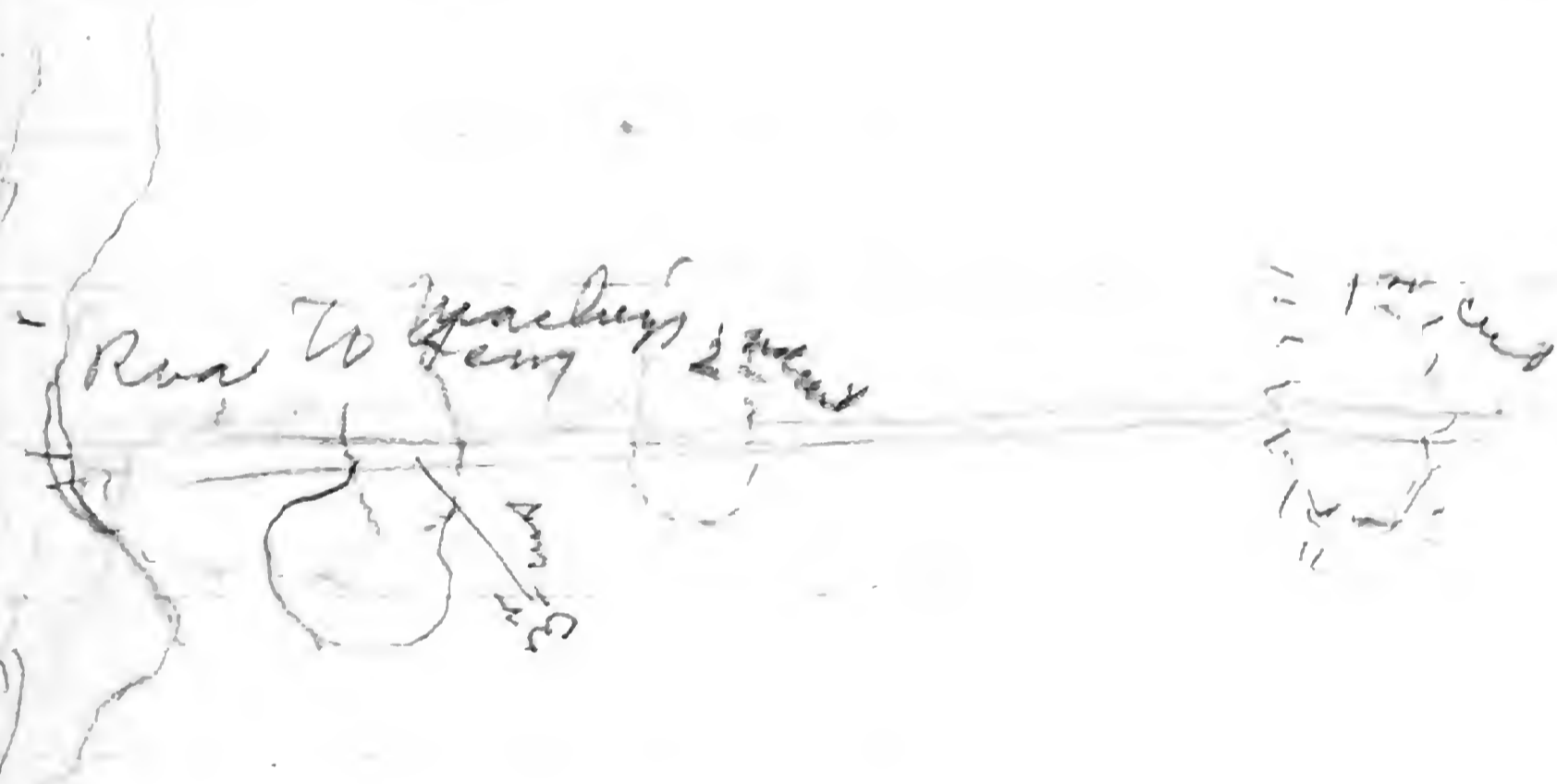
The locs seem to be only

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 locs as in  
preceding, with fossils. Took  
sample & nice set of fossils. The  
later I found scattered through about  
the lowest 6 ft. of locs. I could  
not reach above this.  
The cut is overgrown, but more  
exposed on north side. Roughly  
estimated at 12 or more feet. No  
modules.

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 reddish stuff,  
North



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  
ridge, about 6-7 ft deep, showing  
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 of irregular  
 block samples 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 N. & 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 <sup>near</sup> 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.

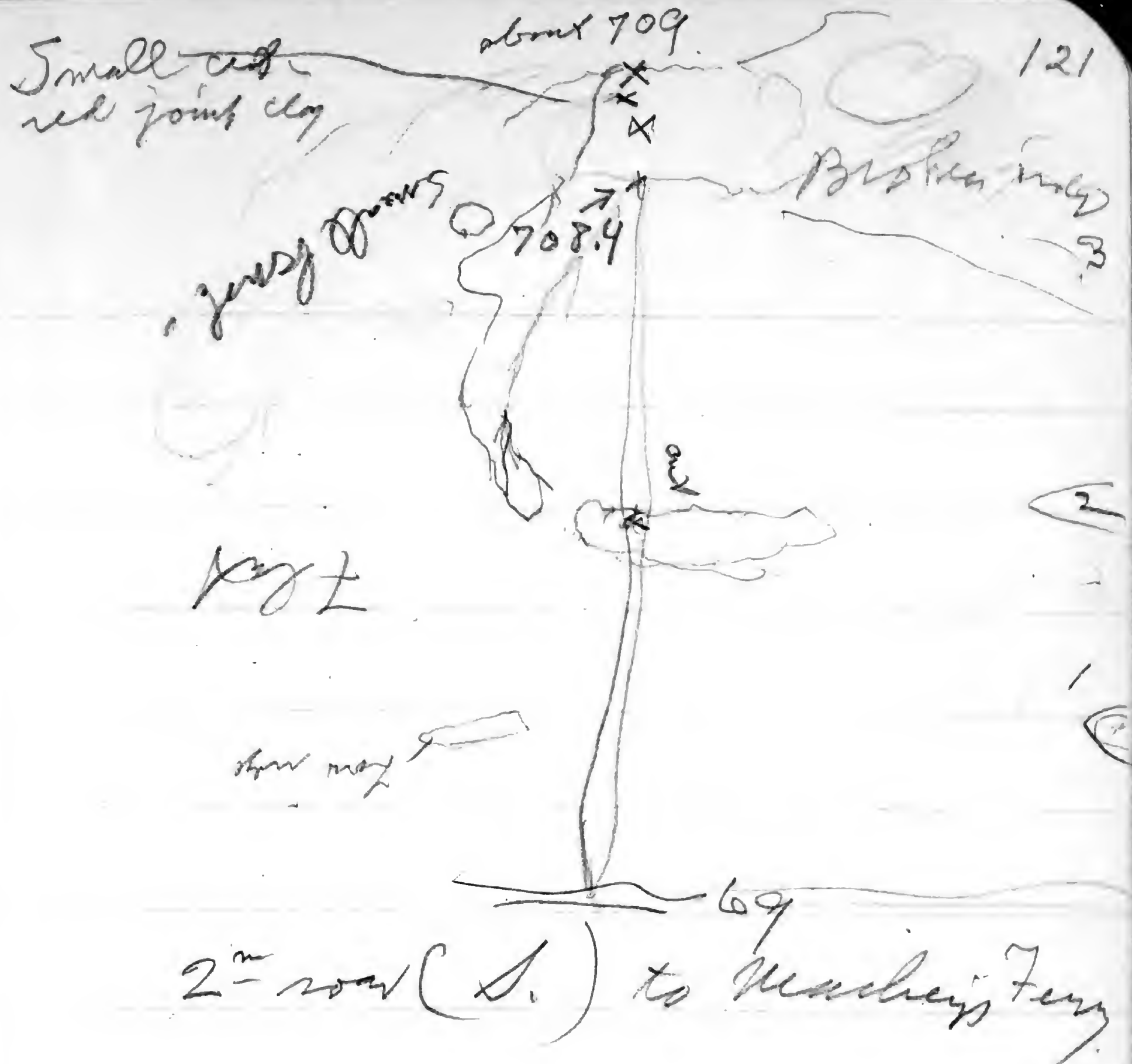


The few isolated knobs to the S. (E. of last low ridge) look like dunes.

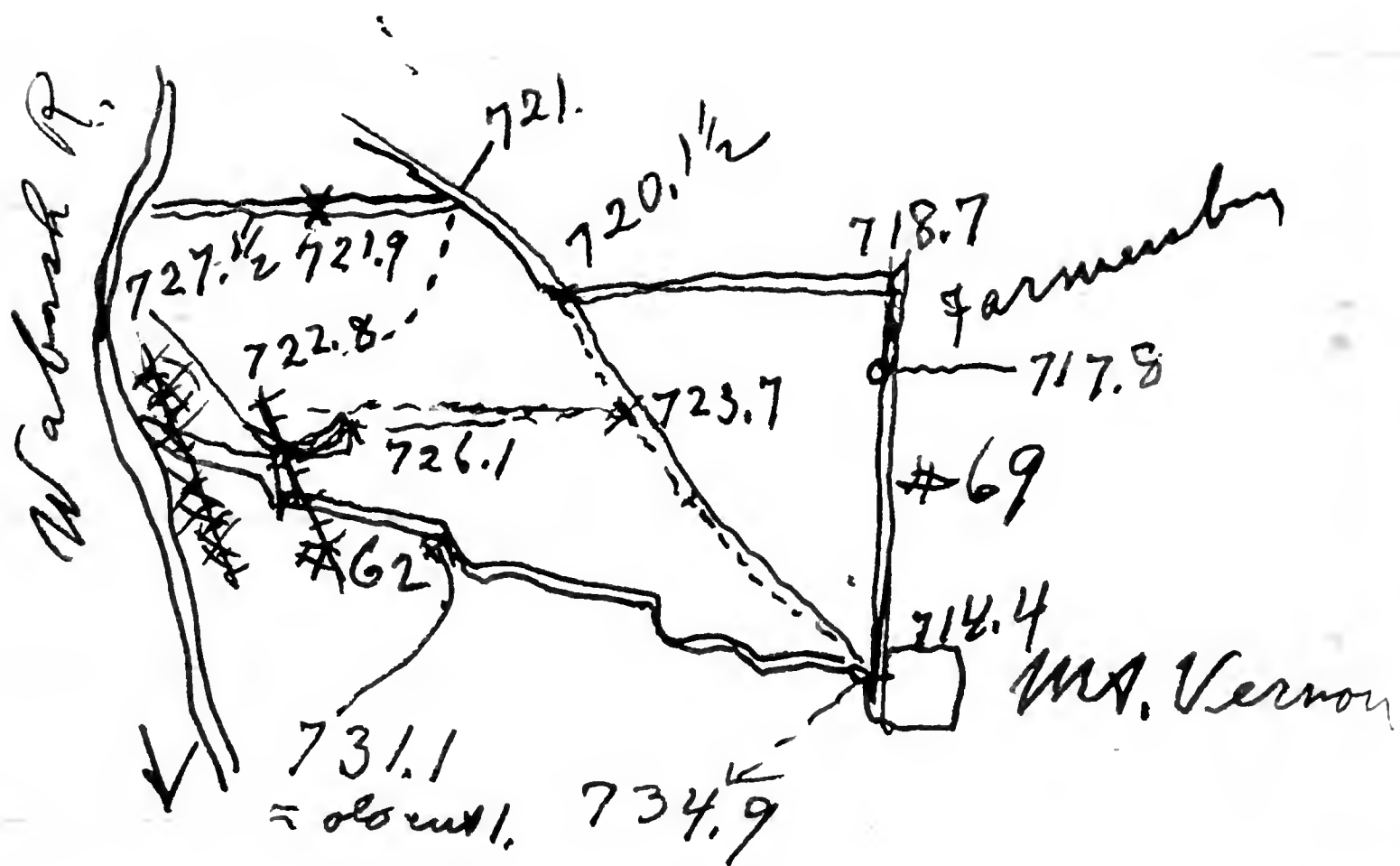
The first cut is across a narrow ridge.

We drove back to #69 & went S. at 707.2 we turned west on another narrow washed to Mackey's Ferry.

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







734.9  
 727.7 1/2  
 -----  
 7.1 1/2

766.9  
 1.7  
 -----  
 765.2

July 15, 1935 Mon. 5:13 am

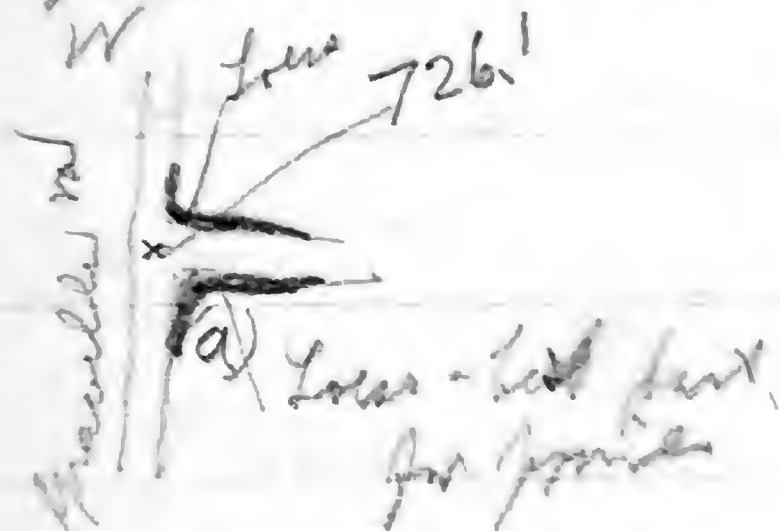
Continued -	714.4	at 749.8 - a cut of road from 82
Farmersville	717.8	Turned on road to old dam past the cemetery.
Road west	718.7	Turned back at 752.3
new road	720.1 1/2	Back to old dam on 753.0 1/2
Turn W.	721.0	to old dam, (gate) 754
Turn back	721.9	Drive to river, at 754.7
back to old dam	722.8	" " " " 755.0
cut across	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
cut back - no of bluff to 62	731.1	Stewart'sville 766.9
Court House W. 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		Low 772.4
Turn to old dam	746.0	at 774.5 1/2 - 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.

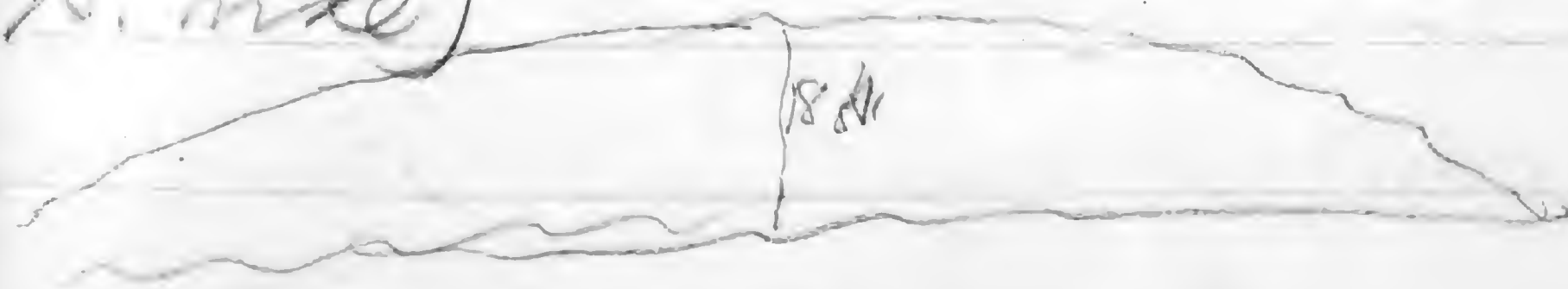


The same yellow loess with shells scattered all through, but nowhere abundant.

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, concretionary (?) 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)





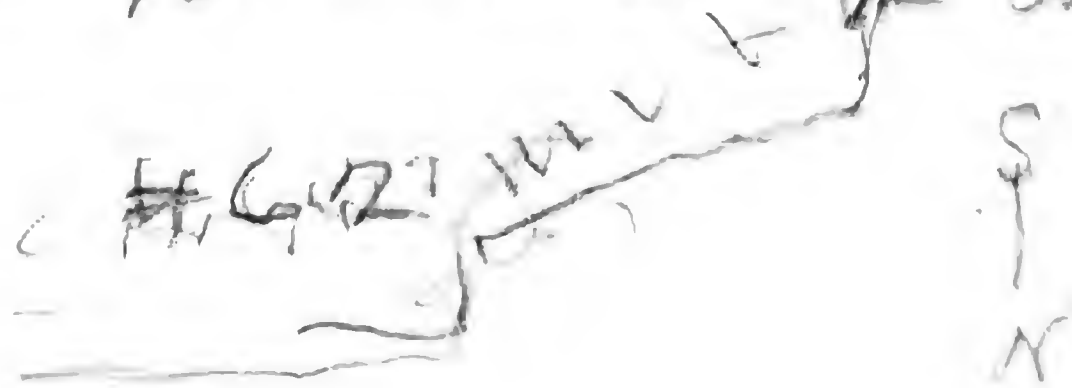
The shells are scattered all through as far as I could see. Took sample of box of clay. See shells. ✓

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

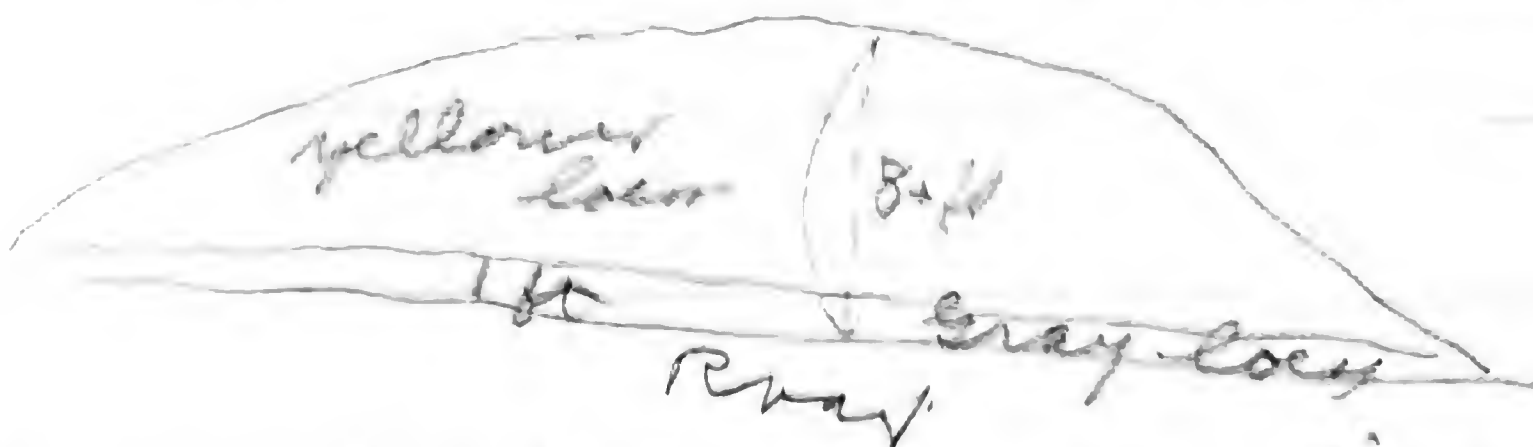
A farmer says the Walack has many large bars at low water.



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 irregularly through upper layer. Gray loess is smooth, uniform gray, with only occasional clodding of iron. The upper loess, which looks yellow on older surface, is mottled & streaked with iron.



more pronounced below.

The fossils are about equally scattered through both.

at 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 yellow loess, 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

#65 again 784  
Turn N.

Poseyville 793, 82  
Road to Stewartville

#66 801.9

(Travel road 802.2)

New Harmony City limit 802.9 1/2  
#66 804. RR 807.5 1/2  
Returns to Siffin gravel road 804.9 1/2

Drove to within 1/4 mile of Kilroy 809.9

Turner back at 810.9  
turned back again toward  
Kilroy to road which

runs to right (east)

Cut at 811.4. Turner back  
to Kilroy road & drove  
to New Harmony

Kilroy road 811.9

Siffin road (to right) 812.4

#68 - 816.4

RR - 816.6

#66 817.4

New Harm. Hotel 818.9

Drove N. towards Griffon

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

at 808.0 The bluffs were  
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 NW, 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 loam  
 becoming gray below.  
 There are scattered nodules  
 of 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

at #65 Turn at 819, 1/2

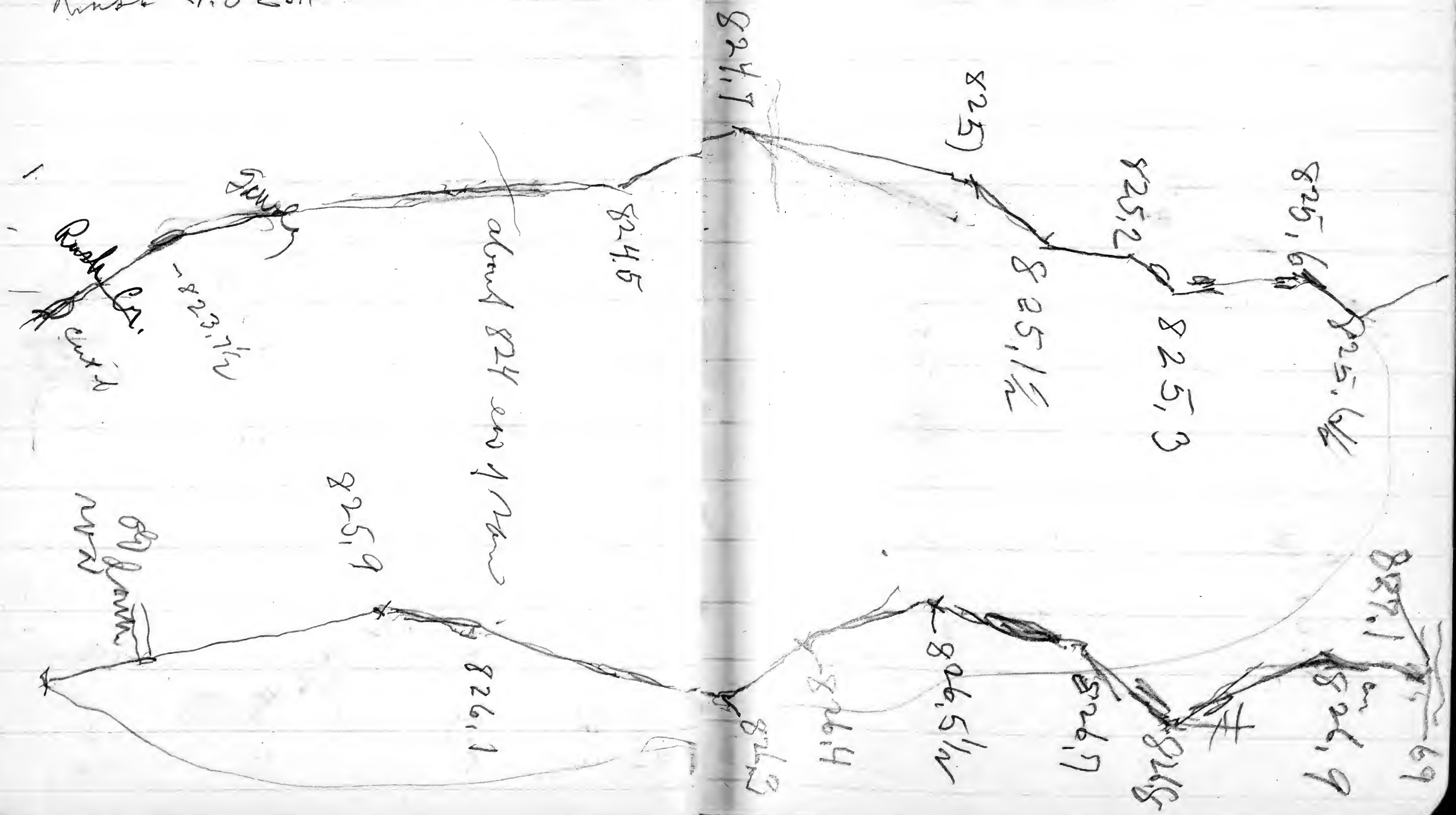
Went S. - <sup>Lower</sup> on Mt. Vernon Rd

Junction	819.8	Return to #1 near Carn.
on -	820.0 1/2	very low bluffs near 867.6
to -	820.3	Turn N. 870.3 868.1
cut	821.6	Turn W. 872.1
Back to #69	827.1	#1, turn N. 874.3
Hotel	827.8+	Crossville <sup>detour</sup> 881.7 880.7
to left -	828.-	Calvin -
Bridge	828.3 1/2	Grayville - 888.8
Crossville Jct. #1	832.5	Turn to Keensby 889.0 1/2
Carroll	835.5	Turn back 893.1
Turn to Keensby	841.9	Keensby fork (-1.6)
Turn back at	847.1	at 897.3 a cut
Back to #1	852.2	Cowling <sup>at N. H.</sup> 898.0
Carn	853.2 1/2	Keensby 903.9
Turn to Epworth	854.2	Low cut at 906.3
Turn S.	856.4	Mr. Carmel <sup>House</sup> 912.6
Epworth	858.2	E. end <sup>bridge</sup> 913.2
Turn E.	860.4	Turn on side 918.3
at low cut	860.9	Back to #64 918.6
reached back	864.6	#65 920.4
Whisper	864.5 1/2	Long cut - 922.8
		Pharm #41 924.3

See p. 143



Start at Rush cr. cut (e<sup>2</sup>) 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 lower  
 20th sample from each side & above,  
 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 Carum, 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 (?) & is smaller similar cut a little beyond.

At 910. - just before Mt. Carmel a deep pit (<sup>saw</sup> purpose?) shows very hard granular (jointed) stuff.

A low cut, about 4 ft, near where <sup>(less)</sup> road crosses RR. - Shows red stuff below, & possibly a couple of feet of gray-yellow loam (?) above. No fossils.

No bars in Wabash here except an irregular island below.

At 919-4 - there is a low cut where road runs up first low bluff. It is very sandy, - no loam 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 that  
badly overgrown. Saw only  
the bare red stuff.

at 923 - another cut -  
overgrown.

Several cuts W. 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. Very poor  
sand on road further along.

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

see p-137

Princeton #41 924.3  
Patoka 928.7  
back from  
turn N.W. 930.5  
Patoka #41 932.2  
at 933.2 1/2 - a cut  
Hagerston  
turn S.W. 938.1  
Back to #41 - 938.3 1/2  
Hagerston #56 939.0  
Lowcut 939.9,

954.5 - Rev cut  
Back to #56 941.4  
#65 - 951.4  
Back to 56+65 - 952.4  
down 955.3  
Bluffs (low) 957.8  
south of hill  
Petersburg #61 959.5  
at 960.8 1/2 big cut  
White River bridge 960.9  
Monroe City 969.7  
Vincennes -  
10.5 mi. back to room

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 zone cut 10W  
12H show red stuff above  
lower low possibly 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 cut.  
Book sample.

The loess exposure faces  
White River

Drive 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 to 6 ft high shows red stuff  
Book 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,  
✓ 9 ft. 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 fragile 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 yellowish.

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

Winds 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 fine  
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 6<sup>th</sup> - etc.



July 17, Wed, 1935

Started at 6:15 am. 34 791

State Union	982.6	Embarras River	1033.6 1/2
Back #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	Duncanville "	1048.3 1/2
Barber, Wash.	987.0	Lyons det #163	1052.0
" " "	987.2 1/2	Robinson	1054.5
Embarras Riv.	994.9	Trumble -	1059.3 -
Lawrenceville	995.9	Grayville Row	1
#1	996.2	York road	1066.9 1/2
Col. 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 to #40	1093 -
#1 -	1022.4	Martinville	1102.7 +
cut	1027.4	Casy -	1102.0
Lamarville #58	1032.1	Veray Park	1112.4
" Courthouse	1032.6	Greenup #130	1118.3
#1 - Inn N.	1032.8	Jewett RR #1	1118.9
		Woodbury	1123.7 + ob
		Montrose -	1126.4 (Lake)
		Zentopolis -	1131.8
		Effingham	1137.3
			1141.1



Drove to 1<sup>st</sup> 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 <sup>at top soil?</sup>



Best section

9 ft. of sand.

2 ft. sandy loess - Succinea

2 ft. sand.

2 ft. - fine loess

2 1/2 ft. - red stiff

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.

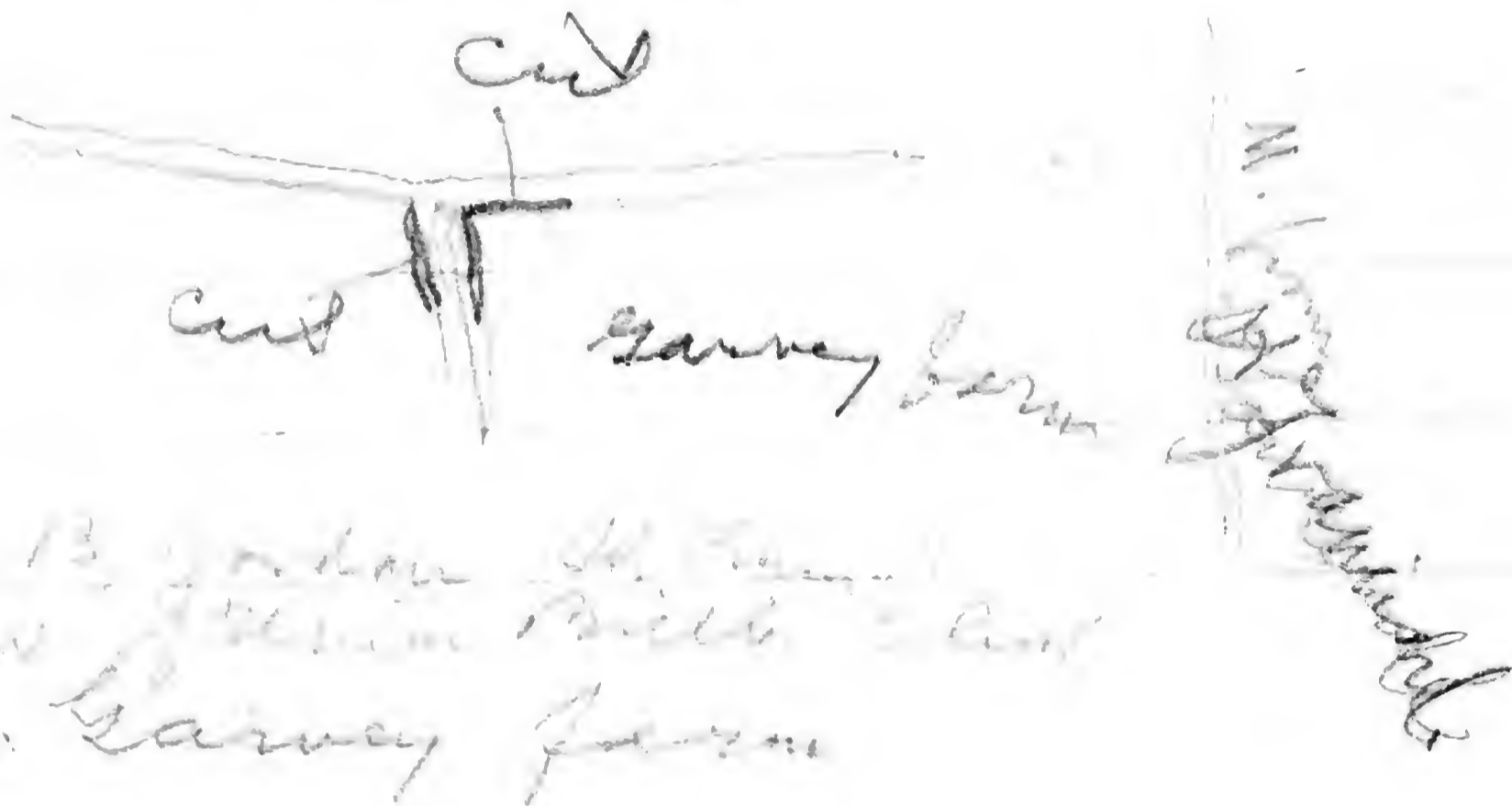
✓ Evidently two dry periods brought sand, a poor period (at this locality) brought many shells, & the upper loess represents a more moderate period.

The layers do not thin 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. NW of  
St. Francisville



On return at 1018.4 there  
is sandy gray soil to right.  
I saw a long cut, 7 or 8 ft  
deep. Could see yellow sand  
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 water.

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 lobular 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 turned

St. Francisville	Miller'sville
St. Francisville #40, see p. 149	1194.5
Offingham -	Dwarko 1197.5
Juniata #129	Velma 1200.7
#129 - 10 separate	Jaylorette 1205.3
Stewardson	Sharpshury 1211.6
Staraburg	Edinburg 1215.2
#16 Rockström	Breckinridge 1218.6
Shelbyville	Keray 1221.2
Juniata Hill - 4	Rochester 1225.5
Bara #2	Springfield #46 1232.3
	see p. 155 1232.9







E. side big cut see p. 161  
at 1305.6

Quartz crumbly lam. 5-6 ft  
Gray liness - Banded massive  
chocolate layers

Pebbly drift,

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

This is back a short distance up a trap ridge  
Front  
Edge of bluff, 1306.2

Back to 24  
1295.9 44, 2  
1296,

July 18, Thurs. 1935

Left Mason City at 5.47 am.  
35075

Mason City	1266.4	Back to Wyand	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
Pekin R.R. Sta	1295.7	Stopped at	
12 city	1296.	cut at	1375.2
at 73.6 Turn S		Return to #6	
cut at	1299.6	at Wyand	1382.1
Return to #24	1381.9	Turn W. at #6	
try cut	1385.6	Sheffield	1387.0
Excelsior Corn	1308.6	Sheffield	1390.1
W. en.	1309.1	South Gate Cr. Club	
124 #88 Corn	1310.8	C.R.C.C.	1392.3
Peoria 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
Lombard		Carbon Cliff	1432.6
Buda #88	1357.4	Alvin	1434.7
#L	1360.0	E. Moline	
Wyand	1365.3	Moline	1440.
cut. 1. 191	1366.5	Rock Island	
		Davenport - City	1444.2
		John	1447.1

Stone City - home 1504.7 1/2



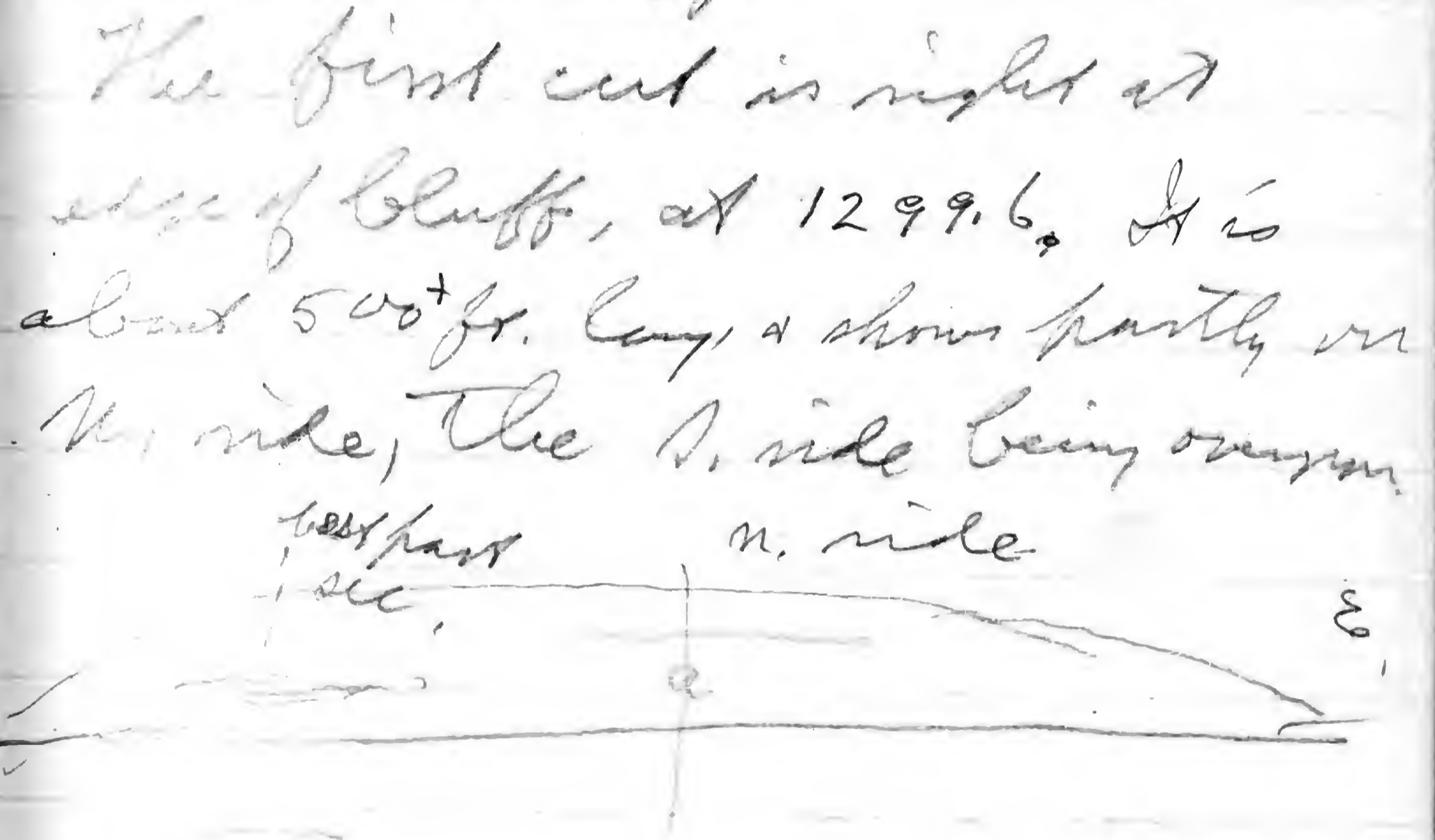
all very flat from Merouitz  
to

We stop at 1255, just N.  
of RR. on #24, beyond Green  
Valley, Ill. This is a gravel  
pit on left side road.



Wide flat to river  
Some bars in river,  
Flat on N. side of river

low<sup>er</sup> the <sup>low</sup> 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.



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

yellow loess, with fossils (see 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 little band above may be loess, - or may reddish stuff - Probable 2-4 ft., no true loess

At 1299.8-9. a big cut on S. side of stream drift, pebbly. Returns to #24 & drove north at 1305.6 There is a long & deep cut, showing the upper part of gray loess. The uppermost 5-6 ft. is a shaly 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~~ map, 156.



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

East E. Vincennes, Ind

- Angiosperm alternata
- Dicran
- Helicodiscus parallelus
- Polygonum profundum
- " multilobum
- " hirsutum
- " frutescens
- Pupilla muscivora
- Ammonium ovalis
- " ovata
- Helicium punctum

Ames

Prof. Carl J. Drake  
Trakke -  
Arkman.

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 .30 1.90  
 Supper 60 cards 30 soda 10 1.00  
 June 8 - Breakfast 55 Hotel 3 day 5.25 5.80  
 Crystal cave 2.00 cards 25 2.25  
 Piedmont - lunch - .50  
 Rapid City gas 2.05  
 Bowl - bubbler 45 entrance 25 1.40  
 Rushmore - bubbler, view 10 35  
 June 8 - State Game Lodge, supper 90  
 June 9 - " " " breakfast 60 2.60  
 Room 2.00  
 Custer, photos 45 paper 10 mtn 10 .65  
 Hot Springs gas 1.63 oil 21 1.84  
 Supper 1.00  
 Gas & oil - all around 1.49  
 Supper, Sidney 30 .30  
 June 10 - Sidney, breakfast, hotel 1.50 2.00  
 gas 50  
 lunch, soda, etc. 21  
 Lunch - Ogallala, Neb. .70  
 Gas - 1.66 oil 75 " 2.41  
 No. Plate - Gas 70 1.22  
 Lexington - paper & mtn 20 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 .60  
 June 12 - Sutton Hotel 1.50 breakfast 50 2.00  
 " Gas 1.95 oil 25 2.23  
 Toll - Omaha 70 Atlantic 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 (limited) \$ 33.40  
 Pullman - West City to Dickinson 4.75  
 - Dickinson to West City 4.75

Hotel & meals. 26.80  
 Cab & car fares .60  
 Incidentals 80  
 Dickinson breakfast June 3  
 B. & B. Walker dinner June 3  
 1.00 - supper - Dickinson - June 3  


---

 71.00

Breakfast - June 4 - 51.  
 gas 1.25 large 1.50  
 June 5 Hotel St. Charles Room 4 day 14.00  
 Breakfast 6.46  
 Breakfast - gas 1.98 oil dinner 56 apples 24 2.78

Dinner at Buddy Raoul, Medora .50  
 June 1 .82  
 Medora June 4 .82  
 Custer dinner " 162 " " 4 .82  
 Medora - gas oil 22 " 1.84  
 Breakfast - Merrill 81



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. 5<sup>th</sup> 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 Exptl.  
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. V. Jacques, Mt. Plim

Dr. Stevens

41,75  
5,00  
4,50

In report to Dr. Lewis <sup>51</sup> by <sup>25</sup> W. Shelf

Iowa

1 - Nearby land  
Only railway water remain  
40 acres should be purchased  
to reconstruct prairie

80  
90  
3200

Fencing + shelter

640  
5  
3200

2 - Distant land

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

This would cost about \$40,000  
Fencing on "Emergency" funds 4,000

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



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

3700-4300 ft. in forest (limestone)

H. B. Baker, 9/13-1931 Spearfish = 3647

No. 2 Miss. Lumber Material Co.

at Spearfish, S.D.

The Regina  
Indian Agency  
Jan

Will Rogers

W. H. Sharpe - at Regina, S.D. Schell, Minnesota

W. H. Sharpe - at Regina, S.D. J. E. Schell

W. H. Sharpe - wants paper on prairie,



