Burnet Co., Texas
Sept. 17th, 1889

Very hot day. Drifting with perspiration.

Section of the Texas Potsdam Shale beginning at the summit of a hill on the south side of Margram Creek where the East & west branches meet.

1. Summit of hill a gray, compact limestone showing fragments of Trilobites, Phyllopoda, this part extends down sharply in places. — 110 ft.

2. Changes to a more granular character, brownish in places & full of fragments of Trilobites & other fossils.
At 180 feet down a crumbling greenish sandstone layer appears that is about 10 feet thick. The limestone above extends down 200 feet where it forms its own aeriaeas.

3. Silicous limestone thin layers of sandstone interspersed.


To the south No. 7 a 200 feet thick stratum of unusual specimens of linguloid fossils etc. Ag nostia.
9-19-84.

Collecting fossils on Satan Hill & lost on the headwaters of Morgan Creek.

Found fossils in sandstone of Satan Hill (4th section).

+ in limestone at one bore of (27 kg 2). 9-20-84.

Moman Hills south of Bumer on Hamilton Creek.

Dr. Shumard (Ann. J. Sci., 22nd Ser., vae. 25, p. 213) states that at Moman Hills the
junction between the
Calciferous & Potosdan is
to be seen.

I find the cliffs of
subcrystalline, calcareo-
magnesian limestone.
The limestone extends down to the bottom of the falls below the mill and here the section is cut off by a deep pool or pool. (The limestone appears to lie nearly in a horizontal position.)

At the foot of the hard layers of sandstone across the stream.

Strike N.E. & S.W. 111.

50° to 90° S.E.

They consist almost entirely of Silurian drift, but contain numerous fragments of plant remains and are evidently of Silurian or Carboniferous age.

Following down the
the strike swings to N 35° W & the dip east
15°.

Bed of shale and sandstone & clay shale appear about 2
miles south of Manzanita the limestone
ledge from one side of the stream bed & the
sandstones the opposite
a cliff of sandstone with
an eastward dip.

The massive limestones
on the west side extend
westward to the Colorado
& form the principal
mass of rock at Marble
Falls. Cherty beds then sandstones rest on them.
9-23-53

Section of pedestal on Parkdale Mt., N.W. end.

At the base palstic on shales, bluish green, 5'-N. 45° E., 10'-S. 100° S. E.

See p. 9 for story of these underlying beds.

1) Coarse, marine bedded redish-brown sandstone.

2) Fine grained, thinning bedded sandstone, redish & grayish brown, holds Longiphis spinosa. 65 ft.

3) Imbricate débris are one

CM 9-23-53 (fossil fragments) 12
4. Reddish buff, soft sandstone. Abolesite

5. Alternating layers of sandstone. Time fine
March accent on
down time. Fragments
of fossils.

6. Massive bedded gray
hand l-
fossils abundant.

7. Coarse grained greenish
Horm area.
9-24-84

The docks underlying the Potsdam 1/2 mi. S. of section
SE ¼ E & W. 1/2 to 40. 40° South.

The Potsdam
immediately underlying
strike NW & S. dip 10° E

The Potsdam is made
up of yellowish brown, dark,
angularly shales, sand-
shales, gray + dark, fine-
grained sandstone,
a belt of gray, compact
dolomite 25 to 35 feet
thick.

This rock appears to equal
the Grand Canyon Grant in
position + in a rough
way in character, or
being changed more
by metamorphism.

Thickman mine
Trace it along an outcrop of 1/2 mile.

It extends from the base of Pachpadale Mt. to a crossing Honey Creek joining nearly the same strike of dip.

Coming up Honey and a road on the east side crosses to the west feature of the road coming from Plano to Plano. At the crossing of the town the strike of the Pre-Potdam beds is E. W. with 15° N.

A little below the strike runs to the N. S. but that is in the shale which vary one more or less distorted locally from their original.
9-28-84

Down the San Saba 37 miles. Collected a lot of Carboniferous fossils near the mouth of Brady's creek. North side of San Saba River. West side of creek. Stopped at Apache York's at night on Cherokee Creek.

9-29-84

Collected a lot of Carboniferous fossils on the Colorado Antilocapra. Nautilius, etc., etc. 1/2 Mile above the town of Reed. Pan Sabu etc.
9-25-54,

Heavy rain.

Drove to Glendo.

noticed Pre-Potsdam cherts, jadas, lomami, all the way across Honey creek valley and also to the mouth on the road to Glendo.

9-26-54 Creek

Drove to Cold Brook
Canan. Collected a lot of Potsdam fossils from the alher beds after growth.

9-27-54

From Cold Brook Canan drove to the San Saba Valley. McGeehunch Co. then down the San Saba River 14 miles.
9-21-84

The Potsdam sandstone to the north of Packeraddle Mountain an deep fault rests on massive bed of dark iron grey shale.

St N 250° E dip 15° 20 E.

The Potsdam sandstone lies conformably on the dark shales and shales.

Marine mammal beds of quartzite with the shales.

Layers of sandstone and shales merge into the Potsdam Fossils.
10-2-84.

Section an area on west side of Honey creek valley, beginning 1/4 mi. N. of road running from Moran to Plans.

The Pre-Potsdam strata consist of layers of shale (talcose) quartz, hard sandstone, with more or less granite in veins from 2 to 3 feet. Strike of beds S. E. W. with 15°.

The largest layers of the Potsdam have made pebbles and coarse red clay, and are shaly conglomerates. They dip 8 to 10° S. E. W.

1. Coarse sandstone reddish to dark buff, passing gradually into
   thinner, reddish brown clays.
2. Mix a less calcareous sand mixed with five parts (fossil fragments) 5.0.

3. Alternating layers of sand and calcareous sand 16.0

4. Introduce limestone between clean shale of an older full of fragments 190

5. Coarse greenshell from sand 20

8. Gray + greenish darker than the vein fossiliferous material terminating above
in massive layers,
(same or top band
of Pachysaddle section) 95

7. Hard compact
rock, dark, orchid-col
colored

8. Terminal crystal line
with fragments of

9. Hard, compact, like 7, passing gradually
into a massive reddish
hard calciferous limestone.

10. Cherty calciferous
weathered, rough

240

23°10' East of R.I.O.
This is a thick felt. Considerable chart matter occurs in one face as irregular, compact, etc. and then for 3.65 ft. it is gray, compact, and semi-crystalline in massive layers 6 to 2 ft. thick. Weather rough. Color dark. On 3.65 feet considerable chart matter again appears.

The section contains a hard birefringent drab, gray, with intercalated chart layers. 540 feet. Some very major layers at this point are a mixture carrying mineral streaks.
and then a massive bed of l-66.8

average N, 60° W
10° 10'-15'

10') A massive sand of gray con tact
60 feet above a prominent point on
the ridge and getting
Honey Creek where
it goes thru into the
cave 60 feet
on the top found
Carboniferous fossils
Product. Remains of
P. Pratticinae. P. Nebacuy
Stefan cinestrus.
about 20 feet of l.
After the valley of
Money Creek on the
Curt is reached
at the top of 9. just below the massive bell of 10, possibly marine fossils.

A fault line cuts off the section above 287 feet up in the Carboniferous.

The underlying slabs Graham affirms along the line of the entire ridge east in the valley.
Oct 29/96

Section of Agaphtian—
Strata on east face
of Franklin Mt. 8m N.
of El Paso—Texas.

Bore—Reddish granite?

1. Agglomerated clay
fine at base firm
up with light calcite
quartzite in cores
16’ 24’ thick (60” x 4”)

2. Reddish, sandy shale
in beds interbedded black
with occasional beds
1’ 15’ thick @ 50’
60’ N & S, 10’ x 13’ x 15’

3. Darker yellow stone
thin reddish streaks
on bottom side green

1’ 8’ thick (about 20’

[Handwritten notes and drawings, possibly related to geological observations or records.]
\[ \frac{150}{12} \quad \frac{60}{60} \]
\[ \frac{7.5}{360} \quad \frac{360}{36} \]
\[ \frac{395}{348} \]
Passes gradually in to a
mean white "white" that
in its weather half an
hour exposure to the
weather but a keen
in cliffs gives a nearly
white light gray band
in the mountainside.

f. Barythorlly & platy
beds - similar to (d) -

6085.5262

395

350

g. Interbedded rhyolitic-
like scoriaceous with
pebbles (1/4 - 12" - inchility)
of v.f. rhyolitic like
rock & slate clod, (e) 201 ft

h. Reddish brown, fine
conglomerate passing
into reddish brown &
greyish "tite" rock

2035
1] Some 3 g. with occasional pebbles in reddish sandy shale
(215) 5942
1265 3306

2] Deep gray comminuted
gyres: with layers of gray,
calcareous nodules carrying
annelid fragments in great abundance.

[folded section of lobe
of 2 + cannot designate
as tip of 1st to the
S. end of the Franklin
range. The uncalcareous
at the base of it is filled
illustrated by local
irregularities in its upper
surface not still better
by the presence of Cambrian beds between
11 and 2—near the S.E.
end of the range—
The summit of the Algonkian is a concave
trough 10 mi.
North but it is eroded
and the lowest Cambrian
beds are denuded in
of the hollies and
about the knobble of
the Algonkian - the Canisteo
surface.

Paleozoic section

1. Quartzites, + indurated
de and gray shales
in beds: 1 1/8 thick.
The basal bed is
formed of coarse grain
of granite like calcite
and resembles the cement
beneath it:

Traces of Lingula-like
Phyoliths were found
15 feet above the floor
and on the serpar whose fine-grained quartzitic rock afforded fine clays, a
accumulation of the fluorspar of the Yonkers and Flaxen or "Deer Isle"
state type. Ample evidence occurs, on the alpine, that the vertical + horizontal
in many of the layers are felt the quaternary long in the age. The broken, crushed +
slightly calcareous, contained to increase into the arenaceous "gray + coarse sand"
the dominion.
19. Reclina

Caloreana 2nd
Tosco up to lucina
dioline well filled
with Amid glasses
at 240 foot room

Aphileten

Asthma

Cinematics

These stand up
for 170 feet with
the rock charges
become harder of a
reddish hue

Some bands

At (54°) + 46 0 boarded
chart have shown
at 5 0 0 feet

Ecculiacphilea

Outcomes

Endoe Aphileten
The Aphelion stood up to the base of a massive felled Annacumin that came near in less cheer.

No 2

3/5 ab. 290 nh

Aphelion

Achaeosaphthisa

A. nuigerae

A. hydria

A. philel - 290

Runs 1 to 715 feet.

Less than uniform androids; Annacumin dualite - d 5 g

Knife 7/5 kfr thick.
At 8:30 the beds at 197 were practically deserted and the anchor was given up.

At 9:00 a physician thickly bedded in corn in a conveyance resembling a light shell fired with check 20 feet of - guests 6 to 8 of the crew.

Entenmane 10:35
10% 30° S. W.

3@ gray, drab, tough weather, averaging 15 - Layers 12 -
35. Coarse cozy gray
dark lead colored
body line in very
massive shells
body matter weathered
with scoured
reticulate meshes

Large canal-like
Santolla childata

Large receptacle
in lower 10 feet

At from 50 to 100 feet
Fusulinian fauna
Rh. incenssson
Orthi - 3 in
Shephtma
Orthoceras
Endoceras
The frame of the
feet is essentially
essentially

A little bit from
and here are

Another frame
Enclosures

Macuine a la Magique

Kerr

Hare

The Black River of
Newmont's

The Army of
Llemorsh
4. Conglomerate formed of fragments of the subjacent rocks \( \overline{\text{36-7}} \) angular and \( \overline{\text{rolled}} \).

5. Dark, lead-colored lignite with abundant coal and some of the slates.

The highest point of this range is \( \overline{\text{Mark \# 5}} \).
Huge isn't entirely unbroken from Lake Butter and limited time it was not studied in detail. No traces of the canals, rate 4, were found on the lower slope at the lower slopes of the first slope toward the river above the river bed.
Summary El Paso
Franklin Range

Saffron Saffron

4 2 oz. 90

Raphitana, etc.

3 2 fl. Oz. 250

Aphidæ & one etc.

2 795

Cænus Cænus.

2 310

Alga Alga.

1 2300.