

Dr Dawson,

Dear Doctor -

Dr. G. W. Mason, a thorough young physician of Bloomington Ill, has watched that coal shaft, & informs me that he has found ice scratched pebbles, & also granite pebbles (necessarily ~~from the north~~ ^{from the north} in that region) & well below the forest bed. Below the timber the following strata are observed from above downward

— Timber stratum —

1. — "Black loam"
2. — "peaty or boggy layer"
3. — "Hard pan"
4. — Sand & blue clay mixed.
5. — Blue clay containing ice-scratch stones.
6. — A "loam earth resembling rotten wood".
7. — Blue clay.

No trace of animal life was found, except old silurian fossils in the boulders. The timber lay apparently where it grew. A stump was dug out in situ, whose roots extended 2 ft. Workmen said the stump & other pieces of wood "had an inclination to the south!"

The finding of supposed bits of shell
in boulder clay ~~in~~ near Chicago turned
out a mistake. The careful search
for distons ^{in our clay} found none.

Please present my thanks to your
son for his article on the western drift.

Yours truly

Last week
P. S. ^{E. Andrews,} On a surgical journey by rail
over the Wisconsin ^{N. W. of Milwaukee} moraine, I carried
my aneroid & noticed numerous points
of stratification in the cuttings,
hundreds of feet above L. Mich.
E. A.

P. S. D. Some years ago at Harvard junction ~~on~~
on the north line of Illinois & among the gravel hills of the
"Wisconsin ^{Illinois} moraine" I saw black muck being
hoisted up by well diggers in an unfinished well. I learned
that they often struck that muck layer in digging wells
in that region. It was near the ~~lower~~ lower
part of ~~the hill~~ a hill slope, and the muck was curiously
interstratified with contorted layers of blue clay, as if the weight
of the hill had pressed the clay & muck laterally by its weight
thence. I found in the clay a greenstone pebble, ~~which~~
evidently of northern origin. At the time I
tried to persuade ~~the~~ myself that the pebble had got jammed into the
clay from the gravel above, though it was firmly surrounded with the
clay, & showed no strain of the upper deposit. ~~I~~ I had no time to verify
the matter, having only a few minutes during a R.R. dinner stop.
On the whole, I now think that greenstone
pebble belonged below the black muck,
just as in Bloomington.

Here is the section.



- A. Modern swamp.
- B. B. B. { Stratum of stony red boulder clay, top layer
of the "moraine" hills at that place,
about 4 feet thick generally.
- C. Boulder Drift gravel, probably stratified,
but I forget, I saw it at several
excavations. It has ~~sharp line of separation~~ ^{sharp line of separation}
from the red clay B.
- D. Black muck & blue clay struck in digging
the well.
- W. The ~~the~~ well.

E. A.