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History of Wisconsin geology

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F.T. Thwaites

Notes taken by G.F. Hanson

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HISTORY OF WISCONSIN GEOLOGY

Notes on talk by F. T. Thwaites to Geology Club, Nov. 11, 1954

(Taken by G.F. Hanson)

Title of talk misrepresented - it is the talk he wanted to give at the Geology Club banquet but didn't as C.K. Leith was present. C.K. has a violent temper and at his age might have suffered a stroke.

Born in 3rd block on Langdon Street. Was there when first Science Hall burned down but was too young to go to the fire. Some say Frank Lloyd Wright had hand in designing present building which accounts for some of its peculiarities.

Became interested in engineering. Two schools of thought, (1) if you learn to do one thing well it will equip you to do other things well, (2) learn a lot about everything and nothing much about anything - this is the I.L.S. philosophy also apparently supported by his father. (Made cracks at U.W. Committee appointed to study aims of U.W. and decided to teach "culture" not fit people for jobs.)

F.T.T. took "hill" work as well as engineering. Clashed with Len Smith who taught engineering. He didn't like F.T.T. and F.T.T. reciprocated.

Got job in Kansas studying groundwater - mostly recording well levels. His chief was Ray Owen who put him through terrific hazing. Got interested in geology there through well work as well as through museum here. Got sick of engineering and hazing so took up geology.

Department was on second floor. Room 119 was Physics. Leith, Hobbs and Fenneman were the faculty. Leith had been private secretary to Van Hise - line of royal succession - private secretary became chairman of the Department and kept it for life. Leith's private secretary was Demming.

Hobbs was colorful character with red hair and red beard. Was interested in all sorts of things - politics and the Russian Revolution. Didn't know much about mineralogy but F.T.T. learned most from him. Hobbs went to Michigan and died at age of 88 several months ago.

Fenneman - some of the audience have suffered with his books, F.T.T. suffered with his lectures. Never knew if he was getting an A or F in the course - guesses he got A but threw his grade cards away several years ago.

Martin - came from Cornell. Married younger sister of his major professor (Tarr). Tarr died shortly - Martin didn't get his job - got a divorce.

Blackwelder - Easiest to get along with.

Steidtman - had many ideas but didn't stick with them. Taught mineralogy and got along well with students.

Hobbs was replaced by Winchell. Nice to work with but kept his students out of field work - probably because U.W. did not give credit for field work done for pay.

Physiography under Fenneman - no labs or assistants etc. Five lectures a week at noon - wasn't science unless held during noon hour. Started Geol. 4 which became Geogr. 1. Would limit his classes by asking candidates if they had had high school physics and chemistry - if not they were out.

In 1906 F.T.T. was a senior. Geology club was founded and he was charter member. Serious, sober group with object to teach field experience by exchanging ideas.

Leith got summer jobs for students prospecting for iron, nickel, cobalt, etc. in Canada - never found anything but a small silver vein. F.T.T. worked on Mayville ores - Leith thought they might dip too steeply for mining also thought Lake Superior ores were finished and supply would come from oolitic ores. F.T.T. determined dip and strike of beds but ore was no good anyway.

Worked in Cobalt area plane-tabling C.K.'s little silver vein. Instructions were to use pacing for distance but F.T.T. used tape anyway. No silver - things busted up and he was sent looking for iron ore with a dip-needle. Early needles had no levels and were no good. After five weeks his helper got sick and had to be taken out. F.T.T. had no help and used all his money for transportation of sick man. He was told to get all equipment out but couldn't without help. Got a ticket to Sudbury and met man with beard - one of C.K.'s men on train. Latter said he would recover equipment but country was too tough and he couldn't. Lot of equipment left including personal belongings of F.T.T. F.T.T. blames self as he was chief of party. (Many morals of captains of ships etc.) From then he got in dutch with C.K. who considered him irresponsible.

Went on to graduate work. Shifted from sedimentation to field work. Got job with Alden (U.S.G.S.) who was a gentlemen. Turned down job as instructor in mineralogy at Brown because he enjoyed work with Alden too well. This was a critical decision. Work done with one horse as Alden had money to pay for it. (Stories of difficulties of tying horses up at outcrops.)

Got Master's degree and told by C.K. and Blackwelder that he was unfit to teach due to the Canadian episode and also as he had ideas of his own.

Next year worked for Weidmann. Nice man - had peculiar ideas on geology and was color blind. Used bicycles and at crossroads Weidmann would say "Off we go east" and then turn west. Latter part of summer they stopped staying in hotels etc. - quarters poor and food bad. Camped out at cost of 16¢ per man. Weidmann collected potatoes from farmers' fields, fished, hunted, etc. When he got back Hotchkiss kept him on to work on geologic map of state showing roads. Hotchkiss more interested in roads than geology. Hotch also interested in politics but clashed with professional politicians, (defined as lawyers who could not make a go of practice). Also worked on models of state which hang by library doors. Came in contact with Lorenz who was a colorful character and was fired (Lorenz) because he wanted his helpers to work 24 hours at a stretch as he did himself. F.T.T. did not venture to express any disagreements which was lucky as Lorenz tried to kill someone who disagreed with him later.

1909 started the Richland Center Quad but got sick. One of his cousins had a "buggy-aut" which was hybrid cross between a buggy and an automobile with worst traits of each. Had two cylinder, two cycle, air-cooled motor that got so hot it lit up the road. Used it in the hope he would get away from horses as it would at any rate stand still.

Walt Moore says this
canceled argument
about color of hills
+ their correlation

1910 - Worked on Lake Superior sandstone under Hotchkiss. Old motor boat did some 20 miles per gallon at 7 m.p.h. at 25¢ per day - contrast with new boat he was in later (with Phil Oetking) that runs about $\frac{1}{2}$ hour on tank of gas.

Became appointed curator of museum. Glorified office boy. No one could make up minds if the museum was going to be a show place, teaching adjunct or dumping grounds for individual collections. (People used only their own collections for teaching.) Many troubles - no finances - no typewriter or clerical help, etc. Given large collection of well samples and became interested in subsurface.

Went out in field with Ulrich and Hotchkiss. Hotch regarded Ulrich as a genius which he was - at telling stories. Ulrich had unique methods and was very positive - used hammer for hand level. Travelled in old Reo and Ulrich stopped at every saloon to ask way to next town. Hotels poor, trip tough, but Ulrich inspired them to do a great deal of work. Started subsurface studies. Got salary of \$25.00 per month for well work.

1916 got job as instructor in geology and geography. Twenhofel replaced Blackwelder. Started Sparta-Tomah quadrangle. First survey using car extensively. Twen would seldom use it and would walk 4 miles into town for lunch. Ulrich and Twen did not agree on interpretation and quadrangle was never published.

World War I - was underweight for service. Started mapping (course?) after the war.

Started course in glacial geology.

Converted Model T with sleeping crib on it placed sideways and known as the "cage".

1922 worked on oil possibilities in Door County - none.

1923 - Went on trip west with students. Got soap in his coffee as cups were not rinsed.

1924 - Returned to western Wisconsin. Had a regrettable attitude - he did not agree with Ulrich therefore he was fired from surface work.

1925 - Serious hernia brought about by heavy lifting in Canada and boat in Lake Superior. Started glacial work. Was married and reformed - couldn't fill pockets with lunch and miscellany - had to carry a brief case.

1926-27 - Leith returned - fired F.T.T. but he was reprieved by Ernie Bean.

1929 - Glacial work terminated. Bean lost job with Highway Commission. F.T.T. took over Physiography from Fenneman. Mead responsible (very brilliant man).

1932 - Summer job in New York. Sanitary engineering - learned a lot.

1934 - Resumed work on N.E. Wis.

1935 - Kansas Geological Society Field Conference. Great field trip through state at 60 m.p.h. Inexperienced road patrol sped up immediately on leaving towns - last of convoy would "crack-the-whip" and have to go through town at 60 m.p.h.

1938 - Mother died - left Turville home by fairgrounds. (Moved to Roby Road). Ill with bronchitis for a couple of months.

1943 - N.E. Wisconsin report completed. Air photography becoming available due to Hank Wallace trying to find illicit corn patches. Opened new horizons.

1948 - "Operation Shoe-String" started with Ken Bertram (i.e. Pleistocene of Door Peninsula). Report now almost ready.

Still working on his geomorphology.

Wants to revise, or do another paper, on the Lake Superior sandstones.

Many second generation students in his classes so he couldn't have been too bad a teacher. Hopes he has lived down the prophecy that he "wasn't fit to teach."

Hopes to do more useful work before he goes to "that mysterious land from which those who visit it never return."