Article Title: Surveying in Western Nebraska: The 1883 Journal of Harley Nettleton

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Article Summary: Harley Nettleton worked as a chainman on one of two crews sent out to survey the "unorganized territory" in Western Nebraska in 1883. The article contains excerpts from Nettleton's original journal, granting the reader insight into the experiences of this young man and the rest of the crew.

Cataloging Information:


Place Names: Paw Paw, Illinois
Nebraska Place Names: Plattsmouth, Sidney, Greenwood, Pumpkinseed Station, Camp Clarke, Snake Creek, White River, Robinson, Niobrara River, Fort Robinson, Circle Bar Ranch, Indian Creek, Sioux County, Running Water Stage station, White Clay, Hat Creek, Benedict, Lockridge TWP, York

Photographs / Images: Harley Nettleton; Map of Western Nebraska in 1883; George W Fairfield; Insert article and photograph about the Common Corner of Nebraska and South Dakota on the Wyoming Line
SURVEYING IN WESTERN NEBRASKA:
THE 1883 JOURNAL OF HARLEY NETTLETON

Edited by Ruth Y. Wetmore

Public land surveys form an important, vigorous, but little-known chapter in the history of the western states. After a new territory was created by Congress and its government installed, surveys were essential to enable orderly settlement and eventual transfer of title in the public lands to states, railroads, and individuals. Prior to 1910 public land surveys were conducted under contract between the territorial or state surveyor general and professional surveyors designated as deputies.

The Fort Laramie Treaty of 1868 had set aside most of northwestern Nebraska as a hunting ground for the Sioux, and the Oglala and Brule Agencies were relocated there in 1872-73. However, this arrangement proved shortlived when gold seekers began to pour into the nearby Black Hills after 1874. Crazy Horse was killed at Fort Robinson in 1877. By 1878 the Sioux had been moved from their Nebraska agencies to reservations in South Dakota.

The removal of the Indians left a vast, mostly unoccupied tract of some 2,055 square miles north of Cheyenne County and west of Holt County that was known officially as "unorganized territory." Eventually it would be divided into sixteen counties. Although a number of cattle ranches were operating in the region by the early 1880s, the garrisons at Forts Robinson and Niobrara were the only settlements of any size.

In September 1882 George W. Fair-
field, a U.S. deputy surveyor, was awarded a contract to survey or subdivide twenty-three townships in what is now Sioux County in northwestern Nebraska. The survey began in May 1883. Fairfield’s party consisted mostly of men from Plattsmouth, Nebraska. Harley Nettleton, who came from Lee County, Illinois, was an exception. Whatever his reasons for wanting to survey in Nebraska, it was not an impulsive decision. He purchased W. M. Gillespie’s 1882 Treatise on Land-Surveying and obtained lists of surveyors’ names from the surveyors general in Nebraska and the Dakota Territory. His uncle, Daniel McClure Nettleton, lived on a homestead near Fairfield in Clay County, Nebraska, and knew either the Nebraska Surveyor General or George Fairfield. A few months after his twenty-first birthday, Harley Nettleton left the family farm in Paw Paw, Illinois, and arrived in Plattsmouth seeking work on a surveying party.

The lure of western adventure must have caused keen competition for such positions. Harley wrote that Fairfield told him “there was about 150 who wanted to go out west with him, and as he only wanted 8 or 9 he did not think there was much chance for me.” Undiscouraged, Harley found work around Plattsmouth. His persistence paid off, and six weeks later he was hired as a chainman.

A survey crew generally consisted of a compassman, a flagman, two chainmen, and a moundman. Fairfield’s survey party consisted of two full crews, a person responsible for writing field notes, two cooks, and two teamsters. The signatures of ten crewmen and their positions appear in the 1883 survey field book, and eight more persons are named in the journal and Nettleton family papers.

While the journal does not describe the activities of a typical day’s fieldwork, it does show some general patterns. The day started around 6:00 A.M. with a breakfast of biscuit, bacon, and coffee. The end of the work day varied from mid-afternoon to dark. The mid-day meal was generally taken to where the crews were working, but sometimes they had nothing to eat until evening. Food consisted of beans, rice, salt pork or bacon, biscuits, and coffee. Harley Nettleton later told family members that he lost his taste for biscuits after this survey. Fish and wild game provided some variety to this diet, along with fresh eggs and vegetables purchased at ranches along the way. Several of the party became sick as a result of the alkali water in western Nebraska.

Survey crews traveled on foot, and were supposed to cover between twenty and twenty-five miles per day, regardless of bad weather, sickness, or rough country. Exterior township and range lines were established by use of a solar compass, and interior township lines could be determined by a magnetic compass or transit. Distances along the line of sight between the compassman and flagman were measured by a pair of chainmen, using a calibrated 66-foot chain of 100 links. The moundman was responsible for setting locational markers (monuments) at specified intervals. Since much of this survey was done in grasslands where there were few trees to mark, stones were notched or incised with township, section, and quarter-section designations. Earth mounds 2.5 feet high and 4.5 feet at the base were built beside each stone to show its location. Descriptions of these corner monuments and the location of the earth pits and mounds in relation to the marker were recorded in the field notes.

Harley Nettleton’s original journal is in the possession of his grandson, James W. Shrigley, who lives in Illinois. Only that portion relating to the survey appears here. Original spelling and abbreviations have been retained.

**The Journal**

*Monday, May 14*

Cloudy and cold. Got up at five o’clock this morning and got “Nell” and “Bird” curried and harnessed before the rest of the folks got up. After breakfast Mrs. Wiles told me to go down and fill my pockets with apples. Mr. Wiles took me to town [Plattsmouth] and on the way paid me five (5) dollars for what work I have done there. Got in town about half past seven. Took the train about half past eight and arrived at Omaha about ten o’clock and staid until about twelve, when we took the train for Sidney. There is a gang of about thirteen of us. They have a good deal of whiskey along, and some of them are pretty well set up.

*Tuesday, May 15*

Arrived at Sidney about eight o’clock this morning. Saw several antelope along the track this morning. Got breakfast about ten o’clock this morning in camp. Had hot biscuit, bacon, and coffee. Got me a pair of blankets, a revolver, and some cartridges. Had the
blankets, cartridges and holster charged to Fairfield, amounting to $8.15. The boys made so much racket, did not sleep much last night. Had my shoes half soled for a dollar and a quarter.

**Wednesday, May 16**

Got up about five o’clock this morning and after breakfast we broke up camp, packed up the wagons, and started across the prairie, northward. Walked about fourteen miles to a water hole and arrived about two o’clock and camped for the night. Saw four ox rigs go by this afternoon, they were each composed of two large wagons hitched together and drawn by from six to eight yoke of oxen.

**Thursday, May 17**

Cloudy and rainy. We broke camp about eight o’clock this morning. Soon after we got started it commenced raining. We went about five miles, when we stopped at a sand draw and camped. The boys killed three ducks. Raining and blowing pretty hard tonight.

**Friday, May 18**

Cold, raining and windy. We have not any wood to get breakfast with, this morning, and it is raining most to hard if we had. I was rather sick last night. Our bed clothes got all wet last night. Three of the boys started out for Greenwood, about noon, and four of the boys took a team of mules and went after some wood; they got back about four o’clock and got several sticks of wood. It has hardly stopped raining for eighty-six hours. One of the boys that went after wood, shot at an antelope, but missed it.

**Saturday, May 19**

Cloudy this forenoon. Clear this afternoon. Rained a little last night. Broke camp about one o’clock this afternoon and traveled about twelve miles. Cold tonight.

**Sunday, May 20**

Clear. Broke camp about seven o’clock this morning. It was so cold, did not sleep very good last night. Passed the stage Pumpkinseed station about eleven o’clock and took a bite up in the sand hills. We arrived at Camp Clarke about three o’clock and I wrote a card to Ma, and while we were in the post office the teams that were coming across the bottoms, got stuck and we went out and worked for about two or three hours to get them out. Had to unload one wagon, and dig both of them out several times. Bought me a slick for three dollars and a pair of blankets for two and a half dollars tonight. Sol Pitcher went out on the line this evening and shot an antelope, the first one on the trip.

**Thursday, May 24**

Cold and foggy a short time this morning. We started out on the line this morning and about ten o’clock there was a cold shower came up and we were all in our shirt-sleeves. Billy Sprague brought our dinner out in the field. We discovered about noon that the township we commenced on had been surveyed, so we came back to camp about four o’clock. Niles went down after Gould, and Mart yesterday afternoon and got back with them and the rest of the goods about three o’clock this afternoon.

**Friday, May 25**

Cloudy and rainy. Mack’s gang went out on the line today, and the rest of us moved the camp up the creek about six miles at the foot of a large sand butte. About four o’clock Mr. Fairfield came in camp and told us to hitch up and take bedding and victuals over to the rest of the boys. So we started and came across the boys about six miles south,
Western Nebraska in 1883

Fairfield survey area
Present-day localities

Bartlett Richards's Upper 33 Ranch
Bartlett Richards's Lower 33 Ranch
Running Water
Cliffords Ranch
Hughes Ranch
Halfway Hollow
Snake Creek
Alliance

Red Willow
Camp Clarke
Bridgeport
Pumpkin Creek
Greenwood
Water Holes

Sidney

Fairfield survey area
Present-day localities

Bartlett Richards's Ranch

Wind Springs
and then went about four miles farther, to Wind Springs and camped for the night. The boys were about fagged out, not having anything to eat since morning.

**Saturday, May 26**

Clear, cold and windy. Started out on the line this morning after eating a breakfast of fried dough and bacon. Well we run all day, until about five o'clock, without anything to eat and were about played out when we got to camp.

**Sunday, May 27**

Clear this forenoon. Sent a letter to Cora [Harley’s sister] this afternoon. Leland took it down to Snake Creek. Fairfield, Sol and I went over a few miles northwest and found a section corner on the township line. While we were out there came up quite a heavy shower and we got pretty wet. Mac shot an antelope from camp this morning; and Will Hagedorn shot another this forenoon.

**Monday, May 28**

Cloudy, had a shower a little after noon. We started out on the line: commenced at the south line of Twp 26 R. 54 W. took a line three miles north. The township has been surveyed so we just took one row of sections to the north line of the township, and camped for the night. The teams went back to our old camp after the rest of the things. The boys had their beards trimmed tonight. I and Chess went out after antelope this evening, but could not get up near enough for a shot.

**Tuesday, May 29**

Rained this forenoon and last night; also had a regular snow storm. The rest of our boys came from the other camp about eleven o'clock this forenoon. Had dinner about two o'clock and then broke camp and run six miles due north and then camped for the night. Pretty cold tonight. This township [T27N R54W] has been surveyed also.

**Wednesday, May 30**

Clear and cold. Froze ice last night. We started out on the line this morning from the south line of Twp 28, R. 54 W. Run three miles north, then one mile west, then one-half mile south and then caticornered around to camp. We passed by one good quarter-section Twp southeast 1/4 of Sec. 6 T 28 N. R 54 W. Wrote a letter to Jo Wiles this afternoon. Got to camp about two o'clock and did not go out after dinner.

**Thursday, May 31**

Clear and warm. Commenced tracing line, from three miles from the south and one mile from the east, and run north running three miles to the Niobrara River, and there took dinner. After dinner we traced north one mile to the north side of the township, and closed on the seventh standard parallel. Had to wade the creek going north. After we found the corner on the standard, we run three or four miles west, and had to wade the river five or six times. Camped on the river. Leland went up to Robinson today and expect he will bring the mail. The boys were fishing tonight and caught several small fish.

**Friday, June 1**

Cloudy. Rained this afternoon. Mac’s gang traced a line, three miles west and twelve miles north. We came across, took dinner about halfway. My head ached pretty bad all day yesterday, and this forenoon but feels a little better to night. We came down and camped on White River. Had quite a hard time getting down to the river, off from the bluffs. Built a large fire and dried our clothes, and cooked some beans tonight.

**Saturday, June 2**

Clear. Clouded up and rained a little about five o’clock. Started out on the line this morning. Commenced at the township corner, run west one mile, and came out over four chains north of the section corner, then run north one mile, and came in about four chains from where the other gang came out. As this was not close enough to suit Fairfield, he went back to one mile west of the town[ship] line and run west two miles, and then came to camp for dinner. After dinner, we traced the line three miles farther, to the southwest of the township. Mr. Leland came back and brought two letters and three weeks papers from Robinson.

**Sunday, June 3**

Foggy this morning. Cleared up this forenoon. Cloudy this afternoon. Wrote a letter to Ma this forenoon, and read the papers about all the rest of the day.

**Monday, June 4**

Clear and warm. Run four miles north and one mile west and four miles south. Got in camp about half-past three and took a nap this afternoon. Saw a Jack rabbit this forenoon.

**Tuesday, June 5**

Cloudy, cold and windy this morning. The owner of the ranch, with quite a herd of ponies, came up this morning. We started out about nine o’clock this forenoon and run around a section before dinner. After dinner, we run west three miles, to the township line, putting in quarter corners in the south. Camped at the southwest corner of the township. Dutch Bill Hagedorn shot an antelope to night. Mr. Fairfield bought a pony up at the old ranch, just before we started.

**Wednesday, June 6**

Clear and warm. Was quite cold last night; froze ice. We run due north five miles between range 55 and 56. Run a mile west two times, and from the fifth mile north run one mile east, two miles south, two miles west and two one-half M south, and then came to camp, arrived at camp about five o’clock. At the fifth mile north, we set a large corner stone and all cut our names on it. We saw Rawhide buttes and Laramie peak, off in Wyoming.
Thursday, June 7
Cloudy and warm. Commenced raining about five o'clock this afternoon and rained about two hours. We went north six miles, to the town corner, and then run east on a random, six miles, and then corrected back four miles, and then went off in a kenyon, and camped. It commenced raining before we got back, and I got wet through. We are now camped down in a deep kenyon, with large pine trees, and high perpendicular cliffs, and a good camp fire.

Friday, June 8
Cloudy. Rained some last night and all this forenoon. We only had the small tent with us, so Johny Hilton and myself slept out in the open air. We had some slicks over us so the bed clothes did not get very wet. We fried some bacon, and wrapped some dough around a stick, and cooked it before the fire for breakfast. There is some of the nicest scenery around here that I ever saw. Just as we got through dinner, there was a man came along on a mule. He said he had not had a thing to eat since yesterday morning, so he staid to dinner. After dinner we started and run a mile north through kenyons, timber, and over hills. Then we went east one mile. Soland Bill are going to sleep outside tonight.

Saturday, June 9
Clear most of the day. We finished our bacon, and we have nothing but flap-jacks and coffee to eat. We went two miles west to the town corner, then run four miles north, then back three and one-half to where Niles had come to; got back to the wagons at four o'clock, and we were pretty hungry. After dinner, Fairfield and I went out a half mile and marked some trees and took their bearings. Quite cool tonight.

Sunday, June 10
Clear and warm. Got up pretty early this morning and after a breakfast of flapjacks started west on the town line; made two closings, to the south, and run to the [Seventh] guide [Meridian]; then we struck off southwest to look for the rest of the boys and after going seven or eight miles we found them camped on the running water. Got there about four o'clock. Fairfield's pony got loose last night and went two or three miles south of camp, and he had a long walk after it.

Monday, June 11
Clear this forenoon. Cloudy this afternoon. Our gang started near camp and run south a mile and a half. Then run west three miles and looked for the State line between Nebraska and Wyoming. We found it after looking about an hour. Then we looked around for three or four hours for the closing corners. Got in camp about four o'clock. I shaved this afternoon. My shoes are about wore out, so I wore my fine boots today. Raining some and is awful cold to night.

Tuesday, June 12
Clear and cool. Did not sleep very warm last night. We have been tracing old lines and put in a few closings. They moved camp about two miles up the Niobrara river this afternoon. Awful cold again tonight. The boys tried seining fish with some gunny sacks sewed together. They only caught three or four.

Wednesday, June 13
Clear and warm. Our gang were over in Wyoming, hunting for the boundary line of Nebraska but failed to find it. So Fairfield decided to close on the line we found the other day. I flagged this afternoon and John Hilton chained in my place. We run north to the town line, and closed on the State line. Dutch Bill shot a rabbit this forenoon. We saw one as we were coming to camp tonight, and the boys shot at it with their revolvers but did not hit it. They moved camp two or three miles up the Niobrara river this afternoon.

Thursday, June 14
Our gang started from the N.W. corner of T. 32 R. 57 and run East to the guide Meridian, then came back a mile, and run North four and one-half miles, then went N.E. a mile, to where the camp had moved to on, or near Hat Creek. Had quite a heavy shower this afternoon just before we got to camp. Finished up a letter to Ma, that I commenced about two weeks ago, for Fairfield is going to Robinson tomorrow. Three of the boys went out hunting tonight and as they did not get in until after dark, Fairfield, Charley and I went up on the highest rock near here, and built a fire, but the boys got back just as we got the fire built.

Friday, June 15
Rained hard last night, and this morning. Fairfield and Niles started for Robinson about nine o'clock this morning. Mac's gang started out on a two days trip. We went south about three miles and worked around east, and came up to the [Eighth] standard [parallel]. Got to camp about three o'clock. After dinner we went out, found the standard, and chained East a mile and built a closing corner. Rained some more tonight.

Saturday, June 16
Clear this forenoon and awful hot. Rained and blew a good deal last night. We went East on the Standard three miles, then run south four miles, then West one mile, then North three and one-half miles, then two miles to camp. We went over some of the roughest country I ever saw. There was brush, timber, deep kenyons, with perpendicular sides, high hills, etc. Got to camp about six o'clock. The other gang got back about noon. Raining again tonight, and is pretty cool. The boys are having a game of poker.

Sunday, June 17
Rained hard about all last night, and until eight or nine o'clock this morning. Had breakfast about ten. Went up on the bluffs and gathered some spruce gum. Commenced a letter to Ma this afternoon. Read about all the rest of the
time. Johny Hilton was quite sick tonight.

Monday, June 18
Clear and warm. Got up pretty early this morning, and worked in Tsp 33 R 56. Got to camp about two o'clock. Went down to the creek, took a good wash all over, and washed some of my clothes. Gould was quite sick after he got in off the line.

Tuesday, June 19
As we were about out of grub, we did not go out on the line this morning. Mr. Fairfield and Niles got back from Robinson about eleven o'clock and we had more for dinner than we had expected. I got two letters from Ma, one from Cora, and the papers. After dinner, we went out to hunt up the [Seventh] Guide Merid. Rained a little tonight.

Wednesday, June 20
Started out on the line about six o'clock this morning and worked in T 33 R 57, and did not get in to camp until after five o'clock. Did not have any dinner. Clear and warm all day.

Thursday, June 21
Clear and warm. Rather windy this afternoon. Started out on the line at seven o'clock went over to the State line, and put in a closing corner at Sec. 499 T 33 N. R 57 W. We finished work about four o'clock and as they were going to move camp up to the north side of the township, we had to hunt up camp. I struck out alone, and traveled about two hours, then saw one of the boys on a high bluff, near camp.

Friday, June 22
Clear and warm. Run north eight miles to the Dakota line. Billy came along with the wagon, and we ate dinner three miles from the north line. Then we run out and closed on the State line, three miles from the northwest corner. We then tried to trace the line west, but could find no more trace of it until we got to the corner, where there is a large stone Mon. Marked 27 deg. W Long. Wyoming, 43 deg. North Latitude [see page 77]. About seven o'clock, we went a mile or so S.E. and camped on [Ind.ian] creek. About eight o'clock it began to thunder and cloud up and look black; and pretty soon it commenced raining and hailning, and the brightest lightening I ever saw. Some of the hailstones were about as large as hens eggs. It stopped storming about eleven o'clock. Billy, Mac, Mr. Fairfield and myself slept in the wagon [and] the rest of the boys slept on the ground. Billy Sprague shot a deer, the first one on the trip. It was a two-year-old buck. We run into a large prairie dog town this afternoon.

Saturday, June 23
Clear and warm. Our gang went up to the Dakota line again this morning and worked around there until after noon, then run South, and expected to find All [Willvering] there, a mile South with our dinner; but come to find out, he had gone to our old camp. So we kept on, and run five miles more south, then struck across four miles to camp, and arrived about six o'clock.

Sunday, June 24
Clear and warm. Wrote a letter to Ma this forenoon and gave it to Mr. Leland, as he is going back to the "States" tomorrow. I took a good wash all over today. Mac's gang went out and run a few miles of line this afternoon.

Monday, June 25
Clear and warm. We moved camp a mile south and two miles east. Our gang

George W. Fairfield. Courtesy of Ruth Y. Wetmore.
run one mile east to the [Seventh] Guide Merid. then traced it one mile south, then run one and one-half mi. east to camp. Got there about eleven o'clock. After dinner, both gangs went north to the State line, and camped. Charley Sprague came along with the team, and brought the bedding and victuals. We could not find the State line. We camped across the line in Dakota. I have not felt very well today. I think it is caused by drinking too much alkali water.

Tuesday, June 26

Clear and awful hot. I feel some better today. Went two miles east on the State line, and then run nine miles south to camp. Got there about three o'clock. Fairfield, Sol and I went out and found a pretty good spring this evening.

Wednesday, June 27

Clear and hot. Our gang run two miles east. then six miles south to the eighth standard, then came to camp about two miles north, a half mile west. Mac's gang got in about an hour later. Johnny Hilton found a pretty good spring, down the creek a few rods, this afternoon. I don't feel very well tonight.

Thursday, June 28

Clear and awful hot. Fairfield went with Mac's gang to hunt up the Standard. Sol and Dutch Bill went along, but the rest of our group did not go out, but laid in camp all day. I felt better today. They found the [Eighth] standard and traced it east a mile, and then run north to opposite camp; they got in about noon. There was an old ranchman came along this afternoon, and stopped awhile, talking to the boys.

Friday, June 29

Clear and hot again. Went up to the Dakota line again today. Went up about five miles from the line and ate dinner, then run up to the line and run back four and one-half miles, and camped for the night. We had to walk a mile and a half to camp, instead of a half mile as we expected; got to camp about half-past nine o'clock. Saw quite a number of antelope on the line today. Could not find anything of the State line.

Saturday, June 30

Clear, hot and rather windy. Run south from where we camped to the [Eighth] Standard: a distance of ten and one-half miles. Got to the Standard about half-past twelve but did not find camp until about four. We are now camped on Hat creek, and there are some splendid springs on the bank, the best water I have tasted for a week or more. Mr. Fairfield, who was taken sick day before yesterday, came over from the old camp about six o'clock, and is very sick and weak yet.

Sunday, July 1

Clear and hot. Did not get up till quite late this morning. Mr. Fairfield is a little better today. I wrote a letter to Ma this afternoon. Whitcome Jim came down to our camp a while this afternoon. A couple of solgers from Fort Robinson, who have been along fixing the Telegraph line, stopped here to camp for the night.

Monday, July 2

Clear and awful hot. Got up about sunrise this morning and got started on the line about six o'clock. Billy Sprague started for Fort Robinson this morning. We made about a ten mile run today and got to camp about three or four o'clock. It was nearly five o'clock when Mac's gang got in. Fairfield was taken worse again this forenoon, but is feeling easier this afternoon.

Tuesday, July 3

Clear and warm. Our gang went out with Billy, and went ten miles S.E. to commence work. Got over there about half-past eleven o'clock. After eating some dinner, we run six or seven miles of line. We ate another bite, and then started for camp. Got to camp about nine o'clock. Considerable cooler to night.

Wednesday, July 4

Cloudy and cool. Broke camp this morning and moved about four miles down the creek. Our gang went East a mile on the [Eighth] Standard, and four miles north, where one of the teams brought our dinner to us. After dinner, we run ten miles north, then two miles East, where we camped. This is at the circle-bar ranch at the junction of the Ind. and Hat creeks. They have a large hayfield, over two miles long, fenced in.

Thursday, July 5

Cloudy. Commenced raining about eleven o'clock and kept it up till about four this afternoon. Started out this morning to find the State line, but could not find it. We put in a closing corner and were just starting south when it commenced raining. We lit out for camp, waded through the creek, and got to the circle-bar ranch about the time we got wet through. The boys got a quarter of beef at the ranch, and we had steak for dinner. After dinner we went up to the ranch and lounged around there till about four o'clock. Commenced raining again about six o'clock, so we went up the ranch and slept on the floor.

Friday, July 6

Cloudy. Commences raining about six o'clock this morning. After breakfast we run a line south, two miles and a half from the State line, and then went over to camp, about a half mile west. Fairfield is considerably better than when we went away. Some of the boys in Mack's gang caught two young coyotes, and brought them to camp, but let them go again after a while.

Saturday, July 7

Clear and warm. We worked in this township this forenoon and run a mile and a half in the township north, and camped by a muddy creek. Cool to night. Did not put up the tent tonight.

Sunday, July 8

Clear and warm. Run north a mile
THE COMMON CORNER OF NEBRASKA AND SOUTH DAKOTA ON THE WYOMING LINE

The northwest corner of Nebraska has figured in a number of surveys. In 1869 Oliver N. Chaffee surveyed the Nebraska-Wyoming line and marked the Nebraska corner with a white limestone monument. The Chaffee stone is the shorter monument (center) and is described in Harley Nettleton's June 22 journal entry. The monument is inscribed "27 deg. W.L." (Longitude 27 degrees west of Washington, D.C.) on the north face and "138M, 22 ch., 67 lks." (138 miles, 22 chains, 67 links) on the south face, which is the distance north from the southeast corner of Wyoming where the Chaffee survey began. Between 1850 and 1912, Washington, D.C. was the origin for measuring longitude. Today, longitude is measured from Greenwich, England, and the monument is approximately 104 degrees west longitude.

In 1874 surveyor and astronomer Chauncey Wiltse made the original survey of the Nebraska-South Dakota boundary westward from the Keya Paha River along the parallel representing 43 degrees of north latitude; later surveyors could not find the posts he set. The taller monument (left) was placed by Joseph Jenkins in 1893 following a retracement of Wiltse's survey.

During his 1883 survey George Fairfield created another state corner 6.82 chains (450 feet) north of the Chaffee monument in the marshy lowlands of Indian Creek. He also changed the Nebraska-South Dakota boundary between the corner and mile post 221 to the east, a distance slightly over three miles. Subsequent surveys continued to use the corner established by Chaffee and later retracings of the Nebraska-South Dakota boundary failed to identify any township corners established by Fairfield.

The General Land Office had the Nebraska-South Dakota boundary traced by Joseph Jenkins in 1893, and he marked the boundary with stone markers at half-mile intervals. Jenkins's survey reconfirmed Wiltse's original line and corner. Robert Harvey, the first Nebraska State Surveyor, wrote the General Land Office in 1922 about the discrepancy between the corners of Chaffee-Wiltse and Fairfield.

The land office declared the original line surveyed by Wiltse and reconfirmed by Jenkins as the true boundary between the two states, thereby invalidating the Fairfield line and corner.

The reason for Fairfield's variance from the other surveys is not known. Several of Harley Nettleton's journal entries (June 13, June 29, July 5) mention the Fairfield party's failure to find the mile markers placed along the Nebraska-South Dakota boundary by Wiltse in 1874. Harvey's query and the resulting correspondence about the boundary and Nebraska's northwest corner certainly made no headlines. The western edges of both states were sparsely populated. Land titles were evidently not affected because they had been issued after Jenkins retraced and remarked the original boundary line.

More than a century of erosion caused severe misalignment of the Chaffee and Jenkins monuments. In 1988 five surveyors realigned the monuments to their original plumb positions, assisted by members of the Fall River County (South Dakota), Niobrara County (Wyoming), and Sioux County (Nebraska) historical societies. The eroded hillside was stabilized and a fence built around the monuments. Restoration was completed by September 6, 1989, when a rededication ceremony was held at the common corner. At that time a commemorative brass cap was set in the Chaffee monument and another plaque summarizing the corner's history was unveiled.

(See Rollin C. Curd, "Shovels and Plumb Bobs," Side Shots, August 1988; and Robert Harvey correspondence with the General Land Office, 1922, Special Files (Misc.), Nebraska-South Dakota Boundary Controversy, Records of the U.S. General Land Office, National Archives and Records Administration. Copy furnished to editor by Rollin C. Curd, Dawes County, Nebraska, Surveyor.)
from the boundary and camped. Got to camp about three o’clock. I feel considerably better today than I have for a week past. One of the boys shot a prairie dog this afternoon. Commenced a letter to Ma this afternoon.

**Monday, July 9**

Clear and hot. Run up to the State line and then traced it eight miles and put in closing corners, then run two miles south and quit. Got through about four o’clock. We then went about three or four miles south and camped for the night. I killed a rattlesnake to night, with four rattles on.

**July 10, Tuesday**

Clear and hot. Traveled about ten or twelve miles to cottonwood creek, then took dinner and went to Robinson. Got to the Stage station about three o’clock. Staid around there about two hours and then went up to the Fort. Sent a letter to Ma. Got a letter and the papers. Found some eggs down at the Stage Station and downed three or four of them. Went out to the Barracks awhile this evening.

**July 11, Wednesday**

Clear and warm. Fairfield split up the gangs this morning. He sent Mac, Ike, John, Billy and myself out west to do some more work and took the rest on home. We went about twenty miles and camped for the night. Mac stopped at a ranch and bought about three dozen young onions for one dollar.

**July 12, Thursday**

Clear and hot. Got up about seven o’clock and got ready to roll about nine or ten. Kept on up White river and got to the old horse ranch where we camped once before, about noon and stopped and got dinner. As we were getting a keg of water at the spring, when we saw an antelope about a hundred yards off. Billy got out the gun, and shot from just behind the wagon. The old black horse of Whitcome Jim’s and the mules all started. Ike caught the old black horse and Mac caught the mules after running about ten rods. Billy missed the antelope. After dinner we struck across the divide. Put in two quarter corners and camped for the night near the N.W. corner of the township. Cooked some rice for supper.

**Friday, July 13**

Clear, warm and rather windy. Billy shot an antelope this morning just before the rest of us got up. Got ready to commence working about nine o’clock. Run east four miles and then went north in the next township among the kenyons and fine timber. Billy in the meantime came down on the head of Hat creek and camped. We got to camp about half past three o’clock. As we were running east this morning, we came upon a peculiar shaped rock about fifteen feet high, out on the open prairie. As there was something that looked like a nest on it, Mac climbed up on it and found a young bald Eagle, that was nearly feathered out. He took it with him and brought it to camp with him. John and Ike took old Whitcome Jim’s horse back home this afternoon. We dug out a spring this afternoon to fill the kegs at in the morning. The mosquitoes are terrible thick and hungry here tonight.

**Saturday, July 14**

Clear and warm. Jack [Gould?] and I went down to Whitcome Jim’s before breakfast to get All Willvering’s watch, that he left as security for the horse that he borrowed. But Jim was not at home, so we had to come back without it. Broke camp about nine o’clock and commenced work on the town line, moving it over south. We finished moving it over to the fifth mile, and did some work over in the township north of the line. Camped at the fifth mile corner, one mile east of the [Seventh] Guide Meridian. Quite cool tonight. “Jim” our Bald Eagle is getting to eat a great deal. We feed him fresh antelope meat.

**Sunday, July 15**

Clear, warm and windy. Got up about five o’clock this morning and found that the mules had skipped out. We all started out to look for them. I traveled about six or seven miles and came back to camp. Ike and John had already gotten in, Mac soon came, and Billy got back about noon. After dinner Billy and Ike started out for White river and don’t expect them back till tomorrow at least. Expect the rest of our boys will get to Sidney tonight.

**Monday, July 16**

Clear and cool. Got up about nine o’clock this morning. As we were eating breakfast about half past ten, Ike came in from the White river ranch. Billy got a pony down at the ranch and went over to Running water to look for his mules. We started out about three o’clock this afternoon and run a few miles of line over north.

**Tuesday, July 17**

Clear and cool. Got up about six o’clock this morning. After breakfast we went out in the town west of here and run a few miles of line. Got back to camp about noon. Lay around camp this afternoon. Have not seen anything of Billy yet. There is only water enough to get breakfast with.

**Wednesday, July 18**

Clear and hot. After breakfast Mac, Jack, and I struck out for White river ranch, about ten miles S.E. from camp to get a team to haul the wagon down there. We got to the ranch about nine o’clock and as soon as the ranchman caught up three horses, he and I started back for the wagon. Got back to the wagon about one o’clock and to the ranch about five; Mac went out and shot at an antelope several times this evening, but failed to get it. Nothing from Billy or the mules yet.

**Thursday, July 19**

Clear and warm. Wrote a letter to Ma this morning while we were laying around camp. I cooked beans. Billy got
in with the mules this forenoon. He found them at Red Willow, about seventy-five miles South, on the Sidney trail. Billy killed an antelope this evening.

Friday, July 20
Clear and warm. Billy went out before breakfast this morning and killed another antelope.Started out South, for the Running Water, about nine o'clock and got there about three o'clock. We went out and moved a quarter corner just after we got here. Cooked beans this evening. The mosquitoes are awful thick tonight.

Saturday, July 21
Hazy and warm. I got up about four o'clock this morning and got breakfast. Just as we were loading up and were about to start, one of the owners of the ranch came up and wanted us to survey the river about eight miles down. So Mac told him he would survey it for five (5) dollars a mile. We had to wade the river about a dozen times. We got down six miles and will finish tomorrow.

Sunday, July 22
Clear and hot. Finished surveying for the ranchman about noon and ate dinner on the river. After dinner we went down the river to the [Running Water] Stage station and there was a letter for Mac from his father, telling him to come up to Robinson, for he wanted to go up and run the State line. We stopped at the station about an hour and then went four or five miles up the road and camped for the night. There was a herd of about 2500 cattle here, on their way to Montana. They were from Southern Texas.

Monday, July 23
Clear and warm. Got to White Clay about ten o'clock and to Robinson about noon. We heard that Fairfield had gone out to White river to look for us. Lay around camp this afternoon, and about eight o'clock Fairfield came in. He said we had about twenty-five miles of State line to rebuild.

Monday, Aug. 6
Clear and hot. Had a cyclone last night, which blew down our tent, wet our bedding through, etc. It struck us about eleven o'clock and lasted about an hour. We went up to the ranch then and bunked in a haystack. We are lying up today to dry out. We have been rebuilding the State line since we left Robinson. We got here to the Circle Bar ranch a week ago Friday, and took dinner there. Then went along the boundary and just came back last night. Saw an old Bufalo a week ago yesterday morning, and Billy shot once at him, but did not get him.

Friday, August 17
Windy and smoky this forenoon. Clear this afternoon. A week ago Tuesday forenoon we started East and worked in T 35 N. R 53 W. and got back to the Circle Bar Ranch a week ago today. Saw another Bufalo on this trip. Saturday afternoon we started South. Camped that night on the town line, about four miles S.E. of here. Billy shot another antelope that night. Rained considerable at night and about all the next forenoon. We started out, however, about nine o'clock, and ran about four miles down and took dinner. We killed a Porcupine near where we stopped. Run down a few miles farther and camped on Sand creek that night. The next day we run nearly to the Bluffs; Tuesday we went up over the bluff. Did not get to camp till about six o'clock and had no dinner. Found some sand cherries while we were coming to camp. Wednesday we started north again and camped that night on a small Branch down on the town line, and last night we camped on Hat creek, about three miles South. Came up here to the Circle Bar ranch a little before noon to day. There is nobody in sight around here.

POSTSCRIPT
On July 11 George Fairfield and most of the crew returned to Plattsmouth. Mac Fairfield, Ike Cecil, John Hilton, Harley Nettleton, and Billy Sprague remained in western Nebraska to do some additional work. Harley Nettleton's 1883 journal ends in mid-August, unfortunately, the volume containing entries for the rest of the year has not been found.

When Mac Fairfield's crew returned to Plattsmouth, Harley Nettleton helped finish up survey details there for a time before returning to Illinois. Two years later, Harley Nettleton returned to Nebraska to help George Fairfield survey land in Morrill and Scotts Bluff counties.

In 1895 Harley Nettleton settled on a farm near Benedict in York County and married Berthelda Green, a native of Auburn, Nebraska. With his wife and three children — Eula, Daniel and Russell — he moved in 1916 to a farm in Lockridge township northwest of York. Harley Nettleton and his wife retired to York in 1930, where he died from pneumonia on February 14, 1938. His son Russell Nettleton with his wife Ruth, raised four daughters on the family farm before moving into York in 1983. Harley Nettleton's other son, Daniel Nettleton, lives in Rhode Island.

George Fairfield moved to western Nebraska in 1885 and opened a land locator office in Sidney with his two sons, Joseph and Mac. The family settled on a homestead near Minatare, where George built irrigation canals and introduced many trees and vegetable crops to the area. In 1903 George Fairfield died in Lincoln at the age of 78, and was buried in Oak Hill Cemetery, Plattsmouth.

Andrew Mac Fairfield obtained the first marriage license in Scottsbluff County, and was admitted to the bar in 1889. Around 1900 he moved to Kansas City, Missouri, where he died in 1922.

James and William Brantner were probably brothers, and may have lived
in Plattsmouth before and after the survey.46

Elwood Marquise "Mart" Buttery returned to Plattsmouth, married, and lived the rest of his life on the same block where he was born. He worked in the Chicago, Burlington & Quincy Railroad shops. In 1934, E. M. Buttery and William Hagedorn had a reunion in Hay Springs and talked about their survey party experiences fifty years earlier. Mr. Buttery died in 1943 at the age of 81.41

Isaac Cecil was born in Pennsylvania and was employed in a Plattsmouth brickyard before the survey. Afterwards, he worked in the Burlington and Missouri Railroad shops. He died in 1930 at the age of 72.42

Niles Garrison married Annabelle, George Fairfield's daughter, in 1876 and they moved to Denver, Colorado.43

After the survey, William "Dutch Bill" Hagedorn worked for a time on the Greenwood ranch north of Sidney before returning to Cass County. There he married Anna Horn and farmed until 1886, when he settled in western Nebraska. Solomon Pitcher, another survey party member, helped Hagedorn find the ranch near Hay Springs which he homesteaded. William Hagedorn died in 1942 at the age of 81.44

Originally from Ohio, John Hilton was probably E. E. Hilton, a nephew of George Fairfield's wife. E. E. Hilton worked with Fairfield and was Cass County surveyor for eight terms before returning to Cass County. There he married Anna Horn and farmed until 1886, when he settled in western Nebraska. Solomon Pitcher, another survey party member, helped Hagedorn find the ranch near Hay Springs which he homesteaded. William Hagedorn died in 1942 at the age of 81.44

Mr. Leland, who kept field notes for the survey, came from Weeping Water.45

Solomon V. Pitcher settled in western Nebraska. He was the first county clerk of Sheridan County when it was organized in 1885 and was county surveyor there in 1886-87.46

Linwood E. Skinner was born in Pennsylvania. He worked as a brickmaker and spent a year in the county clerk's office in Plattsmouth before joining the 1883 survey party. Returning to Plattsmouth, he worked three more years in the county clerk's office before forming a real estate partnership specializing in title abstracts, fire insurance and loans.47

William and Charles Sprague, both born in Nebraska, lived at Buffalo Gap, South Dakota in 1880. William was then 20 years old and worked as a freighter, while his 18-year-old brother Charles lived at home. William Sprague was probably a brother-in-law of George Fairfield, although nothing else is known of their later lives.48

Information is lacking on other persons mentioned in Harley Nettleton's journal. There is some evidence that Chester Barnes, a wagonman, came from Plattsmouth. J. Gould and Al Willerding, a cook, may have been hired after the party reached Sidney. Whitcome Jim was probably a rancher living in the vicinity of present-day Harrison, because he visited the survey party's camp in July, and later loaned them a horse, for which one of the crew left his watch as security.

The most important contribution of the 1883 survey was undoubtedly its role in opening northwest Nebraska for settlement. It is not surprising that a number of the original survey party returned to live in this part of the state. Descendants of several of these pioneer surveyors continue to participate actively in western Nebraska life today.

ACKNOWLEDGMENT

This article would not have been possible without the assistance of Gene Thomaen, deputy Nebraska State Surveyor, who shared his technical expertise and directed me to many of the sources and persons listed in the notes. Joseph Fairfield of Bridgeport provided historical data on his family and on many of the locations mentioned in the journal. Additional information came from Thomas R. Buecker, curator of the Fort Robinson Museum; Rollin C. Curd, Dawes County Surveyor; Linda Duncan of the Cass County Historical Society; and Clarence Schnurr, Sioux County land abstractor.

NOTES


2 Fairfield's contract called for surveying the terrain and was Speaker of the House of Representatives, South Dakota in 1880. William was then 20 years old and worked as a freighter, while his 18-year-old brother Charles lived at home. William Sprague was probably a brother-in-law of George Fairfield, although nothing else is known of their later lives.

3 Journal entry for Apr. 6, 1883.

4 Leland's contract called for surveying the terrain and was Speaker of the House of Representatives, Kansas in 1907. In a May 19, 1883, letter to Harley Nettleton, his mother wrote, "I received a letter the other day from Aunt Nettie. She said the state surveyor of Nebraska is a friend of your Uncle Dan's and that Dan had written to him about you and that he had promised to see you and do all he could for you. Is that Mr. Fairfield?"

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6 Journal entries for Mar. 22 and Mar. 27, 1883; Daniel McClure Nettleton homesteaded in the Spring Ranch township of Clay County after the Civil War. He served in the Nebraska Legislature as the Speaker of the House of Representatives in 1907. In a May 19, 1883, letter to Harley Nettleton, his mother wrote, "I received a letter the other day from Aunt Nettie. She said the state surveyor of Nebraska is a friend of your Uncle Dan's and that Dan had written to him about you and that he had promised to see you and do all he could for you. Is that Mr. Fairfield?"

7 Journal entry for Apr. 6, 1883.

8 The Waterhole Ranch, S4 T15N R51W, was on a tableland six miles west and one mile south of present-day Garley. It was a stage station on the Sidney-Deadwood Trail, the route between the railroad at Sidney and the Black Hills mining camps. Issues of the Sidney (Nebraska) Telegraph in the late 1870s and early 1880s regularly published maps and tables of distances for the trail.

9 Greenwood Station and Inn, S4 T17N R50W,
was on Greenwood Creek, six miles west of present-day Dalton.

39Pumpkin Creek Station, S30 T19N R9W, was a stage station located about two miles west of Court House Rock. The creek is called Pumpkinseed in the original survey. Gene Thomas, Lincoln, to editor.

40Camp Clarke, S32 T20N R51W, developed around the wagon bridge across the Platte River about three miles west of present-day Bridgeport. Troops were stationed for a time at this strategic location, which boasted a stage station, post office, hotel, general store, blockhouse, blacksmith shop, and sod saloon.

41The crew was working in T26N R54W on this date. See microfilm roll 716, Records of the U.S. Surveyor General, Nebraska State Surveyor's Office.

42Wind Springs appears on the south line of T26N R54W on the 1885 Atlas of Nebraska and was located east of present-day Highway 71 and six miles north of the Scotts Bluff County line. Joseph Fairfield, Bridgeport, to author.

43The Snake Creek Stage Station, SS T24N R51W, was about nineteen miles west and one mile south of Alliance.

44Standard Parallels running east and west and Guide Meridians running north and south create forty-eight by twenty-four-mile square quadrangles (four townships by Standard Parallels and eight between Guide Meridians) containing thirty-two townships. A township is one-mile square sections of 640 acres. See Davis, Poole, and Kelly, Surveying Theory, 600-06.

45This would be about three miles east of the Agate Fossil Beds National Monument.

46This creek is known as Wm. Creek on the 1885 Atlas of Nebraska, and as the White Clay Creek on the 1982 Sioux County highway map. Both names appear in Fairfield's field notes for the survey of T25N R54W.

47This camp was probably on the Niobrara River between the Agate Fossil Beds National Monument of today and the Bartlett Richards Lower Thirty-Three Ranch, which was located at the junction of Whistle Creek and the Niobrara River about twenty-four miles southeast of Fort Robinson.

48The White River rises southeast of Fort Robinson and flows northeastward into South Dakota.

49Four chains is a distance of 204 feet.

Regulations in 1883 specified that any distance variation more than three chains (186 feet) must be remeasured to correct the error. Stewart, Public Land Surveys, 101.

50East and West Hat Creeks meet to form Hat Creek in Sec. 10, T23N R55W.

51This may be the ranch mentioned in the journal entry of June 6. See note 21.

52Red Willow Station on the Sidney Trail. S21 T23N R55W, was located about four miles northwest of present-day Angora, Nebraska.

53This was probably Bartlett Richards's Lower Thirty-Three Ranch.

54The White Clay Creek Station was located at the foot of "Breakneck Hill," a mile south of where the Sidney-Deadwood Trail crossed White Clay Creek, approximately five miles southeast of Crawford, Nebraska. See "Outlaw Country, A Map and Guide to the Cheyenne - Black Hills Express Route and the Sidney-Deadwood Trail," compiled by Dick Lloyd, Alliance, Nebraska, 1990.

55The Sand Creek shown on the 1885 map south of Buckhorn appears on the 1885 Sioux County highway map as Whitehead Creek.


57Ibid.

58General Directory of the City of Plattsmouth, Nebraska, 1880 (Myron W. Avery, Greenwood, NE:1880), 12.


60General Directory of the City of Plattsmouth, 1880 (Myron W. Avery, Greenwood, NE:1880), 15. Lincoln County (Nebraska) Historical Society, Custer County Historical Society, Plattsmouth, NE.


67Portraits and Biographical Album of Otse and Cass Counties, Nebraska (Chicago: Chapman Brothers, 1889), 861-62.

68U.S. Census, 1880, Custer County, South Dakota

81