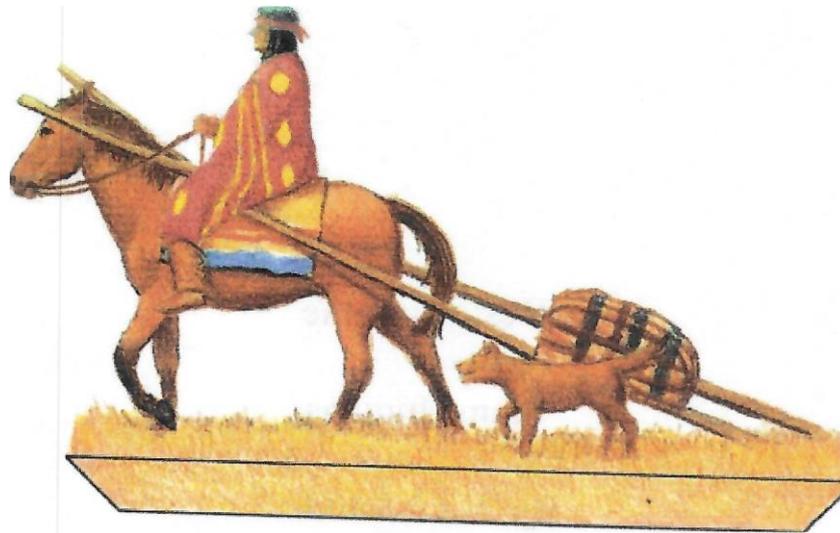


THE MYSTERY OF THE PAST

FOR YOUTHFUL READERS



THE NATIVE AMERICANS

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Issue III

Designs of the
Plains Indians
By A. G. Smith

The Mystery of the Past (for Youthful Readers)

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The Bird City Historical Association, Inc. Officers and Members

OUT OF THE PAST

THE SAND CREEK MASSACRE - November, 1864

The records of the government were written by white men at a time when an attempt was made to control Indian tribes. I am giving an account of the Sand Creek Massacre as told by George Bent, a half-blood Indian of the Southern Cheyenne.

Here is a brief family history of this man -half-white and half-Indian.

William Bent, a white trader out of Missouri, established a trading post near the upper Arkansas River, a territory that was later a part of Colorado. William Bent married an Indian called Owl Woman, daughter of White Thunder, keeper of the sacred arrows of the southern Cheyenne. To this union four children were born: Mary, born on June 22, 1838; Robert, born in 1840; George, born on July 7, 1843, and Julia born in 1847. After the death of Owl Woman, William married Yellow Woman, a sister of Owl Woman, as was their custom. To this union a son, Charles, was born.

George and Charles Bent, at an early age were sent back to St. Louis, Missouri, to live with their grandfather, Silas Bent, a judge of the Supreme Court of Missouri, to be educated. When George became a young man, he joined the Confederate army for a short period during the Civil War. After leaving the army, he and his brother Charles returned to their father's ranch near Fort Lyons, Colorado. The white men of the area were union sympathizers and called George and Charles Bent renegade Indians and threatened to shoot them on sight. William Bent advised his sons to live with their mother's people, the Cheyenne. Charles joined a band of Northern Cheyenne and George joined the Southern Cheyenne. George was with the Southern Cheyenne during the Sand Creek Massacre.

The account of the Sand Creek Massacre as told by George Bent follows: "When the Cheyenne and Arapahoe fled north to get away from General Blunt, they hardly knew which way to turn. They had not been on the Smoky Hill long before Chief Black Kettle and the other chiefs rode into camp, having just returned from Denver, where they had talked briefly with Governor Evans, who put the negotiations in the hands of Colonel Chivington. The chiefs remained puzzled by what Chivington had said and could not make out what his intentions were. The truth probably was that he had already laid his plans for the attack on our camp, which he carried out with such terrible effect a few weeks later. So in his talk he said nothing to alarm the chiefs, or disturb their belief that peace was soon to be concluded.

Major Wyncoop had reassured the chiefs, telling them it was all right and that they might bring their bands in near the Fort and camp there until an answer to their peace proposals was received. So now we broke up our camp on the Smoky Hill and moved down to Sand Creek. The Cheyenne firmly believed that they were at Sand Creek under protection and that peace was soon to be concluded.

The Arapahoe were alarmed and moved away from Ft. Lyon, further north up the Arkansas River, away from military troops. Fifty or sixty Cheyenne went with Black Kettle and the other chiefs to Ft. Lyon, to talk to the new Commandant Anthony. He met with them in my father's old stone fort, which was now a part of Fort Lyon. When the chiefs asked him about peace, he told them he had no authority to deal with them, but they might remain in the camp at Sand Creek, until he heard from the superiors. Commandant Anthony was very deceitful in dealing with the Indians, hoping they would not be alarmed.

Colonel Chivington and his troops had been planning a killing attack on the Indians to ensure their own advancement and prestige in the eyes of the political voters. This attack was kept secret even from other officers in command. All travel down the Arkansas was stopped so that no word would reach Ft. Lyon. Colonel Chivington's troops were made up of men who wanted all Indians dead.

On November 24, as Chivington's troops marched toward Sand Creek, he stopped the mail. From Booneville, the troops marched down the river to my father's stockade at the mouth of the Purgatory River and took them by surprise. Chivington forced my brother, Robert, to act as a guide, threatening to have him shot if he refused.

Chivington and his troops surprised the commandant at Ft. Lyons, going against orders and advice that such an attack would create an uprising of many Indian tribes in retaliation.

In our camp on Sand Creek there were about one hundred lodges of Cheyenne and ten lodges of Arapahoe, under Chief Left Hand. Chivington's troops marched all night under cover of darkness, prepared to attack at dawn. The Cheyenne people under Chief Black Kettle were the most peaceful of the two tribes and had settled here on Sand Creek, with the understanding that they were under the protection of the garrison and they were to remain quiet until peace was established.

At dawn on the morning of the attack, I was still in bed, when I heard shouts and people running about the camp. I jumped up and ran out of my lodge. From down the creek a large body of troops was advancing at a rapid trot, some to the east of the camps, and others on the opposite side of the creek, to the west. More soldiers could be seen making for the Indian pony herds to the south of the camps. In the camps themselves, all was confusion and noise. Men, women and children were rushing out of the lodges, partly dressed. At sight of the troops already armed, the men ran back into the lodges for their arms, some with lassos and bridles in their hands, were running for their herds to attempt to get some of the ponies before the troops could reach the animals and drive them off. I looked toward the Chief's lodge and saw that Black Kettle was standing in front of his lodge, holding a long lodge pole, with an American Flag fluttering in the grey light of the winter dawn. I heard him call to the people not to be afraid, that the soldiers would not hurt them. Then the troops opened fire from two sides of the camp. The Indians all began running, but they did not seem to know what to do or where to turn. The women and children were screaming and wailing, the men running to the lodges for their arms and shouting advice and directions to one another. I ran to my lodge and got

my weapons, then rushed out and joined a passing group of middle-aged Cheyenne men. They ran toward the west, away from the creek, heading for the sand hills. There we made a stand, but troops came up on the west side of the creek and opened a hot fire on us. So, after a short time, we broke and ran back toward the creek, jumping into the dry bed of the stream, above the camps. Hardly had we reached this shelter under the high bank of the creek, when a company of cavalry rode up on the opposite bank and opened fire on us. We ran up the creek with the cavalry following us, one company on each bank, keeping right after us and firing all the time. Many of the people had preceded us up the creek. The dry bed of the stream was a terrible sight; men, women and children lying thickly scattered on the sand, some dead and the rest too badly wounded to move.

We ran about two miles up the creek, I think, and then came to a place where the banks were very high and steep. Here, a large body of Indians had stopped under the shelter of the banks, and the older men and women had dug holes or pits under the banks, in which the people were now hiding. Just as our party reached this point, I was struck in the hip by a bullet and knocked down, but I managed to tumble into one of the holes and lay there among the wounded, the women and children. Here the troops kept us besieged until darkness came on. They had us surrounded and were firing in on us from both banks and from the bed of the creek above and below us; but we were pretty well sheltered in our holes, and although the firing was heavy, few of us were hit.

After the troops withdrew, it was nearly dark, and Black Kettle found his severely wounded wife and carried her on his back to where the others were hiding. Black Kettle was a broken man at the betrayal and deaths of his people.

This is the end of the story as told by George Bent.

Some of the pony herd was several miles north of the creek and were returned to the surviving Indians. They spent that night on the frozen bleak plain – all tents, clothing and food had been destroyed by the troops. Those who were not wounded attempted to keep all the wounded from freezing, as it was bitter cold. In the dark of pre-dawn, the men decided to move the camp to Smoky Hill, moving slowly. The Indians at Smoky Hill gave them buffalo robes, food and blankets. After a time at Smoky Hill, unknown to the military, the Cheyenne band moved to Cherry Creek camp, Cheyenne County, Kansas where bands of Northern Cheyenne, Arapahoe and Sioux joined them to retaliate on Julesburg.

George Bent recorded approximately 137 men, women and children were killed at Sand Creek, and many more wounded, leaving only a few unhurt.

There are many more details about this massacre, but I have not included the more graphic details of this tragedy, even though it is a true account.

Sources: The Life of George Bent, by George Hyde
The Last Promise - a Campaign to Assimilate the Indians,
by Frederick E. Hoxie

Dorothy L. Mast

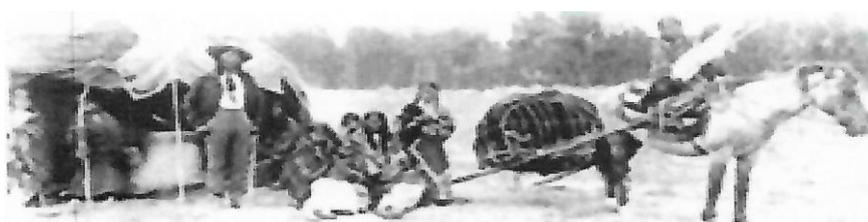
THE CRAFT CORNER

The Indian Travois

p.4

When we think of Indians, we picture a warrior with a spear or bow and arrow sitting on a horse. Horses are not native to North America, so the Indians didn't even have horses until the Spanish brought them in from Mexico. In the 1600s there were Spanish settlers and missions in New Mexico just to the west of Texas where the Pueblo and Navajo Indians lived. In the year 1680, the Pueblo Indians revolted against the Spanish and drove the Spanish out of their land and back to Mexico, forcing them to leave so fast that they left many horses behind. The Pueblo and Navajo Indians began selling and trading them to other Indians such as the Kiowa and Comanche and teaching other Indian tribes how to ride and how to raise horses.

Horses spread across the Plains pretty quickly and changing life for the Indians who lived there. These Indians had always hunted buffalo on foot, but with a horse under him, a hunter could go faster than a buffalo which gave him an enormous advantage. Since the buffalo herds moved seasonally great distances from place to place those who depended on them for their living moved also. When they left one place to go to another, they had to carry everything with them. They carried all of these on a travois. A travois was a load-bearing frame that was pulled along by a dog or horse. It consisted of two poles, one end attached to the horse and the other end dragging on the ground. There were straps or wooden crosspieces between the poles near the open end that served as a carrier for additional poles and teepee covers. The horse with the travois could pull all the belongings of the tribe to the new camp quite easily.



[Cheyenne](#) family using a horse-drawn travois, 1890.

Adapted from <http://en.wikipedia.org/wiki/Travois>; <http://en.wikipedia.org/wiki/Tipi> ;
and from [American Colonies](#) by Alan Taylor.

Wanda Dowdy
Dorthy L. Mast

MAKING A TRAVOIS

Items needed:

- Two 1/2 inch dowel sticks, 10 inches long
- Two 1/4 inch dowels, 6 inches long
- Two 1/4 inch dowels, 5 inches long
- Two 1/4 inch dowels, 4 inches long
- Two 1/4 inch dowels, 3-1/2 inches long
- Two 1/4 inch dowels, 2 1/4 inches long
- Three 60 inch leather strips
- One 6 inch leather strip

Step 1. Crisscross the 10 inch sticks about 2 inches from the top, creating an A-frame. Take a 6 inch leather strip, fold in half and encircle the poles at the top - starting at the fold and then tie the ends of the strip through the crotch with a square knot.

Step 2. Lay all 1/4 inch sticks together, side by side together from longest to shortest, having a 1/8 inch space between each stick.

Step 3. Take three 20 inch strips of leather. Using one strip at a time, fold each strip in half. Starting at the center of the fold of the strip, encircle the right side strip around one 6 inch dowel stick, in the center of the stick. Weave across to the top of the stick. Take the right side strip and weave in and out, across and under the other dowel sticks, in the center of each stick. Tie the end in a square knot at the top of the sticks. Repeat this procedure with the other strips equally spaced on each side of the center weave. Finish with a square knot.

Step 4. Place mat of sticks over the poles of the A-frame about 2 inches from the bottom of the poles.

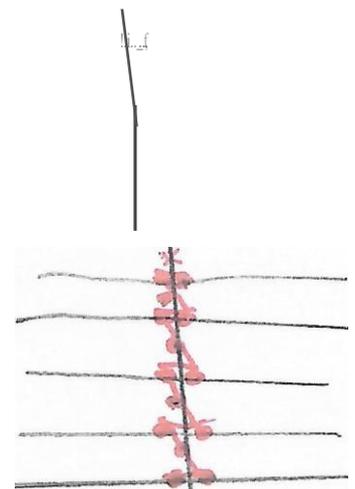
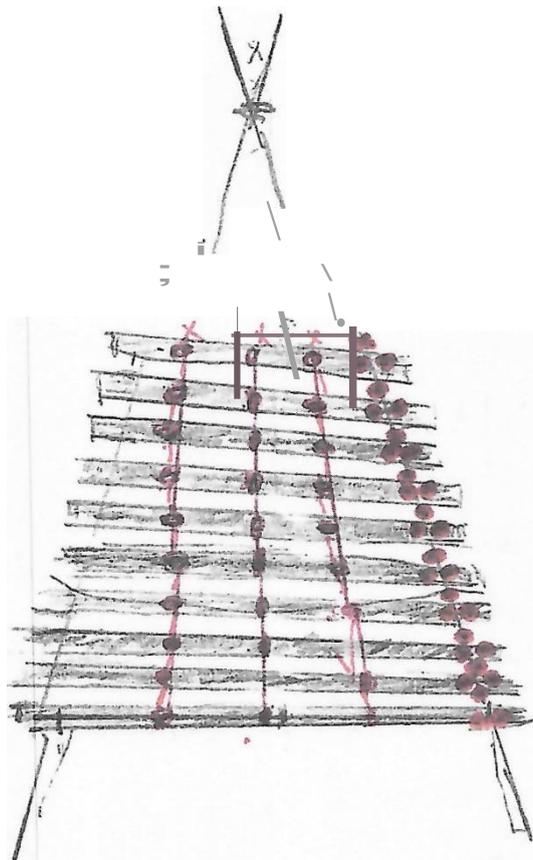
Step 5. Take one 60 inch strip of leather and fold in half. Using one strip at a time, starting at the fold, completely encircle bottom stick inside the pole - then cross over the pole, and completely encircle the stick on the other side of the pole, encircle the stick - then cross to the pole and completely encircle the pole. Continue upward inside the pole to the next stick and encircle it on the inside of the pole. Repeat this procedure with both strips until you reach the top of the sticks and tie the strips in a square knot. Repeat this procedure on the other side of the A-frame.

There will be an excess amount of leather strip - just wind this around a pole in a crisscross method until reaching the top of the pole. Tie ends in a square knot in the crotch of the poles. Note -Diagram on the back sheet.

Sometimes the Indians would soak the rawhide strips so they would shrink and tighten after preparing the travois. When carrying a wounded or elderly person, they secured a buffalo robe over the stick frame.

Dorothy L. Mast

Making a Travois



Dorothy L. Mast

THE YUCCA PLANT

The yucca plant, or soap weed plant, with its sharp leaves and spike of cream colored blooms is a familiar sight in the summer time. These plants are easy to identify by their stiff sharp leaves radiating from woody root stalks. Also known as *Yucca Glauca*, bear grass and Spanish dagger, this has always been an important plant in Kansas and Nebraska.

As the name suggests, Native Americans made soap from the root of the soap weed plant, which was used as shampoo for removing lice. This treatment also supposedly worked as a hair restorer. Other uses of soap weed included: treatment of broken bones and sprains, curing stomach aches and reduction of swelling. Smoke from burning roots was used to calm horses so they could be easily caught.

Native Americans made baskets, mats, brooms, sandals and ropes from the leaves. The tip of the leaf was used as a needle and the fibers on the edge of the leaf were used as thread.

Native Americans also used the yucca for food. The young flower stalks can be eaten like asparagus, or roasted. Later in the year, the flower petals can be eaten raw, and the young seed pods can be boiled. I have tried the flowers, and they are pretty good.

The yucca is still used for many things. A tea made from the roots has been used as a remedy for arthritis, but nobody has proved that it really works. An extract from the yucca has been researched in treating skin cancer. It has also been found to have anti-inflammatory properties.

Livestock seek out the blooms for forage in the early summer, and they eat the base of the plant in the winter, because it is green and nutritious at a time when everything else is brown and dormant.

This plant is important to wildlife as well. Birds make nests under the plants and are protected from predators by the sharp leaves. A small nocturnal moth pollinates the flowers and lays its eggs inside the blooms. When the eggs hatch, the larvae fall to the ground where they spend the winter. The yucca could not exist without this moth, and the moth is dependent upon the yucca in order to complete its life cycle.

Source: adapted from an article written by Sherry Preston in Nebraska Fence Post, June 22, 1996

Wanda Dowdy and Connie Rooney

PICTURES OF THE YUCCA PLANT



Pictures of the yucca plant – also known as the Great Plains Yucca, Dagger Plant, Soapweed and Spanish Bayonet

Source: www.shutterbugphotographs.truepath.com/page21.htm

Wanda Dowdy and Connie Rooney

PIONEER HOUSING

When pioneers acquired land there was no housing on the land. I decided to find out the type of housing that some of my ancestors had before they built sod homes and later wood/log homes.

My sleuthing resulted in finding in my grandmother's book a description of her first home. I quote, "Our first home that I remember was a 'square like tent'. I also remember almost everything we had in our tent, and exactly where our furniture was-I can close my eyes even now and see in my mind where the cook stove was, where the cupboard was, and the corner where the bed was, where the table was. . . I remember the tent had a wooden floor and walls boarded up so high, probably four or five feet high. I was around 3 years old (before 1907). I remember a snake got into our tent. We had to move from our tent home. A real bad wind storm ripped one whole corner of the top of the tent. It was a flat like tent. I remember that night very clearly. Mama (my Great Grandmother) said we went to our cousin Biddie and John Hawkins. We stayed with them until Papa (my Indian Great Grandfather) could build a two-room house."

From these few sentences, I learned much about pioneer housing!!! What type of housing did your ancestors have before they built their sod or log/wood houses?



A picture of their tent home.

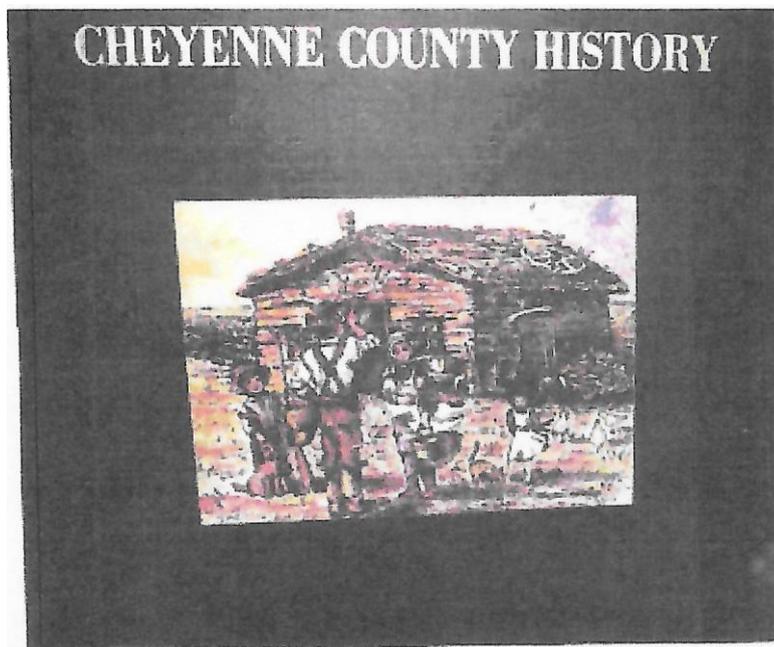
KEEPSAKES

p.10

CHEYENNE COUNTY HISTORY

The book, Cheyenne County History, is a valuable heirloom of my family. Hours and hours of dedicated sleuthing lie within the pages of this large black book. This book is a wealth of historical information that is enjoyable to study. It is a "good non-fictional read" for pleasure. Thank you to each and every person for all the work you have done to make this wonderful history book a precious treasure.

I took a close-up shot to focus on the picture on the front of the book depicting pioneer life. This picture was painted by Rachel Oshant Huffman and is entitled "The Settlers 1888." Papa unhitched Maude early that spring evening. Mama met him with a drink of water and Baby Jacob asleep-- Billy got to hold the rifle--I fed the chickens and took off my shoes and black stockings for the first time that year and Tom played with my toes-- The sun made everything Gold.



Linda (Beeson) Carroll

THE MAP QUEST

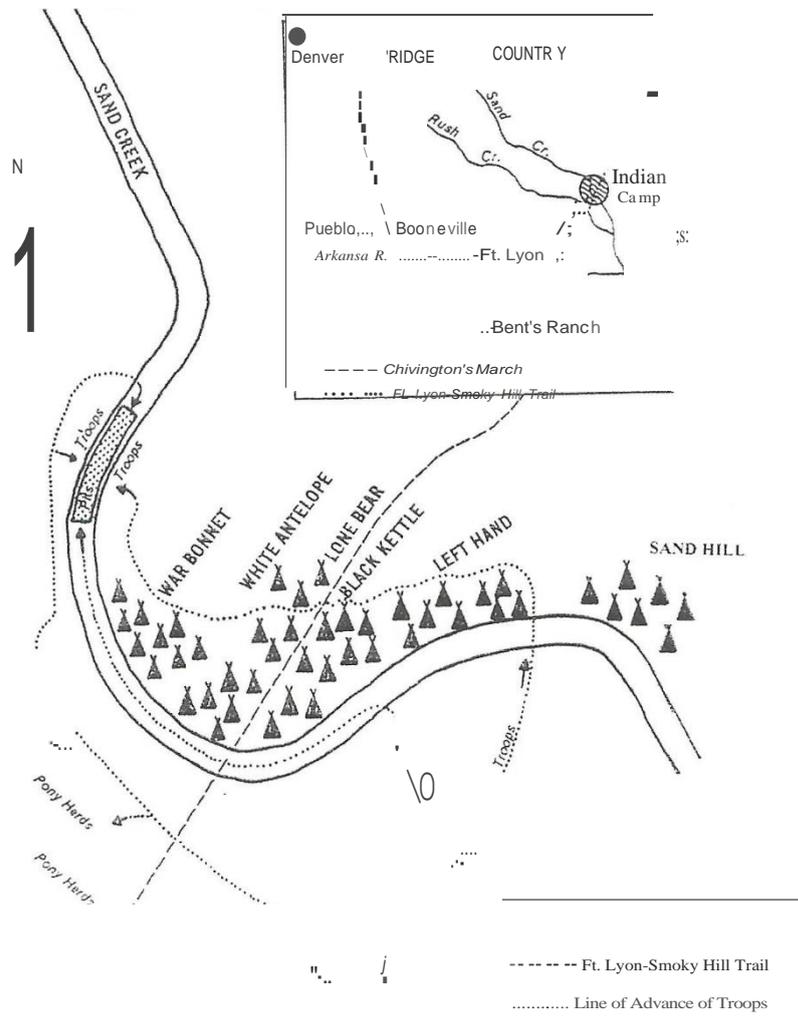
The Sand Creek Encampment

After mourning their dead and giving the wounded time to heal, the Indians sent around the war pipe to attack the whites. This was after the Sand Creek Massacre on the Smoky Hill Camp.

This was an uncommon thing to declare a war in the dead of winter. The war pipe was sent to the Sioux, the Arapahoe and the Northern Cheyenne. All moved over and camped on Cherry Creek. About January 1, 1865, all the chiefs assembled in council and decided to attack at Julesburg, Colorado.

Cherry Creek is located in the northwest part of Cheyenne County, Kansas.

Source: The Life of George Bent, by George Hyde.



From George Bird Grinnell. *The Fighting Cheyenne*
The Cheyenne Camp at Sand Creek

Helene Landenberger

POETRY OF THE LAND

p. 13

THE ARIKAREE BREAKS

In the extreme north comer of the state of Kansas,
On up north of the town of St. Francis,

Lie the Arikaree Breaks, mostly in Cheyenne County,
It's a breath-taking sight, almost worth a bounty!

You're going along, on nice smooth farm ground,
When suddenly there's deep canyons, and the road curves around

Soap weed and scrub brush dot the landscape,
But what you really notice is the land changing shape.

Some roadways are so steep, all you see is blue sky!
Then another panorama comes into sight.

Wildlife abounds, the Mule Deer grow huge,
Hunting is a challenge, they can take refuge

In the cuts and the ravines, and they can smell on the breeze,
Which way you're coming from, then they can flee.

There are ranchers in those Breaks that have mighty fine cattle,
Sometimes without groundwater, it's been a battle.

But they're a tough sort, the kind that endure,
They'll pipe that water in, just to make sure

That their stock do well in those mysterious hills,
It's a beautiful piece of country, that can give you a thrill!

By
Helene Landenberger

THE BOOK CORNER

p. 14

CHEYENNE BREAK-OUT REPORT

By Francis Colcord

"The fall of 1877, the Colcord family moved to near the mouth of Red Fork at Salt Fork, Oklahoma, five miles from the head of Jug Motte Creek. In September, 1878, a young fellow came to our home, saying he was raising men to engage the Dull Knife Cheyenne (who had gone on the warpath). We joined the gang at Nelson's Ranch, then gathered at the Evans camp, over 50 men, and were joined by 40 from Medicine Lodge, Kansas, under Dr. Riggs.

"The second day we surrounded the Indians about 30 miles southeast of Fort Dodge, Kansas, on Bluff Creek (near present Clark County Park) and we had just made contact with them when a troop of Cavalry, under Capt. Rendlebrock, which had been trailing the Dull Knife band ever since they had started on the raid, arrived on the scene. We had a long fight with the Indians. Dr. Riggs and four men were shot, but only slightly hurt.

"We had much shorter range guns than the Indians had, as they had all been issued modern rifles with ammunition when they arrived at Darlington Agency on August 5th. Nelson and our group wanted to close in on the Indians and clean up that night, but Capt. Clarence Mauck refused to attack and surround them. By the next morning, the Indians were 45 miles away (making their way north on what would become known as The Last Indian Raid). The soldiers and citizens followed, but Charley Martin, Mark Burke, and myself went back to bury our dead.

"Reuben Bristow and Fred Clark, with wagon and mule team, had left our ranch on Red Fork going to Cimarron Salt Plains for a load of rock salt. On the high divide between the Cimarron and Salt Fork watershed, near Jug Motte (Section Line 33-34, Township 29 North, Range 18 West) we found their bodies in the wagon, minus the mules. The wagon had been rolled down the hill and lodged in the bush covered creek bank. They [Reuben Bristow and Fred Clark] had been killed before the battle that we had experienced at Turkey Springs. I pulled four arrows from Fred's body and four from Bristow's heart. It was a hard job for the three of us to dig the grave, one always on guard at the hill top."

Source: Sutton's Southwest Nebraska, by S. E. Sutton, p. 99
Abstracted/Edited by Marsha C. SQUIRES Magley

Marsha Magley and Shirley Watson

THE BOOK CORNER

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THE CHEYENNES

As an honored candidate into the Cheyenne Woman's Mystic Society, Mari Sandoz sat upon the ground fronting the Tribunal Council as the rising sun broke over the hill top, blessing the new-born day with a splash of autumn colorations. At that moment the revered Old One dusted her brown with a symbol known only to herself. She then counted off the four Cardinals, and with a sweep of encompassing hands completing the Eternal Circle of the female, the beginnings of a never-ending Life.

During the rituals it was impressed upon the candidate that this was the ancient philosophy of "an eye for an eye--the survival of a people."

As Mari Sandoz often implied in her writings: The Cheyenne Dog Soldier's intentional raid upon the Kansas civilians--the murder, rape and destruction heaped upon the whites in the autumn of 1878--they felt justified.

Didn't the soldiers under Officer Neil shoot to kill the unarmed Cheyenne People at Sand Crane Hill in March, 1875? And again the unwarranted attack at Sappa Hole (south of Atwood, Rawlins County, Kansas) in April of that same year? Medicine Water was killed and the ponies were stolen. And then the enforced Long Walk, in 1876, from the Black Hills to the pest-ridden Darlington Agency of Oklahoma? This justified Dull Knife's war arrows in the atonement raids of 1878.

"The whites have taken our pastures and our ponies starve. Our cattle, the buffalo, are slaughtered, and we have no safe valley to raise our lodges. We were promised food, clothes, and pastures for ponies and a buffalo range even so long as grass grows. We have treaties so written by the White Father and the soldier officer saying so. We cannot live on paper, but we can die as proud warriors!"

Source: Sutton's Southwest Nebraska, by S.E. Sutton p. 98;

Mari Sandoz' discussions during her several visits with Everette S. Sutton

Abstracted/Edited by Marsha C. SQUIRES Magley

Marsha Magley and Shirley Watson

ITEMS OF HISTORICAL INTEREST

This globe rotating in space is extremely ancient. It has gone through very many changes. Oceans have covered this blue planet in space several times. The land mass has broken into extremely different areas by collision and separation of tectonic plates underlying the oceans and land masses. Seas have developed and dried up, mountains have grown and eroded away and glaciers have frozen and melted again and again. An unbelievable number of plants and creatures have come into being and disappeared into the mists of time.

So, here we are in a small town in a county called Cheyenne, in the northwest corner of a state named Kansas. It is to be found in the center of a country named the United States of America, on a continent called North America. Our country is very young compared to the earth on which we live. Even this country shows many of the changes through the centuries. The rivers have channels and the mountains have grown and collapsed. We see the layers of rock eroded in Grand Canyon by the Colorado River, Mount St. Helens in Washington State erupted bringing volcanic dust to this area in May of 1980. The Breaks of the Arickaree, the so-called mini Grand Canyon in Cheyenne County, consists of soil formed by dust from huge dust storms from the second Rocky Mountain Range in the past. The soil, which is called *loess*, pronounced luss, formed into the hills and canyons we know now. The area has been eroded by wind and water.

The last ice age reached only into the northeast of Kansas, but, as far as is known, there has only been one dinosaur fossil found in Kansas. It was determined to be a young Nodosaurus Dinosaur, evidently washed into the inland sea by a flood and located by Charles Sternberg in the Smoky Chalk layer of Logan County.

We have always been fascinated by the many different dinosaurs that began to evolve about 230 million years ago. Dinosaurs lived in warm, humid areas with lush forests, lakes and marshes during the Jurassic period. This period generally occurred as the continents were breaking apart from the super continent called Pangea. New ecosystems developed with widely diverse sea and land creatures developing. Among dinosaurs, the Brachiosaur was one of the largest. It was called the Thunder Lizard, weighing about 50 tons and approaching 82 feet in length. The most fearsome dinosaur of the Jurassic period was the hunter predator, Allosaurus, who may have weighed 4000 pounds and reached 39 feet in length. The period has also been called the "Age of the Giants."

The Tyrannosaurus was widespread throughout North America during the late Cretaceous period. It was generally about 39 feet in length. Of course, this is the one we call "T Rex."

Now, I will have Michael J. Everhart tell you an abridged account of his imagined story of how a big fish ate a smaller fish and left their fossilized remains for George Sternberg to find in the Smoky Hill Chalk of Gove County, Kansas. This fossil is now in the Sternberg Museum in Hays, Kansas, for us to wonder and marvel at:

"The big Xiphactinus swam effortlessly through the clear, warm waters of the Western Inland Sea in a solitary, never-ending search for his next meal. It was not yet full grown, but still larger than any other species of fish, at nearly four meters of length (13 feet) in this ocean except the ginsu sharks. It had grown large enough that the marine lizards weren't interested in it as a meal. Its favorite prey was other fish.

The X-fish was alerted to a group of *Gillicus* feeding nearby and close to the surface. As it swam closer, it could see that a two meter fish (about 6 feet long) in the group swam surrounding a school of smaller fish. The *Gillicus* swam in circles around the trapped school. Occasionally some of the *Gillicus* darted through the smaller fish with its mouth wide open, gorging on the sudden abundance of prey. The *Gillicus* had their attention diverted so they did not notice the X-fish's approach from the dark waters beneath them.

The X-fish selected its victim and accelerated swiftly upward meeting the other fish nearly head on. Opening its large mouth at the last moment, it seized the smaller fish's head from below. As its lower jaw closed, the large, conical teeth punctured the thin bone covering the head of the *Gillicus* and kept it from getting away. The X-fish held on to its prey for several moments, then quickly repositioned it so that it was pointed head first into the larger fish's mouth.

At first, swallowing the big *Gillicus* was relatively easy. But then the X-fish began to have problems. At nearly two meters in length, the *Gillicus* weighed more than a hundred pounds and was probably the largest prey the X-fish had ever eaten. Once the head and the pectoral fins had passed into the larger fish's throat, there was no turning back. The bony pectoral fin rays of the *Gillicus* were tightly folded back against its body. Any attempt to reverse direction would cause them to unfold and catch in the muscular esophagus of the larger fish. The relative large body of the *Gillicus* now filled the mouth and throat of the X-fish and made it difficult for water to

reach its gills. The last two feet of the *Gillicus*, including its bony tail, still protruded beyond the jaws of the X-fish. Barely alive but tightly confined within the bony skull and forebody of the larger fish, the *Gillicus* thrashed about occasionally as it was swallowed. A final spasm caused one of its sharp fin rays to pierce the esophagus of the X-fish.

Twice as long as the *Gillicus* and much more massive, the X-fish struggled to swallow its prey. Unable to adequately replenish the oxygen in its body with the smaller fish lodged in its throat, however, it was quickly weakening. Slowly the smaller fish was moved deeper and deeper into the gullet of the larger one. Finally the bony tail moved entirely into the mouth, and the gills of the X-fish began to function normally again. Now the prey began to move more easily into the stomach of the X-fish, but something was wrong. The large fish swam in ever-slower circles as it finished swallowing the *Gillicus*. During its futile struggle to break free, a fin spine of the prey had punctured something vital in the X-fish. Within a few minutes, the X-fish stopped swimming, rolled over on its back and died, and then sank headfirst toward the muddy bottom below."

Source: Oceans of Kansas, by Michael J. Everhart

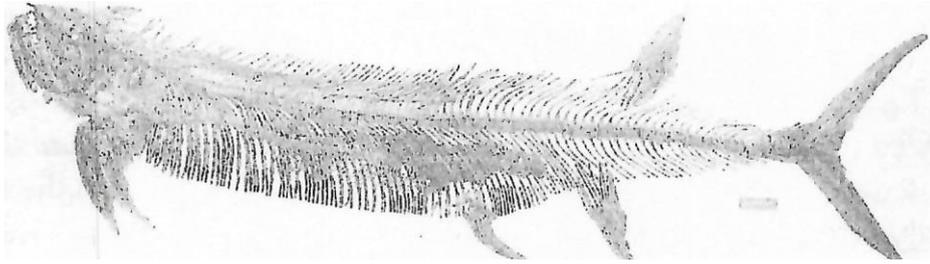
While this story is fiction, the famous "fish-in-a-fish" specimen recovered by George Sternberg is a fact (Rogers, 1991, p. 248; Liggett, 2001, p. 64).

Perhaps, one day, you will find something amazing, too!

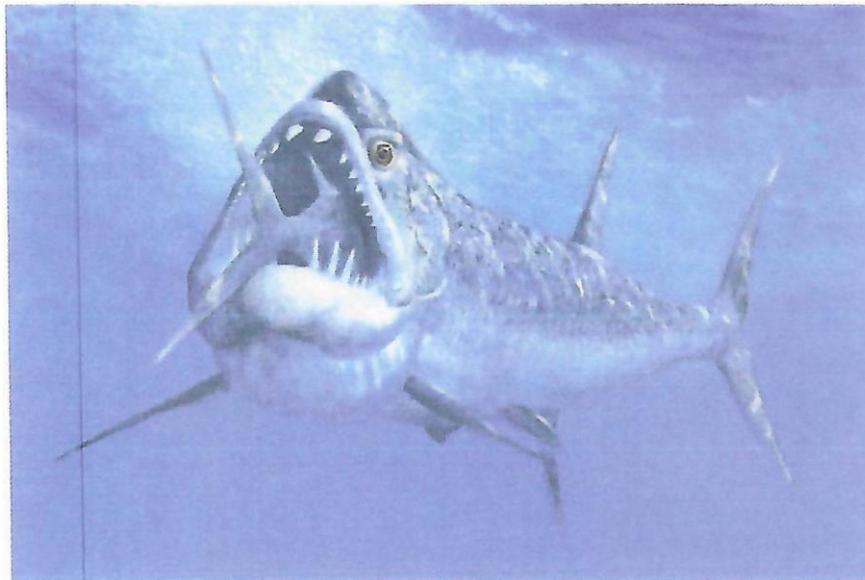
Rosemary Powell

ITEMS OF HISTORICAL INTEREST

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The famous "fish-in-a-fish" specimen of a large *Xiphactinus audax* and its last meal in the Sternberg Museum of Natural History in Hays, Kansas. The remains were collected from the Smoky Hill Chalk of Gove County in 1952.



During the last few minutes of its life, a giant *Xiphactinus* struggles to swallow another fish called *Gillicus*. This *Xiphactinus* died before the smaller fish could be digested.

The fossilized remains of the famous "fish-in-a-fish" Specimen were collected by George F. Sternberg from the Smoky Hill Chalk, and are currently displayed in the Sternberg Museum of Natural History. Painting by Dan Varner.

Source: Oceans of Kansas by Michael J. Everhart
Rosemary Powell