Along the westward-moving frontier, innovation and invention were requirements for survival and early American settlers were resourceful individuals indeed. It is not surprising that in the latter half of the 1800’s they sought and found ways to utilize the energy provided by that great natural resource of the prairies, the wind. One of the more spectacular contrivances they dreamed up was the windwagon, a vehicle with sails powered by the wind. Its brief history provides one of the more fascinating episodes in the saga of American transportation.

Although little information is available concerning the efforts of separate individuals to utilize the breezes of western Missouri and Kansas to propel their light wagons, there are bits and pieces in the history of pre-Civil War days indicating that some passenger-carrying windwagons were constructed. The vehicle which provided a real impetus to the creation of large wind-powered schooners, however, was a super-windwagon built in Missouri in 1853, envisioned as a replacement for the slow-moving freight-hauling bull trains to Santa Fe, California, and Oregon.

The story of this first kingsize clipper, though true, has all the aura of legend, and inspired a spate of folk tales written by such well-known authors as Stanley Vestal, Tom Smith, H. Allen Smith, Ennis Rees, who wrote the story for children, and Wilbur Schramm who wrote the lengthiest and the most wildly imaginative tale for Atlantic Monthly. These fables, all with the same basic plot, but with different casts of characters, have fostered the impression that the ship that navigated the grassy plains under sail was the figment of someone’s imagination. That Windwagon Smith, the hero of the tales, and the wagon itself were real is a fact not widely recognized.

Leslie’s Illustrated Magazine of July 7, 1860 carried this drawing of the windwagon.
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It all began when "Windwagon" Thomas (not Smith as in most

tales, and "Windwagon" because, according to Judge W. R.

Bernard, an old resident of Westport, Missouri, no one ever knew

his given name) steamed into Westport in a small wagon rigged with

sails. A former sailor, Thomas believed a wagon could run on prairie

grasses the same as a ship on water, by sails. He proved his theory

to the skeptics of Westport when he made a successful round trip from

that city to Council Grove, Kansas Territory, a run of approximately

300 miles, in his small trial model. Judge Bernard told the Kansas

City Star: "His return in safety to Westport was the cause of con-

siderable excitement and immediately the Westport and Santa Fe Over-

land Navigation Company was formed. The object of the company was

to build a fleet of the so-called windwagons and go into the overland

freight business."

There are conflicting stories about where the company's first

and, as it turned out, only mammoth freight wagon was built. Several

writers have stated that the schooner was built in Henry Sager's wagon

shops located in Westport. Others believe it was constructed in a

foundry in Independence, Missouri. All are in agreement, however,

about the wagon's dimensions. Constructed like a Conestoga wagon,

the huge craft was 25 feet long with a seven-foot beam and had wheels

12 feet in diameter. The hubs, "as big as barrels," were designed as

reservoirs for water that could be used when crossing desert country.

The craft was intended to move backwards with the tail-gate of the

wagon as the prow of the ship and the tongue brought up and over the

stern to act as a tiller.

Dr. J. W. Parker, a member of the newly formed freight com-

pany and the owner of a white mule of which he was inordinately proud,

said of the windwagon in later years, "I remember it well and I think

it was one of the most laughable things I ever saw. But that wagon

could go! I had one of the best mules in the country, and he could

not hold a candle to that wagon."

Under the heading of "Westport's Dry-Land Navy," a descrip-

tion of the big wagon's trial voyage, as related by Judge Bernard,

appeared in the Kansas City Star on August 6, 1905:

It was covered like the ordinary prairie

schooner, but over the covering was a small

desk on which the navigator operated the

sails attached to the mast which towered 20

feet above the deck.

One bright day, after completion of the

wagon, the trial trip was made. All the stock-

holders and a number of prominent citizens

embarked and after two yoke of oxen towed the

vehicle about three miles to prairie, they set

sail. The new wagon was even a greater suc-

cess than the first one and the way the
cumbersome looking rig scooted over gullies and small hillocks was surprising. The success was too good to be true and led to the downfall of the Overland Navigation Company and the destruction of the ship of the prairie. "Windwagon" Thomas, intoxicated with success and other stimulants, began a course of fancy sailing not in the catalogue of prairie navigation.

"Watch me run her in the face of the wind," said Thomas. And then the trouble began.

The wagon came around all right, but the sudden veering of the wind brought on a catastrophe. The big sail, catching the wind suddenly, sent the wagon backward at a speed never attained before, and in some manner the steering apparatus became deranged. Faster and faster went the windwagon, propelled by a rising wind and guided only by whimsical fancy.

Dr. Parker, the only stock owner who did not embark on the cruise, followed on a mule as rapidly as possible, fearing that his professional services would be needed. The rising wind, however, soon made vain the efforts of the mule, for the wagon revolved in a circle of about a mile in diameter with the terror-stricken faces of the stockholders and prominent citizens looking longingly at mother earth.

Spectators of the incident noticed on the next revolution that the wagon shed sundry stockholders and prominent citizens along its orbit. All deserted the ship save Thomas. The inventor stayed until another vagrant zephyr... wafted the entire outfit into a ten-rail stake and rider fence near Turkey Creek, and there the windwagon collapsed.

We fished Thomas out of the wreckage and Dr. Parker pronounced him practically uninjured. But that was the end of the windwagon and when the next easterly wind appeared in Westport, Thomas mounted his original wind-propelled vehicle and disappeared... That was the last of Westport's dry land navy.

About the same time that Thomas's wagon was being built, William Wills, another Westport wagonmaker, began to build a windwagon with a different design for John Parker. Smaller than the Thomas wagon, measuring only 20 feet long and four feet wide, it had a mast and four crossarms in which the sails were fastened. Theoretically, the schooner could run sideways if necessary to keep the wind in the sails.
When Wills finished Parker's schooner, the axles were greased with buffalo tallow and provisions were placed aboard. It was then towed out to a level stretch of prairie southwest of Shawnee, Kansas Territory. It was late in the day and the men returned to Westport for a good night's rest before embarking on their great adventure. When morning came the windwagon was gone. Parker had forgotten to lower the mast and a wind that came up in the night blew the windwagon away. There were wheel marks in the tall prairie grass, showing the direction the clipper had gone. Parker and his crew set out in pursuit of the wayward vehicle. Traveling at first at a rapid pace, then at a slower rate to save their horses, by midafternoon they found themselves lost, thirsty and hungry, with no guns with which to shoot game. A settler provided them with a little food, but had no information about the elusive wagon.

The men returned to Westport where August Rodert, who had been busily building his own version of a windwagon, offered to join the hunt. Rodert put a windmill on his wagon, similar to the mills of his native Holland, and ran a rawhide belt from the shaft of the mill to an axle at the rear of the wagon. Having tried the contraption in his backyard a number of times on windy days, he knew it would work.

With a good supply of provisions, and guns for shooting antelope and prairie chicken, the men set out. They traveled for several days over open grassland, often with the horses in a lather, trying to keep up with Rodert's windwagon. One day a rainstorm dampened the rawhide belt, causing it to stretch until it was useless. Parker forged ahead alone, but when the sun came out and the leather belt shrank, Rodert soon overtook him. Several days later the men saw where the errant clipper had crossed a railroad track, breaking...
the low telegraph wire with its mast. They also encountered a few settlers who had seen wagon tracks but no wagon. When the search was finally abandoned, the missing craft had not been found. What happened to it is still a mystery.

No record was found of other windwagons until seven years later, in 1860, when two vehicles were built in Oskaloosa, Kansas Territory, one by Andy Dawson and another by Samuel Peppard. Stories of windwagons usually have been of two types: folk tales about the Thomas wagon, using the skeleton of the true story with fictitious characters and contrived incidents; or more historically accurate but oftentimes jocular accounts of the exploits of Samuel Peppard. Peppard is often referred to as the first man, and sometimes as the only man, to navigate the western plains successfully with a sail-equipped wagon, probably due to the number of stories written about him at the time of his trip to the gold fields, and also to the fact that he kept a fairly detailed account of his trek in a journal.

Peppard was not the first man to pilot a windwagon to Denver City, however. That distinction appears to belong to A. J. "Andy" Dawson, who was not only the first man to make a successful journey to the Kansas gold fields, but the only one to complete the trip aboard his schooner, and the man who traveled at the fastest rate. Dawson set out from Oskaloosa in April of 1860 for Denver City, then located in Kansas Territory, in a wagon equipped with sails and a crank to propel the vehicle by man power if the wagon became becalmed. (The Kansas-Nebraska Act of May 30, 1854, created the territories of Kansas and Nebraska out of the Unorganized Territory. Until Kansas became a state in 1861 and the lines were redrawn, part of its western boundary was "on the summit of the Rocky Mountains." What later became the Colorado gold fields were the Kansas gold fields when the
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Dawson and Peppard windwagons until seven years built in Osceola, Kansas were by Samuel Peppard. Stories two types: folk tales about the true story with fictitious more historically accurate but bits of Samuel Peppard. Peppard d sometimes as the only man, fully with a sail-equipped wagon, written about him at the time of the fact that he kept a fairly 1.

wagon in 1860.

A few days later the Marysville Platform reported a "Novel Sight" which appeared on the city streets, "a singular looking vehicle fitted up with a sail and cutter, like a boat. It had the necessary machinery attached, so that two men could sit in the wagon and by turning a crank propel themselves onward at the rate of eight miles an hour. If this experiment proves successful, there will be no more use for mules and oxen."

On May 12, 1860, the Weekly Western Argus of Wyandotte City, Kansas Territory, printed a dispatch from a correspondent of the Missouri Democrat who was in Denver at the time of Dawson's triumphal entry into that mining town:

The great and long expected "Windwagon" arrived on Laramie Street yesterday morn, with flying colors. Time, 20-odd days across the plains... It is not anything like as extensive or scientific in its get up as the windwagon made by Mr. Thomas of Westport, Missouri... nevertheless, it is the windwagon which first crossed the great American plain and came to Pike's Peak!

Mr. A. J. Dawson, formerly of Weston, Missouri, we believe is the gentleman who is the "owner and master" and who commanded its crew to Denver City - all O.K. The party disposed of it here next day for a considerable sum of money... A crowd of persons flocked around her when she came in... Everybody crossed the creek here to get a sight of this new fangled frigate....

By this time Samuel Peppard, who owned a sawmill on a branch of the Grasshopper River near Osceola, had completed his windwagon, built with the help of John Hinton and dubbed "Peppard's Folly" by his neighbors. George Remsburg suggested that, because 1860 was a year of extensive drouth and business was slack in Kansas settlements, Peppard may have built his frigate just as a means of whiling away idle time. Since he and his companions set out immediately for the gold fields upon completion of the craft, however, it seems logical to assume that it was constructed for that purpose.

The Kansas City Times once described a windwagon as "a combination flying machine and go-cart." Peppard became aware of the wagon's flying capacity when he and seven companions took his invention out for a trial spin during a good stiff breeze. As the wind struck the large sail, the craft stuck its nose down and nearly capsized. Peppard slacked sail and set out again, using the smaller sail. The clipper is said to have attained a speed of 40 miles an hour, a velocity that caused the boxing in the wheels to heat. Going over a little knoll, it leaped about 30 feet into the air and came down with a crash that
broke the axletrees. In the words of the Kansas State Record, the wagon's passengers were deposited on the ground "in a somewhat damaged condition from broken heads, bruised limbs and bodies."

The schooner was repaired and Peppard and his crew set sail for the gold fields about May 11, 1865. No record was found of the route Dawson took to Denver, but in all probability it was the same as that traveled by Peppard. Known as the Northern Route via Fort Kearny and thence by the South Platte River to Denver City, it was described as "shorter than all the other well-known routes - and has stations and settlements all along - every 10 to 40 miles from the Missouri River to Denver City."

Although he was not mentioned by name, it is probable that the "wind ship" reported as arriving at Ft. Kearny by a visiting correspondent for Leslie's Illustrated Magazine was Peppard's. The date was May 26, about 15 days after his departure from Oskaloosa.

The ship hove in sight about 8 o'clock in the morning with a fresh breeze from east, northeast. It was running down in a westerly direction for the fort, under full sail, across the green prairie. The guard, astonished at such a sight, reported the matter to the officer on duty, and we all turned out to view the phenomenon. Gallantly she sailed, and at a distance ... not unlike a ship at sea ... in front is a large coach lamp to travel by night when the wind is favorable ... A crank and band wheels allow it to be propelled by hand when wind and tide are against them.

During his short stay at Ft. Kearny, the pilot of the clipper gave "fabulous accounts" of the windwagon's speed, "asserting that she made 40 miles per hour." The correspondent from Leslie's was skeptical, however, thinking that even at 20 miles an hour "she would have been torn to pieces." He timed her on a two-mile stretch and estimated that she was going only about eight miles an hour.

"Getting clear of the fort, she again caught the breeze, and went off at a dashing rate toward Pike's peak, stampeding all the animals on the road ... And followed by the curses ... of the Incommoded Pike's Peakers against 'that e'er darn windwagon.'"

Peppard's own entertaining account of his journey over the prairie ocean can be found in the archives of the Kansas State Historical Society. One of the most interesting episodes was an encounter with a band of Indians.

On the fifth day out ... about noon ... we were traveling along probably at about 10 or 12 miles an hour. A cloud of dust attracted
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about noon...we probably at about 10 or d of dust attracted our attention...We thought it was a band of Indians who were drunk and would do us harm if we allowed them to overtake us. The Indians were not hostile, but when...under the influence of "firewater"...were usually ugly. When we had finished our meal and smoked a pipeful apiece, the band of Indians had approached to within a mile of where we had stopped.

Strange to say they had not yet seen us.... we were in a depression of the prairie and... were thoroughly covered with dust and this served to make us the same color as the road. Not caring to have them approach too near, I let the brake partially off and again resumed our journey.

When we came out of the low place and I spread the sail, we could plainly see each Indian rise in his saddle with a start of surprise. As quick as a flash, each mustang was put into a gallop and the band of what we thought were drunken Indians was bearing down upon us. I knew that we could outrun them with ease and so gave myself no alarm.

The wagon was just getting under way when snap went a bolt that held the brake. The brake was useless and the Wind had risen until it was blowing 30 miles an hour. To give ourselves up to the Wind with no means of checking our speed would be madness. To allow the Indians to catch us would result in the loss of our provisions and if they drank the brandy we had, might result in our being personally molested. Time was precious. I again reefed the sail and bidding my companions to follow my example, I jumped to the ground and seized a wheel. The wagon stopped. I seized a halter of rope that we had picked up on the road, to bind the broken brake... As quick as my hands would let me I made secure the brake and we were ready to start.

The Indians were upon us, but fortunately, through suspicion or superstition, they had slackened their speed and were within 100 yards of us, advancing cautiously. This allowed me to give sail to the wind slowly and thus not wreck the wagon. A fresh look of surprise upon the faces of the red men greeted our eyes as the wagon began to move and gradually increased its speed. If they had been curious at the appearance of the vehicle, they were now astounded at seeing it move...A wild whoop came from the throat of each Indian and as I saw them lean over their mustangs and lash the
beasts into a dead run, I realized the race was on...

The swiftest of them all was a brave who rode a little gray mare. She clearly outclassed the others and as she gradually drew away from them the race resolved itself into one with her alone... For about a mile we had a race that was exciting...

The mare was fleet but the race was ours. The wind had risen higher and I was obliged to reef the sail to keep from being carried into the air... At last I saw that the mare was weakening and in order not to distance the brave, I applied the brake to slacken our speed. The Indian seeing this, suddenly drew in the mare and exclaimed:

"Ugh! Red man ride horse. White man fly like bird on wings of wind!"

(There is said to be a legend among the Indians of a wagon which traveled over the prairie without horses or oxen to pull it and with a white baner as high as a tepee. This episode is possibly the basis for the legend.)

About 50 miles northeast of Denver, Peppard and his crew were moving along at a leisurely pace when they saw a whirlwind approaching. As he hurried to let down the sail, the ropes caught in the pulley. He gave it a jerk and it broke, leaving no means of lowering the sail. The whirlwind carried the wagon about 20 feet into the air. When it came down, the hind wheels broke under the weight of the vehicle. The front wheels were sound, however, and with other salvage from the craft, the party fashioned a pousseart to carry their provisions. By the time they had gathered themselves together, they were surrounded by travelers who extended invitations to ride along with them. They cast their lot with a baggage train. Of the four weeks Peppard spent in getting to Denver, only nine days were passed in actual travel because of unfavorable weather.

Strangely, no mention of the windwagon was made in "Uncle Sam" Peppard's obituary in 1915. During his lifetime, while he took pride in relating his experiences with the windwagon, he reputedly never told the story unless asked to do so.

The disastrous finale of Peppard's journey did not mark the immediate demise of the prairie ship as transportation, however. In the late summer of that same year, the Council Grove Press reported that a wind wagon had arrived in that city from Westport and was expected to make regular trips between the two cities. Its running time was 48 hours.

Whether or not these expectations were realized, there was an account as late as 1887 of a windwagon, with John B. Worman of
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Westport acting as steersman, which carried a group to a camp
meeting, a run described as lively travelling. The project collapsed,
however, when the wagon became becalmed in a hollow. Apparently
Wornall’s schooner was not equipped with a crank for manual propul-
sion as Peppard’s wagon had been.

Among other vehicles equipped with sails and powered by
Kansas winds were handcars on the Kansas Pacific Railroad (later
the Union Pacific) in 1877. The cars were 16 feet in length with
sails 15 feet high, 12 feet wide at the bottom, 10 feet at the top.
With a good wind, they could attain a speed of 25 miles an hour.

In 1910, under the heading "A Wind Wagon the Latest," the
Kansas City Star described a sailing schooner that had been invented
in Louisville, Kentucky. Naturally, the Oskaloosa Times hastened
to declare that a windwagon was not new, and Kentucky could not
claim credit for a craft that had been invented in Kansas and Missouri
50 years earlier.

Writing for Westerners, Walter H. Blumenthal stated that not
even Missouri and Kansas can rightfully claim to be the home of the
first inventors of wind-propelled vehicles. Said he, “Sail locomotion
on land was known in Europe in eccentric experiment long before the
American ventures. A state carriage of the Governor of the Netherlands
in 1599 was propelled by sails.”

Wichita Festivals Windwagon on Parade.

Courtesy of The Wichita Eagle and The Wichita Beacon.
There is at least one windwagon in Kansas today, designed by architect Sam Mobley and built by the Star Lumber Company of Wichita to the exact specifications of "Windwagon" Thomas's original schooner. It is a featured attraction of the annual Wichita River Festival held in May, keeping alive the legend of Windwagon Smith.

New and recently inaugurated sports activities that utilize wind power are those of land sailing, using a boat equipped with both wheels and sails, surf sailing and skate sailing. Could it be that the next step will be the development of boat-shaped vehicle for sailing along the highways of the windy plains states?