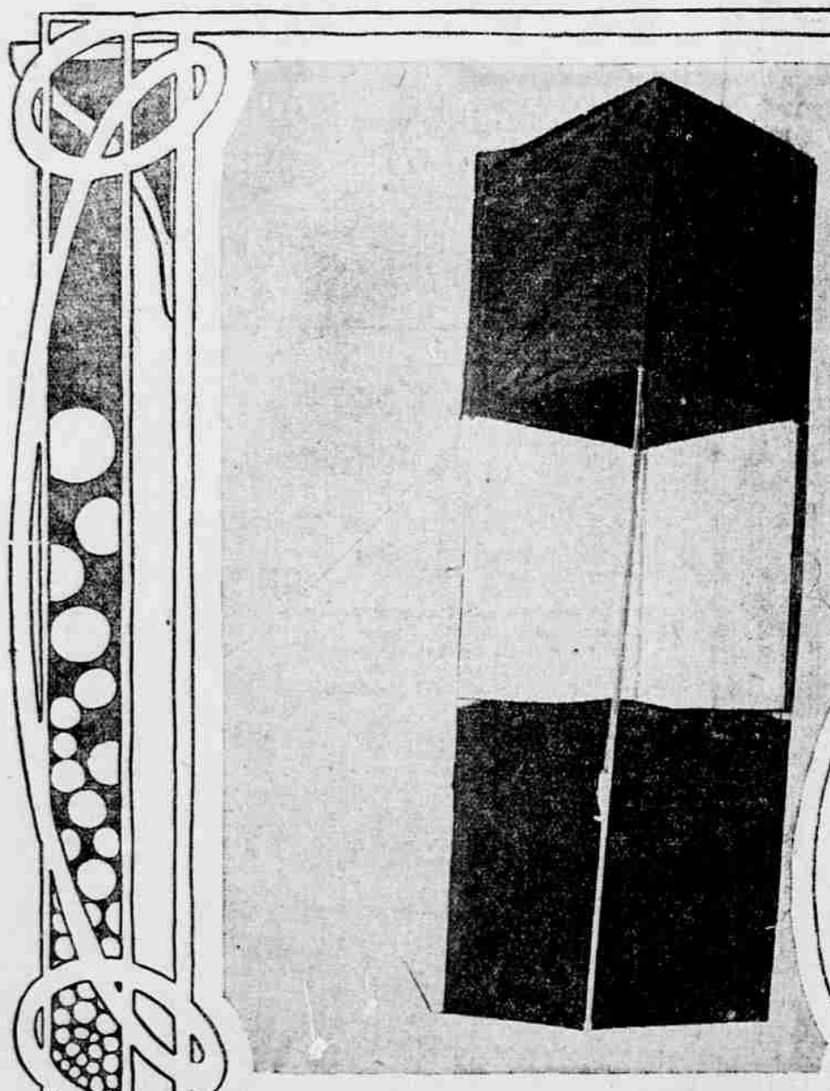
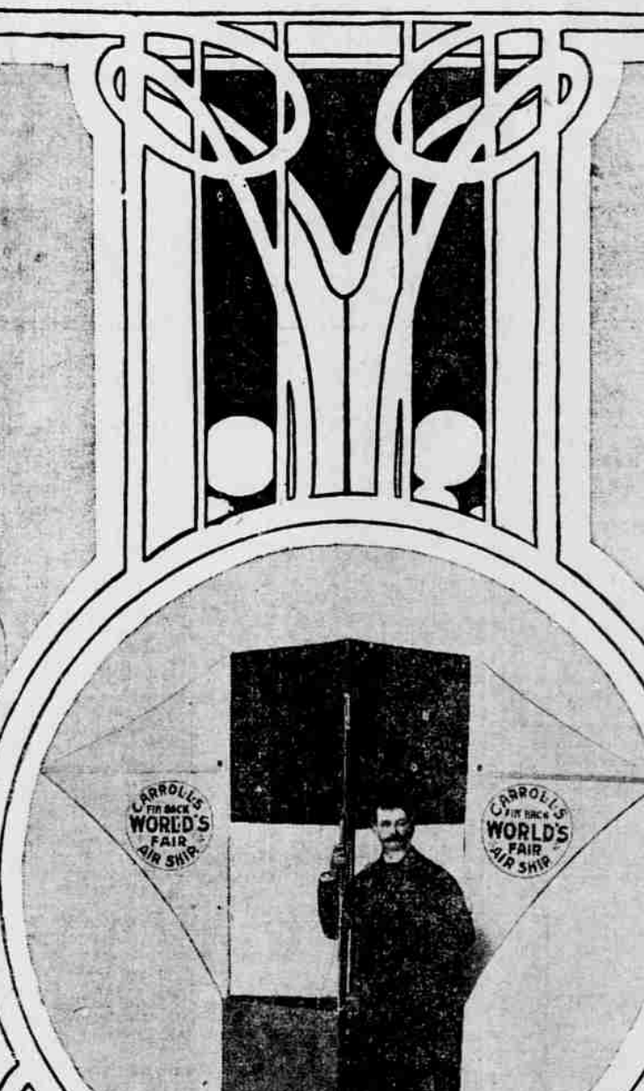
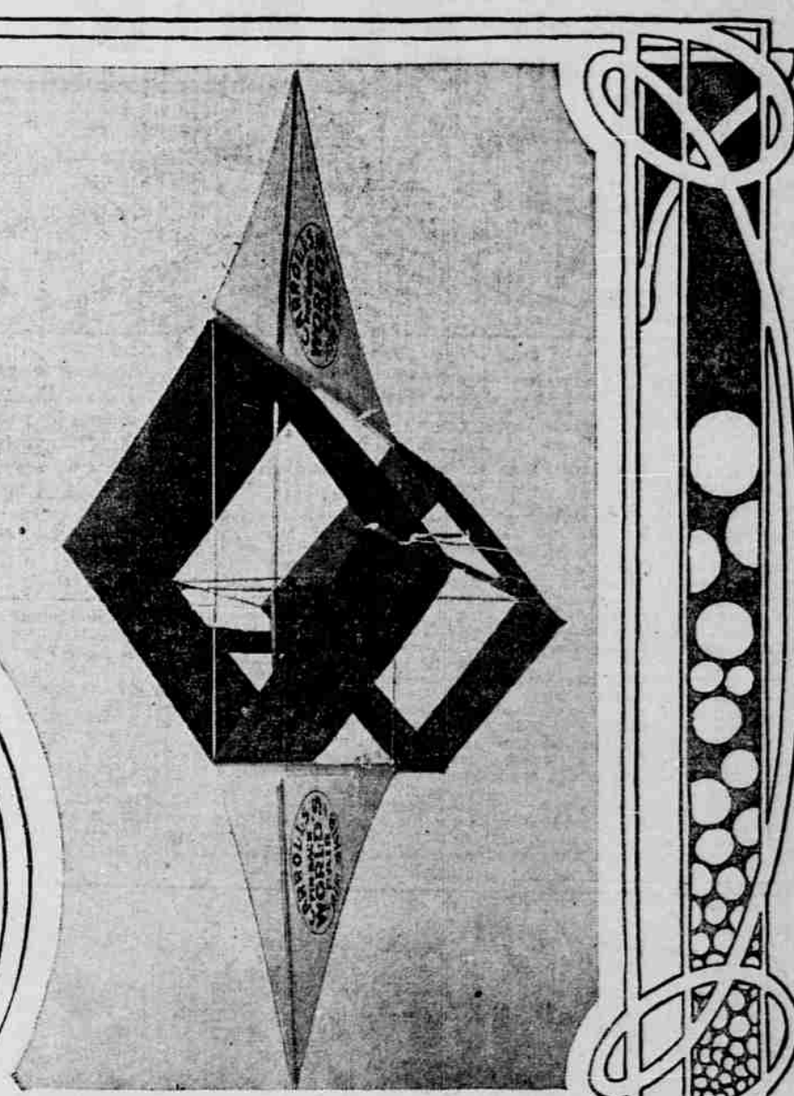
THE REMARKABLE FIN-BACK KITES OF A HOPEFUL MISSOURI INVENTOR.







Mr. Taylor Carroll, of St. Louis, Aims to Design Finally a Kite that Will Fly in Any Wind, Remain Motionless in the Air, and Have Enormous Pulling Power---Has One With a Lifting Power of Sixty Pounds and a Pulling Power of 150 Pounds.

Is Now Building a Kite Twelve Feet High by Fifteen Feet Wide, Which He Expects Will Lift an Average Size Man to Any Height---Has Adopted the Idea of Re-enforcing His Kites with Gas Bags so They Will Reach the Higher Currents.

DURING the past few years kite flying as a science has been extensively indulged in. The former sport for the boy is attracting the undivided attention of men in all parts of the world. What was once a mere pastime now offers a vast field for scientific experiment, with a view to practical usefulness in more ways than one.

In the successful application of kite flying to warfare men see an opportunity for considerable usefulness. Proper photographic apparatus attached to a kite, and flown at an elevation directly over an enemy's fortifications, yet at such an altitude as to eliminate the possibility of any amount of shooting taking effect, becomes a formidable weapon, inasmuch as it discloses distinctly upon the negative the exact plans and details of the fortifications. It has time and again been demonstrated beyond all possibility of a doubt that photographs can be successfully taken in this manner. Snap shots have been taken in this wise from elevations directly above various sectio s of Greater New York, and in the prints every detail of the vast conglomeration of houses and intersecting streets below was plainly visible.

As a novel and lucrative means of advertising in cities, kite flying has been so regarded for fully half a dozen years. Various brands of soap, biscuits, and other articles have been flaunted before the gaze of thousands in all parts of the country by means of huge streamers and banners attached to kite lines. The excellent advantages afforded by some forms of kites for signaling purposes have also been fully recognized and put into use.

The Blue Hill Observatory, at Blue Hill, Mass., a short distance outside of Boston, was established a few years ago for the purpose of fostering experiments with kites, perfecting their design, and studying their usefulness. From this place has radiated to a very great extent all the experiments in kite flying that have been made in this country. While kite experiments have been largely made in all parts of the United States, they have followed more or less upon the line of the work already accomplished at the Blue Hill Observatory.

But now comes word of new and more practical tests of the usefulness of kites from the West. While the scientific phases of kite flying were being exhaustively perused in the East, men were also at work upon the same subject in the western section of the country, but with a more practical object in view.

Mr. Taylor Carroll, of 509 Tesson Street, St. Louis, Mo., has come strongly to the fore in this work. His experiments have been largely confined to the construction of a type of kite that will fly in almost any wind, remain motionless in the air, and, above all else, have an enormous pulling power. Mr. Carroll believes that he has at last accomplished his object, or at least better than it has been arrived at heretofore. His kites are designed principally for advertising purposes, with a view also to their application to aerial photography.

It was his intention to construct a kite with a remarkable pulling power. This, of course, places very great strain upon the kite line and permits of larger designs for advertisements to be carried aloft, as well as enhancing their ability to lift photographic apparatus.

He has now built what he terms a "fin-back" kite, which he claims has very nearly double the lifting power of any other kite of the same dimensions. The largest of these "fin-backs" that he has yet constructed was eight feet in length by ten in width. This has a lifting capacity of sixty pounds, and an average pulling capacity of 150 pounds. So far as can be learned this is the only kite in existence that has a greater width than length.

The kite is composed of two diamond-shaped boxes, set in about the same relative positions as the compartments of an ordinary box kite, such as are commonly flown by boys. Two huge triangular wings or fins extend out from the kite, one on each side. These fins extend from the top of the lower box to the tip of the kite. On the top of the whole, and fastened to the rod forming the ridge of the kite, is the "fin-back" which gives the contrivance its name. This fin acts as a rudder, and serves to hold the kite steady, and almost rigid in the air. It is largely this accomplishment of remaining stationary that makes the thing so valuable as an advertising medium.

In writing to The Sunday Times regarding his kites, Mr. Carroll said:

"I built my kite on a new and scientific principle, as nearly after the idea of a bird as possible. The increased pulling and lifting power was what I aimed at, and I have succeeded very well in getting it. So great is the pulling power that caution and judgment must be exercised in letting out and pulling in the kite, to avoid being tripped and thrown to the ground, especially when the wind is very strong and squally. Ordinarily, two men are required to handle it, but often three or more are found necessary. The kite will easily stand a twenty-mile wind. I have had it up in a wind that was blowing at the rate of twenty-six miles an hour, but flying it under such circumstances was extremely hazardous, both to the operators and the kite.

"I have also adopted the idea of supplying the kite with gas bags of sufficient size to carry it up into the higher currents of air when there was little or no wind near the ground. Owing to the fact that the kite flies on an inclined plane the gas bags are entirely protected from the wind. Then by having this gas lifting power to depend upon besides the wind, I can easily send the contrivance up at night and use it to advantage for illuminated advertising purposes.

"At present I am engaged in building a kite twelve feet high by fifteen feet wide, which I confidently expect to lift an average sized man to any height he has the nerve to go. These kites when over six feet long are made in sections, so that they can be folded lengthwise for carrying and packing purposes. In order to carry a man up with the kite, a strong basket can be secured by a pulley to a point in the main line about three hundred feet below the kite. The man has merely to step into the basket upon the ground, after the kite has been let out, and by means of a windlass and strong rope be drawn up as high as he wishes to go, or as high as the main line is above the earth.

"I intend to have a monster specimen of one of these kites on exhibition at the St. Louis World's Fair in 1904."

BEAUTIFUL MADE-TO-ORDER RAINBOWS IN THE OFFICE AND IN THE HOME.

THE office walls were dark and dingy, but something unexpectedly beautiful glowed and glimmered on the one opposite the windows. The office men, silently following the gaze of the little stenographer, saw that the something was a rainbow—a miniature rainbow, but perfect as ever glorified the sky, and adorning the wall of a business office.

The rainbow was produced by the stray gleam of sunshine which pierced the glass of water standing on the stenographer's desk, and the stenographer had manipulated the creation of the rainbow for the sake of "resting her eyes."

The office manager happened to be absent and the other men were all around the rainbow in a moment.

"Did you ever make a rainbow out of a single drop of water?" queried the cashier. "The kids all used to do it in my town, years ago. Dip up a drop on the end of a pin or straw, you know, and hold it up to the sunshine. Perfect little rainbow as ever you saw it would throw, and the drop was good to look at, too. Lots of times I've done it on rainy Sundays or when we children couldn't get out."

"We used to do it with a tub or pail of water—left over from the washing, often," said the entry clerk. "Tub or pail stood outside the kitchen door, and the sunshine reflected in it danced all over the wall. Red, yellow, blue, green, purple—gorgeous. My kids do it now with a rose jar filled with water and stood on the window seats; lots of fun they have watching the colored sunbeams jumping on the wall."

"Fairies, we used to call them," put in the stenographer, softly. "We always played they were fairies, dancing for joy that the sun had come out again."

"My wife makes rainbows for the babies with the garden hose," the silent bookkeeper spoiled his taciturnity to remark. "She turns the stream toward the sunshine—morning or evening—and makes the spray fine. The sunlight, shining through, makes a rainbow as big as the back yard. Perfect, too. The babies go wild over it. I've done it myself for them, many a time."

The check clerk said nothing, but he took out of his pocket the prism which had once hung from a fine chandelier and tied it to the cord of the window shade. The stray sunbeam had no objection to doing double duty, and another rainbow soon danced on the wall opposite the window. The mingling, shimmering, glorious play of color resulting from the two rainbows was good to see. The men watched it in silence for some time. The eyes of the little stenographer were shining, although a trifle moist; her color came and went—with pleasure—almost as softly and prettily as the varied color on the wall. When one loves beauty and loveliness passionately yet is compelled to click a prosaic typewriter all day long and every day little bits of beauty occasion great delight. The cashier, not to be outdone in ingenuity, brought from the closet the little toilet mirror and placed it against the wall, at right angles from the window. His little pocket mirror did duty as a reflector, and after a little fussing and manipulation the third rainbow made its appearance. The stenographer cried out with pleasure as the lovely trio danced and shimmered. The silent bookkeeper rose to the occasion with another idea.

"Ever see a rainbow in a mist?" he inquired. "Nature knows how to do those things. Saw a beauty out over the river last month, and the sun wasn't shining, either, so far as could be seen. Great copper boiler on a freight car on the railroad acted as reflector, I suppose. You can do the same thing with a steamy window pane," he added, reflectively.

The window panes were not steamy, and the check clerk abandoned his momentary impulse of breathing on one of them without making the experiment. The stenographer dipped a long celluloid hairpin in the glass of water, and held it, quivering, up to the solitary ray of sunlight. The drops of water ran slowly down it, one by one, and fell to the floor. And down the wall opposite ran tiny, perfect rainbows, dropping also, in a shower of wonderful color, to the floor and out of existence. The entry clerk was deep in a story of doing a similar thing with soap bubbles when the office manager came in.

"You blow up the bubbles big and fat," the entry clerk was saying, as the office door swung to behind the manager, and then, when they're just ready to leave the pipe, or tube, you blow them lightly upward. Soap bubbles always look like globular rainbows, you know. When you send them flying to the ceiling, between a sunny window and the wall, the wall often seems covered with rainbows. Pretty sight, I can tell you."

"If I had a beanshooter and some soapsuds, or even some plain water, I could show you a trick or two about water rainbows," the check clerk began eagerly, but the calm voice of the office manager cut him short.

"The work must be light today, gentlemen," he observed, quietly, "if the entire office force has nothing to do but talk of soap bubbles and rainbows. But do not let me interrupt your conversation on any account. Very interesting, very. We wonder you left your desks to take part in it."

The little group of rainbow students scattered on the instant. The typewriter was clicking energetically in a second. Over the desks and books bent sober-faced, industrious men. But the glass of water on the stenographer's desk still made the rainbow on the wall dance and shimmer as the table vibrated to her work on the machine, and even the eyes of the office manager wandered to it admiringly from time to time.

UNIQUE BUILDING OF ALFRED UNIVERSITY.

THE Alfred University Building, in the State of New York, is a freak of architecture, unlike any other college building in America. It has attracted widespread attention in all parts of the country for its peculiar appearance and unique shape. Pictures of the structure have been published in newspapers and magazines all over the United tSates. Indeed, in its style of architecture, and in the material used in its construction, it is the oddest college building in the country.

This building is devoted to the museum and natural history department of the university. It is the gift of the late President Jonathan Allen, of the university, and Mrs. Allen. In addition to its very unusual architecture and peculiar shape it is also unique in the fact that in its outside walls there are more than 7,000 varieties of rock found in the drift near Alfred. The interior is finished in natural woods in great variety, so that the mere building itself is a veritable museum. In it may be seen something more than 30,000 very fine specimens of archaeology, mineralogy, conchology, and paleontilogy, collected by the late President Allen and given by him to the university.

The university itself is a place of exceptional interest. It is one of the finest appointed colleges in the Empire State and has a large attendance. It is a fact worthy of note that a great many, if not the majority, of its students, work their way through the institution. They obtain employment on farms in the vicinity during the spring and summer months, and, with the fruits of their labors, attend the college during the autumn and winter months, eking out their existence by odd jobs that present themselves from time to time. Some teach school one year and attend college the next; others work at trades, as clerks, bookkeepers, factory hands, and at other employments a portion of the time, and, when sufficient funds are accumulated, resume their studies until their funds are exhausted, when they again seek employment, returning after a time to complete their work at the college.

ALLEN STEINHEIM MUSEUM.

HE WAS A CANNIBAL KING

FROM the far-off Marquesas in the southern Pacific has come news of the death of J. H. Humrill, Boston born and bred, long a Yankee king of cannibals.

Rumrill lived for more than fifty years among the Marquesans, and for many years was their ruler. He died last year at the age of seventy, surrounded by his native wife and children.

His last thoughts took him back to the home of his boyhood and his kindred and giving a missionary friend the name and address of a sister who yet lives in the old New England home, he expressed a desire that she be informed of his feeble condition and that he died a Christian.

It was from this missionary that a letter was received recently by Rumrill's sister, Mrs. J. E. Nason, of Roxbury, giving some details of Rumrill's last days.

Rumrill was born in Boston in the early 30's of the last century. Love of the sea induced him in 1847 to ship on board a New Bedford whaler, which disappeared after rounding Cape Horn.

Upward of forty years had passed since he sailed away, when one day a naval officer called upon Mrs. Nason with news of her brother. The officer said that his ship had the year before stopped for water off the town of Taiohae, on Nukuhiva, one of the principal islands of the Marquesas group, and he had there met the king of the islanders, who to his surprise addressed him in rather awkward English.

The king was to all outward appearances one of the natives. One side of his face from the center of the forehead down was tattooed in native designs and characters, and he had the swarthy, copper color of the islanders. He told the officer that he was not a native but a New Englander born, and that his name was J. H. Rumrill.

His story, as the naval officer repeated it, was as follows: The whaling ship on which he sailed was wrecked on one of the Marquesas. All on board were drowned save Rumrill and four or five comrades.

The survivors were seized by the natives, who determined to serve them up at a grand feast. The news was sent by courier to distant parts of the islands and the rest of the inhabitants were invited to the banquet.

Before being dished up each one of the captives was bound securely and subjected to the slow, torturing process of being tattooed from head to foot on one side of the body, the dividing line being drawn straight down the center of the forehead. The rule was that he who should survive should not be killed.

Rumrill's comrades succumbed and were eaten, but he survived and became a favorite of the king and the natives. In course of time he learned the native language and customs, and taught the natives many useful things.

Above all, he sought to abolish their cannibalistic practices, and in this he was largely successful. The old king died, leaving Rumrill as his successor.

At the time of the American warship's visit Rumrill was nearly sixty. He told the visitor that he had lived so long in the islands and had been so thoroughly imbued with the spirit of the life of the islanders that he had no desire to return to his old home. Indeed, in his tattooed state it would be impossible for him to return to civilization and live in any comfort.

One wish he did have, and that was that his visitor on returning to the United States should call at his old home in Roxbury, seek his sister, and if alive give her greetings from her long lost brother. He also desired that she should write to him.

Mrs. Nason at once wrote a long letter to her brother, and after many months it reached its destination. Rumrill wrote back, giving more details of his life on the islands, and for a time the correspondence was kept up, though the letters from Rumrill were few. In one letter he remarked that he would no doubt cause a sensation if he were suddenly to appear in Boston and walk up Washington Street, and scare people with his half tattooed face.