

THROUGH THE WHIRLPOOL RAPIDS OF NIAGARA

So far as known, the first craft to pass through the whirlpool rapids of Niagara with human beings aboard was the small steamer "Maid of the Mist" on June 6, 1861. There were three men on board this boat, the principal one being Joel Robinson, who won renown by the daring feat. From that time until 1883 no person braved the billows of the wonderful gorge. In 1883, however, Capt. Matthew Webb, an English swimmer of note, crossed the ocean and journeyed to Niagara, bent on swimming through the rapids. He attempted the feat on July 24, 1883, and lost his life.

The death of Webb had a stimulating effect on people who love notoriety, and at once a number of schemes for navigating the rapids presented themselves, or were presented by people who sought fame and dollars. One such was Carlisle D. Graham, a Philadelphia cooper, who announced that he would build a barrel in which he could navigate the rapids and whirlpool. There was some little laughter at the thought of a human being rushing through the turbulent waters of the Niagara gorge inclosed in a barrel, but all the jokes cracked did not deter Graham from carrying out his scheme, and on the afternoon of Sunday, July 11, 1886, Graham surprised everybody by not only going through the rapids and whirlpool, but by going down to Lewiston, the full length of the gorge. Since that time he has made four other rapids trips in his barrel. One of these was made on July 13 last, when he landed at the whirlpool.

One of the results of Graham's last barrel trip was to arouse the ambition of Miss Maud Willard to make a similar trip, the result being that Graham and Miss Willard agreed to navigate the gorge on Saturday, Sept. 7. The plan was to have Miss Willard make the rapids voyage in Graham's barrel, while Graham, protected by a life preserver, was to swim from the whirlpool to Lewiston, a feat never successfully performed up to that time.

On the afternoon referred to Miss Willard and the barrel were cast adrift above the lower bridges at 3.58 o'clock. Two minutes later she passed under the bridges, and at 4.04 p. m. the barrel entered the whirlpool. It had been the experience that barrels and boats were captured and withdrawn from the pool within an hour after entering there, but in Miss Willard's case the barrel was not caught until after

ing been made on July 9, 1900, when in a boat of his own construction. On his return home after his first exploit he conceived the idea of rebuilding his boat in order that he might take a series of soundings close to the falls and also in the whirlpool. On this new craft he expended much time and labor and it was in it that he made his next trip. The boat is 21 feet in length, has an outside beam of four feet and a height of six feet six inches, and draws nearly four feet of water. It is claimed to be the smallest full-decked steamer in the world. In shape it somewhat resembles a whaleback. The wood used in the construction of the boat is oak, elm and pine. The deck is of oak and pine. The total weight of the boat is between four and five tons. The wooden keel has an iron weight or additional keel attached which weighs about 2,100 pounds. At the port of Chicago the boat is registered as the "Fool-Killer," a pleasure launch, and Nissen by the papers is al-



MISS WILLARD, WHO LOST HER LIFE IN THE WHIRLPOOL RAPIDS.

lowed to carry two people, which includes the crew.

Two deadlights, or windows, are set about eight feet back from the stem, one on each side of the engine room. The glasses are about four inches in diameter and of heavy plate, affording ample light to look about the engine room. The propeller is four-bladed, and 28 inches in diameter, quite large enough for a 40-foot boat. The interior of the boat is divided into five spaces, one at either end for corks and cans, an engine room, a coal room and

before. Two millions of people in Pennsylvania, and probably a million more who have emigrated from Pennsylvania to the middle west, use it in daily conversation. Even in cities like Allentown and Reading no merchant can be successful in business unless his employees are proficient in its use. On the trolley lines and in the railroad yards employees may be heard employing it constantly in social conversation. These men speak English well, but it is easier for them to chat in this strange dialect, which is governed by no rules of grammar. It seems that they are using it even when on duty, but the safety of the public demands that this practice shall be stopped, and the employees themselves will doubtless all agree that the Lehigh Valley railroad has done a good thing in issuing the orders.—Pennsylvania Grit.

TRAVEL UNDERGROUND.

London's Roads a Travesty on Rapid Transportation.

The movement of the traffic in the city of London proper, the center of the financial activity of the world, is suggested. Although only a square mile in area, with a day population of about 200,000 and a night population of only a tenth of this, in a single day over a million and a quarter of people and 100,000 vehicles enter and leave its limits. The general street traffic is carried on by about 200 miles of tramways, nearly 150 lines of omnibuses and 12,000 cabs. Internal communication is also provided by two lines of underground railways, with suburban connections, and three deep-level roads operated electrically. Two lines are under construction, six more authorized and parliamentary rights are sought by existing or new companies for thirteen railways, or modifications or extensions thereof. Most important of the existing roads for internal traffic and admitting of the greatest possibilities are the existing Metropolitan and the District railways, with their extensions. Unlike the roads of later construction they are of the "cut and cover" type, brick arched and with flat roadbeds. Both lines of way are in a single tunnel, close to the surface, and at times in the open, the extensions being almost entirely so. These roads may be described as composed of an inner circle (or ellipse) about thirteen miles around, with outlying branches radiating and looping in various directions. At present they are unfortunately under separate managements, as well as subject to running rights which interfere with a reasonable schedule. The class system and compartment cars characteristic of long-distance lines, are maintained, while fares vary materially and in many instances are almost prohibitive. The present operation is a travesty on rapid transit, says F. J. Sprague in Engineering. The inner circle presents a ten-minute service between the upper and lower halves, while with stations half a mile apart, and with no grades or curves worth mentioning, a schedule of only 11½ miles an hour is maintained. The atmosphere is foul from the use of steam and the delays are augmented by changing engines.

German Prince a Fiddler.

The German crown prince promises to exhibit the versatility for which his father is famous. During the recent visit to Lowther castle the Earl of Lonsdale engaged a large band, which was under the direction of Mr. Hamilton, the senior conductor of the London county council park bands, and played long programmes of music each evening. The programme, it may be mentioned, did not include an undue proportion of German music. Perhaps with the idea of remedying this omission the young prince on the last evening of his visit borrowed a violin from one of the orchestra and played Handel's "Largo" in very creditable fashion.

Honors Easy.

She: "You know, John, you promised me a sealskin wrap, and—" He: "And you promised to keep my stockings darned, and you haven't done it." She: "Well, you don't mean to say you'll break your promise on that account?" He: "Well, it's just this: You don't give a darn, and I don't give a wrap."—Philadelphia Press.

An Unreasonable Protest.

"I feel hurt," the young lover remarked to the adored one. "Why?" "Because all the time I have been courting you I find you have been making inquiries about me." "But courts of inquiry are all the style just now," said the fair girl.—Cleveland Plain Dealer.

What We Are Coming To.

"Do you think you will marry that titled gentleman from abroad?" "I haven't quite decided," answered the American heiress. "I am not sure I can support him in the style to which his ancestors were accustomed."

Spiders Tap Wires.

The Argentine Republic has been obliged to put the telegraph line between Rosario and Buenos Ayres underground, because on wet days the electric current was dissipated through the numerous spider webs attached to the wires.

FISHING FOR CEDAR LOGS.

Sunken New Jersey Swamps That Furnish Priceless Shingles.

The cedar shingle industry which flourished at Dennisville, Cape May county, N. J., a few years ago is now almost extinct, and the export of the once-prized wood, some of which is said to be nearly 3,000 years old, has been reduced to a minimum. The sunken cedar swamp reaches from the mouth of Dennis creek to what is known as Cedar Swamp creek, and runs along Cedar Swamp creek to the village of Petersburg. The age of this swamp is not accurately known. Twenty years ago Prof. Cook, then state geologist, visited Dennisville and examined a tree dug up by Charles Robert of Cape May, which he then said was 3,000 years of age. The valuable cedar, which consists of fallen trees, lies buried underneath the swamps, creeks, meadows and ponds at a depth of four feet. Thousands of acres have been worked, as this wood is very valuable for shingles. A roof of dug up cedar shingles will last for fifty years. The wood is not so plentiful now, as the log men have worked the swamps for years, and the present growth of cedar does not fall and bury itself. The process by which the wood is obtained is very interesting. An iron probe about five feet long is thrust into the mud until it strikes a buried log, when the logmen keep on sounding until they discover the length of the log. They then thrust in a saw and cut all the way round the log to free it from obstructions. If the log happens to be in the swamp or meadow it is dug out, but if in a pond or creek, as soon as it is freed from the saw it immediately springs from the mud and floats on the surface of the water. No signs of these buried logs can be seen and they are found only by probing. In many swamps there are three growths under the mud, with the present growth standing above them. An immense log has been dug from under a large aged stump that was also under ground. Some logs gnawed down by beavers have been worked in what is known as Robins' swamp. From 1860 to 1870 Elmer Edwards is said to have secured 100,800,000 dug-up cedar shingles. From one log \$75 worth of shingles were obtained. A large amount was sent to Winchester, Mass., to be used in the manufacture of violins.—Chicago Record-Herald.

TRACING SLANG PHRASES.

Some of Them Go Back to Classical Greece and Rome.

A learned German philologist recently has been tracing so-called slang phrases through the labyrinth of various languages, and has found that many of them are of ancient and some of classical origin, like the famous phrase, "He's a brick." As most every one knows, this originated from the reply of the King of Sparta, who, when asked where were the walls of his city, replied that Sparta had 50,000 soldiers, "and every man is a brick." It was once the custom in France to serve to a guest who had overstayed his welcome a cold shoulder of mutton instead of a hot roast, as a gentle hint to terminate his visit. Hence the expression, "To give the cold shoulder." Back in the days of "Good Queen Bess" a shoemaker named Hawkins committed suicide by standing on a bucket to bring him nearer to the convenient rafter which he had selected for his hanging place. Having made fast the rope he kicked the bucket away and so accomplished his purpose. Hence to "kick the bucket." In Puritan times a certain Ezekiah Morton was in the habit of baking two or three dozen apple pies every Saturday, and arranging them in the pantry with labels, appropriate to one or more pies for certain days. The pantry thus arranged was said to be "in apple-pie order." It was a custom of the Hungarians in their wars with the Turks to wear a feather in their cap for each Turk they killed. Hence "a feather in his cap." "Deadhead" is of extremely ancient origin. In Pompeii people who gained admission to the theater or the amphitheater without paying their way were "deadheads," because the check used for their admission consisted of a small ivory death's head. Perhaps the expression was older than Pompeii, and the ivory checks were the outcome of the word and not the word of the checks. But it is certain the word was used then as it is now.—New York Press.

How Br'er Williams Settled It.

"Dey tells me dat Br'er Williams done come ter grief ergin?" "Yes, he in mo' trouble." "How come?" "Well, you hearn dat tale 'bout Br'er Washinton eatin' wid de big white folks?" "Yes, dey tole it ter me." "Well, Br'er Williams 'low dat his time done come ter settle what dey calls de race problem down disaway, en de sooner it wuz settle de better. So he give a great feast, en pick out two er de bigges' white mens in de settlement, en sen 'um a invite ter come eat dianer wid 'im." "De goodness gracious!" "Dat what he done. En one er de white mens cut 'im down a pine saplin, en ter one on-itch two plow lines fum off his mule, en meetin' of Br'er Williams in de big road, dey took 'im ter de fur woods ter ax 'im a few leadin' questions 'bout dia same race problem; en w'en dey got 'thoo' wid 'im Br'er Williams say dat settin' down wuzn't good fer de he'll, en dat runnin' a mile a minute wuz de fines' exercise in de worl'! En de las' word dey heah 'im say con-cious wuz, 'Dam de race problem!'"—Atlanta Constitution.

...ABOUT... SUN RINGS

Queer Things Astronomers See Through Big Telescopes

In regard to the halo around the sun which created much excitement throughout the eastern section of this country, Mr. Justice Stahn, secretary of the astronomical section of the Maryland Academy of Science, says: "Very often, when the heavens are overcast by slight, or light, fleecy clouds, we observe colored rings about the moon and the sun. They are termed halos, or aureoles. I have never observed a halo about the sun in the latitude of Baltimore, but halos about the moon are quite frequent. One of the most brilliant that I have observed in Baltimore occurred some time in the beginning of 1901. Very often the halos do not form a complete circle, but are visible only in sections. Probably the reason we do not notice the halo about the sun is on account of its intense brilliancy, and that we do not look at it directly. The best way to observe halos is to observe the reflection of the sun in a black mirror, black glass or glass smoked on one side. In meteorology the halos are divided into two classes—the corona, which is of small diameter, and the halo, which is of a greater extent. In the corona the color of the inner part of the ring is blue, and the outer red. In the large halo the red is on the inside and the blue outside. The corona is classed as a different phenomenon—that is, the light from the sun or moon in encountering the small particles in the cloud or which form the cloud is broken up, scattered or diffracted, like the gratings that Prof. Rawland ruled at the Johns Hopkins university. Diffracted light may be of two kinds. It may pass through fine material and be diffracted like in a transmission grating, or it may be broken up by encountering the fine particles and being reflected. We never have a diffraction caused by a reflection of the light from the small particles in the cloud. The halo is supposed to be due both to diffraction and reflection. When light is diffracted it passes through a medium

which both disperses it and bends it out of its course. Thus the rainbow is produced by the sunlight passing through the drops of water and the water regional ways opposite to the sun. Halos occur only in the higher clouds and are more frequent than the corona. Sometimes the halos intersect each other, and at their intersection round patches are formed, called mock suns. The particles of matter forming the medium for refracting the light are mostly small ice crystals or ice needles. Mr. Gildersleeve, the late president of the Baltimore Astronomical Society, related that at various times he had observed snow storms through the telescope while making daylight observations of the stars and planets. At any rate there is considerable solid matter in the atmosphere that we sometimes observe in sweeping around with the telescope. On rare occasions we can see a bird flying across the field of view, of which not a sign can be seen with the naked eye. Then, again, small specks fly across, looking like small meteors. At one time I observed a ray seeming to have its origin at the setting sun on the horizon and extending as a slender beam clear to the zenith and lost to view a little to the east of the zenith. The mock suns are mostly seen in high latitudes. We can then come to the conclusion that halos and mock suns are simply due to the state of the atmosphere when it contains moisture, ice crystals and snow, and they existed from the remotest times, when the earth had been fashioned to its present condition, and there is no cause for alarm."—Baltimore News.

Proof of Girl's Beauty.

"Is she pretty?" they asked of the young man who was speaking of his fiancée. "Well, I don't want to boast," he replied, "but she always gets a seat on the street car."—Baltimore American.

BATTLESHIP'S WEAKNESS

Barbettes on English Craft Said to Have Sunk Six Inches

The report that the Implacable's barbettes have sunk six inches or so is a very serious one, but while it is an error to minimize the matter, nothing is gained by exaggerating it. We still hope that a good deal of exaggeration will be found to exist in the early reports. So far as we can gather from the vague paragraphs going around the daily press, the thing that has happened is not altogether without precedent. Twice before it has occurred with that system of gun mounting of which the essence is an immense weight supported on a very small base at the bottom of the ship. The principle is, roughly, that of an inverted cone, and has been used in a not very dissimilar form by the French for a good ten years. It has certain great advantages, but like most advantages, there are counterbalancing factors. If anything in the ship's construction is faulty, the whole mounting is likely to sink, and the fault may be created by the strain of jocking. This actually occurred with the Japanese battleship Shikishima, and it would puzzle anyone where to lay the blame.

So far as we can gather her barbettes guns were moved in dock, and the ship did not happen to be fully supported directly underneath the barrette. A sinking resulted, and it was remedied by cutting off some of the

base of the cone. Now it was obviously impossible for either builders or gun makers to anticipate an incident of this sort. Probably, we should say, the Implacable trouble is on all fours with that of the Shikishima. The Glory started for China with a defective barrette; this, so far as we can ascertain, was the direct result of rushing things, parts destined for various other ships being crowded into her so as to complete her in a hurry. It would be interesting to learn whether any Peters were robbed to pay the Implacable Paul. In any case, however, bad as the accident may be, there is no reason for the shriek that a certain class of people love to raise directly anything goes wrong. Any number of foreign ships meet similar or somewhat similar accidents. The foreigners, however, are never in a hurry to advertise the fact.—London Engineer.

It is the peculiar quality and character of an undisciplined man, and a man of the world, to expect no advantage, and to apprehend no mischief from himself, but all from objects without him. Whereas the philosopher, quite contrarily, looks only inward, and apprehends no good or evil can happen to him, but from himself alone.—Epicurus.

The Ringmaster of Old

He Used To Wear Evening Dress and White Gloves

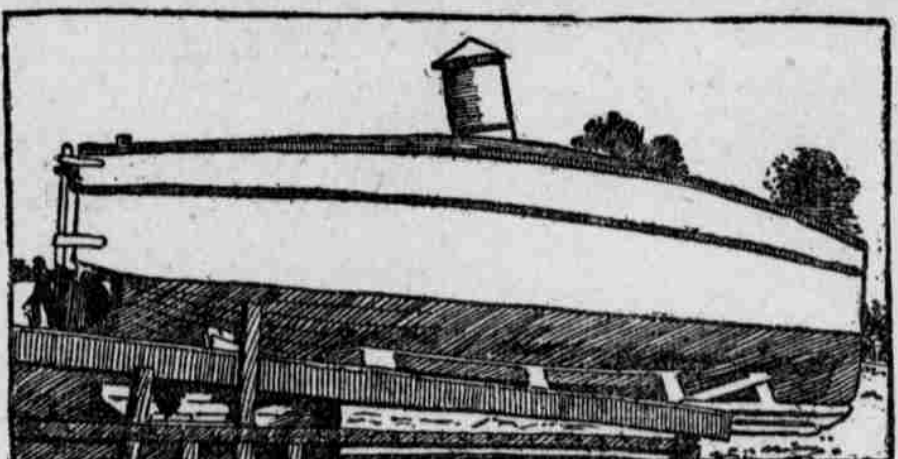
A circus without a ringmaster! They used to have black hair, parted in the middle and beautifully smoothed, evening dress (even at matinees) and white gloves. The ringmaster was almost one's earliest hero; the butcher came first, perhaps, and then the policeman and railway guard; but the ringmaster, when his hour struck, thrust these plebeians, these usurpers, these Warbucks and Simnels, into impetuous darkness. That whip was beyond all steels, all truncheons, all bull's eye lanterns and whistles; one would not exchange it for a scepter. The ringmaster's effulgence was superior even to the dimming influences of the clown's wit. That immortal dialogue following upon the bet of a bottle of "wine" (always "wine;" what is "wine?" champagne? claret? sherry? port?—port I suspect), that the ringmaster could not answer three questions with plain yes or no; how often have I heard it and how potent it always is! The first question was anything; the second question was anything; but the third, propounded by the clown after long self-communing, was steeped in gulle: "Do you still beat your wife?" There is no way out of that; affirmative and negative alike are powerless to rob that "still!" of its sting; and off goes the clown with his bottle of wine, crack goes the whip, round ambles the old white horse with a back like Table Moun-

tain, and the signorina resumes her petty capers. And today the ringmaster is seen only for an instant, and the speaking clown not at all!—The Cornhill.

Name Sells the Cigar.

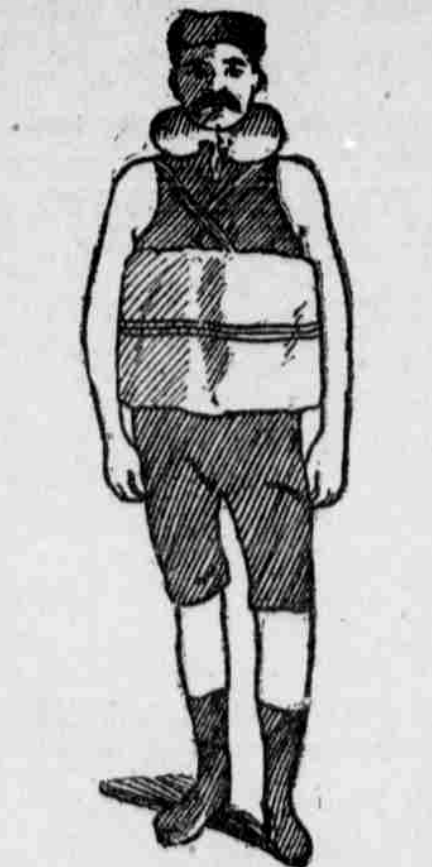
"It takes a lot of thinking to get up a name for a new cigar," remarked the representative of a big cigar manufactory. "The popularity of a cigar is influenced more or less by the judicious selection of a name. I've known some that didn't go at all under one name to have quite a large sale when put on the market as another brand. A good name for a cigar is one that is short and catchy. It must sound nice, for a name that jars on the ear will hoodoo any cigar. We do a lot of studying when we are about to introduce a new low-priced cigar to the public. At the factory a prize is usually offered for the best name, and there is much consideration given to the selection of the name. The smoker won't stand for a clumsy, unwieldy title, and we have to use judgment if we want to enjoy his patronage."—Chicago Journal.

In the palm of the hand there are 2,500 pores to the square inch. If these pores were united end to end they would measure nearly five miles. Man is the only animal that eats pie and employs a physician.



THE "FOOL-KILLER," IN WHICH PETER NISSEN SUCCESSFULLY NAVIGATED THE WHIRLPOOL RAPIDS—THE SMALLEST FULL-DECKED STEAMER IN THE WORLD.

9 p. m., and she had been floating in the pool over five hours. When she entered the barrel she took her pet dog for company's sake. When the barrel was landed the dog was alive, but Miss Willard was dead. The day before Miss Willard's trip, Martha Wa-



C. D. GRAHAM, WHO MADE A NOTABLE SWIMMING RECORD DOWN THE NIAGARA RIVER.

genthuhrer made the trip and was taken from the pool alive. On Nov. 28, 1886, Sadie Allen made the trip in a barrel of different construction, with George Hazlett.

Later a Michigan woman went to her death in the attempt.

The latest venture of this kind is that of Peter Nissen of Chicago, who on Oct. 12 successfully navigated the whirlpool rapids in a 21-foot cigar-shaped boat called the "Fool-Killer." This was his second trip, the first hav-