

THE ST. LOUIS.

BIGGEST VESSEL EVER BUILT IN AMERICA.

Details of Her Dimensions and Appearances - Splendid Interior Arrangements of the Great Ship.

The new American liner St. Louis is a beautiful craft, alike in regard to her lines, her sumptuous interior arrangements, and above all, her speed. It has not been claimed that the vessel has been built for speed, but when she returned from her six-hour trial trip it was known that she had developed the remarkable speed of 21 1/2 knots an hour without being pushed, and that when she was asked if she couldn't do any better the crack liner had plowed her way through the Atlantic at the rate of 22 knots and some odd fractions. This signifies that the St. Louis, to put it in plain English, can travel at the rate of about 24 miles an hour, and if she can do that in her trips across the Atlantic there isn't another ship afloat that will be able to keep pace with her.

She is the first Atlantic greyhound and the biggest steamship that has ever been built in America. The St. Louis is altogether American—built in an American shipyard, manned by an American crew of 400 men and commanded by an American captain.

The St. Louis has been built in less than two years. The first frames were erected on July 23, 1898, and she was launched fifteen months later. Her dimensions are: Length, 554 feet; length between perpendiculars, 535 feet; extreme breadth, 63 feet; molded depth, 42 feet; number of decks, 5; number of water-tight compartments formed by transverse bulkheads and flats, 17; distance of collision bulkhead abaft of stem, 33 feet; displacement at 26 feet draft, 16,000 tons.

The machinery of the St. Louis consists of two separate engines, each driving a separate screw. There are ten enormous boilers, six of which have double ends and four single ends. In addition to the main engines there are no less than forty-nine auxiliary engines used in the working of the ship and twelve additional ones for lighting and ventilating the vessel, independent of the propelling machinery. Her gross tonnage, 11,629.

The ventilating system of the ship, it is believed, will be the source of the greatest comfort to the passengers. There are four large ventilating plants, each operated by electricity. By this system it is possible to change the air completely in every room in the vessel in ten minutes. Each of the plants has two fans, one for exhaust and one for supply. As fast as one fan draws the vitiated air from the rooms another pumps fresh air in. In cold weather this fresh air is heated by means of ventilators near the top and the bottom of every apartment; the passenger may regulate the temperature and the ventilation as he chooses.

The lightning system is elaborate. All told there are more than thirteen hundred electric lights in the ship and four large dynamos are required in operating the extensive plant. That would be enough to supply a town of large size. The passenger capacity of the ship is: First cabin, 350; second cabin, 200; steerage, 800. The crew will number about 400.

Among the interesting facts about the ship are that there are fully one thousand tons of piping of the various kinds in the ship. The circulating pumps will pump up at least fifty million gallons of cooling water a day, probably double the amount of water required for the use of New York City in a single day. The furnaces will consume no less than the enormous amount of 7,500,000 cubic feet of air an hour. The amount of coal used a day will be little more than three hundred tons. The length of the boiler tubes if placed in a straight line would be nearly ten miles and the length of the condenser tubes would be more than twenty-five miles if put in a line. The total number of separate pieces of steel in the main structure of the ship is no less than 40,000, and the total number of square feet of timber used in the construction is more than 1,200,000. The total number of rivets used in building the vessel is not far from a million and a quarter.

The people of St. Louis are naturally proud of the ship that has been called after their town. As a sense of their appreciation they have presented the St. Louis with 1,622 standard volumes for the saloon library and 639 volumes for the second saloon. Some folks in St. Louis also presented the ship with 200 copies of hymnals and prayer books. Other gifts from the town included ten ornamental glass windows, portraying prominent features of St. Louis, and a beautiful set of flags.

The vessel is so divided that in case of collision two and even three water tight compartments could be flooded and not endanger the safety of the ship. The fastening edges of the bulkheads have been made unusually secure, so that if the ship sustained a shock in that place in collision the chances are that only one compartment would be flooded. This same arrangement has been made in the engine and boiler spaces. The boilers are in two groups, one for each funnel. They are entirely separated from each other, and if one set of boilers became incapacitated the other set could do the work of supplying steam to the engines at a moderate rate of speed. The engines likewise are cut off from each other by water tight compartments, and it would be possible to run the ship with either engine if the other should break down. In addition to these

precautions for safety, there are in the life saving equipment fourteen life boats, fourteen collapsible boats, one cutter, one gig and four metal life boats, and they all have the advantage of being operated from the shade deck above any possible rush of frightened persons to secure places in them.

Keep the Water Pure.

If a pitcher of ice water is set in a room inhabited, in a few hours it will have absorbed the perspiration gases of the room, the air of which will have become purer but the water unfit for use. This depends on the fact that water has the faculty of condensing and thereby absorbing nearly all the gases. Hence water kept uncovered in a room a while is always unfit for use, and should be often removed, whether it has become warm or not. Impure water is as injurious to health as impure air, and every person should provide the means of obtaining fresh pure water for all domestic uses. An hour's intelligent examination of the water supply at a proposed country home would in a large majority of cases prevent the risk of fevers and diphtheria. Take in your dressing case an ounce phial of saturated solution of permanganate of potash. Mix six or eight drops into a tumbler of the drinking water that is supplied. If it turns brown in an hour, the water is broadly speaking, unfit to drink; if not, it is not especially harmful. If a country hotel sewage system is confined to cesspools, within a hundred feet of the house, and near the water supply, take the next train. These matters should force themselves on one's personal attention.

Odds and Ends.

Only thirty per cent. of the robberies committed in London lead to a conviction.

Experiments prove that snakes will not cross hair ropes.

The horned toad of California is almost as invisible as the sand in which it exists.

The strawberry is known all over the world, and was used as an article of food by the ancients.

In several European countries, including France and Belgium, elections are always held on Sunday.

There are forty-eight different materials used in the construction of a piano, from no fewer than sixteen countries.

At the depth of three thousand feet the temperature of the oceans is said to be the same both at the Arctic Circle and on the equator.

The Chicago Civic Confederation declares that there are 60,000 victims of the opium habit in that city. They keep alive 100 public smoking places.

Australia is a country without orphans or an orphanage. Every waif is taken to the receiving house, where it is kept until a country home is found for it.

To the Pyramids by trolley may soon be a possible trip. The Egyptian government has just granted a concession for an electric railroad in Cairo, and the Pyramids are only eight miles away.

There is a loaf of bread in the Agricultural Department at Washington made from the roasted leaves of a plant allied to the century plant. Another kind of bread is from dough of juniper berries.

Scores of Quaker families in southern Pennsylvania have preserved the marriage certificates of their ancestors for many generations, signed—as is the Quaker custom—by all the guests at the ceremony.

When the tunes of a piano-organ are changed, the cost of a new set, consisting of ten tunes, is about \$15. Owing to the intricacies of the instrument, if a new tune is required, an entire fresh set must be put in.

Wilhelmina, Queen of Holland.

The sweet girlish face which accompanies this paragraph might belong to almost any little American schoolgirl, but it is the latest picture of Holland's young queen, Wilhelmina. She is a most winsome and lovable girl, just past her fourteenth birthday, and is adored by her loyal subjects. With all her childishness she is conscious of her coming responsibilities, and that gives her manners a little touch of reserve and dignity that seem almost out of



THE QUEEN OF HOLLAND.

place with the fresh simplicity of her youth. She has just been over to England with her mother, to visit her aunt, the Duchess of Albany, and in the grounds at Claremont, where her aunt's fine palace stands, with her cousins, a boy and a girl near her own age, she has had as merry a romp as if she were not burdened with the coming cares of a kingdom. Everybody will wish this pleasant-faced child, who is both amiable and intelligent, a happy life and a long and prosperous reign.

BYRNES' METHODS.

Incidents in the Career of the Detective.

Thomas Byrnes, who recently retired from the head of the New York police force, was born in that city June 15, 1842. He learned the trade of gasfitter and worked at it until he went to the war in 1861 with Ellisworth's Zouaves. He joined the police force on December 10, 1865, and was advanced by successive stages to the superintendency in 1892.

One of the first orders he put forth was one prohibiting any man in his department from opening his mouth about police business. Every story of crime and crime detected which came from the Detective Bureau was told by Byrnes himself. He made it his business to teach criminals that certain kinds of crime must not be committed. Highway robbery, bank burglaries, or important burglaries of any kind, systematic forgeries, counterfeiting and a lot of other crimes were prohibited, and, to the credit of the system which Mr. Byrnes created to suppress them, have never been allowed to gain a foothold in New York.

Byrnes was a man of force and not finesse. His business was to check the actions of certain thieves and other criminals. To do this he made it his business to know criminals. He did not go out in the streets to talk to thieves, nor did he have them calling upon him as honored guests, he has explained, but when they were brought in to him as suspects each day he made them tell what they knew.



EX-CHIEF OF POLICE THOMAS BYRNES.

Armed with power under the law to make arbitrary arrests, to lock men, or women either, in the cells under the headquarters building, and to keep them there for twenty-four hours, not even admitting their presence there, or permitting a relative or friend to approach them, he was able to get almost any information out of a criminal caught in his net that he wanted against an associate or against himself.

Byrnes himself is authority for the manner in which he forced a confession from the man Unger, who murdered his friend and afterward cut and sawed up the body.

"I was criticised for what I did in this case," he has said, "but I was prepared to defend my actions. Unger was a big, stolid, heavy jawed fellow—as stubborn and reticent as any man I ever saw. I could get nothing out of him, and I did not seem to be able to make any impression upon him. So I got the blood stained lounge upon which he had cut up his friend, the knife, the saw and the hammer with which he killed him, and put all of these things in the little, narrow cell with him. Well, in thirty minutes he was trying to break out of his cell to get away from these things. He was well ready to confess."

Byrnes treated the thieves brought before him with the utmost contempt. He spoke to them as if they were the dirt of the streets, and of them as "contagious diseases on the highways." "I never let them feel as if they were as big as a double ace," he has said. "When they come to me whining about their intention to lead honorable lives, I say: 'None of that here. You are a thief and you know it. Steal all you can and get away with it if you can, but if you try it in New York I'll land you where you belong.'"

If it happened that a thief of any note came to town and did not report to him how he would send for him, ask him how he dared to come, and what he meant to do, and confront him with his record.

"I'd make him feel that he did not amount to as much as a fly buzzing at the window," the late chief has said.

He kept a corps of stool pigeons constantly in the employment of his department to make the acquaintance of and to betray thieves.

It was to keep track of all the different kinds of professional criminals that Byrnes organized his force. One lot of men looked after one class of criminals and other lots of the other sorts, each lot of detectives having its specialty in crime and criminals. Between Byrnes and his men and the thieves there grew up a feeling not unlike friendship.

"They know what their business is," said Byrnes. "They speak of me with a term of endearment which would not look well in print, but they usually add that I am 'square with them.' Byrnes wants to send everybody to jail," they say, "but as long as we don't steal in New York he don't bother us, and he don't take what we've got, except by process of law." I don't molest them unless I want them, or somebody else wants me to get them. Otherwise, if they

keep out of the way I've no cause to trouble them beyond keeping an eye on them from day to day."

A professional thief had few rights left in Mr. Byrnes' eye. It was upon this principle that he acted upon each of the occasions of great gatherings in New York since the funeral day of General Grant. Upon each occasion he issued a proclamation warning criminals that if they were seen upon the streets on any of these days they would be summarily arrested and locked up until the show was over. If magistrates discharged the prisoners after he had kept them the time allowed by law before arraignment, which is anything less than twenty-four hours, he threatened to rearrest the men at once on the sidewalk outside the court houses.

The Trotting Queen.

Allx stands fifteen hands high and weighs 950 pounds. She has an exceedingly bloodlike look, and her head, neck and shoulders are perfect. She is wide across the forehead, with a beautiful, beaming, intelligent eye. Her great peculiarity is that she is not fond of the opposite sex. She is exceedingly fond of the ladies, and a bonnet, with a good looking face underneath it, has only got to appear at her stall, when she will immediately go to meet the visitor. She will put her head down apparently to kiss the hand of the stranger, but in reality it is only her fondness for bonbons and sugar, which her lady visitors, who know her weakness, are always ready to give her. In this respect she is much like her own sex, whether equine or human; she is fond of the sweetness and luxuries of life. She is a model traveler, and as soon as she gets into her car lays down and has no fear. As a campaigner she is fearless, resolute and game, and in every respect the beau ideal, the dream and the realization of the perfect American trotter.

Death for Train Robbers.

A bill has passed the National Congress of Mexico regulating the manner in which train robbers will hereafter be dealt with in that country. The new law provides that if during the assault on any train there should result a case of robbery or the death of one or more passengers, the criminals, if apprehended, will then and there be condemned to suffer the death penalty without any other formality than the drafting of the minutes regarding the execution by the officers in charge of the forces effecting their capture.

Those whose capture shall not be made at the moment of the commission of the crime will be tried by the authorities adjacent to the spot of their apprehension in the peremptory period of fifteen days, and be made to suffer the death penalty.

The Lively Turtle.

Philadelphia has swiftly caught on to another turtle. It is said a land turtle that without fail for twenty-six years has regularly appeared at the home of Michael Mackey, at Parker Ford, Chester County, came to time a few days ago, and is being proudly exhibited around Pottstown by Mr. Mackey. That gentleman asserts that there can be no mistaking his turtle, as the initials of his name are emblazoned on its shell. He says that its training has been so well developed at his home that at the sound of the dinner bell it comes into the dining room to receive its allotment of food. It stays around the Mackey premises until September, and then goes off to its winter quarters.

To Please the Eyes.

Here are some of the paradoxes of architecture. If a column which supports an entablature is perfectly straight, it appears to lean outward, therefore the architect makes it lean inward. The perfectly level edge of a roof appears to drop about the middle, therefore it must be raised slightly at that point. A tapering monument with straight sides appears to be concave, therefore the sides are swelled a little. Corners are made to look square by being in truth a little broader angled. Architects discovered ages ago that the human eye was prone to deceive and they have humored it ever since.

Centers of Paper Wheels.

The centers of paper wheels are made of successive layers of paper and glue firmly pressed together by hydraulic machinery, and a steel or iron plate is then bolted on each side of this paper center, and a steel tire is secured to the plates and center in the same manner as in a spoke-center wheel.

The centers of wheels of these descriptions are practically indestructible. The steel tire, of course, will wear out in time, but all that is necessary is to put a new tire on the center, and then the wheel is as good as new.

Light by Reflection.

A manufacturer in Europe did not find satisfaction in any of the usual methods for the lighting of his cloth mills. He tried gas jets, arc lights and incandescent lamps, all of which failed to satisfy him because they either did not give light enough, or too much light, or cast shadows. He finally patented the walls of his room white, and beneath a certain number of arc lights suspended reflectors. This threw the light up to the white ceiling from which it was reflected to the room below, and this method of lighting is reported to have been a success.

FOR THE YOUNG FOLKS.

"FORWARD, MARCH!"
"Halt!" cries Captain Lazy Bones.
"Halt! halt! and stand at ease;
This dusty street will tire our feet.
And make us cough and sneeze."
Then furl your colors, Lazy Bones.
And make your meaning clear;
You're not the man to lead the van,
Your place is in the rear.

"Right about!" cries Captain Doubt;
"A mountain lies ahead;
The road is rough, we've done enough,
Fall out! and go to bed."
Please, doff your feathers, Captain Doubt.
Our cause you do not aid,
Such chiefs as you are only true
At mass and dress parade.

"Forward! March!" cries Captain Pluck.
"Heed not how winds may blow.
Sound no retreat until defeat.
Or we defeat the foe."
Three cheers! Lead on, we'll follow you:
For glorious cause we fight,
And we will go and meet the foe,
To battle for the right.
—Edward Carswell.

ANTS AS BITERS.

Ants are terrible fighters. They have very powerful jaws, considering the size of their bodies, and therefore, their method is by biting. They will bite one another and hold on with a wonderful grip of the jaws, even after all their legs have been bitten off by their ants.
Sometimes six or eight ants will be clinging with a death hold to one another, making a peculiar spectacle, some with a leg gone and some with half the body gone. One singular fact is that the grip of an ant's jaw is retained even after the body has been bitten off and nothing but the head remains.

PRESENCE OF MIND.

Here is an account of two boys, who by presence of mind and rare good sense, saved the life of their father.
In Maine, lately, these two boys went out to the woods with their father to see him cut down trees. Through a mistake in calculating how a tree he was cutting would fall, the father was caught and pinned to the ground, the tree lying across his body.
At the fearful sight the boys did not lose their presence of mind, but set to work with energy to save their father. Some boys would have exhausted their strength in vain efforts to remove the tree; others would have run and screamed for help, and meantime the father would have died.
The boys did neither of these things. They commenced digging a hole immediately under their father, and in a very short time released him from his awful situation. Their coolness and wisdom were the means of saving his life.

LION AND MOUSE.

A mouse was put in the cage of a lion to test whether, as the old fables asserted, there was a natural affection between them. The experiment demonstrates that each was so afraid of the other that no affection could exist between them. The lion saw the mouse before he was fairly through the bars, and was after him instantly.
Away went the little fellow, scurrying across the floor and squeaking in fright. When he had gone about ten feet the lion sprang, lighting a little in front of him. The mouse turned, and the lion sprang again. This was repeated several times, the mouse traversing a shorter distance after each spring of the lion.
Finally the mouse stood still, squealing and trembling. The lion stood over him, studying him with interest. Presently he shot out his big paw and brought it down directly on the mouse, but so gently that the mouse was not injured in the least, though held fast between the claws.
Then the lion played with him, now lifting his paw and letting the mouse run a few inches, and then stopping him again as before. Suddenly the mouse changed his tactics, and instead of running when the lion lifted his paw, sprang into the air straight at the lion's head.
The lion, terrified, gave a great leap back, striking the bars with all his weight. Then he opened his jaws and roared again, while the little mouse, still squealing, made his escape. Of the two the lion was the more frightened.

THE CAT'S REVENGE.

A cat story for a change.
Blossom is a big gray cat. She has been in the family for seven years, and her mistress thinks she was fully 10 when she came uninvited and took possession, according to the Boston Transcript. Her charms made her welcome, and visitors, as a rule, pet her to her heart's satisfaction. Still she shows her loyalty to her mistress by many fine qualities.

One day a young man came for a short visit. He was an inveterate tease. As there was no one else for a victim, he took Blossom in hand, in spite of pleadings and protestations. Her ears were greeted with the strange terms, "old rascal," "necropage," "tramp" and kindred names till the astonished cat did not know what had come to her. Her pretty ways disappeared, she fled from his approach and hid whenever she could till he was out of the house.

One morning she was missing for some hours and was not to be found in any of her hiding places. A loud cry from the chambermaid revealed her whereabouts. Blossom had re-venge herself on the visitor's night-

shirt, which lay in tatters on the floor! Pissy was scolded, and every one was cautioned to keep the door shut. In vain! The cat would find her way in and hide till the chambermaid will tire our feet.
And then the claws went to work, first on the visitor's own clothes, if any could be found, and then on the pillow cases. The young man tried to soothe her feelings, but she would have none of him, and he was glad to cut short his visit. Blossom quickly recovered her usual demeanor, and has never been known to destroy anything from that day to this.

A William Goat Flags a Train.

A track walker on the Pennsylvania Railroad, who lives in Philadelphia suburbs, is thoroughly convinced that an offensive William goat that infests his neighborhood was not born to die on the railroad.
On returning from his work one afternoon he found the goat engaged making a meal of one of his best flannel shirts, which had been placed on the line to dry. The shirt was a wreck when he arrived on the scene, but he was not too mad to let the chance slip for punishing the goat. After a hot chase he caught William, and securing his legs with what was left of the red shirt, carried him out and placed him on the railroad, hurrying off of sight to watch an approaching freight train relieve the neighborhood of the offensive goat. The animal, in the meantime, kept up a continual kicking, giving portions of the red shirt a chance to move rapidly to and fro, and with so much success that the engineer of the oncoming freight train mistook the fluttering remnants of the red shirt for the regular danger signal, and stopped his engine in time to save the goat's life.

Antiquity of Our Race.

An Austrian student, Herr Low, who has been traveling in Central America, has recently obtained and forwarded to the Imperial Museum in Vienna twelve large stone slabs bearing footprints in the solid rock. The slabs were taken from the quarry over Lake Managua, in the territory of Nicaragua. These footprints had been overlaid by eleven different layers of stone, extending to a depth of four meters, and indicating an antiquity for our race quite transcending all conjectures hitherto hazarded. They are about three-quarters of a meter square and are sunk into the stone to a depth of from eight to ten centimeters. The footprints are said to be very conspicuous and seem to be those of three distinct persons, one of whom was a child. To what race or to what age they belonged no one yet has ventured to guess.

The Deepest Mine.

It has been the undisputed claim of Austria that she possessed the deepest metal mine in the world, the Maria shaft at the mines of Pribram, which was 3,675 feet below the surface at the time of the great fire in 1892. It has now been surpassed, says the Engineering and Mining Journal, by the No. 3 shaft of the Tamarack Copper Mining Company, in Michigan, which on December 1 was 3,640 feet deep, and is now more than 3,700, the average rate of sinking being about seventy-five feet a month. This makes it beyond question the deepest metal mine in existence, and only one other shaft has reached a greater depth, that of a coal mine in Belgium, for which 3,900 feet are claimed. The Adalbert shaft in Germany reached a depth of 3,281 feet.

Worth More Than Gold.

A Countess of Anjou, in the fifteenth century, paid for one book 200 sheep, five quarts of wheat and the same quantity of rye and millet; and in early times the loan of a book was considered to be an affair of such importance that in 1299 the Bishop of Winchester, on borrowing a Bible from a convent in that city, was obliged to give a bond for its restoration, drawn up in the most solemn manner, and Louis XI, in 1471, was compelled to deposit a large quantity of plate, and to get some of his nobles to join him in a bond, under a heavy penalty, to restore it, before he could procure the loan of a book which he borrowed from the Faculty of Medicine at Paris.

Eccentric Matches.

A curious experiment can be performed with an ordinary box of parlor matches. Take four matches from the box and fix two of them between the box and the cover, one each side, so that their heads may be protruding a short distance from the box, and also pointing the same way. Fix a third match tightly in a horizontal direction between the two heads of these two matches, so that it is not touching anything else but the two matches. Then strike the fourth match and apply the light to the center of the third. Instead of setting light to either of the two upright matches as might be expected, the match shoots right out into the air.

Curiosities of Words.

It is said that there are only two words in the English language which contain all the vowels in their order. These are "abstemious" and "facetious."
The following each have them in irregular order: Authoritative, disadvantageous, encouraging, efficacious, instantaneous, importunate, mendacious, nefarious, precarious, pertinacious, sacrilegious, simultaneous, tenacious, unintentional, unequivocal and vexatious.