

A BIG PROJECT.

Proposed Electric Railroad Between Chicago and St. Louis.

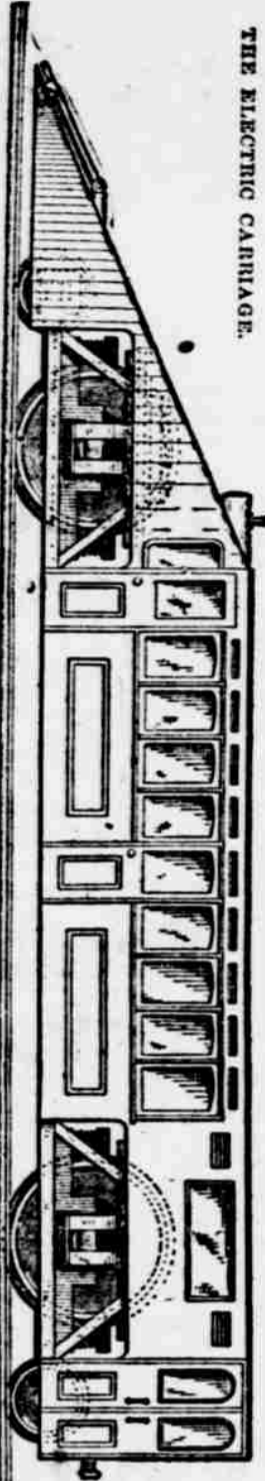
A Company Organized to Construct It—Projectors Enthusiastic Concerning the Future of Electricity as a Motive Power.

A company known as the Chicago & St. Louis Electric Railroad Company has been organized for the purpose of constructing and operating an electric railway system between the cities of Chicago and St. Louis, with suitable branches to connect points adjacent to the route. This company proposes, also, to supply, by the means of electricity, the people living along the line of its route with heat and power for all purposes.

The company has purchased the exclusive right to operate such railroad between the two cities named from the Adams Electric Railway Company, which owns and controls all patents governing such construction. The projectors of the company are enthusiastic over the plan outlined, and claim that it means a complete revolution in railway construction and manipulation. One of the advantages which are claimed for electricity properly applied as a motor for passenger transportation is the greater speed which may be attained with less danger than now attends the comparatively slow travel of ordinary methods.

The speed of trains on this new railroad, it is claimed, will not fall short

THE ELECTRIC CARRIAGE.



make collisions impossible. No fuel or water will be carried, as the power will be developed at a central station located near the mouth of a coal mine somewhere near the center of the road. No heavy machinery will be required, and the trains will consist of single cars, thus reducing the strain on bridges and culverts, and lessening the concussion in case of accident. This plan will also to a great extent obviate noise and the danger from conflagrations arising from stray sparks.

The new company, in its prospectus detailing the plan of the proposed enterprise, says that the road will be divided into twenty-five sections of ten miles each, which will constitute a complete block system, making it impossible for any two cars to run at a high speed upon any single section at the same time, thus making collisions impossible. There will be a complete block signaling system by means of incandescent electric lights, with telephonic communication between cars upon the same section, whether running or standing still. The road will be illuminated by incandescent electric lamps for one mile ahead and one mile behind every car while running. It will be built in a practically straight line, and as far as possible avoid grade crossings of other roads. At all grade crossings, whether wagon or railroad, a red electric light will be displayed and an electric bell rung for two minutes before it is time for the train to pass. It is intended to ultimately construct four tracks, two outside tracks for local traffic and high class freight, while the two inner tracks will be used exclusively for through passenger traffic, mail and high class express.

It further states that the mine from which the coal that generates the power is obtained will be operated by means of electric mining locomotives, electric drills and electric lights, which will greatly cheapen the present cost of the ordinary system of mining coal. The company expects to sell the good coal that it mines, and use only the waste dust or slack to run the engines which develop the power for operating the mine and road, in connection with its distributing system of light and power to consumers along its line. At present such dust and slack is valueless, and has to be hauled away at the expense of the mining company.

The exact location of the proposed road has not been definitely settled, and the accompanying map shows three routes, all practically straight lines, either of which may be utilized. The projectors say it is entirely practicable to build such a road before the time of the world's fair, and that it might then be used for the immense traffic incident thereto.

The character of the electric carriage or car that will run on the projected road is shown in the accompanying illustration.

It is a long, low, compact, light but strong car, having two pairs of driving wheels, each of which are driven by a separate and distinct electric motor. The whole weight of the car with its passengers and of the two electric motors comes upon these two pairs of driving wheels, and is, therefore, all available for traction or adhesion between the rails and the wheels, through the agency of which the car is propelled. The top of the car stands only nine feet from the rail, which is three feet lower than the ordinary street car.

The driving wheels are six feet in diameter and are capable of making five hundred revolutions in one minute. The weight of the entire car with its motors weighs but ten tons. It may be interesting in this connection to state that a steam locomotive to make the same speed, if it were practicable, would have to weigh in the neighborhood of one hundred tons, and the present locomotive weighs from sixty to ninety tons. These electric carriages or cars will be illuminated and heated by electricity and will contain all the modern appointments for the comfort of passengers. "Through" cars will run at intervals of an hour or oftener, according to the requirements of the traffic. Accommodation cars will run every half hour, stopping at all points along the line.

Fallibility.

The necessity which teachers are under of being perfectly sure of their statements or else of being not too positive in making them was illustrated recently by an incident of actual occurrence in a public high school. A pupil was reading during a recitation in English literature while the teacher, with no book in his hands, and with folded arms, walked up and down the recitation room.

"Hypocrits," says La Rochefoucauld, is the homage which vice pays to vice," the pupil read.

"That is very true," said the teacher, "but don't say homage; say 'omage; the h is not sounded."

"Omage," said the pupil, obediently.

"Read on, now."

"Sir," said the pupil, "may I please read the note at the foot of the page?"

"You may do so."

The pupil read: "Homage. In pronouncing this word the h is frequently omitted by uneducated persons. It should always be sounded."

In some cases there is absolutely nothing to be said, and on this occasion the teacher said it.—Youth's Companion.

Very Good.

Sojourners in barbarous countries find the natives illustrating their talk with comparisons which sound rather grim to civilized ears. An employe of the Congo Free State writes that he had in his service a black man who was almost always accompanied by an ape, of whom he seemed very fond.

One day the native appeared without the animal.

"What have you done with your monkey?" asked the white man.

"Monkey? Me eat him up!"

"You ate him! Are monkeys good to eat, then?"

"Um—taste same like white man!" said the negro, with an air of keen appreciation.—Youth's Companion.

ALTHOUGH managers pay a popular singer big prices, they do not conceal the fact that they want her services for a song.—Baltimore American.

ROOM FOR ALL.

Dr. Talmage on the Refuge Offered By Religion.

Christianity Ample For All Conditions and Characters—The Infinite Mercy of God—How Easy It Is For the Christian to Die.

In a late sermon at Brooklyn Rev. T. De Witt Talmage discoursed on the refuge offered by the Christian religion to people of all ages and every variety of character. His text was Ezekiel xvii. 23. "A goodly cedar and under it shall dwell all fowl of every wing." Dr. Talmage said:

The cedar of Lebanon is a royal tree. It stands 6,000 feet above the level of the sea. A missionary counted the concentric circles and found one tree 3,500 years old—long rooted, broad branches, all the year in luxuriant foliage. The same branches that bent in the hurricane that David saw sweeping over Lebanon, rock to-day over the head of the American traveler. This monarch of the forest, with its leafy fingers, plucks the honors of a thousand years, and sprinkles them upon its own uplifted brow, as though some great hall-lord of Heaven had been planted upon Lebanon and it were rising up with its long-armed strength to take hold of the hills between it came. O, what a fine place for birds to nest in! In hot days they come thither—the eagle, the dove, the swallow, the sparrow and the raven. There is to many of us a complete fascination in the structure and habits of birds. They seem not more of earth than of Heaven—ever vacillating between the two. No wonder that Audubon, with his gun, tramped through all of the American forests in search of new specimens. Geologists have spent years in the new red sandstone. There is a snipe's bill or a grouse's foot to be found at all the universities. Musicians have, with clefs and bars, tried to catch the sound of the nightingale and robin. Among the first things that a child notices is a swallow at the eaves, and grandfather goes out with a handful of crumbs to feed the snowbirds. The Bible is full of ornithological allusions. The birds of the Bible are not dead and stuffed like those of the museum, but living birds with fluttering wings and plumage.

"Behold the birds of the air," says Christ. "Though thou exalt thyself as the eagle and thou set thy nest among the stars, thence will I bring thee down," exclaims Obadiah. "Gavest thou the goodly wings unto the peacocks?" says Job. David describes his desolation by saying: "I am like a pelican of the wilderness; I am like an owl of the desert; I watch and am as a sparrow alone upon the housetop." "Yea, the stork in the Heaven knoweth her appointed time, and the turtle and the crane and the swallow observe the time of their coming, but my people know not the judgment of the Lord," says Jeremiah.

Ezekiel in his text intimates that Christ is the cedar, and the people from all quarters are the birds that lodge among the branches. "It shall be a goodly cedar, and under it shall dwell all fowl of every wing." As in Ezekiel's time, so now—Christ is a goodly cedar, and to him are flying all kinds of people—young and old, rich and poor, men high soaring as the eagle, those fierce as the raven, and those gentle as the dove. "All fowl of every wing."

First, the young may come. Of the 1893 years that have past since Christ came, about 1,699 have been wasted by the good in misdirected efforts. Until Robert Raikes came there was no organized effort to save the young. We spend our strength trying to beat old trees, when a little pressure would have been sufficient for the sapling. We let men go down to the very bottom of sin before we try to lift them up. It is a great deal easier to keep a train on the track than to get it on when it is off. The experienced reinsman checks the fiery steed at the first jump, for when he gets in full swing, the swift hoofs clicking fire from the pavement, and the bit between his teeth, his momentum is irresistible. It is said that the young must be allowed to sow their "wild oats." I have noticed that those who sow their wild oats seldom try to raise any other kind of a crop. There are two opposite destinies. If you are going to Heaven you had better take the straight road and not try to get to Boston by the way of New Orleans. What is to be the history of this multitude of young people around me to-day? I will take you by the hand and show you a glorious sunrise. I will not whine about this thing or groan about it; but come, young men and maidens, Jesus wants you. His hand is love; his voice is music; his smile is heaven. Religion will put no handcuffs on your wrists, no hoppers on your feet, no brand on your forehead.

I went through the heaviest snow-storm I have ever known to see a dying girl. Her cheek on the pillow was white as the snow on the casement. Her large, round eye had not lost any of its luster. Loved ones stood all around the bed trying to hold her back. Her mother could not give her up; and one nearer to her than either father or mother was frantic with grief. I said: "Fanny, how do you feel?" "Oh!" she said, "happy! happy! Mr. Talmage, tell all the young folks that religion will make them happy." As I came out of the room, louder than all the sobs and wailings of grief I heard the clear, sweet, glad voice of the dying girl: "Good night; we shall meet again on the other side of the river." The next Sabbath we buried her. We brought white flowers and laid them on the coffin. There was in all that crowded church but one really happy and delighted face, and that was the face of Fanny. Oh! I wish that now my Lord Jesus would go through this audience and take all these flowers of youth and garland them on His brow. The cedar is a fit refuge for birds of brightest plumage and swiftest wing.

See, they fly! they fly! "All fowl of every wing."

Again: I remark that the old may come. You say: "Suppose a man has to go on crutches; suppose he is blind; suppose he is deaf; suppose nine-tenths of his life has been wasted." Then I answer, come with crutches; come, old man, blind and deaf, come to Jesus. If you would sweep your hands around before you blind eyes, the first thing you would touch would be the cross. It is hard for an aged man or woman to have grown old without religion. Their taste is gone. The peach and the grape have lost their flavor. They say somehow fruit does not taste as it used to. Their hearing gets defective, and they miss a great deal that is said in their presence. Their friends have all gone, and everybody seems so strange. The world seems to go from them, and they are left all alone. They begin to feel in the way when you come into the room where they are; and they move their chair nervously, and say, "I hope I am not in the way." Alas! that mother and father should ever be in the way. When you were sick and they sat up all night rocking you, singing to you, administering to you, did they think you were in the way? Are you tired of old people? Do you snap them up quick and sharp? Do you will be cursed to the bone for your ingratitude and unkindness!

O! it is hard to be old without religion—to feel this world going away and nothing better coming. If there be any here who have gone on far without Christ, I address you deferentially. You have found this a tough world for old people. Alas! to have aches and pains, and no Christ to soothe them. I want to give you a cane better than that you lean on. It is the cane that the Bible speaks of when it says: "Thy rod and thy staff, they comfort me." I want to give you better spectacles than these you now look through. It is the spiritual eyesight of divine grace. Christ will not think that you are in the way. Does your head tremble with the palsy of old age? Lay it on Christ's bosom. Do you feel lonely now that your companions and children are gone? I think Christ has them. They are safe in His keeping. Very soon He will take you where they are. I take hold of your arm and try to lead you to a place where you can put down all your burden. Go with me, I will a little while longer and your sight will come again, and your hearing will come again, and with the strength of an athlete, you will stop on the pavement of Heaven. No crutches in Heaven; no cross looks for old people. Dwelling there for ages, no one will say, "Father, you know nothing about this; step back; you are in the way!" O, how many dear old folks Jesus has put to sleep! How sweetly He has closed their eyes! How gently folded their arms! How He has put His hand on their silent hearts and said, "Rest, now, tired pilgrim. It is all over. The tears will never start again. Hush! hush!" So He gives His beloved sleep. I think the most beautiful object on earth is an old Christian—the hair white, not with the frosts of winter, but the blossoms of the trees of life. I never feel sorry for a Christian old man. Why feel sorry for those upon whom the glories of the eternal world are about to burst? They are going to the goodly cedar. Though their wings are heavy with age, God shall renew their strength like the eagle, and they shall make their nest in the cedar. "All fowl of every wing."

Again: The very bad, the outrageously sinful may come. Men talk of the grace of God as though it were so many yards long, and so many yards deep. People point to the dying thief as an encouragement to the sinner. How much better it would be to point to our own case and say: "If God saved us He can save anybody." There may be those here who never had one earnest word said to them about their souls. Consider me as putting my hand on your shoulder and looking in your eye. You ask: "How do you know that? He has been very hard on me." "Where did you come from?" "Home." "Then you have a home. Have you ever thanked God for your home? Have you children?" "Yes." "Have you ever thanked God for your children? Who keeps them safe? Were you ever sick?" "Yes." "Who made you well? Have you been fed every day? Who feeds you? Put your hand on your pulse. Who makes it throbb? Listen to the respiration of your lungs. Who helps you to breathe? Have you a Bible in the house, spreading before you the future life? Who gave you that Bible?" O! it has been a story of goodness and mercy all the way through. You have been one of God's pet children. Who fondled you, and caressed you and loved you? And when you went astray and wanted to come back did He ever refuse? I know of a father who, after his son came back the fourth time said, "No; I forgave three times, but I will never forgive you again." And the son went off and died. But God takes back His children the thousandth time as cheerfully as the first. As easily as with my handkerchief I strike the dust off a book God will wipe out all your sins.

There are hospitals for "incurables." When men are hopelessly sick, they are sent there. Thank God! there is no hospital for spiritual incurables. Though you had the worst leprosy that ever struck a soul, your flesh shall come again like a little child. O, this mercy of God! I am told that it is an o-s-an. Then place on it four swift-sailing craft with compass, and charts, and choice rigging, and skillful navigators, and tell them to launch away, and discover for me the extent of this ocean. That craft puts out in one direction, and sails to the north; this craft to the south; this to the east; this to the west. They crowd on all their canvasses, and sail ten thousand years, and one day come up the harbor of Heaven, and I shout to them from the beach, "have you found the shore?" and they answer, "no shore to God's mercy!" Swift angels, dispatched from the throne, attempt to go across it. For a million years they fly and fly, but

then come back and fold their wings at the foot of the throne, and cry, "no shore! no shore to God's mercy!"

Mercy! Mercy! Mercy! I sing it. I preach it. I pray it. Here I find a man bound hand and foot to the devil, but with one stroke of the hammer of God's truth the chains fall off and he is free forever. Mercy! Mercy! Mercy! There is no depth it cannot fathom, there is no height it cannot scale, there is no infinity it cannot compass. I take my stand under this goodly cedar and see the flocks flying thither. They are torn with the shot of temptation, and wounded, and sick, and scared. Some fought with iron beak, some once feasted on carcasses, some were fierce of eye and cruel of talon, but they came, flock after flock—"all fowl of every wing." Again, all the dying will find their nest in this goodly cedar. It is cruel to destroy a bird's nest, but death does not hesitate to destroy one. There was a beautiful nest in the next street. Lovingly the parents brooded over it. There were two or three little robins in the nest. The scarlet fever thrust its hot hands into the nest, and the birds are gone. Only those are safe who have their nests in the goodly cedar. They have over them "the feathers of the Almighty." O, to have those soft, warm, eternal wings stretched over us! Let the storms beat, and the branches of the cedar toss on the wind—no danger. When the storm comes you can see the birds flying to the woods. Ere the storm of death comes down, let us fly to the goodly cedar. Of what great varieties Heaven will be made up! There come men who once were hard and cruel, and desperate in wickedness, yet now, soft and changed by grace, come into glory: "All fowl of every wing." And here they come, the children who were reared in loving home circles, flocking through the gates of life; "All fowl of every wing." These were white and came from northern homes; these were black and ascended from southern plantations; these were copper colored and went up from Indian reservations. "All fowl of every wing." So God gathers them up. It is astonishing how easy it is for a good soul to enter Heaven. A prominent businessman in Philadelphia went home one afternoon, lay down on the lounge and said: "It is time for me to go." He was very aged. His daughter said to him: "Are you sick?" He said: "No; but it is time for me to go. Have John put it in two of the morning papers that my friends may know that I am gone. Good-by," and as quick as that God had taken him.

It is easy to go when the time comes. There are no ropes thrown out to pull us ashore; there are no ladders let down to pull us up. Christ comes and takes us by the hand and says: "You have had enough of this; come up." Do you hurt a lily when you pluck it? Is there any rudeness when Jesus touches the cheek and the red rose of health whitens into the lily of immortal purity and gladness?

When autumn comes and the giant of the woods smites his anvil and the leafy sparks fly on the autumnal gale, then there will be thousands of birds gathering in the tree at the corner of the field, just before departing to warmer climes and they will call and sing until the branches drop with the melody. There is a better clime for us and by and by we shall immigrate. We gather in the branches of the goodly cedar, in preparations for departure. You heard our voices in the opening song; you will hear them in the closing song—voices good, voices bad, voices happy, voices distressful—"All fowl of every wing." By and by we shall be gone. If all this audience is saved—as I hope they will be—I see them entering into life. Some have had it hard, some have had it easy. Some were brilliant, some were dull. Some were rocked by pious parentage, others have had their infantile cheeks scalded with the tears of woe. Some crawled, as it were, into the kingdom on their hands and knees, and some seemed to enter in chariots of flaming fire. Those fell from a ship's mast, these were crushed in a mining disaster. They are God's singing birds now. No gun of huntsman shoots them down. They gather on the trees of life and fold their wings on the branches, and far away from frosts, and winds, and night, they sing until the hills are flooded with joy, and the skies drop music, and the arches of pearl send back the echoes—"All fowl of every wing."

Behold the saints, beloved of God, Washed are their robes in Jesus' blood Brighter than angels, lo! they shine, Their glories splendid and sublime. Through tribulation great they came; They bore the cross and scorned the shame, Now, in the heavenly temple blest, With God they dwell; on Him they rest. While everlasting ages roll, Eternal love shall feast their soul, And access of bliss forever new, Rise in succession to their view.

The Tallow Tree.

The tallow tree reaches forty feet in height, the seeds of the flowers of which are covered with something resembling tallow, which rises to the top when the seeds are thrown into boiling water, and, being skimmed off and pressed, makes a hard cake of tallow, from which excellent candles are manufactured and which can be used in various salves and ointments. The tree producing this really valuable substance is a native of China, but now is to be found all along our southern seacoast.—Detroit Free Press.

Sanitary Item.

Mamma (to daughter)—Now, Eugenia, this is a new life to both of us. If your poor, lamented father was alive we wouldn't be reduced to the necessity of keeping a boarding-house. Eugenia—Well, mamma, there doesn't seem to be any other course left us.

Mamma—I know it, Eugenia. You must be very circumspect, and while polite to all, you must, in your late, lamented, nautical father's words, "repeel boarders."

Eugenia—Don't you think, mamma, we ought to leave that to the hash?—Texas Siftings.

STOCK ITEMS.

Sheep scatter their droppings more evenly over the land than any other stock.

Usually with hogs intended for spring market it will be best to commence crowding in good season.

To make the best quality of meat give the hogs clean feed, pure water and comfortable quarters.

Pigs need more or less grain every day from the time they learn to eat until they are finished for market.

One of the items in the care and management of hogs both in breeding and feeding is to maintain constitutional vigor.

Ten good grade cattle, well cared for and fed, will return a better profit than twenty scrubs left to care for themselves.

In breeding with all classes of animals there will be some inferior animals, hence the necessity for continued careful selection.

Young stock of all kinds need special care during the next month or six weeks on account of the changeableness of the weather.

With sheep as with other stock a first cross makes a good feeding animal, but the breeding cannot be carried any farther with profit.

Sheep will thrive better if they can be given a change of pastures occasionally. In nearly all cases two pastures are better than one.

When kept for mutton alone the sheep require extra care. Good pasturage with liberal feeding is necessary to secure the best results.

Fifty quarters at this time is often the cause of disease among the sheep, especially when the weather is rainy and the quarters get damp in addition.

Plenty of cheap pasturage in summer and plenty of good rough feed in winter are two essentials in realizing the largest profit with cattle on the farm.

Lambs, wool, muttons and manure are the four essential points of sheep raising and with all four, if properly managed, a fair profit should be realized.

A good grade of stock, good and cheap pasturage, plenty of cheap feed during the winter, and good care are the essentials of profitable cattle keeping.

While cattle relish green food early in the spring it is a detriment to turn them into pastures until the grass has made a sufficient growth to furnish a full supply of feed.

Because a hog occasionally delights in wallowing in the mud is hardly a sufficient reason for considering them naturally filthy. Give them a fair opportunity and they will keep clean.

FARM NOTES.

Set out your new currant plantation as soon as the condition of the ground will permit.

Put your sawdust around your currant and gooseberry bushes. They need good manure also and will pay for it.

If not already done cover over your strawberry bed with straw to remain and protect the fruit from the ground.

One advantage with early planted corn is that it has a better opportunity to get well established before hot dry weather sets in.

Clover can be made to add to the fertility of the soil and also furnish good feed both early and late during the growing season.

Economy is the proper term for good farming. Save the littles all around. Chips will make as good fire while they last as big cord wood.

The larger the variety of good grasses in the pasture the better and longer the supply of feed can be maintained throughout the season.

One of the best crops to grow and plow under to increase the fertility of the soil is buckwheat by sowing early two crops can be grown in one season.

Arrange to plant or sow some crops this spring that if needed can be cut off and fed green during the summer if needed, to keep the cattle in a good, thrifty condition.

In setting out trees, shrubs, berry plants, berry bushes or flowers, be sure you leave no open interstices under the roots; make sure that the soil touches the roots at every point.

When there is an insufficient acreage of meadow to supply plenty of hay it will be a good plan to sow millet or Hungarian, either will make good hay if cut in good season and properly cured.

When you set a broody hen give her a green sod for the bottom of her nest; it tends to keep moisture for the eggs. Mark the date of the setting on each egg and see to it that no hens lay to her or break her eggs.

The best sight for the plum orchard is one located where the poultry frequent the most, as they are a great help in the work of destroying insect pests that injure the trees and fruit; plant reasonably close together.

A good plan to prevent crooked trees from splitting is to twist and fasten two small limbs together. This should be done while the trees are comparatively small, so that as they grow they will become more closely united.

Now is the time to put the bands of cotton batting around apple trees to prevent the female of the canker worm from ascending the tree to lay her eggs. If captured in the loose cotton she perishes in the struggle to free herself, and the eggs, if laid, do not hatch and the foliage of the tree is preserved from injury.

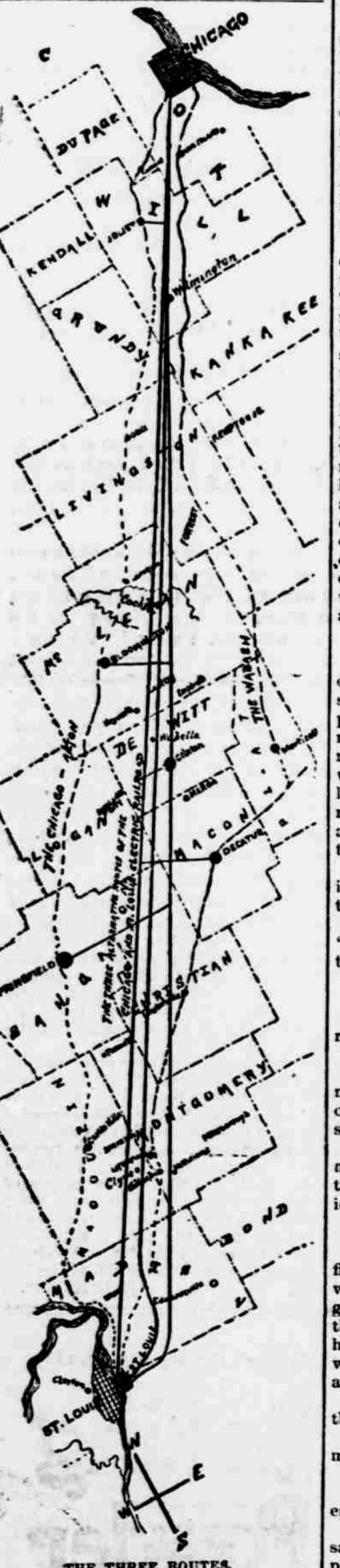
Notes.

A long-handled shovel, which can be used without stooping, saves the back of the man who uses it.

Any hour when no other work is pressing can be put in to advantage in forking over the manure heap.

The winter winds often pile up the leaves of the woods so that they may be easily gathered and used for bedding down live stock when straw is scarce.

Cultivating the ground for flowers and delicate early vegetables can be better accomplished by a four-tined spading fork than with a spade.



THE THREE ROUTES.

of a hundred miles an hour, and even at that velocity the danger will be very little, on account of the lightness of the train, and the precautions which