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NEW YORK, SATURDAY, JUNE 17, 1893.

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### For the Week Ending June 17, 1893.

#### Price 10 cents. For sale by all newsdealers.

I. AGRICULTURE.-Rice Culture.-How to grow rice in the South.

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IF YOU WISH TO BE HAPPY, BE REASONABLE. Morally, we have no more right to cheat ourselves than we have to practice deception on others. In great extent on how one's own status in his profession or business is appreciated by himself. He "must abandoned for lack of fertility. not think more highly of himself than he ought to think," nor go to the opposite extreme by underrating his abilities, and while these remarks apply to men in every occupation, they are now directed more particularly to those who devise new things for the use and benefit of others.

Some inventors are apt to be over-sanguine, and with reason; since no other honorable business yields so large a profit with the same outlay and with as little risk. By some peculiar mental process they induce themselves to believe that an invention is worth thousands or millions of dollars. when the real value may be only hundreds or thousands.

A notion of this kind when adhered to is damagtorily realizing from his labor, whereas by taking a rational view of the case he might gain handsomely.

Two points should be candidly considered by inventors; first, the possible value of an invention, and second, the actual value of capital and influence.

Often, very often, the money invested in promoting and elevated. an invention, and the business tact and energy which put the invention in commercial shape, are worth far more than the invention itself, and even a firstclass invention is greatly increased in value if backed by money and business talent.

Inventors who realize this, and are willing to make reasonable concessions, are most likely to obtain the best returns from their inventions.

Let the inventor for the moment imagine himself half million, a hundred thousand, or ten, or even five they will only put down electric roads. thousand dollars in such an invention as his own ? Let him be honest with himself.

Capital is not invested in patents without the exgoods at retail prices.

happy, be reasonable."

#### FARM CHANGES IN ILLINOIS

An anomalous state of affairs is reported in the farming communities of the State of Illinois. Prospects are encouraging, crops have been comparatively satisfactory of late, and farming lands are steadily increasing in value; yet thrifty and well-to-do land owners, as steam railroad. well as tenant farmers, are moving by scores to Iowa, Nebraska, Kansas and other Western States. The movement, which has been steadily growing for years, is looked upon with some anxiety because of the uncertainty as to what the ultimate result will be.

The introduction of improved methods of farming by the use of machinery of various kinds has made it possible for a man with means and energy to cultivate large tracts—acres by the hundred. Alongside this is the use of teams. The ideal road has been claimed another acre-monopolizing tendency on the part of to be a Telford or macadam strip with a trolley line moneved men to buy up desirable lands and rent them on each side. This provides for those who wish to ure. These two tendencies make the lot of the small that horses must become accustomed to the trolley car. land owner less desirable than was the case in former years. If the small holder wishes to add to his acres, affected by the competition with trolley roads. A few he finds it quite impossible from lack of means to do so years will see the suburbs of all our cities gridironed from adjoining farms, and oftentimes from any other, with these roads. The local business will leave the land within reasonable distance, at a price within his steam roads. The old mud and sand roads will be reach. If, however, he goes to Iowa, Kansas, Nebraska, soon replaced in these districts by improved Telford or other Western States, he finds that he can probably and macadamized surfaces. In the cities horse cars buy five acres for the same amount of money that one will soon be as much a thing of the past as are the omcommand as he wishes for, and he finds further that to wonder how its ancestors continued to exist under it costs no more to grow his crops, and that transporta- and expensive train service in the suburbs, with untion rates to market are not appreciably greater. From ridable roads as connecting links throughout the this point of view the farmer, especially if he has some i country districts.

The question is an old one in Illinois and has had public attention drawn to it at several periods since the organization of the State, but is now assuming a every profession or business, success depends to a serious phase. The situation is quite different from what it is in New England, where farms have been

## IMPROVED TRANSPORTATION.

The inanguration of cable traction on the great thoroughfare of this city, involving the transfer of a line of cars distributed over many miles of the most important artery of the city, shows a new condition of things brought about by the new demands of our increased population. It is but a few years since horse cars were introduced upon Broadway. The storm of protest which they raised and the questionable methods used to obtain possession of the street are in the minds of all. The property owners objected, but the road was put down. It proved of the greatest benefit to all. Now, with larger cars propelled by steam power, in place of the overburdened horses, the ing, and may prevent the inventor from satisfac-|Broadway Railroad appears in a better light than ever. In other streets of our city the devotion of two thoroughfares to steam transit will soon be seen. A cable line will run on the natural surface directly under an elevated road. Some day may yet see a threestoried transportation established-tunnel, surface,

While this and other cities have been progressing, the country has not been idle. The centralization of power and its distribution by the trolley system have inaugurated a cheap and rapid transportation system for suburban and even rural districts. The country roads have been invaded by the trolley. The vigor of the movement of the day in favor of cheap transportation is here emphasized. In spite of the effects upon horses in frightening them, the country roads on all to be the other man, the capitalist; would he invest a sides are presented to electric traction companies if

The cause of the extensive introduction of this class of road is not only to be found in the advantage of centralized generation and power. It is not only the pectation of large returns. Inventors who sell out wonderful adaptability of electricity for distributing their interests should not expect all the profits of their power that has made the trolley road a winner in cominvention. This would be like a jobber trying to sell, petition with the old established steam roads. A single car run at frequent intervals, independent of a Our advice then to inventors is, "If you wish to be published time table, in point of convenience far surpasses the fewer scheduled trains of steam roads. But the free gift to these companies of streets and roads ready graded and prepared for their use is the reason of their existence. Having no extensive right of way to acquire and exempt from the necessity of filling, excavating and bridge building on their line, they possess an enormous advantage in capitalization over the

Simultaneously with the above the movement for good roads has mounted into a national issue. All over the country are heard the calls for better roads. The State of New Jersey, many districts of which are famous for their macadamized ways, is admitting the trolley cars upon these expensive roads. In this there is a measure of inconsistency, unless an adequate breadth of macadamized surface be preserved for out. These landlords are always ready to add to their pay fare, while the farmer can transport his product holdings, but seldom willing to sell at a reasonable fig- by the old-fashioned way. It is a self-evident fact

Already local steam roads have been most seriously would cost in Illinois, and with as many acres at his nibuses now. The next generation will only be able these new acres are as productive as his old ones, that the regime of slow horse cars in the cities, infrequent

The Largest Lake Steamer.

lustrations. Magnesia Firebricks.-Production of non-shrinking firebricks... XII. MISCELLANEOUS.-The Appreciation of Gold.-The rising webba of gold 14558 14558 14562 14564 XIII . PHYSICS.-A New Form of Barometer.-A barometer filled vithout boiling.-1 illustration... TECHNOLOGY.-Extraction of Gutta Percha,-Extraction of rutta percha from the wood by solution in bisulphile of carbon... XIV 14566 XV. 14558 14556 cheapness of solid silver, as compared with a property of the second sec

The steamship S. S. Curry, which recently has been launched at Bay City, Mich., is to be the largest steamer on the great lakes, but unlike the type of lake steamers which has become so familiar, she will have improved methods of transportation which practically, her machinery amidships instead of well aft. Recent annihilate distance. But while this westward tenexperiences have quite conclusively demonstrated the dency may be a beneficial thing to those farmers who fact that in vessels of large size constructed on the soparticipate in it, what will be the result in the State called lake lines, sufficient stability has not been secured. Immense carrying capacity is quite invaluaof Illinois, which they leave? In the case of a tenant farmer the probability is that another tenant farmer ble, from a shipper's standpoint, but lake construcwill take his place, although this latter in all probation has gone to the extreme of sacrificing stability to bility will be of foreign birth, while the former is more carrying capacity. This new vessel is 378 feet 6 inches likely of American birth. Land owners who leave over all, 45 feet in breadth, and of light enough draught Illinois to push westward sell their holdings largely to to enable her to pass through the "Soo" canal. The engines will be triple expansion and steam will be adjoining farmers who have the means to extend their acreage and who propose to do farming on a more exused at a pressure of 170 pounds. She is of steel and tensive scale, or to landed proprietors who succeed the was built by F. W. Wheeler & Co., West Bay City, independent farmer with the tenant farmer. Mich.