

A GREAT STRUCTURE.

It Spans the Harlem River at New York City.

Completion of the New York Central's Four-Track Draw-Bridge and an Immense Steel Viaduct.

One of the most remarkable feats of engineering on record is just completed, and the passenger entering New York from the north now rides over one of the grandest examples of steel railway construction yet accomplished in this age of marvelous results in that direction.

Going south, at One Hundred and Forty-ninth street, the tracks of the New York Central begin to rise gradually, and at One Hundred and Thirty-Fifth street they cross the Harlem river on the new four-track steel draw-bridge, at an elevation of 24 feet above high tide.

This massive structure is remarkable in being the first four-track draw-bridge ever constructed, and is the

through; all tugs, canal boats, barges, etc., will have ample room to go under the bridge while it is closed.

The Harlem river, having been declared by congress a ship canal, the secretary of war has issued orders that all tugs and barges shall join their smokestacks and flag-poles, to enable them to pass under the bridge while it is closed. He has also ordered that the bridge shall not be opened between the hours of seven and ten o'clock in the morning, and four and seven in the afternoon, except for police, fire or government vessels, the hours named covering the great business traffic in and out of the city, the important through trains arriving and departing during those hours. This will avoid delays, which have been, at times, very annoying, and permit of much faster service than could have been maintained under the old arrangements; and, as speed is one of the principal factors in travel in this age, this feature will prove an important one.

Quite a number of the great improvements which have recently been made in the northern part of the city can be seen from the trains as they pass over



END VIEW OF THE NEW YORK CENTRAL'S NEW FOUR-TRACK STEEL DRAW-BRIDGE OVER THE HARLEM RIVER AT ONE HUNDRED AND THIRTY-FIFTH STREET, GREATER NEW YORK, THE LARGEST STRUCTURE OF ITS KIND IN THE WORLD.

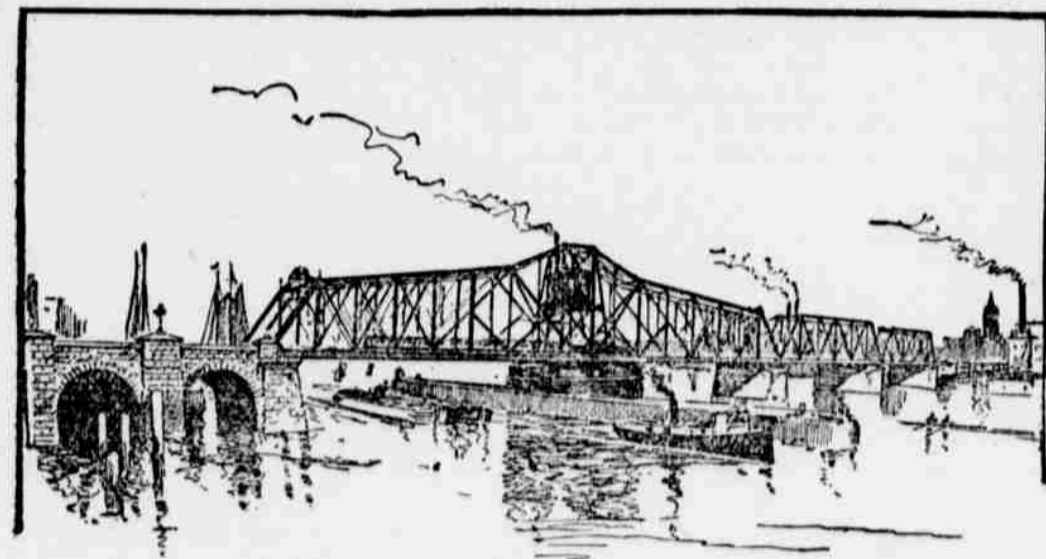
largest bridge of the kind in the world. It is 400 feet long and weighs 2,500 tons. The draw-bridge is 58 feet 6 inches wide, from center to center of outside trusses, and is carried on three very heavy trusses. Between the central and each of the two side trusses is a clear space of 26 feet, which permits the passage of two sets of double tracks. The floor is corrugated, and the rails are bolted to it on steel tie plates. The trusses of the draw-bridge span are 64 feet high in the center and 25 feet high at each end. At the highest part of these trusses is situated the engine house, which contains two oscillating double-cylinder engines, which turn the draw and can be worked together or separately, so that if one should break down at any time, the other can do the work.

From One Hundred and Thirty-eighth street south the four new tracks run over the steel viaduct to One Hundred and Tenth street, and thence by the stone viaduct to One Hundred and Sixth street, where they strike the level of the present four-track line.

The work of building this massive structure, which is here illustrated,

the new viaduct. Among them are Grant's tomb, St. Luke's hospital and the buildings of Barnard college and Columbia college, on Morningside Heights, and very soon the grand structure of the Cathedral of St. John the Divine will be observed. Further north, and on the west side of the Harlem river, the now famous speedway is under construction and approaching completion; the magnificent High bridge, Washington bridge, McComb's dam bridge and the viaduct leading to it from the north are works of art, as well as of great utility, under which the trains pass, and on the right may be seen the buildings of the University of the City of New York, Webb's Sailors' home, and hundreds of other new buildings of less importance. North of the Harlem river, on the Harlem division, is Bronx park, which is to contain the great botanical gardens and zoological gardens of Greater New York, and within a few years this portion of the city will offer attractions which will be unsurpassed in their character by any city in the world.

Greater New York, which is 19 miles



SIDE VIEW OF THE NEW FOUR-TRACK STEEL DRAW-BRIDGE OVER THE HARLEM RIVER.

began September 1, 1893, and has continued without cessation until now, and will cost when completed considerably more than \$3,000,000. The completion of the new work will permit the opening of all cross streets under the railway and so permit a perfectly free passage for street traffic.

One Hundred and Thirty-eighth street, which has become a great thoroughfare, will be entirely free, as the trains which heretofore crossed it at grade will pass over it at an elevation that will allow street cars and all traffic perfect freedom. At One Hundred and Twenty-fifth street the tracks will cross the street 14 feet above the level of the street, and at this point a magnificent passenger station is to be built, extending from One Hundred and Twenty-fifth to One Hundred and Twenty-sixth street, under the four-track viaduct.

This improvement will be of immense value to the entire state—in fact, to the whole country—as the bridge, being so high above the water, will never have to be opened except when large steamers or vessels with masts are to pass

wide by 35 miles long, certainly offers to the tourist and seeker after knowledge or pleasure more inducements than any other American city, and few cities in Europe can equal it.

ADIRONDACK.

A Safe Rule.

Bad Boy—What ye talkin' 'bout me goin' to the bad place fer? Our preacher says there is one, but Johnny Stagg's preacher an' lots of other preachers says there ain't. Guess they know 'bout as well as our preacher does.

His Mother (with decision)—My son, whenever a preacher says anything that bad boys like to hear, you can jest make up your mind it ain't true. — N. Y. Weekly.

Explained.

"Why did that rude-looking train boy bite the quarter I gave him?"
"He's an ex-cowboy from Texas, ma'am, and they frequently bite the dust out there."—Cleveland Plain Dealer.

—More than one-third of the people in this country live in cities, and more than half the doctors are there, too.

TENNESSEE CENTENNIAL

Exhibitors Will Not Be Charged for Space or Power.

The Nashville Exposition Will Compare Very Favorably with the Chicago World's Fair—The National Event of 1897.

The Tennessee Centennial and International exposition, which will open at Nashville on the 1st day of May and continue for six months, closing October 30, was originated purely from patriotic motives, and not for the purpose of making money for its projectors, and, therefore, exhibitors will not be charged for space or power. All of the principal buildings, magnificent in architecture and ample in dimensions, are now ready for occupancy, and more than three-fourths of the space originally allotted to exhibitors has already been taken, and in order to accommodate the growing demand for space, several of the large buildings have already been extended, and that others will now have to be extended or additional buildings erected is quite certain.

In almost every respect the Tennessee exposition will surpass the Philadelphia centennial and all other expositions that have been held in this country except the world's fair at Chicago. Over half a million dollars has been expended on the ground and buildings up to the 1st day of February, and the company does not owe a dollar. More than as much more will be required for buildings and promotion, and this amount will be furnished without calling for assistance outside of the city of Nashville and the state of Tennessee. The Atlanta exposition of 1895 had raised only \$209,000 in money, and was in debt to the amount of \$500,000 before the gates were opened. The managers of the Nashville exposition have not only kept clear of debt, but they have profited in many other respects by the experience of other expositions, and no

these have already arranged for public and private exhibits, and there is a spirit of rivalry in the greater cities of the west and south, each city striving to out-do its business rivals of other cities. The greatest enthusiasm has been aroused in Cincinnati, Chicago, Louisville and St. Louis, and these cities and their merchants will not only seek to advertise their goods, so that they may secure the trade of the south, but they will contribute in many ways to the success of the exposition.

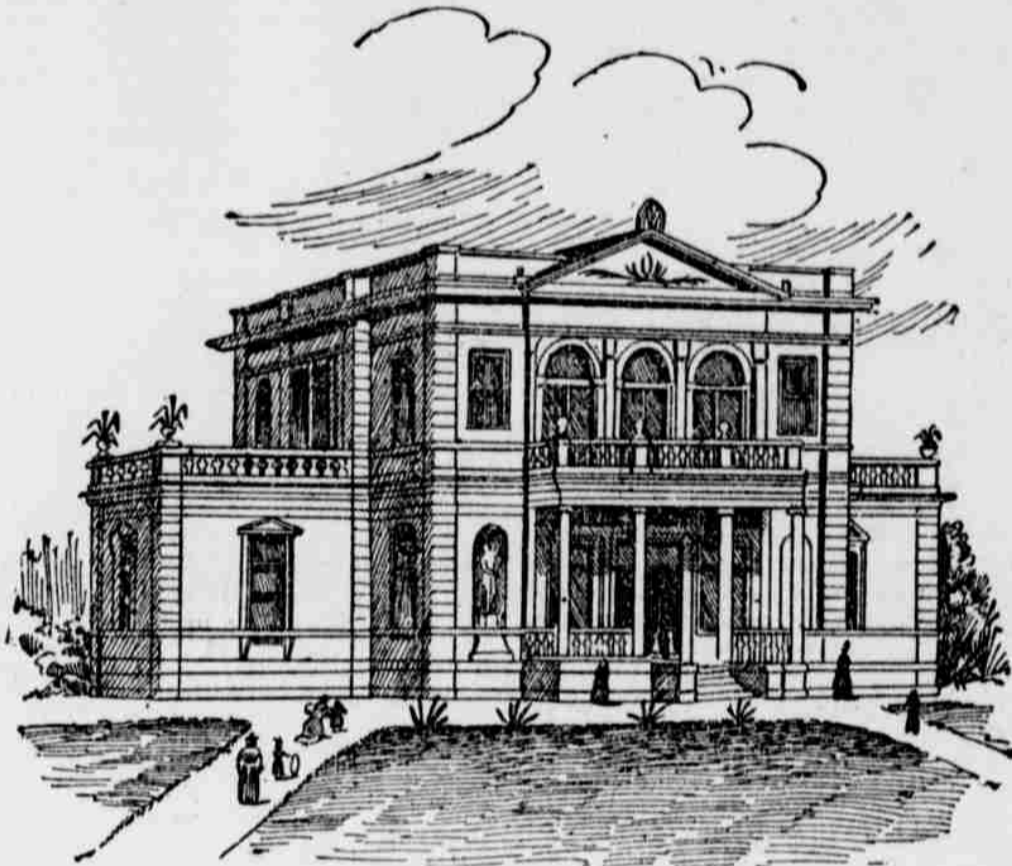
This being the only national attraction of the year, and there being a prospect of a business revival everywhere, there is every indication that the exposition at Nashville will be highly successful. Manufacturers should not neglect this opportunity of making their business known through this medium of advertising. For full particulars they may address Maj. E. C. Lewis, director general, or Herman Justi, chief of bureau of promotion and publicity, Nashville, Tenn.

The Nashville centennial will be a great factor in the restoration of confidence and in the revival of industry in the United States, and in fact it has already had a beneficial effect in some quarters, and as its scope and purpose become more and more widely known its influence will be very greatly felt. All that we need in this country is that we get out of the rut in which we have been languishing for several years, and a good running start, such as the Tennessee Centennial exposition will give us, should place us on higher and firmer ground. Then we shall move along steadily to ever increasing prosperity until we again forget the dearly-bought lessons of the last decade.

IN A JOSS HOUSE.

The Chinese Celebration of New Year's in San Francisco.

The interior of the joss-house was but dimly lighted; and when the eyes once became used to the mysterious and smoky atmosphere that filled the place, strange and weird faces of gods and demons showed through the dark-



THE TENNESSEE CENTENNIAL—CHILDREN'S BUILDING

enterprise has ever approached the opening day under more favorable circumstances.

The Tennessee exposition will compare favorably with the world's fair, but will not be too large to be thoroughly comprehended, while the grouping of the buildings and the general view of the grounds and buildings affords a view of charming beauty. It will be sufficiently attractive to bring millions of visitors, and will provide a means of advertising the business of exhibitors in a most effective manner.

The railroads have subscribed liberally towards the erection of the buildings, and offer great inducements in the way of transportation of exhibits and for visitors. There are 10,000,000 people living within a night's ride of Nashville, and the railroads will see that a large percentage of that population is brought to Nashville besides the many who will come from more remote portions of the United States and from foreign lands. The officers will give careful attention to the interests of the exhibitors. Special provision is made for showing inventions and improvements, and, for the benefit of smaller exhibitors who may be unable to attend in person, the services of reliable men, experienced in their respective departments, can be relied upon. Although not officially connected with the exposition they are endorsed by the authorities and will be under bond for the faithful discharge of their duties. These men will contract to receive, install, care for and return exhibits, and when requested will secure such attendants as may be required. In this way many valuable exhibits have already been entered, and this arrangement will secure hundreds of others that have not previously been seen in any exposition.

While space is free (if the exhibit shall be in place on opening day) the director general reserves the right to decline exhibits of any class which may be already fully represented. Other things being equal the first applicants will be given the preference. Those who are contemplating an exhibit should apply at once, especially if a large or prominent space is wanted.

The governors of more than 30 states and the mayors of nearly all the principal cities in the United States have appointed commissioners, and many of

ness and gazed solemnly down from rich altars upon the visitors. A priest, seated at the entrance, had a supply of painted candles, sticks of incense made of sandalwood, and packets of papers containing printed prayers.

Having brought a supply of these helps to worship, Ah Gau and his family had entered the inner room of the pagan gods. In the presence of these images, with hideous, painted faces, dimly looming out of the darkness and mystery of the incense-laden atmosphere, most American boys of Ah Gau's age would have been terror-stricken. He, on the contrary, seemed to be quite at ease among these strange things and went near to the uncanny idols with an air of familiarity. He boldly walked up to a large drum standing in one corner, and, seizing a drumstick, pounded on it with all his might, for the purpose of drawing the attention of the gods to the worshippers.

He then joined with the family in placing a large number of lighted candles and smoking incense sticks upon the altar; after which they bent themselves in prayer before the principal image in the temple. A number of offerings—cakes, fruits and various articles of food, as well as rice wine—were next piled up before this deity. The devotions ended with the burning of a lot of printed prayers in a little brick furnace erected in a corner of the joss-house for that purpose. As they left, a pack of firecrackers was set off, and then, thoroughly satisfied with themselves, and with minds at rest, they had gone homeward.—Theodore Wores, in St. Nicholas.

A Compliment.

"Yes," said the evangelist to the young sport who had just come under conviction, "you are plucked as a brand from the burning."

"Well, I suppose I was pretty hot stuff," responded the youth, with a certain air of gratification.—Chicago Journal.

—The discovery in Java of the fossil remains of a Pithecanthropus—a form intermediate between man and the higher apes—was regarded as a matter of the first importance in the scientific world. The remains belong to the Pliocene age in geological history,

AMERICAN RAILWAYS.

Some Interesting Facts as to Their Present Condition.

The following interesting extracts are from an article by Mr. Robert P. Porter on the "Condition of American Railways," published in a recent number of the New York Sun:

The latest general balance sheet of the railways of the United States gives us a total valuation of railway property close to \$1,200,000,000, and over 180,000 miles of road. Next to our farms, which aggregate \$1,300,000,000, these great properties will form, at the close of the century, the most valuable assets of the republic. The construction of the great systems of transportation has played an important, if not the most important, part in the progress of the nation during the last half century.

Within the last few weeks, the ways and means committee of congress have granted hearings at Washington to those representing our several industries. In reading the published testimony, one is struck with the deplorable accounts given of the condition of many branches of manufacture. While not occupying the public mind to anything like the extent of the manufacturer, the American railroad is in as bad, if not in a worse plight. If congress would only extend its hearings to railways, the stories of the recent tariff hearings would be repeated with emphasis on a larger and even more impressive scale. Loss of earnings, reductions of rates below the paying point, actual loss in passenger traffic, deterioration of roadbed, reduction in the number of employes, others working half-time, receiverships, foreclosure sales, practically half of this enormous investment bringing no returns, and the blight of insolvency steadily settling down upon our entire system.

The losses and disasters arising from these conditions have been widespread and far-reaching. In the first place, it is undoubtedly true that in no other industry is so large a business carried on upon so small a banking account. A railway company is a great distributor, not only of passenger and freight, but of money. As fast as its earnings come in, they go out again. First, we have the army of direct employes, which reached nearly 575,000 a few years ago, but which has been reduced fully 100,000. With continued prosperity, our railway system would have to-day furnished direct employment to at least 1,000,000 employes. This, however, gives but an imperfect idea of the number employed indirectly, that is, in car shops and locomotive works, and equipment shops of all kinds, blast furnaces, rail mills and a myriad industries dependent upon the railways for their prosperity. As the percentage of increase in equipment has been reduced from ten per cent. in 1890, to an actual decrease in 1895, it may be safely assumed that thousands indirectly engaged have been thrown out of employment. A perusal of the statistics of railways as compiled by the United States government shows conclusively that under existing conditions most of our railways are running behind, and the few that are apparently holding their own are far from hopeful for the future. Economical management is one thing, but forced economies can only result in a deterioration of the property. For a few years some of our older railways can thus economize, but it is only by continued and liberal expenditure of money that track, roadbed, bridges, equipment and rolling stock can be kept up-to-date and in good running order. The loss to labor has been enormous, and it is important that railway employes of all grades should study this side of the question. With freight and passenger rates less than those of European countries, where labor is paid about half the American rates, how long will our railways be able to tide along with reduced forces and three-quarter time? Unless the decline in receipts is stopped, wages must be reduced, and then the trouble will begin. Taking an army of 200,000 men out of active employment in one occupation is a pretty serious business. That means an annual loss in wages of not less than \$150,000,000, more we have the direct loss. The indirect loss comes from the irreparable injury to the properties by reason of not keeping them up, ultimately entailing additional losses.

With the exception of 1894, passenger rates reached their lowest in 1895, while freight rates, save a small rally in 1892, are steadily coming down. When compared with foreign countries, rates are indeed low. It is said that if the Pennsylvania Railroad company could secure the same rates as the London & Northwestern company, the annual receipts would be increased \$12,000,000. Mr. George R. Blanchard, in his recent testimony before the interstate commerce committee of the senate, said that had our railways collected the lowest of the European charges, we would have received \$370,000,000 more than we did receive. This calculation was based on the figures of 1892. The figures of 1896, which are lower for the United States, would make a greater difference.

The impartial student of these data must be struck with the necessity of commercial as well as industrial reconstruction. The census reports of 1890 and 1899 and the statistics of the interstate commerce commission, all of which are uniform, together with the valuable reports of H. V. Poor, give us material on which to base a thorough inquiry. The presidents and other officers who have charge of these great properties should be accorded the same opportunity to be heard as the manufacturing industries. So far as I can learn, there is no desire on the part of railway managers to generally raise rates. There is, however, a widespread belief that rock bottom prices have been reached, and that anything, even the merest shade lower, will be absolutely ruinous.

The case against the railways is a familiar one. Those who realize these new conditions have no excuses or apologies for past mismanagement, nor for the methods by which some of these roads were built. Whatever may be said of those who built railways far in advance of population, or for purposes other than legitimate trade, we have, on the other hand, equally to blame, the cities and towns and counties and individuals who were ready to mortgage the future to help along the work. In a large measure the wind and the water and the fraud have been squeezed out of these properties. In their place new and honestly-acquired capital has been built up, and the properties have been forced to mortgage to stockholders has been invested. Foreclosures, the sheriff and the courts have wiped out much of the inflated values and new capital with reorganization for business purposes has followed. Surely no one will deny that the consolidation and changes, say of the last decade, have been beneficial. There is more uniform action than ever before. Better business principles prevail. The public have never been so well and so cheaply served as now. Considering the hard times, the discharges, the reduced time, there has never existed better feeling between the railway employe and the officers than at present. The loss of \$100,000,000 income in five years must have been a staggering blow. A continuation of this sort of thing would simply destroy much of our wealth and arrest the progress of the republic.