

ST. JOHN, N. B., SATURDAY, SEPTEMBER 16, 1899.

FOR THE BIG PARIS SHOW

BUILDINGS ON THE EXPOSITION GROUNDS ARE FAR ADVANCED.

Main Gateway Planned to Admit 60,000 Persons an Hour—Immense Telescope One of the Main Features—Many Foreigners Already Engaging Rooms in Paris.

The Paris Exposition of 1900 is assuming form. Exhibitors are beginning to get their marvels under roofs. For the first time in history an international show will open on time. The growth of the great white buildings brings to mind the mushroom rising of boyhood's circus tents. The great and little art palaces are almost completed, and the ugly buildings which hid them from the ever passing throngs on the Champs Elysee have been torn down. The beautiful bridge across the seine, which was, in a moment of hysteria, named after the Czar of Russia, and which will, of course, have to be renamed in case the Russian bear snarls at France, is nearly finished. The builders are changing their attention from the framework to the decorations of buildings, and the railway lines are beginning to feel the great rush of freight business which will clog their lines from now until after the exposition opens. Almost every hotel in Paris has rented many, if not most of its best rooms for the first weeks of the exposition. The greatest rush will, of course, be during the first weeks, because intending visitors realize that after those first weeks are over the fuzz will be off the peach to some extent. It would scarcely be fair to say that the exposition will "wear out" so quickly, but the French show is not being prepared on the scale of broad and brilliant beauty, that was the characteristic of our own World's Fair in Chicago. The buildings, with two exceptions only, are of even a more temporary type of construction than were our finest structures, and their plans include much work which architects characterize as "gingerbread." This will be affected by the lapse of time, and the brilliant paints which are everywhere to be used are likely to grow dingy.

That only two buildings—the great and little art palaces—are being built of the famous French sandstone, is a temporary blessing to all Paris. The dust from this sandstone is so white and so penetrating that it becomes a public nuisance. It has actually changed the color of the roadway in the Champs Elysee. From the ordinary brown of the average macadam road, the pavement has become a dirty gray from the white dust blown and tracked into it from the neighborhood of the art palaces. This has also had its effect on the health of the trees which have helped to make this famous avenue one of the most beautiful in the world. The stone of which these buildings are being constructed is taken from the very bowels of Paris, from the same stratum of underground France in which the catacombs were dug. It is soft and very easily worked when first taken out, but it hardens after exposure to the air. One of the early wonders of the show is the famous diamond saw, which is now continually at work on the exposition grounds, and which cuts this rock as a sharp knife might cut white cheese—thereby adding to the dust which pervades Paris and blows and blows and blows, until your eyes and your ears and your mouth are full of it. No such machine was ever made before. It is about seven feet in diameter, and its sawing edge is studded with Brazilian diamonds or "boorts." It has cut stones two feet thick and twelve or fourteen feet long in a quarter of an hour. The same work would take three or four days of a competent man's time.

Paris believes the show will be a great success. There is no likelihood that she will be mistaken if she succeeds in keeping her temper long enough and fails to have a revolution. "The Dryfus case," said a very important Frenchman the other day, "would have caused a real revolution long before this had it not been for the approaching exposition." This is probably true. Mere principle would scarcely keep the mercurial French people cool-headed through such a crisis; but the hope of gain will make a Frenchman do anything—even keep quiet. The middle class—and that is the governing element—is thrifty almost to the point of meanness, and has been thoroughly trained in the gentle art of plucking foreigners. Its people will spare no effort to preserve and make perfect so fine a chance as the exposition will offer. Paris is a city of small shopkeepers. Napoleon said a dozen times that that fact alone would save it. It makes the propo-

sition of non-property holders—those who have little or nothing to save or lose—comparatively small. Half a dozen mobs have rushed through the Paris streets during recent months, any one of which would, in an ordinary year, have gathered strength and numbers enough to do great harm. But, with the exposition in view, the efforts to prevent such a catastrophe—to save the life of a goose that lays the golden egg—were not only earnest. They were desperate. And so far they have succeeded. How completely the Government realizes the danger is shown by the almost continuous press censorship exercised on telegraphic despatches going out of Paris. President Loubet and his Cabinet know that to frighten the foreigners at this stage of the game would be fatal to the show. Fond mammas have no desire to take their darlings on streets likely to be mobswep; nor have exhibitors any yearning to place their treasures in buildings which may be looted.

The most interesting of the scientific exhibits will be the great telescope built on an entirely new plan. The difference between 240,000 miles and forty-two is said by its projectors to be what this great instrument will bring about when the anxious American looks at the moon through it. It will magnify the moon 10,000 times. The highest magnifying power obtained through any other telescope so far has been about 4,000 times. An object on the surface of the moon 700 feet long will be visible to the eye at the telescope's big reflector as an object one-thirtieth of an inch in length. The very largest ocean steamer that sails earthily seas would look, if transported and set afloat on a moon lake, somewhat smaller than this when gazed at by the aid of the big telescope.

This machine will cost completed more than \$300,000. Its object glasses will weigh 500 pounds and cost not less than \$120,000.

Its plan of construction is distinctly novel. The tube will remain stationary on a great brick foundation laid horizontally on the earth's surface. Before the object glasses or lenses will be a great mirror, which may be so moved as to throw the reflected image of any part of the heavens into the object glasses. From the other end of the telescope (where the human eye would ordinarily be applied), the magnified image will be projected on a screen after the fashion of a magic lantern. This wonderful instrument is already nearing construction in the "Palace of Optics," near the bottom of the Eiffel tower. The big tube will be made of 24 enormous castings each 7½ feet long and 4½ feet in diameter. It is being built by M. Gauthier, the most celebrated optical instrument maker in France.

Of course the crank has and is still having his day in connection with the Paris show. A list of the wild schemes which have been submitted to the managers of the exposition would fill all the columns of this paper. The Eiffel tower and the great wheel already stand on the exposition grounds. Another plan which will probably be carried out consists of an immense umbrella with its stem or handle planted firmly in the earth. To the end of each of its ribs will be attached a car somewhat smaller than the Ferris wheel. When the steam engine opens the umbrellas, these cars will, of course, be carried up into the air by ribs. Just where the fun of being slowly raised to a height of sixty or seventy feet at the end of a big umbrella will come in, I leave for the gentle reader to figure out alone.

The "Bottom of the Sea Aquarium and Panorama" will be really beautiful and highly educational. In its enormous glass sided tanks there will be, in the first place, the finest collection of strange fish and submarine animals ever gathered in one place. Sections will also be devoted to rare marine plants. By clever planning it has been arranged to give visitors a perfect view of what really goes on at the bottom of the sea. There will be divers at work on the wrecks of ships, which will show the plain effects of long sojourning beneath the sea. A submarine volcano will be in a -tive eruption, and the method of laying and repairing an ocean cable will be illustrated. One plan in connection with this part of the show failed. There are certain fish which can live only in the deepest depths, where the pressure of the water from above is great. These fish have, of course, never been put on show, and an effort was made to arrange a tank for them by means of hydraulic pressure. The

scheme was found to be impracticable.

Not least among the show will be the gathering of notables. Royalty will be in Paris during 1900 as it has rarely been anywhere except in London at the time of the Queen's Jubilee. The government long ago set aside the Pavillon de Flore as an abiding place for the chosen ones during the show, and is now well along in its preparations for their reception there. It is not a particularly beautiful building, although the great architect, Ketul, designed it for the Prince Imperial. It was occupied by the State Department for the Colonies, and its alterations for royal use have been in charge of M. Redon, the architect of the Louvre.

No one seems to know what will take the place of Chicago's Midway Plaisance at the Paris Exposition. Many mysterious concessions have been given out for the neighborhood of the Eiffel tower, and an "annex" has been arranged for in the Wood of Vincennes. Inasmuch as this is to be largely devoted to athletic games, it seems likely that it will draw the crowds who would be amused by the sort of thing which went on on Chicago's Midway. Nothing, however, is being said, and little can be found out on this subject. It is fair to suppose that Paris, the gayest of cities, will quite outstrip any previous efforts made by more staid municipalities.

The biggest room in the world will also be a feature in the Paris show. There are larger buildings than Machinery Hall will be, but according to the claims made by the Parisian promoters, none has ever had so great a single floor space—12,544 metres. The amphitheatre has been planned to seat 15,000 spectators, daylight being admitted through an immense cupola of glass.

Two interesting railway features are under way. One is an American railway train consisting of ordinary coaches, passenger car and express car, which will run frequently between the main grounds of the exposition and the annex at Vincennes. The other railway novelty will be an immense panorama of the barbaric scenery along the Czar's famous trans-Siberian railway.

The management is preparing to handle enormous crowds. The main gateway will be known as "L'Entree Monumentale," or Monumental Entrance. The show will be open sixteen hours a day, and this entrance is arranged to give passage to 60,000 persons an hour. This great gate will be a triumphal arch, decorated over its front with the arms of the city of Paris. This will be surmounted by a statue of Liberty heroic in size. Including the two great friezes on the sides representing workmen carrying their products to the exposition, the gate will cost \$12,400.

Citizian Business.

It is more than fifty years since Victor Hugo wrote his letters from the Pyrenees, and some of the things mentioned in them seem to belong to a remote age; but the world moves slowly among the ancient races of that mountain region. It is possible that what he wrote of the business ways of that time might be found true of the same people to-day.

A tall, strapping Basque, who told me his name was Oyarbide, offered to carry my belongings. He lifted them.

"They are heavy."

"How much do you want?"

"A peseta."

"Very well."

He loaded everything upon his head, and seemed ready to groan beneath the weight. We met a woman, a poor old creature, barefoot, and already laden. He went up to her and said something in Basque which I did not understand; the woman stopped. He transferred his whole burden into the basket which she already carried half-full upon her head, and then came back to me. The woman went on before us.

Oyarbide, with his hands behind his back, walked beside me and made conversation. He had a horse; he offered it to me for an excursion to Fuenterrabia; it would be eight pesetas for the day. We arrived. The old woman set down the luggage at the feet of Oyarbide, and made him an obeisance. I gave Oyarbide his peseta. "Are you not going to give the poor woman anything?" he asked.

Horses and Men.

Study of the relation between the total length of life and the time required to reach maturity has brought out an interesting comparison between men and horses. A horse at five years is said to be, comparatively as old as a man at 20, and may be expected to behave, according to equine standards, after the manner of the average college student following human standards. A ten-year old horse resembles, so far as age and experience go, a man of 40, while a horse which has attained the ripe age of 35 is comparable with a man of 90.

ON A RUNAWAY ENGINE.

DISASTROUS RESULT OF FIRST TEST LOCOMOTIVE CUT OFF BOSTON.

Freight Cars Filled With Merchandise Made up the Train—she struck a Down Grade and Never Stopped Until the Round House was Demolished.

It was a proud day for Ruben Finch when he was selected as engineer of the big eight-wheeled freighter, Massachusetts. Back in the forties, says the Boston Transcript, when railroading was young and innovations were regarded with an interest not justified with the many inventions and contrivances of modern science, the news that the Western Railroad, which now forms a part of the Boston & Albany system, had put on a mammoth freight engine, larger than any yet tried, excited a widespread curiosity, not limited to the circle of railroad men, which was then much smaller than it is now. Among the engineers and firemen, however, the curiosity had something of excitement mingled with it, born of the desire to be put in charge of the great engine. And so Finch was an envied man the day his appointment was made known. Not less fortunate than Finch, in the estimation of his brotherhood, was James Marcey, who was selected to run with him as fireman on the Massachusetts. It was something to be placed in charge of a mighty monster, which made all the other engines on the road look like children's toys.

Early in December the Massachusetts was brought up from the shops at Lowell, and was sent up and down the road, while Finch adjusted every little part till she was in good working trim. The test of the engine was awaited with great interest as fabulous tales were told of the number of cars she could haul. The test was to be a severe one, but there was one thing that interloped: there were not cars enough around to make it interesting. In those days the freight traffic was very limited. Each road kept its own cars on its own road, as the railroad men say, and the variety from every road in the country could not be seen on each track, as it is to-day. So, to get enough cars, a tribute was levied on each passing freight train. It delayed the traffic a few days, but goods sent by freight in the forties were not perishable.

The test was to be made over the track from Worcester to Springfield, and on Dec. 18, 1840, thirty-five cars had been collected, enough, it was thought, to give the engine a most thorough test, for thirty-five cars made a tremendous load, as loads were then. In the afternoon Finch and Marcey oiled up the parts anew and made everything ready for the triumphal trip to Springfield.

A couple of toots on the whistle, a clanging of the bell and Finch, opening the throttle, felt the great engine roll out on the main track with seemingly as little effort as though there were not a string of freight cars behind her nearly a quarter of a mile long. There were two or three men in the cab with Finch and Marcey, among them Wilson Eddy, known the country over in later years as the veteran master mechanic of the Boston & Albany Railroad. Majestically the Massachusetts swung along and there was nothing to mar the smoothness of the machinery's motion. It was brisk winter day and the rails were covered with frost, but the great wheels did not slip. Railroad accidents were new things then and it was as yet an undiscovered fact that an engine could run away, with his engineer powerless to control it. There were but two brakes on the train, but this caused no uneasiness, particularly as there was that great engine to be depended upon.

In those days the railroad had not yet been extended across the Connecticut River at Springfield, but the abutments for a bridge were being built. Before the handsome Boston & Albany station was built at Springfield there was a steep grade which swept down into the city from the east.

Beginning about a mile back from the city the track dropped quickly down past the station and came to an end at the river bank, three hundred yards below. This was the jumping off place, for the tracks had not been built on the bridge. To the right, diverging slightly from the main track, a spur led to the roundhouse, which stood on the riverbank, not far away. It was here that the engines were faced about for the return trips.

As the Massachusetts, coming in trium-

phantly from its fifty-mile run, approached the brink of the hill a mile back from the river, Finch began to slow down and as he did so he began to realize that the heavy train had considerable impetus. He was afraid to risk going down the grade with so few brakes and decided to stop and block the wheels, seeing that the track was very slippery. So he shut off the steam and applied the brakes. To his surprise they seemed to have no effect on the heavy train.

"Watch out, Finch," said Marcey, "or you'll have us on the grade. It's pretty slippery."

Finch made no reply, but nervously reversed the throttle, sending the wheels spinning backwards over the greasy rails in spite of the weight of the engine, but not staying in the least the movement of the train. The dip in the grade came nearer and nearer, and at last Finch cried:

"My God, boys, I don't believe I can stop her!"

Then suddenly the engine leaped forward as it felt the steeper grade, and the speed increased each second in spite of Finch's efforts as car after car swept over the brink and pushed forward with a force that was not to be resisted. The occupants of the cab could do nothing but cling to the engine with a helplessness which became despair, as they saw that the big engine was entirely beyond control. But as the Massachusetts came rushing down toward the depot the full horror of the situation burst upon her occupants, for there seemed to be no way to escape plunging straight into the abutments of the new bridge.

There was a scramble for the side of the cab. Eddy made the first jump and he rolled off the tracks just at the station, unhurt. Moore, the conductor, and Nichols, a fireman who was riding in the cab, jumped next and were not seriously injured, while back of them the trainhands were jumping to the right and left for their lives. Finch bravely stuck to the Massachusetts, doing all he could to stop the headlong rush and planning to jump at the last moment at the river bank, and Marcey stayed with him.

A few seconds more and the whole train would be piled up in the river, but just then a curious thing occurred. As the Massachusetts reached the point where the spur track led off to the roundhouse, Finch felt a sudden jerk sidewise that told him the engine had taken the switch, and realizing that it must plunge into the roundhouse instead of the river he jumped without an instant's hesitation and without seeing what his landing place was going to be. He luckily struck a clear spot just in front of the roundhouse and went rolling yards away from the track, while the mighty engine with its long train of cars went rushing at full speed through the double doors. Marcey had delayed his jump too long and was buried in the debris into which the roundhouse engine and cars were resolved.

Abel Willard, the master mechanic of the road, had heard the engine coming down the grade, and supposing that it was some engine wanting to come in there, had thrown the switch. The force with which the Massachusetts, pushed by the heavy train, struck the roundhouse was tremendous. The old engine, Hampden, which was standing on the track inside, was driven through the brick wall on the further side and brought up standing, after climbing a woodpile which stood on the very brink of the river. But for this the Massachusetts would have gone into the river after all, despite the trifling obstacle of a brick roundhouse.

The cars piling into the house after the engine filled it to the roof with wreckage, and the frightful confusion gave a new idea of the possibilities of railroading. The debut of the Massachusetts had caused the loss of four lives as well as the demolition of the train and the roundhouse. Marcey was buried deep in the wreckage; Willard and a helper were crushed while endeavoring to get the double doors open and a brakeman was killed in jumping, but Finch came off nearly unscathed.

American Rubies.

At a recent meeting of the Mineralogical Society in London the existence of rubies at Cowie Creek, North Carolina, was discussed, and the opinion of experts was quoted to the effect that these American rubies are comparable in color and brilliance with the finest gems from Burma. The Cowie Creek rubies were first found about 15 years ago.