

UNUSUALLY RAPID EROSION has created a new 5-mile channel for the Sittang River, India. A ditch 6 ft. wide was dug in 1903 to drain land on a neck in a bend of the river. The tide and floods frequently overflowed the ditch and in receding rivulets toward it. In two years the ditch widened to 300 ft. The flood waters then found their way into the ditch from above and created a waterfall of 5 ft., which receded 1,000 ft. in a year, working finally into the upper river.

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THE LOCATION OF THE FIRST SECTION of the Alberta and Great Waterway Railway has been completed and if favorable weather conditions continue it is expected to accomplish considerable construction work yet this year. The entire right of way to Fort McMurray will be cleared between now and spring, and a party of surveyors will be kept continually in the field until the location of the entire line is completed. Contracts for the ties and rails will be let shortly, so that they can be distributed along the road bed during the winter months.

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WITH THE OFFICIAL OPENING of the new railroad thoroughfare over the River Sioule by the French Minister of Public Works, M. Viviani, the completion of the highest viaduct ever built, is brought to the attention of the engineering world. The viaduct is situated at Fades on the Orleans railway system in the Pay-de-Dome department, between the stations of Lepeyrouse and Volvic. It is 144½ yards above the stream, and was built at a cost of \$800,000, eight years being taken up with its construction. Previously the highest bridge over which a railroad passed was the Chokteik viaduct in Birmania, 139½ yards high.

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RATHER AN INTERESTING BRIDGE, said to have been built by Indians, is situated about 200 miles east of Prince Rupert, B.C., near the proposed line of the Grand Trunk Railway. It is built of round poles, fastened together with telegraph wire and wooden pins, the floor being the only part where nails are used to any extent. No two joints of the structure are made alike, but it seems, nevertheless, to do the work required of it, that of providing means of travel for pack trains to cross Bulkley River. Looking at it from a distance, it seems to be nothing but a conglomeration of poles and wire stuck together, with no particular reason for its not falling; the floor is very uneven, and the joints of the different members are made by lapping and binding them with wire. But a closer inspection shows that the party who built it had a pretty good idea of engineering, for the bridge is an ingenious combination of cantilever and suspension construction.

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NEW YORK'S MILLIONAIRE PLAYHOUSE, as the gorgeously appointed "New Theatre" just completed at Central Park west and 62nd street is known, was opened to the public on the night of November 8. From the outside it looks more like a Greek temple or an art museum than the particular style one is accustomed to see in structures of this kind. On the interior the color scheme throughout is driftwood and gold, relieved by a touch of cerise in tapestry and hangings, while in the panels forming the ceiling of the foyer are two magnificent oil paintings, presented by Wm. K. Vanderbilt, and taken from his own ballroom walls. The playhouse is intended to promote and elevate the legitimate drama, and its erection was made possible by a fund subscribed to by wealthy New Yorkers. E. H. Sothorn and Julia Marlowe, at the head of a notable array of stars, presenting Shakespeare's "Anthony and Cleopatra," had the honor of being the first to appear before the footlights. The theatre is the finest and most costly playhouse in America.

MACHINERY IMPORTED into the Transvaal during the first quarter of 1909 amounted in value to \$1,820,000, an increase of \$344,648 when compared with the amount for the corresponding period of 1908. Evidently a good market in this respect will be found there for some time to come, especially in view of the fact that the government has made the first survey and completed preliminary arrangements for the extension of the railway from Pietersburg to the copper fields at Mesina, 200 miles to the north, with an ultimate continuation across the Limpopo into Rhodesia. The whole district through which the railway will run is rich in mineral resources and agricultural possibilities, and the construction of the line, which is to be proceeded with forthwith, will mark an important epoch in Transvaal development.

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A STEP CONDUCTIVE TO PUBLIC SAFETY has been taken at Toronto in the form of an edict issued by the Police Department prohibiting the sale of standing room tickets at any of the local theatres. That the authorities intend to apply stringent measures to suppress the practice of crowding the aisles and the space back of the seats, is evidenced in the fact that two theatre managers were, subsequent to the time when the notice was served, fined for violating the order. Other cities in Canada where a similar evil exists should follow Toronto's example. It will be recalled that the great campaign of investigations throughout the country which followed the fatal Iroquois Theatre fire in Chicago a few years ago, pointed out that just such a condition was one of the greatest dangers which confronted most municipalities as regards their playhouse. A review of the existing conditions in a large number of Canadian cities shows that the drastic measures then adopted for the safety of the public, have been but feebly carried out. Another idea, suggested by Controller Geary, in connection with the new order of things in Toronto, which should be approved of by theatre managers and enforced by the authorities, is the throwing open of fire exits after each performance, and the encouraging of the public to use these openings, so that theatre-goers may familiarize themselves with their location and the point of the street to which they lead.

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COINCIDENT WITH THE WIDENING of the Richelieu River Channel at the port of St. John's, Quebec, other harbor improvements, including the construction of concrete wharves and the erection of a railway bridge, are being carried out in a vigorous manner. The river channel, according to the present plans, is to have a width of 300 feet, and a depth of 14 feet; but it will require several years to complete the dredging, the object being to extend the work 3 miles to St. Theresa Island, in which event 7 miles of the Chambly Canal, through which all the vessels plying the Richelieu River have to be towed, will no longer be used. This will be of great benefit to the commerce of the river, as it will materially reduce the cost of towage, only 5 miles of the present 12-mile canal then being required for navigation purposes. The immediate benefits to be derived from the work in its present state will be a considerable reduction of the annual spring inundation of farm lands bordering the banks of the river between this port and Lake Champlain. In addition to this work, the construction of concrete wharves is at present under way, and the Canadian Pacific Railway is replacing its old bridge, built on piles, with a modern one of concrete piers and steel superstructure, at an estimated cost of \$200,000. The piers will be of sufficient width to accommodate a double track, the present bridge being single tracked.