

THE FELLING OF THE CONCRETE COLUMN AT NIAGARA.

BY ORRIN E. DUNLAP.

The concrete column erected in Victoria Park, Canadian side, at Niagara, designed to make a dam in its prostrate form, was successfully tipped over into the river from the trestle on which it stood on the afternoon of Thursday, November 9, in the presence of between one and two thousand spectators. The trestle on which the column stood was 20 feet high above the ground level. The column was 50 feet high and 7 feet 4 inches square. Every 8 feet of its height a wooden wedge 12 inches thick at the outside and tapering to 6 inches at the center of the column was inserted for the purpose of breaking the column into sections when it fell, while a chain ran through the center of the column to hold the sections together when the column broke.

It required about an hour and a half to tip the column. Three jacks were operated under the timbers at the base of the trestle. For the first few inches of elevation of the timbers, hardly any slant was visible in the column, but soon the great shaft was seen to incline toward the river, and it was felt that it would fall very soon, but almost unexpectedly it toppled over into the river with great rapidity, making a mighty splash. The ends of the column disappeared under the water, but at the center the broken blocks or sections were elevated, but may settle down later. The trestle was intended to fall with the column for the purpose of throwing the inner end of the column about 15 feet out from the shore in order that an ice run might be left between the shore and the end of the column. This worked successfully. After the column was in the river the water in the intake was increased 10½ inches in depth, which it is believed will give sufficient depth to afford a full supply to the pumping station of the city of Niagara Falls, Ont., and the Niagara Falls Park and River Railway for power purposes, as the intake is used jointly. Supt. James Wilson, of Victoria Park, states that the results obtained are satisfactory, and he reports Engineer Isham Randolph, who planned the tower-dam, as being well pleased.

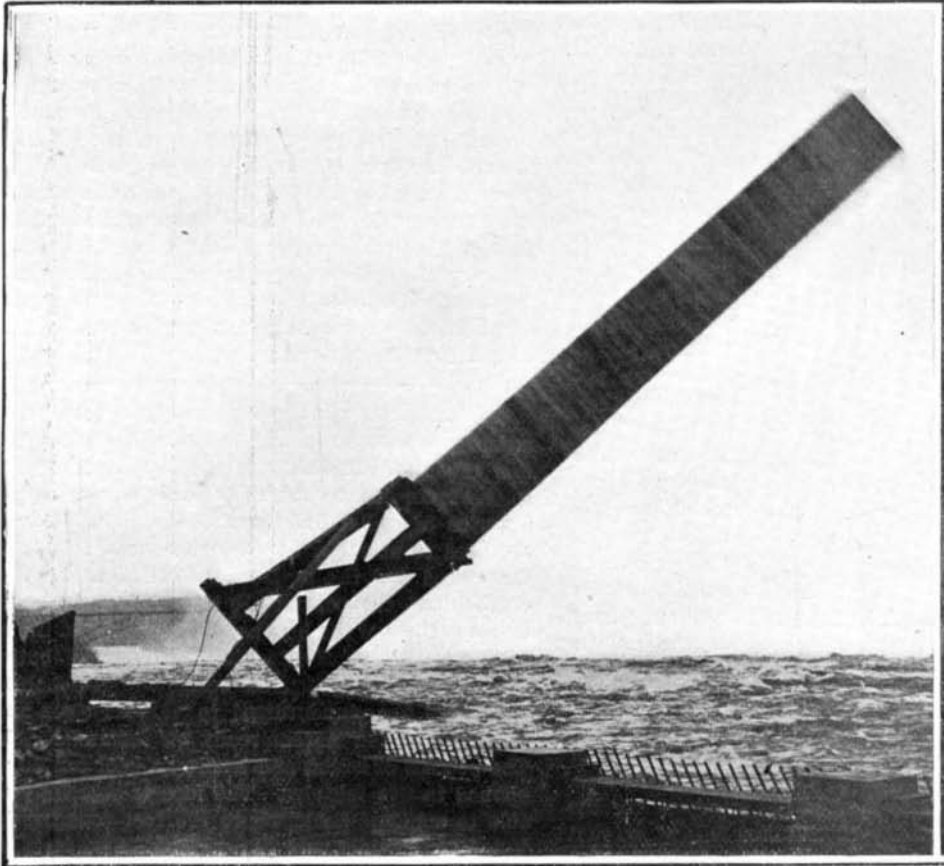
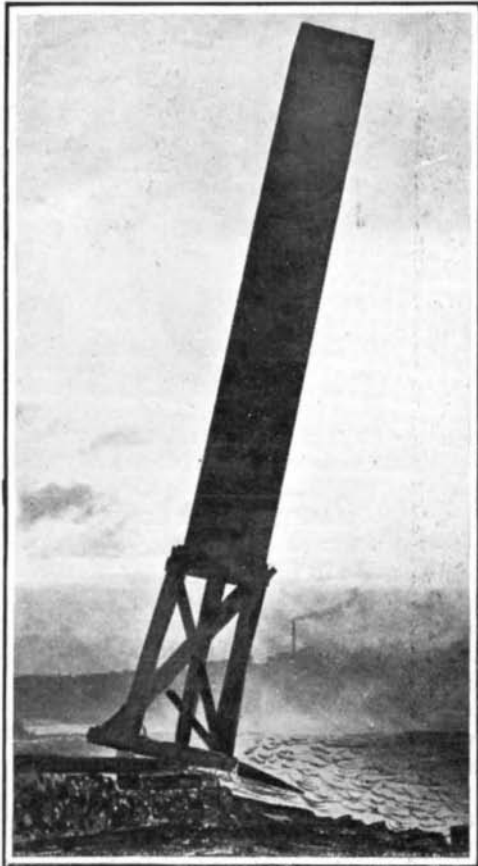
A well-made maple wheel may be run with safety at a rim speed of 154 feet per second.

Sea-Gulls as a Commercial Asset.

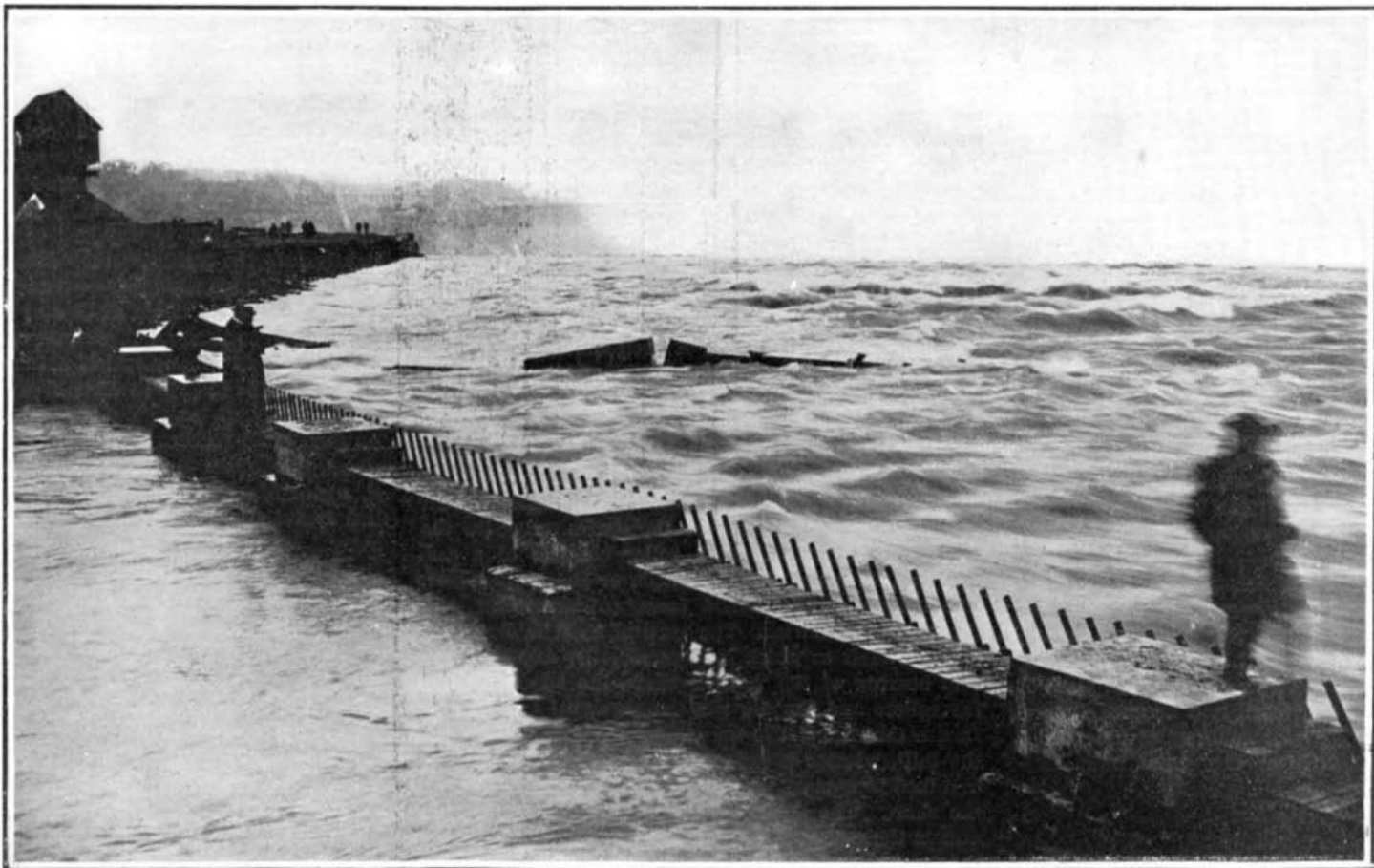
In the immediate vicinity of the small town of Liegnitz, in Silesia, lies the village Kunitz, which is the proud possessor of a small lake, having a rush and reed covered island nestling cozily in its bosom. This sheet of water has been selected by a shrewd gentleman as a breeding ground for sea-gulls, and thousands may now be seen there. This idea was inspired not only by a poetic spirit, but also by a sound commercial mind, as the eggs of these birds are held almost in as much esteem as those of the lapwing or pewee as a dainty. The demand is so large, and the quantity of eggs secured is so considerable, that the gentleman in question is making money quickly, although he has

date them. Most gulls would, doubtless, at once recognize the necessity for emigration to other less overpopulated islets; but the gulls of Kunitz think otherwise. As the water of the lake is now incapable of providing all they need, they have decided *pro tem* to seek what they require in the neighborhood; and the visitor, on arriving at Liegnitz railway station, is much astonished to see (provided, of course, his advent takes place by day) flocks of these beautiful white navigators of the air come swooping down around the train in search of biscuits, buns, or what not, while thousands of others sit preening their feathers upon the roofs of the sheds, offices, and other station buildings. However, they have still other ways of getting

a living, this being merely a kind of sportive branch of their victualing department. The real and true struggle for existence commences directly the peasant puts his hand to the plow, and turns up from the warm earth thousands of fat, juicy worms, beetles, earwigs, and other delicacies for which competition is as keen among the gulls as buying and selling are among men though the methods of the stronger gulls are often sharper and sterner — yet perhaps in the end the more merciful of the two. They follow the plow in their thousands, picking and scratching up the rich, brown earth, and collecting (to the farmer's great delight) myriads of insects for themselves and their hungry little ones. To watch them at work, it would be hard to believe that they were aquatic birds, so kindly have they become at home with Mother Earth as the source and origin of their supplies. Were it not for their peculiar and characteristic flight, and for their great number, the stranger might easily assume that he



Tipping the Concrete Column Into the Stream. Two Views Taken One After the Other.



The Column in the Stream—Broken Into Segments in Accordance with Its Designer's Plan.

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to pay a rent of no less than \$3,000 per annum for the use of the lake and island.

Strange to say, the birds have not been frightened away from the island by the regular collection of their eggs. This may be due to the fact that the owner allows no one but himself to set foot upon their domain. They do not seem to object to the removal of their eggs, but lay all the harder to make up for the loss—at least so it would appear, as the gatherings are increasing from year to year. At the same time the number of gulls is steadily advancing, a circumstance which is already giving rise to apprehensions, as the lake is getting too small to feed and accommo-

was watching some gentleman's private collection of white ravens.

A bridge of unusual dimensions has lately been constructed at Vauriat, in the Puy de Dôme, on the western side of the high plateau country of Auvergne. It carries a single line of railway over the river Seoule by three lattice girder spans, the central one being 472 feet 6 inches and each of the two side ones 377 feet 5 inches long. The two river piers of granite masonry are each 303 feet high, and tapered from 76½ feet × 43-2-3 feet at the bottom to 69 × 18¾ feet at the abutment level.