

THE NEW CROTON DAM

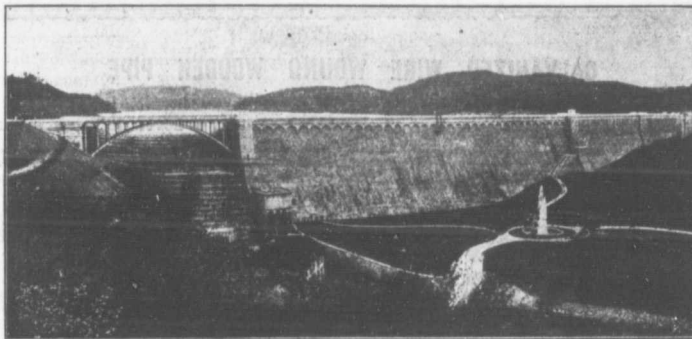
The newest and greatest of the dams upon the Croton River, which is to impound 30,000,000,000 gallons of water for the consumption of the city of New York, is pronounced finished at last, after thirteen years occupied in its construction. The gates in the dam were closed some sixteen months ago, and since then, says Public Works, no water has flowed in the bed of the Croton below the new dam. It is doubtful, indeed, if any water will flow there henceforth, since the demands of the great city are much in excess of the average inflow of the Croton basin, and only in the rapid thawing of the snow in the early spring and the resultant freshet is there any great preponderance of supply over demand. In one such spring freshet day of 1905, however, there was an estimated inflow of 1,500,000,000 gallons and in three days the height of water in the reservoir rose to 14.48 ft. But the water in this new reservoir is the overflow from the spillways of about a dozen reservoirs higher up the Croton River and its tributaries, whose aggregate capacity is nearly 44,000,000,000 gallons. Two other dams and a divert-

sumed in building the new Croton dam, though the capacity of the Wachusett reservoir is more than double that of the new Croton. The appended table gives the comparative figures:—

	Wachusett.	Croton.
Total length, dam and spillway (ft.)	1,496	2,168
Height, foundation to crest	228.2	297
Width at base of foundation	180	216
Width at crest	25.75	18
Depth of foundation	93	140
Height, ground level to crest	107	157
Length of main dam	971	1,168
Length of spillway	452	1,000
Earth excavated in building (cub. yds.)	258,600	1,750,000
Rock	99,350	425,000
Masonry in dam	273,000
Storage capacity (million gallons)	63,000	30,000
Time of building	5 years	13 years
Cost	\$2,173,159	\$7,631,189

LEGAL.

Judgement has been delivered in favor of plaintiff in the case of King vs. Town of Palmerston, awarding \$5,000 damages for the death of T. G. Burns, of Palmerston, who died from the



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Its storage capacity is 30,000,000,000 gallons, and it has cost \$7,631,189 to construct.

ing basin are under construction in the Croton watershed, which will add about 24,000,000,000 gallons to the storage capacity and will bring the total supply to about 102,000,000,000 gallons. This must suffice until the new water-source in the Catskill Mountains can be made available, which cannot be too soon accomplished, for the consumption of water by the city has reached the appalling daily average of 320,000,000 gallons. As the population of New York is growing with great rapidity, this consumption is sure to increase in like ratio, while the new works on the Croton have exhausted the capacity of that watershed.

The new Croton dam is a handsome work of solid heavy masonry, and has cost \$7,631,189. Its completion makes possible some interesting comparisons with the great Wachusett dam which impounds a potential total of 63,000,000,000 gallons of the water of the Nashua River for the use of the metropolitan water district of Boston, Massachusetts. This latter work has been described quite fully in Public Works, both during its construction and soon after its completion last December. It will be seen that owing to the especially favorable location of the Wachusett dam its cost was much less, and the time expended in its construction was less than one-half that con-

shock of an electric wire, alleged to be due to a defect in the lighting system. Wm. King, the administrator of the estate, asked for \$10,000.

The Halifax Electric Tramway Company have won a notable case in the Supreme Court before a jury. Dr. Mader, of that city, two years ago obtained a verdict awarding him about \$7,000 for damages alleged to have been sustained while driving over snow thrown up from the company's tracks. After appeals had gone through the Supreme Courts of Nova Scotia and of Canada, a new trial was ordered, with the result now that the jury awards Dr. Mader no damages, but finds him negligent in his driving.

Judge Anglin, in deciding the cases of the Keewatin Power Company, brought against the Town of Kenora, declares that the power in all navigable rivers belongs to the Crown. The action was brought to restrain the Town of Kenora from prosecuting expropriation proceedings in a branch of the East Winnipeg river. The eastern bank is owned by the Hudson Bay Company, the western bank by the Keewatin Power Company. The town of Kenora leased the bed of the river and proceeded to construct a dam for power purposes, and to expropriate land on either side for this purpose. The owners of the two banks claimed that their title was to midstream. Justice Anglin says: "By nothing short of an express grant should the Crown be held to have parted with its title to the alveus of our navigable rivers." The Crown grant gives title only to the water's edge. A natural obstruction in the course of an otherwise navigable river does not deprive the river of its navigable character. The case will probably go on to the privy council.