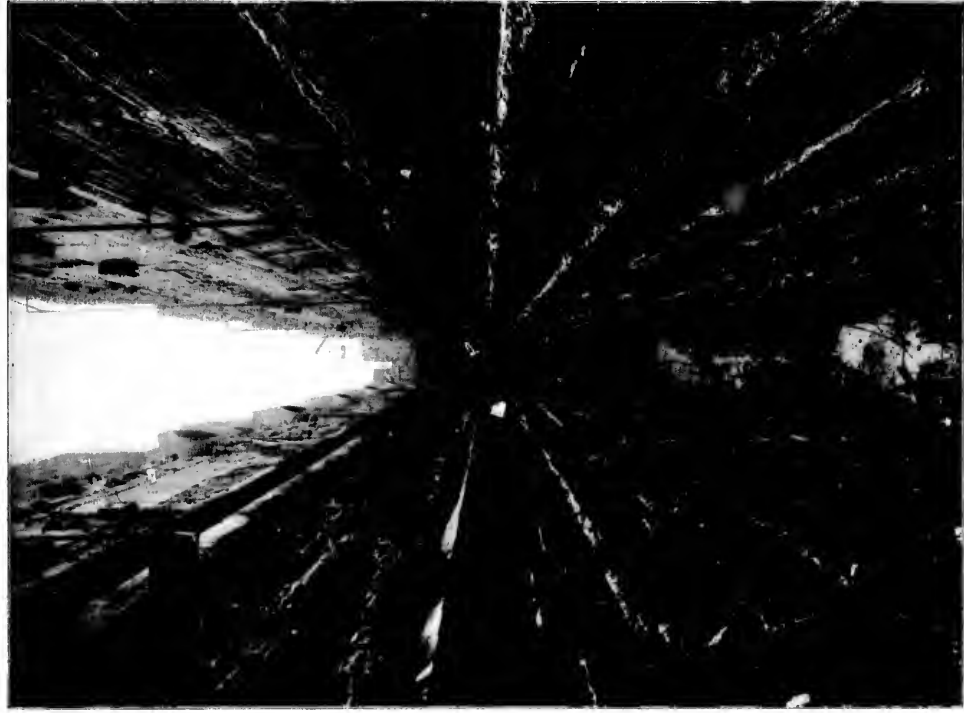




WHEEL PIT NIAGARA IN HARNESS.

This wheel-pit, wherein is subjected the power of Niagara, is an excavation 178 feet in depth, and is connected with the main tunnel, which serves the purpose of a tailrace, 7,000 feet in length with a slope of six feet in one thousand. This tunnel is one of the most interesting and stupendous mechanical contrivances extant; most fitting adjunct to the Falls themselves. It is excavated from the wheel-pit, directly beneath the town, to a discharge into the river but a short distance beyond the "Maid of the Mist" landing at the foot of the gorge. The tunnel has a maximum height of 21 feet and a width of 18 feet, 10 inches, making a net section of 380 square feet. The slope is such that a clip thrown into the water at the wheel-pit will pass out of the portal in three and one-half minutes, showing the velocity of the water to be 29½ feet per second, or almost twenty miles per hour. In this great work 60,000,000 tons of material were removed; 70,000,000 bricks, 30,000,000 feet of lumber and timber were used, besides 60,000 cubic yards of stone, and 55,000 barrels of Giant American Portland cement, 12,000 barrels of natural cement, and 20,000 cubic yards of sand. Over one thousand men were engaged in the construction of this tunnel not more than three years.