

(Mixing Plant on Left; Screening and Washing Plant in Background.)

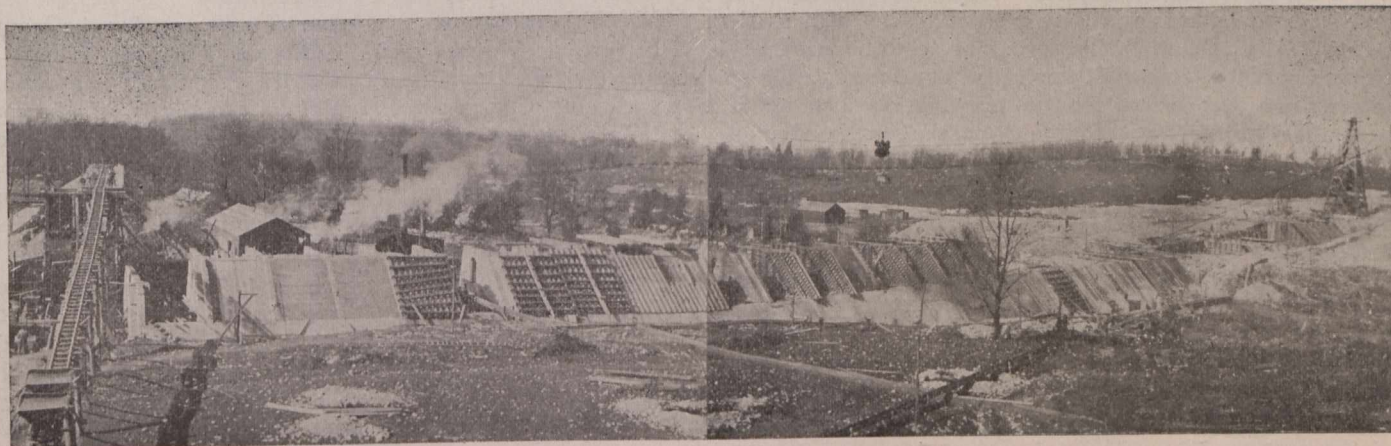
light as possible and the other of ten hours during the night, when the cableway was available for moving forms. In this way the required capacity from the concreting plant could be obtained by properly systematizing the gangs employed in form erection and stripping.

The progress of concrete was estimated as follows: Plant to be in operation about August 1st, figuring that this would insure approximately one hundred working days before December 25th, after deducting for Sundays and bad weather. To pour 8,000 yards in this time an average of 80 cu. yds. per day would be required. It was therefore apparent that one mixer would be more than sufficient, and that the form work was the governing factor. It was also apparent that the concrete plant had a large reserve capacity in case the estimated time of erection should be cut down, as turned out to be the case. It had been estimated that sufficient cut-off trench could be prepared by August 1st, while the plant was being erected, to allow form work and concreting to proceed at that date. On account of the much greater depth of cut-off required, however, and uncertainty at the start with regard to certain horizontal clay seams encountered, it was practically September 1st before the first concrete was poured. On account of this delay it was therefore necessary to exceed the estimated average progress of 80 cu. yds. daily, by at least 25 per cent., raising the rate to an average of 100 cu. yds. per day, and this condition was fully met by the concrete plant and form work, as shown in the following record.

During the month of September the average pouring was 99 cu. yds. of placed concrete per working day. In October the daily average was 140 cu. yds. In November the average for the month dropped to about 90 cu. yds. on account of stormy weather and the fact that most of the work was confined to the small sections at the top of the dam. This record, however, showed that the plant had placed in 78 working days about 9,000 cu. yds. of concrete, or an average of 112 yards per day, and that the "factor of safety" in its capacity was sufficient to make up for the unforeseen delays which had limited its working time. A large factor in the average attained was the high speed of the cableway, which easily reached a travelling speed of 1,500 feet per minute in operation.

Fig. 2 is a general view of the dam and cableway on October 20th, and in the direct foreground are two cars from the gravel plant starting up the incline to the mixer bins and storage piles. The top of the concrete at the left of the picture is about 15 feet below the crest of the completed dam.

Mr. F. A. Gaby is the chief engineer of the Hydro-Electric Power Commission, and the work has been directly under the department of Mr. H. G. Acres, hydraulic engineer. Mr. T. H. Hogg is responsible for matters pertaining to design and Mr. A. D. Watts is resident engineer for the Commission. Mr. A. J. Raymond is superintendent in charge for the Ambursen Hydraulic Construction Company, and Mr. G. A. Johnson is the company's engineer on the work.



20th, 1914. View from Central Point.