

The transmission-line insulators have given every indication of progressive deterioration, and during the latter portion of the year, prior to completion of the annual overhaul, breakdowns occurred frequently. A rigorous overhaul and replacement of insulators showing signs of defect has resulted in a very pronounced improvement in this respect.

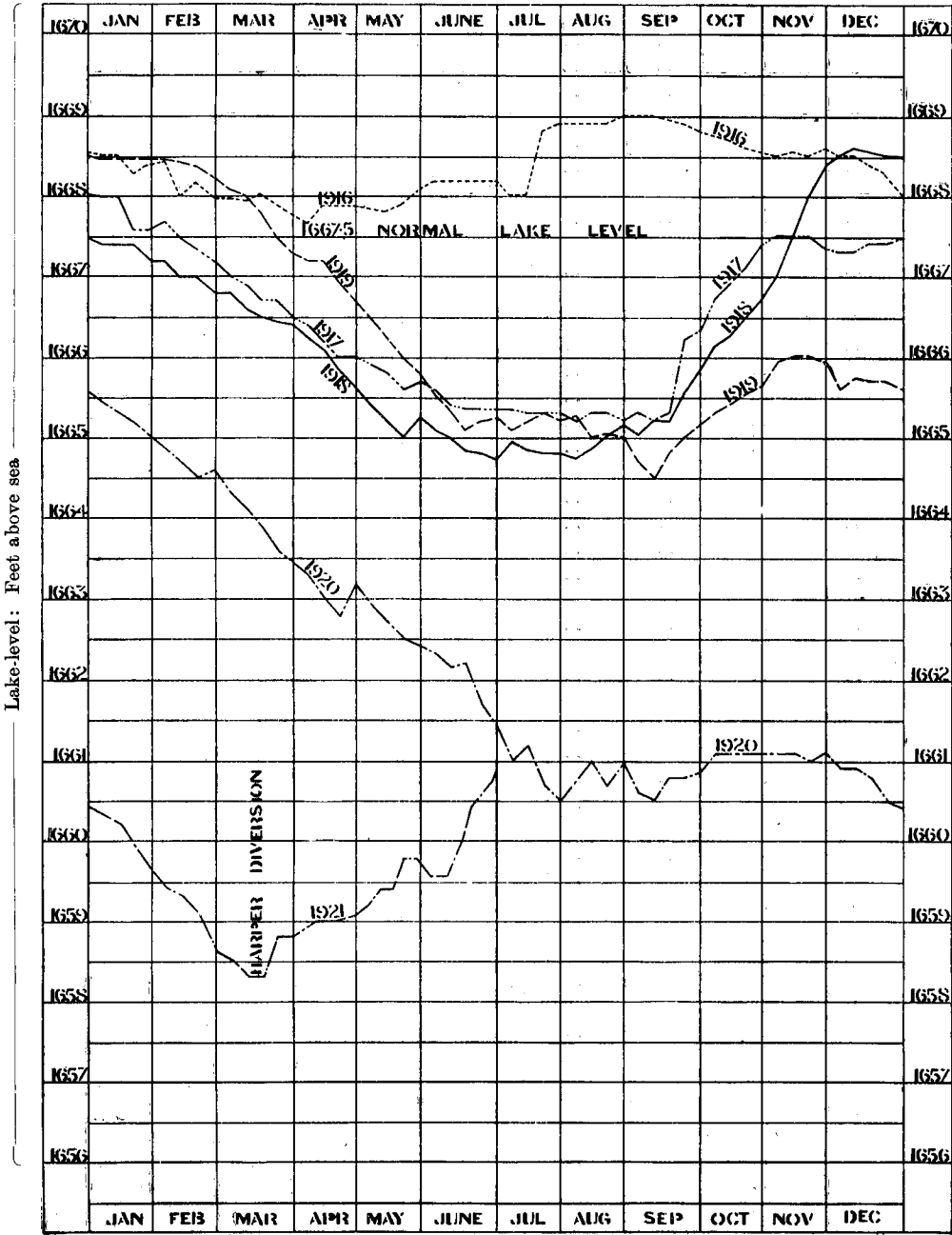
The year passed without any serious troubles occurring on the lines, and all operating equipment has worked satisfactorily.

*Interruption to Service.*

During the year two interruptions in service occurred exceeding a few seconds, one on the morning of the 15th June, the north line failing while the south line was under repair; the second line failed at 12.44 a.m. and was restored at 4.58 a.m. The second breakdown was on the morning of the 6th February, when, owing to line trouble, the emergency gear on the turbines came into operation and shut down the station. The failure took place at 12.3 a.m., and, owing partly to the time at which it occurred and partly to the fact that a very thorough investigation of the cause of shut-down was essential before again putting the plant into operation, supply was not resumed until 2.40 a.m.; thus a total interruption of two hours and forty minutes ensued, but fortunately at a period of light load and therefore with a minimum of inconvenience to consumers.

*Water-storage.*

After an abnormally dry year, and with the increased demand for power, the anticipated recovery in the lake-level in the spring of the year did not take place. The level fell at the beginning of March to 1,658.8, the lowest point so far reached, and only by concentrating on the lowering of the lip of rock at the entrance to the intake was the supply maintained. In the meantime the work of cutting the race and building of intake for the Harper diversion had been energetically pursued, and on the 3rd March, 1921, a small temporary diversion of the river was made. The immediate result was most gratifying in that the downward trend in the lake-level was stopped, and there is every indication that the position will be secure until such time as the permanent diversion of the river is completed. A graph showing the effect of the diversion on the lake-level is published herewith.



CURVES SHOWING VARIATIONS IN LAKE-LEVEL.