

feet per second; when the water stands at compromise point, the flow is reduced to 505 feet per second; when it is 6 inches below that point, the flow is 410 feet per second, and at 2 feet below it is 187 feet per second, while at 3 feet below the flow is but 82 and a fraction cubic feet per second. As a matter of course, when the water fell below the bottom of the Jordan River, there was no natural flow at all.

PUMPS

For the purpose of overcoming the difficulty arising from the foregoing variation in the flow, and to obtain a regular flow of water from the lake into their diverting canals, plaintiffs, in 1902, installed a pumping plant at the point where the lake empties into the Jordan River, to which plant they have added from time to time after 1902 so that when this case was tried appellants had 7 pumps installed with a combined theoretical pumping capacity of 700 cubic feet per second.

MEASUREMENTS

From various measurements that were made, it was also made to appear from the record that from 1837 to 1900 the water fluctuated in Utah Lake from being 11 inches above compromise point, the highest point reached, in June, 1893, to 3 feet 1 inch below that point, the lowest, in October, 1900. During the term of years aforesaid there were only 4 years when the water rose above compromise point, namely, 1893, 1894, 1896, and 1897; and 2 years, to-wit, 1890 and 1899, when the water reached, but did not go above, compromise point; while in all the years it fell below that point during a large portion of each year. The average of all the measurements, as near as we can obtain it from the record, that the water fell below compromise point each year during the years aforesaid, was probably about 11 inches; while the average of all the measurements that the water rose above that point was about 5 inches. The water, however, was above compromise point but a short time in each year. In one year it was above that point for about 60 days; while in the other years the time did not exceed 30 days, which was during the high-water season.

AMOUNT OF LAND IRRIGATED

The court found from the facts that the highest amount of water that plaintiffs took from the lake in any one year by means of their pumps was in the year 1905 when plaintiffs took approximately 136,000 acre feet, or an equivalent of a continuous flow of about 373 cubic feet per second for a period of 130 days. Put in another way, the plaintiffs never did make use of the 185,000 acre feet of water decreed to them by the lower court.