To prevent fairway erosion during the annual rainy season, this concrete flume has been built at the San Gabriel (Cal.) C. C. in the former river-bed. This view was taken during construction of the flume.

property in the vicinity of the eleventh green. These sources of supply are temporarily impounded by means of low concrete dams, each complete with screened inlet, shut-off and blow-off valves. The water in each dam thence flows by gravity into a circular storage reservoir.

Protect Stream Flow

This reservoir has a capacity of 300,000 gallons, and is of the cut and rolled earthen embankment type, being floored and lined with reinforced concrete. The primary purpose of the reservoir is to balance the supply to the pumps and to avoid the taking at any time of the entire stream flow. For many reasons it was deemed advisable to maintain a natural flow of water in Cobbs creek and the tributary down stream from the diverting dams. From an aesthetic standpoint alone the green committee was of the opinion that this was of considerable importance.

From the reservoir the water flows through pipes by gravity to two centrifugal pumping units in the pump house near by. These are motor driven and they discharge directly into the irrigation lines. One pump has a rated capacity of 100 gallons per minute with a discharge pressure of 115 lbs. per square inch. This unit is operated when it is desired to sprinkle small areas, such as the greens or tees. It is powered with a 15-horsepower motor. The second pump has a rated capacity of 300 gallons per minute with a discharge pressure of 115 lbs. per square inch. This unit is operated when it is desired to sprinkle fairways, and is powered with a 40-horsepower motor. At such times as it is desired to sprinkle greens, tees and fairways both units are operated in parallel. The smaller unit supports sprinklers of the type usable on greens and tees and the large unit takes care of sprinklers of a type usable on fairways.

Pumps Have Excess Capacity

Service tests have demonstrated that the pumping units will support a somewhat greater sprinkler load if occasion demands. In actual service the combined output of both pumps has reached 475 gallons per minute. No attendants are necessary in the pumping station during sprinkling operation as the motors and pumps are fully protected automatically against overload, service stops, etc. The pumps were furnished by the American Well Works Co., motors and switching equipment being furnished by the Westinghouse Electric Co.

The new distribution system including lateral connection is practically all of cast iron pipe. Some idea of the extent of the system can be had by noting the following summary of pipe line as installed:

Inches.	Feet.
2	8,589
3	3,132
4	4,908
6	3,264
10	1,056
	20,949

A total of practically four miles of pipe