

at low cost, while at the same time probably justifying the undertaking of such power schemes at an earlier date than might otherwise appear warranted. With cheap hydro-electric power there is no doubt that many areas not now being investigated as potential irrigation settlements, chiefly because an economic gravitational supply of water is not available, would be dealt with by pumping water from the larger rivers and lakes.

#### INDIVIDUAL, COMPANY, AND LOCAL-BODY UNDERTAKINGS.

Irrigation development has also been successfully carried out, or is at present in progress through individual effort, by companies, or by local bodies. Works undertaken by individual effort comprise a hundred or more small areas scattered throughout the district, generally in the most favourable situations, which involve a minimum of construction cost. There are, however, a few instances where more enterprising settlers have confidently and successfully constructed irrigation works of considerable magnitude, involving in some instances the loading of their farms with construction costs running into several thousands of pounds. Among the most notable of these individual irrigation undertakings are those of Mr. John Wilson, at Lauder; Mr. P. R. Sargood, at Wanaka; Mr. Lee, at Lake Hayes; Mr. Lethbridge, at Ardour; and Mr. R. K. Smith, at Tarras. The last-mentioned undertaking has recently been acquired by the Crown for enlargement and extension. The total area of lands under irrigation by individual effort is estimated by the writers at 10,000 acres.

There are only two instances of companies being formed to construct irrigation works—namely, the Little Valley development party and the Cromwell Development Company. The former have acquired



FIG. 10. KAWARAU RIVER, SHOWING CROMWELL DEVELOPMENT COMPANY'S WEIR.