xi 1).—1.

Although graphs 3 and 4 are instructive in the way of showing that the counties affected by irrigation have more than kept pace with the general growth of dairy and sheep farming in the Dominion, they do not fairly show the progress that has really taken place in these counties. It has to be remembered that over the lands which are suitable for irrigation in Otago Central the rainfall is extremely small, and that without some artificial means of watering these lands very little increase at all could have taken place in farm-produce. Therefore graphs 3 and 4 as well as graphs 1 and 2 are really indicative of the progress that has been made due entirely to the irrigation of the land.

The above graph shows the increase in traffic from 1915 to 1930 for sheep, pigs,

and cattle from the various railway-stations in the irrigated area.

Taking the figure of 16s. per head as a fair value to allow for the production for a sheep per year, the increase in production due to irrigation for sheep only can be calculated at £104,000. Similarly, taking the annual value of the production from a dairy cow as £13 10s. and the increase in numbers of dairy cows due to irrigation as 1,200, the increase in the value of the products from this source can be calculated at £16,000. The total increase in production primarily due to irrigation from these two sources alone can therefore be set down at £120,000 per annum.

## FUTURE PROPOSALS.

The amount proposed to be made available this year for the development of irrigation in Central Otago is £75,000. The possible future schemes that have been under review are the Omakau-Lauder-Matakanui, taking supply from the Upper Manuherikia River, which would irrigate between 14,000 and 15,000 acres at present owned by fifty-two individuals. In the absence of complete detailed surveys and plans, the estimated cost of this work is £267,000, and the annual charges would amount to £12,550. The next scheme under consideration is known as Becks-Clyde, also taking supply from the Upper Manuherikia. In this case there would be available for irrigation purposes 28,000 acres of land at a total estimated capital outlay of approximately £680,000. The third scheme in regard to which a certain amount of information is available is known as the Lake Hawea electric pumping scheme, which would irrigate about 14,000 acres of land. In regard to this area a tentative proposal was recently made to the Government that private enterprise would be prepared to undertake this work, and a reply has been given to the effect that the Government would give its answer to the request for a license when a definite proposition is submitted.

The remaining schemes which have at one time or another been investigated are the Roaring Meg electrical pumping and the Ettrick or Teviot extension. In the first case about 8,000 acres could be irrigated, and under the Ettrick scheme

a much smaller area.

With regard to the Maniototo Plain, the irrigable area is very large, probably amounting to 120,000 acres. No tentative estimates have yet been made in regard to this very large undertaking, but it is obvious that if its development were undertaken it would have to be of a progressive nature. The supply in this case would be drawn from the upper reaches of the Taieri River. The Maniototo Plain is held in large areas, and the number of present settlers who would be irrigators has not yet been established. Various surveys and the collection of data of an engineering nature have been in hand by my Department for some time past in connection with the possibilities of this area. The prospects of increased production from Otago Central are too well known to need any further elaboration in this Statement, and, as pointed out above, it is necessary that those engaged in promoting extensions of irrigation schemes should bear in mind that, judging from the experience of schemes at present operating, the indirect or national benefit accruing as the result of making water available to land hitherto unproductive entirely outweighs the direct return provided by a water rate.