was required for the production of the same amount of increased weight in the buttermilk-alone groups, and more buttermilk plus meal in the meal-fed groups, *i.e.*,—

- Series A: Weight range 40 lb. to 140 lb. required 714 gallons milk, or 555 gallons milk plus 84 lb. meal, per 100 lb. pigmeat produced.
- Series B: Weight range 90 lb. to 140 lb. required 876 gallons buttermilk, or 688 gallons milk plus 132 lb. meal, per 100 lb. of pig-meat produced.

While the two series are not strictly comparable, the only material difference between the groups compared above is the weight-range over which they extended, and, although the trials were not designed to investigate the point, the results are so striking as to indicate that the weight-range factor has probably been largely responsible for the difference in the economy of food noted. Such a result is consistent with the fact that small animals have a lower maintenance requirement than large animals, and in consequence a larger proportion of the ration of the former is available for conversion into increased weight.

ECONOMY RESULTS.

Table 5 sets out the economic results on a cash return per 100 gallons of buttermilk basis. Costs of meal used have been deducted in the case of the meal-supplemented groups, the balance only being credited to the buttermilk used.

| | | Group 2 : 🕴 lb. Meal. | | | Group 3: r_2^1 lb. Meal. | | |
|--|-----|--|--------------------------------------|--|--|--------------------------------------|--|
| Bacon, price per pound | | 4d. | 5d. | 6d. | 4d. | 5d. | 6d. |
| Control, buttermilk alone | ••• | 45·5d. | 57 · od. | 68·4d. | 45·5d. | 57.od. | 68·4d. |
| Meal at $\pounds 6$ per ton Meal at $\pounds 8$ per ton Meal at $\pounds 10$ per ton Meal at $\pounds 12$ per ton | ••• | 44 · 4d. 39 · 8d. 35 · 2d. 30 · 6d. | 58.9d. 54.3d. 49.7d. 45.1d. | 73 • 4d. 68 • 8d. 63 • 2d. 58 • 6d. | 43 · od. 34 · 7d. 26 · 6d. 18 · 4d. | 59·8d. 51·6d. 43·5d. 35·3d. | 76 · 7d. 68 · 4d. 60 · 4d. 58 · 2d. |

Table 5.—Series B : Cash Returns per 100 Gallons Buttermilk (deducting Cost of Meals).

The most significant feature arising from these results is the fact that only at higher prices for bacon and at lower prices for meal than those normally ruling in New Zealand was there a margin of profit over the control group fed on buttermilk alone. Meals can seldom be purchased at f_6 per ton, while the price of bacon is normally well below 6d. per pound the relative prices which would need to exist for a profit margin from meal-supplementing as in Group 2. A slightly higher price could be paid for meal as used in Group 3 if bacon is worth 6d. per pound. The low efficiency of food-consumption of the pigs in this series would appear to be partly responsible for this result, and if this be so it throws considerable doubt on the wisdom of the common practice of pig-fatteners in using meals during the later stages of growth of pigs rather than during the early stages. "Topping off" on meal would appear to be a questionable practice on a profit basis under normal prices.