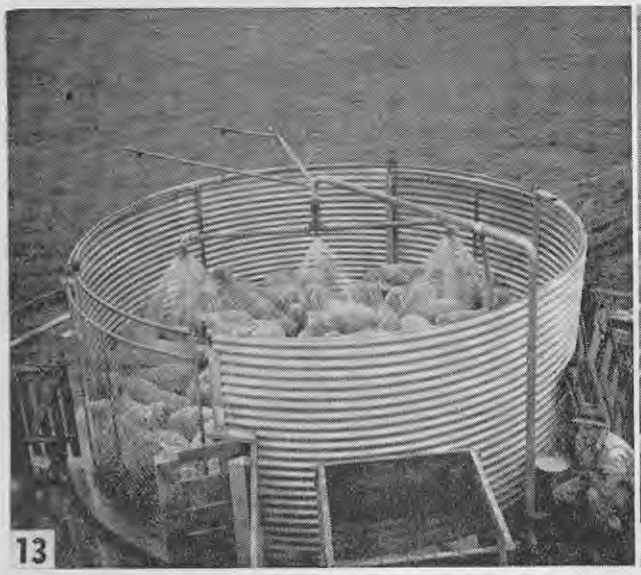
DIPPING IN PROGRESS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system of dipping were set out. Now that the tests at Ruakura have been carried out, it is possible to give at first-hand experience under New Zealand conditions.

(a) The sheep are not knocked about; consequently losses are kept down to the bare minimum. Even low-conditioned sheep and ewes close to lambing could be safely dipped if necessary. Many of the usual risks associated with dipping valuable stud rams are eliminated.

(b) As the sheep received no rough treatment or sudden plunge into the dip, they offered little objection to dipping, so the amount of labour required was greatly reduced, and nobody even "got a sweat up." A man and a boy can easily work the dip, and even one man with good dogs would not find it difficult. The sheep enter easily, as the exit gate (which is directly opposite the entrance—see Fig. 13) is of cyclone wire, and the sheep in the draining pens act as decoys, being in full view of those entering. Fig. 14 shows the leisurely fashion in which the sheep are leaving the dip; in fact, this might almost be classed as a disadvantage, as they have to be chased out.

(c) Dipping is rapid compared with present methods; 500 sheep per hour were dipped without difficulty. Four sizes of this type of spray dip were manufactured in Australia, rated at 30, 60, 90, and 120 sheep capacity. The model tested is a 60-sheep one, so with the largest model it would be fair to assume that upwards of 1,000 sheep per hour could be dipped.

(d) Economy in the use of dipping fluid, which can be used to a much lower level than with any of the standard types of dips. It was found that dipping could be continued till just over 100 gallons were left. With an improved design of reservoir with a sloping floor, it is probable that dipping could continue even longer before the foot-valve was exposed, thus allowing the pump to suck air.

(e) As the design necessitates and incorporates efficient screening, it removes much foreign matter from the dip (see Fig. 6), and reduces the risk of dip stain to a minimum. It can handle any type of dip equally well, and the continual circulation is a great advantage with powder dips, as it keeps them thoroughly mixed and the powder particles in suspension. As already mentioned, the pump can be used as a very convenient and thorough method of carrying out the initial mixing of the dip (see Fig. 8).

(f) The first cost is no higher than that of a standard type of dip of comparable capacity. The approximate landed cost in New Zealand of the framework, entrance and exit gates, galvanised iron, all piping hoses and valves, and centrifugal pump, would be in the vicinity of £110 at present. To this must be added the cost of the concrete work and fences round the draining pens, but these costs vary so much according to circumstances, e.g., the availability of shingle and sand, whether farm labour is used, etc., that no useful estimate can be given for this part of the job. No doubt those interested could make their own estimates on the following basis:—Area of concrete in floor of circular pen, approximately 200 sq. ft., all at least 4in. thick and preferably reinforced. The rim, which is 1ft. wide, is included in the above area, but this concrete will be at least 6in. thick, giving a total of about 75 cubic feet. Area of concrete in draining pens, approximately 350 sq. ft., at least 3in. thick, and preferably reinforced, plus a raised rim all round, requiring about 92 cubic feet in all. The reservoir is of the dimensions given above, and has reinforced walls 6in. thick.