

## (2) Method of Sowing

There are many aspects from which to view the problem of the best method of sowing linen flax, but the best practical means is not necessarily the ideal way from the viewpoint of maximum fibre yields and highest quality of fibre.

(a) **Height of Straw.**—It appears that cross-drilled crops may, on the average, be slightly taller than crops drilled one way only. Broadcast crops may have a very slight advantage over those drilled in the latter manner.

(b) **Quality of Straw.**—Cross-drilling tends to give unevenness both in height of straw and in diameter of stem, and therefore in quality of fibre. This is particularly undesirable. On the average, however, the straw quality of cross-drilled crops is superior to drilled crops, probably because of the smaller amount of branching.

(c) **Sowing.**—Cross-drilling, of course, means going over the ground twice. In addition to the extra cost and greater time taken, the operations involved, which usually include rolling, may over-consolidate those soils which tend to be heavy and lead to "caking" of

the surface, with detrimental results to the crop.

When all factors are taken into consideration it would seem that drilling in 7 in. coulters is the only practical method at present. However, the adoption of the Continental system of sowing in 3½ in. drills would probably result in taller crops with a higher fibre yield. Further, the latter method of sowing would probably result in more even-growing crops showing less variation in fibre quality.

## (3) Rate of Seeding

(a) **Height of Straw.**—In most districts low seeding rates of 70 lb. per acre or less tend to result in shorter crops, and in some cases the height of straw increases regularly with the higher rates of seeding. This factor appears to assume greater importance in those areas where the crops as a whole have been somewhat poorly grown. In most cases the rate of seeding should be at least 80 lb. per acre, and, generally speaking, rates of the order of 85 to 90 lb. per acre should prove satisfactory.

(b) **Quality of Straw.**—The low rates of seeding in most cases appear to

produce crops of inferior straw quality, probably because of the greater amount of branching that a thin stand allows, but no consistent differences are shown apart from this. The rates indicated above should be quite satisfactory from a straw quality viewpoint.

## (4) Fertiliser Used

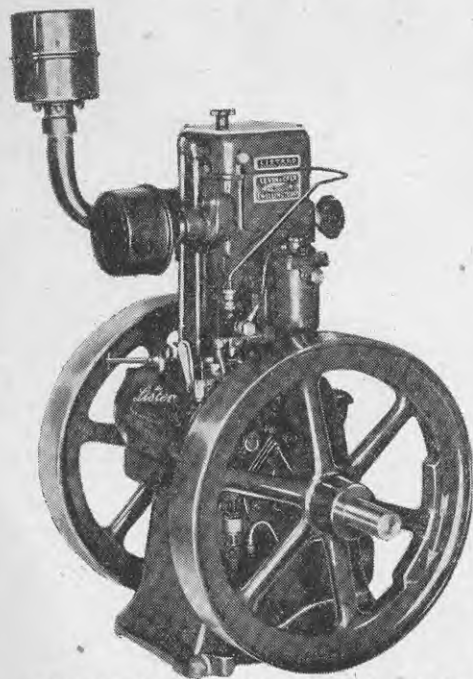
(a) **Height of Straw.**—There is little doubt that higher rates of application of superphosphate or reverted superphosphate have resulted in taller crops than lower rates of these manures. The differences between these two fertilisers when applied at the same rates are in most cases negligible. Increases were also recorded with rates of application above 3 cwt. per acre, but the possibility of affecting germination with high rates of superphosphate in certain seasons should not be overlooked. It would seem, therefore, that linen flax should be sown with 2 cwt. per acre of superphosphate or reverted superphosphate.

(b) **Quality of Straw.**—The effect of additional amounts of phosphatic fertiliser does not appear to affect straw quality as seen in the field, nor are

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