soil be of a light, friable character, the Norfolk or four-course system (wheat after clover) is generally followed, the spreading roots of the clover giving that firmness to the soil which experience has shown to be so desirable for wheat. On such soils, too, the roller, either plain or ribbed, is a good friend to the farmer: it closes the surface, stops evaporation, and consolidates the body of the soil generally.

On strong lands, again, root crops are certainly the best preparation for wheat, provided the land can be cleared in time to allow for wheat sowing. In the north and other districts, where the five or six course system is carried out, either turnips, or potatoes, or mangel precede the wheat. All form good fallowing crops, allowing the land to be well cleared, requiring to themselves mineral ingredients different in proportions from the wheat, and at the same time leaving on the land a supply of organic matter for its use.

On very heavy soils root crops are rarely attempted, owing to the difficulty in obtaining a sufficiently fine tilth for the seed-bed, and also to the difficulty in getting them off the land before the bad weather sets in. On such soils beans are sown alternately with wheat. This rotation, though suitable as regards the chemistry of the two crops, has one great fault, that of preventing to a great extent that mechanical treatment of the soil which we know adds so much to its fertility. The bean stubble is ploughed in with its accumulated weeds; the wheat sown, and generally, on such soils, left unhoed until harvest; the ploughs are sent in again as soon after the field is cleared as possible; manure either ploughed in now or before seed-time in the spring, and the land is left for the winter fallow. In the spring the first chance of getting the beans sown should not be lost; and the only opportunity of getting the land clean is during the early period of their growth: and then the chances of weather on strong clay soils are considerable against you, and the weeds remain masters of the field, until a twelvemonth's fallow and a large expenditure in labour again clears your land of those unprofitable occupants. The addition of a third crop to the rotation, which would admit of a better preparation of the land, might be obtained in the smooth-leaved rape. This on such soils, grows well; it admits of the land being well worked and cleared before sowing, and of being kept clean during its growth: it comes to maturity early enough to be fed off by the end of September, and leaves a large amount of good dressing for the succeeding crop of wheat. The good effect of the extra tillage in cultivating root crops is always shown in the succeeding wheat crop; and although different practices prevail necessarily in different districts, still, as a general rule, a farmer cannot deepen his soil too much, nor reduce it to too fine a tilth, in preparing it for the reception of his wheat.

Having, then, to the best of our judgment and our power, completed the preparation of the land, the next point for consideration is the *selection of the seed;* and this is a point of far more importance than farmers are generally disposed to concede to. We have no series of properly conducted practical experiments to refer to, which are always desirable in cases where scientific principles are so opposed to general practices as in this instance; but to those at all acquainted with natural history—the laws of animal or vegetable life—a little consideration would clear up any doubts they might before have possessed in reference to it. We may be told, it is true, that good seed does not produce a good crop, while the produce of inferior seed is sometimes of a superior quality. This may be quite true, and there may be many other ways of accounting for the result beyond the mere difference in the seed; but as a rule, the law of production—"that like produces like"—cannot be disregarded; therefore if we wish to secure the best results, it is important *that the seed sown should be of the best quality—that it should be perfect in itself—and that it should be fully matured.* The temptation of the higher price too often takes all the best grain of the farm to the market, while the inferior qualities, including the tail corn, with all its immature and injured grains, are, with a sadly short-sighted economy, considered good enough to risk the next year's crop upon.

Another point to be attended to in reference to seed corn is the advantage of changing it as often as circumstances will permit for seed grown in a different district, both as regards soil and climate, from your own; as seed constantly produced year after year on the same soil is apt to deteriorate in quality, and to produce a crop less vigorous and more liable to disease than if its conditions of growth had been frequently changed.

This practice of changing seed is becoming every year more followed, experience satisfactorily confirming the correctness of its principles. Not only is a more healthy plant secured, but an opportunity is offered to the farmer, by using as seed the grain of an earlier district, to accelerate the time of his own harvest, which in some seasons and in some places is a matter of considerable importance to him. Thus the light chalk and gravelly soils of Kent furnish a good exchange with the strong alluvial and clay soils of the opposite coast of Essex; and the fen soils of Huntingdon and Lincolnshire exchange seed beneficially with the wolds and chalk soils of Cambridgeshire and the green sandstone soils of Bedfordshire; while the strong, cold clays of Northumberland and Berwickshire, and the rich alluvial carse soils of the north would find the seed corn of the warm, friable soils of the new red sandstone improve the wheat produce of their broad and well-tilled fields.—*Our Farm Crops, by* John Wilson, F.R.S.E.