

10. General arrangements of the farmstead, and of the farmer's and labourer's houses; plan for carrying off smoke and removing soot to be applied to the land; new mode of hanging doors, so as to allow ingress and egress with ventilation, but without draught.

In reference to an inquiry made by Mr. Ricardo, of Gatcombe, near Minchinhampton, as to the best mode of laying down an asphaltic or bituminous flooring in his pigsties, Mr. Parkins informed the Council that he had found the following composition very useful for that purpose, namely, lime or pounded chalk mixed with so much coal-tar from gas-works as will leave the mixture in a state not too soft for ramming, adding a sufficient quantity of sand or fine gravel to bind the whole. Mr. Parkins, stated that these materials not only formed a hard basis for pigsties, farmyards, &c., but made good walks on which weeds would not grow, and answered the purposes generally for which asphaltic was commonly employed.

Lord St. John informed the Council that the plans of his farm premises, at Melchbourne, presented by him to the Society at a former meeting, referred to an occupation of 500 acres of land, about half of which was under the plough.

Col. Elwood, of Clayton Priory, near Brighton, favoured the Council with some suggestions in reference to Captain Scobell's plan of cottages at High Littleton, in Somersetshire, presented to the Society at the general meeting.

**Chinese Cabbage.**—Mr. Langdale, of Gower-street, Bedford-square, presented to the Council some of the seeds of Endive-Cabbage, from Chusan, as the only supply which, up to the present time, had been received in this country. From the report of Mr. Boyd it appears that this vegetable is very prolific, grows lofty, and requires a warm aspect; being serviceable both for the cottager and the farmer. The Council referred the trial of these seeds to the Horticultural Society and Messrs. Thomas Gibbs and Co., with a request that they would respectively report to the Council the result of their cultivation.

**Russian Turnip.**—Mr. Wells, of Botley, Hampshire, presented specimens of plants grown from Russian (Swedish) Turnip-seed imported last year, and sown on the 22nd June. The Turnips were hoed on the 25th July, formed miniature bulbs early, and soon completed their growth. Mr. Wells considered that on these accounts, this new variety of Swedish Turnip would be found well adapted for late sowing. The seed-plants presented by Mr. Wells stood about five feet high.

**Guernseyism.**—The Rev Daniel Gwilt, of Icklingham Rectory, near Mildenhall, Suffolk, reported to the Council the success with which he had adopted the plan of cultivation recommended by Mr. Guernsey; and he ventured from practical experience to recommend the system most strongly, his success under it having exceeded his expectations. He thought it might be carried out with great advantage to a certain extent upon most farms in any district; but more especially in the sandy districts of Norfolk and Suffolk, where heather, broom, larch-trimmings, &c., may be had in such abundance, and at a small expense.

**St. John's Day Rye.**—Mr. Gwilt also informed the Council that for the last three years he had been cultivating a variety of rye very similar to that named St. John's day rye. It was known to him as the giant rye, and seemed, from the experience he had had of its qualities, entirely to answer the description given of its merits in Mr. Pusey's communication to the Council.

**Flax Seed.**—Mr. Taylor, of 314, Regent-street, communicated to the Council analyses made by Dr. Ryan, of the Royal Polytechnic Institution, of common linseed and the seeds of the "gold of pleasure" flax. It appears from these results that linseed gave 82½ per cent. of a peculiar gum, and Gold of Pleasure 5½ per cent. of mucilage, which on further analysis yielded 61½ part of a soluble, and 22 parts of an insoluble gum. The elementary analysis showed the Gold of Pleasure mucilage to contain 7 per cent. more nitrogen than the Linseed-gum,

and 6 per cent. less oxygen. Dr. Ryan considered the amount of nutriment in the seeds of the Gold of Pleasure, the excellent quality of the oil, and the small quantity of inorganic matter they contained, as points greatly in their favour for the production of oil cake of a nutritious character.

**Analysis of Manure.**—Mr. Shaw laid before the Council the analysis made by Messrs. Balmain and Parnell, of the manure manufactured by Messrs. Daniel Hutchinson, and Co., of Camborne, Cornwall; from which it appeared the manure in question consisted chiefly of 45 per cent. silicate of lime, 19 per cent. of carbonate of lime, 28 per cent. of caustic lime, with 2½ per cent. of magnesia and alkaline salts. Messrs. Balmain and Parnell remark:—"The efficiency of the manure is, no doubt owing principally owing to the silicate of lime and alkaline salts.—The lime is useful alone, but the silicate of lime (and more especially that variety it presents in this manure) is valuable as a constant source of lime, and soluble silica, the lime being progressively supplied from a latent source. The silicate of lime gradually yields both its silica and its lime to the action of water; but until the lime is separated from the silica it is not active or caustic, and not all at once presented in a caustic state. The alkaline salts, though so small in quantity, are still important; possibly, in many cases, all the more useful because they are so small in quantity, as an excess of them is more to be dreaded than a dearth."

**Agricultural Education.**—Mr. Warry, of Shapwick, near Glastonbury, Somersetshire, expressed his willingness to place at the entire disposal of the Society (on terms of acknowledgement only of his proprietorship) a school and master's house, with a farm of a great variety of soils attached to them, for any experiment the Council might wish to make in reference to the education of those who depend upon the soil for their support.

Mr. Turnor, of Abbot's Bromley, near Rugeley, Staffordshire, transmitted copies of the Society's Tract (from the Journal) on Cottage Economy and Cookery, and Mr. Blacker's essay on the cultivation of small farms, both translated into the Welsh language, and printed in a cheap form for extensive distribution among the farmers of North Wales. The following directions for butter making had also been translated into Welsh and extensively circulated throughout that part of the principality.

**Preparing Butter for the London Market.**—"The following is the most approved method of making and preparing butter for the London market, and is submitted for the advantages of farmers and dairy-men throughout Ireland. Butter made on this system, with care and quick despatch, will insure high prices and quick returns. The agent's comment on each dairy's butter, and improvement, are still going on. The best lands is old pasture, as free from weeds as possible, with abundance of good water. The cows should not be heated or tormented in any way; housed at night, fed on green food, and the pasture changed when practicable. In milking take salt-petre in the pail, one eighth of an ounce to 8 quarts of milk. The dairy should be perfectly clean, airy, and of equal temperature (say 50°), very little light, and completely shaded from the sun, by trees or otherwise; and in winter a stove may be required. Strain the milk into coolers sweet and dry (never mix warm and cold milk), keep it from two to four days, then put the whole of the milk and cream into a clean churn, which is not to be used for any purpose except during the time it is in operation. Boiling water to be added to raise the temperature to about 68° or 69°, if horse or water-power be used. The time occupied is from one to two hours, depending on the size of the churn; but churning should not be continued beyond the proper time. After churning put the butter into two bowls or pans of pickle, made from pure water and fine stoved salt (as common gives the butter a bad flavour). It should be washed, and the pickle changed frequently, until all milk is extracted, working with the hand the two pieces alternately, until the grain become quite close and firm; when it is to be cured with the finest dry-stoved salt and sugar. The proportion to be one quare of refined sugar to one pound of salt, to be