

tion as follows, on light, gravelly, or sandy subsoil when

| CLEAN      | MIDDLING.                   | DIRTY.                      |
|------------|-----------------------------|-----------------------------|
| Clover     | Clover                      | Clover                      |
| Clover     | Clover                      | Clover                      |
| Pasture    | Manured & broken up in June | Fallow or Pasture as before |
|            |                             | Fallow                      |
| Wheat      | Wheat                       | Wheat                       |
| Root Crops | Peas                        | Peas                        |
| Barley     | Fall Rye                    | Buckwheat                   |

Whether two or three years' grass is desirable will depend partly on the solidity of the soil.—The last crop of clover ploughed in or manured, or both for wheat. Peas would require plaster and be a full preparation for fall rye, which would be a more certain crop than wheat after peas, particularly in exposed situations. Barley could be taken if a root crop were substituted for peas, the ground being clean; if the land were dirty (as such soil if neglected is apt to become) the late period at which a crop of buckwheat can be sown, allows ample time to work the soil after heat sets in, whilst Stephens tells us, but I have not had the experience, that it is the best crop with which clover can be sown. A rotation for the clay subsoils might be as follows:

| WHERE STIFF.       | WHERE MORE FREE?                 |
|--------------------|----------------------------------|
| Fallow with Manure | Hoe crops, Fallow—part hoe crop. |
| Wheat              | Barley, Fall wheat—Spring wheat  |
| Clover             | Clover, Clover                   |
| Pasture            | Pasture, Pasture                 |
| Peas on Rag Fallow | Fall Rye, Oats, part peas Oats   |

Your hoed crop might be followed with barley; in this case your next white crop would be fall rye, or being followed by wheat, the vegetable matter imparted by two crops of clover, would be a good preparation for oats, whilst the fallow might be well manured. On the stiffer land two crops of grass followed by peas, would bring it into fine tilth for oats. The former list I consider as merely one rotation, varied as you require different crops or according to the state of your soil. The latter for the clay subsoil, is two distinct rotations—one adapted to the stiffer—the other to the more free variety of these lands. In all cases, however, these lighter or barer classes of soils should, as speedily as possible be freed from water, so as to allow both, in their vegetable and mineral constituents a free decomposition, whilst the nutritive matter ought to be studiously increased by the liberal use of both home made and extraneous manures; always bearing in mind that the bulkier the crops you produce, if you make a proper use of that bulk, the richer your land will become. A true definition of a good rotation is a system of cropping, which, while it is ever increasing the produce, is at the same time increasing the productive properties of the soil.

When I reflect on the limited extent to which science, or even a regularly accumulated store of practical facts, has been applied to the elucidation of agriculture, I feel ashamed that the art first born into the world, should be so nearly the last

in information and intelligence. But I do trust a brighter day is dawning upon us. There has been much mawkish sentimentality on the dignity of agricultural pursuits. A Cincinnatus on his little farm! The rich pictures of rural felicity, and the sympathies of our successive races of poets have fostered the feeling. But despite the 'otium cum dignitate' of a Horace, the sweet Bucolics of a Virgil; the glowing description of a Thomson, and the Harkaway of a Somerville, nations have hitherto achieved nationality, most frequently by the oppression, the slaughter and the bloodshed of their fellow creatures. Persian luxury and Attic refinement, alike looked on the masses as an inferior race of beings, and the bulk of the population lived only in degradation and misery. Our own beloved little Island has gained by her commercial enterprise, a name never to be expunged from the history of nations; alas, that even there the colossal capitals attendant on extended manufactures and commercial operations, should chain the mass of the community in deepest slavery at labor's car. It remains for the present generation, for Canadians, for us, gentlemen, to show the world that a nationality can be earned by the peaceful and beneficent pursuits of agriculture — pursuits which, in every profit they throw into the hands of an individual, equally enrich the community.

The mines of California, the gold fields of Australia, may pour in their glittering riches; but it is the grain, the mutton and the beef, the cotton and the wool, with the labour of those who are fed and clothed by them which must ever be the true wealth of a nation.

Mr. Samuel Campbell said, he was very sorry that he did not know much about farming on any soil, and still less upon light soils, as his farm was a very heavy soil; he thought that draining was the first thing to improve a soil, and that it would pay on either heavy or light soils; he had always been been draining on his farm; he put in half a mile last spring; he supposed he had ten miles of drains on his farm; when he began first, he used to fill his drains with wood, but he found that wood was soon decayed, and the frost caused the drains to crumble in, fill, and stop up, so he thought there was nothing for him but tiles; he put in near a mile of tile drains last fall. He did not like summer fallowing as it did not work well with him; the rotation he had adopted was to sow peas on green sod, and after the peas came off, to cross plough lightly and sow fall wheat after the wheat he took a hoe crop, (hoe crop, includes Indian corn, potatoes, turnips, ca.rots, mangold wurtzel, beets, &c.;) then sowed spring wheat, then in spring he ploughed and sowed oats with clover; his rotation stood thus:—1st, peas; 2nd, fall wheat; 3rd, hoe crop; 4th, spring wheat; 5th oats with clover; then 6th, hay; 7th, pasture. He found in cross ploughing after the spring wheat, that his land turned up clean and mellow; he found that the earlier he got his clover seeds sown they did the better; he thought that barley was best to seed down with. He tried last spring, the following plan: he took an eight acre field, and on six acres of it he planted potatoes and corn—put three rows of corn, then