

pearlash, lime, and lye, because he knows the qualities that should be sought for in different substances, or has learned the signs by which they may be known. The simple inhabitant of a town or village knows himself that the science of his neighbor, the municipal counsellor, who possesses some knowledge of the principles, in virtue of which are determined the laws of the sanitary police, is truly beneficial to the community.

Surely, then, we may expect to gather in future much more important fruits from progress. We by this opinion. Already sciences exercise a certain influence, to the profit of public prosperity (under restraint it is true, but increasing from day to day), over the system of arts and manufactures. Thanks to them, agriculture, as the illustrious founder of our academy has stated, will experience a revolution equally advantageous when it shall have recognized that the separation of agricultural colleges from other educational establishments of a general nature is an obstacle to intellectual progress; when it shall be admitted that the immediate cause of the general decadence and small success of these institutions is found to be the insufficient education, owing to the imperfect scientific instruction which is received in these schools, while they study there, at the same time, technical processes.

(Concluded in our next.)

The Scottish Highlands.

A small volume has recently been published, on "*Management of Highland Landed Property*," by George G. Mackay, of Inverness. It consists mainly of a re-issue of several well written articles that appeared in the *Inverness Courier*. The writer displays an intimate acquaintance with the condition of landed property in the Highlands, and the hindrances to the development of its natural resources. A few extracts will be found generally interesting, particularly to those who hail from "the land of the mountain and the flood."—"In reference to the recently much agitated questions of game and deer forests.

Mr. Mackay states—"We have said, and we confidently repeat, that farmers do not object to a fair stock of game, which it is conceded to be the undoubted right of every proprietor to preserve for his own benefit or enjoyment. Our forefathers could have no conception of what a modern game preserve consists. In those days game had merely a place in the equilibrium designed by the wisely ordained laws of nature, wherein the productiveness of every species is

uniformly in the inverse ratio to its powers of self-defence; and the stock of game was, so to speak, natural and moderate, holding the position designed for it by the decrees of an all-wise Providence—proportionate to its importance and value, but subservient to the interests and prosperity of other species, and above all those of man. By the hand of man, however, this equilibrium has been destroyed; and hence the evils complained of. May it not be deemed an excess of game when three or four hundred blackcocks are found by the farmer in his morning walk snugly set down on the top of his stooks. We have known instances in which, from their unceasing attentions in this way, a field that was estimated to yield 6 qrs. per acre only yielded two! Ay, we have seen portions of a field on which the stooks were so thoroughly lightened in this way, that the lucky owner was entirely saved from the labour of thrashing them! How shall we characterise the state of the game where, perhaps, in a large field of thoroughly enclosed turnips, a premium may be offered for the discovery of a single unbroken bulb; or where the farmer, in his homeward walk at dusk, is gratified with the sight of perhaps fifty hares in his promising braid? Is it to be wondered at that a rent payer should occasionally give vent to a little grumbling in such circumstances?"

If the farmers in the Highlands can solve the problem, What constitutes "a fair stock of game?" they are much wiser than their English brethren, who gave evidence before Mr. Bright's committee. Nothing is more condemnatory of game preservation than the above extract, which describes a state of matters not exceptional. The general system of the owners of lands in the Highlands is to obliterate all signs of ancient as well as of advancing civilisation. Fashion is fostering a spirit of barbarism, the ultimate results of which appear to be that the Highlands of Scotland are ultimately to be rendered a comparative desert—the inhabitants and the domesticated animals being extirpated to make the country the domain of wild animals. Till the fact becomes more generally recognized, that preservation of wild animals and high farming is incompatible, it is hopeless to expect the investment of capital, either in the reclamation of waste lands, or to lands already under the plough, so as to increase the agricultural products. Game and deer cannot be kept out of corn fields by any plan which has been adopted in the Highlands. With the extension of deer forests, the cultivator must recede, as well as the stock farmer. The onward march of the red deer is only to be stopped by the erection of a boundary fence more difficult to surmount than the Roman wall of Antoninus. [Mr. Mackay thus describes the result of the annually increasing extent of deer forests:—"Besides the loss of population, we incur the loss of a large quantity of the staple food of the people. Those exten-