from all fiscal theories or political views with which my profession and pursuits forbid me to intermeddle, I ask you, if such a foreigner, so instructed, could fail to admire the open boldness, to look with respect on the resoluteness of such a country, or to long for an opportunity to study, not only the character and habits of its people, but the modes of culture plactised by them, with so much success, in a region so unfavoured by nature ?

And were he actually to come among us, it would be casy for him, having started from the Land's end, to proceed from one warm hearted and hospitable farmer to another, till the Pentland Firth arrested his course. and all his journey long he might converse with cultvators of ardents minds, full of practical and general knowledge, who in most unpromising circumstances refuse to despond, and while they see so much every where around them awaiting the hand of the improver, tain fiscal regulations, yet feel alike that to resolute men the conquest of the stubborn land is as sure as the dominion of the sea; that new difficulties only demand new exertion and that new energies are equal to meet new emergencies.

On quitting the British shores, after such a tour, that foreigner would carry with him a true impression of the flower of English and Scottish Agriculturists, and his first admiration of the resolute firmness, and his estimate of the skill of the island farmers, would be confirmed and strengthed by his actual survey.*

In other parts of the world I might fear lest my audience should accuse me of over exalting, by such lanpeople. You, who feel so just a pride in the noble land you possess, will know how to make allowance for my pride in mine. But indeed whatever can be truly said of the spirit and energy of British farmers, may, I begin to feel, already he said, with almost equal truth, of the Nova Scotia and New Brunswick, two younger Pro- rye, barley and oats, to colder and more uncertain clivinces, I have seen a picture of what Maine and New mates. Hampshire, and Massachusetts especially, have been : and in the gradual conquest which persevering labour, brand, &c., and the circumstances of local climate most has in these states achieved over drifted rocks and hun-favourable to their appearance—or gry gravels, and sandy barrens, and ungenial swamps, I discover the resolute spirit still living of those men conjoined-such as who centuries ago dared to cross a then wide and little known sea, in search of new and freer homes, and whose each other, because of the special structure and natural and the New. Time has not impaired the energy and the soils. enterprise of either ; I believe I may say it has left their hearts unchanged too.

in Europe are most in advance in the practice of the rural arts, look forward to as likely to help on agriculture still further. In what especially, you will enquire, do we of Great Britain trust, who have thrown down the gauntlet to the farmers of the world? These questions I shall answer by drawing your attention briefly, to what may be regarded as the characteristic or living feature of the agriculture of our time-what you no doubt expect me briefly to speak of, the direct applications, namely, of natural science to the several branches grow-or of rural economy.

The main purposes for which natural science is applied to rural economy, are-

First. To explain the reasons of practices already adopted, or of things already observed, and to supplant old and defective by new and better usages.

Second. To establish general principles, by means of which a short cut is provided for the unlearned, to the knowledge, practical and theoretical, we already possess. A single principle explains and thus recommends or forbuls many practices, according to the circum-stances of the soil, place or season.

Third. To enlarge our actual knowledge by new discoveries susceptible of practical application.

On these several objects of natural science, in its applications to agriculture, it would be out of place at present to duate. It will be sufficient if I briefly draw your attention to some of the general results, in reference to rural economy, at which science has already arrived.

Which this view I might draw my illustrations from any will not let slip the anchor of hope; who differing one of the many different branches of natural know-

the art of culture--such as

a. The influence of broad seas and of great lakes and rivers, of tides, of sea currents, and of prevailing winds, on the capabilities of a country and the practices and profits of its cultivators,

b. The influence of mountain elevations and depressions, of high table lands and of low level plains--or

2d. The general indications of Geology in regard to the fertility of a country, the branches of husbandry to which it is best adapted, and the means by which its fertility may be best promoted.

The Geological Map of this State and the volumes of guage as this, the character of my own country and its the Natural History Survey, afford abundant illustrations of the relations of this science to practical agriculture .or

3d. The relations of Melcorology and Botany conjoined such as

a. The adaptation of certain plants to certain climates farmers of your Northern states. Of the west and south -of sugar, cotton and rice to warmer; of buckwheat, I cannot as yet, from personal observation, speak. In and Indian corn, and wheat, to warmer and drier; of

The nature of rust, smut, mildew, the maize, b.

4th. The relations of Geology and Vegetable Structure

That certain plants and soils are mutually adapted to

The valley of the Mohawk, for example, is remarkably prolific in Indian corn, and raises comparatively And now you are ready to ask me, what those, who little wheat-while the district of Syracuse produces wheat abundantly, and is less favourable to corn. So in Great Britain and Ireland, we have our turnip and barley soils, distinguishable readily, by the practical man, from the wheat and clover soils. These differences are from the wheat and clover sons, these that independent of chemical composition, and are not to be explained upon chemical principles. They are dependent upon the special relation which the structure and natural habits of the plants bear to the physical characters of the medium in which their roots are made to

5th. The general indications of Geology and Meteorology conjoined-such as

The relations of the nature of the rocks, of the soil, and of the fall of rain taken together-

a. To the necessity for under drainage, and the means of effecting.

b. To the necessity for artificial irrigation, and the asiest mode of obtaining a supply of water for the pur-DOSE--OF

^{*} For two recent estimates of the condition of Agriculture in Great Britain, see WECCHERIN, Ueber Englische Land-wirthschaft und deren Anweinling auf Land-wirthschaftlihe Verhaltnisse indesondere Deutschlands. Stuttgard and Tubingen, 1845. And COLMAN'S British Agriculture. London and Boston, 1840.