several branches, as connected with *Botany, Meteorology, Entomology, and Chemistry*,—but whose investigations, it would seem, were still only in progress. In the mean time, in spite of those imposing, high sounding demonstrations, the awful and mysterious pestilence in question, which can only find a parallel in that dread inexplicable scourge the *Indian Cholera*, has been a second year spreading its baneful influence over both hemispheres, as if in utter derision of the laboured researches of science and philosophy! You will, perhaps, smile at this bold and somewhat ironical apostrophe; but the fact appears to be, that the complex agency of various branches of abstruse *science* had been imposingly brought into the field, when the patient investigations of the humble, unlettered, practical agricultural observer would, perhaps, have been more effectually employed; and hence we find a host of *scientific* conclusions *alone* arrived at, of the most puzzling and contradictory character, so much so, indeed, that it does not yet appear to be satisfactorily determined *in what form the disease first attacks the plant.*

Thus, for instance, while a great number of observers have considered that it is first seen in patches of dark coloured "fungus" on the leaves, thence gradually spreading down to the *tubers*, and think they have detected the sporules of the fungus passing down through the stem in the ordinary circulation of sap; others, on the other hand, adduce well authenticated instances where the *tops*, or vines, have remained *green and flourishing*, while the *tubers* were much *diseased.*

Again, all agree that the *nitrogenous* compounds in the *tubers* were affected; and Liebig and others have gone so far as to refer the origin of the disease to a peculiar state of these constituents; and the Dutch commissioners of Groningen, M. Payen of Paris, and Mr. Phillips of London, and many others, ascribe to the *excessive moisture and sudden changes* during the last two years, the *predisposing* of the plant to the attacks of *Fungi*; while in the West of Scotland, where the summer of 1845 was considered *rather a dry one*, the Potatoes were found as much affected as on the east coast, and three or four of the most Northern counties remained *entirely free* from the disease; at the same time that in Renfrewshire, Potatoes lifted and stored between the 5th and 15th of September remained sound, while others lifted and stored, from the same field, on the latter date, were not two days in the house before they were found tainted and decaying, as was also the case, before the end of the month, with all that were left in the field;—all *facts* opposed to the theory of a peculiar *atmospheric* influence, and thus leaving the cause as much a mystery as ever.

Finding themselves baffled in their endeavours to discover the origin or cause, the different commissions, as well as many other scientific individuals, seem to have busied themselves with much earnestness, but not much greater success, in suggesting various remedies and preventives, among which were change of seed, the application of Gypsum, and hot slacked lime, and the "greening," or exposing to the Sun, of Potatoes intended for seed, and the use of saline and other manures to the growing plant. But the preservation of the stored crop during the winter naturally excited the deepest interest, and led to numberless proposed methods, among which, no doubt, were many careful experiments and arrangements actually adopted by practical agriculturists which produced very beneficial results, though the aggregate may have more or less proved utter failures.

In this dilemma, like the writer in the *American Journal*, we might be forced to conclude that the origin and causes of this disease are at present unknown, that its mysterious marks have appeared suddenly on two Continents separated by wide oceans; under heat and drought, rain and cold, on wet and dry, light and heavy soils; at every elevation, and in every variety of Potato; and that those who have most carefully investigated its peculiarities, and most widely examined its range, are most undeceived as to its cause,—had not observations been fortunately made since, to which I would now call the attention of your readers, ascribing, with every appearance of reason, if not absolute proof, the first production of the disease, (on the Potato plant), to the effects of the poisonous depredations of swarms of minute *insects* instead of *vegetable fungi*,—whatever may be the peculiar epidemic agency by which it afterwards becomes so universally disseminated; and for this interesting and important information we are chiefly indebted to that highly useful and popular, though comparatively humble, periodical, the *Gardeners' Chronicle.**

According to this authority, the prospects of the present (or now rather the late) Potato crop in Great Britain and Ireland, unfortunately indicate a total failure, and in proof of this he furnishes the following melancholy authenticated general view of the state of the crops in different parts of the United Kingdom, at the end of July.

Cork— Potatoes in every field exhibiting symptoms of disease; tubers small and discoloured.

Cornwall.—Crops with few exceptions, shewing disease as strong as last year; some raised from sets imported from the Azores, not yet affected.

Devonshire.—Every body hurrying up their early patatoes. Crops all diseased, and the failure predicted to be greater than that of last year; a sound potato hardly to be met with.

* See also *British American Cultivator* for September and October; the intelligent patriotic Editor of which makes some excellent remarks on the subject.