The most obvious rule, that grows out of the premises for this purpose is, 'that the selection of plants be made, from *higher* latitudes, than those to which they may be transferred.

Since we have seen, that the *mean temperature* of the globe is *diminishing;* and, with this cause, necessarily, a general migration of the vegetable and animal species, regularly, though slowly progressive, from the *poles* towards the *equator*, in quest of new '*stations*,' which may have become more suitable to their habits and constitutions,—it follows, that our *selections* must come from *hgiher* latitudes, in conformity with the physical laws, under which they had been heretofore moving; and, with as wide a difference of climate as experiment may prove them capable of bearing: this removal will be only in *anticipation* of their *natural impulse*: and *what, this impulse*, would, in a *longer time*, have accomplished; and this principle of *selection* will afford a reasonable hope, *cæteris paribus*, of a longer enjoyment of the plant, than had it been found in the south, and brought back to a '*station*,' which possibly, it may have *deserted* for its *unfitness*.

It has been wisely said, 'we may command nature, only by obedience to her laws: under her well defined laws, as we have seen, the physical geography of the whole globe has been suffering a series of changes, from the earliest history of time—and, by a *rule, based on this fact* of natural science, the cultivator of the soil must *select* his crops, and *graduate* his system of cultivation.

Under this rule, the only hope remaining for a continuance of our favourite staple crop, will be found in *seed wheat* from *higher* latitudes; a spring wheat from Switzerland, and another from Florence, have recently attracted public attention; yet, but little is known of them; the '*common spring wheat* has heretofore disappointed us; how far these new varieties may supply the *desideratum*, is a question of *intense interest*, and merits the most prompt, and earnest investigation: I have purchased some small parcels for experiment, and shall be enabled, at the next autumnal exhibition, for the Eastern Shore of Maryland, to be held at Easton, to report the result.

The hope of a change of climate, propitious to our *winter* wheat is delusive and groundless.

The extent of our continent, and its connection with the polar circle by a vast chain of high lands, have fixed upon us a climate of excessive *rigour* and *mutability*,—when the continent of Europe separated from these arctic regions by an *ocean*, enjoys, in the *same parallels* of latitude, a climate more *temperate* and more *equable;* and it is much to be apprehended from well known physical causes, that the *excessive* character of our climate will increase rather than diminish.

The *felling* of our *forests* and the *cultivation* of our *lands*, as Mr. Lyell, and others have inferred; and the well known principles of philosophy teach us, will allow a copious absorption of heat, under our nearly vertical sun; which, radiated into the atmosphere will rarify it, and bring in upon us an influx of the condensed, freezing *currents* of the northern mountains, and, the transitions from heat, to cold, will probably become more *frequent*, more *sudden*, and more *considerable* in the direct ratio of *those causes*, which are progressive.

The same authorities too, teach us, and the general principles of meteorology support the doctrine, 'that *forests* have the effect of *promoting rain*: they cool, and condense the atmosphere around them: which, mingling with the aerial currents flying over them, arrests their progress, and supplies us with genial *showers*, that otherwise, might have passed in *vapour*.'

From these considerations it would seem too clear to be questioned, that our *climate will not improve*, but, on the contrary, will become more *excessive*, and the mean temperature lowered; our winters more rigorous,—our summers more subject to *intense heat*, and *frequent drought*, and *wind;* and the *fluctuations* greater than formerly, or at present.

Hence, the necessity to summon fortitude,—and, by future wisdom, economy, and perseverance, to expiate out past follies:—adopting the golden motto, '*Ne cede malis, sed contra, audentior ito*.'

Under a conviction of this truth, and from repeated abortive attempts with the old routine, I have made the experiment of many new crops,—and I regret to acknowledge I have not yet accomplished my views; yet, I have the consolation, that by the detection of many errors, I have advanced so many steps to my *final purpose*.

A cotton crop which I continued three years, produced on the second, a strong hope of success, yielding twenty-five thousand pounds of seed cotton, from thirty acres—the third crop on seventy acres was almost a total failure;—the texture was fine, and it commanded a better price, than the upland southern; yet I found it too precarious, for profit.

An experiment, a few years past with hemp, was flattering;—I have no doubt, that in our low black lands, the hemp crop would be a valuable acquisition.

I have this season, grown the 'sugar beet,'—the 'white Silesian,' and have a large product of fine roots which I contemplate manufacturing, when I receive my mill, which is contracted for;—having prepared all the other necessary implements. A faithful report will be made of the result.

Upon a fair trial of the Shipping bean, which had been highly commended, I experienced almost a total failure;—under the most favourable circumstances, it did not pay costs.

An experiment with the 'palma christi,' convinced me, though the growth was fine, that the tediousnes of the gathering was nearly equivolent to the product of the crop, and I have denounced it, as interrupting more time than it is worth.

My crops of Spanish tobacco, from seed directly from Cuba, which I have, for the last two years extended, in the growth and manufacture, to a large amount, have far exceeded my most sanguine expectations, in respect to both quality and number:—the impediment to this crop arises from the difficulty of obtaining the seed, annually, (which is essential) from its native soil and clime; in which, I have been disappointed, eight years in the last ten, either by the failure of the orders for it, or by its not vegetating, when received.

I have a few thousand mulberry stocks, Multicaulis, and White Italian, yet too young for the worm, without injury to their growth; this article, with its manufacture, needs no comment;—*produce it*—and *pro tanto*, you *produce wealth*:—yet, with *arms folded*, we invoke the aid of Hercules; unconscious of our own resources:—of our own abilities, to *extricate* the *wheel*.

Some saccharine and farinaceous roots,—'potatoes'—'beets'—'parsnips'—'carrots,' though not profitable for *field* culture, might occupy a few acres, to advantage, and would enable us, to send to to market, more of our Indian corn, which for several years, has been a scarce and costly article.

The '*turnip*' the '*ruta baga*,' and *all its varieties*, though its introduction into England, is said to have made a *memorable era* in the agriculture of that country I hold to be the *most worthless* of the *cultivated roots*—its *fibres* are chidfly *ligneous*—its *juices, aqueous*:—without meaning any disrespect to its numerous eulogists, I might fitly, and technically term it 'a simple *hydrate* of *wood*.' It may answer the mechanical purpose of filling the stomach, and enabling it to grapple the *nutritive* matters received in it, and but little else. One of the best analysts in England, Sir Humphrey Davy, reports the common turnip to contain only forty-two parts of soluble, or nutritive matter, in one thousand:—the ruta baga but little more.

In respect to the 'Indian corn,' a crop of the first magditude, it may seem superfluous to make a remark:—though well cultivated, on this Shore, particularly yet, it is a singular fact, that in the northern states, where the climate cannot be so favourable to its growth, as that of Maryland, their crops are much more productive, yielding 80 to 100 bushels per acre, on lands of moderate capacity: when, on our best land 30 to 40 is considered a good *field* average;—and one-half of this quantity is more than an ordinary product;—it follows, that we are defective, in some material point;—it is possibly, in the *sort* that they excel us;—I have this year, tried three of their varieties—but will say nothing decisively, of them, until further experiment.

It is more probable, in the unnatural practice, of stripping the blades, and cutting the tops, before the grain is fully matured, hard, and firm—under this general practical error, much is lost: and the present season, from my own observation, and the candid acknowledgement of many, a sacrifice of 20 per cent. at least of the corn of Dorchester has been incurred, by this *fashionable operation*: this practice is considered essential to good economy;—and to be performed, at a *precise period* of the *sun* and *moon's places* in their respective orbits; and all, who are unfortunately in the *rear*, from accident, or design, are denounced as slothful farmers.

This force of prejudice, or, rather, this '*lex loci*' is one of the most insuperable impediments to agricultural improvement; and in no instance, perhaps, more pernicious, than in the practice, in question—that of fodder saving.

The vegetable leaves, or blades, are the lungs, or organs of respiration; and very analogous, in their functions, to those of the animal;—they serve to oxygenate the juices of the plant, and prepare them for nutritive secretion, which is effected by clusters of glands, at their base, or junction with the stock; thence to be transmitted through the system;—extirpate, or wound these organs, and their functions, necessarily cease, or, are impaired:—while green and succulent, nature designs them to perform their respective offices;—when withered, and dry, they are useless, as fodder; hence the practice is indefensible; and it is one of the most *unnatural, singular*, and *palpable errors*, that ever obtained *credit* and *currency* in agriculture: and I verily believe, it is one of the principal causes of our short crops: Moreover, the blades *above* the ear, continue, longer, fresh, and succulent, than those *below* it, hence, the clear inference,—as the designs of nature, are never *idle* and *superfluous*, that their physiological purpose is longer required;—and, the *stock* having already attained its full growth, at the time the practice commences, the *remaining purpose*, must, of necessity, be to elaborate the sap, for the nutriment of the *grain alone*.

If it be asked, '*what substitute* for this fodder?' the plain answer is to be found, *in a few acres of the grasses*, of which we are strangely deficient, at the present;—with less trouble, and less cost, these would, abundantly, supply us.

I am aware of the hazard incurred by an encounter with popular prejudices,—and by multiplied experiments with multiplied disappointments openly avowed—from a class of soi-disant prudentials, of whom it has been said *indocti stolidique et depugnare parati*'—to these I willingly concede the palm.

In regard to live stock, though much improved by the previous efforts of our institution, yet much remains to be done—a few stocks, carefully selected, well fed, and protected from the rigours of the winter, will be found most profitable.—The latter conditions are generally held unessential to that valuable animal, the hog, which is supposed to possess the rights of *ubiquity*, and of subsisting by its own faculties of enterprise--it may be true, it is hardy & enterprising; & it is equally true, that the owner, who forces it to exercise these rights and there faculties, to the annoyance of others, is a moral as well as a legal agent of trespass—and to his own injury; did he supply from his own resources, food and protection to this useful animal, he would be greatly profited, and his *conscience* would approve the act.

The subject of manures and their peculiar fitness for different soils, would fill a volume. Upon this, I shall only remark, that *calcareous matter*, in all its combinations, with whatever acid, or derived from whatever source, is directly or indirectly an-essential constituents of all manures—and without it, all are, at least comparatively unavailing.—I cannot resist, on this subject, the impulse to pay a tribute of respect and acknowledgment to Mr. Edmund Ruffin, of Petersburg, Va. for his able essay on calcareous manures, the fruit of much labour and research—and too, for his 'Farmers's Register,' a monthly periodical devoted to the interests of agriculture and sustained by the best talent and experience of the state.

Upon the subject of calcareous manures, I could add but little useful—I may simply illustrate one of its modes of operation, by the analogy, in a chemical view, to the action of alkalies on oils, with which they make a *homogeneous* mass, miscible with water—so does lime with putrescent manures make with the soil, a *tertiary* compound, easy of solution, and well adapted for vegetable nutriment, when, without this intermediate substance, the mixture is merely mechanical, loose & destructible, by every shower or rivulet that may come in contact. Lime, too, is a constituent of the vegetable pabulum, though in proportions differing with the peculiarity of the plant, and like all other manures, it must be in state of solution, to be admitted through the very delicate absorbents into the vegetable system;—by its agency, the *soil*, the *manure*, and *itself* are placed in this condition.

I have witnessed with astonishment a very prevalent error in favour of *half burning shells* for manure—it is too palpable to dwell upon the fact, that the more complete the calcination and consequent comminution of the particles, the greater space they will occupy, and the more efficient will be every particle in the space occupied, because more of its surface is exposed to action; if partially calcined, the space covered will not only be smaller, but it will contain much *inoperative* matter, & the remark that *in time* it will come into operation is not rational. We surely wish it *when applied*, to operate in the *shortest possible time*, with the *smallest possible quantity*, and with the *greatest possible effect*.

I have used the half decomposed shells of the old Indian deposites, twenty years ago, which appear not to have advanced in calcination, more than one per cent. at the present day—requiring *rateably* for the full attainment of my purpose, the fearful lapse of about two thousand years, and consequently a goodly share of the *king-becoming grace of patience*.' I confess, gentlemen, I would rather have an *earlier result*—*some* may prefer to *wait*, yet, '*omnia non pariter rerum omnibus apta*.'

In respect to the quantity of lime, fifty to one hundred and fifty bushels per acre, are upon the best authorities stated to be the *minimum* and *maximum*, that may be used to advantage—dependent, chiefly, I presume, on the quantity of putrescent matters with which it is to combine—somewhat analogous to the law of chemical equivalants.

I prefer lime to marl, in general, because it has more *indenty* in its composition, & consequently more of a *definite uniformormity* in its *action*. Marl is often found in a *gangere* of ferruginous salts and other substances, fatal to vegetable life, and it varies in its contents of the calcareous matter from five or ten to sixty per cent. or more, and consibably often in the same bed.

Of manures in general, we have unlimited resources: besides those of the regular farm yard, we have the surface soil of the forest, the bottom mud of marshes, branches and ponds—these require to be passed through the farm yard, to receive a portion of the saline offal—or to be heaped in the fall previous to their application, with lime or ashes to correct their acidity—the oxalic acid prevailing, it is generally believed, in the former, and the sulphuric in the three latter—and to allow time for their intimate incorporation and maturity; which method, be the *rationale*, right or wrong, the experience of many years has assured me, is essential to a good result.

Surface manuring, which is apparently at variance with every known relative principle, has some able advocates in experience; the adversary principles appear to be well established; yet the inferences drawn from them may possibly be fallacious; or others yet to be discovered may preponderate. It is a question of primary importance, to ascertain the facts in the case, which may enable us to adopt the true practice, and arrive at the true principles on which a correct theory may be settled.

This leads me finally, to remark upon the inveterate *antipathies* of many, to the *very name* of '*theory*,' and of 'books,' and agricultural '*science*.' Upon this subject I have before dwelt with much earnestness, in the full belief of the marvellous and pernicious prevalence of the sentiment.

I assume '*consensu omnium*,' 'that facts are essential to this, as well as to every art or science; a graphical history of facts records an preserves them from being lost or forgotten, and necessarily accumulates and virtually multiplies what is essential to the arts or sciences: Theory digests, arranges and makes inductions from the facts collected and preserved, and though the conclusions may be as various as the minds that draw them, and therefore cannot be all correct; yet they contain the various views and best judgement of *those* who are in the habit of reflecting and reasoning upon such subjects—and they present for the consideration of others, a comparative view of the various relations and inductions, of which the facts are susceptible. And thus they enable a very untutored mind form a *correct judgement* upon subjects which it could not have attained, without the assistance of books and the elucidations of science.

Of these advantages chemistry and geology afford well marked instances.

By '*chemistry*,' we learn the ultimate principles of bodies, and their several combinations; and, by a detection of those, which, in point of fact, are conductive to vegetable life, as well as those which are inimical to it, we are enabled to correct the one and supply the other, as interest may incline us,—and, often by the agency of foreign substances, cheap and easily obtained, to convert rancorous poisons into salutary nutriment. Sulphate of iron for instance, is a deadly poison to the vegetable system; the metal itself is innocent; chemistry teaches, that the acid having a stronger affinity for lime, than for iron,—by its addition, the poisonous compound is converted into sulphate of lime, or plaster of Paris, a valuable exciting manure, *leaving* its former base, the 'iron,' in its *unoffending metallic state:* innumerable instances might be adduced to the same effect.

The science of geology, for many practical purposes is useful to the 'farmer;' as chemistry teaches the *ultimate*, so does geology inform us of what may be termed the *proximate* principles of the earth: by geology we may learn the proportions of the four *primary* earths present in the soil; 'silicia,' 'lime,' alumina, and magnesia,—which, combined with animal and vegetable matters, constitute the '*soil:* & by their various proportions, make the various qualities which we daily witness.

A mode of geological analysis has been proposed by Professor Eaton, which I have found very convenient and simple; pursuing the course of *geological deposition* in *miniature*; that is, soils may be deposited from water, in a common tumbler; after a suitable preparation, so that the proportions of these earths may be ascertained; for which, he has given an excellent formula.

The advantages to be garned from these and other branches of '*science*,' notwithstanding the popular prejudices, are too obvious to need further remark: rest assured, that *self-conceit*, and vanity have much agency in the adversary sentiment; and, as in the *physical* man, so in the *moral* and *intellectual*, the more *inveterate*, the more *incurable* the affection.

If any feel disposed to the fatuity, he should arrest it in the *germ*; he should make the earliest efforts to resist the vicious *habit of his mind*; to such I would address myself in the emphatic language of St John 'sin no more, lest a worse thing come unto thee.'

From these views, it it is obvious, that '*books*,' as well as '*ploughshares*', are fit instruments of agriculture; and, that this *ancient, useful, and honorable* profession is based upon, and essentially connected with '*science*,' in the broadest import of the term, extending to all intricate plans and operations of the supreme *architec, of nature*, comprehended within the vast orbs of the *heavens*, and of the *earth*, they are all *directly or indirectly*, subservient to the great purposes of *agriculture*.

We have, then, it will be conceded, a learned profession, as well as a useful art of which its votaries may boast. Yet as if to rebuke ingratitude to the great author *of all good*, we have in prospect, some *black* and *ominous clouds*: it is not my duty, if it were my will and power to *discuss* their *origin*, or *foretell* their *issue*. It would seem that not only the laws of the material world are working a deleterious revolution in our '*climate*'—but that nature herself had suffered a concussion, had lost her centre of gravity, and is *tottering on the eve of perdition*; and, that the whole machinery of the universe with the ingenious developements of the human faculties, the fruits of time and experience, in moral and political discipline for the social and individual happiness of man are in *immitent peril*.

But it is consistent with true philosophy, to dismiss those grave & solemn forebodings—and to exert the best faculties of mind and body to avert approaching evils, and *confide the issue to the great God of nature*.

'Who *knows*, but *He*?—whose hand the lightning forms,
Who heaves Old Ocean, and who wings the storms,
Pours fierce ambition in a Cæsar's mind,
Or turns young Ammon loose; to scourge mankind.'

At the pink ribbon festival in New York, we perceive that the State of Maryland was 'complimented' by the following toast from Mr. Philip Hone;—

Maryland—We sympathized in her struggle against the united forces of Jacobinism & Locofocoism; we rejoiced in her triumphs over them, and we bid a cordial welcome to her distinguished sons, now here, to share in our victory and our joys.

Now, Mr. Philip Hone, ex-auctioneer, ex-mayor and somewhat ex-traordinary in many other respects, must be told that we throw back into his teeth his dirty slang of 'Jacobinism and Loco-focoism.' We acknowledge no other name than that of *Democratic Republicans*. As such we have contended for a new State Constitution, and shall continue to contend until our efforts shall triumph;—as such, we have opposed a Federal Bank and the iniquitous system of State banking;—as such, we have unwaveringly supported the administration and lent our best aid towards the triumphs of the party in this city over the patched and piebald whig faction; and as such, we say to Mr. Philip Hone, that we hold in contempt the paltry and slanderous epithets with which he and his *parvenu* assail a party among whom there are men whose shoe-latchets he is not worthy to tie.

To the billingsgate of Philip Hone, Mr. Reverdy Johnson made an appropriate answer, the most important remark in which, was an allusion 'to the never despairing efforts of his whig friends in Baltimore, to redeem themselves, and their *exalted hopes* even under defeat.' That, to be sure, is an old story, for his whig friends here have long been living on 'exalted hopes;' which at every election we happen to thrash into something like common sense, until we have fairly become tired of the sport. Mr. Johnson's toast is made up of nouns proper;—'New York,' 'Maryland,' 'Destructives,' 'Hydra,' 'Van Burenism' and 'Serpent,' upon which the company gave three times three as an evidence of their appreciation of the classical allusions of the learned gentleman.

Mr. Kennedy, 'the author of the Swallow Barn,' and the *Great Defeated*, next quoted some poetry about 'pledges,' and 'edges,' but said nothing of 'exalted hopes,' and characteristically sententious, gave 'Harry of the West,' upon hearing which, Webb, who was one of the Vice Presidents, started to his feet, felt for his 'mahogany stock' and ordered the music to play,—'Of all the Airts the wind can blaw, I dearly love the *East*,' whereupon Stone turned a somerset, and the Websterites fell to dancing most merrily. 'During which,' as the papers say, 'our reporter left the meeting.'—*Balt. Rep.*

His Late Majesty.—It is a fact worthy of observation that our late sovereign, considered in relation to the different parts of his dominions, was actually at the same time William the First, William the Second, William the Third, and William the Fourth. This seeming improbability will be understood by a consideration of the following facts. Of the kingdom of Hanover his majesty was William the First, because until this time of George the Third the sovereigns of that country were called electors only. Of Ireland his majesty was William the Second; for as that country was not added to the English dominions until the reign of Henry the Second, William the Conquerer and William Rufus, were, of course, not soveigns of Ireland, and no native prince of that name had ever reigned there. William the Third of England was, therefore, William the First of Ireland, and our late sovereign was, consequently, William the Second as to that country. Of Scotland, his majesty was William the Third, thus:—The kingdoms of England and Scotland were united in James the First. Previously to that era the only monarch of Scotland bearing the name of William was the renowned William the Lion. The third William of England, therefore, was the second William of Scotland, and our late king, consequently, became the third William of the northern part of his dominions. And considered in relation to England only, he was William the Fourth.

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Questions and Answers.—There is no better way of posing the opponents of the general government and its measures than by giving them an occasional glimpse of their tergivesations; and this cannot better be done than through the medium of questions and answers—as thus:

Who called for a currency of equal value in every part of the country? The whigs.

Who opposed the issuing of treasury notes, which are just such a currency? The whigs.

Who claim to be the exclusive friends of the merchants? The whigs.

Who hampened the bill postponing the payment of merchants' bonds? The whigs.

Who made long and loud complaints about the specie circular? The whigs.

Who neglected to touch this circular during the late session of Congress? The whigs.—*N. Y. Daily News.*

A Pensioner one hundred and six years old.—John Davis still continues to call on "Uncle Sam" semiannually, for his pension, though he numbers a whole century and six years over. I saw, him a few days since, when he attended here to prove his identity, and his right to be counted among the living.

This aged veteran was born in Prince William county, Virginia, and for some time lived near the residence of George Washington, with whom he served in Bradduck's war. He afterwards served through the whole Revolutionary struggle. His appearance does not betoken such extreme age—his step is still quite active and firm, and he rode on horseback to this (eleven miles) and returned the same day. His hearing is but little impaired, and his vision such that he writes his name without spectacles. He observed that his faculties are failing, especially his memory—though sometimes his recollection was very perfect in recalling the past events of "by-gone days," but again he found himself frequently bewildered in a story, and indeed says he, 'I begin to feel the effects of old age.' The last twenty years he has not tasted of ardent spirit, and what is most singular in this man's history, is his conversion at the age of ninety-nine, was baptized and still is a constant member of the baptist church. Lawrenceville, Ga. Oct. 10, 1837.—*Southern Banner.*

From the New York Bulletin of Nov. 3.

Another dreadful accident has occurred upon our wsters, which have lately become the scene of so many heart rending and appalling catastrophes. The steamer Monmouth left this port about a week since, laden with several hundred Indians, a portion of the emigrant Creek tribe as passengers. In travelling up the Mississippi, through Prophet Island Bend, she was met by the ship Trenton, in tow by the steamer Warren descending the river.

It was after dark, being near eight o'clock at night, and though the mismanagement of the officers and the obscurity of the scene, a collision took place between the meeting vessels, and the Monmouth immediately sank from the violence of the concussion. Out of the large number of Indians on board, near three hundred perished. Whether any of the crew were saved or not we have not learned.

The mishap is ascribed chiefly to the neglect of the officers of the Monmouth. She was running in a part of the stream where by the usages of the river and the rules of the Mississippi Navigation, she had no right to go, and where of course the descending tow did not expect to meet her. Here is another evidence of the gross carelessness of a class of men to whose charge we often commit our personal safety and precious lives.

Colonel Johnson, Vice President of the United States, has been in this city for several days, and has been received with great cordiality and enthusiasm by his political friends, and with the respect due to his station by all others. We are gratified at this; for though we think Col. Johnson by no means the proper person to occupy the second office in this Government, and though no consideration could have induced *us* to vote for him, yet he *is* the Vice President of the United States, and as such entitled to respecful treatment, and a kind reception, wheresoever he may go. He is too, a brave man, and we verily believe an honest one. He has fought the battles of his country with a bold heart, and a manly arm, and whether he did or did not 'kill Tecumseh,' he has done enough in the battle field to deserve the respectful consideration of his country, and we have no participaton in that portion of Whig feeling which prompted a few individuals at the Park and National Theatres to hiss during the plaudits that were bestowed upon him on Saturday evening.—*New York (Whig) Gazette.*