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Fire-Side, Vol. 1 No. 10 (1820), by Various**

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THE
RURAL MAGAZINE,
AND
LITERARY EVENING FIRE-SIDE.

VOL. I. PHILADELPHIA, *Tenth Month*, 1820. No. 10.

FOR THE RURAL MAGAZINE.

THE DESULTORY REMARKER.

No. IX.

It is a fact of no infrequent occurrence, that erroneous estimates are formed of human conduct, and its immediate and remote effects on the interests of society. When this is the case, we sometimes denounce as hostile to social order and salutary improvement, those who are really their most faithful and efficient friends, and in this way become the agents and disseminators of error and injustice. There is nothing perhaps, more unfashionable, not to say mischievous, in the eyes of the present generation, than what they denominate ENTHUSIASM; a temper of mind, which they are disposed to treat with the greatest contempt, as altogether unworthy the enlightened period in which we live. If the legitimate import of the word were always observed in its application, there would be little controversy on the subject; as no one would become the advocate of "vain imaginations" or "violent passions." But it is believed that much that is truly valuable in its character and tendency, is improperly ascribed to this source; by which hostile prejudices are excited, in opposition to that which is entitled to the countenance and support of the public.

In CHARLES J. FOX'S history of JAMES II. there is this passage:—"We are accused of enthusiasm! are we then fanaticks? Are we enthusiasts because we do not rob—abstain from murder? If by enthusiasm be meant *zeal and warmth*, I freely acknowledge it; I glory in it. Enthusiasm, when it arises out of a *just cause*, is that which makes men act in it with energy; it is that, without which *nothing was ever done great, since the creation of the world*. Enthusiasm of this sort, I hope, therefore, I shall always possess." The historian referred to, will not be classed among credulous, weak-minded men; for he was one of the most eminent statesmen of his day; and his opinion is therefore justly considered as authoritative. The position taken, is corroborated by all experience, that great actions and great achievements are never the result of lukewarmness and indifference; but of "zeal and warmth," directed to "a good cause," without which honourable and permanent distinction can never be obtained. What is too frequently mistaken for enthusiasm, is in reality produced by a profound conviction of the truth, in connection with some particular object, of the greatest importance to mankind.

It was this that guided COLUMBUS across the unknown and boisterous ocean, and opened to his view a new world; which enabled him to encounter and surmount every difficulty, which the malice of his enemies, or the combination of untoward circumstances, arrayed against his great design; a design which was branded as a chimera of enthusiasm.

It was this which induced FRANKLIN to persevere in his philosophical experiments, until they were crowned with success; and the identity of lightning and the electric fluid, completely established, and eventually placed his name among the most eminent philosophers of the age.

It was this, that enabled RITTENHOUSE to emerge from the condition of an humble mechanic in Montgomery county, and by the construction of his wonderful Orrery, to obtain from Jefferson this great but well-merited testimony to his talents;—"that no mortal was ever permitted to make so near an approach to his Creator."

It was this that strengthened the hands of the immortal FOUNDER of Pennsylvania, in his noble determination of sacrificing the bright prospects which birth and connexions imparted, to a sense of duty; and of establishing an asylum in a remote wilderness, where the oppressed of all nations, kindred, and people, might find a covert from the storm of civil and religious persecution, and enjoy in perfect security the sacred rights of conscience.

It was this which guided the footsteps of HOWARD to the distant abodes of wretchedness and wo, unmindful of the comforts and delights of home, to bind up the sorrows of their miserable tenants, and to complete, in the language of Burke, his "noble circumnavigation of charity."

It was this which conducted FULTON to that astonishing result, justly considered as the great wonder of the age—*navigation by steam*; after a crowd of discouragements and difficulties had been subdued, sufficient to disconcert the plans and defeat the object of almost any other man, however sanguine his temper and resolute his purpose.

It was this which under Providence induced that signal victory, obtained in Great Britain, by SHARP, WILBERFORCE, and CLARKSON, over the disgrace of humanity and civilization, the SLAVE-TRADE; after a most doubtful and arduous conflict of more than twenty years, with avarice and oppression.

To conclude, nothing but this active and persevering zeal, will, *in future*, lead to like glorious results. Instead, therefore, of its being opprobriously branded, let it be cherished, when directed to just and important objects, as a prolific source of good to man. Scientific research has an ample field before her still unexplored, in which no doubt laurels will continue to be reaped, and great and substantial advantages be derived by new discoveries. But the *moral improvement* of our fellow citizens, should be sedulously attended to, as more immediately soliciting our notice; and the cause of such of them as are denied the rights to which they are by nature entitled, should be fearlessly and constantly vindicated, as truth and justice may open the way; notwithstanding those may be denounced as ENTHUSIASTS, who believe that in the eye of the great Creator, "ALL MEN ARE EQUAL." ↵

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VARIETY.

For the Rural Magazine.

The fogs of England have been at all times the complaint of foreigners. Gondomar the Spanish ambassador, when some one who was going to Spain waited on him to ask whether he had any commands, replied, "Only my compliments to the Sun, whom I have not seen since I came to England." Caracoli, the Neapolitan minister there, a man of a good deal of conversational wit, used to say that the only ripe fruit he had seen in England, were roasted apples; and in a conversation with George II., he took the liberty of preferring the Moon of Naples to the Sun of England.

JOHN HOWARD.

I have been frequently asked, says this great man, what precautions I use to preserve myself from infections in the prisons and hospitals I visit. I here answer, next to the free goodness and mercy of the Author of my being, temperance and cleanliness are my preservatives. Trusting in Divine Providence, and believing myself in the way of my duty, I visit the most noxious cells, and while thus employed, "I fear no evil."

FRANKLIN.

He that raises a large family, says Franklin, does indeed, while he lives to observe them, *stand*, as Watts says, *a broader mark for sorrow*; but then he stands a broader mark for pleasure too. When we launch our little fleet of barks into the ocean, bound to different ports, we hope for each, a prosperous voyage; but contrary winds, hidden shoals, storms and enemies, come in for a share in the disposition of events; and though these occasion a mixture of disappointment, yet considering the risk where we can make no insurance, we should think ourselves happy if some return with success.

BURNS THE POET.

About the age of thirteen, Burns was sent during a part of the summer to the parish school in Dalrymple, in order to improve his hand writing.—In the following year he had an opportunity of passing several weeks with his old friend Murdoch, with whose assistance he began to study French with intense ardour and assiduity. His proficiency in that language, though it was wonderful, considering his opportunities, was necessarily slight; yet it was in shewing this accomplishment alone that Burns' weakness ever took the shape of vanity. One of his friends, who carried him into the company of a French lady, remarked with surprise that he attempted to converse with her in her own tongue. Their French, however, was soon found to be almost mutually unintelligible. As far as Burns could make himself understood, he unfortunately offended the foreign lady.—He meant to tell her that she was a charming person and delightful in conversation; but expressed himself so as to appear to her to mean, that she was fond of speaking; to which the Gallic dame indignantly replied, that it was quite as common for poets to be impertinent, as for women to be loquacious.

ORTHOGRAPHY.

The following curious instances of spelling are from Bassompierre's account of his mission to the court of Charles I. in 1626.

Sir Edward Sackville, (Hacfil;) Earl of Dorset, (Dorchet;) Buckingham, (Boukinkam;) York-House, (Jorschau;) Earl of Bridgewater, (Britswater;) Whitehall, (Withal;) Cheapside, (Shipside;) Wimbledon, (Semilton;) Wallingford, (Vialenforaux;) Blackfriars, (Blaifore;) Kensington, (Stintinton;) Berkshire, (Barcher.)

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For the Rural Magazine.

INDIAN CORN: ITS BAD AND GOOD CULTURE.

An agricultural traveller, who has recently passed through parts of Montgomery, Berks, Lehigh, Northampton and Philadelphia counties, by the great roads leading through them, wishes, most cordially and earnestly to call the attention of the farmers to their unfortunate style of agriculture in some important particulars.

After leaving the neighbourhood of Norristown, with a few exceptions, a barely tolerable field of Indian corn was rarely to be seen, until he arrived, on his return from Easton, into the southern parts of Bucks county. The foes to all good husbandry, weeds, were predominant in almost every cornfield. If, perchance, the interior was tolerably clear, a circumstance which rarely, occurred, the weeds around the enclosures were so lamentably abundant, that the corn was, in a great degree, obscured. Good and bad land exhibited the like ruinous and disgusting appearance and miserable promise; and the same bad system of culture prevailed. The ploughing was generally shallow, whatever might be the texture of the soil.—Every field was ridged; many had been broken up in bulks, and furrows were always thrown up to the plants, for the drought to turn into dust, or indurate into impenetrable clods.—The middle spaces between the rows were untouched, either by the plough or the harrow in very numerous instances. Countless varieties of pestiferous coarse grasses and weeds took possession of these neglected spots, furnishing a counterbalance to any supplies from the earth or the air, which the corn plants, in the absence of these pests, might have drawn, and effectually preventing the extension of their roots beyond the bounds of the elevated furrows, or narrow ridges, in which they were imprisoned. Can it then be wondered at, that the crops evidenced a sickly, stunted & wretched appearance, both in colour and size? In some fields, where limestone prevailed, and, perhaps, lime had been applied, the colour was better, but the weeds and grasses abundant; on the head lands particularly, which are seldom sufficiently, if at all, stirred and cleaned: thus establishing a mischievous nursery of poisonous pests to perpetuate their scourges on future crops. Fall ploughing was rarely, if at all, practised; and lime little used, even in many limestone districts. One farmer said, "their land was hot enough without lime." It is hoped, that this superlative ignorance of the qualities of lime, which, when slacked, is the coldest of all substances applied to land, is confined to the individual sporting the opinion. One of the uses of lime is to supply the soil, and that not too lavishly, with calcareous matter, when its caustic qualities are subdued.

This is not exaggerated, but is a regretful picture. It is held up to intelligent and well-disposed farmers, who, by viewing its deformities, may banish entirely their present mode of culture, which, by its own showing, is proved to be radically wrong. A corn crop is not only in itself, but, when well cultivated, is in its consequences the most valuable of all our products. With an abhorrence of weeds, the test of intelligence in a farmer, he can, with a corn crop, more effectually clean and prepare his fields for succeeding crops, than can be done by any other culture. Whilst he is attending his corn, which will not, with impunity, suffer neglect, he is not only invigorating and increasing his crop, but he is subduing his worst enemies—weeds of all kinds. This makes ample amends for the exhaustion of the soil by this gigantic plant.

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The change recommended, is dictated not only by reasonable theory, but is founded on long experience and multitudinous practical proofs.

Deep and Flat Culture.

Plough your fields throughout *deeply*; and *that* in the fall, to expose and destroy the eggs of the

grub moth; and roll, to pulverize the clods. Harrow in lime at this season, or on spring ploughed ground, for corn; and do not spread it on your fallows for wheat; because it is then injurious to your winter grain crop; as frequent experience has shown. Mark out your squares or drills, lightly, with the plough; and thereafter never suffer the plough to enter your fields. Work entirely with *harrow*s; whereof procure the necessary variety; some with large, and others with smaller *hoes*. These cut up weeds, and sufficiently stir your intervals to any depth you choose. If the hand hoes be found indispensable, use them near your plants; but never hill or plough up furrows. The common harrow will have its share of usefulness; and spare it not. As often as young weeds appear, or your surface becomes crusty, often occasioned by drought after rains, ply the harrows. You will then have a deep, loose and light body of pulverized soil, for your roots to penetrate. It will imbibe the dews and gases from the atmosphere; and afford, in the severest droughts, perpetual moisture and nourishment; which will be exclusively applied to your corn plant; having no robbers to contend with. In droughts, deeply stirred soil inhales and *retains* moisture. In wet seasons it is the least injured; because it affords room for superabundant wetness. Being elastic and buoyant, it does not consolidate or settle into concrete bodies, like shallow ploughed, cloddy, and unstirred ground. The corn roots (which have, in such ground, been measured ten feet long,) will have a continuous and not a divided soil, wherein to expand and extend themselves; in which, it being loose, deep, and constantly moist, the roots will far exceed those confined to narrow detached ridges, wherein they are short and starved. It is an idle opinion, to suppose that plants spend themselves in roots. The stronger, the root, the more vigorous is the plant.

If you *will* introduce the plough after the first breaking up, either before or after planting; and squares are the most commodious for thorough stirring and cleaning; plough shallow; so as not to disturb the deeply buried sod. Let the harrows level and flatten your surface at the next operation; and continue them exclusively in all future stirrings. Your culture will be easier, cheaper, and more abundantly profitable, than those who are accustomed to the old modes will *believe*, until they *see*.

If your field requires drains, draw furrows in proper places. If it be naturally wet, break up deeply in very broad lands, on which the harrows may still be used, and drains sufficiently multiplied. If it be stony, rugged, or harsh, either plant other crops; or strengthen your harrows; ridged ground dries the soonest, and burns through; so does all shallow ploughed soil, whether ridged or flat. Attraction of moisture is trifling, and evaporation rapid.

Be not afraid of cutting corn roots, which benefit by excision; throwing out, on the parts attached to the plants, numerous fibres, to draw in and communicate their food.

Your corn, in deeply ploughed and frequently stirred ground, will resist storms and heavy rains, owing to the strength and numbers of its roots, far beyond hilled or ridged plants. If it yields to the storm, and leans, the extent, tenacity, and re-acting contraction of the roots, will generally restore the erect position of the stalks: whereas, in the ridged or hill culture, the roots are short, brittle, and incapable of recovery. It is not uncommon in the deep and flat culture, for those called finger roots, to grow entirely or greatly extended *under* instead of *above* the surface; and throw out innumerable fibres, to support the stalk.

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Detach all suckers, which are robbers; and top, in due season, to shorten the lever, insure the standing of the stalks, and facilitate the ripening of the grains.

Banish all apprehensions, that working among corn in dry weather, is injurious. The contrary is the truth; for your harrows will, in such weather, have the double effect of more certainly destroying weeds, and pulverizing, to open mouths to take in moisture and gases, from the dews and the air.

It being seldom practised in Pennsylvania, I need not warn you against sowing winter grain in the same year with corn. This not only scourges your land, but interferes with the great use of the cleaning culture, affording the time and opportunity for weeds to recover their pestiferous reign, and is a sure test of slovenly and covetous farming.

If you will not at once believe in this system of corn husbandry, now frequently and ever successfully practised, where the best crops are to be seen, try a small portion of your field—do it justice—and compare it with the old mode, for your own and your neighbour's conviction. Whatever may be hastily thought of these observations, they are, with the most friendly wishes for their prosperity, offered for the serious consideration of liberal minded and unprejudiced farmers; among whom numberless instances of good farming, in other respects, are to be found, and to which the greatest proportion of the corn culture is a mortifying contrast.

September 10, 1820.

MENTOR.

SEPT. 18, 1820.

Messrs. Richards & Caleb Johnson—

In the Lancaster Journal of September 8th, 1820, there is an excellent charge of Judge Franklin to the Grand Jury, on the subject of the Act of Assembly "for promoting agriculture and domestic manufactures." I think it well deserving a place in your Magazine; as it contains, in epitome, much useful and impressive advice on the importance of agriculture, and the formation of agricultural societies; by the instrumentality whereof both the principle, and practice of

husbandry can be successfully promoted, and most effectually encouraged.—Your obedient servant,

RICHARD PETERS.

Address.

But I am desirous at this time, gentlemen, of introducing to your notice an Act of Assembly of this Commonwealth, passed at the last session of the legislature, which, if its provisions be duly attended to, may produce many beneficial effects. It is entitled, "An Act for the promotion of agriculture and domestic manufactures." The 1st, 2d, and 3d, sections enact:

"That as soon as the Board of Commissioners and two-thirds of the Grand Jury, of any county within this Commonwealth, shall agree, in writing under their respective hands (which agreement shall be filed in the office of the Prothonotary of the proper county) that a society shall be established within the same; then it shall and may be lawful for twenty or more inhabitants of any such county, fifteen of whom shall be practical and actual farmers, under the name of The Society for the Promotion of Agriculture and Domestic Manufactures, in and for such county, to sign an agreement, promising to pay the treasurer of said society, so long as he shall remain a member thereof, the sum of one dollar each, or more, annually, for the purposes hereinafter mentioned, and cause such agreement to be filed in the office of the Prothonotary of proper county; every such society shall by virtue of this act become a body politic and corporate, in deed and in law, with perpetual succession, and all the rights, liberties, privileges, and franchises incident to a corporation, for all the purposes of this act, and to admit new members upon the terms aforesaid. *Provided*, That the association which shall have first filed their articles of agreement shall be the only one entitled to the privileges granted by this act.

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"That the said societies, respectively, shall meet at some convenient place on the Wednesday of the next Court of Common Pleas, after the said agreements shall have been filed as aforesaid, and choose by a majority of votes, out of their number, one president, ten directors, one treasurer, and one secretary, who shall be officers of said society for one year and until others are duly elected. And the said societies respectively, at their first meeting, shall have power to fix on the time and place of their annual meetings on such day of the year as they shall designate, which shall continue to be the day of the annual meeting of the societies respectively, until otherwise altered by a vote of the members as aforesaid; and also to make their own rules and by-laws, not inconsistent with the constitution and laws of the United States, or of this state; and to add other officers to those designated, and prescribe their respective duties. And the president and directors shall have power to summon special meetings of said societies respectively, at such other times as to them shall seem proper.

"That at the next assessment of county rates and levies, after said societies respectively shall have been established and organized in any county within this commonwealth, and annually thereafter, the county commissioners are hereby required to assess, levy, and cause to be collected, in the same manner that county rates and levies are assessed, levied, and collected, an additional sum of fifty dollars for every member which said counties respectively are or may be entitled to elect to the House of Representatives of this commonwealth, and to cause the same to be paid to the treasurer of the society, by warrants drawn on the county treasurer: to be expended, together with their annual subscriptions, in the manner hereinafter mentioned."

I need not read the remaining sections of this law. The pamphlet containing it will be laid upon your table, and you will have an opportunity of deliberately considering it in all its parts.

I wish to impress you, gentlemen, with the importance of this subject, as it affects the vital interests of our country; particularly at a time when our foreign markets are almost destroyed, and we must learn to establish our prosperity on the interchange of commodities within our own limits. This will produce a solid independence, teach us the value of our connexions with one another, and bind us in bonds of mutual interest. The struggle has heretofore been (and a fatal one it has proved) to get *rich*: the endeavour now must be, how to *live* in comfort and plenty.

The consumption and use of the necessaries and conveniences of life, by 10,000,000 of people, and the demands for the materials of domestic manufactures, cannot fail to afford to every quarter of our Union the means of substantial enjoyment. *Industry* must take the place of hazardous *Speculation*, and *Frugality* must succeed *Extravagance*. We shall then be taught to live within our means, and this will easily be accomplished, when we have only real wants, and not those which are, for the most part, artificial and fanciful. We must "eat our bread in the sweat of our faces," and we shall find it the sweetest and most nutritive of any food we have heretofore enjoyed. It may not be accompanied by luxurious and expensive viands; but its associates will be health, peace of mind, and corporeal vigour, ensuring exemplary life and purity of morals.

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The foundation of the public prosperity is undoubtedly agriculture. This brings forth all the materials about which other branches of labour are, for the most part, employed, and sustains the workers in every department of the mechanic arts, in their labours. Without it, the earth would be a howling desert: with it, the cultivated world is an artificial Paradise, produced by the labour of Man, who, being doomed to "eat his bread in the sweat of his face," thus fulfils the decrees of Heaven, while he ensures to himself and his race the blessings of plenty, innocence and health. To what a high destiny, then, is the farmer appointed, when to him is committed the

art on which the subsistence of his fellow men necessarily depends. His responsibilities are great indeed; and shall he rely only on his individual efforts and limited experience, for the fulfilment of such important duties? No: he should call to his aid the experience, the intelligence, and the scientific as well as practical knowledge, which associations for promoting agriculture are universally found to afford, and thereby add to his own, the experience of those with whom he is associated, and, by joint efforts, produce results to which any one individual is incompetent. The practices, good or bad, which are handed down by his predecessors, are repeated; and little progress is made in improvement by isolated or self-confident individuals.

It would be a toilsome task, nor indeed would my limited information enable me, to enumerate all the discoveries and improvements in husbandry which modern times have developed. I will mention one or two of the most prominent. There have been but few articles used among our farmers, for the most essential of all requisites, *manuring their lands*. *Dung*, which can be produced only in quantities inadequate to the demand for it, has been the universal and main reliance, *Lime* is also generally esteemed of primary importance. Both of these are estimable, without dispute; and yet it is now well known in Europe, and begins to be so here, that *the ashes of burnt clay* constitute a manure which is superiour to them all, for every purpose to which they have been applied. Clay is found every where in immense quantities, and can be cheaply converted into ashes, and whole farms may be rapidly fertilized in place of partial and protracted applications of more expensive and less attainable manures; it is fortunately best adapted for strong and clay soils, which thus afford renovations of their surfaces out of their own bowels. This account of so valuable an addition to our stock of manure, obtained from a material of little estimation, walked over every day, and heedlessly neglected, will not, perhaps, be believed by the generality of our farmers; and yet the most celebrated agriculturists in England, Scotland, and Ireland are so convinced of the fact, from actual experience, that it is maintained to be "the most important discovery in agriculture which modern times have produced."

The application of salt to our fields as manure, is now under very extensive experiment. There is no doubt of its efficacy: but it requires experience, as to quantity per acre, and the kinds of soil the most suitable. This is not a new discovery; for its application to *land as manure* has been known before, and at the time of, our blessed Saviour's appearance upon earth. In St. Luke's Gospel^[1] it is said, "*salt is good; but if the salt has lost its savour, wherewith shall it be seasoned? It is neither fit for the land nor yet for the dunghill; but men cast it out.*" Its uses, both for cattle and manure, can be traced through the writings of the most eminent among the *Romans*, down to the most celebrated chymists and agriculturists of our own day. Where are our farmers to learn such facts and discoveries? Not of themselves; for there are many who do not read, and few go out of their way to try experiments. They can only be taught by agricultural associations, wherein the experience of practical farmers, the information derived from books, and the assistance of scientific characters, are happily combined.

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The spirit for agricultural improvement, and the formation of societies, has very much spread throughout the Union. Shall Pennsylvania be behind her sister states in such associations? She is before them in many practical proofs of her good husbandry; but has yet much to learn. Let us then promptly obey the call of our legislature, and begin the great work by forming societies and rendering them efficient. Let us pride ourselves in our household manufactures; and for this purpose let us invite the female branches of our families to join in our plan. *Without their aid*, we can do nothing in such manufactures; *with it*, everything. Instead of foreign gewgaws and expensive finery, we may be independent in articles for household uses and our attire, and save the expenditures which now go into the pockets of foreigners. Commerce is certainly essential to an agricultural country; but the extent of it should be no greater than our products will reach: when the balance turns against us, our prosperity declines.

You know, gentlemen, that our farmers will be satisfied only by actual observations of practical proofs. We must have public manifestations of improvement. The institution of cattle-shows should be promoted. They would be useful as places of sale, or for the exhibition of the best breeds, or for exposing for imitation or sale the best and greatest variety of household manufacture. On these occasions, premiums, more honorary than costly, should be distributed to successful candidates, either for such cattle or manufactures, or for agricultural discoveries or improvements, or the best execution of known practices. Emulation must be roused and encouraged, and the honourable pride of excelling must be fostered. Such public exhibitions must be conducted by discreet and reputable men.

Under such guidance and with suitable accompaniments of innocent pleasure and amusement, they will make a much stronger impression than any oral addresses or written communications. By these exhibitions, the emulation, excited in some neighbouring states has improved their agriculture and increased their manufactures to a degree almost incredible. Agricultural societies are extending to every quarter of the Union. Until very lately, there did not exist one to the southward of Pennsylvania, and she had but two, *to wit*, the Philadelphia Society, which has long continued its useful labours and eminent zeal; and that of Blockley and Merior, in the neighbourhood of Philadelphia. In the Eastern States, they are numerous; and in New York, forty or fifty are recently formed and are making successful progress.

I shall not enlarge further upon these topics, but will dismiss you with the expression of a hope that you may be governed in all your deliberations by the pure principles of justice; that by preserving your minds entirely free from hate, from friendship, from anger, and from pity, they may be directed to such conclusions as may best effectuate the great purposes for which you are assembled, and that in clearing the innocent from unjust suspicion, and dragging the guilty to deserved punishment, you may promote the best interests of society, and secure the freedom and

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LETTERS ON AGRICULTURE.

(Concluded from last Number.)

Though the cultivation of land by metayers may be unfavourable to its amelioration, still it may be easily imagined, that the smaller products of every little farm will be greater, as each must possess both a garden and a poultry yard. Every field in Lombardy is encircled with a band of poplars, mulberries, oaks, &c., and they are often so thick that the eye can scarcely penetrate the rich growth of leaves. From the boughs, luxuriant vines hang in festoons, and present to the passing traveller a scene of rural beauty and enjoyment which he may search for in vain in other countries. The shade of the trees does not injure the crops, such is the invigorating effect of a humid soil and an Italian sky.

Of the constant succession of crops we here know very little; indeed it is the result of experience alone. So much depends on climate, that we imagine the rotation practised elsewhere can never afford certain information to us. The largest quantity of the most valuable product, which may be taken from a spot of ground in any number of years, is a problem whose solution is of the greatest importance. In Piedmont the rotation is generally as follow:

- 1st year, Indian corn, manured, Beans—hemp.
- 2d year, Wheat.
- 3d year, Clover, turned up after the first cutting and fallowed by a fallow.
- 4th year, Wheat.

This rotation, says M. de Chateavieux, is one of the most abundant, and may be pursued indefinitely, notwithstanding the recurrence of wheat, though perhaps the result may be attributed to the abundance of manure furnished by a meadow cut three times. After stating that a farm of sixty arpents supported a family of eight or nine persons, who kept twenty-two head of large cattle, of which two oxen and a cow are fattened every year, as well as one or two hogs, that it gave about one hundred and twenty-five dollars worth of silk, and furnished more wine than could be consumed, that the preparatory crop of Indian corn and beans almost subsisted the metayers, and that nearly all the grain might be sold, as well as a great quantity of smaller products, he celebrates the industry and management of the Piedmontese proprietors in the following terms: 'It will be easy for you, after this, to conceive how Piedmont is perhaps, of all countries, that where the economy and management of land is best understood, and the phenomenon of its great population and immense exportation of produce will thus be explained.'

In the neighbourhood of Placenza, cattle rather than grain constitute the wealth of the farmer. The cows and oxen are distinguished by immense horns and beautiful figures, and we believe that our American race is in no way to be compared with them.—Their origin is said to be Hungarian; the males are noble animals, but the cows give little milk. To remedy this inconvenience, two thousand cows are imported from Switzerland, and the valuable qualities of the animal are thus perpetuated. The cattle are almost universally of a slate-grey colour. The rotation of crops is here as follows:

- 1st year, Indian corn and hemp, manured.
- 2d year, Wheat.
- 3d year, Winter beans.
- 4th year, Wheat, manured.
- 5th year, Clover, ploughed after the first cutting.
- 6th year, Wheat.

This succession, however, can only be pursued in a rich soil, which is manured every three years. There is one article we beg leave to notice particularly. We imagine that the winter bean might easily be introduced among us, and with great advantage, as it is capable of supporting the cold of the severest winter. It is sown in the beginning of September, and it must have considerable growth before autumn to resist the attacks of the cold. The stalk then perishes by the frost, but at the moment the genial warmth of the spring is felt, two or three new stalks arise, which bloom in the month of May, and the beans are fit to gather at the end of July. The management of this important vegetable we give in the words of the author. 'La culture est extrêmement simple; après a récolte du blé fumé, on retourne la terre par un seul labour et on la laisse émietter par l'influence de la saison. Aux premiers jours de Septembre on sème les fèves, soit en les enterrant á la charrue, soit en les recoverant á la herse, soit enfin avec le semoie, qui les place par rangées, de manière à pouvoir au printemps les sarcler avec la houe à cheval. Si on ne suit pas cette dernière méthode, il faut les sarcler à la main, dans le courant d'avril.' The culture of the winter bean is suited to argillaceous soils, and while it allows the proper intervals between ploughing the ground and sowing wheat which succeeds, it is admirably calculated to maintain the fertility of the ground.

The plains which border on the Po, in the vicinity of Parma and Lodi, support those fine animals, whose milk is converted into the celebrated Parmesan cheese. The grass is here far

more valuable than any crop of grain. In the summer the cows are housed and fed with the green grass of the first and second mowings: that of the third is converted into hay. At the end of autumn the cows are allowed to pick up whatever may be left in the fields. These meadows are perhaps the most fertile on earth; they are generally mowed four times a year. The cheese is here never made from less than fifty cows, and as the farms are small, there is one common establishment, to which the milk is brought twice during the day; an account of it is kept by the cheesemaker and settled in cheese every six months. The same plan has been introduced in Switzerland.

In the Milanese, the farms are larger than in other parts of Italy, because the culture of the grasses demands less care and labour than other branches of farming, and fewer advances. Irrigation is here carried to such an extent, that every two or three arpents can be inundated by its own canal. The good quality of the grass, however, in time becomes deteriorated, other plants gradually spring up in the place of the grasses; the sluices are then closed, and the ground is ploughed for hemp; after which, and a crop of legumes, oats, and wheat, it is again laid down in grass. A meadow will generally last fifteen years, and the course of harvests returns every five. M. de Chateaufieux gives the following remarkable outline:

- 1st year, Hemp, followed by legumes.
- 2d year, Oats.
- 3d year, Wheat, followed by legumes.
- 4th year, Indian corn.
- 5th year, Wheat.
- 15th year, Natural meadow, dunged every 3 years, and mowed 4 times a year.
-
- 20 years 67
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Of these sixty-seven crops from the same ground there are sixty-one for the use of animals, five for the sustenance of man, and only one for his clothing. There is, perhaps, no country on the face of the earth which can boast such a proportion of agricultural products. To obtain this result, the ground is manured, very profusely however, five times in twenty years, and it is a singular fact that this manure is applied always to the grass and never to the grain.

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The culture of rice occupies a part of Italy, and is a source of great profit to the owner of the soil. The difficulties in its cultivation are so trifling, that, contrary to the usual custom, the ground is let out at a fixed rent of one hundred and sixty francs the arpent; three crops are received every five years. As with us, these rice grounds are most unhealthy, and the stagnant water which covers them produces disease in all the surrounding country. The unfortunate peasant rarely escapes its deleterious effect, and the government, sensible of this constant draft on human life, have prohibited the further extension of the culture of this grain.

One of the most singular features in the physical character of Italy, is the constant elevation of the beds of rivers, particularly the Arno and the Po, by means of depositions of earth and stones, brought down by the heavy rains from the mountains.—This had become so alarming, that the raising of dykes yielded to a very ingenious operation called *Colmata*, by which the water of the river was allowed to overflow a certain space, and this very deposition, about three or four inches in a year, made to raise the level of the adjacent shores. But this process, which is fully described by Sismondi, must necessarily have a limit. Embankments are resorted to, and in some places the bed of the Po is absolutely thirty feet above the level country. The Po even now frequently overflows and devastates its banks; the inhabitants, provided always for the calamity which unfortunately is not unfrequent, take to their boats and wait till the inundation has subsided. There would seem to be little doubt that at some day not far distant, the whole delta of the Po, or *Polesino*, as it is called, will become one wide and wretched marsh. Even now the roads are often impassable. Ferrara, consecrated by the genius of Ariosto and Tasso, will be extinguished, and Ravenna, already fallen from its high honours, be known only as the deserted capital of a potentate of the lower empire.

M. de Chateaufieux, climbing the mountains which separate Tuscany from Modena, and leaving behind him the fertile plains of Lombardy, entered those lofty regions, where the earth does not produce sufficient sustenance for the inhabitants, who are employed with their flocks of goats and sheep, in constantly traversing the mountains in a manner somewhat similar to that of the Spanish shepherds. The author employs himself in describing the scenery of the Corniche, and though it is perhaps among the finest in Europe, and he might have felt all its changeful beauty and sublimity, still we think he is far more fortunate in his delineations of rural economy.

The agriculture of Tuscany has been so fully and ably investigated by Sismondi,^[2] that little was left to M. de Chateaufieux. The valley of the Arno, in truth the only fertile part of the dukedom, (for the rest is composed of precipitous mountains, or that silent and hideous district the Maremma) stretches from Cortona to Pisa, and forms about one-sixth of its whole territory. The farms are very small, being from three to six arpents, so that one pair of oxen supplies the necessities of ten or twelve metayers, in the working of their little plat of ground. They manifest, however, their extravagance in maintaining a horse, which may transport their produce to market, and their wives and daughters to mass or a rustic ball.—The most general rotation of crops is here:

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- 1st year, Indian corn, beans, peas, or other legumes dunged.
- 2d year, Wheat.
- 3d year, Winter beans.
- 4th year, Wheat.
- 5th year, Clover, sown after the wheat, cut in the spring and followed by *sorgho*.

This *sorgho* is a sort of parsnip, which is reduced into flour, of which they make a bad soup and a poor polente. The ground is manured only once in five years, a circumstance which abundantly proves the richness of this deep alluvial soil. Notwithstanding all this fertility and a cultivation which resembles rather that of a garden, than a farm, the country does not produce enough to resist the effects of a bad year. The metayers live with the greatest economy, and though their cottages are built with a taste which seems indigenous to the country, the interior exhibits a total absence of all the conveniences of life, and supplies but a frugal subsistence. Such is the view which M. de Chateaubieux has taken. But in our opinion the peasantry of Tuscany under all circumstances, are not only more neat in their persons, but better clothed, and apparently enjoying more happiness, than that of any other district in Italy. There can be little doubt, that all this distress and privation arises from the system of the metayers; a system which, deriving its existence from the feudal state, is equally to be deprecated, whether we consider the political character of the community or the individual happiness of its members. The man who has no other possession than his industry, and who cannot hope to change his situation, can never have such a stake in the state, as to render him either an intelligent or valuable member of it. On the other hand, the metayer, bound to furnish half the seed and to divide and sell the produce, pretty generally consumes one year the fruits of the last; or if there be a surplus, how is it to be invested? There would seem to be no other mode, than in the sticks which he is bound to supply, for the support of the vines, for the landlord provides the stock and repairs the house. He then can only lay up his money in his chest, or spend it on his pleasures. Thus the end of a year finds him no better off than at its commencement, for want of such an interest in the soil, as would secure him from the effects of his negligence and indifference in its cultivation.

Before leaving this part of Italy, we ought to mention a subject which is of some little importance; the manufacture of straw hats, which has just commenced in our country. It is doubtless a most profitable exertion of industry. The raw material costs nothing, and M. de Chateaubieux informs us that this branch annually amounts to three millions (we presume) of francs. The straw is of beardless wheat, cut before it is ripe, and whose vegetation has been thinned (*étiolée*) by the sterility of the soil. This soil is chosen among calcareous hills; it is never manured, and the grain is sown very thick. The women who are employed in making the Leghorn hats, earn from about thirty to forty cents per day, no trifling sum in Italy.

The Maremma or country of the Malaria forms the third district, extending from Leghorn to Terracina, and from the sea to the mountains, and having a width of twenty-five or thirty miles. M. de Chateaubieux speaks of this singular country in the following terms: 'Le ciel reste également pur, la verdure aussi fraîche, l'air aussi calme; la sérénité de cet aspect semble devoir inspirer une entière confiance, et je ne saurais cependant vous exprimer l'espèce d'effroi que l'on éprouve malgré soi en respirant cet air à la fois si suave et si funeste.' A country so very singular in its character would necessarily require a very peculiar system of management. Our author develops this system in a visit he made to a domain called Campo Morto, in the most deserted part of the Maremma. Here was a Faltore, charged with the administration of the farm. The whole Maremma of Rome is in the hands of eighty proprietors, who are called *mercanti de' tenuti*, and reside as well as their *Fattori* in the city.—On this farm there were four hundred horses, of which, one hundred were broken; two thousand hogs, which ran in the woods and fed on the acorns; some hundreds of cows, who give no other revenue than the sale of the calves, which is estimated at about eight dollars each cow; one hundred oxen used to the plough, and about four thousand sheep. The rent of this farm was about eighteen francs the arpent of cultivated land, amounting in all to about \$22,000. The annual profit was about \$5000, besides interest at five per cent. on the capital of the flocks.

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In the midst of this establishment there was a vast *casale* or farm house, destitute of furniture and inhabited but a very few days in the year.—Every thing around breathed the most perfect desolation; all was vast and silent. The harvest had just commenced and a thousand labourers, of whom one half were women, had descended from the mountains to gain a small pittance during a few days, by reaping the rich grain of six hundred and sixty arpents for the lordly proprietor, and if they did not perish at their toil, to go back after having respired the elements of a miserable death. Some days had elapsed since the harvest began, and only two labourers had been attacked by the fever of the Malaria; every day would, however, increase the number, till at the completion of their task, scarcely half of them would remain. 'What then becomes of these unfortunate people?' said M. de Chateaubieux. 'They get a piece of bread and are sent off,' was the inhuman reply,—'But where do they go to?' 'To the mountains; some stop on the road, some die, others get home almost expiring with misery and famine, only to follow the same life next year.'

The Malaria is one of those singular phenomena whose origin has baffled every effort at discovery, and the remedy for which has never yet been ascertained. Attempts have been made to cultivate the soil of the Maremma, and colonies were established within its circuit, but the resistless scythe of sure and silent death swept away the presumptuous intruders.—During half of the year, a few miserable beings, armed with lances and clothed in skins, the living images of death, wander over these devoted plains with their flocks; and if accident should delay their return to the mountains, fall certain victims to this fatal disease. Immense numbers of sheep,

cows, horses, and goats find a subsistence on these wastes and supply the markets of Rome and the Val d'Arno. The soil is extremely steril; the whiteness of the pure argil being only alloyed by a mixture of sulphur, which is produced in great profusion. The cause of the Malaria, as we before remarked, has escaped all the investigations of science; it still remains a mystery no less profound, than its effects are dreadful. Some have supposed it to arise from the low pools of stagnant waters, which collect on the face of the Maremma; but the disease prevails on the heights of Radiocofani and within the lofty precincts of Volterra.

Some have supposed that the disease was caused by exposure to the sudden changes of temperature at the going down of the sun.^[3] This is supported, it is true, by the very weighty fact related by de Bonsteten in his *Voyage au Latium*, of a man who resided at Ardea sixteen years without being indisposed. But we doubt whether any solution that has ever been proposed was so perfectly ridiculous or so completely destitute of foundation. Do the people then die in the towns of this disease, where we know it to be a custom not to go out after dark, of mere exposure to a changing atmosphere? A short distance from the Porta del Popolo at Rome are two villas, one on each side of a small lane, but both situated on high ground. We were informed that during the summer season, a man would run very imminent danger of death in sleeping in one, while he might remain in the other with perfect impunity. How is this to be reconciled with the doctrine that the disease caused by the Malaria is nothing but fever and ague, brought on by exposure? The truth is, this dreadful enemy every year makes further inroads; no longer satisfied with pursuing the wretched thousands of enervated labourers and shepherds, who at evening crowd for safety into Rome, it is advancing into the city in the midst of darkness, and spreading from the Porta del Popolo, on the one side, and from the Palatine on the other, up the sides of the Quirinal. In 1791, says M. de Chateaubieux, Rome had a population of 160,000; at the time of this visit, it numbered only 100,000, of whom more than 10,000 were gardeners, shepherds, and vine-dressers. Four years afterwards we heard it computed at from 80 to 90,000. Undoubtedly political events have had no small effect in diminishing the number of inhabitants; but still we believe the Malaria must have had a no less powerful influence. Annually it roams over the finest villas without the walls, and ravages large districts of the town within; and neither the magnificence of the villa Borghese, nor the luxuriant beauty and towering pines of Doria Pamfili, can resist the assaults of this silent and deadly foe. Time seems to hold its mantle over the queen of cities, and to prepare by a fate as extraordinary as its former history, to blot it out from the admiration of mortals. Encompassed already by the awful stillness of a desolate waste, once filled up with sixty towns, which the antiquarian in vain attempts to trace, perhaps her own site may be hereafter unknown; and some future traveller may boast with enthusiasm of having once again penetrated its deserted streets, of having visited the spot enobled by the heroic virtue of Junius Brutus, or the eloquence and wisdom of Cato the censor. But we must leave a subject, on which we could dwell still longer with delight, and conclude our notice of a book, of which we would hope our readers have received a favourable impression. The subject of the work is not only important in itself, but most interesting to us. Italy is essentially an agricultural country; she is neither a manufacturing nor a commercial state. It is by her agriculture, that she supports more than 17,000,000 of inhabitants, or about 1237 to a square league; a population far superiour to that of France or England. It is her agriculture which laid the foundations of those splendid cities which crowd her plains; it is her agriculture, which, should it ever be protected by an enlightened government, will again yield nourishment to the principles of liberty, and raise her to a level with the most respectable nations of Europe. M. de Chateaubieux has devoted himself to the illustration of this noble subject, and we are confident that his work will not only afford many valuable hints to the practical farmer, but some lessons to our statesmen, in any future attempts which may be made to elevate manufactures at the expense of the most dear and invaluable interests in our country.

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From the Edinburgh Farmer's Magazine.

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PARMESAN CHEESE DAIRY.

From a Journey in Carniola, &c. by W. A. Cadell, &c.

"On the 14th April (1818,) I went to see a large cheese dairy, 3 miles from Milan, one of the dairies at which that kind of cheese, called in commerce *Parmesan*, is made. It is called in Italy, *Formaggio di grana*, because it is commonly used in a granular form, being grated, and brought to table to be eaten with soup. Much of this cheese is also made near Lodi and Pavia.

The word *Formaggio* is from *Formaticum*, which signifies, in the Latin of the middle ages, cheese prepared in a form.

The cheese is made in the morning before sunrise.

The morning's milk, and that of the preceding evening, are put into a large brass vessel, five feet in height, narrow at bottom, and widening out like a trumpet to three feet diameter at top. This vessel is placed over a fire, which is sunk in the ground, and the vessel can be removed from the fire by a crane.

When the milk is heated, runnet, in form of paste, is put in, and a little saffron, to give the cheese the yellow colour.

When the coagulation has taken place, the copper is taken off the fire, the curd is taken out in a cloth, and put within a broad wooded hoop, the sides of which are as high as the cheese is intended to be. This hoop can be straitened by means of a rope. A board is placed on the top of the cheese, and a small weight on the board. The cheese is not cut into a press.

After this, the cheese is taken to the salting room, and two cheeses are placed together, one above the other, with broad hoops tightened round them. Much salt is laid on the top of the uppermost cheese; the salt dissolves, and the brine filters through the cheeses.

The cheeses are shifted from one place to another all along the benches of the salting room, and are beaten with a flat piece of wood, cut with straight-lined furrows intersecting each other.

The cheese is next taken to the magazine, where each cheese is placed on a shelf.

The sides of the cheese are painted with a mixture of litmus, otherwise called *tournesol*, and oil, to give them the purple colour. The *tournesol* is a plant collected in the south of France.

The cheeses are set on the shelf in the same order in which they were made; and the cheeses of each month are placed together.

Those of the month of October and of May are the best, and bear the highest price. The best cheeses can be kept longest, and are improved by keeping for some years.

There was an October cheese which had been kept five years, and was to be sent to the emperor.

After the great cheese is made, the liquid in the copper is again heated over the fire, and curd is collected from it to make small cheeses, called *Mascarla*.

The number of cows kept for making cheese in this dairy is eighty.—They are always in the house in winter, and at the present season of the year. They are fed upon grass all the year, except perhaps in December. The house in which they are kept is not above nine feet high to the ceiling. They are not kept very clean. In summer, they go out to the field to feed during the day.

The cows are of a dark colour, and are brought from Switzerland, which is found more profitable than rearing them in this country. The bull is also Swiss, and fourteen months old.

It is estimated that 2000 head of cattle pass the Mount St. Gothard every year coming from Switzerland into Italy. Considerable fairs for the sale of Swiss cattle are held at Lugano.

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The evening's milk is put in flat copper vessels, three feet in diameter, in order to collect the cream.

There is an ice-house in the dairy, for the purpose of supplying ice for cooling the cream which is put into the churn. This, they find, facilitates the making of butter at certain periods of the year.

In the farm-yard is an inscription, commemorating the visit paid to this dairy by the Austrian emperor and the archdukes, two years ago."

WILD RICE.

From the New York Statesman.

Extract of a letter, dated Canandaigua, July, 1820.

I saw for the first time in the Seneca river at Montezuma, the aquatic plant called wild rice, or folle arvine. It grows all over the west and north; and wherever it flourishes, myriads of waterfowl are attracted to it, and derive their chief support and exquisite flavour from its alimentary qualities. In the lakes and rivers adjoining Montezuma, thousands of wild geese and ducks of all kinds congregate at the proper season for food, except the canvas back duck, or *anas valsineria* of Wilson, which derives its name from a water plant called *valsineria*, on the roots of which it feeds, and which Wilson states to be a fresh water vegetable, that grows in some parts of the Hudson and Delaware, and in most of the rivers that fall into the Chesapeake.

Some difficulty has occurred not only about the botanical name, but also about the botanical character of the wild rice, or wild oats. The confusion of nomenclature has arisen from Linnæus himself. In his *Species Plantarum*, he has denominated it *zezania aquatica*, and in his *mantisa*, *zezania palustris*—and it has been called by other botanists, *zezania claurlosa*. I shall prefer the first name as most characteristic. It has been well described by Mr. Lambert, as *zezania panicula inferne racemosa superne spicata*. Pursh represents it as a perennial plant. Nuttall and Michaux are silent on this point, and Eaton says it is an annual, in which opinion I concur.

Mr. Lambert, in a communication in the 7th volume of the Transactions of the Linnæan Society of London, has given a figure of this plant as growing at Spring Grove, the seat of sir Joseph Banks, in England. It appears that sir Joseph received some of the seed gathered in a lake, in Canada, and put it in jars of water. It was sown in a pond at Spring Grove, where he has a great quantity of the plant, growing annually, ripening its seeds extremely well in autumn, and sowing itself round the edges.

By what I can learn, this same plant grows in Lake George, and Lake Champlain, and in all the western lakes. It produces seed in some places in September, and in others in October. It grows

in shallow water, and, sometimes to the height of eight feet. Some of the western Indians derive their principal support from it. The grain it bears is superior to the common rice, and if cut before ripe, it makes excellent fodder, embracing the advantages of hay and oats. Mr. Lambert's figure of the plant in the Linnæan Transactions is accurate, and exactly resembles the one growing in the Seneca River. Its productiveness may be inferred from the food it furnishes to thousands of human beings, and to myriads of aquatic animals. From the success of the experiments of Sir Joseph Banks, it is highly probable that it will grow in any part of this country and Great Britain; and if so, may it not be considered as a good substitute for the *oryza sativa*, or common rice. It is well known that the latter furnishes more subsistence to the human race than any other plant. Pursh mentions a grass which he calls the *oryzopsis asperifolia*, which he observed on the broad mountains of this country, and which he says contains large seeds, that produce the finest flour. Perhaps this species of *oryzopsis*, although generally different, bears the same relation to *z. aquatica* in its importance and place of growth, as the mountain rice of India does to the common rice of that region. At all events, the more I see of this country, the more I am convinced of its vast ability to support the human species and of the propriety of calling its latent powers into operation.

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ON SEEDS.

Among plants, as among animals, there are different breeds to be found, some mean, some middling, and some quite superior. The intelligent grazier, or raiser of cattle of every sort, selects the finest animals he can find for breeders of his future stock; and in this way he experiences a wonderful improvement in its value, whether the stock be of horses, neat cattle, sheep, or swine. The same precaution should be observed by the agriculturist in the selection of the seeds of different plants which he cultivates—he should constantly select his seeds from the finest breeds of plants of every kind. In some cases such selections are attended with more trouble than with others, but in all cases it is a matter of the utmost importance in the improvement of crops. Some general rules for such selections shall now be pointed out.

For *Indian corn*.—Search for such stalks as bear two ears, at least, and take the largest ear of each stalk for seed, rejecting the grains on both ends. Pursuing this practice will, in a few years, increase the corn crop at least one third.

Wheat, Rye, Barley, &c.—Search among the sheaves for the largest and best filled heads.—Sow the grains taken from these by themselves, and when the product is sufficient for seed, sow of this selected stock only. Repeat the selection about every six years.

Flax, Hemp, &c.—At the time of pulling the crop, select the longest stalks to be found, sow the seed of these separately, and the product will probably afford seed sufficient for the next year's sowing. Repeat this, as before mentioned.

Carrots, Beets, Turnips, &c.—Make yearly selections of the largest and most perfect roots, for bearing a supply of seed for the ensuing year.

Pumpkins, Squashes, &c.—Select such plants as bear the greatest *number* or the greatest *quantity* of pumpkins, or squashes, &c.—take the *largest* of the produce of each plant, and after opening them, the quality for *sweetness* of each can be ascertained. Select your seeds for the next year's crop, from the sweetest of the collection.

Cabbages.—Preserve the stalks for seed, which bore the largest and finest heads, or leaves, according to the sort of cabbage.

Apples, Pears, &c.—No selections from the seeds of these, will insure the same sorts of fruit as those from whence the seeds were taken. The finest of these fruits are only to be obtained by ingrafting. It is however said, that by taking the seeds only from the south sides of such apples or pears, as grow on the finest of these fruit trees, varieties of young trees will be afforded from such seeds nearly equal to those from whence the seeds were taken.

Peaches, Plums, &c.—Make your selections from such trees as bear the finest fruit, and from that growing on the south side of the trees. If you wish to make the young stock of fruit earlier than that of the parent tree, make your selections of such peaches or plums as ripen first, and these will always be found on the south side of the tree.

For preserving the germinative power of seeds, let them be mixed with a due proportion of sugar.

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There is, in most cases, perhaps in all, a very essential advantage to be derived from a change of seeds, or bringing them from one part of the world to be sown in another. Sufficient attention has not, however, been paid to this matter to enable us to ascertain what changes prove most beneficial; but in making them, regard must doubtless be had that the seeds be taken from climates not too widely dissimilar. In bringing southern seeds to be sown in northerly climates, the danger is, that they will want sufficient time for ripening, and in pursuing the reverse of this, the crop may ripen so early as to be, on that account, lessened in its products.

In raising seeds of plants of which there are different species, it is essential that the seed plants be placed so far apart as to preclude any danger of the pollen of the one being carried by the winds to the other; for if an intermixture of breeds take place, a degeneracy of the plants must ensue, by mixing the valuable qualities of each. In the *Brascia* tribe, for instance, there is

one species denominated cabbages, of many varieties, and are valuable for their heads or leaves; another species is the common turnip, of several varieties, and valuable for its bulbous root; and another is the Swedish turnip or *Ruta Baga*, whose principle excellence is its bulbous stalk. The effect, therefore, of an admixture of these plants, must be a diminution of the bulbs of the two latter, and an increase of foliage, while the cabbages would lessen in the heads and leaves, with a proportionate augmentation of stalk and roots.

[*Plough Boy.*

HOLKHAM SHEEP-SHEARING, (ENG.)

This festival, established by T. W. Coke, Esq. forty-three years ago, commenced on 10th July last.—Among the company present this year were, his Royal Highness the Duke of Sussex, Princes Potemkin and Trabetzkoy, (Russia,) the Marquis of Downshire, Earl of Albemarle; Lords Waterpark, Erskine, Anson, Ebrington, Lynedock, Delaware;—Hon. Mr. Keppel, Hon. Geo. Walpole, Hon. Gen. Fitzroy, Hon. Mr. Thellison, Sir John Sinclair, Bart. Sir Wm. Hoste, Bart. T. W. Coke, jr. Esq. M. P.; G. W. Hall, Esq. Thos. Gay, Esq. (Herts,) Robert Patterson, Esq. (Baltimore,) C. Deering, Esq. (Middlesex,) Mons. Petit, Esq. (Paris,) Thos. B. Beevor, Esq. J. Ellman, Esq. (Sussex,) and many eminent agriculturists from Norfolk, Suffolk, and various parts of the kingdom. This festival, instituted for the improvement of agriculture, assumes, at every anniversary, a greater degree of interest and importance.

Among the sheep exhibited there was an Arabian, and one from New Zealand; likewise a half-bred Zealand lamb, from a Southdown ewe. The Arabian sheep is a large animal, covered with a close coat of hair, like our pointer dogs. The colour of the one exhibited was white, with a black head and neck. The tail is very singularly formed—a large piece of loose flesh projects from the rump, above which grows a tail, about four inches in length, exactly resembling that of a young pig; the sheep has also a large pouch under the jaw.

A simple but most effectual method of preventing rats and mice from injuring corn stalks, was recommended by Mr. Gibbs. of Quarles, a tenant to Mr. Coke. The cost is not more than 6s. or 7s. per stack; and it has been found by several gentlemen who have made the trial, to be a complete bar to the depredations of those destructive vermin. The stack is cut round, and merely plastered with common lime and hair, about three feet high; and when properly done, it will be found that no vermin can possibly make their way into the stacks.

Mr. Coke pronounced the *grubber* to be one of the most useful implements upon his farm, and pointed out its superiority over the scarifier, which cuts the roots of the weeds in pieces, and thereby multiplies them; instead of which the *grubber* forces them up in an entire state, and even their finest fibres are destroyed. Alluding to his own farms as a proof of what a better mode of husbandry would effect, Mr. Coke observed, with respect to what was frequently said of the injury accruing from the introduction of machinery, that he employed more hands with the machinery than he could any other way. Of the mode of *driling*, he said, it should be from north to south, instead of from east to west. This might appear of trivial moment, but he could assert that it was worthy of attention.

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About 500 persons each day sat down to dinner in the noble mansion; when a scene of hilarity and cheerfulness, intermixed with valuable information from the gentlemen whose healths were drunk, was exhibited. Mr. Coke, at the close of the meeting on Wednesday evening, delivered the prizes to the successful candidates in the various classes.

AGRICULTURAL MEMORANDA.

Flax for Cambrics.—The culture of this species of flax is an object of great importance to every farmer.—The produce of a single acre has been known to bring in Flanders upwards of \$380. It requires a deep and rich soil, and must be staked or supported nearly as peas, as it grows twice as high as the ordinary flax; but the labour attending this is amply compensated by the produce.

Hops.—The essential oil of hops, obtained by distillation, and afterwards mixed with a small quantity of sugar, is found to be the best way of using that plant in brewing, and the most effectual method of preserving it for years.

Squashes.—It has been asserted, as the result of an accidental experiment, that squashes sown in the Fall will survive the frosts of winter and spring, and will ripen much earlier than any which can be raised by sowing in the spring. Those sown in the spring, and those sown in the fall, were, in the case alluded to, exposed to a severe frost; the former were killed, while the latter survived. It may be worth a more satisfactory experiment. The earliest salads, we know, are grown in this way. The same has been said of a species of beans, and even potatoes.

A Hint for Farmers.—For 3 or 4 years past Hemp and Canary Seed have sold, on an average, at 5 and 6 dolls. per bushel, in this city; and within the last twelve months the last mentioned seed (Canary) has been sold as high as 12 dolls. per bushel.—The above seeds are as easily raised in this country as wheat—why then should we depend on Europe for our supply, while wheat is

Salt as a Manure.—In the history of the cocoa nut tree, by M. le Goux, the author tells us that the inhabitants of those parts of Hindostan and China, which border on the sea coast, sprinkle their rice fields with sea water, and use no other manure; and that in the interior of these countries, they sprinkle the lands with salt before they are tilled, a practice which has been followed for ages with the greatest advantage. Park says, he was informed by a gentleman in England, who had spent many years in making experiments on the employment of salt in Agriculture, "that one bushel to an acre makes land always more productive; but that a larger quantity would, for two or three years afterwards, render it actually sterile."

AMERICAN GINSENG.

Extract from the New Monthly Magazine, on the "American Trade with China."

Above all, a remarkable production deserves to be mentioned here, which grows in America itself, and is almost peculiar to the United States; a production which is almost wholly unknown in Europe, but has been in use in China from time immemorial, and is held there in extraordinary esteem. This is the root *Panax quinquefolia*, or Ginseng. The Chinese writers call this plant a precious gift of nature, sweeter than honey and the honey comb, more valuable than fine gold, and jewels, and pearls, a glorious gift of Heaven, bestowed by the gods upon mortals for their happiness, and their enjoyment on earth. Placed on a par with the philosopher's stone, it is called the food of immortality, and it passes among the priests and physicians for a universal remedy, wholesome for all weakness of the frail body, applicable to all diseases; nay, it is even said to prolong life, invigorating the nerves, strengthening the understanding, cheering the soul, soothing the mind, taming the wild passions, and bestowing inexhaustible delights upon our mortal existence.

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The reigning dynasty of the Mantchews, in China, were proud that Nature produced this wonderful root, with such magical powers, in their original country; for it was found in Chinese Mogul Tartary; but sparingly scattered in certain places and districts. Here it was considered as one of the regalia of the crown, only the emperor had the right to have it gathered, and guards were posted at the places where it grew, that no one might presume to take openly, or by stealth, what was for the emperor alone. How fortunate was it for the Americans, that they accidentally discovered, not very long ago, that this root, so highly esteemed in China, and paid for there with its weight in gold, which it had been always supposed was only to be found in Tartary, as the Chinese had always boasted, was indigenous in the United States, and might be there collected in far greater abundance than in China, hitherto the only country where it was known to grow.

It grows in the United States, in the whole of the immense tract from the Canadian Lakes to Georgia; is found even in the northern states of New York and Pennsylvania, and flourishes in Virginia and the two Carolinas. Nature has spread it here, particularly in the tract between the Alleghany mountains and the sea, and it thrives especially where the mountains take a southwesterly direction. It loves a fertile soil, and cool shady spots, on the declivity of the mountains.

While Europe produces nothing which it can offer to the Chinese in exchange for their productions, America possesses in this remarkable plant an article peculiarly its own, which is, above all others, proper for the trade with China.

Many of your readers may, perhaps, be curious to be better acquainted with a plant so esteemed by the great Chinese Mandarins, and in the Harems.

The stalk of this plant, which attains the height of about a foot from the ground, is of a dark red. It is adorned with elliptical leaves, three of which always grow together, and each of which is again divided into five little leaves. On account of the symbolical meaning attached to the numbers three and five, which these leaves present to the eye, the plant obtained, in ancient times, in China, the character of particular sacredness. The growth of this singular plant is extremely slow, but then it attains an age unusual in plants of this kind; when it has stood fifteen years or more, the root is not yet an inch in diameter. Every year the stalk makes at the upper part of the root, at each new shoot, marks, which show by their number the age of the plant. The root itself is of an elliptical form, and commonly consists only of one piece. The plant bears but a few seeds; two or three grains are all that can be gathered from one stem; these are of a bright red colour, in shape and size like those that may be collected from the honeysuckle. They ripen in America, in the latter half of the month of September, and their taste is more aromatic than that of the root itself, but less bitter.

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In China the greatest care is taken in gathering this valuable root. It is not done till it has attained the highest perfection and maturity: this is during the autumn and winter. In America they long committed, from ignorance and inattention, the great fault of collecting the root from the spring to the first frost. As it is always soft and watery at this season, it naturally shrunk together in drying, became very hard, and lost not only in weight but in goodness. This mistake is still committed in some parts of the United States, where the inhabitants make the collecting of the root only an occasional object; and when they are hunting or travelling, dig up the plant at all seasons when they happen to meet with it. But by this they deprive the ground of a valuable

production, which would be far more valuable if it were tended and cultivated with due care. Though the Ginseng roots thus collected by ignorant persons do not fetch in China the high prices which are given for such as have attained their proper maturity, yet the demand for them is not the less brisk. The American merchants in the interior purchase large quantities by the pound, or the hundred weight, of the country people, who employ themselves in collecting and digging this root, and gain by exporting it to China, about one hundred per cent.

But the profit is incomparably greater when Ginseng roots, perfectly ripe, and carefully gathered at the proper time, are brought to Macao or China. The Americans begin to be more sensible of this advantage, in proportion as the intercourse with China becomes more active. They have made themselves better acquainted with the nature of the plant, and the taste of the Chinese; employ greater care in gathering, and acquire more skill in digging it. One man can gather about eight or nine pounds daily. Hence the quantity of this article exported from the United States increases at the same time that its quality improves; and the trade with Ginseng roots in the Chinese markets continues to become more and more profitable to America. The exportation already amounts to at least 500 cwt. annually.

In China they understand the art of preparing the Ginseng, in such a manner, that it appears semi-transparent: in this case a much higher value is set upon it. In America they have also learnt this art, and the process employed is very simple.—The merchants in the American commercial towns, purchase the roots so prepared, and rendered partly transparent, at six or seven piasters apiece; and sell them in China, according to the quality, at from fifty to a hundred piasters apiece. Even in Louisiana and Kentucky, they carry on this extremely profitable export trade to China.

EDUCATION.

The Easton, (Md.) Gazette, in treating of the importance of Education, and the advantages, under a republican government, of close application to study, concludes with the following characteristic allusions:

Who was Mr. Wirt, the present Attorney General of the U. States? A poor boy of our state; of the village of Bladensburgh.—What has given him one of the first stations in the country, with a handsome income? Good education, laborious study and application, and consequent knowledge.

Who was William Pinkney? A poor boy of Annapolis. What has learning made him? The first lawyer; the most celebrated advocate of our country.

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Who was James Monroe? The son of a bricklayer in the town of Cambridge, in Dorset. Who is James Monroe? The President of these United States.

Education is the solid granite pedestal of the column of his fame, supporting a shaft of the most towering attitude, whose Corinthian capital is high above the clouds. How emphatically, in this instance, has wisdom, founded on good education, and matured by intense study and application, proved herself to be power, with station, and honours, and wealth, following in her train. Why then should not a son of one of our bricklayers, or hatters, or tailors, or cabinet makers, become a future President of the United States?—The same path is open to them: true, it winds up the sides of a steep and rugged mountain; and the elevated pinnacle is not to be gained without setting out aright, with the earliest and best discipline of good schools, and the severest and most immense mental labour—but the prize is well worth the boldest, the highest exertion.

Will it be said that Nature made these men of her best materials? no such thing. Providence was bountiful to them; but Nature left these diamonds as rough, as many of the pebbles now in the streets. Instruction turned them; and education gave the high polish and the point, which illumines and dazzles America, and throws their radiance far into other countries. And have we not at this moment, genius and talents in our Academy equal to Wirt's, and Pinkney's, and Monroe's? Yes, without doubt, and among the sons of our mechanics too—and would to Heaven I could fire their young bosoms with the noblest ambition, without which they can never reach what they aim at.

THE TURKMANS.

The following extract is taken from Mr. Browne's MS. remains: on his journey across Asia Minor he thus describes a very remarkable people:

"In my visits to the Turkman tents, I remarked a strong contrast between their habits and those of the Bedouin Arabs. With the latter, the rights of hospitality are inviolable; and while the host possesses a cake of bread, he feels it a duty to furnish half of it to his guest; the Turkman offers nothing spontaneously, and if he furnish a little milk or butter, it is at an exorbitant price. With him it is a matter of calculation, whether the compendious profit of a single act of plunder, or the

more ignoble system of receiving presents from the caravans for their secure passage, be most advantageous. The Arab values himself on the *hasb we nasb*, that is, his ancient pedigree; the Turkman, on his personal prowess. With the former, civility requires that salutations be protracted to satiety; the latter scarcely replies to a *Salam aleikum*.

"The muleteers, who had preferred this devious path to the high road, to avoid the dellis, were now alarmed at the frequent visits of the Turkmans. They described me to them as an officer of Chappan Oglou's retinue, employed to communicate with the English fleet on the coast; an explanation which appeared to satisfy them; and fortunately I was able to support that character. It is to be observed that Chappan Oglou has a large military force at his disposal, and administers justice with a rod of iron. His vengeance pursues, on eagle-wing, the slightest transgression against his authority. Our precautions at night were redoubled; and I divided the time into two watches, which I ordered my servant to share with me; but the disposition to sleep having speedily got the better of his vigilance, a pipe, although carefully placed under the carpet on which I myself slept, was stolen unperceived before morning.

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"The dress of the Turkmans consists of a large striped and fringed turban, fastened in a manner peculiar to themselves; or sometimes of a simple high-crowned cap of white felt. A vest, usually white, is thrown over the shirt; the Agas superadd one of cloth; and in general, and in proportion to their rank and wealth, they approximate to the dress of the capital. But the common people wear a short jacket of various colours. A cincture is indispensably required, in which are fixed an enormous yatagan, and a pistol. Many of them wear half boots, red or yellow, laced to the leg: the dress of the women is a coloured vest, and a piece of white cotton cloth on the head, covering part of the face. They are masculine and active, performing all the harder kinds of labour required by the family. Their features are good, but not pleasing. The men are generally muscular, and well-proportioned; tall, straight, and active. Their teeth are white and regular; their eyes are often extremely piercing; and there is an air of uncommon boldness in their countenances and mode of address. Their complexions are clear, but sun-burnt. In a word, they have every thing that denotes exhaustless health and vigour of body. A general resemblance is visible between them and the populace of Constantinople; but the latter appear effeminate by the comparison. Every action and every motion of the Turkmans is marked by dignity and grace. Their language is clear and sonorous, but less soft than that of the capital; expressing, as may be conceived, no abstract ideas, for which the Turkish is indebted to the Arabic alone; but fitted to paint the stronger passions, and to express, in the most forcible and laconic terms, the mandates of authority. Their riches consist of cattle, horses, arms, and various habiliments. How lamentable to think, that with persons so interesting, and a character so energetic, they unite such confirmed habits of idleness, violence, and treachery! From the rising of the sun till his disappearance, the males are employed only in smoking, conversing, inspecting their cattle, or visiting their acquaintance. They watch at night for the purpose of plunder, which among them is honourable, in proportion to the ingenuity of the contrivance, or the audacity of the execution. Their families are generally small, and there seems reason to believe that their numbers are not increasing."

PUNCTUALITY.

An English traveller, who has just published an account of a Journey in Holland, makes the following remark—"The Dutch are as punctual as they are industrious and parsimonious. The diligences and treckschuyts start at the time appointed, during the striking of the clock. If you are told that the hour is seven, you may be sure to be away before the fourth of the seven strokes has sounded.—The precision at which the hour of arrival is fixed, is such that you may depend upon it within a few minutes; and the same reliance may be placed on the period of finishing the journey, whether it be made by water or by land." This is a most valuable trait of character in that people, and is well worthy of universal imitation. There are a considerable proportion of mankind who are always behind-hand.—Let them make ever so many or so important engagements, as it respects punctuality in time, they invariably fail.—Many such have fallen within our observation; and the same want of exactness in point of time attends all their concerns. If they go to church upon the sabbath, they will not get there until after the services have commenced—and this happens to good, sober, pious Christians, as well as others; and it happens all their lives. Such is the inveteracy of this habit of negligence, that people, who would be shocked at the irreverence of any person who should so far forget himself as to disturb the devotions of a religious congregation by speaking, or in any other thoughtless manner, seem to have no idea that their entrance into the church in the midst of the most solemn exercises, has any thing in it improper or censurable.

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The same thing occurs in the attendance of such persons upon public business, where they are associated with others. At meetings, appointed for the transaction of such business, if any considerable number are necessary to its accomplishment, there is often, and indeed usually, as much time spent in waiting for a *quorum*, as is consumed in attending to the object of the meeting. This is a great hardship upon those who make a point of being strictly punctual, for it costs them a double quantity of time. And these *behind-hand persons*, if they would only suffer themselves to reflect, could not fail to remember, that punctuality would cost themselves no more time than the want of it. Judging from considerable experience and observation, we are very well convinced, that about as much time is spent in waiting for dilatory people, as is necessary for

transacting the business immediately in view when appointments for the purpose are made.

Espriella, if we do not mistake the writer, mentions his having taken passage in a stage coach at York, in England, which was to start at a certain hour. A few minutes before the time, every thing was prepared; the passengers took their seats; the coachman mounted his box, took the reins and his whip, but did not move. Upon being inquired of why he did not start, as every thing was ready, he replied, *he was waiting for the Minster*—which meant the cathedral church of that name. In a minute or two the secret was explained—the Minster clock began to strike, and before it had finished, the carriage was on its way.—We have no doubt that this habit in the driver made every body who intended to make use of his vehicle strictly punctual. If, however, instead of starting at the moment, he had practised waiting 5 minutes, occasionally, there would have been much delay and vexation, by the dilatoriousness of these behind-hand persons of whom we are speaking. We scarcely ever recollect to have been on the wharf when a steamboat was casting off, without finding some person left, or running with breathless speed to get aboard, being a few minutes *too late*. Such persons, when they find themselves safe on the deck, will almost always look at their watches, and find it *a few minutes later than they imagined*, or their watches a little too slow, or something else is made chargeable with the evil—when the honest truth is, *they are naturally or habitually behind-hand*.

It is not easy to imagine, unless our attention has been particularly turned to the subject, how much time is lost, and how much a man's affairs suffer, from this dilatory disposition. It will more or less run through and affect all his concerns. A dilatory man is perpetually in a hurry. His business always drives him—and business transacted in a hurry, is rarely well done. We once knew a respectable mechanic, whose habit of punctuality was such, that in carrying on his trade quite extensively for more than forty years, he never disappointed a single customer by not having his work done at the time appointed—he never failed of sitting down to his meals within five minutes of the time—he made his family, as well as his workmen, conform strictly to his rules of punctuality—and it hardly need be added, that he always supported the fairest reputation as a man of business—and that he acquired an independent property, beyond the handsome support of a large and expensive family.

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[N. Y. Daily Adv.]

NATURAL CURIOSITY.

Most of our readers, no doubt, have noticed accounts of living toads, that have been found enclosed in stones and trees. This is perhaps one of the most extraordinary facts that has come within the observation of naturalists; so extraordinary, indeed, that few, on the first mention of it, have given it credence. So many instances, however, have occurred, attested by authority so respectable, that it would seem there now remains little room for doubt. Some of the most remarkable may here be mentioned—instances that are well substantiated, and which have led inquiring men to investigate as minutely as possible the philosophy of the matter.—A living toad was found in a large stone at Newark, on Trent, in England—it was white, measured three and a half inches, and appeared incapable of bearing light; for its motions argued an incompatible state, and in an hour it died. But in this time it was seen by several hundred people.—Three living toads were discovered lying together in a stone quarry near Cassel. No aperture was discoverable on the outside of the stone. The toads could with difficulty be removed from their bed, and endeavoured to return whenever they were removed, but died in the course of half an hour. More of the same kind might be added; every one's recollection will no doubt, supply him with instances which have occurred in our own country. Though naturalists have endeavoured to account for this astonishing fact, yet we think their speculations have been in general very visionary. The best account we have seen, is that by J. G. J. Ballenstedt, rector of Papsdorf, in the duchy of Brunswick. The substance of this we present to our readers, hoping that will at least be found amusing, at a time when political news is scarce, and uninteresting. More than amusement need not be expected; for we regard his speculation as we do most speculations of mineralogical travellers and geological societies—mighty light, airy and unsubstantial stuff. But let his rectorship be heard.

Another world besides the one we now inhabit, has had its existence, inhabited, as ours is, by animals terrestrial and marine. A time was when all that is now land was covered by the ocean, as the secondary mountains, with their beds of petrified marine productions, abundantly prove. "There, where at present the plough turns up the soil, and countless cornfields shine with their golden harvests—where immense forests spread their luxuriant trees, among which numerous wild animals sport—where hills and mountains raise their varied summits—where herds of cattle graze—where rivulets and rapid streams wind through valleys, and where cities and villages are now situated—there formerly raged the waves of this ocean—there swarmed hosts of marine animals, of numberless forms and magnitudes."—The Almighty spoke, the waters disappeared, and these animals were left on dry land; those belonging to the dry land were swallowed up, together with their habitations, in the great deep. Sea animals that have been petrified, are found at the present day in the bosom of the earth; and under the bottom of the sea are discovered river muscles and the beds of former great rivers. Whole forests were buried, and have been subsequently turned into coal. The slime and mud of the bottom of the sea, when left dry, was hardened into stone, and strata of regular conformation; which, to produce the present irregularity met with among them, (we suppose,) have undergone divers severe twistifications, by

During this awful catastrophe, these living toads were probably enclosed in their stony prisons. They were covered and buried with mud, which afterwards was hardened into stone by the active exertions of Mr. Unknown Process, a worthy old gentleman, of astonishing powers, who occasionally has the kindness to assist poor philosophers in their immense task of creating worlds. In this mud, poor fellows, they would have gone the way of all flesh, had it not been for their peculiar organization; for they possess the "power of sleeping and remaining in a state of torpor during the winter without having occasion for any nourishment during that period." When enclosed in mud, therefore, the same process went on as in winter, but for a longer time.—They had nothing to do but to go to bed, and get to sleep as soon as possible, and enjoy a comfortable nap of several thousand years, till accident should unhouse them, and turn them out to enjoy the glorious light of the sun, and a thousand other things they had never dreamed of. Being fast asleep, and so closely and comfortably wrapped up in a stone blanket several feet thick, "no exhalation could take place from them, and, therefore, there could be no necessity to replace the lost animal juices by various nourishment." Wonderful phenomenon! The toad, this highly and much despised animal, was of all others the only one capable of undergoing this experiment of nature, and, thereby, of viewing a second time the light of the world. All others the most noble and most beautiful of creatures, even man himself, had it not in his power to live to see such a blessing. Man, with his fellow creatures, could only pass into a new world in a petrified state; insects of a former world could only be preserved from complete ruin in amber, and the mammoth be preserved partially in ice; but the toad was capable on account of its tenacious powers of life, and its peculiar nature, to pass from the old world into the new one, in a living state, and by these means to be snatched from destruction. It has twice trodden the theatre of the world!!—Wonderful phenomenon! we respond. Wonderful, indeed, when we take into consideration the many other created beings that sleep during winter, which had the same risk to run of being enclosed in this mud, and therefore, "from their peculiar nature," had the same chance of enjoying a comfortable nap of several thousand years.

[*Milledgeville Journal.*]

THE ISLAND OF MADEIRA.

From a late account of that Island published in London.

The climate of the island is excellent, being between the extremes of heat and cold; indeed the climate and soil are such, that the fruits of the earth are yielded with very little trouble in their cultivation, which, from the negligence of the inhabitants, is highly essential.

Nearly every kind of European vegetable production is to be met with here, to which may be added the sweet potato and yam. The same may be said of fruits, and with care might be produced most of the tropical ones. The oranges, lemons, and figs, are remarkably fine: peaches, nectarines, apricots &c. are very abundant.

The hills are covered with very large chesnut and walnut trees; the former producing the finest fruit of its kind in the world, and forming one source of sustenance to the hardy peasantry.

The island is formed of one immense hill or mountain, running from east to west, affording views beautifully romantic, abounding with fine springs of the purest water in the universe; while verdure and fertility cover the most unpromising situations. Pico Ruivo is five thousand one hundred feet high.

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The city of Funchal is very delightfully situated at the foot of this lofty range of mountains, on the south side of the island; which forms a kind of amphitheatre, and has a beautiful appearance from the shipping as you approach it, the environs abounding with vineyards, generally in the most luxuriant state; and in the midst of the green foliage of the vine, orange, lemon, pomegranate, bannanas, myrtle, cypress, cedar, &c. are numerous villas belonging to the gentry, or to the British merchants, which, being quite white, add greatly to the beauty of the scene.

Funchal is the emporium of the island; it contains about twenty thousand inhabitants, (the population of the whole island is one hundred thousand souls,) and is the residence of a governor, bishop, corrígidor, juiz da fora and other public functionaries. It is a very irregular built town; the streets are generally narrow and crooked, having no foot paths, and are badly paved; but it is quite the reverse of Lisbon, being extremely clean. The old houses are ill built; but they have lately much improved in architecture, for the modern buildings are generally handsome, and are invariably built with stone, plastered over and whitewashed: most of the houses of the gentry are stuccoed inside, many of them are very elegant, and they are for the most part handsomely furnished in the English style.

The residence of the governor is called the palace of Fort St. Lawrence; it is a large ancient building: a few years since, it was greatly improved by the addition of a new suit of apartments, built under the direction of an English gentlemen, which are elegant and commodious.

Funchal has several handsome churches, the altar pieces of which are highly ornamented with paintings, silver lamps, and railings, together with richly carved and gilt figures, &c.

There are, on the island, about twelve hundred secular priests, governed by a dean and

chapter, with a bishop at their head.

Funchal towards the sea side, is protected by a parapet wall, properly called the musketry parapet: the fortifications consist of a castle erected upon a steep rock, on the west side of the harbour, and is within a few yards of the shore; it is very ancient, and mounts nine guns of different calibre. This fort returns the salute of the different vessels of war, anchoring in the roads; and the castle serves for a state prison.

There is one small vegetable and fruit market, but the cattle, beef, and fish markets, are miserable.

The prisons are ill constructed, badly governed, and insecure. They are altogether a disgrace to the island.

All the towns and villages, of which there are several, are invariably situated on the sea coast.

The country is too uneven for wheel carriages, except just in the town and its vicinity; the mode of travelling, therefore, is on horseback, or on mules, and in palanquins or hammocks.

The native inhabitants of Madeira are commonly of a middling stature, well limbed, and of a darker complexion than the inhabitants of the colder climates of Europe, possessing a warmth of feeling with more volatile humour than is usual in the phlegmatic constitutions of people of more northern countries, they are courteous in their dispositions, and are very polite in their manners among themselves, as well as towards strangers. The females display great taste in adorning their hair, the blackness of which corresponds with their dark expressive eyes, and gives them a very interesting appearance; they are almost universally distinguished for the whiteness of their teeth, the smallness of their feet, and their finely turned ancles.

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The convulsive state of Europe, for so many years, occasioned such an increased demand for the wines of Madeira, that they have, in consequence, advanced to nearly treble the price at which they were sold at the commencement of the French revolution. The cause is removed, but the effect is still continued, by the impolicy of the British merchants, who out-bid each other in their purchases from the land proprietors and wine-jobbers: this rise in the price of wine has produced an increase of income to the landholders, and thus (to use the language of one of their own writers) many now live in splendour, whose parents were content with the simple manners of their neighbours on the opposite coast of Barbary.—Both sexes dress now in the highest style of English fashion: while most of the principle families have their card and music parties, routes, balls, &c.

There is no imprisonment for debt, and condign punishment is never inflicted in Madeira; for certain crimes the criminal is sometimes banished to the Cape de Verds, and when the crime is death, according to the Portuguese law, the felon is sent prisoner to Lisbon, there to await his fate.

Many of the natives are possessed of a turn for poetry, and almost the whole of them are rhymesters.

The islanders have a great taste for music, and are very graceful dancers.

The highest gratifications of the natives are the church festivals, and religious processions; their avidity for these spectacles is so great, that they come from all parts of the Island to see them: although it is constantly a repetition of the same thing; the streets are crowded with the delighted multitude, and the windows of the houses filled with the *senhoras*, who assemble there full dressed to see and be seen.

It is the custom to bury their dead within twenty-four hours after their demise; they carry the body in an open bier to the place of the interment, with the face and arms exposed to full view, attended by a concourse of priests and friars, chaunting a funeral dirge (that is when the deceased leaves money to pay for it, otherwise, no penny no pater-noster;) then follow the friends of the departed, and a motley tribe of beggars bearing lighted torches, although it should be at mid-day. When the body is consigned to the grave, a quantity of lime and vinegar is thrown in to consume it, in order to make room for others, as they always bury within the church. Relatives do not accompany the funerals, being supposed to be too much affected by their loss. Widows of rank do not cross the threshold for twelve months after the death of their *Caro Sposos*.

The dress of the peasantry is very simple, consisting of a shirt and drawers of linen of their own manufacture, the knee-bands of the latter and collar of the former are worn both open, a pair of loose light goat-skin boots, which, with a small blue cloth cap, of a conical shape turned up with red, completes their dress; although they have a blue cloth jacket, but it is generally thrown over one shoulder, being seldom worn. They are very civil when they meet a stranger; they take off their cap, and "hope the Lord will prosper him;" and when they encounter one another, they stand cap in hand, though under a perpendicular sun, till they have satisfied each other as to the welfare of their wives, children, relatives, acquaintances, cattle, domestic animals, and so on: there is then a good deal of ceremony in settling the important question who shall first put his cap on again. They are very muscular, and are capable of undergoing incredible fatigue.

A more desirable spot for the asthmatic or consumptive, uniting such numerous advantages cannot be found; the town of Funchal being situated in a valley open only to the south, while it is completely defended by the mountains rising behind, from those northern blasts, which in other situations too often prove fatal in cases of decline; and the temperature of the atmosphere is very little subject to change, the thermometer being seldom higher than from 75 to 78 in summer, and rarely below 65 in winter; indeed, the climate is so favourable for invalids, that were it resorted to before the disease becomes too long confirmed, it would seldom fail in restoring their health;

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but it is to be regretted that this resource is often deterred till it is too late for any hopes of recovery, and when the patient has scarcely strength to undergo the fatigues of the voyage.

When the Island was first colonized, prince Henry had the sugar transplanted hither from Sicily; and, at one time, there were forty sugar mills on the Island, that article then forming the staple commodity; now there is only one mill remaining, at which little sugar is made, but that little is excellent, and has a scent like the violet.

Instead of the cane the vine is now cultivated, the produce of which is well known and esteemed all over the world: the vines run on trellises of cane work, about three feet from the ground, and the grape is usually fit for making into wine at the beginning of September, when they are obliged to tie up all the dogs, to prevent their getting at the grapes, of which they are very fond. Great quantities are destroyed by rats, lizards, and wasps.

The wine-press is a wooden trough, about six feet square, and two feet deep, over which is a large clumsy lever. When the trough is nearly filled, about half a dozen peasants bare-legged, get in, and, with their feet, press out the precious juice; after which the husks and stalks are collected in a head, and pressed with the lever: this last pressing produces the strongest and choicest wine. The best wine is produced on the south side of the Island, and, when first made, is as deep coloured as Port: it ferments for about six weeks after it is made. It is computed that about twenty thousand pipes are made annually, of which about two thirds are exported, principally to Great Britain, and British colonies, and the remainder is consumed on the Island.

There are many different descriptions of grapes; the large sized, and which is merely a table grape, and is not made into wine, is about the size of a muscle plum, and the bunches are so large as sometimes to weigh twenty pounds.

The wines shipped from Madeira, are classed Tinta, or Madeira Burgundy, Malmsey, Sersial, and simple plain Madeira; the three first thirty pounds per pipe dearer than the latter, which is sixty pounds per pipe of 110 gallons, free on board. This high price is occasioned by the want of unanimity among the English merchants, or indeed a want of good faith towards each other, for they appear occasionally to rouse from their lethargy, meet at their consul's, and agree to give only certain prices for the wines at the press; but, immediately after, each out-bids the other, and the wine-jobber laughs in his sleeve, and profits by their folly.—Were a dozen of the principal wine shippers to be unanimous, they might, with ease, reduce the wines at the press one third of the present exorbitant prices, and could, of course, make a similar reduction in the shipping prices, when they would consequently have larger orders: but what can scarcely be credited is, that when they had what they term a factorial meeting to affix the shipping prices for 1819, all but two of the sapient assembly were for raising the price 8*l.* per pipe; and when these two proved to a demonstration that such conduct would only induce the wine-jobbers to make a similar rise, and merely add to their coffers, already overflowing with the effect of the merchants' past follies; the meeting still deemed it necessary to adjourn for a few days, before they would allow themselves to be convinced.

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No foreign wine is allowed to be imported, not even a few dozen of Port for private use, although it is the production of the mother country: this is being strict indeed, yet it is justifiable, as a very few years since a discovery was made of an attempt to smuggle into the Island a number of pipes of wine from the Islands of Fayal and Tenneriffe; and had not the most rigid methods been adopted, the wine of Madeira would have lost its reputation, as no one who imported wine from thence could have been certain of having it genuine: consequently the wines were seized, and the heads of the casks were knocked out in the public marketplace, which overflowed with the contents: the boats that landed it were confiscated, and the smuggler condemned to transportation, or to pay to the crown, in addition to losing the wine, twice its amount.

The Island is well supplied with good beef, mutton, poultry, and some wild pigeons, quails, partridges, snipes, woodcocks, wild rabbits, &c. The Atlantic furnishes the Island with abundance of excellent jew fish, john dory, pike, mullet, hake, mackerel, pilchards, turtle, cray fish, crabs, shrimps, limpets, &c. They have a breed of small but handsome and serviceable horses.

Most of the commercial characters on the Island are English; and among them are some respectable long established houses, possessing considerable capitals: there are about twenty different firms, and as many families. The total number of British subjects in Madeira, including women, children, clerks, and servants, amounts to one hundred; but they are too haughty, too jealous, and too envious of each other, to be very sociable.

THE PROMPTER.

He does not work it right.

What a vulgar saying the Prompter has selected for his text in this number! Yet these vulgar sayings are often full of good sense.

I knew a young man who left the army with an invincible attachment to gambling. He followed it closely till he had lost most of his wages—he then purchased a shop of goods, mostly on credit—he had his nightly frolics—he *kept it up*—he was a blood of the first rate—his goods were soon gone and not paid for—his creditors began to cry *peccavi*—in fact, *he did not work it right*. But

his friends helped him out of six scrapes, yea, out of seven. At length necessity broke his spirit—it tamed him—he married, became a man of business, recovered his lost credit—and now *he works it right*.

I often say to myself, as I ride about the country, what a pity it is our farmers *do not work it right*. When I see a man turn his cattle into the street to run at large and waste their dung, during a winter's day, I say this man does not work it right. Ten loads of good manure, at least, is lost in a season by this slovenly practice—and all for what? For nothing, indeed, but to ruin a farm.

So when I see cattle, late in the fall or early in the spring, rambling in a meadow or mowing field, pouching the soil and breaking the grass roots, I say to myself, this man *does not work it right*.

So when I see a barn yard with a drain to it, I say the owner does not work it right; for how easy it is to make a yard hollow, or lowest in the middle, to receive all the wash of the sides, which will be thus kept dry for the cattle. The wash of the yard, mixed with any kind of earth, or putrid straw, is the best manure in the world—yet how much do our farmers lose! In fact they do not work it right.

When I pass along the road and see a house with clapboards hanging an end with one nail, and old hats and cloths stuffed into the broken windows, and the fences tumbling down or destroyed, I conclude the owner loves rum—in truth, he does not work it right.

When I see a man frequently attending courts, I suspect *he does not work it right*.

When I see a countryman often go to the retailer's with a bottle, or the labouring man carrying home a bottle of rum after his work is done on Saturday night, I am certain this man *does not work it right*.

When a farmer divides a farm of one hundred acres of land among five or six sons, and builds a small house for each, and sets them to work for a living on a little patch of land, I question whether *he works it right*. And when these sons are afterwards unable to live on these mutilated farms, and are compelled by a host of children to go to work by the day to get bread, I believe they are all convinced that *they have not worked it right*.

When a man tells me his wife will not consent to go from home into new settlements, where he may have land enough, and live like a nabob, and therefore he is obliged to sit down in a corner of his father's farm, I laugh at him, and some time or other he will own *he has not worked it right*.

A man in trade, who is not punctual in his payments, certainly *does not work it right*; nor does the man, who trusts his goods to *any body*, and *every body*.

Whether in Congress or a kitchen, the person who *talks much* is *little regarded*. Some members of Congress then certainly *do not work it right*. A hint to the *wise* is sufficient; but twenty hints have not been sufficient to silence the clamorous tongues of some Congressional spouters.

Family government gives complexion to the manners of a town: but when we see, every where, children profane, indelicate, rude, saucy, we may depend on it, their *parents do not work it right*.

I once knew a young man of excellent hopes, who was deeply in love with a lady. The first time he had an opportunity to whisper in her ear; and before he had made any impression on her heart in his favour, he sighed out his sorrowful tale to her in full explanation. The lady was frightened—she soon rid herself of the distressed lover—she said, *he did not work it right*.

THE TURKS.

In the New England Galaxy we find the following account of the Turks. If the facts are as stated, those that are termed barbarians are *Christians in practice*, while we who are Christians by name, are barbarians in reality.

"Notwithstanding their religion differs from ours, still I cannot help respecting it. They worship the same God that we do—they esteem our Saviour as a great prophet and lawgiver—their prayers are evidently offered with a sincere heart, and considering that it is the religion of their ancestors, how can we blame them for preferring it to ours? Did you but know in what contempt they hold a renegado, you would agree in opinion with me, that the combined powers of the whole Christian world would not be able to persuade a virtuous musselman to change his faith.

"Honesty, so often sought and rarely found, among the enlightened and religious communities of Europe and America, in this part of Asia and in the Turkish dominions west of the Hellespont, stands unrivalled.

"Whether a sense of virtue or moral obligations to each other contained in the pages of the Koran is the cause, I am unable to say; but all travellers who have visited this country, and are divested of prejudice, will do them the justice to say, that theft is a crime almost unknown throughout the realms of the Grand Seignor.

"A merchant of Smyrna having occasion to send about five hundred pound sterling a distance of about four days journey into the country, requested his brokers to find a suitable person! The first they met in the streets, although one of the lowest porters, they engaged for that purpose.

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"The gold was given him in a bag, and without even inquiring his name or residence in the city, he was directed to hand it to the merchant in the village, whose name was given him on a piece of paper: and on his return he should receive the amount agreed on, and about five dollars as a compensation for his trouble.

"On the eighth or ninth day he returned to the city, stating that he had delivered the money, when he received his pay, and went to seek employment in the streets.

"After a lapse of nearly a month, a letter from the merchant announced that he had not received the money, and expressed surprise at the circumstance. This excited considerable alarm, particularly as it was almost impossible to find the messenger, having a second time neglected to take his name. After three days search, however, he was found staggering through the streets with a heavy burden on his back; and being informed of the cause why they sought him, he laid it down and exclaimed, 'God forbid that I should wrong any man, even a *Christian!* but,' he continued, 'I will go back at my own expense and see who has got the property; otherwise my reputation will be ruined!' This speech had a curious effect from a man whose real and personal estate would not, in all probability, have amounted to fifty piastres.

"He departed, and arriving at the village, examined, with a scrutinizing eye, every Christian he met, till at last the Greek to whom he had given the gold, presented himself. 'You have injured my reputation like a dog, as you are, (said the porter,) and have taken from me that which belongs to another! but, thank God, you are found at last; I will take you to the Agha, and have you hung, that the world may be rid of such a scoundrel.' The Greek on his knees begged forgiveness: 'I was in distress, (he said) when I saw you, and having occasion for the money, I assumed the name of my neighbour! It was my intention to have paid him before he would feel any alarm as to the remittance: but spare my character; here is your gold, and here are 500 piastres for yourself!' The Turk allowed him to depart, took the money to the right owner, and returned with his pockets better filled than they had ever been during the whole course of his life.

"The perfect resignation with which the Turks submit to the dispensations of Providence cannot but be pleasing to every one. If they are fortunate, God is praised; if the reverse, they say, 'His will be done.'

"The Turk never effects insurance on his commercial adventures; but often, previous to despatching his vessel, makes a solemn promise, that, should he be fortunate, a sum of money shall be bestowed in charity; which promise is never broken. But, should she be lost, and, as often happens, his whole property with her, he exclaims, 'God's will be done,' and seeks in the streets the means of accumulating another, in the laborious employment of a porter.

"His friends continue to show him the respect he previously experienced, remarking, 'Our brother has been unfortunate, but it was the will of God! Why should we treat him otherwise? We are all liable to lose our possessions, and it would be censuring the decrees of the Almighty, were we to neglect him!' How can we but admire these principles, notwithstanding they emanate from the breasts of those differing from us in religious tenets?"

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MISCELLANY.

Weight of Great Characters—Weighed at the Scales at West Point, August 19, 1783.

	<i>lbs.</i>
General Washington,	209
General Lincoln,	224
General Knox,	280
General Huntington,	132
General Greaton,	166
Colonel Swift,	219
Colonel Michael Jackson,	252
Colonel Henry Jackson,	238
Lieut. Colonel Huntington,	232
Lieut. Colonel Cobb,	186
Lieut. Colonel Humphreys,	221

The above memorandum was found in the pocket book of a deceased officer of the Massachusetts line.

Curiosity respecting the form, physiognomy and stature of eminent men is universal; biographers usually attempt to gratify their readers by detailing all such minute circumstances; yet who knows the weight of general Bonaparte, or the duke of Wellington? Those who read their biography would be gratified to know the cubic inches and exact dimensions of the clay tenements occupied by such martial spirits.

The average weight of these 11 distinguished revolutionary officers, is 214 lbs. and exceeds, we think, that of an equal number of any other nation.

[*Salem Gaz.*

Benevolence the source of delight.—BENEVOLUS, who was uncommonly fond of music, was

dressing to go to an opera, which was much admired, when he heard a murmuring of voices in the passage below his chambers; on inquiry, he was told that it was occasioned by a workman who had dropped half a guinea that he had just received for his week's wages, which could not be found; and on which his own maintenance and that of his wife and child depended. It immediately struck Benevolus that he could afford to give the man the half guinea by staying from the opera that night. He accordingly sent him the money and staid at home.

On another occasion, Benevolus having been prevailed on to promise to dine at a tavern with some young men, of whose company he was fond, was solicited for charity at the tavern door by a woman with an infant suckling at each of her breasts, and two half-naked children following her.—"For heaven's sake, a penny," said the poor woman, "to purchase some bread." "We are very hungry," cried the children. Benevolus, thrusting his hand in his pocket, found he had just a guinea, and no other money of any kind. "Good heaven!" thought he, "I am going to throw away the greatest part of this for a dinner, and it will maintain this poor woman and children a fortnight!"—He slipped the guinea into the poor woman's hand, and, returning directly to his chamber, sent an apology to the company, and dined with more delight on a mutton-chop than he had ever experienced from the most luxurious dinner.

[Moore.

Home.—The great end of prudence, Dr. Johnson says, is to give cheerfulness to those hours which splendour cannot gild, and acclamation cannot exhilarate. Those soft intervals of unbended amusement, in which a man shrinks to his natural dimensions, and throws aside the ornaments and disguises which he feels in privacy to be useless incumbrances, and to lose all effect when they become familiar. To be happy at *home*, is the ultimate result of all ambition, the end to which every enterprise and labour tends, and of which every design prompts the prosecution. It is, indeed, at home, that every man must be known, by those who would make a just estimate either of his virtue or felicity; for smiles and embroidery are alike occasional, and the mind is often dressed for show in painted honour and fictitious benevolence.

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There is something undoubtedly venerable in antiquity, but even this passion may be carried beyond its proper bounds. An old gentleman was once possessed of a jack-knife, which he declared he would not sell for twenty dollars. It was once, said he, the property of my great grandfather—and since I have been the owner of the knife, it has been repaired with four blades and two handles.

The Emperor of Morocco.—The following anecdote serves to show the *high wisdom* of the Emperor of Morocco:—A Jew had ordered a French merchant to furnish him with a considerable quantity of black beaver hats, green shawls, and red silk stockings. When the articles were ready for delivery, the Jew refused to receive them. Being brought before the emperor, who, it is well known, administers justice himself, he denied having given the order, and maintained that he did not know the French merchant. "Have you any witnesses?" said the emperor to the Frenchman. "No." "So much the worse for you; you should have taken care to have had witnesses—you may retire." The poor merchant, completely ruined, returned home in despair. He was, however, soon alarmed by a noise in the street; he ran to see what it was. A numerous multitude were following one of the emperor's officers, who was making the following proclamation at all the cross roads: "Every Jew, who within 24 hours after this proclamation, shall be found in the streets without a black beaver hat on his head, a green shawl round his neck, and red silk stockings on his legs, shall be immediately seized, and conveyed to the first Court or Palace, to be there flogged to death." The children of Israel all thronged to the French merchant, and before evening the articles were all purchased at any price he chose to demand for them.

A knave outwitted.—A man lately came into a merchant's store in Newbern, N. C. and told the merchant he owed him five dollars for goods he lately had of him. The merchant being a correct man in his business, finding no charge against him on book, and knowing also that he never gave credit to strangers, told the honest man he must be mistaken; but he insisted he was not, and paid the money. A few days afterwards he called again and wanted credit for goods to the amount of about \$30, which the merchant declined letting him have. The man pretended to be surprised that he, who had shown such honesty in paying a debt, which the merchant had forgotten, should be refused a further credit; but says the merchant, if I have been foolish enough, for once to trust a stranger, I shall not be such a fool again.

Mineralogy.—The science of mineralogy is at present pursued with uncommon assiduity in England.—The elementary treatises on the subject, as published there, are numerous, but lately Mr. Philips published a second edition of a Manual of Mineralogy, of which in 9 months he sold 900 copies. In Paris there are four lectures on the subject, and last year the only four students who were foreigners, were all from Pennsylvania—these were the young Messrs. Gallatin, Seybert, Keating, and Vancexin. The science seems to be highly deserving of encouragement here, as it has become reduced to such general rules as enables the mineralist or geologist to ascertain with tolerable certainty what substances are, and what are not to be found in the bowels of different parts of the earth, by inspection of its surface, as well as to ascertain by sight, or by analysis, their nature, composition, properties, and uses.

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Cave in Virginia.—Of *Wier's Cave* in Virginia, general C. Jones, of that state, has lately given a description, of which the following is a summary. The cave is of limestone, generally descending in its course. The entrance, about 4 feet square, brings you first into a room 12 or 15 feet high; you then creep along a narrow passage into another room—then, descending a ladder, you enter *Solomon's temple*, in which is a large fluted column, called *Solomon's pillar*, and on the sides curtains descend from the ceiling to the floor, the room about 25 feet high; ascending a ladder,

you pass a steep narrow rock, and then descend into the *curtain room*, profusely ornamented with drapery, having more of the appearance of art than of chance, the curtains hanging from 6 to 12 inches apart, and mostly white and transparent:—next is the *music room*, abounding with stalactites similar to those forming the curtains just mentioned, but of firm texture, on which enchanting music can be made, when struck with a skilful hand:—You next descend a natural staircase, with something like balusters on one side, and then, down a ladder, into the *ballroom*, 100 feet long, and from 16 to 20 high, the floor smooth, the sides ornamented with curtains, and in which there is a sofa, remarkable for its resemblance to the reality. You next encounter a long difficult narrow passage, creeping and sliding part of the way, and then, descending some steps, you enter the *vestibule*, the arch about 25 feet high, in which is a saloon, and Mary's gallery, the latter formed of a horizontal sheet of rock, a foot thick, and 20 in diameter:—You then enter *Washington-Hall*, the grandest part of the cavern, the floor of which is level, and rings to the tread, the arch above 80 feet high, and on one side is something like a row of marble statuary:—The next is *Lady Washington's drawing room*, a handsome large apartment, with something like a bureau in it, on which are inscribed a number of names:—The *diamond room* is next, its walls sparkling with brilliants; then the *enchanted room*, in which is a basin containing about two hogsheds of pure water, and a column, about 25 feet in diameter, called the tower of Babel; and the last is the *Garden of Eden*. This is a spacious apartment, in which a rock seems to be floating over head, called Elijah's mantle, and a large white curtain, and a rock called the salt mountain, are seen at a distance. The general, and the party with him, were two hours and three quarters before they regained the mouth of the cavern.

Missouri.—The Missouri Convention, having completed its labours in the formation of a constitution for that state, have designated St. Louis as the seat of government for the state until 1827, when it is to be permanently established on the Missouri, at or near the mouth of the Osage, which place is to be called Missouriopolis, the former part of the name being Indian, and the latter Grecian.

Iron Rail or Carriage-ways.—In the neighbourhood of Newcastle, this ingenious mode of reducing friction, and facilitating the conveyance of loaded wagons, has been adopted to a very great extent. According to M. Gallois, an extent of 28 square miles on the surface of the earth, presents a series of 75 miles for this species of conveyance; while the interior of the adjacent coal mines contains them to as large an amount. Five or six wagons, made entirely of iron, fastened to each other in regular succession, descend these roads without any other mover than their own gravitating force. By means of a pulley, or wheel, a certain number of carriages in descending occasion a certain number of others to mount, in order to take in a load at the summit of the inclined plane they traverse. We are, however, naturally led to believe that, excepting in very peculiar circumstances, there will always be a great saving of power in conveyances by water, for this simple reason, that the whole weight of the burden so transported, is transported by the stream with a comparatively small loss of power by friction, while the inclined plane, on which the carriage runs, supports only a part of its weight. On the other hand, however, it cannot be denied that many situations in which it would be quite impossible to open a canal, might admit of the establishment of metallic and other rail-ways.

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Varnish for Wood.—The Italian cabinet work, in this respect, excels that of any other country. To produce this effect, the workmen first saturate the surface with olive oil, and then apply a solution of gum arabic in boiling alcohol. This mode of varnishing is equally brilliant, if not superiour, to that employed by the French in their most elaborate works.

American Saltpetre.—A Boston paper says—"We have seen a quantity of Saltpetre refined and chrystallized at the Gunpowder Manufactory of Chelmsford, which, for whiteness and clearness, was much superiour to that of foreign preparations, with which it was compared; and we understand it can be afforded at a less price. The chrystallization of the American articles is uncommonly handsome, and will gratify the attention of any who may view it."

The Horse.—J. Carver, Veterinary Surgeon, has written a letter to the editor of the *Plough Boy*, wherein he stated he had been applied to by a gentleman to cut the Lampas out of his horse's mouth, but that he had declined on the ground that there was no necessity for such an operation; and that the disorder could be cured in the following simple manner:—"Rub the upper part of the roof of the mouth, which you find on those occasions red and swollen, with coarse salt, three or four times a day—throw in his manger also a few ears of the hardest corn; and thus, a few days would totally remedy the evil."

Mr. Carver expresses some astonishment that persons "should fall into the ridiculous and absurd belief, that horses are subject to that imaginary disease called Lampas. Because, examining the palate or roof of the mouth would be quite sufficient to convince a judicious investigator, that the supposed enlargement cannot deprive the animal of his food; since it is not in the least sore, nor shows any signs of sensibility on pressure."

He states that the error proceeds from a want of the knowledge of the animal, and the obstinacy and ignorance of stabularian philosophers; that the operation of "*cutting and burning* the palate with a red hot iron, not only prevents the animal from eating his food for some weeks, but is frequently attended with the most serious consequences by opening the palatine artery, which has bled many a horse to death for want of proper assistance."

Mr. Carver advises gentlemen never to suffer the operation to be performed, but if the parts are very red and very much swollen, they may be just scarified with the point of a sharp penknife, or pricked with a large darning needle. He concludes with saying, "that the cutting and raising the frog from the ground to keep the foot in health—the cutting out the haw of the eye, to cure

inflammation and lockjaw—and the operation of burning for Lampas, can by no means be reconciled to common sense."

Internal Wealth.—A correspondent informs us, that he passed, in Danvers, on Wednesday last, a wagon road of merino wool, weighing three tons, drawn by seven horses, passing from Hanover, N. H. (where it was produced,) to the Factory at Danvers—the value of which was probably from four to six thousand dollars.

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[*Newburyport paper.*

Camels.—Two full grown camels, one eight and the other nine years old, have arrived at Boston from the coast of Morocco.

Paintings.—The paintings by the old masters, which belonged to the late Mr. West, have been sold at public vendue in London. The whole produced 10,027*l.* The Death of Actæon, by Titian, brought 1700 guineas—a Head of Christ, by Guido, 700—Abraham entertaining the Angels, by Rembrandt, 7 by 9 inches, 200—the Bath of Diana, by Titian, 610—a Forest Scene, by Rembrandt, 200—the Last Supper, by Titian, 435—the Virgin Child, and St. John and Mary Magdalen, by Parmagianio, 350—the Watering Place, by Wouvremans, 560—Peasants with Cattle, by A. Berchem, 450—View on a River, by Hobbima, 290—a Knight in full Armour, by Giorgione, 140—View of a Village, by Gasper Toussin, 210—a Dead Hare, and other Game, Spaniel, &c., by Wfenix, 165—Minerva, with her Ægis, &c., by Reubens, 155—Christ betrayed, by Teniers, 126—and many others, at proportionate prices.

New Hampshire State Prison.—The income of this penitentiary, for the last year, has been derived from the usual sources, the labour of convicts in its various departments, the sale of articles manufactured by them, and the fees of admittance to visiters—the whole amounts to \$4660 81 cts. The expenditures during the same period, amount to \$4203 53 cts. leaving a balance gained to the institution during the last year of \$457.28. The amount of property on hand has also increased \$1811.41; and the balance of debts due, \$743.14; making the whole income \$2553.55; from which deducting the amount received from the treasury, leaves a balance further gained of \$454.55. In the amount of debts due is included \$3637.03, charged to the state house committee, for labour of the convicts in preparing stone, &c. for that building; which, if paid over to the state prison, would reduce the sum required from the treasury to meet the estimated expenses of the present year to \$963.

Anecdote of Lycurgus.—Lycurgus, the Spartan lawgiver, to show his countrymen the vast importance of education, by reason of its influence in forming the minds and manners of a people, caused two whelps of the same litter to be bred in quite different ways; whereby the one became sluggish and ravenous, the other of a good scent, and skilled in hunting. Finding the experiment to answer his design, he soon took an occasion at an assembly of the Lacedemonians to discourse on this subject, and address them in the following manner:

"It is of great advantage, fellow citizens, to the acquirement of virtue, when any one is trained up in the customary practice of wholesome instructions, and precept, which I will presently let you see by example."—On this, he ordered the young dogs to be brought into the midst of the hall, where was set before them a vessel, in which meat had been frequently boiled, and a *live hare*.—Whereupon, according to their different breeding, one flew to the hare, and the other as greedily ran to the vessel.

The spectators were surprised: and, as they were musing what should be the intent of his introducing the whelps after this manner, he said to them, "This is what I before told you; you perceive these creatures do as they were taught, for, though they are both of a litter, yet the diversity of breeding has made one a good hound, and the other a cur, good for nothing but to lick pots and dishes."

FOR THE RURAL MAGAZINE.

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The following extract is taken from the Poems of CUNNINGHAM, whose pastorals are those in which he is generally considered as the most successful. The moral of this fable is good; and if resembled in our daily intercourse with each other, might be highly useful.

I.

THE FOX AND THE CAT.

The Fox and the Cat, as they travell'd one day,
With moral discourses cut shorter the way:
"Tis great," says the Fox, "to make Justice our guide!"
"How godlike is mercy!" Grimalkin replied.
Whilst thus they proceeded, a wolf from the wood,
Impatient of hunger, and thirsting for blood,
Rushed forth—as he saw the dull shepherd asleep,
And seized for his supper an innocent sheep.
"In vain, wretched victim, for mercy you bleat,
When mutton's at hand," says the Wolf, "I must eat."
Grimalkin's astonished—the Fox stood aghast,
To see the fell beast at his bloody repast.
"What a wretch," says the Cat,—"'tis the vilest of brutes:
Does he feed upon flesh, when there's herbage—and roots?"
Cries the Fox, "While our oaks give us acorns so good,
What a tyrant is this, to spill innocent blood!"
Well, onward they marched, and they moralized still,
Till they came where some poultry picked chaff by a mill;
Sly Reynard surveyed them with gluttonous eyes,
And made, (spite of morals,) a pullet his prize.
A mouse too, that chanced from her covert to stray,
The greedy Grimalkin secured as her prey.
A spider that sat in her web on the wall,
Perceived the poor victims, and pitied their fall;
She cry'd—"Of such murders how guiltless am I!"
So ran to regale on a new taken fly.

MORAL.

The faults of our neighbours with freedom we blame,
But tax not ourselves, though we practice the same.

From Barton's Poems.

STANZAS.

We knew that the moment was drawing nigh,
To fulfil every fearful token;
When the silver chord must loosen its tie,
And the golden bowl be broken;
When the fountain's vase, and the cistern's wheel,
Should alike to our trembling hearts appeal.

And now shall thy dust return to the earth,
Thy spirit to God who gave it;
Yet affection shall tenderly cherish thy worth,
And memory deeply engrave it,
Not upon tables of brass or stone,
But in those fond bosoms where best 'twas known.

Thou shalt live in mine though thy life be fled,
For friendship thy name shall cherish
And be one of the few, and the dearly lov'd dead,
Whom my heart will not suffer to perish;
Who in loveliest dreams are before me bro't,
And in sweetest hours of waking thought.

But oh! there is one, with tearful eye,
Whose fondest desires fail her;
Who indeed is afraid of that which is high,
And fears by the way assail her;
Whose anguish confesses that tears are vain,
Since dark are the clouds that return after rain!

May HE, who alone can scatter those clouds,
Whose love all fear dispelleth;
Who, though for a season his face he shrouds,
In light and in glory dwelleth,
Break in on that mourner's soul, from above,
And bid her look upwards with holy love.

MEMORY.

Borne on the Ocean's heaving breast,
 Mark yon stately vessel sail;
 How in floating canvass drest,
 Courts she every wanton gale!

Soft the prosp'rous breezes blow;
 Fast she makes a wish'd-for shore;
 Glitt'ring bright in splendid show,
 Rich with India's golden ore.

Gently foams the recreant tide,
 'Neath the golden-gilded prow;
 Pleased the joyous waves divide
 Still behind no track they show.

Yet at some far-distant day
 Memory will the scene retrace;
 Mark the wanton breezes play,
 Hail the vessel's easy grace.

Buoyant thus on life's broad stream,
 Man in all his beauty moves;
 Blest with sweet contentment's beam,
 Blest with all his bosom loves.

Swift each passing year rolls on;
 Still contentment glads his mind;
 Soon each passing year is gone—
 Gone, nor leaves a track behind.

Then alike fond memory's powers
 Pleasures long since past, review;
 Lead him back to youth's bright hours,
 And each blissful scene renew.

BANK NOTE EXCHANGE,

[400]

AT PHILADELPHIA—*Oct. 3d, 1820.*

	Per cent Disc't
VERMONT—generally,	4
MAINE—generally,	4
NEW HAMPSHIRE—generally,	4
MASSACHUSETTS—generally,	4
Boston Bank,	2
RHODE ISLAND,	4
CONNECTICUT—generally,	2-4
NEW YORK,—City Bank,	par.
Country generally,	2-6
J. Barker's Ex. Bank—no sales	
BANK OF UPPER CANADA,	10
NEW JERSEY notes,—	par.
PENNSYLVANIA—Farmer's Bank, of Lancaster; Easton; Montgomery County; Chester County, at Westchester,	par.
New Hope; Northampton,	1½
Susquehanna Bridge Company,	2
Lancaster Bank,	1½
York; Gettesburg; Chambersburg,	2
Northumb.; Union; Centre,	15
Farm. and Mech. Bank of Pittsburgh,	25
DELAWARE—generally,	par.
MARYLAND—Baltimore Banks,	½
City Bank,	5
Annapolis; Hagerstown,	2-3
VIRGINIA—Country generally,	2
N. W. Bank, at Wheeling,	8
COLUMBIA DISTRICT—Country generally,	1

Mech. Bank of Alexandria,	3
NORTH CAROLINA—State Bank at Raleigh, and Branches,	4
Cape Fear; Newbern,	4½
SOUTH CAROLINA—State Banks, generally,	2
GEORGIA—State Banks, generally,	3
Augusta Bridge Company,	75
TENNESSEE—Few sales at any price.	
KENTUCKY—Kentucky Bank, and Branches,	30
OHIO—Marietta; Steubenville	11½
Bank of Chillicothe,	5
Country generally,	20-50

PRICES CURRENT—*Oct. 3, 1820.*

	Per	D. C.	to	D. C.
Beef, Philad. Mess,	<i>bbl.</i>	13.00		13.50
Butter, Fresh	<i>lb.</i>	0.18		
Cotton, (Louisiana)	"	0.19	"	0.21
Cotton Yarn, No. 10,	<i>lb.</i>	0.36		
Flax, Clean,	"	0.16	"	0.19
Firewood, Hickory,	<i>cord,</i>	6.00	"	7.00
Oak,	"	3.25	"	4.25
Flour—Wheat, P. S. F.	<i>bbl.</i>	4.50		
Rye,	"	2.75		
Corn Meal,	"	2.87		
Grain—Wheat,	<i>bush.</i>	0.85 sales.		
Rye,	"	0.45	"	0.50
Corn, Pa.	"	0.48	"	0.53
Oats,	"	0.25	"	0.30
Hams—Jersey,	<i>lb.</i>	0.11	"	0.13
Leather—Sole,	<i>lb.</i>	0.24	"	0.30
Upper, undrs'd.	<i>side,</i>	2.75	"	3.50
Plaster of Paris,	<i>ton,</i>	4.75	"	5.00
Shingles, cedar, 3 feet	1000	20.00		
Cypress,	"	4.00		
Molasses, S. H.	<i>gall.</i>	0.50		
Nails, Cut, all sizes,	<i>lb.</i>	0.07	"	0.12½
Pork, Jersey & Penn. Mess,	<i>bbl.</i>	15.00		
Mess, Wool—Merino, Clean,	<i>lb.</i>	0.75		
Do. in Grease,	"	0.40		
Common,	"	0.50		
Yarn, Hempen,	"	0.10	"	0.11

STATE OF THE THERMOMETER.

	9 o'clock.	12 o'clock.	3 o'clock.
Aug. 26,	80	81	82
28,	72	73	74
29,	71	76	76
30,	73	77	78
31,	75	77	81
Sept. 1,	76	79	83
2,	74	75	76
4,	72	76	79
5,	73	77	80
6,	76	79	83
7,	77	82	94
8,	77	80	82
9,	77	82	87
10,	80	82	86
11,	80	83	83
12,	70	70	73

13,	67	69	72
14,	70	73	73
15,	71	73	76
16,	72	74	75
17,	75	75	79
18,	74	76	78
19,	72	73	70
20,	67	69	65
21,	54	62	61
22,	58	68	68
23,	63	70	70
24,	61	64	68
25,	64	76	75
26,	55	64	64
27,	65	70	70
28,	62	74	74
29,	62	68	67
30,	65	76	75
Oct. 2,	67	73	73
3,	65	69	71
4,	67	60	—

RAIN GUAGE AT PHILADELPHIA.

	In. hun.
Sept. 12, Rain,	1.16
18 & 19, do.	0.40
Oct. 3, do.	4.00
3 to 4, do.	1.65

Errata in p. 360, No. 9, for "he will," &c. read, *we* will, &c.

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FOOTNOTES:

- [1] Chap. xiv. 34, 35.
- [2] Tableau de l'agriculture Toscane, par J. C. L. Sismondi.
- [3] See Edinburgh Review for March, 1817, p. 57.

Transcriber's note:

Minor typographical and punctuation errors have been corrected without note. Irregularities and inconsistencies in the text have been retained as printed.

Mismatched quotes are not fixed if it's not sufficiently clear where the missing quote should be placed.

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