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UNITED STATES OF AMERICA.

THE INTELLECTUAL AND MORAL RESOURCES OF HORTICULTURE.

AN

ANNIVERSARY DISCOURSE,

PRONOUNCED BEFORE

THE NEW-YORK HORTICULTURAL SOCIETY,

AT THE

ANNUAL CELEBRATION,

AUGUST 26, 1828.

BY JOHN FREDERICK SCHROEDER, A. M.

AN ASSISTANT MINISTER OF TRINITY CHURCH, IN THE CITY OF NEW-YORK;

A MEMBER OF THE SOCIETY.

Salve, magna parens frugum, Saturnia tellus,
Magna virum: tibi res antiquæ laudis et artis
Ingredior, sanctos ausus recludere fontes.

VIRG. GEOR. II. 173.

NEW-YORK:

PUBLISHED AT THE REQUEST OF THE SOCIETY.

1828.

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Extract from the Minutes of an Extra Meeting of the "NEW-YORK HORTICULTURAL SOCIETY," held on the 2d September, 1828.

ON Motion, it was *unanimously* Resolved, That the thanks of the Society be presented to the Rev. JOHN FREDERICK SCHROEDER, for his elegant and classical Address, delivered before them in celebrating their tenth Anniversary, and that a Committee be appointed to request a copy of the same for publication.—Whereupon the following persons were appointed:

WILLIAM R. COOKE, &

WILLIAM WILSON.

WILLIAM R. COOKE,

Recording Secretary.

New-York, Sept. 3, 1828.

DEAR SIR,

WE have much pleasure in enclosing you a copy of a Resolution, passed unanimously, at a Special Meeting of the "New-York Horticultural Society," held last evening. It would be extremely gratifying to us, and no doubt so to every member of the Society, if you will do us the favour to furnish a copy of the able and eloquent Discourse, for publication, which you delivered before them, in celebrating their tenth Annual Festival.

In making this request, on behalf of the Society, we take the opportunity of tendering you our individual thanks for the high satisfaction which it afforded us.

We are, Sir, most respectfully,

Your Ob't Servants,

WM. R. COOKE, }
WM. WILSON, } Com.

To the Rev. JOHN FREDERICK SCHROEDER.

New-York, Sept. 4, 1828.

GENTLEMEN,

YOUR Communication, enclosing an Extract from the Minutes of the "New-York Horticultural Society," is a flattering assurance, that my endeavour to fulfil the pleasing duty, which their partiality assigned to me, was well received. Our FRANKLIN has somewhere observed, that while he looked on human nature, he was agitated by a conflict of sadness and disgust and pity; but when his eye reposed in contemplation on the vegetable kingdom, all that he beheld was "beauty, harmony and peace." My *memory* may be, perhaps, unfaithful to the *words*, but I am conscious that my *heart* is true to the *emotion* of the great philosopher. And amid the turmoil of party politicks, and the perplexities of commerce, and all the thorny mazes of our busy mart, if the accompanying Discourse may but scatter a few flowers, to recreate with amiable, pure and hallowed sentiments, any one in the vast crowd, I shall be abundantly rewarded.

Accept, Gentlemen, my thanks for the kind manner of your Communication, and believe me,

With sincere esteem,

Your Ob't Servant,

J. F. SCHROEDER.

WM. R. COOKE, & WM. WILSON, Esqrs. Com.

ANNIVERSARY DISCOURSE.

GENTLEMEN OF THE HORTICULTURAL SOCIETY,

ASSEMBLED at this interesting season of the year, it is peculiarly proper for us to indulge those sentiments which our Association would inspire. The horn of plenty overflows with its abundant fruits; the gardens and the fields are glad; the groves and forests are resounding with a cheerful harmony. And while on every side the valleys and the hills rejoice, we may appropriately celebrate our festival.

We have a high sanction for the sympathies which we have assembled to indulge. When the Beneficent first chose a scene to occupy our intellectual and moral faculties, having "planted a garden eastward in Eden," he there "put the man whom he had formed." And when Earth, and "all which it inherit," shall have passed away, within the precincts of a future world the ransomed shall partake of joys, that are depicted under the alluring imagery of a garden. Refreshing bowers and luxuriant verdure, a pure crystal stream, sweet fragrance and delicious fruits were man's first blessedness, and are the graphick *emblems* of that final bliss which is reserved for him.* It was a Paradise that we have lost; we are to regain a Paradise.

* Compare Gen. ii. 8. 9, 10. and Rev. ii. 7. xxii. 1. 2. 14.

While we yield to the emotions which are suggested by our Anniversary, we may be enlivened therefore by this interesting thought:—We are engaged in the promotion of an object suited to man's highest earthly destinies.

It is calculated to afford the *intellect* abundant themes, to which a patriarch's long life might with unceasing gladness be devoted; for it extends above, beneath, around us, rare beauties that are without limit, and varieties that are without end; it is replete with the animating pleasures of discovery, and the calm delights of contemplation. It is calculated also to affect us by yet higher and more wholesome influences; for it can act upon the *heart* with a benignity, that has power to allay the angry passions of the breast; it can promote our peace on earth; and it can fill us with pure sentiments and holy breathings.

Let us, then, exult to-day, in these attributes of our subject.

I. We have said that it was calculated to engage *the intellect*.

There is no human science that is more ample in its range, or more attractive in its multiplied allurements. It unfolds to the astonished view a living landscape—the wide world; and as its votary is pointed to the Eastern and the Western Hemisphere, it leads him, in full vision of the extended scenery, to look abroad. It then invites his contemplation to the bold draft that marks *its outline*.

In all that may appear so wild and scattered, in these multitudes that teem throughout the vegetable kingdom, it discerns an exquisite gradation,

“ From the proud woods, whose heads the sky assail,
To the low violet that loves the dale.”

And it disposes all, with a regard to that established order, which is proclaimed by their *peculiar characteristic*s. With a philo-

sophick eye, it dwells upon *the parts of which they are composed*, and it again developes every where the rudiments of "heaven's first law." It views the *external* forms which plants exhibit, and sees them to be well-ordered both for nourishment and reproduction. It names, it classifies, and it describes the gifts of Flora. Within the bounds of four and twenty classes, it brings no less a multitude than thirty thousand* species. It beholds their *internal* organization. It explains the Physiology of plants.† It sees them pass through their successive states, from their incipient existence, to the period when they have attained maturity, and sink again into their native dust. Their numerous causes of *disease* are also carefully detected; the favourite places of their *habitation* are distinctly marked; and whatever is connected with the peculiar traits, which they assume, is made a theme of accurate and laborious investigation.‡ The details resulting from this scrutiny abound in interesting facts.

But it is the province of our subject to indulge a range yet wider. It investigates the *geographical distribution* § of the vegetable families, in which it every where discovers a variety the most pleasing, regulated by established general principles. It explores the surface of the globe, with a regard to its various qualities of *soils and earths*; and here Geology and Chymistry, its handmaids, decorate it with new charms. It is concerned

* See Decandolle and Sprengel's *Philosophy of Plants*, P. II. Sect. 122.

† An excellent popular treatise on *Vegetable Physiology* is contained in the *Library of Useful Knowledge*, P. I. No. 14. Nov. 1827.

‡ On the several subjects suggested in this paragraph, the "*Philosophy of Plants*" will abundantly supply useful information.

§ The "*Essai sur la Géog. des Plantes par Al. de Humboldt et A. Bonpland*" is full of interest.

also to improve and renovate the earth by *fertilizing agents*; and the vegetable, animal, and mineral kingdoms here conspire in its cause.*

With an admirable ingenuity excited by its wants and its emergencies, from age to age it has contrived *implements, machines*, and other *articles of mechanism*. In the history of these, is comprehended much to entertain and discipline the mind.

With a parental care, it rears appropriate *structures*, for the nourishment, security and preservation of its household; it erects larger *edifices*, both for use and ornament; and it disposes all, with a regard to the just principles of taste. Its gardens thus are *Landscapes*, where the useful and agreeable, as lights and shades in the *chiaro-oscuro*, charm the eye.

These lovely scenes are the abode of the aimable genius of Horticulture. She ranges the wide world with an indefatigable assiduity; she gathers, and transfers, and naturalizes, and adapts to our use, whatever can regale the senses. And it is her enviable occupation "to dress and keep" what she has thus gathered and arranged. A boundless theme is here presented; it is the *application* of her Art. It is to sow and plant; to prune, to train, and to transplant; to propagate by grafting, cutting, budding, layering and inarching. And connected with these operations are remarkable phenomena, that lead the mind to pleasing and to elevating thoughts; for it may thus dwell on many of the most interesting pages in the book of Nature.

Both as a SCIENCE and as an ART, if it be properly appreciated, Horticulture is abundant in resources. It has occupied the

* LONDON, in his *Encyclopædia of Gardening*, Lond. 1827, has collected much that is very curious and instructive, on the topics contained in this and the two following paragraphs.

meditations of the learned, in all countries and at all periods of the world, as is demonstrated by *its Literature*. Within its gardens are inscribed the names of Hesiod and Homer, Aristotle and Theophrastus. Xenophon and Ælian, Cato, Varro and Palladius, Martial and Horace wandered there. Beneath its shades, and in its cool retreats, a Virgil could repeat his Eclogues. Dioscorides, and Pliny too, and Columella lingered in its fragrant walks. All these conspire to commend the fascinations both of Flora and Pomona. To their shrine each realm of Europe has sent multitudes of votaries. From Britain the ingenious Bacon, and the philosophick Evelyn, and the poetick Cowley mingled in the throng; and in their train were Milton, Addison and Pope; Thomson, Shenstone, Cowper, Mason; Walpole, Darwin and the illustrious Sir Joseph Banks. And from the continent, amid a bright array of genius and learning, we may recognise a Buffon, a Delille, and a Saint-Pierre, in France; in Germany, a Hirschfeld and a Herder; in Switzerland, a Conrad von Gessner; and in Sweden, the renowned von Linné. Such* famed scholars and historians, poets, statesmen and philosophers commend our subject by the various contributions, with which they have themselves adorned it. To dwell in contemplation on those spots, which by their presence they have consecrated, gratifies the generous mind.

And other pleasing themes await the votary of Horticulture. With a retrospective view, he may recur in meditation to its *Ancient History*, and be refreshed by its alluring visions, as they pass successively before him.

* It may be invidious to *select* from the distinguished names of those who have adorned and illustrated our subject; but it has been my aim, to present a view of *various* minds, *all* kindling at the contemplation of the same source of light.

He now sees man's first place of bliss,

———"planted with the trees of God,
Delectable, both to behold and taste."

Now the gardens of the Hesperian nymphs, with every classical embellishment, attract his eye. He sees the Babylonian terraces, which, by the magnificence of art, and the luxuriance of nature, formed a wonder of the world. The pleasure-grounds of Solomon, described in Scripture; and the gardens of Laertes and Alcinoüs, which Homer has immortalized; the far-famed Sardian retreat, which Cyrus cultivated; the Panchæan paradise and the Orontian grove, *here* rise in their enchantment. *There* appear, the celebrated vale of Tempé; and the Academus and the Lyceum, each associating nature in her loveliness with philosophy in all its pride. The splendid works of ancient Roman sumptuousness are seen displayed by a Lucullus and a Hortensius; and to these villas that extend round the Imperial City, the orators, the poets and the philosophers of Rome invite the student who would sympathize in their emotions. Such is the Ancient History of Horticulture.

And the first rosy light, that beamed after the dark ages, kindled a new radiance about our subject. It is thus encompassed by the attractions of its *Modern History*. The gardens of Holland and the Netherlands feel the influence of Science and the Arts revived. The atmosphere of Italy and France next breathe rich odours. They soon scent the isles of Britain; they pervade the continent.

This department of our subject draws its *copious* details from the political and moral state of Europe, while the last four hundred years have been inditing their momentous records. To the understanding of the intelligent it here offers a rich feast; for its garlands have allured the eye and called forth the emulation

of the Medici in Italy, Louis the XIV of France, Peter the Great of Russia, and the most celebrated literary worthies, and benefactors of the human race, in every region of the world. Since the invention of the Microscope at the beginning of the seventeenth century, the most wonderful discoveries, alluring multitudes to the pursuit of vegetable science, have given animation to their diligence, and recompensed their toils.

The History of Horticulture thus puts forth its buds and thus expands its flowers, in Ancient and in Modern times.

When the inquirer, who is curious to learn its *present state*, ascends that eminence from which its groves and walks may be discerned, his interest is yet further heightened by the most gladdening discoveries. *In Europe*, a fresh impulse to investigation has been experienced; and many a distinguished naturalist on the continent is emulous to obtain a wreath, like that which decorates the brow of him who lately towered aloft,

*Quantum lenta solent inter viberna cupressi.**

But now, alas! the mournful branches of the funeral tree are waving over him; yet, with the distinctive qualities of the same cypress, the memory of the immortal Sir James Edward Smith† shall be evergreen and everduring, *sempervirens et sempiterna*.

Throughout the East, new stores are yet continually unfold-

* Virgil, Ecl. I. l. 26.

† This great naturalist, the President of the Linnean Society of London, breathed his last on the 17th of March in the present year. The tribute that I feebly utter is dictated by an ardent admiration of his rare endowments. The *CUPRESSUS sempervirens* I have called also *sempiterna*, with a reference to its durability. THEOPHRASTUS says, it remains uncorrupted *four generations*, τέτραγας γενεάς; PLINY alleges *four hundred years*, quadringentis annis; and VITRUVIUS ascribes to it *eternity*, æternam diuturnitatem. See Buxtorf, *Geog. Sacr.* col. 22.

ed to us; and the vegetable treasures within *South America* appear in real value to transcend its precious mines.

And we rejoice also at beholding in our *happy land*, a scene at which the Horticulturist has cause to glory. We have already, as a people, enriched by numerous treatises and volumes, the Library that illustrates the natural products of the earth. Were I not surrounded at this moment,* by the learning, genius and talent, which have been most conspicuous in accomplishing these toils, I would with pride repeat the names of many, and add to them, with pleasure, their appropriate epithets.

And learning, genius and talent are emulated by indefatigable industry and practised skill. The gardens that surround our city are abundant evidences of this truth.†

Throughout the Union, enterprise is now directed to the culture of the most valuable plants.‡

Besides *sectional* objects, confined to particular regions of our country, there are others also claiming universal notice, which may be denominated *national*.

Of these, the *first*, by its importance, is *the cultivation of the vine*. The interesting facts and valuable suggestions on the subject, which you received from our President in his Inaugural Discourse,§ deserve particular regard. Four years have intervened, since the Anniversary when he pronounced it, and his sentiments have been corroborated by indisputable proofs. Ex-

* A Catalogue of Books and Treatises by Members of the New-York Horticultural Society may be seen in the Appendix, A.

† The Publick Gardens in and near the city of New-York are mentioned in the Appendix, B.

‡ On this subject see the Appendix, C.

§ An Inaugural Discourse, delivered before the New-York Horticultural Society, Aug. 31, 1824.

periments have been successful, and the voices of our intelligent and enterprising Farmers and Horticulturists proclaim: 'The vine will flourish in our country, in various latitudes; and it yields to us an agreeable and valuable product.* Yes! and native wines derived from it, and from the fruits of our orchards† and our gardens, may be hailed by the philanthropist as the harbingers of a new era. The epocha may not be distant, when the draughts that are inebriating and destroying thousands of our population, shall be superseded by the use of milder and of salutary beverages.

A *second* object, that may be called national, is *the cultivation of the mulberry*. Distinguished among trees, as that from which the serick insect draws its nourishment, the mulberry *deserves* indeed particular attention. The American Institute of the City of New-York, anticipating the results to be derived from this invaluable plant, have received the aid and counsel of the learned President of the Linnean Society, and have entered upon a large and liberal plan of operation. We congratulate them, and sincerely trust, their labours may be remunerated by a rich abundance of the golden fleece.‡ As an article of manufacture, silk has claimed the notice of our *general government*. Its House of Representatives have ordered, that the Secretary of the Treasury "cause to be prepared" a Manual on the subject,

* See the Appendix, C.

† In the Appendix to Dr. Hosack's Inaugural Discourse, is an interesting letter on this subject, by Dr. S. L. Mitchill.

‡ A Volume on the culture of silk, by Dr. Pascalis, is now ready for the press. It is accompanied with a Preliminary Dissertation by *Professor Anthon* of Columbia College, who argues that the product of the silk worm is to be understood by the *golden fleece* of antiquity. See Appendix, D.

and a well-digested Treatise* was accordingly transmitted to them by the Secretary, during the period of their last session. It is before the publick; and its very favourable views of the growth and manufacture of silk in the United States, present a field of speculation, that is peculiarly attractive. The same policy, which has enlightened, and will no doubt stimulate by due rewards, the enterprising and industrious in this particular department, may soon become extended, (*veni dies !*) to the whole range of Horticulture !

Had I not already dwelt so long upon the first of the particulars, that were proposed for your attention, I might here enlarge upon the *future prospects* of our favoured land. I might collect before you the anticipations, which are suggested, by its unparalleled advancement in the facilities of transportation and the extent of commerce :—its canals and rail-roads ; the staple products of its soil ; and its natural adaptation for the residence of the most enlightened of all people on our globe. Exhibiting, in their true colours, the glories that may one day reach, like the celestial bow, from our Atlantick to our Pacifick confines, I might direct your contemplation to this graphick symbol of our great national destinies. And when all sounds of a disunion shall have passed away ; when the rude storm of political animosity shall have been stilled ; and when the last echo of the thunderings that arrest us in the South shall cease to roll ;—as the prismatick arch, the token of an everlasting covenant of

* It is entitled “ Letter from the Secretary of the Treasury, transmitting the information required by a resolution of the House of Representatives, of May 11, 1826, in relation to the Growth and Manufacture of silk, adapted to the different parts of the Union”. *Octavo, Wash. Gales & Seaton, 1828. pp. 220.* Another Congressional Document on the subject is the “ Letter from James Mease, transmitting a Treatise on the rearing of silk worms, by Mr. De Hazzi of Munich, &c.” *Wash. Gales & Seaton, 1828. pp. 108.*

peace and union, shall shed its smiles upon our soil, I might depict the happiest of lands, that, like an aromatick "field which the Lord hath blessed," shall send up to heaven, from the wide extent of its vast territories, the mingled perfumes of its cornu copix, sweet-scented fruits and fragrant flowers.

As we mingle our sympathies at this anniversary commemoration, we may with joy reflect upon the numerous, the varied, and the enlivening themes, by which Horticulture, with its stores of learning, and with its stimulus to industry, is calculated to engage the intellect.

II. And there is a *moral* halo that invests our subject. It can improve the *heart*.

As we behold the wonders that abound throughout the vegetable kingdom, we are lost in the interminable manifestations of the Supreme.

The *organization* that pervades it lifts up our hearts unto an Omniscient Creator. We cannot view the mechanism of a single plant without this sentiment. We see the several parts of which it is composed, arranged with a regard to its nutrition and its perpetuity, demonstrating a contrivance* the result of the profoundest wisdom.

The *succession* that is discoverable in the annual circuit of our globe, directs our thoughts to Him, who is

" ——— the life and light

" Of all this wond'rous world we see."

Flowers, fruits, and culinary plants attain perfection, *in a series* that must command our gratitude. Not lavished with an indis-

* Very beautiful illustrations of this truth are collected by Dr. Paley, in his Natural Theology, Chap. XX. *Of Plants*.

criminate profusion, at some one favoured crisis of the year, they are dispensed with an all-wise frugality, and “*yield their fruits every month.*”

Their *nature* also is adapted to the condition of mankind. Where sultry beams are shed upon the torrid zone, umbrageous groves extend their branches. Where the Polar skies are cheered by a short summer's reign, its vegetation is distinguished by a rapid* progress to maturity. Where manual labour is discouraged by oppressive heat, and where the mind is destitute of moral enterprise, abundant aliment is yielded to the lowliest cultivator of the soil. But in the *temperate* regions of the earth, where, unexposed to the depressing influence of an ungenial atmosphere, man walks abroad, delighting to exert his energies, *here* Nature calls forth talent, and awakens industry, by obstacles, which she allures them to surmount. As if anticipating the caprice of man, in countries, where the valley and the mountain each invite his residence, the products of the *torrid* zone are found within this vale; and on that towering summit is displayed to view a *Northern†* vegetation.

* In Lapland and at Olekminsk in Siberia, barley ripens in *seven or eight* weeks. See Georgi as quoted by Malte-Brun, *Syst. Geog.* B. XX. *Grain.*

† Les vallées des Andes sont ornées de bananiers et de palmiers; plus haut se trouve l'arbre bienfaisant dont l'écorce est de fébrifuge le plus prompt et le plus salutaire. Dans cette région tempérée des quinquinas, et plus haut vers celle des *escallonia*, s'élèvent des chênes, des sapins, des *berberis*, des *alnus*, des *rubus*, et une foule de genres que nous ne croyons appartenir qu'aux pays du Nord. Aussi l'habitant des régions équinoxiales connaît toutes les formes végétales que la nature a disposées autour de lui: la terre développe à ses yeux un spectacle aussi varié que la voûte azurée du ciel, qui ne lui cache aucune de ses constellations. See Humboldt's “*Essai sur la Géog.*” near the close.

In the distribution of the *odours* that are breathed around us, Nature seems to have been regulated by the same economy. Where happiness is found only in the refinement of the senses; where in luxurious repose, the Hindoo, with no zest for intellectual delights, seeks an innocent enjoyment in exhalations of sweet flowers; there the loveliest of plants, that are unrivalled in their perfume, dispense aroma in rich offerings to the ambient air.

“ Who has not heard of the vale of CASHMERE,
 “ With its roses the *sweetest* that earth ever gave ?”

Where man, upon another continent, is seen degraded by the indulgence of the most loathsome appetites, and we are told that, by a remarkable peculiarity,* which he possesses in common only with the inferior animals, the Hottentot experiences an emotion of delight, at the carrion-smell of what regales the hyaena and the vulture; in that region of the earth, (as if the poor savage were to be indulged in his caprice,) while Oriental perfumes are withheld,† plants distinguished among us by their offensiveness, the *Stapelias*, in their variety, abound upon the soil, and fill the atmosphere with their putridity of savour.

Wherever man resides are found *nutritious berries*, which are agreeable to *all*. The barberry, the cranberry, and the dwarf mulberry, regale the distant Laplander; and beside these, the currant forms a wholesome food for the inhabitants of Greenland. Does the exhausted native of warm climates, parched with thirst, ask such plants as may be most refreshing to his enfeebled energies? Lo, Nature's bounty has supplied him with the melon, and the pine-apple, and all cooling fruits.

* See Malte-Brun, where he treats of the *Boschmen*, B. LXX.

† See Appendix E.

And does the mariner, from the long use of salt provision, need some prompt remedy for its scorbutick influence? He may coast along the shores of the most distant regions in the North or South, and be furnished with the succory, the cresses, and the wild-sorrel, from Siberia to the remotest of the Pacifick isles. The Botanical Materia Medica is but an enlargement of this interesting thought.

But on a theme so vast I dare not venture further. It is replete with interest and instruction, wheresoever we direct our eyes, from the most attenuated *lichen*, that is scarce discoverable on the rock, to the huge *baobab*, developing its mammoth trunk of eighty feet; and from the lowliest moss that peeps above the surface of the soil, to the towering palm-tree of the tropicks, almost two hundred feet in elevation.* As the march of knowledge shall advance, and man be more minutely taught the mysteries of Nature, this wide field of Science, with an increased earnestness, shall be explored. What has been accomplished in the *heavens* by the rare genius of Laplace, bold, brilliant, and aspiring,—by some future Linné may be accomplished in regard to *earth*; and while the blue vault, and while the verdant landscape, are more and more distinctly uttering:

“The hand that made us is divine,”

the philosopher and Christian will continually be attracted by new themes of “wonder, love and praise.”

It has been my object, not to venture far within this vast domain, but merely to suggest what may *awaken the resources* of a learned and intelligent assembly. A single pearl proclaims the boundless treasure of the deep; one gem is witness of ex-

* Malte-Brun, Syst. Geog. B. XX. *Vegetation of the torrid zone.*

haustless mines within the earth; and a few fitful rays from the bright canopy above may reveal to the imagination innumerable worlds of glory.

Under the influence of these thoughts, I would now say to the Members of the Society which I have the honour to address: While you participate the intellectual and moral stores of Horticulture, you have a *two-fold* object, worthy of your tenderest solicitude.

1. It is for you *to collect the vegetable treasures of the Old Continents*, and enrich with them the glories of our favoured land.

The correspondence between Mr. Rush the Secretary of the Treasury and our President, now stands upon our records. It invites us, literally, to regale upon the bounties of the wide world; to look abroad, wherever the banner of the country has been planted, by a Foreign Minister, a Consul, or a Diplomatick or Commercial Agent; and to ask what we will of the productions of this ample realm. "Forest trees," I adopt the very words of Mr. Rush, "forest trees, useful for timber; grain; fruit trees; vegetables for the table; esculent roots; in short, plants of every description, whether used as food or for purposes connected with any of the useful arts—all will fall within the scope of the plan proposed."*

Such cheering smiles the General Government bestows upon that field which it is our privilege to occupy. They thus emulate the policy of other nations; and in accordance with this policy, were proper publick grounds provided, either in each

* The correspondence between Mr. Rush and Dr. Hosack has been published in the *New-York Farmer and Horticultural Repository*, Vol. I. Art. 34. The quoted passage is in Mr. Rush's Letter, dated May 15, 1827.

State, or in the four great sections of the Union, we doubt not, that our nation would rejoice at the benign results. We have a soil, which, like the heritage of ancient Israel, is "the glory of all lands." Within the limits of our four and twenty States may be discovered an appropriate residence, for almost every plant in all the *four and twenty Classes* of the Botanist.

And to the Members of the New-York Horticultural Society are offered powerful inducements, to be the channel of our nation's intercourse with other countries, in regard to plants. In the Mythology of Ancient Rome it was ingeniously fabled,* that Pomona could not be induced to shed a smile on any of her suitors, until her heart was touched by the devout breathings of Vertumnus; and in the tenderest of bonds were joined the god of merchandise and the divinity of gardens. The ingenious fable is instructive; for our Art

" thrives most

" Where Commerce has enriched the busy coast;

" He catches *all improvements* in his flight,

" Spreads *foreign* wonders in his country's sight."

2. Another object, far more interesting, invites your care. It is *the preservation and the culture of plants indigenous to our soil.*

They are confided to your guardianship. But look around you; see them perishing in multitudes beneath the ploughshare and the axe. Certain species and varieties, which in old time adorned the verdant mantle of the earth, are to be found no longer;† but their memorial, transmitted to us in flinty rocks, is a demonstration of their original existence. And shall it ever be recorded of any valuable varieties of *our native* plants, *their sweetness has expired on "the desert air?"* Your active mea-

* Ovid has given the story with all its embellishments.

† See Decandolle and Sprengel, P. II. Sect. 143.

tures, I doubt not, will soon eloquently teach, that in the garden which you are preparing to establish, will be collected from our woodlands and our fields, a beauteous and bright floral galaxy.

And here again I would refer to our President's Discourse, in which is clearly and minutely stated a well-ordered *plan*, both practical and scientific, discovering to us large views, which it is noble to possess; and could we but effect their consummation, the reality would be magnificent.

We might then call together, (and exult as we contemplated,) the lovely families of our rural offspring. We might find within this native circle, when possessed of suitable advantages for their *improvement*, the rarest and most estimable qualities, to please and benefit mankind. Among the changes that are exhibited upon the surface of the globe, none are more worthy of remark, than the *transmutations* which are effected in the vegetable tribes. Our Celery is but the parsley, or smallage, in an advanced state of cultivation. The Cauliflower and the Broccoli have issued from the humblest plants. When in its natural condition, the Asparagus can scarce be recognised as that, which when domesticated is a table luxury. And the potatoe, which is the sustenance of millions of our race, has been generally cultivated but a hundred years,—and the most useful of all esculents, it is insignificant and uninviting in its natural state. And can we for a moment think, the progress of discovery has been arrested? Are there no other contributions which the earth may yield, to the existence and enjoyments of our race? At this moment, the botanick missionaries of the Old Continent are engaged* in traversing our fruitful territories, that

* M. Leroy writes to me in these words: Le gouvernement Français entretient habituellement ici de jeunes Botanistes, qui parcourent les forêts des Etas-Unis dans toutes les directions, pour enrichir leur pays de tout ce qu'ils peuvent découvrir de nouveau et interessant.

they may answer the inquiry. Let us emulate their zeal ; and let us not value at a lower estimate than others, those rare gifts which the great God of nature hath put into our hands. Let us *co-operate* in the attainment of our interesting purpose ; let us tie together our rods in the manner of the Roman *fascies*, and this union cannot fail to give us permanence and power.

Replenished with *indigenous* attractions, our proposed garden will be esteemed abroad “ a garden of delights.” The hand of many a distinguished foreigner will soon beckon for an interchange of precious plants ; and by the winds, that swell the sails of our commerce, will be wafted to us the best offerings of the remotest realms. We may even rival in celebrity the paradises at Copenhagen, Kew and Malmaison ; at Schönbrunn and Berlin. Let us then appreciate our natural inheritance. It is *our bald-eagle*, that in full view of Niagara’s sublimity, soars beyond the flight of his companions,

“ sailing with supreme dominion,
“ Through the azure deep of air.”

The forest hears the minstrelsey of the whole feathered throng, in the delightful musick of a bird,* that in its native beauty and perfection is *our own*. And, as the youthful Otaheitian, who “ sprang forward at the unexpected sight of a banana tree, in the *Jardin des Plantes*, and embraced it, while his eyes were bathed in tears ;”† could *we*, within the confines of some distant land, but scent the gale that bore upon its wings the perfume of our *Magnolias*, as we imbibed the fragrant offering, with the

* See Wilson’s glowing description of the Mocking-bird, in his *American Ornithology*.

† Phillips’ *Syl. Flor.* Vol. I. *Introd.*

same generous enthusiasm *we* also might exclaim: " Ah! tree of *my country!*"

Let us appreciate *all* our natural inheritance! Let us persevere to the full attainment of the objects which we contemplate. *We know that we are able, and we will succeed;*

—— possunt quia posse videntur.

Then by science and by industry we will contribute to the stores of human happiness; and we will take the lead, where to follow in our footsteps will be honourable.

Our ardent, able and efficient President, our learned and indefatigable Lecturer and Counsellor, and our classical and accomplished Corresponding Secretary* have, in turn, been chosen to animate you, when convened at the former celebrations of this festival. I was unmindful of myself, in my devotion to my subject, or I should not have consented to follow in *their* path. But, though I "attain not unto the first three," I account it a distinction for which I tender you acknowledgments, that I have been deemed worthy to be named and numbered with them in our cherished cause.

It is a benevolent, it is a noble cause. It exerts a salutary, intellectual and moral influence. It has rich resources for the head; and it has rich resources for the heart. While it instructs and edifies; ennobles and exalts; it awakens feelings of philanthropy. Its motto is: "GOOD WILL TO MAN." It inscribes above its portal, what was written at the entrance of that memorable garden, into which the very Patriarch of Botany, Linné himself allured his followers: "ENTER; FOR A GOD IS HERE."

* The Society have listened, successively, to *Dr. Hosuck, Dr. Mitchell, and Mr. Carter.*

Like that holy faith which we profess, it calls up sympathies, that would excite every one within the extensive sphere of its operation, to partake of its innumerable enjoyments and its manifold rewards.

In my enthusiasm for my subject, I now *experience* this sentiment which I describe.

Could I address myself to all the ingenuous, and liberal, and enlightened among my friends, adopting the eulogium pronounced on the study of Polite Literature by the great orator of Rome, I would thus paraphrase it with a particular reference to our subject. “ Were it not as abundant in resources as I have “ alleged, and were it to be pursued merely for the pleasure “ which flows from it, you will acknowledge, I doubt not, that “ it is a mental recreation, the most liberal and polite. For “ other studies are not appropriate at all times, to all ages, and “ in every place ; but this has nourishment for us while we are “ young, and pleasing joys when we are old. In prosperity, it “ is an ornament ; and in adversity, a refuge and a solace. It “ delights us when at home, and it is no impediment abroad. “ Whether we go forth to meditate at eventide, or are occupied “ in journeying from place to place, or are wandering through “ the country in our rural recreations, it is an agreeable companion and a constant friend. If any are themselves unable “ to pursue the subject, or want a relish for its charms, yet when “ they see it blooming about *others*, they should not withhold “ the tribute of their commendation.”*

Could I appeal to such as are entrusted with our *Literary Institutions*, I would say : Instil into the minds of all your youthful charge a love of nature. Teach them

* Cicero, *Orat. pro Archia Poeta*, Sect. IV.

" To mark, in every magick change of scene,
The grand diversities of nature's laws,
Yet find in all the ever present God !"

You will thus give them an instructive friend, where they might otherwise be solitary. You will supply them with a volume, in which with rapture

————— " they may read, and read,
And read again, and still find something new,
Something to please, and something to instruct."

Could I accost *the amiable portion of our race*, whose attributes are symbolized by the delights of Flora, I might maintain the justice and propriety, with which a certain Oriental language* uses the same word to designate both flowers and the fair. Every estimable virtue that adorns the sex has its type in these exquisite manifestations of the Benignant. And they are adapted, not only for the personal embellishment, but for the intellectual and moral discipline of those, to whom I would commend the contemplation of their loveliness. Their province is not only to afford the senses a rich feast, to fill with their sweet perfumes the air we breathe, and to allure the eye by their conformations, and by their tints of colour ; but by sympathies, the most refined, and pure, and amiable, to exalt the soul.

" The spleen is seldom found where Flora reigns,
The low'ring eye, the petulance, the frown,
And sullen sadness, that o'ershade, distort,
And mar the face of beauty, when no cause
For such immeasurable woe appears :
These Flora banishes, and gives the fair
Sweet smiles, and bloom less transient than her own."†

* The Malay, the most agreeable throughout the East. Like French in Europe, it is a very general medium of thought; and its characteristics entitle it to be distinguished, as *the Italian of the Orientals*.

† I would here name particularly the *Sylva Florifera* by Henry Phillips, as deserving a place in every Lady's Library. No one can rise from the perusal of it without amiable feelings.

Could I move *the authorities of our city* in the cause which I espouse, our publick squares and parks should become pleasure-grounds, disposed and decorated, to regale our citizens. Within their walks should be no fumes of the intoxicating deity, but the pervading pure, and salutary influence of Nature's God.

And in the suburbs of our Metropolis should be a Cemetery; it should be "a garden and in" the midst of "it a sepulchre," where the ashes of the departed might *repose in peace*; where children might be literally gathered to their fathers; and where the vernal buds, the summer flowers, and the sere leaves of autumn might teach lessons of morality, and speak of the resurrection and the life to come.

Could my voice reach *the Legislative Councils of the land*, I would say: Appropriate to those who have fulfilled their trusts, and are withdrawing from the paths of publick life—in the interesting manner of the heroick† age, appropriate a *temenos* (τέμενος); a portion of that soil, which in their hearts is consecrated as their country and their "sweet home." It will refresh their spirits, when they look around them, and reflect: this is the nation's gift. There is a peacefulness and a serenity in rural scenes, that have at all times had a charm for the philosopher and patriot. That hand, which held the destinies of ancient Rome, when it had guided and had saved the nation, held the plough upon *the farm of Cincinnatus*. In the hearts of all his countrymen is the memorial of him, who loved *mount Vernon's calm retreat*. *The shades of Monticello* have been forever consecrated. And at this moment, the beloved Lafayette is seen

† See *Homer*, Iliad. M. 310—314. Z. 194. et al. and the notes of HEYNE. STEPHENS, Thes. Græc. Art. τέμενος, quotes the appropriate passages to show: heroibus et principibus peculiariter hæc τέμενη tribuere videtur, a plebeiurum agris sejuncta et separata quibusdam ἐντομαῖς.

cultivating his *La Grange*; and our own Jay, retired to the sanctuary of his villa, now calmly meditates upon his rest above.

Were it given to me, on this festival, to distribute garlands, I would thus place them upon the brows of our youth; I would supply them also as a decoration for the fair; I would fill our country and our city with their fragrance and their verdure; and I would present them as a reward of publick services.

Were there some happy realm, where might be realized the joys, which, inspiration teaches, were the first blessedness of man, I would delight to resort thither with the beloved circle of my friends, that in the tranquillity of the terrestrial Eden, we might live in rural happiness and die in peace. But, with the learned, we shall in vain seek the enviable spot. One tells us, it was in the confines of the ancient Armenia; another points us for its bliss to the lovely valley of Cashmere; and another teaches, that in Persia were its gladdening groves. But it is no longer upon earth. Like good men of old, *it has been translated*. Yet, I would indulge, in reference to it, the kindest sympathies toward my associates; I would embody my best feelings in a devout ejaculation: that, when our studies and our cares and toils shall have ceased here below; when, like the grass that withereth, we shall have mingled with the dust; we may hereafter meet within the bowers, and be regaled with the enrapturing transports of that *Eden in the skies*.

APPENDIX.

A.

BOOKS AND TREATISES,

ON BOTANY, AGRICULTURE AND HORTICULTURE, BY RESIDENT
MEMBERS OF THE N. Y. HORT. SOC.

DAVID HOSACK, M. D., F. R. S. L. & E. President of the Society.

Syllabus of a Course of Lectures, on Botany and Vegetable Physiology, delivered in Columbia College, in the year 1795. The 2d. edit. is enlarged, in the Author's MEDICAL ESSAYS, 2 vols. 1824.

Hortus Elginensis, New-York, 8vo.

Statement of Facts, relative to the Elgin Bot. Gard. New-York.

American Medical and Philosophical Register; or Annals of Medicine, Nat. Hist., Agricult., and the Arts:—conducted by David Hosack, M. D., F. L. S., and John W. Francis, M. D. Prof. of Mat. Med. in the Univ. of New-York. 4 vols. 8vo.

Inaugural Discourse, delivered before the New-York Horticultural Society, &c. Aug. 31, 1824. New-York, 1824.

To these may be added numerous contributions to Scientific Periodicals.

SAMUEL L. MITCHILL, M. D., F. R. S. Ed. &c. &c.

Discourse, pronounced at New-York, before the Society for promoting Agriculture, Arts and Manufactures, 1792; printed in the Society's Transactions.

Correspondence with Robert R. Livingston, on Light as a menstruum dissolving vegetable matter, &c. Ibid. 1793.

Remarks on Manures; intended as a sequel to Judge Peters' inquiries concerning Plaster of Paris. Med. Repos. vol. II. p. 30—50, 1798.

Discourse before the Society for the promotion of Arts, &c. in Albany, 1799; printed in a subsequent volume.

SAMUEL L. MITCHILL, M. D., F. R. S. Ed.

Further Observations on Manures; intended as a supplement to Kirwan's publication on those matters. Med. Repos. vol. II. p. 240—9, 1799.

Additional Notices on Manures; intended to follow the meditated Report of the British board of Agriculture on Manures. Ibid. p. 345—354, 1799.

Observations on the Canker-worm, which devours the leaves of Apple-trees. Agric. Transactions, 1801. Med. Repos. vol. IV. p. 59.

Facts in relation to Vegetation. Med. Repos. vol. III. p. 420, 1801.

Description of various vegetable phenomena. Ibid. vol. IV. p. 196, 1801.

Essay on Salt (muriate of Soda), as favourable to the health and thrift of domestick animals, when taken with their food in moderate quantities. Tilloch Philos. Mag. 1804.

Letter to late Gov. Milledge of Georgia, assuring from culture, that the seeds of the Bhenné, brought there by the negro slaves; produced plants of Sesamum, whose grain affords an oil of a preferable quality to that of the Olive, for food, medicine, &c. 1809. Georgia Newspapers.

Letter to the late Josiah Meigs, Surveyor General of the Land Office, on introducing the Phœnix dactylofera, or Date-bearing Palm-tree, into the Southern section of the Fredonian States. 1810. Nat. Intell. and Southern Gazettes.

Description of the North American fungus, called Tuckahoe or sclerot; Med. Repos. vol. XV. p. 335—7. 1812.

Discourse before the Hist. Soc., on the Botany of the two Americas. 1812. Hist. Soc. Trans.

Abstract of Don Jose Ignacio Pombo's Spanish book, on the four Species of Cinchona, called Peruvian Bark trees; in Southwick's Plough-boy, for Aug. 5th, 1820.

Correspondence with William Prince, on a singular hybrid fruit, produced between the Spanish chesnut, and the Fredonian chinquapin; Southwick's Ploughboy, Nov. 1, 1820.

Address, pronounced before the New-York County Agric. Soc., at their fair in Haerlem, Oct. 1820, in Newspapers of the time.

Two Speeches, on the Linnean celebration at Flushing, in May 1823 and 1824, in Newspapers of the time.

Botanical and Horticultural Notices, in Hauston's and Brooks' Minerva: Vol. II. P. I. pp. 185, 202, 217, 296, 313; P. II. 28, 72, 107, 136, 137, 186, 344; vol. III. 90, 184 & 281, &c.

Letter to Stephen Van Rensselaer, Pres. of N. Y. Board of Agriculture, on the Fly-weevil, or Tinea segetis, destructive to wheat-grain, in the sheaf and stack. Oct. 1825, in Newspapers of the day.

Address, pronounced before the N. Y. Hort. Soc. at the Annual Celebration, Aug. 29, 1826.

SAMUEL L. MITCHILL, M. D., F. R. S. Ed.

Correspondence with Prof. Hooker of Glasgow Univ. on the St. Lorenzo Potatoe, or Witheringia montana of Peru; with a coloured fig. Bot. Magaz. Sept. 1827.

An extensive collection of MSS. prepared with great care, when he was Prof. of Botany and Mat. Med., and then used for the purpose of Lectures.

To these may be added Occasional Contributions to Woodworth and Bell's Parthenon; to Messrs. Fleet and Halsey's N. Y. Farmer; and to the Amer. Farmer of Mr. Skinner.

N. H. CARTER, A. M. Author of "Letters from Europe," and late Corresponding Secretary of the Society.

Address, read before the N. Y. Hort. Soc., at the Anniversary Celebration of the 28th of August, 1827. New-York, 1827.

WILLIAM WILSON, Nurseryman.

Economy of the Kitchen-Garden, the Orchard, and the Vinery, with plain, practical directions for their management. New-York, 1828. 12mo. pp 206.

The Author announces also, as forthcoming, a new work, to be entitled *The New-York Horticulturist*, an Extract from which is published in N. Y. Farmer and Hort. Reposit. Art. 120. vol. 1.

GRANT THORBURN, Seedsman and Florist.

The Gentleman and Gardener's Kalendar, containing ample directions for the cultivation of the Kitchen and Flower Garden, Green House, Nursery, Orchard, &c. for the U. S. of Amer. New-York, 1821. 3d. edit. 12mo. pp. 132.

Beside the above mentioned Books and Treatises, there are numerous contributions to The New-York Farmer and other Periodicals, by the Resident Members of the Society.

B.

LIST OF PUBLIC GARDENS, GARDENERS, SEEDSMEN AND FLORISTS, IN AND NEAR THE CITY OF NEW-YORK.

ARMSTRONG . . . at Kip's Bay, near New-York, has a Nursery and Green-house.

BLOODGOOD & Co. James, Nurserymen, 206 Front St. New-York. At Flushing, L. I. 11 miles from New-York, they have a Nursery, &c. occupying 10 acres.

- BOYCE** John, 3d Avenue, corner of 11th St. N. Y. cultivates a Vegetable Garden.
- BRIDGEMAN** Thomas, Bowery Hill, has recently established a Seed-Store, and Garden.
- DYCEMAN** . . . , has a very large Market Garden and Orchard, covering 50 acres.
- FLOY** Michael, Nurseryman, is the proprietor of an extensive Green-house, and a Seed Store, at the corner of Broadway and 12th St. His Horticultural Nursery at Haerlem includes 10 acres.
- HOGG** Thomas, Nurseryman, near the House of Refuge, occupies 3 acres with his Green-house and Nursery, and displays a very rare collection of exotick plants. A notice of his premises is contained in the *N. Y. Farmer*, Vol. i. Art. 76.
- HOLDEN** William, at Bloomingdale, has a large Vegetable Garden of 8 acres.
- HUBBARD** . . . , 3d. near Avenue C., is the proprietor of a Vegetable Garden.
- KENNEY** Daniel, Gardener and Florist, corner of Carmine and Bedford St., beside a Green-house, has also a Seed Store.
- MILLS & Co.** at Flushing, L. I., 11 miles from New-York, occupy 8 acres with a valuable nursery.
- PARMENTIER** Andrew, at Brooklyn, L. I., 2 miles from N. Y., has a Horticultural Botanick Garden, containing 24 acres; and his collection of rare and valuable plants, his numerous vines, his ornamental and fruit trees, and the great taste and neatness with which all are disposed, render his Garden one of the most attractive resorts near our city. See *Amer. Farm.* Vol. x. No. 24.
- PHELAN** William, an extensive cultivator of Green-house plants, resides in the 2d. Avenue near 5th. St.
- PRINCE** William, is the proprietor of the large Linnean Botanick Garden at Flushing, L. I., 11 miles from New-York. His premises include 41 acres; his garden is very rich in rare and valuable plants; his green-house contains 20,000 exoticks; and in his assortment of vines are comprehended more than 400 varieties. See *Amer. Farm.* Vol. x. No. 22.
- SIMPSON** William, cultivates twenty acres as a Market Garden, and has a Greenhouse in the 7th. Avenue near 15th. St.
- SMITH** Alexander & Co., 372 Broadway, N. Y., have a large Seed Store. At Newark, New Jersey, 7 miles from New-York, they have a Garden and Nursery, occupying 10 acres.
- STILL** George, cultivates about 5 acres as a Vegetable Garden, at Bloomingdale.
- THORBURN & Son**, 67 Liberty St. N. Y., have the largest Seed Store in America. The premises which they occupy are 84 ft. by 100 ft.; their building is 60 ft. by 40 ft., with an elegant green-house 84 ft. by 16 ft., extending the whole front; and the Store is replenished with bulbous roots, and the seeds of indigenous and exotick plants, with utensils and

implements of Husbandry, with valuable Books on Agriculture and Horticulture; and beautiful engravings and paintings of flowers and rural scenery decorate the walls.

WILSON William, Nurseryman, beside a large Green-house, at the corner of 4th and Macdougall St., has an extensive Nursery at Murray Hill, covering about 10 acres.

C.

REMARKS

ON CERTAIN EXOTICK AND INDIGENOUS PLANTS.

My affectionate preceptor, M. LEROY, an intimate friend of the celebrated MICHAUX, has communicated in his letters to me, the following facts and statements :

1. Of EXOTICK plants introduced into the United States.

“ J’avais introduit dans les Etas-Unis la célèbre *Rhubarbe de Tartarie*, celle à feuilles entières, et celle dite *Rhæum palmatum*; M. Delatullaye au quel je les avais procurées les a conservées plusieurs années; elles prospéraient et fructifiaient à Baltimore, comme dans leur pays natale.” * * * *

“ J’avait apporté dans mon dernier voyage d’Europe nombre d’espèces de graminées; dans ma collection étaient vingt six espèces et variétés de *semences céréales*, vingt quatre des plus belles espèces de *vignes*, de la célèbre collection du Luxembourg à Paris; des *avelines*, les *pistaches* de Verdua, des *oliviers*, le *fusain*, le *géné épineux*. excellent pour faire des haies, des *pruniers* de la meilleure qualité, des *chateignes dites marrons de Lyon*, c’est à dire de la plus belle espèce connu; deux espèces de *noyers* à tres gros fruit, 4 espèces d’*azeroliers*, 3 de *néfliers*, 2 espèces de *frênes*, le *quercus suber*, dont l’écorce fournit le liège, et enfin le *quercus robur*, le meilleur, chêne d’Europe pour la durée et pour la construction. Tout cela venait à merveille à Baltimore. Les *vignes* prospéraient au gré de mes desirs.” * * *

“ Il y a deux ans que je fis venir de France, pour un jardinier pépiniériste actif et intelligent, une caisse contenant 24 espèces des meilleures *pommes de Normandie*, à peu près le même nombre de *poires* et toutes les variétés de *fruits* qui se trouvent en France. Cette caisse, qui n’excédait pas 22 pouces en tous sens, contenait plus de mille sujets, parceque je m’étais contenté de ne demander que des greffes de tous les arbres que je savais pouvoir être entés sur ceux de ce pays, et comme elles avaient été prises à l’extrémité des branches de l’année précédente, aucune n’excédait six ou sept pouces de

longueur, et ne dépassait pas la grosseur d'une plume à écrire. Elles étaient par rangs, pressées entre des couches de mousse fraîche, d'un doigt d'épaisseur, et si bien emballées que le tout est arrivé ici au mois de Mars dans le meilleur état. Tout a parfaitement réussi, et j'ai le plaisir de voir que les jeunes arbres qui les portent commencent à se répandre dans le pays."

2. Of our INDIGENOUS plants introduced into Europe.

"Vous m'avez observé, que, 'le locust (Robinia), nombre d'espèces du *Magnolia*, &c. &c. depuis longtemps embellissaient l'Europe;' cela est vrai. Le locust a été introduit en France, du temps même de HENRY IV, dit le grand, c'est à dire, vers la fin du seizième siècle. J'ai vu le *populus tulipæfera flava* au milieu du jardin botanique de Caën, que j'ai jugé à sa grosseur ne pas avoir moins de soixante ans; j'ai vu sa variété *alba* à Bordeaux dans le jardin de M. Chaudfour, près de l'ancien jardin des Chartreux, aujourd'hui converti en Cimetière, qui pouvait avoir quarante ans. Au Jardin des Plantes à Paris il y en a une allée entière, mais le terrain y est trop sablonneux, et trop su; cet arbre demande un sol frais. J'en ai vu d'autres aux environs de Paris dans une position plus favorable, qui promettaient un grand développement. Le locust *Robinia* a gagné en France. Mr. Descemet, célèbre botaniste à St. Denis pres de Paris, est parvenu à en obtenir une espèce ou variété absolument *inermis*, et dans de doubles proportions relativement au feuillage et à la fleur; l'arbre est loin d'être arrivé au terme de sa crue; on regarde cette acquisition comme précieuse sous la rapport du fourrage." * * * * "Tous les arbres d'agrément jusqu'à présent découverts aux Etas-Unis ont été introduit en France."

"M. Michaux, auteur du *Sylva Americana*, et un de mes intimes amis, convaincu de l'inutilité des plantations particulières pour la conservation des arbres forestiers, est parvenu à persuader le gouvernement de la nécessité de faire des semis en grands, et de les placer de suite dans les lieux que la nature leur a désigné; c'est au milieu des forêts de l'Etat que se font en plantations, qu'on a soin de protéger contre les entreprises des lupins et des bêtes fauves, pendant les premières années, par des enclos légers, mais suffisants pour l'objet proposé. On est parvenu par ce moyen à introduire trente mille chênes de semis sortant des Etas-unis. C'est moi qui ai fait cet envoi, et M. Michaux m'en a mandé le sacre, en me disant qu'on avait donné mon nom à la section de la forêts qui les contenait, sur le plan qu'on en avait tiré." * * * * "Le Maryland seul m'a fourni 16 espèces ou variétés du *quercus*, 8 du *juglans*, 5 de l'*acer*, 3 du *fraxinus*, 2 du *liquidambar* dit *sweet gum*, 2 du *nyssa*, dit *gum tree*, 3 de l'*ulmus*, 2 du *fagus*, &c. * * * Mr. Michaux m'observe que la crue des chênes du Nord de l'Amerique est bien plus accélérée que celle des chênes indigènes d'Europe."

Pour la vie, Votre bien affectionnée ami; vale.

VICTOR LEROY.

Ample details, in regard to the culture of indigenous and exotick plants in the United States, may be found in several excellent repositories of Agricultural and Horticultural knowledge; particularly, the AMERICAN FARMER, which is very ably conducted by Mr. Skinner at Baltimore; the NEW-ENGLAND FARMER AND HORTICULTURAL JOURNAL, which Mr. Fessenden edits with great zeal and talent at Boston; and the NEW-YORK FARMER AND HORTICULTURAL REPOSITORY, on the management of which, it may be stated with pleasure, Mr. Lyman has recently resolved to enter, in connection with Mr. Halsey, the Corresponding Secretary of the New-York Hort. Soc.

D.

LETTERS

FROM DR. PASCALIS, ON THE CULTURE OF SILK.

EXTRACTS.

"REV. J. F. SCHROEDER,

"Dear Sir,

"The culture of the *Mulberry tree* is to be entrusted to the Horticulturists of our City and State; and as an inducement to serve the publick, in promoting its extension, and the most genuine crops, it is interesting to consider its beneficial results."

"One ounce of Mulberry seed, well raised, gives 16,000 trees. Ten trees, after three years nursery, are sufficient to feed one ounce of eggs, that is 40,000 cocoons. These cocoons, at sixteen to the ounce, will afford 136 pounds and a fraction of raw silk, which, at $2\frac{1}{2}$ oz. of reeled silk per pound, make a little more than 19lbs. of perfect silk, (from ten trees and one ounce of eggs,) which are worth 114 dollars in that genuine state."

"The possible income from one ounce of seed being 16,000 trees, is or may be equal to \$182,400; and that from one pound of the same seed \$2,918,400."

"Very respectfully, dear Sir,

Your ob't serv't,

FELIX PASCALIS."

Silk may be raised with advantage, throughout the Union. The culture of it, in this country, commenced at a very remote period. As early as the year 1623, it commanded attention in VIRGINIA; in 1656, it was encouraged by the government with rewards, and the planting of the mulberry was at the same time required by penalties.

Upon the settlement of GEORGIA in 1732, lands were granted, on condition of the culture of this tree. In 1735, eight pounds of raw silk, sent to England from Savannah, were made into a piece and presented to the Queen. The exports, from 1750 to 1754 inclusive, were \$8,880; in 1759 they amounted to 10,00lbs. of raw silk, which sold at two or three shillings higher than that of any other country; and in 1766, there were exported more than *twenty thousand* pounds weight of cocoons!

Mrs. Pinckney of SOUTH CAROLINA, in the year 1755, raised and spun, in the vicinity of Charleston, as much silk as was required for three dresses; one of which was presented to the Princess Dowager of Wales; another to Lord Chesterfield; and the third, in 1809, was at Charleston, in the possession of Mrs. Horry.

At the recommendation of Dr. Franklin, considerable attention was directed to the culture of silk in PENNSYLVANIA, soon after the year 1770.

At Cayuga in NEW-YORK, during the late war with England, Mr. Chidsey sold sewing silk, of domestick manufacture, to the annual amount of \$600.

In Windham County, CONNECTICUT, the culture of the white mulberry was introduced in 1760; and it was greatly encouraged at New-Haven, by Dr. Ezra Styles. In 1789, two hundred pounds of raw silk were made at Mansfield, where, at the present time, three-fourths of all its families are occupied in raising silk. Year after year they are producing, severally, 5, 10, 20, or 50 lbs.; the success attending some is, occasionally, 100 lbs.; and during the last season (1827), it was estimated, that the aggregate amount in this town only, was 2,430 lbs!

The "Letter from the Secretary of the Treasury, &c. in relation to the growth and manufacture of silk," from which these facts have been derived, abounds with the most animating encouragements to domestick industry. A great influence must be exerted on our trade in silk, during the lapse of the next five and twenty years; and with confidence it may be anticipated, that *before* they have revolved, the value of *imported* silks will not, as in the year 1825, exceed *ten millions*! [See Report of Committee on Agricult. in House of Repres. May 2, 1826.] Attention has been awakened; enterprise is active; and while I write, the precious insect is at its toil.

Vellera nunc foliis depectunt tenuia Seres.

E.

REMARKS

ON CERTAIN PLANTS IN THE SOUTH OF AFRICA, AND ON A PECULIARITY OF THE INHABITANTS OF THAT REGION.

So large a number of plants, at the Cape of Good Hope, and in the adjoining region, are *destitute of fragrance*, that it has been said: "In the South of Africa flowers have no smell." [See *Colebrooke's State of the Cape*, p. 158. *sec.* Malte-Brun, Vol. IV. B. LXX.] And while Oriental perfumes are withheld, the STAPELIAS abound, and yield a savour that is agreeable to the degraded Hottentot. Writing to me on this subject, my father says: "In Donn's Catalogue are given 55 Stapelias, all of which have been brought from the Cape of Good Hope *only*; and as far as I am acquainted with this plant and its varieties, of which I have had several, they are all very disagreeable in smell. I now have in my green-house a STAPELIA *hirsuta*, as Dr. Thornton calls it in his Temple of Flora, and it has often been blown by the flies which it attracts."

In a Communication, with which I have been favoured by Dr. S. L. Mitchill, on the alleged peculiarity of the *Boschmen*, the Dr. writes: "Idiosyncrasies in regard to the sense of smell are numerous. There are individuals of the human family who have not the power of distinguishing odours of any kind. I have known several such persons; and they are in a situation, analogous to those who are born *deaf* and *blind*. It has been supposed that brute animals have not the ability to distinguish aromattick emanations; but the proof of this conjecture is merely negative. It is told of Louis XIV. of France, that perfumes were generally unpleasant to him; and certain Asiatics, in ancient times, employed *assa fetida* as a condiment, calling the very substance which we have nicknamed *Stercus diaboli*, the food of the gods." With his characteristick learning, the Dr. then cites the *Tartars*, and the *St. Kilda Islanders*, as distinguished by the same peculiarity, which is attributed to the natives of South Africa.

Whatever may be the fact, in reference to the particular example here illustrated, the general truth that has been alleged is certainly demonstrable:—The vegetable families subserve the wants of man, as he exists, in different regions of the earth.

The cistern trunk of the vast *boa* tree, when once filled with water in the Spring months of rain, supplies refreshment in the midst of Africa's hot sands, during the intense heat of a protracted summer. The abundant sap of the *Lianne*, on the parched rocks of the Antilles, is a salubrious and limpid vegetable fountain. The *raining-tree* of the Canaries, and the *bassa butyracea* of Indostan; the Lapland *hair-moss*, the New Zealand *flax plant*, the Kamtchatka *lily*, and the *cocoa-nut* of the Nicobar Islands; the *bread-fruit* of the South Seas, and the *date-palm* of the desert of Zahara, afford a few only of the innumerable testimonies, that proclaim with a sublime eloquence:

"There's mercy in every place."

"O Lord! how manifold are thy works! in wisdom hast thou made them all."

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