

A

DISCOURSE,

DELIVERED

John Breckinridge

IN THE CHAPEL OF NASSAU-HALL,

BEFORE THE

Literary and Philosophical Society

OF

NEW-JERSEY,

AT ITS FIRST ANNUAL MEETING, SEPTEMBER 27, 1825.

BY SAMUEL MILLER, D. D.

*Professor of Ecclesiastical History and Church Government in the Theological
Seminary at Princeton, and Corresponding Secretary of
the said Society.*

“MANUS DESUNT POSCENTIBUS ARVIS.”

Princeton Press:

PRINTED FOR THE SOCIETY, BY D. A. BORRENSTEIN.

1825.

EXTRACT FROM THE MINUTES OF "**The Literary and
Philosophical Society of New Jersey,**" AT THEIR
FIRST ANNUAL MEETING IN THE COLLEGE CHAPEL, AT
PRINCETON, SEPTEMBER 27, 1825.

"RESOLVED, UNANIMOUSLY,

"That the thanks of this Society be given to the REV. DR. MILLER, for his able and eloquent Address, delivered this day, and that a copy be requested for publication."

"RESOLVED,

"That the Recording Secretary communicate to the REV. DR. MILLER the above Resolution."

LUTHER HALSEY, *Rec. Sec.*

WHEN this Discourse was delivered, it was prefaced with the following statement.

“It is well known to all present, that the venerable and honoured PRESIDENT of our Society was appointed, and fully expected to perform this service. They will all, no doubt, regret, with me, that he found himself unable to fulfil his appointment; and that we cannot on the present occasion be instructed by his learning, wisdom and experience. It was not until Tuesday last that the least hint was given to me that I should be requested to appear as the substitute of that distinguished Individual. And, unfortunately, during the greater part of these five days, my time has been laboriously occupied with other and indispensable engagements of an official kind. In these circumstances, I am aware that, in venturing to comply with the request of the Executive Committee, I lay myself open to the charge of indiscretion, if not of temerity. If such should be the impression of my hearers, I trust they will find an apology for me in my ardent zeal for the welfare of our Society; and my earnest wish to avoid the pain of a total disappointment in the very first effort to introduce it to the notice of the publick.”

A Discourse,

§c.

MR. PRESIDENT, AND

GENTLEMEN OF THE SOCIETY,

WE are assembled, in this venerated Edifice, and on this interesting eve of our Academick Jubilee, to celebrate the first anniversary of "THE LITERARY AND PHILOSOPHICAL SOCIETY OF NEW-JERSEY."

Our commencement is, indeed, humble and unpretending. We are conscious that it becomes us not to vie with the large and mature Institutions of a similar kind, which have been long and usefully established in several of our sister-States; to say nothing of the still older and more splendid establishments beyond the Atlantick. But, however deficient in magnitude and splendour in the outset, we are taught, from the highest of all authority, not to "despise the day of small things." We

trust we shall grow ; and that our growth, if not rapid, will be solid and useful in its character ; and that we may, long hence, be able to look back upon this day with mutual gratulations, and with unmingled satisfaction.

The declared objects of our Society, as set forth in its Constitution, are, "THE PROMOTION OF USEFUL KNOWLEDGE, AND THE FRIENDLY AND PROFITABLE INTERCOURSE OF THE LITERARY AND SCIENTIFICK GENTLEMEN OF NEW-JERSEY." We are persuaded that so far as we shall be enabled to promote the interests of literature and science, we shall contribute to the real honour and welfare of the State. And we have no doubt that one of the most probable means of advancing the great cause of useful knowledge, will be to promote mutual acquaintance, union, and co-operation among those who love that cause, and are qualified to be its benefactors.

The social principle pervades all the rational enjoyments, and all the best interests of our species. "It is not good," in any sense, "that man should be alone." And, certainly, in the pursuits, the pleasures, and the emoluments of literature and science, he can as little afford to stand aloof from his fellow-men, and to cherish the spirit of a solitary being, as in any department of human activity.

In gathering and using the products of the soil, or in seeking the means of sensual gratification in any way, man may riot, if he will, as a mere animal, in ignoble solitude. Yet even this, is considered, by all whose opinion is valuable, as degrading to himself. But in the empire of knowledge, men can neither inquire nor execute to the highest advantage, except in union and concert. Hence the old, and generally received remark, that, in all ages and countries, great men have commonly arisen in clusters. Not only because great occasions have seldom failed, in the ordering of Providence, to become the means of bringing forward and forming distinguished agents for the important work which, at once, demanded and trained them; but also because, in coming forth, and in performing their respective tasks, they mutually aided, excited, and elevated each other.

Hence it was, no doubt, that, in all ages, anterior to the discovery of the art of Printing; especially in the best periods of Grecian and Roman literature, it was a constant practice of those who had a thirst for knowledge, to travel as extensively as possible into foreign countries, and to converse and dispute with all the great men with whom they could come in contact. This was regarded in those early times, not merely as a luxury, annexed to wealth, to be enjoyed after the body of the educa-

tion had been completed; or as a matter of personal vanity, or curiosity; as is generally the prompting motive of modern travel; but as a primary and essential part of education itself; as the best means of enlarging and invigorating the mind, and of storing it with various, profound and practical knowledge. In this way *Lycurgus*, and *Solon*, and *Herodotus*, and *Plato*, and *Aristotle*, and *Polybius*, and *Xenophon*, and *Diodorus*, and the long catalogue of ancient legislators, philosophers, and historians, whose names we are accustomed to pronounce with veneration, made a large part, and, perhaps, the most precious part of their acquirements. I say the most precious part; because there is a *vivida vis animi*—an undefinable substance, power, and adhesiveness in that which we acquire from the lips of the living teacher, or companion, or rival, not commonly belonging to that which is gathered from books only. Accordingly, the learned retreats of the pagan priests, and the Academick Groves, and Porches, in which some of those distinguished men, and their disciples and admirers were wont to assemble, to lecture, to converse, and to hold their publick disputations, were perhaps, the mightiest engines that ever existed for exciting the human mind; for raising it to its highest efforts; and thereby enabling it to embody ideas, to apply truth, and to multiply associations. more powerfully, more rapidly, and more happily

than we can expect to be attained by solitary study.

We are sometimes ready to lament that those great Master Spirits, from the circumstance of their living only in manuscript times, had so few books, and *could* have so few. But is there solid reason for this lamentation? Were not their intellectual powers more thoroughly disciplined, and their knowledge better digested and more practical, than we are wont to find among those who study, even diligently, upon the modern plan;—surrounded with ample Libraries, and furnished with all the facilities which our literary wealth and luxury have provided, for promoting the effeminacy, rather than the vigour, of the modern man?

Dr. *Franklin* once told a friend, that some of his most original thoughts were suggested by the collision of conversation; and that, too, very often upon subjects foreign to those on which he was conversing. And Mr. *Fox*, the far-famed parliamentary orator, declared in the British House of Commons, that he had learned more from Mr. *Burke's* conversation, than from all the books he had ever read in his life.*

* *Rush's* Introductory Lectures, p. 349.

And as the circumstances in which the ancient votaries of knowledge were placed, had a peculiarly powerful tendency to excite, to strengthen, and to enrich their minds, and, of course, to mature their works; so it is evident that the manner in which they were compelled to publish these works, when executed, had no small influence in imparting that high finish which is calculated to insure lasting popularity. It is universally known, that they were publickly recited, at the Olympick Games, at the most frequented Baths, and at other places where crowds were assembled, and where impartial criticism could not fail to bear a sovereign sway. In undergoing this ordeal, when, as the Satyrist tells us—

“Frontonis platani, convulsaque marmora clamant
Semper, et assiduo ruptæ lectore columnæ;”—*Juv.*

who does not see that the literary aspirant was favoured, at once, with stimulants to intellectual effort, and with means of correcting his works by the publick taste, which writers of the present day cannot enjoy?

No wonder, then, that the plan of promoting letters and science by means of permanent Associations was early formed. Accordingly, when literature had a small and temporary revival under Charlemagne, we read of a Society of learned

men, who associated under the auspices of that celebrated Monarch, for the purpose of improving each other, and of promoting useful knowledge. This is, so far as I am informed, the first Society of the kind on record. The plan, however, appears to have been rude and defective, and the manner in which it was carried into execution, of small practical utility. After this effort, we hear of little more of the same nature until the sixteenth century, when several literary and scientific Societies were formed in *Italy*. Still, however, they seem to have been, in their plan and their influence, much inferior to many which have flourished since. The most enlarged ideas of such associations appear to have originated with Lord Chancellor *Bacon*, who, in his *New Atlantis*, delineated a plan of such an institution more liberal, extensive and enlightened than had been ever before proposed. His project, indeed, received little encouragement from his contemporaries; but it was destined to produce very important effects not long afterwards.

In the seventeenth century, the conviction of the importance of such Societies, and a taste for forming them, may be said to have commenced their prevalence, and to have made a general impression on the literary world. It was a little after the middle of that century that the two most con-

spicuous Associations of the kind in *Europe*, namely, the “Royal Society,” of *England*, and the “Royal Academy of Sciences,” of *France*, were formed: the former by Mr. *Boyle*, Bishop *Wilkins*, Mr. *Hooke*, and a number of others, who, at that time, held a high station in the philosophical world;—and the latter by *Louis XIV*, prompted by the suggestion, and assisted by the counsels of his minister, *M. Colbert*. Those who have examined the numerous volumes which contain the transactions of these celebrated Societies, cannot hesitate for a moment to believe, that they have contributed in a very important degree to the advancement of useful knowledge, not only in *Great-Britain*, and *France*, but throughout the world.

But the eighteenth century is pre-eminently remarkable for multiplying these Associations; for a great increase in the number of their publications; and for their unexampled activity and usefulness in the cause of science. And after the most ample experience we are warranted in saying, that they have exerted, and continue to exert, an influence eminently beneficial to the interests of liberal knowledge. They have made learned men better acquainted with each other. They have kindled a spirit of generous emulation among the votaries of science. They have stimulated into action many useful talents, by holding out suitable

encouragements to exertion. They have suggested objects of inquiry, and methods of experiment, which might otherwise have escaped attention. They have operated like happily adjusted lenses; to converge the rays of light to one focus, there to produce genial warmth, motion, and life, where all was cold and dead before. They have also furnished useful repositories for the observations and discoveries of the ingenious, and have thus presented to the world many valuable productions, which would probably otherwise have been lost, through the modesty, the indolence, or the poverty of their authors. These associations, moreover, by extending their literary invitations and honours to other countries, bind more closely together the members of the republick of letters in different quarters of the globe, and teach them to feel as brethren embarked in the same great cause. It would not be difficult, I am persuaded, to show, that such confederations of learned men have had a very perceptible influence in promoting even national prosperity and greatness, and in widely extending a spirit of general improvement.

The number of Societies of this kind in the United States, though comparatively small, are well worthy of notice and imitation. The first in order, both with regard to time and importance, is "The American Philosophical Society, held at

Philadelphia, for promoting Useful Knowledge." It was formed, in the year 1769, by the union of two smaller societies, which had for some time existed in that city; and has been ever since continued in useful and respectable operation. Of this Society, Dr. *Franklin* was the most conspicuous and active founder, assisted by Dr. *Rittenhouse*, then entering on his illustrious course, the Reverend Drs. *Ewing* and *Smith*, and a number of other friends of liberal knowledge, whose names have secured an imperishable record in the history of American literature. The Volumes of Transactions which this Society has published, are too well known to require commendation here. Some of the Astronomical Papers contained in the first volume of those Transactions, served, it is well ascertained, at that early day, in connection with the experiments on Electricity, by *Franklin*, to make a most respectful impression throughout *Europe*, with regard to the native genius and science of our country.

"The American Academy of Arts and Sciences," held at *Boston*, was established in 1780. It has published several volumes of Communications, which afford a very honourable specimen of the talents, learning and diligence of its members, and a pledge of still greater usefulness in future.

"The Connecticut Academy of Arts and Sciences,"

formed at *New-Haven*, in 1799; and “The Literary and Philosophical Society of New-York,” founded in 1814, have also entered on a career, which bids fair to be, at once, reputable to themselves, and beneficial to our country. A few other Associations of a similar kind, but on a smaller scale, and of less celebrity, have arisen in different parts of the United States; and ought to operate as a stimulus to us, and as examples of how much, even with smaller means than we possess, an enlightened zeal can effect.

In this generous and noble competition, the State of *New-Jersey* has not yet advanced to take her place. It is matter of some surprize, and of no small regret, to those who have attended to the history of our State, that we have not made greater progress in literature and science. The colonial annals of *New-Jersey*, furnish a considerable list of men, who flourished eighty or ninety years ago;—men of powerful, cultivated, and active minds;—men who might have been expected, from their talents and acquirements to have left more ample memorials of their own characters; and to have diffused, by their example, more of a spirit of literary enterprize on the succeeding generation. But for want of union, excitement, and co-operation among themselves;—that very union and co-operation which we now

propose;—their efforts were detached, feeble, and, in a great measure, useless; their reputation was much more circumscribed than it deserved to be; and names which ought still to live in the memories of all who respect talent and worth, have either sunk into oblivion, or are cherished only in the recollection of a few, who have had curiosity enough to explore the neglected and mouldering records of departed eminence.

Nor are our predecessors alone chargeable with delinquency here. Even since we have become an independent State, though the number of our educated citizens has considerably increased;—yet no measures have been hitherto taken to make them acquainted with each other, and to bind them together in one common brotherhood; and, of course, this corps, respectable as it undoubtedly is, on the score of number, has remained to this time without any kind of organization, and consequently, without that efficiency which union alone can give. And yet, it is but truth to say, that we stand in PECULIAR NEED of such SPECIAL MEASURES for uniting and binding us together as those of which I have been speaking. For we have, certainly, fewer of what may be called the NATURAL MEANS of promoting this object than many of our sister States. We have no GREAT CITIES, which it seems to be generally and justly agreed, furnish some

of the most indispensable and powerful means of exciting, keeping in a state of tension, and putting in requisition, all the powers of man; which more constantly attract, employ and reward talents, than the less dense forms of population can possibly do; and which have always been the GREAT FORCING BEDS, if I may so express it, not only of the foliage and flowers, but also of the solid and invaluable fruits of genius. We have none of those splendid COLLECTIONS OF APPARATUS and of SPECIMENS, for promoting the compendious acquisition of knowledge, the formation of which pre-supposes a considerable share both of enterprize and wealth; and which seldom exist, to any extent, out of large and opulent cities. We have none of those GREAT LIBRARIES, which, in other countries, and in some of our sister States, publick liberality has opened for publick use. We have, indeed, some Libraries of great value, and which promise much as to future enlargement; but their use is necessarily confined to the members of those Institutions to which they belong; and cannot, without a breach of trust, be made centres of general attraction to the literary population of the State. And, to omit other particulars, we have few instances of those very large PRIVATE ESTATES, which are numerous in other parts of our country, and which have frequently furnished endowments of the most magnificent character for the promotion of knowledge.

Seeing, then, that we labour under a deficiency as to the various resources which have been mentioned,—we must, if we desire to excite in our State a new spirit of improvement in literature and science—we must, of necessity, resort to some of those means which are certainly and always within our reach, and which experience has shown to have a powerful influence in stirring up the minds, and enlarging the views of men. It has pleased “Him who sits as Governor among the nations,” to pour out upon almost every part of our beloved Country, a spirit of “INTERNAL IMPROVEMENT,” as extensive and powerful, as it is gratifying to every patriotick mind. And even in our own State, hitherto, undoubtedly, chargeable with tardiness in the career of great enterprizes, it is delightful to perceive the influence of this spirit extending itself in every direction. While we rejoice in this honourable impulse, and with every voice and hand cheer it on; let us remember that there is an “internal improvement” of the INTELLECTUAL and MORAL kind, in which we all,—whether Statesmen, Scholars, Patriots, or Christians, have an infinitely deeper interest, than in all the *Canals*, the *Railways*, and the various other monuments of physical power and expenditure, which the ingenuity of man ever formed. And, though we may not be able to vie with some of our neighbours in their other magnificent and

splendid works; yet HERE we may enter the lists of honourable rivalship with the best of them. We undoubtedly have, if you will allow me the expression, an abundance of the *raw materials* for truly respectable fabricks of mental and moral enterprize: and to erect them, with honour and profit to ourselves, and with rich advantage to our State, we have, humanly speaking, ONLY TO WILL IT.—Though we cannot be greatly distinguished, as a State, for the extent of our *Commerce*; and though large districts of our territory are by no means friendly to the highest success in *Agriculture*; yet in *Literature* and *Science*, if our energies in this field of improvement were once fairly roused, and happily applied, we might soon venture on competition with the most improved and illustrious of our Sisters. And, perhaps, it may even be alleged, that our local situation, between two great States, and two large Cities;—while it is certainly unfriendly to the accumulation of capital within our limits; is yet, in some respects, favourable to that kind of improvement of which I am speaking. For, although these local circumstances will, undoubtedly, be the means of drawing away from us, from time to time, much of our taste and talent, to supply the demand of other and more tempting markets; yet our position, at the same time, brings us all within the reach of that enlightening, warming, and vivifying influence,

which the proximity of foreign and more powerful luminaries is calculated to impart. Besides the whole of our own advantages, we may share largely in those arising from the great establishments of *New-York* and *Pennsylvania*.

And let us not attempt to conceal from ourselves, my honoured Colleagues, that *New-Jersey* stands in need of such an impulse in literary and scientific improvement, as that which is now urged, and which we hope she is about to receive. We are, at present, far behind many of our sister States in the PROPORTION of OUR EDUCATED INHABITANTS. Our population is a little greater than that of *Connecticut*. That State is nearly on a par with ours, too, in having no large cities, and few cases of great wealth. Yet the number of the sons of *Connecticut* who receive a liberal education, is FOUR if not SIX TIMES GREATER THAN THOSE OF NEW-JERSEY. This ought not to be so! And to suppose that this humiliating fact is without remedy, is unjustifiably to despair of the Republick. A new æra—I will cherish the hope—is about to arise—nay has arisen. When I see the ingenuous Sons of *Nassau-Hall* engaging in a fraternal competition for their mutual improvement, and for elevating the character of their *Alma Mater*, and calling upon a distinguished Citizen to appear, this day, as the Organ of their laudable sentiments,

I cannot but hail such facts as tokens of good things to come equally decisive and gratifying.*

Suffer me now, Gentlemen, most respectfully to suggest a thought or two on some of the objects to which our attention, as the "Literary and Philosophical Society of New-Jersey," ought to be more particularly directed. This is, no doubt, a department of inquiry in which there is much room for diversity of opinion, and concerning which the peculiar taste and habits of each member will be apt, perhaps in an undue degree, to sway his judgement. You will bear with me, however, I am persuaded, while I offer a few remarks, which, if they lead to no other result, will, at least, evince my zeal for the honour of our Society, and for the welfare and improvement of the State in which it has pleased Providence to cast my lot.

* There is a reference here to a plan of correspondence and cooperation, lately formed between the "*American Whig*," and "*Clissophic*" Societies, of *Nassau-Hall*, one article of which is, that "some distinguished honorary or graduate member of either Society, shall be appointed to deliver an Address before the two Societies in joint meeting, at three o'clock in the afternoon of the Tuesday preceding the day of Commencement." The first Orator appointed in consequence of the adoption of this plan, was the Honourable SAMUEL L. SOUTHARD, Secretary of the Navy of the United States, who, in the afternoon of the day on which this Discourse was delivered, delighted a large audience with an Address, as rich and excellent in sentiment, as eloquent in composition and delivery.

Allow me, then, first of all, to say, that the great interests of EDUCATION appear to me to be among the most radical and important to which our attention can be directed. Our State possesses a large, and constantly accumulating COMMON-SCHOOL-FUND, which will soon be set in active operation, and possess, we hope, much potency. It is of the utmost importance that a wise system be formed, by means of which this fund shall be made to accomplish, under the Divine blessing, the LARGEST POSSIBLE AMOUNT OF BENEFIT TO THE RISING GENERATION, AND ESPECIALLY TO THE CHILDREN OF THE POOR. And although the ultimate formation and adoption of such a system must be the work of an enlightened Legislature; yet, in most instances, when such great plans are well formed, by a Legislative body, they emanate first of all from wise private individuals, and are generally the result of the united counsels of many such individuals. Who can tell but that the collected wisdom of our Society may contribute something to the maturing of such a plan? Sure I am it is well worthy our profound attention. And if but a single hint of real value to the completion of an object so important, should be suggested by us, we shall enjoy the delightful consciousness of being benefactors to the State, and thousands will have reason hereafter to rise up and call us blessed. [The intellectual, the moral, the political,

and the physical interests of *New-Jersey*, are all wrapped up in this MIGHTY SUBJECT. If there be any temporal concern worthy of our attention as politicians, as philanthropists, or as philosophers, it is the GRAND CONCERN OF ELEMENTARY PUBLIC INSTRUCTION.

To the same general subject belongs another consideration, which has been by far too much neglected in our highly favoured and enterprizing Country. I refer to some plan by which places in our COLLEGES shall be made accessible to the children of the POOR as well as to those of the rich. There ought to be in all our higher Institutions of learning, a number of SCHOLARSHIPS, for the support of such indigent young men of promising talents, and good moral character, as have an ardent thirst for knowledge, and wish to proceed to the more advanced grades of education. To this provision, which every enlightened community owes to itself, ought to be added another,—that of FELLOWSHIPS,—after the example of all the best foreign Universities, on the basis of which a select number of indigent students, who have gone through the regular Collegiate course, and have a taste and capacity for much higher attainments, may remain several years longer engaged in study, and thus become eminently fitted for the highest and most important trusts of Academi-

cal office. Establishments of this kind, which shall give the son of the poorest man in the community,—if he have talents and virtue,—the opportunity of rising to the most elevated honours of any profession which he may select—and which shall also furnish the means of providing ripe and thorough scholars, to fill the chairs of Collegiate government and instruction, ought to lie near the heart of every friend to sound learning, as well as of every enlightened Statesman.) And let me add, this matter has been so long neglected by almost all the Colleges in the *United States*, that we can scarcely hope to rouse the proper spirit in reference to it, at once. It will require the best talents of this community, firmly, patiently, and unitedly applied, to effect the requisite impulse. The friends of literature and science must come together; must be made acquainted with each other; must inspire a spirit of mutual confidence; and must learn with unwearied perseverance to co-operate, before the obstacles in the way of the desired attainment will be likely to be removed.* It will be an honour to

* The late Dr. ELIAS BOUDINOT, of our own State, one of the most illustrious examples of American munificence, has bequeathed to the Trustees of the College of *New Jersey*, lands and money, for the purpose of endowing Fellowships in that Institution, which, it is hoped will, in a short time, go into operation; and serve, at once, as a stimulus to other Gentlemen of wealth and public spirit to *go and do likewise*, and as a lasting memorial of the liberality of their founder.

New Jersey, to take the lead in supplying this GREATEST DESIDERATUM—for I verily think it is THE GREATEST—in our American Colleges. Never can we hope for the frequent attainment of that mature and profound scholarship, for which the demand is every day becoming more urgent, and more difficult to supply, but by gradually building up such a system as that of which I have spoken. We ought to feel this, and to go to work without an hour's delay. And if our "Literary and Philosophical Society," shall contribute to lay a SINGLE STONE, or drive a SINGLE NAIL in such an edifice, it will be a benefit worth all the labour of our association.

The next object to which I would beg leave to direct your attention, is, THE CIVIL AND POLITICAL HISTORY OF OUR STATE. This object is worthy of engaging our early and particular regard. The work of our respectable Historian, *Smith*,* is just interesting and instructive enough to satisfy every discerning reader that a work far *more* instructive and interesting might easily be formed

* The Author of "The History of the Colony of Nova Cæsaria, or New-Jersey," was SAMUEL SMITH, Esquire, a respectable gentleman, who resided in the city of *Burlington*, in this State. His work was published in that city, in the year 1765, in one large octavo volume. It is now entirely out of print, being seldom to be met with excepting in the libraries of the curious.

from many rich materials, now possessed, to which there is no probability that the worthy Pioneer in our story, just mentioned, had any access. Yet, perhaps, there is no species of composition which requires the more patient co-operation of many hands, in collecting materials, and in striking out new lights, than the Historical; especially when the history intended, is not a mere compilation from many narratives already published; but an original work, drawn from sources never before opened to the publick eye. We ought, undoubtedly, to have a large shelf in our Depository for every kind of materials pertaining, directly or remotely, to this subject. It is well ascertained that many such materials, some of them truly curious, and extremely valuable, are to be found in different parts of our State. To search them out, and bring them together, will be an important service. When this is done, or even partially accomplished, we shall probably not be long without a zealous and able hand to prepare them for the publick eye, in a form at once gratifying and honourable to the State.

The NATURAL HISTORY of our State, in its various branches, will, of course, claim your early and diligent attention. It is of great importance both to Science and the Arts, that the Vegetable, and more especially the Mineral riches of *New-Jersey*,

which are said to be pre-eminently abundant, should be explored, described, and brought into use. The bearing of such investigations on our Agriculture, our Commerce, and our most productive Manufactures, is too direct and important to be for a moment overlooked. This is really but another name for developing and bringing into operation THE RESOURCES OF THE STATE. And it becomes us to recollect that our Natural History is yet in its infancy. A large number of subjects pertaining to our Zoology, and especially to our Ornithology, remain undescribed; and with respect to our Mineralogy, we have scarcely entered on the task of exploring its ample domains. But how are these interesting treasures to be examined? Not, certainly, by leaving the whole subject to take care of itself by casual discovery, and mere individual effort. All the eyes and hands in our State ought, as far as possible, to be set to work. Some efficient and organized Body, as a centre of communication, and as furnishing a point of deposit, is indispensable. The contents of every hill, and valley, and river, and forest, and field ought to be carefully explored. Discerning individuals ought every where to examine; to collect specimens; and to forward them, with appropriate descriptions, to the proper place of accumulation. Sets of Queries ought to be prepared, and transmitted to every district in the State. And, finally, subor-

dinate Societies, or organized Committees, ought to be formed,—especially in particular neighbourhoods,—for conducting inquiries to which an individual may not be adequate: that thus every species and scrap of information, however minute, which can interest the man of science or the statesman, may be collected and laid up for use.

Again; the great interests of AGRICULTURE and HORTICULTURE will also demand an appropriate share of our attention. The connection of these subjects with publick prosperity and improvement, and with personal and domestick comfort, is now so well known, and so generally acknowledged, that all attempts to array proof of the fact are entirely unnecessary. He who can make two tons of grass, or two bushels of wheat, grow on the same ground that produced only one before, and at a cheaper rate too; or he who can tell us how to rear double the quantity of much finer fruit, with less trouble and expense than formerly, is surely a public benefactor. Yet it is manifest that the improvement of these branches of science and art, depends very much on social union and effort. Indeed, without such union and effort, little progress in this kind of improvement can be expected. Before the best methods of culture can be ascertained, many experiments, in many different circumstances, must be made,—on different kinds of manures; on

the rotation of crops; on the most effectual means of propagating the best fruits; of defending them from the ravages of their various assailants; and of maturing and preserving them for use. We all know, that in almost every part of the civilized world distinct associations have been formed for discovery and improvement on all these subjects; and that they have been uniformly patronized by men most illustrious both for rank and science. Indeed in our own State, if I am correctly informed, more than one Agricultural Society already exist. But do we not still need an efficient central body, which shall exert an influence over the whole State; which shall concentrate the new lights which may be at any time shed on the subjects in question; and which shall furnish the means of conveying to the publick at large results of experiments now confined to members composing the society of a small district?

In all the departments of ASTRONOMY, NATURAL and EXPERIMENTAL PHILOSOPHY, and CHEMISTRY, a "Literary and Philosophical Society," will, of course, feel itself called upon to inquire, and to labour with unwearied assiduity. These have ever been considered, in all countries, as among the most appropriate objects of culture by such Associations as that which is now assembled. But, may it not be said, that, within the last fifty years, these

branches of science have assumed an aspect of far more practical importance than ever before? Is not the close connection which Experimental Philosophy and Chemistry have established with Agriculture and Gardening; with many of the most important of the mechanick arts; and more especially with Medicine—such as to present them in a most interesting light to every friend of human comfort and improvement? The representation of Sir *Humphrey Davy* on this subject, particularly with regard to Agriculture, is extremely impressive: and with respect to the importance of the science of Chemistry to the Healing Art,—“I do not hesitate”—said the celebrated *Fourcroy*, a few years ago—“I do not hesitate to pronounce, that modern Chemistry has done more, in twenty years, for Medicine, than the united labours of all preceding ages.”

Further; the cultivation of LEGAL and POLITICAL SCIENCE forms another important object in the arrangement of our plan. And by Legal and Political Science I mean, not those petty principles of litigation, which are adapted to the narrow views of the mere special pleader; or those elements of feud and conflict—those miserable compromises of selfishness and ambition, which enter into the still more sordid aims of the party politician. But I mean that noble field of inquiry, which opens the

way to free and learned discussions on the great principles of government; on the pure administration of justice; and on all the immensely important doctrines of Political Economy, in their widest range. I mean, in short, a branch of that great Science, of which the learned Author of the "Ecclesiastical Polity" speaks with equal eloquence and justice, when he says, treating of it in its largest sense—"Of Law there can be no less acknowledged, than that her seat is the bosom of God, her voice the harmony of the world: all things in heaven and earth do her homage; the very least, as feeling her care, and the greatest as not exempted from her power: both angels and men, and creatures of what condition soever, though each in different sort and manner, yet all with uniform consent, admiring her as the mother of all their peace and joy."* Much as has been given to the world on these great subjects, no thinking man can entertain the opinion that further and deeper inquiry is not desirable. One part, indeed, of the general science in question,—that of Political Economy,—is supposed by many to be still in its infancy. If so, and surely there is no small reason for entertaining such an opinion; then there is not a citizen of the *United States*, in any walk

* *Eccles. Polity*, Book I. Sect. 16.

of life, who has not an interest in all those inquiries which tend to promote its elucidation.

On the remaining departments of knowledge embraced in our plan, I shall not now dwell; not because they are less worthy of culture than those which have been mentioned; but because their importance is so obvious and unquestionable, that all proof, or even illustration of it, is superfluous. In THEOLOGICAL AND MORAL SCIENCE, every human being who regards either his own duty and happiness, or those of others, has an interest which no arithmetic can estimate. In MEDICINE, and the auxiliary branches of knowledge, every one who has a life to preserve, and health to cherish, must recognize one of the most precious treasures committed to man; a treasure to the improvement of which, selfishness and benevolence equally call upon us to contribute. And, to mention but one department more, the cultivation of PHILOLOGY and BELLES LETTRES, while it ministers to all the refinements of national literature, has a bearing, more or less direct, on all the interests of philosophy; and is more closely connected with precision and with every habit of thought, with the whole system of publick instruction, and with the general improvement of man, than is commonly imagined. The individual, or the society,

then, which shall contribute the smallest mite, either to the culture or the diffusion of any of these branches of knowledge, is engaged in a work of deep and universal interest.

I have repeatedly adverted, in the foregoing remarks, to the great advantages resulting to nations from their progress in the arts and sciences. That these advantages are not only real, but immense, is matter of unquestionable fact, which the history of all ages has established, but of which the history of the last half century, has afforded an illustration truly wonderful. Of these advantages, *Great Britain* has furnished the most signal example. And the distinctness with which, amidst other causes, they may be traced to her progress in Philosophy and the liberal Arts, is too plain to be controverted. Within a little more than the period to which I have alluded, her improvements in Agriculture, and, consequently, in the quantity and quality of the products of the soil, have been almost beyond estimate. In consequence of this increase of the means of subsistence, her population has nearly doubled. Her inventions of machinery for saving labour, and of new processes for expediting and improving manufactures, have been equivalent to the addition of several millions more to the number of her people. The rents and profits of estates have had a corresponding augmentation. New and astonishing sour-

ces of wealth, both within and without the bowels of the earth, have been opened. The comforts, and even elegancies of life have been brought within the reach of multitudes who could not enjoy them before. The wealthy have been far more conveniently and comfortably accommodated, for the same expense, than formerly. The lower classes have been better rewarded for their labour, and, of course, better fed, better clothed, and in every respect better situated than in any preceding times. The national exports have increased in the aggregate, within the period in question, at least four-fold, many of them fifty-fold; and the national income has advanced to an extent once considered as altogether incredible. In short, the progress of that wonderful country, since the principles of science and art have become popular in their culture and application—her progress in wealth, in refinement, in comfort of living, in power, and in all the means of national elevation, has been the theme of wonder and eulogium with all who have understood, from authentick records, her situation sixty or seventy years ago, and who have been permitted to witness her present condition.

I need not say, that in the same career of improvement, we, her children, have made rapid strides; and that, next to the culture of the Religion of Jesus Christ,—the surest source of hap-

piness to any people,—we cannot give a more certain pledge of our future happy progress in the same course, than by entering heartily into the work of endeavouring to render every species of liberal and useful knowledge, as universal as possible.

Such, my respected Associates, is the wide and fruitful field in which we have agreed to labour. That there is more than enough here to occupy all the talents, the industry, and the energy which we can employ, is certain: and that such labours, when wisely and successfully pursued, will be found conducive to the best interests, not only of our State, but also of our common country, and of mankind, no one can doubt, who has been accustomed to take any other than the narrowest view of human affairs. Whether we shall pursue them with ardour, zeal, and great benefit, and thus render our Society a publick blessing;—or with feeble and interrupted steps, which can only amuse and delude with abortive hopes;—must depend, under Providence, upo] ourselves. If we are prepared to pledge ourselves to one another and to the publick, to unite heart and hand in the noble labour of benefitting our State—benefitting our species—and will faithfully redeem the pledge; then shall we have reason to think of the transactions of this day with pleasure as long as we live.

Many, I know, are ready to turn such Societies as that which is now assembled into ridicule, because too much is sometimes proposed, and too much expected. Dr. *Johnson* remarks, in one of the papers of the "Idler," that when the "Royal Society" of *England* was founded, "great expectations were raised of the sudden progress of useful arts. The time was supposed to be near when engines would be turned by a perpetual motion, and health be secured by the universal medicine; when learning should be facilitated by a real character, and commerce extended by ships which could reach their ports in defiance of the tempest. But improvement, adds the great moralist, is naturally slow. The Society met and separated without any visible diminution of the miseries of life. The gout and stone were still painful; the ground that was not ploughed brought no harvest; and neither oranges nor grapes would grow upon the hawthorn. At last, those who were disappointed began to be angry; those, likewise, who hated innovation, were glad to gain an opportunity of ridiculing men who had depreciated, perhaps with too much arrogance, the knowledge of antiquity. And it appears, from some of their earliest apologies, that the philosophers felt with great sensibility, the unwelcome importunities of those who were daily asking, "What have ye done?"*

* *Idler*, No. 88.

Those who enter with zeal into the labours of our Association, must expect such taunts as these. But let us be prepared to meet, and willing to bear them, and hold on our way with unwearied perseverance. We ought not to make too much haste to be scientifick, any more than too much "haste to be rich." Here PATIENT TOIL must be our motto. No one ever passed a steep and craggy mountain at a single leap. He only is fitted for the arduous enterprize, who is willing to take the time, and undergo the labour necessary for many a difficult, slow, and cautious step, and who is not impatient of the progress of things in their regular course. We are associated for the purpose of attempting, in company, to scale a lofty mountain;—a mountain lofty enough, and craggy enough to put in requisition all our energy and all our patience. For let it be remembered that in this fallen world, every endeavour to promote the real welfare of man is UP-HILL WORK, from the smallest effort of benevolence, to the most glorious and stupendous atchievement of love that ever engaged the counsels of the Almighty.

Let none indulge the ignoble fear, that the progress of science—I mean of real science—will be dangerous; that it will endanger *any* of the true interests of man; and least of all, that it will endanger the interests of true Religion. That

“ignorance is the mother of devotion,” is a “doctrine of devils,” and as stupid as it is diabolical. The time, we trust, is forever gone by, when such fears are to be indulged, or such a doctrine tolerated. I have no doubt that the memorable saying of Lord *Bacon* is, emphatically, a truth—that “Philosophy, when studied superficially, leads to unbelief and atheism; but when profoundly understood, is SURE TO PRODUCE VENERATION FOR GOD, AND TO RENDER FAITH IN HIM THE RULING PRINCIPLE OF OUR LIFE.” It is true, indeed, that some presumptuous claimants of the name of Philosopher, in the eighteenth century, attempted to extend the principles of that illustrious Father of Experimental Philosophy, to a length equally dangerous and insane;—to a length which would have accounted for all the phenomena of motion, life, and mind, on the principles of the material system alone; and, of course, would have banished the Creator from his own world. But this daring perversion was infinitely remote from the spirit of *Bacon*. Whatever may be said of his personal failings, HIS SYSTEM HAD, SURELY, AS MUCH PIETY AS GENIUS; and if his professed followers are not at least speculative Christians, it is because they have deserted their Master.

To a co-operation, then, in this sober, patient, practical course, we respectfully invite our fellow-

citizens. To our friends, of every taste and pursuit, who love knowledge, and who desire to promote their own rational enjoyment, and the benefit of mankind, by extending and applying knowledge, we would say—"Come with us! Here you may find ample employment, and rich remuneration. Here every one may aid, and be aided in his turn. Here the suggestion of a useful thought; the contribution of the humblest specimen of nature or art, that you may find in your path; the recording and transmitting a single remarkable fact; and even a smile of encouragement in our labours, will be acknowledged as a favour to the cause of human improvement, and will meet, we doubt not, its appropriate reward."