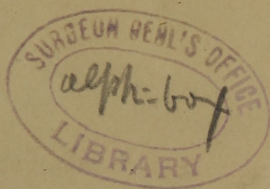


Watkins (Jobias)

Anniversary discourse
x x x Columbian institute
on the 7th Jan'y 1826,



ANNIVERSARY

DISCOURSE

DELIVERED BEFORE

THE COLUMBIAN INSTITUTE

ON THE

7TH JANUARY, 1826.

BY TOBIAS WATKINS.

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1826.

COLUMBIAN INSTITUTE,

WASHINGTON, JANUARY 7, 1826.

Resolved, That the thanks of the Institute be given to DR. WATKINS for the able and appropriate discourse delivered by him this day, and that he be requested to furnish a copy for publication.

ASBURY DICKINS, *Secretary*.

DISCOURSE, &c.

IF it be true, that "*Liberty is Power*," how infinitely must that power be augmented, when to Liberty is added *Knowledge*!

The axiom of Bacon, that "*Knowledge is power*," is often repeated, and universally admitted.—But it is one of those trite, abstract propositions, to which, unfortunately, mankind are too generally satisfied with yielding a bare assent, without attempting to deduce from them rules of conduct; and which, when unaccompanied by argument or illustration, die away upon the ear leaving no permanent impression upon the mind.

Could those, who are ever most hostile to the cultivation of the intellect, and to all advancement in the arts and sciences, be induced to reflect upon the meliorating change, which has been wrought in the character and condition of the human race, by the progress of knowledge, they would feel themselves prompted by an irresistible impulse, to abandon the perilous and gloomy paths of contented ignorance, and seek for opportunities of exercising their mental faculties, in the wide and varied avenues of intellectual light and safety. It is by an

occasional reminiscence like this, that the philosopher and man of science, gathers fresh energy and vigour to pursue his labours—that he is cheered and animated in his solitary studies: and that he finds a solace in those moments of anxiety and despondence, to which genius is said to be so peculiarly obnoxious, and in which so few know how to sympathize.

It may almost be said, that knowledge makes man a *God* to man. When the Spaniards, towards the close of the 15th century, landed in this new world, the poor untutored natives looked upon them as beings of a superior order, and prostrated themselves at the feet of the strangers, in awe and adoration. The meanest sailor in the fleet of Columbus, was regarded by them with mingled feelings of reverence and apprehension: their ships, their fire-arms, and swords—the thousand unknown and miraculous instruments and machines, by which they seemed to live and move; and, above all, the inconceivable art of transmitting their thoughts to each other at a distance: were considered by these neglected children of nature, as incontestible proofs of an unearthly and divine origin.

Spain, it is true, had, at the period referred to, nearly attained to the full eminence of her power and grandeur. She was “the cynosure of neighbouring eyes”—the country to which all Europe looked for polish and refinement. But in what light do the philosophers and learned men of the present day, regard the Spaniards as they were, three cen-

turies ago? Certainly in no respect as *Gods!* Nay, it is scarcely exaggeration to say, that, great as was the difference *then*, between the rude savage and his civilized invader, the difference in the condition of the world, as it *now* is, and as it *then* was, is still greater. How many inventions and discoveries have, since that time, been added to the stock of human knowledge! How many new sources have been opened of comforts and of happiness to man! What vast and admirable improvements have been made in every art and science! How many, and curious, changes in the dress, manners, customs, and modes of living, among the nations of Europe.

Could a Spaniard of those days, even the most polished and refined, be permitted to revisit the earth, and appear among us in the dress and manner of his time, we should probably look upon him as little better than a barbarian; while he himself would find, perhaps, as many causes of wonder and astonishment, in the changes and improvements which have taken place in our manners, modes of life, and means of advancing in knowledge, as the poor Indians found in Columbus and his fleet.

But let us carry back our view to a period still more remote, and take a brief and rapid glance at the comparative condition of man in ancient and modern times. We shall find, it is true, in this examination, that in *some* of the arts and sciences, the ancients attained to a degree of excellence, which no subsequent efforts of the human genius

have been able to surpass ; and that in others, particularly in some of the *fine arts*, they went so far as to outstrip all modern competition. The specimens of ancient *sculpture*, for example, which the ravages of time have spared to us, are still regarded as *master-pieces* of the art. It was in Greece, that grave in which every thing of ancient greatness and glory lies buried, that this art reached impassable perfection ; it was there, under the plastic hand of genius, that “stones leap’d to form, and rocks began to live.” Who, that has once seen, can ever forget, the *Dying Gladiator*?

“Supported on his shorten’d arm, he leans,
Prone, agonizing ; with incumbent fate
Heavy declines his head ; yet dark beneath
The suffering feature, sullen vengeance low’rs,
Shame, indignation, unaccomplish’d rage—
And still the cheated eye expects his fall.”

Or the Group of Laocoon ?

“The miserable sire
Wrapt with his sons in Fate’s severest grasp ;
The serpents, twisting round, their stringent folds
Inextricable tie. Such passion here,
Such agonies, such bitterness of pain,
Seem so to tremble thro’ the tortur’d stone,
That the touch’d heart engrosses all the view.”

How often has *Canova*, the Praxitiles of modern times, in the fullness of his fame, and in his proudest day of gratified ambition, contemplated, with admiring and with envious eyes, these unrivalled efforts of ancient genius—these miracles of human art!

In Rhetoric and Composition ;—in Poetry, History and Eloquence ;—modern times may, perhaps, furnish parallels to the “blind old man”—to Anacreon—Herodotus, or Demosthenes :—but we may modestly doubt whether even these models will ever be transcended.—Some of the useful arts, too, which were well known, and in common practice, among the ancients, have been irrecoverably lost to modern research.

But, having paid this passing tribute to the genius of the Ancients, may we not be permitted to say, that the condition of man has been infinitely improved, since the most effulgent day of Greece or of Rome?—Let us for a moment throw the reins to Fancy.—Let us imagine, that the ashes of some of the illustrious dead of antiquity, have been reanimated ; and that, in palpable and living forms, they are now roaming through the streets of London or of Paris, with a conductor able to explain to them the phenomena—for they would be *phenomena*—which at every turn meet their astonished gaze. Virgil,—Livy :—Cicero ! what indefinable emotions of wonder and delight would swell their eager bosoms at the sight of their own works *in print* !—Archimedes ; Euclid ;—Claudius Ptolemy !—how would their mighty spirits shrink abashed, when they found that even the schoolboy could give them a thousand new lights in their own sciences,—could correct in them a thousand *errors*, which they had received and cherished as immutable *truths* !—with what intense and straining curiosity would they

pause to examine the various instruments and mechanical inventions, which the mathematicians and philosophers of the present time have been able to bring to their aid—orreries, quadrants, theodolites!—with what ineffable amazement would they ponder on the discoveries of a Galileo, or a Newton!—on the invention of *Logarithms*! analytical Geometry!—those highest triumphs of modern, over ancient intellect.—

And, let us summon up some of their renowned Captains:—Behold Epaminondas; Annibal; Cæsar! present at the battle of *Waterloo*!—Their warlike and ambitious souls are thrown into a tumult of astonishment, mingled with envious repinings and regrets, at seeing their mightiest deeds eclipsed;—the most dreadful scenes of slaughter, in which *they* were actors, outdone in horror. How do they stand amazed, at seeing men, unprotected by defensive armour, calmly performing their evolutions amidst the tempest of war;—the thick hail of bullets,—the rapid lightning of the bursting shells;—the ceaseless roar of the artillery's thunder.—And how is their amazement still more enflamed, when they behold the mover of all these horrors—the man of carnage and devastation—sitting aloof upon his fiery but managed steed, with all the calmness of an unconcerned spectator—cool, tranquil, imperturbable. A word—a gesture—from him, conveys the flying haddock from spot to spot of the contested field;—while *he* sits, stern and motionless, amid the swift, invisible, messengers of death, that people

the air around him. No helmet ; no buckler ; no “goodly armour,” protects his seemingly charmed life. His hand wields neither sword, nor spear ; but it holds in anxious grasp, the *Telescope*—an instrument unknown to the shades whom we have called up—which he, from time to time, lifts to his ever watching eye.—And such is the precision,—the perfection,—of modern tactics, that a single glance, occasionally thrown upon the scene before him, tells him the vacillation of his fortune :—tells him, at length, that an Empire is lost—and won.

The Greeks and Romans, it must be confessed, reached a degree of refinement and luxury in their modes of living, which we may not hope, and need not be ambitious, to excel. Their rich palaces :—their magnificent temples :—their beautifully embellished gardens :—displaying all that art, and taste, and wealth, could accomplish ;—offered at once incitements and means of indulgence, in all the vices of ease, indolence, and luxurious enjoyment. But how many of the *conveniences* and *comforts* of life, of which the poorest individual of modern times would, perhaps, think himself miserable to be destitute, were *to them* totally unknown—or, being known, their uses unskillfully applied. The sciences of chemistry and mineralogy,—upon which the modern artificer has so largely drawn for aid in his various manufactures,—shed none of their convenient lights upon the ancient workman. The various metals, which in the hands of the modern mechanic have assumed all forms, and the art of

working which has made the greatest improvement, and contributed most to increase the comforts and augment the power of man, were, in the eyes of the ancients, masses of useless matter exciting no interest in the discovery.

The art of navigation, too :—how has it been extended and improved, since the days of that celebrated hero who led the *argonautic* expedition ! what wonderful changes have been made, as well in the construction, as in the management, of the Ocean house ! The timid bark was *then* seen creeping slowly along the sinuosities and indentations of the sheltering coast—terrified at every gathering of the clouds ; and seeking, with fearful caution, a nightly harbour. *Now*, the venturous and gallant ship, roams from pole to pole,—circumnavigates the great globe itself—braving the wrath of winds and billows, with such dauntless security, that *sleep* even

“ ——— upon the high and giddy mast
Seals up the shipboy’s eyes, and rocks his brains
In cradle of the rude imperious surge.”

Now a voyage of many thousand miles is performed with as much ease, and pleasure, and safety—and with as little dread of danger—as an hour’s excursion upon the unruffled bosom of our own Potomac.

In maratime countries, Commerce and Navigation have a mutual influence and dependence upon each other :—they flourish or decay together. The most celebrated commercial people of antiquity, were also the most enterprising, and the most successful,

navigators. The Phenicians, more especially, richly deserved the celebrity which they acquired, for their industry, their enterprise, and their skill in many of the arts and sciences. To their genius, we owe the invention of the *Alphabet*—that paramount of human discoveries—the grand source of all the mental wealth, the main spring of all the physical power, of man.

Taking into consideration the rude and imperfect structure of the Phenician vessels—their entire ignorance of the *magnet*, that quivering with seeming life and intelligence points us with ever constant truth to the North—they may justly be ranked among the most daring and adventurous navigators that the world has seen. Their devotion to commerce, led them to explore the shores of the Mediterranean:—they successively colonized Sicily, Sardinia, the South of France, Africa, and Spain:—and they were the first people to venture beyond the Pillars of Hercules, and trust themselves to the unknown world of waves. Who has not heard of *Tyre*—“her riches and her fairs, her merchandize, her mariners, and her pilots?” Of Sidon? and of Carthage?—those once celebrated marts of wealth and of splendour!

The changes which have taken place, not only in the manner of conducting, but in the articles of trade, since those days, have been truly wonderful. Commerce was, at first, nothing more than the simple barter of one commodity for another:—in the course of time, a clumsy *coin* was invented as the

representative of merchandize. Now whole cargoes are bought and sold, and millions of money are transferred from one individual to another, by means of a mere *scrap of paper*.—In former times, the merchant stood, like a shopkeeper, in the midst of his wares :—*now* he may amass the wealth of every clime, by trade, and never behold, from year to year, the commodities which he is daily buying and selling. Such have been the effects of an invention, apparently so simple, that we can hardly refrain from wondering that it should have been left to modern genius, and, perhaps, those who have not been careful to observe the tardy and hesitating march of human improvement, would find it difficult to conceive that *Paper credit* and *Bills of Exchange* did not naturally result from the first efforts of commercial enterprise.—

Many of the most important and most ordinary articles of the commerce of the present day, were wholly unknown to the ancients ;—and yet millions of human beings *now* regard them, if not as absolutely essential to the *sustenance*, as at least indispensable to the *comforts*, of life.

The *condition*, too, of those who occupy themselves in trade, or in commercial pursuits, is *now* more respectable and dignified, than at any former period of the world.—It was the opinion of *Aristotle*, that any profession by which money was gained, was unworthy of a gentleman ; and he maintained that, in a well ordered community, no man engaged in trade ought to enjoy the right of citizen-

ship. *Plato* went still further, and proposed, that a *punishment* should be inflicted upon every citizen who applied himself to commerce. But few centuries have elapsed, indeed, since those engaged in trade were, every where, excluded from societies that termed themselves respectable.—How altered is their condition *now*, when a body of *merchants* are the *masters* of that empire which even the son of *Ammon* could not conquer !

From this brief, and necessarily imperfect, comparative sketch of the different states of the arts and sciences, in ancient and modern times, some idea may be formed of the vast improvements which have been effected, by the steady progress of human thought, and human industry. The fruits of that interdicted Tree, which stood in the midst of Paradise, and whose taste was death, have now lost their bitterness, and have become a pleasant and healthful aliment. The character and the condition of man, improve as he advances in knowledge. The comforts of life ; moral worth ; all that constitutes human glory ; are found to be most abundant in those countries, whose inhabitants are most assiduous in the cultivation of the arts and sciences : while, on the contrary, in those unblessed regions which are still darkened by the overshadowing gloom of ignorance, sloth, and superstition, man is but little exalted above the untamed beast of the wilderness.

The progress of man towards his present state of high civilization and refinement, has been slow, and frequently interrupted. Nor has his march been

always progressive:—on the contrary, he has at times been forced to tread the mournful path of retrogradation; and at one unhappy period, he was suddenly hurled back into the same deep abyss of ignorance and misery, from which it had cost him so many years of toil and struggling to emerge.—

It is difficult to conceive what would have been the condition of the human race at the present day, if that universal relapse into barbarism, during the Gothic ages, had never occurred. We know, that each movement made in advance, renders more easy and more successful that which is to follow. In a country in which the arts and sciences flourish, and where no obstacles are opposed to their general cultivation, every day gives birth to some useful invention or discovery. Wants, and the means of gratifying them, are continually reproducing each other, in rapid succession. Light is daily added to light—luxury to luxury. The mathematicians of one generation solve the problems that perplexed their predecessors; and perplex themselves with new ones, to be solved in like manner by those who come after them. The implements of the artizan become every day more numerous and complete, and his skill and dexterity in the use of them more perfect. We every day behold in the shops of the workmen, some new and curious article of manufacture, to tempt the ostentation of the rich, or stimulate the industry of the poor.

Are there, then, no limits to the march of human improvement?—But why ask a question to which

infinite intelligence alone can respond! It is enough for us that we have not yet reached those limits; that much yet remains to be accomplished before we may fear to meet the divine interdict—"thus far thou mayest go, *but no further.*" The secrets of the elements are not yet exhausted. The bowels of the earth may still teem with unknown treasures: fire may hereafter be applied to purposes no less wonderful than that of making the billows conquer themselves; plants may now be trodden heedlessly under foot, which shall hereafter become important articles of commerce, and form new and copious sources of national wealth; man is now the prey of many fatal diseases, for which infallible specifics may yet be found; undiscovered planets may now be tracing their silent and eternal course in the heavens, whose rays will ere long burst upon the gladdened sight, and reward the patient midnight vigils, of the astronomer.

An important inquiry here naturally suggests itself. By what means can the advancement of the arts and sciences be accelerated?

One of the surest and most obvious means of promoting this advancement, is to kindle the desire, and encourage the pursuit, of knowledge, among the poorer classes of society, by facilitating to them the means of its acquisition. It is a fact not less singular than notorious, that many of the most celebrated philosophers, artists, and mechanicians, that the world has produced, sprung from an humble origin; and that their rise to usefulness and

fame, was obstructed and retarded by all the various difficulties, that poverty and the consequent neglect of early education could combine against them.— It may not be entirely without interest to mention a few, out of innumerable instances, in order to show what immense advantages might accrue to the cause of human improvement, if those, whose ardour in the cultivation of science, is unchilled by the benumbing influence of poverty and neglect, could be prevailed upon to extend the right hand of fellowship to the less fortunate labourers in the same noble work. Our own *Franklin*, whose fame is coextensive with the knowledge of Letters, was a journeyman printer: *Fulton*, to whose name no epithet could add distinction, was apprentice to a watch-maker: *Harrison*, who received from the British Parliament a reward for his improvement in the construction of chronometers, was a carpenter; and the celebrated *Sir Richard Arkwright*, to whom England is, perhaps, more indebted than to any of the great statesmen whom she has produced, for her present commercial prosperity, was originally a poor barber.

If these illustrious men, with their limited means, and in defiance of the obstacles by which they were impeded, were able to achieve so much, is it unreasonable to presume that they would have achieved still more, had they enjoyed, in the early part of their career, the advantages of a free and friendly intercourse with men of science?

It is to the communion of mind with mind—to the

frequent and familiar interchange of opinions and suggestions between men of genius, that we undoubtedly owe most of the improvements which have been made in the arts and sciences in modern times. It rarely occurs that an invention is made perfect, or a discovery applied to purposes of utility, by its author. It often happens, on the contrary, that the most useful discovery is the result of accident;—or, that it is stumbled upon by some man of rude uncultivated genius, who is unaware of its importance, or of the extent to which its principles may be applied. There seems to be a *necessity*, therefore, that a spirit of the most perfect friendship and equality should subsist among fellow-labourers in the fields of science. The cause of human improvement is one in which every class of men, and every individual of each class, are alike interested: we may naturally suppose, therefore, that those who profess to devote themselves to this cause, are actuated by a sincere desire for its advancement, unmingled with any selfish motive of acquiring an exclusive and personal fame. Among the votaries of polite literature, on the contrary, and those who are engaged in the cultivation of the purely ornamental arts, jealousies and bickerings will unavoidably arise; the harvest of their glory is circumscribed, and the flowers which are culled by one, diminish the stock from which others must weave their chaplets. But among the pioneers of useful science, the spirit of *emulation*, and not that of *envy*, should be the animating prin-

ciple of action: the stock from which *they* gather renown is inexhaustible; *theirs* is a common object—that of expanding and enlarging the operations of the intellectual faculties—of opening new sources of human enjoyment, and giving activity, extent, and vigour, to the springs of human felicity.

The sciences lend to each other mutual assistance and support: but it is not possible that the most active and comprehensive intellect can travel through the whole range of them, and make a progress alike profitable in all. The attainments of a single individual, whatever may be his genius or his industry, must always appear trifling and insignificant, when compared with the constantly increasing sum of human knowledge. Perfection in one branch of science, seems only to be acquired at the expense of ignorance, or, at best, of superficial knowledge, in the rest. One or two phenomena of human genius, it is true, have appeared in the world, who seemed to grasp all branches of knowledge with the power of omniscience; but the fact that they are regarded as *phenomena*, sufficiently proves the truth of the general rule. It is true, that a vast disparity exists in the intellectual powers of men. There have been minds whose brilliance has served, as a pillar of fire, to guide the wanderings of several successive generations of men: but still, omniscience and infallibility are not the attributes of mortals; the wisest will err—the most skilful will blunder; and their errors and

blunders may, perhaps, be corrected by those who are neither wise nor skilful. Flaws have been detected even in the philosophy of Newton.

It would seem to be a law of their nature, then, that, in order to the successful culture of the arts and sciences, men should join together in their labours and investigations. The rapid strides which have been made in modern times, and particularly within the last two centuries, may no doubt be chiefly attributed to the institution of societies and associations among the learned. The origin of these establishments would, perhaps, be traced by those who are fond of gathering Olympic dust, to the Academies, Gardens, and Porticos, of the ancients; but it seems to be more reasonable to believe, that they took their rise in the friendly intercourse and casual assembly of men of science around their own firesides. The ancient Academies were confined, chiefly, if not exclusively, to the cultivation of metaphysics and moral philosophy, both of which were carried to the most extravagant heights; and the members of them were accustomed to yield implicit assent to the dogmas of the individual selected as their guide and preceptor. It was enough that *the master said it*, to give to any absurdity the currency of truth.—But the Societies and Academies of the moderns, embrace a range of knowledge too vast, and too important to the welfare of man, to permit any individual to arrogate to himself the authority of a dictator. The science of metaphysics seldom

engages much of the attention of modern schools; and the science of ethics, changed as it is in its very *basis*, no longer admits of being safely or properly mingled with the exclusively temporal matters which belong to the discussions of philosophy.

Associations for the advancement of useful and practical knowledge may, therefore, properly be said to be entirely of modern date. They have been among the consequences of the invention of the art of printing, and of that extent and freedom of investigation in matters of science, to which political liberty gave rise.

The numerous advantages to be derived from such societies, are too obvious to need illustration. Modern Europe abounds with them; and by means of the correspondence, which they carry on with each other, all the nations of that enlightened quarter of the globe, whatever may be, in other respects, the difference of their situations, are placed upon an equality with regard to the interests of science. Those which have acquired most celebrity, and which have been most instrumental in promoting the growth of knowledge, and diffusing the benefits of science, are the French "National Institute," and the British "Royal Society." The most illustrious and distinguished individuals, in both empires, have thought it their greatest glory to be enrolled among the members, and their highest privilege to be permitted to join in the labours, of these societies.

Several attempts have been made to form institutions of a similar nature in our own country. But, if they have not altogether failed, it is certain they have not attained to that degree of reputation and extended usefulness, which their founders contemplated, and of which their nature is susceptible.—The causes of this will be made apparent by a little reflection. No single member of our great confederacy can furnish a sufficient number of men of science for the support of such societies; and that spirit of emulation which naturally prevails among the states—a spirit which is, unfortunately, seldom entirely free from the debasing alloy of *envy*—will not permit the citizens of one state to contribute gratuitously to increase the fame and grandeur of another.—At some future period, when the population of the country shall be sufficiently augmented, and science shall become more generally diffused, the same cause—a rivalry between the different members of the Union,—will, probably, operate to produce a contrary effect. But, for the present,—if we desire that our country should possess a scientific institution that may vie in usefulness with those that have become celebrated in the old world,—it is of vital importance that we should direct our care and attention to a single one, and bestow upon *that one*, our exclusive and indefatigable exertions.

It is to the suggestion, and to the personal exertions, of an amiable and enlightened individual of this City—whose philanthropy and patriotism are

perpetually on the watch for opportunities to promote the happiness of his fellow men, and to advance the glory and prosperity of his adopted country—whose hand and heart are alike open to all the charities of life—and whose active benevolence knows neither sect nor kindred; that we are indebted for the institution of a society here, which, however humble may be its present claims to public notice and patronage, is destined, it may be hoped, at no distant day, to realize the proudest anticipations, the most expanded views, of its founders, and friends.—

The prospects of the “Columbian Institute” are peculiarly favourable. Its location—in the Metropolis of the country, under the eyes of the Representatives of the people, and upon a soil to which each State in the union has an equal right—forbids all apprehension that its advancement will be retarded by the influence of *sectional* jealousies and rivalries. Men of science and learning may here meet as it were upon *neutral* ground. The great importance and general interest of the *objects* for which the Institute was created, the high political rank of its presiding officer—whose presence here checks the eulogy which rises to my lips—and the opportunities, which the Representatives of the people have, of taking part in its labours; not merely as honorary, but as present and efficient, members—all combine to exhibit its character in a point of view entirely national. A society of this nature, established under circumstances so propiti-

ous and so encouraging, may one day prove to be among the strongest bonds of union between the states.—Among politicians of different creeds, hostile feelings and bitter contentions will often arise ; but a different spirit—one of friendship and harmony—will be excited and cherished among the votaries of science. If those, therefore, who are deputed by the people of the respective states, to watch with jealous eyes over their interests, in the general councils of the nation, could be induced to follow the illustrious example which has been held out to them, and unite with the members of the Institute, in the accomplishment of the task which they have undertaken—the animosities which are so apt to be engendered by political debate, would give place to the desire of rendering their common country as pre-eminent in the arts and sciences, as she already is in Liberty and the power that Liberty gives.

When the “Columbian Institute” shall become known to the people of the union, its situation must give it innumerable advantages over every other society of the kind. Men of learning and genius, in every profession and occupation, and in every part of our country, from the Lakes to the shores of the Atlantic, will have an opportunity, through the medium of their Representatives in Congress, of transmitting to it the results of their labours and investigations. It may thus become a sort of national reservoir for improvements in the arts and sciences. Industrious and enterprising agricultural-

ists, whether in Maine or in Florida, in Maryland or Missouri, may thus, at no expense, reap the many advantages to be derived from a knowledge of each others experiments, upon the various soils, and under the various climates, of our extended territory. The Geologist, the Mineralogist, the Chemist, the Physician, the lover of Botany and of Natural History, may each deposite among its archives, or upon its shelves, the fruits of his researches into the mysteries of Nature.

Other advantages will be enjoyed by the society, in its near vicinity to the Library of Congress, and to the Patent Office. The former, if not at present the most complete and extensive publick collection in the union, is in a fair way to become so, by means of the annual appropriation made by Congress for its increase. It already contains a great number of valuable and costly scientifick works, which are seldom within the reach of individuals or of infant societies, and the want of which is often seriously felt in the course of their investigations.—An occasional examination of the numerous and interesting productions of American genius, which are to be found in the *Patent Office*, will afford to the members of the Institute an exact knowledge of the progress which has been made in this country in the science of Mechanics; perhaps suggest new inventions; and enable them to judge of the originality and utility of those which may come under their notice.—The ground which, by the munificence of Congress, has been placed

under the control of the Institute, for the purpose of establishing a Botanical Garden, will in the course of a short time form not only a pleasing ornament to the Metropolis, but a source of delightful recreation to the votaries of that interesting science.—The exhibition of specimens of American manufactures, which it is proposed to make, at stated periods, at the seat of Government, and, as we have reason to believe, under the direction of the Institute, would enable us, from time to time, to publish an exposition of the improvements, which our fellow citizens are constantly making in the useful arts, and thus afford to the publick an agreeable and convincing proof of the benefits which may result to the nation from our labours.—Should the suggestion for the establishment of a National Observatory, at the seat of Government, receive the approbation of Congress, the Institute might have an opportunity of giving another proof of its usefulness, and of its entire devotion to the national service.

Both the Government and the people of this country, seem to be now more disposed, as they are certainly more able, than at any former period, to encourage the progress of the arts and sciences. “The spirit of improvement is abroad upon the earth;” and the scholar and statesman who now fills the Executive chair—has given us assurance, in his first official communication to Congress, that his prompt and cheerful cooperation will be given to any measures which the Representatives of the

people may, in their wisdom, devise to foster and promote that spirit.

A great and inestimable advantage which we possess over the philosophers of the old world, is in the character of the government under which we live. A land of freedom is the soil most congenial to the growth of knowledge. Under an arbitrary government, the arts and sciences may, indeed, be cultivated by stealth, and made to vegetate like the sickly exotics of a green-house. Or the despot, cunning in contrivances to increase his fame and consolidate his power, may, perhaps, affect to foster and protect them, in order to secure the good will of the wise and learned. But it is in those regions only where the human mind is unfettered by the degrading influence of bigotry and superstition, and untrammelled by the restraints of political vassalage—where the Eagleeye of independence “drops its lid to none of woman born,” that they can attain to their full and natural growth. It is our happiness to live in such a land. Here we may pursue our researches, unmolested by the jealous interference of a tyrant, whose jaundiced eye sees a conspiracy in every association of his subjects. Here is no Hierarch to dictate laws to the planets. Here are no censors to prescribe to us modes of thinking; no fears of torture, exile, or imprisonment, to drive us from our course.

Every incentive that can actuate noble minds, is thus held out to the members of the Institute, to

persevere with unwearied ardour in the accomplishment of the objects, for which they have associated themselves together. Surrounded by the most distinguished men of our own country, and by the ministers and representatives of foreign nations, our exertions will be stimulated, not only by the holy spirit of patriotism, but by personal pride. If we succeed, a rich and glorious reward awaits us, in the esteem and approbation of our fellow-citizens: and, as the war-worn fathers of our country's freedom, now feel their bosoms thrill, with a pure and hallowed delight, as they behold their children enjoying, in peace and safety, the blessings which were purchased by their blood; so may we, though the paths we tread are less perilous, and the fame to which we aspire, less brilliant, one day have cause to exult in the reflection, that we were among the founders of the Columbian Institute.

