PROCEEDINGS

NATIONAL CONVENTION

OF THE

FARMERS, GARDENERS AND SILK CULTURISTS,

OF

HELD AT

MECHANICS' HALL,

IN THE CITY OF NEW YORK,

ON THE 12TH, 13TH, AND 16TH DAYS OF OCTOBER, 1846,

IN CONNECTION WITH

THE NINETEENTH ANNUAL FAIR

OF THE

AMERICAN INSTITUTE.

NEW YORK:

JOSEPH H. JENNINGS, PRINTER, 122 NASSAU ST.

1846.



PROCEEDINGS

OF THE

NATIONAL CONVENTION

OF

FARMERS, GARDENERS AND SILK CULTURISTS,

HELD AT

MECHANICS' HALL,

IN THE CITY OF NEW YORK,

ON THE 12TH, 13TH, AND 16TH DAYS OF OCTOBER, 1846,

IN CONNECTION WITH

THE NINETEENTH ANNUAL FAIR

OF THE

AMERICAN INSTITUTE.

NEW YORK: JOSEPH H. JENNINGS, PRINTER, 122 NASSAU ST.

1846.

응고는 돈은 문 모양이 많기?

222 N28

spectrum and the DIM

(i) 2 (i) 3 (k)

 α (3.1 α α β (4.1 α β (4.1 α β (4.1 α β)

NAME AFORE A CONTRACTOR AND A

Control of chanks

110-110-01

and the second s

OFFICIAL PROCEEDINGS.

01

17 14 2: A

NEW YORK, October 12, 1846.

In pursuance of the following Circular, addressed to farmers, gardeners and silk culturists throughout the United States, by the Managers of the 19th Annual Fair of the American Institute, the Convention assembled this morning at Mechanics' Hall, 472 Broadway, New York.

CIRCULAR.

SIR—One of the most important arrangements embraced in this anniversary celebration of American arts and industry, is the Convention of farmers, gardeners and silk culturists, which meet at the Mechanics' Hall, 472 Broadway, at 11 o'clock, on Monday, the 12th of October, 1846.

It is called in conformity to resolutions of previous agricultural conventions, held during the Annual Fair of this Institute.

It is deemed essential that this great interest should have some general system of action, in order to produce concert in such leading measures as, on consultation and deliberation, may be viewed, by an extensive representation of agriculturists and their friends, expedient. The present condition of agriculture and horticulture, the latest and most useful improvements that have been devised and adopted in different sections of our country, should be brought before this Convention, with suggestion of new ones.

The influence of the tariffs, and other regulations of foreign nations on our domestic labor, on the character, comforts, independence and prosperity of our agricultural population, will be considered as legitimate subjects of discussion.

A home department of agriculture, so earnestly recommended by Washington and so long neglected, should obtain the early attention of this Convention, and effective measures taken to press it upon the consideration of the national legislature early at its next session.

The addition of another great staple to our country's resources, constantly in demand in all the great markets of the world and calculated to produce a wholesome influence in our balances of trade with other nations, may be realized in silk. The means of removing the obstacles to its rapid growth, by suitable encouragement to sustain it in its infancy against foreign competition and at the same time promote its home manufacture, a sure and healthy mode of stimulating its extended growth, afford subjects that demand the best reflections of our wisest political economists. Nature has fitted America for a great silk country. Capital, labor and skill, judiciously directed and applied, cannot fail soon to place it high on the catalogue of our richest staples.

As friends of agriculture and horticulture, and of the silk culture in particular, whether engaged directly or indirectly in these important branches of industry or not, we respectfully invite you to come with your friends to the celebration, and we ask you to take part in the deliberations of the Convention.

We will promise you rich treats in our cattle shows, ploughing exhibitions, displays of the productions of the farm and garden in unsurpassed vegetables, fruits and flowers, and the finest specimens of the factory and workshop in almost numberless variety. In the various addresses, from time to time during the Fair, from some of our most distinguished scholars and statesmen, will be furnished an almost continued feast of reason for those who seek intellectual enjoyment. Every American citizen has a most noble duty to perform on this great continuent where Heaven has placed us. We are to make it, if possible, a greater scene of earthly happiness than has ever yet been vouchsafed to mankind. Let us do every thing to beautify, to enrich it, and to render it in civilization and the arts the admired of all nations.

On behalf of the Managers,

T. B. WAKEMAN,

Corresponding Secretary.

P. S. The "VAN SCHAICK PREMIUM" of 1000 dollars, generously given by Myndert Van Schaick, Esq, of this city, to be bestowed by the American Institute in premiums of \$100, for ten successive years, will be awarded as follows:

For the best piece of silk stuff, 27 inches in width and 60 yards in length, manufactured in the United States within the year, from native silk, \$50.

For the best and greatest quantity of American silk, uniformly reeled, not less than 20 pounds, \$20.

For the best sewings, of any color, made entirely from American silk, not less than 10 lbs., \$10.

For the best peanut cocoons, not less than one bushel, \$10. And to each of the successful competitors the "Van Schaick Medal." Other premiums on silk will be bestowed, as usual, by the Institute. All silk culturists and manufacturers are invited to send in their specimens as early as the 1st, 2d or 3d of October.

There were many delegates from other states and a large number from New York in attendance.

On motion, Gen. H. A. S. Dearborn, of Massachusetts, was appointed temporary Chairman, and Dr. D. J. Browne was chosen Secretary, pro tempore.

On motion of Col. Clark, a committee, consisting of Messrs. Lawrence, Wakeman and Meigs, was appointed to nominate officers for the Convention.

By request, the names of delegates present were handed to the secretary.

Gen. Dearborn, rose and said, "I feel much honored by the station in which you have placed me. It is no ordinary compliment to be selected to preside over so important a body as this Convention. I felt that I was especially honored when I entered this hall, devoted as it is to the improvement and elevation of American mechanics. I cannot but feel proud of the country and the city whose laboring men enjoy such advantages; here the poor apprentice has the knowledge of the past and of the present within his reach; books and lectures are in his hands and before his It is only within the last half century that philosophy has mind. descended from lofty college halls to dwell with the poor mechanic. A few years since her inestimable treasures were locked up in high-priced books, or more effectually shut out from the common scholar by being written in the Latin and Greek languages. It is within our day that that great dictionary of nature, Newton's Principia, was first translated from its original Latin into English. When Nathaniel Bowditch, one of the greatest men of this country, was a poor boy, he got hold of a long desired copy of the Principia. To his great disappointment, it was written in Latin, of which he was perfectly ignorant. Undismayed by the gloomy prospect, he procured a Latin dictionary and, without grammar or lessons. labored through the whole of Newton's work-read understandingly the immutable laws of nature there laid down ; and after that he could read any Latin book. Thus did our indomitable American boy toil up the hill of science, and as an astronomer ranked before his death next the great La Place. When La Place began to publish his remarkable work, 'Mechanique Celeste,' the Edinburgh professors said there were not more than nine men in England who could read it understandingly. What did our Bowditch do? He not only read it, but translated it into English, and gave us, pari passu with the author, a complete version of that voluminous work. He corresponded with La Place and other learned men of Europe continually, and the last work that he performed on his sick bed was to correct the last proof sheets of La Place's mighty work, to which he had added several thousand valuable notes and illustrations. He went to his grave the first astronomer in America, almost the first in the world. This was but one specimen of the versatility of his talent; this was what a poor boy could do, and what many a boy of this city can do by the aid of such libraries and halls as they have here. I, therefore, feel proud to stand in Mechanics' Hall, devoted as it is to the mechanic and scientific interests. But this is a Convention of farmers, gardeners and silk culturists, each interest represented by men prominent in their respective vocations." General D. rapidly sketched the early history of agriculture-spoke of the quadrupeds, birds and insects made subject to man, of which the dog only had become his friend-of the settlement of new lands, the importance of corn and wine, the value of silk, &c., &c.

The committee to nominate officers returned and reported as follows: For President, H. A. S. Dearborn, of Brookline, Mass.; for Vice Presisidents, John Ogden, of Newark, N. J., and A. P. Byram, of Kentucky; for Secretaries, T. C. Munn, of Orange, N. J., and D. J. Browne, of Long Island.

On motion, the report was accepted and the officers appointed.

On motion of Mr. T. B. Wakeman, Dr. Underhill, of Westchester co., N. Y., Dr. L. A. Smith, of Essex co., N. J., Jenisen G. Ward, of Montgomery co., N. Y., Henry Meigs, of New York city, and Dr. Field, of Duchess co., N. Y., were appointed a committee to prepare business for the action of the Convention.

Mr. James Darrach, of Orange co., N. Y., read a memorial on the subject of agricultural education, addressed to the national convention of farmers, gardeners and silk culturists, held in the city of New York, at the call of the American Institute, October 12, 1846.

Mr. President and Gentlemen of the Convention :---

The necessity for any education grows out of the duties which man has to perform and the exigencies to which he is subject in their performance. Their peculiar character determines its extent. Omitting the equal constant relative ones of social life, the unequal and varying duties and exigencies of the arts and professions require an unequal extent and varying character of education. He that pursues an art whose materials are simple and always under like conditions, requires a less extent of education than he who pursues an art whose materials are complex and under varying conditions; and thus in proportion to that complexity and range of conditions.

Applying these simple truths to the farmer, we arrive at once to the most cogent proof that he requires an extent of education unsurpassed by any other profession. Soil, gaseous compounds and their products, his materials, are the most complex. Light, heat, electricity, moisture, his conditions, are the most susceptible and variable; whilst both materials and conditions are alike betimes subjects and lords of that inscrutable power, vitality.

It is not now necessary to draw upon the other fruitful sources of evidence to establish the necessity which the farmer has for a large extent of knowledge in science. Strange as it may appear, it is not more untrue that this necessity is less felt than in any other profession. It is not only not acknowledged by the farmer, but an unnatural antagonism exists between him and science. Sneering at "book-farming," as he denominates science, he rejects it as his guide, either entire or in part. The son destined to merchandize, mechanics, or a learned profession, enjoys from his liberal bounty the advantage of the schools which they have established; while that one whose destiny is to breathe the health-giving fragrance of the freshly-turned sod, graduates at the district school.

Laudable attempts have been made to destroy this antagonism. Writers have divested science of her peculiar and appropriate language, clothed her reasonings in more familiar phrase, displayed her beauties and proclaimed her triumphs. The weekly agricultural column of the country newspapers, the twenty-seven agricultural periodicals issued in nineteen different states, agricultural societies and farmers' clubs, by joint diffusion of the knowledge of results obtained, have struck it a mighty blow. It has been weakened, but not destroyed! It has been cowed into silence ! but it still lives, though seldom manifested other than by positive or negative action. Until it is rooted up and cast into the fire of public shame, our American agriculture will be slow in its improvements, and her interests long remain the prey of the demagogue and the neglect of our legislatures. Can it be destroyed ? It can ! To accomplish this good end, correct and definite views of an agricultural education must be obtained and diffused, the institutions for affording such education established and sustained.

Those who have not paid attention to prevailing notions of an agricultural education, may not be aware how incongruous, crude and indefinite is their character. To give a just impression, it will not be necessary to bring specimens for description from their multitudinous species, genera and orders. They may be arranged under two classes. The classic description of one is, that all the professional education a farmer needs can be only acquired at the tail of the plough, the nib of the scythe and the staff of the fail. Of the other, that the pursuits of the labaratory, and the studies of the museum are the only and sufficient requisites. Into one or the other of these the individuals of the mass may be resolved. Illustrations to the Convention of their error is deemed useless. To those possessing any just views of the requirements of agriculture they are both evidently wrong. For it may be asked, if they are wrong, what are right notions ?

In answer we would reply, we have come to this Convention to ask of its wisdom an answer to that question, and also of its adjunct. By what mode shall facilities for the attainment of an agricultural education be offered?

In asking these questions, however, it becomes us to state the views at which the association we represent has arrived, after a careful examination of the character and modes by which a professional education is obtained in other arts and professions, and otherwise.

In commerce, in mechanics, in engineering, in teaching, in law, in medicine, in theology, it was found to be contemporaneous instruction in the practice and sciences belonging to each, subsequent to a proper preparative course of elementary and disciplinary education.

The application of this universally adopted principle is met at the outset with a difficulty which at first seems insuperable. It exists in difference of circumstances. The future merchants and mechanics are sufficiently numerous in large villages and cities to sustain schools and lectures, upon which they could attend during intervals of release from their practical duties. The future divines, while enjoying instruction at their seminaries, find opportunities of practice at the social meetings of the pious as well as in the exercise of their schools. The future lawyers, while fulfilling the duties of the office, embrace the exercises of their courts and the fruitful advantages of the halls of justice. The future physicians, gathered at their colleges, collect and study the precepts, principles and experience of their profession, whilst they enjoy the clinics The future farmers have no of their private instructors or a hospital. such advantages. Their practical instruction requires the farm and the farmer. Their theoretic the instructor in agricultural science. There is no common centre where the expense of this education could be divided among a company of fellow students.

Upon this view of the difference of circumstances, the plan of gathering a sufficient number for the support of scientific instruction upon a single farm was examined and abandoned, it being supposed upon any ordinary sized farm as insufficient to afford necessary opportunities for practical education. It seemed impossible to adopt the principles of contemporaneous instruction, so far as regarded the union of the theory, economy and practice of farming.

The suggestion at last arose, that in districts where farms were of moderate size and the farmers generally of superior character, pursuing a mixed husbandry, they might be united in an association, under proper regulations, to receive and become practical instructors, each to a few young men, in the practical duties and economy of the farm, who collectively might be able to sustain a school in the sciences relating thereto.

"We, the undersigned, present to the favorable consideration of the public a short detail of the plan of this Institute, recently organized by a number of exemplary farmers residing in the same neighborhood, some explanation of which is embodied in the following extract from the written agreement :---

" I, James Darrach, of the town of Montgomery, county of Orange, and state of New York, farmer, do hereby covenant and agree to give to the pupils all necessary scientific instruction in practical agriculture, by lectures, instructions and examinations, in such way as will most conduce to advance them in thorough knowledge of all the theoretic part of the business. And we, whose names are hereunto subscribed, agree, with said James Darrach, that we, and each of us, will receive into our families the number of pupils mentioned opposite our names, and instruct them to the full extent of our power in all the practical branches of agriculture and the manual operations of the same, and also watch over their morals and habits, in the same manner that we would our own children for their permanent good.'

"The character of this plan presents highly important claims to the favorable consideration of parents and pupils.

"The difficulty in any course of practical agricultural education, in institutions where the teachers and scholars occupy and are confined to a single farm, is that nearly the whole practical economy of the farm, in the house and in the fields, must necessarily be omitted; and thus the pupil may be taught the art of farming, but those economical details which make the business profitable as well as pleasant, must afterwards be learned by the expensive teacher—experience."

Our plan, on the contrary, places the pupil in the hands of good practical farmers, whose living and happiness are at stake in the successful prosecution of their business.

With them, economy and methodical arrangement are necessary and important elements of success. Consequently this branch of the business will be taught precisely in the same manner in which it will have subsequently to be performed by the pupils themselves, if they should follow the business. While we dwell with confidence upon the peculiar advantages of these considerations, we offer equal inducements in regard to scientific instruction.

His course of instruction, while it is mainly directed in its application to agriculture, will embrace most of the academic studies, so that a thorough English education may be proceeding at the same time.

Among the branches which will receive particular attention may be numerated thele elements of the natural sciences, and the application to agriculture, vegetable and animal physiology, mathematics, natural and moral philosophy.

So far as the experience of six months will enable us to judge, the only remaining obstacles to complete success, independent of those arising from want of proper endowments, are such as are common to any plan to accomplish such education. These are the antagonisms between the farmer and science, erroneous notions of its nature, and the opinion that the experience and practice of one district was of no use in another where a different kind of crop was grown.

A purely professional education of the farmer, consisting not only in practical skill and all the elements of science, but also in the application of its developments to the great phenomena of life, require the same preparative studies as medicine or any other profession.

Its own requirements are of a high character; a knowledge of the laws and accounts of trade, of the mechanical principles and skillful use of machinery and implements, the study of vegetable and animal physiology, of rocks, soils, atmosphere, water, the imponderable agents and decomposing organisms; also their applications, actions and transmutations, under or destitute of vitality. In a word, a knowledge of the commerce, geoponics, genomia, zoonomia, hydrology, and chemistry of agriculture, with facility in examining and making their records. This profession, then, like others, demands the same preparative of instruction. It is impossible to except anything from the course but the dead languages; but though these are excepted, they must ever be deemed as the aids and polish of an education which may be acquired without them.

The general attainments of youth contemplating the pursuits of agriculture, demand that instructions for their benefit should be both preparative and professional. The amount of acquirement requisite for admission to such institutions should be good attainments in the rudiments of an English education, including a thorough acquaintance with arithmetic, grammar and geography. The age, with rare exceptions, should not be under fifteen years.

As already remarked, we appear here as delegates to ask your investigation of the broad subject of agricultural education.

If the views presented, the result of two years' investigation, are correct, the association we represent would respectfully urge their sanction by the Convention in some suitable manner, but if not, that such views should be expressed as may be the result of deliberations due to the importance of the subject.

But whether correct or not, they would further call your attention to the want of proper institutions, with proper endowments.

The influence of existing preparative institutions is thrown towards other pursuits, yet there are no means of favor for us as farmers. Ancient Yale has just established an agricultural professorship, from which we would fain augur something for the advancement of agricultural science; other colleges are examining the signs in its firmament.

Theology dots the land with her seminaries, law-schools gather around the purlieus of our courts; medicine every Winter gathers her 1000 students in a sister city, and in fair proportion where clinical and other instructions are offered; commerce and mechanics meet us on every hand with their libraries, their institutes, and their lectures. The noble hall in which you are assembled is dedicated to the latter. Where are the corresponding advantages for our profession? Where is the profes-

9

sional school for the farmer? We commit no fraud upon others by using the word profession. Agriculture is a profession. Its high requirements of science, and such action of the Convention as its interests demand, will ere long entitle it to the appellative of "learned profession." We repeat the question, Where is the professional school for the farmer? Where? Let it be asked aloud, till the sound of it reaches the South, and West, and North; till echo rolls back from the Green and Rocky Mountains the empty sound. Let the Convention repeat it, and repeat it till a voice from every state answering "here," shall drown echo's wearisome reply.

From this state three infant voices have reached our ears. During last Spring the public prints announced that an agricultural school would be opened in the western part of this state upon the farm of Gen. Harmon; another in Duchess county, upon the farm of John Wilkinson, Esq., and under his care, the third in Orange county, as has been already noticed. In Franklin College, Tennessee, some attention is paid to agriculture, and it appears by public announcement that James Gowen, Esq., of Philadelphia, has purchased a property near his farm at Mount Airy, with the view of establishing an agricultural college.

It is worthy of remark, that these five and, so far as we are informed, only efforts, have been made by private individuals, with the exception, perhaps, of the Orange County Institute—single handed enterprize. Of the Orange County Institute it is only proper for us to say, it is in its earliest stage of growth, now six months old, with five youths in training. Its fruit cannot be matured so as to have a reflex on its welfare under several years. Eighteen months hence it hopes to present to the friends of American agriculture its first offering at the shrine of science united to practical skill. At present, from the nature of the case, it casts itself upon the public favor, with no other testimonial than personal references as to character and qualifications of its instructors. If worthy we ask for it the nourishing patronage of American agriculture.

But, whether we or our fellow laborers succeed or fail in our enterprize, let not, we pray, the great cause of an elevated and liberal professional education for the farmer stand still, waiting the issue of these feeble efforts. Let its progress be kept onward and onward until the American farmer shall delight his leisure with the writings of literature and science, be an honored guest within their halls, and be ashamed to seek advocates of his and his brethren's interests at the door of other professions.

We fain hope there will be found in this Convention sufficient patriotism, esprit de corps, enterprize and energy, to put this noble interest upon a broad and permanent basis.

All which we respectfully submit.

(Signed)

J. DARRACH, SAMUEL WAIT, Jr. LINDLEY M. FERRIS,

In behalf of the Orange County Association of Farmers for the promotion of agricultural education. Near Walden, Orange co., N. Y., Oct. 8, 1846.

On motion, the subject was referred to a committee, consisting of Messrs. Meigs, Underhill and Hyde.

Mr. Meigs moved that a committee be appointed to draw up a memorial to Congress, for the establishment of "Washington's Home Department of Agriculture,"—that said committee consist of thirteen, and that the number present have power to proceed with business, which motion was carried, and the following gentlemen named as the committee :

Henry Meigs, of New York, Chairman; A. P. Bryam, Brandensburg, Ky.; Moses B. Coe, Newark, N. J.; Martin Ellsworth, East Windsor, Con.; Judge Tiffany, Fultonville, Montgomery co., N. Y.; James Darrach, Orange co., N. Y.; Wm. J. Gilchrist, Saratoga co., N. Y.; Peter H. Brink, Saugerties, Ulster co., N. Y.; Jacob D. Van Winkle, Hudson co., N. J.; Jenison S. Ward, Gloversville, Fulton co., N. Y.; Dr. L. A. Smith, Essex co., N. J.; Gen. H. A. S. Dearborn, Roxbury, Mass.; Dr. R. T. Underhill, New York.

A miscellaneous conversation followed, in which many of the members participated, concerning education, an agricultural department in the general government, value of the dead languages in scientific education, preparing a memorial to Congress, &c., &c., the substance of which will more fully appear in the subsequent reports and speeches.

On motion, the Convention adjourned, to meet at the same place, at 11 o'clock the day following.

Tuesday, October 13, 1846.

The Convention met pursuant to adjournment, Gen. Dearborn taking the chair.

The minutes of the first day's proceedings were read, and after some corrections, approved.

Dr. Underhill, from the Committee to prepare business, reported in part as follows:

1. Letters and communications to be read.

2. The memorial from Orange county concerning education to be taken up.

3. Matters pertaining to the establishment of a department of agriculture in the general government, considered.

4. Investigation of the effects of the gases from burning brick kilns on vegetation.

5. Diseases of the potato.

6. The culture of silk.

7. The culture of native grapes for wine and the table.

There being no communications,

Mr. Meigs, from the committee on Orange County Memorial, reported the following preamble and resolutions, which were adopted:

The committee to whom was committed the memorial addressed to this Convention from the Orange County Scientific and Practical Agricultural Institute, on the nature of a professional agricultural education and mode of attaining the same, beg leave to report the following preamble and resolutions as justly expressive of the high interest which they take in agricultural education.

Whereas, the relations of science and practical agriculture are by their natures inseparable, and ought to be united in the person of every American farmer; and whereas, contemporaneous instruction in science and practice is the true method of accomplishing a useful agricultural education; and whereas, this cannot be accomplished except where opportunities for both scientific instruction and full performance of practical duties in the manipulations and economy of the farm are afforded; and whereas, the memorial committed to us presents superior facilities to effect this object, by placing just so many students as can find sufficient profitable employment upon separate and contiguous farms, with the owners thereof as practical instructors, while at the same time competent scientific instructions are afforded to all by a professor of agricultural science and teachers of preparative studies : Therefore

Resolved, This Convention approves the plan presented in the memorial, and earnestly recommends its adoption where circumstances will warrant.

Resolved, The Orange County Scientific and Practical Agricultural Institute is worthy the patronage of the public.

And further, Whereas the necessities of this Institute for apparatus and other proper educational appliances are great, and as the gentlemen engaged therein are proper and responsible men, therefore

Resolved, This Convention cordially recommends it to the liberality of the friends of agriculture and education for a share of their bounty, and further commend it as worthy of legislative endowment by the state of New York. H. MEIGS, *Chairman*.

Mr. Meigs then reported the following circular and memorial in regard to the Agricultural Bureau; which were adopted:

Report of committee on Washington's Department for Agriculture, to the National Convention of Farmers, Gardeners and Silk Culturists.

NEW YORK, October 13th, 1846.

The committee of the Convention to whom was referred the subject of a memorial to Congress, asking for the establishment of Washington's "Agricultural Department of Government,"

Respectfully report, That they have had the same under consideration, and see no reason to alter their judgment, but every reason to again endeavor to enforce that of the preceding conventions. They have considered that General Washington's views on this subject have the same deep and noble character as when he gave them to his country in one of his last messages to Congress. The committee here beg leave to repeat his most memorable words :----

"It will not be doubted, that with reference either to individual or national welfare, agriculture is of primary importance. In proportion as nations advance in population and other circumstances of maturity, this truth becomes more apparent, and renders the cultivation of the soil more and more an object of public patronage. Institutions for promoting it grow up, supported by the public purse-and to what object can it be dedicated with greater propriety? Among the means which have been employed to this end, none have been attended with greater success than the establishment of Boards composed of proper characters, charged with collecting and diffusing information, and enabled by premiums and small pecuniary aid, to encourage and assist a spirit of discovery and improvement, by stimulating to enterprize and experiment, and by drawing to a common centre the results everywhere of individual skill and observation, and by spreading them thence over the whole nation. Experience accordingly has shown that they are very cheap instruments of immense national benefits."

Such was the language of Washington when at the summit of his wisdom !

It is strange indeed, that he should have spoken in vain. Fifty years

have passed away since the words were uttered and nothing has yet been done. Is it because farmers are so attentive to the farm that they have no time to think of this? Is it because farming is a low occupation, to be followed only by men of little knowledge, that the few who engross to themselves science or official distinction, look upon farmers as mere operatives?

Such was not the view of the greatest men of ancient Rome. They, like Washington, held up to glory the cultivation of the soil. Cincinnatus cultivated the land with his own hands and by that example made it an order of the highest nobility. And Washington, like him, was a farmer, and begged his country to ennoble it by establishing a separate department of government to take charge of it.

Let us see what would be the practical effect of establishing such a department. The public purse would be employed in procuring all the seeds, plants, and animals of use or pleasure, from every part of this globe! It would have the means of doing all this, through the vast multitude of agents it could employ, consisting of the officers of the navy, army, foreign ministers, charges, and consuls; through the aid of captains, supercargoes, and agents of ships in every quarter of the world.

By its power to diffuse these seeds, plants, and animals throughout our land; by its power to send to any farmer that desired it, portions of all these, and the most accurate and authentic accounts of their origin, qualities and modes of production; by establishing such premiums for great agricultural improvements as would produce the very highest competition —by all this, every intelligent farmer would keep his eye upon the department which so deeply concerns his welfare, and would feel himself ennobled by its existence.

The department would employ clerks well acquainted with the agricultural history of all nations. Correspondence would be established with all foreign and domestic agricultural societies. The sovereigns of the old world would communicate with the department, and thus the great landed interest become eminent among all nations, and the eternal truth brought up to the view of all men, that the glory of nations, their virtue, and their high agriculture are three inseparable facts !

H. MEIGS,

Chairman of the committee.

(SIGNED)-A. P. BYRAM, Kentucky.

Moses B. Coe, New Jersey.

MARTIN ELLSWORTH, Connecticut.

ISAAC H. TIFFANY, Montgomery, N. York.

JAMES DARRACH, Orange co., N. York.

WM. J. GILCHRIST, Saratoga, N. York.

PETER H. BRINK, Saugerties, N. York.

JACOB D. VAN WINKLE, Bergen, N. J.

JENISON S. WARD, Gloversville, N. York.

DR. L. A. SMITH, Essex, N. J.

H. A. S. DEARBORN, Roxbury, Mass.

DR. R. T. UNDERHILL, Croton Point, N. Y.

MEMORIAL

Of the National Convention of Farmers, Gardeners and Silk Culturists, held in New York, October 14th, 1846.

TO THE CONGRESS OF THE UNITED STATES,

On Washington's Department of Agriculture.

The National Convention of Farmers, Gardeners and Silk Culturists, now in session in the city of New York, respectfully present the following memorial, unanimously adopted by this Convention, viz:

Your memorialists, in common with a large body of the American agriculturists, have, for some time past, deemed it of the highest importance to the agriculture of their country, to carry into execution the views of Washington, as expressed in one of his last messages to Congress, relative to the establishment by government of a Department for Agriculture. And we here beg leave to repeat his words.

"It will not be doubted that with reference either to individual or national welfare, agriculture is of primary importance. In proportion as nations advance, in population and other circumstances of maturity, this truth becomes more apparent, and renders the cultivation of the soil more and more an object of public patronage. Institutions for promoting it grow up, supported by the public purse, and to what object can it be dedicated with greater propriety? Among the means which have been employed to this end, none have been attended with greater success than the establishment of Boards, composed of proper characters, charged with collecting and diffusing imformation, and enabled by premiums and small pecuniary aid, to encourage and assist a spirit of discovery and improvement, by stimulating to enterprize and experiment, and by drawing to a common centre the results every where, of individual skill and observation, and by spreading them thence over the whole nation. Experience has, accordingly shown that they are very cheap instruments of immense national benefits."

Such was the language of Washington when at the summit of his wisdom. Yet, strange to say, fifty years have passed away since these words were uttered and nothing has yet been done.

Is it because farming is a low occupation unworthy the notice of government? Is it because they are mere operatives, whose interests are below the notice of the government? Such were not the views of the greatest men of ancient Rome. Cincinnatus, like our Washington, was a farmer, and *held up to glory the cultivation of the soil*! Cincinnatus by his own example ennobled the farmer, and Washington precisely imitated him.

We most earnestly ask Congress to look at the practical effect of the establishment of Washington's Department for Agriculture.

The public purse would then be employed in obtaining all the seeds, all the plants, all the animals, for use and for pleasure, from every part of the globe. The department would have the means, already in existence, of doing all this, through the multitude of agents employed by government, consisting of officers of our army and navy—of consuls, charges, ministers—and would also obtain the aid of every captain of our vast mercantile marine, and the agents of our immense commerce in every land. And it would have the power not only to concentrate at Washington all these good things, but all manner of accurate information relative to their origin, qualities, and modes of raising and utility; and diffusing all this in the most authentic manner among our farmers. And by establishing appropriate premiums for excellence, in every branch of the farming and gardening pursuits, the highest spirit of emulation would be produced. Such a department would attract the eye of every cultivator and cause him to feel that noble pride which of right belongs to his inestimable labors. Such a department would employ clerks acquainted with foreign languages—a constant correspondence would ensue between it and all important agricultural societies, and with all the governments of the earth. Its questions would be promptly and authentically answered from China to Great Britain, and from Russia to New Holland; every facility would be given to the transportation of plants and animals to our country from all foreign lands.

The sovereigns of Europe would cheerfully lend their aid in all this for they all feel now, more than has been felt by their predecessors for the last fifteen centuries, the surpassing importance of the agriculture of the world. They all feel that the glory of nations, their virtue, and their high agriculture are three inseparable facts !

HENRY MEIGS, of New York, Chairman of the Committee.

(SIGNED.)--H. A. S. DEARBORN, Roxbury, Mass. A. P. BYRAM, Kentucky. MOSES B. COE, New Jersey. MARTIN ELLSWORTH, Connecticut. ISAAC H. TIFFANY, Montgomery co., N. Y. JAMES DARRACH, Coldenham, Orange co., N. Y. WM. J. GILCHRIST, Saratoga, N. Y. PETER H. BRINK, Saugerites, N. Y. JACOB D. VAN WINCKLE, Bergen, N. J. JENISON S. WARD, Gloversville, N. Y. DR. L. A. SNITH, Essex, N. Y.

(SIGNED)-H. A. S. DEARBORN,

President of the Convention.

H. P. BYRAM, of Kentucky, JOHN OGDEN, of Newark, New Jersey, J. C. MUNN, of New Jersey, D. J. BROWNE, of Brooklyn, L. I., Secretaries.

Dr. Underhill (on the call of the 4th subject in the order of business) said, "The subject, though perhaps new to many, has engaged my mind for six years, during which time I have studiously sought for a remedy. My attention was first called to the subject by a gentleman who observed that after a light shower all his vineyard appeared to be in a sickly condition, an effect just the reverse from what might be anticipated from rain. He thought possibly that the vines had been injured by electric fluid running along the wires which supported them. This reason was not satisfactory, and after some observation I was satisfied that the injury was done by the gases from a neighboring brick kiln. Subsequent observations confirmed this opinion. The effects upon the leaves of trees and plants are much like those of a severe fire; the tender and pendulous

portions of leaves are turned to a reddish-brown color, and curl up as if seared by extreme heat. In some instances, spots are, as it were, burned through, as if strong acid had dropped upon them. The cause of this appears to me to ar se from the anthracite coal used in making This is used to facilitate their burning; in those nearest the brick. fire only three pecks is put into a thousand bricks, while those on the outside contain twelve bushels per thousand. This is the case in one brick yard, according to the statement made to me by the owner himself. The quantity of coal may vary in different localities, but something near this proportion probably exists in all cases. When the burning is nearly done, the coal in the outside bricks is on fire, and large quantities of carbonic acid gas, sulphuretted hydrogen, carburetted hydrogen, and perhaps a little phosphorated hydrogen, are evolved. These gases, (particularly the last,) are most active and injurious to vegetation. When the atmosphere is moist, and in foggy weather with a light breeze, their effects are traceable for miles. In some instances you will find the track of a stream from 100 yards to half a mile in width and several miles in length. If a heavy rain happens at the same time, the effect is less serious; it seems to wash off the injurious gas. These injuries occur not only in vineyards, but are observed on forest trees, shrubbery, fruit trees and vegetables. The Newtown pippin is a great sufferer; sometimes its blossoms are destroyed, or if these escape, perhaps so many leaves are ruined that not enough are left to furnish sap for the proper maturity of the fruit, and the apple is small and of poor flavor. I know one very large and fine orchard in Westchester county which has been ruined in this manner. Nor is this a solitary case ; hundreds of orchards all along the North River have been more or less injured. I am aware that I shall raise something of a storm in places where brick making is a business. But after so long studying upon the evil, I do not speak at random. And further, I have something here to corroborate my statements. [Dr. Underhill exhibited several branches of forest and fruit trees which had been touched by these gases, corresponding in appearance to his description.] After this injury by the noxious gases, the plantlouse and other insects are more than usually active, and often complete the destruction of the foliage. Where the gas falls upon the leaves of the hickory, it sometimes cuts a hole through the leaf. Pine is quickly destroyed by it, the whole tree being effectually killed. In fact, this deleterious gas injures almost everything in the vegetable kingdom, and an efficient and immediate remedy is most anxiously desired.

The subject was, on motion, committed to Messrs. Ellsworth, Underhill, Brink, Haight and Darrach, who will report to the Farmers' Club.

The next business (diseases of potatoes) was taken up, and after some brief remarks from Mr. Ellsworth, of Conn., it was laid on the table for want of time to treat it at length.

The culture of silk then came up, and on motion, Messrs. Van Epps, Hyde, Summy and Byram, were appointed a committee to report at the next meeting.

Some conversation on silk, and in regard to a place for the next meeting was held, and it was

Resolved, That when we adjourn, we adjourn to meet at the Repository of the American Institute in the Park, on Friday, at 10 o'clock, A.M.

The 7th subject (culture of native grapes) then came up, and,

On motion, it was referred to Messrs. Underhill, Meigs and Hall, to report at the next meeting.

The president then read a letter from S. B. Parsons, of Flushing, L. I., recommending the establishment of a botanical garden in Florida, for the acclimation of tropical trees and plants, domesticating of valuable exotics, &cc.

Gen. Dearborn gave a brief history of the experiment of a botanic garden made by Dr. Perrine in Florida, during the Seminole war; spoke briefly of the duty government owes to the people to advance with all reasonable means such philanthropic objects; of intelligence as the surest basis of freedom; complimented the Parsons family on their stability and intelligence, &c.

The subject was finally referred to a committee, consisting of Messrs. S. B. Parsons, H. A. S. Dearborn, R. L. Pell, Rev. R. R. Gurley, and William Valk, to report at next meeting.

On motion, it was

Resolved, That the American Institute be requested to renew their application to the legislature of this state for a grant to establish an agricultural college and experimental farm somewhere in the vicinity of New York.

After considerable desultory conversation, Messrs. Wakeman, Darrach and Chandler were appointed a committee to carry into effect the foregoing resolution.

There being no further business offered,

On motion, the Convention adjourned, to meet at the Repository of the American Institute on Friday, at 10 A.M.

Friday, October 16, 1846.

Third Day.

The Convention met at the Repository of the Institute in the Park, pursuant to adjournment, at 10 o'clock, A.M.

H. A. S. Dearborn, President, called the meeting to order, and D. T. Brown, Secretary, read the minutes of the previous session, which were adopted.

Reports of committees being in order,

Gen. Dearborn, from the committee to whom was referred the subject of a botanic garden in Florida," read the following report:

Report of the Committee on the establishment of a Botanic Garden in Florida.

The committee to whom was referred the communication of S. B. Parsons, of Flushing, on the "Establishment of a botanic garden in Florida, for the acclimation of foreign trees and plants valuable for their products, or for ornament," respectfully submit the following report:

The great advantages to the whole Union which may be derived from the introduction and culture of the plants of the *tropics*, and of the temperate zones, not indigenous to the United States, which may be rendered subservient to the interests of the mechanical and manufacturing industry of the country, and increase the variety and value of our exports, as well as augment the number and species of fruit and ornamental trees, shrubs, and herbaceous plants, by the establishment of an EXPERIMENTAL

3

GARDEN in the southern extremity of the United States, is a subject worthy the serious consideration of every citizen, and of the state and general governments.

Thus far the cultivators of the soil have been indebted to individual enterprise and liberality for all the vegetable productions which have been introduced from foreign countries, previous to the return of the exploring expedition, so well conducted by Captain Wilkes; and for all the experiments which have been made for the benefit of the numerous departments of native industry, the projectors have been indebted for aid more to individual effort than to legislative enactment. When it is considered that this republic has been so long and efficiently established, that its population has been extended over a vast extent of territory, varied in its climate, products and soil, and that its position has become exalted among the powerful nations of the earth, it is to be presumed that the government will be emulous to afford to all classes of the people as effectual means of a vigorous and rapid progression in the development of all the arts of an exalted civilization, as have been secured to the subjects of the most enlightened empires of the Eastern continent.

The sovereigns of France and England have long since founded extensive botanical, experimental and acclimative gardens in their capitals, as well as in the southern extreme of their domains.

The "Jardin des Plantes," of Paris, is justly celebrated ; the botanical garden at Montpelier, is of scarcely inferior value, and the horticultural enterprise and energy of the French is farther developing itself in the establishment of an extensive botanic garden in Algiers. From the reigns of Louis XIVth, and Peter the Great, agriculture, horticulture, and botany have especially claimed the attention of those monarchs. The royal gardens of the French, with those at St. Petersburg and on the shores of the Crimea, are celebrated as seminaries of instruction in most of the branches of natural history, and have been also eminently beneficial to the agricultural and mechanical labor, and to the commercial consequence of those powerful nations. In order to make them increasingly useful to commerce, science, and the arts, intelligent naturalists have been sent out in the public ships for the express purpose of collecting from every country, plants and seeds that might be advantageously introduced into the field or garden culture of any part of their dominions. The British government, aware of the importance of many new products to the agricultural interests of the country, have for many years given standing orders to its consuls throughout the world, to send home all the plants and seeds, that may in the most distant degree promise to benefit the landed interest of their country. In that country legislative effort has been ably seconded by individual enterprise and interest. The nobles and intelligent commoners, residing in the country upon their ancestral estates, have either individually, or as members of botanical, horticultural or agricultural societies, founded experimental gardens throughout England, Scotland and Ireland, for the laudable purpose of increasing the number, variety, value and beauty of their vegetable productions. So successful have been their commendable exertions, that plantations now exist in the vicinity of London as well as in Paris, whence are disseminated an infinite variety of valuable and ornamental trees and plants, collected from every soil and climate of the earth.

If then England and other European powers are so eminently alive to the benefit likely to occur from the introduction of foreign trees and plants, to their comparatively limited territories, how vast indeed would be the advantage of such establishments in the United States, where is to be found every variety of climate and soil, from Cape Cod to the Pacific, and from the orange groves of Florida to the frozen borders of Lake Superior ?

By thus testing the character and hardihood of staple foreign products, the culture of some plant may possibly be introduced, whose product will be as valuable to our national industry as olives to the South of Europe, as coffee and indigo to the tropics, or as cotton to our own country.

The trees and plants of America are so highly appreciated in Europe that no difficulty would be experienced in establishing a system of exchanges with their experimental gardens.

The favorable disposition of Congress to the foundation of a botanic garden in Florida, has been exhibited by the liberal grant of a large tract of land, with a sufficient sum of money to Dr. Perrine, several years since, whose efforts were frustrated by his sudden death at the hands of the Indians, just as he had commenced the transplanting of numerous tropical plants which he had procured from Central America and Mexico.

The object of the government in affording encouragement to this undertaking, was thus suddenly frustrated, but it is to be confidently presumed that an equally liberal patronage will be again extended, and in such an efficient manner as to render the realization of this important project as certain as it is desirable. Such an establishment, if situated on the St. John's River, on what must eventually be the principal inland route from New York to New Orleans, would be an attractive object to travelers; would command the attention of scientific men of our own and foreign countries; and while it arrived at the great object of benefit to the domestic industry of our country, would exhibit to foreigners a convincing evidence that our republican government was fully alive to all that could beneficially affect the wealth and prosperity of its people.

The committee would respectfully recommend the adoption of the following resolutions :--

1. Resolved, That the American Institute be requested to memorialize Congress to adopt such measures, as may be deemed most expedient, for the establishment of a BOTANICAL AND EXPERIMENTAL GARDEN IN FLORT-DA, for the ACCLIMATION of TROPICAL and other FOREIGN TREES AND PLANTS, and for their distribution among the several states in such a manner as will best subserve the interests of each.

2. Resolved, That the American Institute be also requested to correspond with the agricultural, horticultural and botanical societies throughout the United States, on this subject, and ask their vigorous cooperation, by transmitting memorials to Congress of a like import to that designated in the foregoing resolution.

3. *Resolved*, That the Secretaries of this Convention be instructed to transmit a copy of this report to the Corresponding Secretary of the American Institute.

H. A. S. DEARBORN, L. B. PARSONS, In behalf of the Committee. Gen. D. made some remarks upon the prospective utility of such a garden, and invited Hon. C. F. Mercer, of Virginia, to address the Convention, saying that Gen. Mercer, had resided several years in Florida, was conversant with the experiment of Dr. Perrine, and at present cultivated as an amateur an extensive garden in Virginia, of which commonwealth he was one of the ablest statesmen.

Gen. Mercer rose and said, he was deeply indebted for the compliment of the honorable chairman. "I have resided in Florida," said he, " about six years in every variety of season, and can speak with some certainty of its soil and climate. Though not a constant resident, it has been my home. Florida in point of territory is the third state in the Union. It extends from 26 degrees to 31 degrees of North latitude, comprising every variety of soil, from the lightest and most barren sands to the richest hammocks, whose fertility is unparalleled. One peculiarity of this state is that its forests never lose their leaves ; which perennial verdure, combining with the influence of the Gulf Stream on one coast, and the ocean on both, preserves an equality of temperature unknown to inland regions. Frosts are seldom or never known to injure vegetation in Winter. Some instances have occurred near Tallahassee of injury to orange trees by late Spring frosts, owing to the proximity of the southern spur of the Alleghanies. Such a country, it will be seen, offers excellent advantages for 'trial farms,' as we in the South call them. Let the great empire state establish there her botanic garden or trial farm, and other states will soon imitate the good example; and in this great southern garden almost all plants may be acclimated or naturalized. We have scarce a single fruit in its natural state. Our splendid apples of two pounds weight came by cultivation from the miserable little crab-apple. Our grapes, of a size and flavor most excellent, came by proper care from a like insignificant parent. These grapes, which in England forty years ago brought four shillings sterling per pound, are now sold for one shilling. Into this great botanical garden, and similar ones in other latitudes, we can introduce valuable native plants from all parts of the world. For instance, the wild rice, rye, and anniseed of Texas; which state, wooded with deciduous trees, mostly an elevated prairie, lying exposed to the cold blasts from the Rocky Mountains, where a change in a few hours of 40 degrees Fahrenheit often occurs-is highly unfavorable to vegetable perfection. Yet the botany of Texas is of the richest description. In regard to a grant of land, I think from the present state of the country, and opinions of our government, little or nothing can be expected from Congress. The influence of States Rights men, of which Mr. Polk is one, is too powerful. I think this garden would be cheerfully established by private subscription, if the minds of the people were turned to it. As I am about to settle in Kentucky, and shall have no personal interest in the matter, I may perhaps be allowed to advise. Land can be purchased at ten shillings per acre. Let a private subscription be opened (I will give \$50 myself) for the purchase of a location, after which \$1000 per annum will defray expenses. Send some of our best German immigrants there as cultivators; many of whom would be glad to go for the consideration of small farms of their own; to these add a superintendent, whose skill in botany and analagous sciences shall be his recommendation, and the experiment is complete. I have a word or two to say concerning the tariff, knowing that I stand before a tariff audience. After thirty years of public life, during which I steadily and constantly voted against a tariff for protection. I have at last been converted to that doctrine, through the influence of observations made in a trip to New England, and two voyages to old England. I am glad my experience has induced me to change my views, and do not hesitate to proclaim my new convictions, having no interest for publication or concealment. I hold no public office. never accepted one while in Congress, and would not now accept any, not even the highest within the gift of government. Some time ago I was in Boston, and while I was preparing to leave, my friend Nathan Appleton invited me to visit Lowell. I had an indistinct prejudice against factories and declined his request. He would not be put off, and after long persuasion I consented to go, for I could not well persist in refusing to please one of the principal men in a city where I had been received with such unbounded hospitality. When we arrived at Lowell, I was astonished to see so clean and beautiful a city; and still more so at the wonderful spectacle of 7000 girls—all pretty girls, too—neat, comfortable and happy. They all looked up smilingly as I passed along, but very suddenly looked down again, perhaps not much captivated by what they saw. When I entered the factories, I expected to have all my prejudices against manufactures sustained by ocular demonstration: but here I was again most wonderfully astonished to find things orderly and neat; so clean, too, that I verily believe I might have swept the floor with my handkerchief without giving it a stain. This remarkable state of things seemed a paradox to me, effectually annihilating my long cherished prejudices against home manufactures, and converting me to the doctrines of the American system. About forty years ago I was in England, and while there visited Manchester, Stockport, Birmingham and other places, for the purpose of knowing the state of society there. It was astonishing to me how human beings could exist in a condition so miserable-three or four families huddled into a damp basement, more like hogs than men. From comparisons made of the expense of manufacturing in England and America, I am confident that we can make goods here with less expense than they can in England. They have no water power-we have it unlimited; they pay a great price for transporting coal to their factories-we scarcely anything; their primum mobile is steam-ours water; their laborers are ignorant and wretched-ours enlightened and happy; their markets are abroad-ours at home. I therefore conclude that a moderate protection to our manufactures will soon establish them on a basis which will be too firm for overthrow by casual chances. I do not consider it always true that every one is the best judge of the manner in which he should employ his capital and labor, as those affirm who cry out against all laws restricting and regulating trade. The great fault of our government is not in the enactment of tariffs and revenue laws, but in the facility with which these measures are changed. Perhaps I, who so lately changed my views, ought not to talk of instability ; but in sixty years of active life, one finds many opportunities for change, if not so many for improved opinions. All are familiar with the change of Daniel Webster on the tariff, and of Henry Clay on the national bank, and no one presumes that other than honest convictions prompted these great men to reverse their judgments. The very first memorial presented to Congress in favor of protection to our manufactures came from Charleston, S. C., and was supported by Mr. Calhoun. In the unsettled times of Jefferson and Madison, most of our southern men were in favor of establishing domestic manufactures. Then we had embargoes and prohibitions, and double duties during the war.

At its close we went back to a comparatively low tariff, and Monroe had to borrow money to pay government pensioners. The injustice of these frequent changes is manifest. No matter how wise or theoretically good measures of this kind may be-no matter how great an improvement on former laws-if they are often and unexpectedly changed, their effects are injurious; they induce fickleness of purpose, and scepticism among the people-faith in the government is destroyed, and all is doubt and uncertainty. Suppose, in the great operations of Nature, such changes should occur; the farmer going forth to plant his Spring grain suddenly finds it to be October instead of April-Michaelmas night instead of Mayday-how would his faith be shaken in the Supreme Ruler! Such uncertainty in regard to business our changing government is continually producing, and this instability is the greatest evil of our democratic system. The injustice of those frequent changes, crushing as they do many young branches of enterprising industry, is too apparent to need elucidation.

After some farther observations upon the opinions of Southern men, &c., and excusing his unstudied and discursive remarks, Gen. Mercer sat down, amid hearty applause.

The question on the adoption of the report was then put and carried.

Mr. Meigs remarked that in looking over the proceedings of the Royal Society at Paris, he observed that there had been quite a war of words on this subject of acclimating plants, some contending that it was altogether impracticable, mentioning the potato, which they had possessed nearly three hundred years, as a witness; others considering acclimation perfectly natural and easy. The potato being an annual plant can be no proper proof for or against acclimation. Mr. Meigs thought acclimation easy, and hoped to see it tried. Many plants, we know, will change their appearance and character by a change of climate.

Col. Clark observed that plants often undergo a material change by transplanting, and mentioned the castor bean, a native of the West Indies, which on being transplanted to this climate greatly changes its period of maturity. While up, he would remark that the injury to vegetation, by gases arising from brick kilns was, he thought, produced by excess of sulphate of alumina in the clay rather than gases from the coal used. Some clay contains this sulphate in so large quantities that alum has been obtained from it. The gases produced by burning this aluminous clay deprive the atmosphere of moisture and, of course, annihilates one of the greatest supporters of vegetation. The affinity of sulphurous acid gas, for moisture is very great, and its effects upon vegetation proportionably injurious.

Gen. Dearborn, in regard to acclimation, said that he had picked ripe balls of cotton from plants in his garden, in Massachusetts, though this valuable plant is acclimated only as far North as the southern part of Virginia. Sugar cane is a tropic plant, and in the torrid zone it ripens full to the very top the saccharine matter. It has been acclimated in Louisiana so that they get three or four feet of saccharine matter, if the crop be secured before frost. I doubt not there are in tropical and boreal climates many plants which may be easily and profitably acclimated in our country. We cannot expect any very important new discoveries in the animal and mineral kingdoms; we are intimately acquainted with land animals and with minerals; aquatic regions can at best yield us little else than oil ; but so extensive and important is the vegetable kingdom, that if all animals (man excepted) were destroyed, we should have an abundance left for our sustenance. We know that many of our valuable plants are natives of far distant regions; for instance, the mulberry, which was originally a native of a small province in Southern India; thence it came up the Persian Gulf, through Palmyra, (Solomon's famous Tadmor in the Desert,) passed ruined Babylon and Nineveh, spread over luxurious Persia, came along the Ægean and Mediterranean, and finally reached Rome. A wandering monk, whose pilgrimage had been in the East, brought to Constantinople, in the top of his staff, a few seeds of the mulberry and eggs of the silk worm where (in Europe) they were Thence came they to Italy and France. Now look at the first planted. immense value of the silk business in those countries. See our valuable animal, the sheep, as it were, put out of countenance by that insignificant worm brought by the wandering monk from far Asia. This is an instance of acclimation. Theoretically I query thus: In India they have a tree and a worm which produces this valuable silk, this gorgeous velvet, this magnificent satin. Can I raise them in Massachusetts ? Undoubtedly no, is the response! But they and other valuable products of the opposite zones, may gradually be taught to grow in our climate. This experimental garden we must have; and if we move energetically in the matter, we can have it, we will have it.

Mr. Meigs mentioned, as a singular fact, that the island of Japan will not produce a potato. He said that in Algeria, the French government have an experimental garden in successful operation, in which one may find torrid and frigid plants side by side, a medley of the vegetable kingdom from all parts of the world.

Gen. Mercer said we must not expect too rapid progress in acclimating plants. There is great affinity between the vegetable and animal kingdoms; and if the latter, negroes have been a hundred and fifty years in this country, yet they are not so well acclimated but that they generally feel and thrive better when transported to the burning climate of Africa. The first magnolia grandiflora he ever saw in Virginia was in General Washington's garden. Now they are plenty in Philadelphia, and even farther North. He had planted the soft-shelled almond in Florida, and was of opinion that it would do well, and might supersede the imported article. Plants generally have a uniform temperature at all hours, as he had demonstrated some years ago, by placing the bulb of a thermometer in a tree. This equal temperature tended to equalize heat and cold in timbered countries, as is evident from the sudden changes in places destitute of trees.

General Dearborn having, in course of his remarks, alluded to his correspondence on the subject of a botanical garden in Florida, was requested by a committee of the Institute to furnish the same for publication, in connection with the report of the proceedings of this Convention. He kindly complied, and the letters are inserted.

> HAWTHORN COTTAGE, Roxbury, December, 1846.

My DEAR SIR :---

I enclose the copy of a letter from Professor Wurdemann, an eminent physician of South Carolina, to General D. D. Clinch, of Georgia, in relation to the establishment of a botanical garden in Florida, which was transmitted to me by Doctor A. Mitchell of Portland, Maine, from the belief that I would be gratified to learn the views of a scientific gentleman of such distinction, so exactly quadrate with those entertained by the American Institute, upon a subject that claimed its special attention, during the last exhibition of the products of the earth and mechanical industry.

From the extensive information which Dr. Wurdemann possesses of the extreme southern region of our country, great confidence may be placed in his statements, as to the climate of Florida, and the advantages which would be derived, from the location of a garden of acclimation in that state.

Dr. Mitchell is entitled to the highest respect for the commendable and zealous efforts he has made to investigate the various departments of our natural history. Within the past six or eight years he has collected specimens of most of the birds of New England, and many of the quadrupeds, as well as of other animals, and has prepared them in a very perfect manner for insuring their preservation. I have never seen more beautiful illustrations of the very different art of securing examples against that decay to which such precious acquisitions are liable.

He passed the last Winter in the North, for the express purpose of making additions to his valuable cabinet of ornithology, and was so successful as to have procured numerous specimens which were set up in the best manner, and brought safely to Portland.

It was during his absence, and while making explorations on the River St. Mary, that the idea occurred to him, of the establishment of a garden in eastern Florida, and I received several letters from him on that subject, before and after his return.

You will recollect, that during the session of the Convention of farmers and horticulturists, in October, I referred to the valuable services which Doctor Mitchell had rendered to his country, as a naturalist, and the measures he had taken, as well as those which he considered it important should be adopted by the government and the patriotic cultivators of the soil throughout the Union, for the foundation of a garden of acclimation; and it is also proper to state that he has corresponded with a number of the most intelligent gentlemen in several of the southern states, on this very interesting and important subject, and has received assurances of their cordial co-operation. General Clinch, who commanded our military forces in Florida, for a number of years, and now resides in Georgia, not only fully approves of the plan, but is confident of the immense advantages which will result from its being carried into effect.

General Clinch is one of those intelligent, liberal, and warm-hearted patriots, who looks far into the future, and has a sanguine belief in the grand destinies of the United States, and is ever ready to aid in promoting the prosperity of his country.

Confident that the American Institute will cheerfully and efficiently use its influence in a manner that will merit the gratitude of the present and future generations, I shall await the result of the efforts it has determined to make, in the full belief that they will be crowned with success.

> Very respectfully, your most obedient servant, H. A. S. DEARBORN.

T. B. WAKEMAN, Esq., Corresponding Secretary of the American Institute of New York.

LETTER OF DR. WURDEMANN TO GENERAL CLINCH.

CLARKSVILLE, GEORGIA. September 19th, 1846.

GEN. D. D. CLINCH.

DEAR SIR :- The intention of forming the company referred to by your correspondent, Dr. A. Mitchell, for establishing a botanical garden in Florida, for the purpose of propagating tropical plants, is one which should meet the support not only of the state and general government, but also of every lover of natural history in our whole country. Its establishment is certainly feasible, and it could moreover be rendered very profitable to those engaged in it, by making it a nursery, from which the farmers of Florida could obtain a supply of tropical plants and trees ; and thus convert their uncultivated wilds into gardens, as luxuriant and beautiful as those which now form the chief charm of the West India Islandsbesides the market which the numerous gardens and hot-houses would present in our larger cities of the North and South.

By selecting a suitable site for a boarding-house near the establishment. it would offer a pleasant retreat for invalids during the Winter. The journey to the West Indies is too dangerous and tedious, and the privations and expenses to which they are subjected are too great ever to render them places of general resort for that class of travelers. There are also other objections of still greater weight-the insalubrity of the climate of most of the accessible islands, and too great a heat of their Winter months. After a residence of six consecutive winters under the tropics, I have been able to select only one, and that one not entirely free from objections. The smaller islands, as Santa Cruz, Curacoa, Key West, and Indian Keys, do not afford shelter from the pernicious atmosphere that ever hangs along the borders of the sea. Could a salubrious situation be selected in Florida, far enough inland to be out of the influence of that atmosphere. while its own climate being dry, I do not hesitate to predict, that with suitable accommodations for invalids, they would flock to it from all parts of our widely extended country.

The high, sandy, pine regions of the state about, or not much below the latitude of St. Augustine, must present many proper sites for a hotel. From my own experience and observation, I am inclined to believe that a region occasionally visited with cold sufficient to require woolen clothing is the best suited, by its bracing effects, for consumption especially. The heat in one more southern is too debilitating, and they are moreover not entirely free from malaria, even during Winter.

I earnestly hope that the plan proposed, to form a company referred to by Dr. Mitchell, will meet with encouragement, and that they will not wait for the support of the general government in the commencement. Under one or two efficient agents, a profitable investment would be made. and success would be certain.

> I am, dear sir, very respectfully, Your obedient servant, H. WURDEMANN.

While the subject of making a grant of land in Florida to Dr. Perrine, for the purpose of acclimating tropical plants, was under consideration in Congress, in 1838, the following letters from General H. A. S. Dearborn, of Massachuettss, on that subject, to the Hon. Levi Lincoln and Dr. Perrine, were published in the National Intelligencer;

HAWTHORN COTTAGE, Roxbury, April 17, 1838.

My Dear Sir—I am very much obliged to you for the report of the agricultural committee on the memorial of Dr. Perrine, in relation to the culture of tropical plants in Florida, which you were so kind as to send me. I have read it with the deepest interest, instruction and pleasure; and so favorable do I think of his honorable and patriotic enterprise, that I most sincerely hope Congress will cheerfully and promptly grant his request, and aid him in the most liberal manner.

The introduction of a single plant or seed has, in all ages and nations, frequently produced the most important and valuable results. The mighty influence on the agricultural industry and the general prosperity of empires, which the naturalization and culture of the cereal grains, the olive, vine, white mulberry for the food of the silk worm, the sugar cane, coffee plant, cotton, potato, rice and tobacco, have produced, is well known, and I have no doubt that several of the plants which Dr. Perrine has now growing at Cape Florida and Indian Key may possibly become staple articles of cultivation in several of the most southern states. Besides, I do not think so meanly of the capabilities of the soil of Florida as most people. I well remember that Louisiana was called a mere alligator swamp, when first so cheaply acquired. The single fact that East Florida is the only portion of the union where many of the most precious of the tropical plants can be acclimated, will at no very distant period bring every acre of land into great demand for tillage. It will be drained, diked, embanked, and converted into various kinds of plantations. What was Holland before its dikes and canals were constructed ?*

What has made the cotton and sugar estates of lower Louisiana so prolific, but the levces for restraining the overflowings of the Mississippi ? What the rice fields of South Carolina and Georgia? Human genius and indomitable industry, where there is a cheering prospect of reward, will triumph over all natural physical difficulties. We know the knights of Malta made fertile gardens on the barren rocks of that island, celebrated for their chivalrous deeds and as the site of Paul's shipwreck, by pounding up the loose and scattered stones which covered its bleak surface, and importing soil from Sicily to mix with their dust. The Mexicans had floating gardens in Lake Tezcuco, where their capital city was established. The Chinese have long resorted to the same means of rearing culinary and other plants, and not an inch of soil, even though situated amidst the precipitous cliffs of the mountains, is untilled, so great is the demand for vegetable products by the thronged population of the Celestial Empire. The lemon and orange groves of Portugal and Sicily, are established and maintained by an expensive and laborious system of artificial fountains and channels of irrigation. With us land is so abundant, in comparison

* The government of Holland is now engaged in draining Harlem Lake, which covers an area of 45,000 acres, or over 70 square miles, to the depth of thirteen feet below low water, in the Zuyder Zee, for the purpose of securing Amsterdam and Leyden, as well as large region of farms and yillages, from inundation, and to convert the bed of the lake into tillage land. To accomplish this grand object, three enormous steam engines are employed, which work eleven pumps each, which are 63 inches in diameter, that discharge 2,500,000 tons of water per 24 hours. These engines, it has been calculated, will drain the lake in 400 days, at an expense of 580,000 dollars. The first engine was completed in 1845.

with the population, that we have no just conception of its value, as estimated in those portions of the globe, where the inhabitants are so numerous that a few roods are considered an estate so ample that the fortunate proprietor is accounted an independent man.

But even in the vast extent of the United States, with the millions of acres still in a state of nature, how many thousands are now cultivated, which, a few generations since, aye, in our day, were deemed worthless? In England, what extensive morasses have been reclaimed and added to the domain of agriculture, while the heath-covered mountains of Wales and Scotland are rapidly being planted with magnificent forests, not for embellishment merely, but as inexhaustible sources of wealth. The old Duke of Athol planted a forest on his estate in Perthshire of 15,593 acres, which contained 27,431,600 young trees when he died; and his successor set out 6,500 acres of poor mountain land solely with larches. The land was not worth over twenty-two cents rent per acre; and now with the timber on it is valued at 32,500,000 dollars.

The citizens of this country have, here and there, selected the most fertile and eligible locations, and call most of the immense remainder of the land either refuse or worthless. Time and the increase of population will show that nearly the whole will become more valuable than even what is now considered the most choice. Embankments like those in the vicinity of New Orleans will be extended on each bank of the Mississippi, from the Gulf of Mexico to the Falls of St. Anthony.

If but one of the most valuable of the two hundred plants introduced by Dr. Perrine, can be successfully cultivated, all Florida will be drained and become luxuriant fields and gardens, and be embellished by canals, rivers, bays, harbors and beautiful lakes. It will be the Cuba of this nation.

I know your liberal disposition and enlightened and enlarged views in relation to subjects connected with agriculture, and all the great branches of national industry, and am confident you will be disposed to do what is expedient on this occasion.

Dr. Perrine, like most men of science and ardent patriotism, has devoted much time and expended his resources for a great purpose, is sanguine in the beneficial results to the republic, and the hope of future remuneration from his own practical exertions; and it is very desirable that he should not be left, as is too often the case, to lament his labors and to find that others hereafter reap the fruits of his meritorious enterprise, without having endured any of the toils, or incurred any of the expenses of a first experiment. Congress must be to him as munificent as would have been Henry IV. of France, or Napoleon, to render his indefatigable researches and accumulated intelligence upon the subjects he has presented to the consideration of the government useful and honorable to himself and the country.

With assurances of the highest respect and esteem,

Your obedient servant,

H. A. S. DEARBORN.

HON. LEVI LINCOLN, Member of Congress for Massachusetts.

HAWTHORN COTTAGE, Roxbury, June 20, 1838.

Dear Sir—Your two letters and the samples of the foliaceous fibres of the precious tropical plants, which you are desirous of introducing into FlorIda, have been received. I am extremely obliged to you for this kind

attention, and very happy to learn that the letter to my estimable friend, Governor Lincoln, afforded you any satisfaction. It was but the expression of my gratitude for the highly commendable efforts you were making to subserve the interests of your country, by furnishing a new source to the agricultural and manufacturing industry of the United States; for every raw material produced, even in the extreme South, is a direct benefit to the mechanical and commercial enterprise of the North. I am fully sensible of the difficulties you have been compelled to encounter, in your laudable endeavors, and how laborious and discouraging is the position of a gentleman who has a favorite and important object to accomplish, which requires the generous co-operation of the national government, and especially if it is of a novel character. The momentous subjects before Congress, growing out of our domestic and foreign relations, have been of such an all-engrossing character, as to require immediate action, and have not left the members at leisure to attend to less pressing matters. Besides, there are comparatively but so few persons who take an interest in political economy, scientific inquiries, or any measure which requires much research, that an utter indifference to them too generally exists in the whole community. And it is not until more complete and exact knowledge is obtained, that the same zeal and promptness of action is induced, as when the end to be obtained is obvious, and universally approved, from the evident advantages which are to follow.

Be not discouraged, therefore, for *facts* and *truths* are mighty in their operations and will ultimately triumph over all impediments. Columbus was for years, a petitioner to no less than three sovereigns, and on the point of appealing to the bounty and energy of a fourth, before his gigantic conception of the existence of a "New World" was credited and his voyage of discovery undertaken. Newton's theory of gravitation was not adopted even by the Academicians of France, until forty years after the publication of his Principia ; and Galileo was obliged to confess before the assembled authorities of the Romish church, "that the earth did not turn round on its axis." Still that remarkable philosopher did not despair, but as he arose from his humbled position, and brushed the dust from his knees, whispered to a friend, "nevertheless the earth does revolve;" and his belief has become universal, although the pontificial decree, denouncing it as a heresy, remains unappealed.

The value and importance of the experiment you contemplate making is so great to the whole republic, that it is impossible that it shall not be undertaken, when the subject shall be fully understood, in all its vast scope and bearing, and by our almost unanimous voice. The citizens of the United States are at times, difficult to be excited, but when the course is made clear and the anticipated result of momentous import, they evince an ardor and an energy which sweeps like a flood every obstacle, and there is no relaxation, until the work has been consummated. How long were roads, canals, and rail-ways urged upon the attention of the state and national legislatures before they obtained any favorable consideration ? And, at last, indignant at the slow movements and parsimonious policy of their governments, the people came forth in their strength ; and behold the glorious consequences. Prove that a measure is based on truth, and will be useful, and it will be adopted. Let the pioneer of improvement enlighten the route he has taken with the flame of intelligence, and his followers will be as numerous as the object to be accomplished demands.

One of the kind of fibres you sent me, that of the Forest Pine Apple, Bromelia pita, is of a remarkable glossy and delicate character, and I should think would make a beautiful and excellent thread, as the most perfectly prepared flax, or the filaments of the silk-worm.

The value of the culture of the Agave Sisalana, from which is obtained the Sisal hemp of commerce, may be conceived from the following facts, which I have taken some pains to ascertain, since the receipt of your first letter, as it is a substitute for the Manilla hemp which is the fibre of the petiole, of a species of Banana, cultivated in the Philippine Islands.

Cordage made of Manilla hemp is now preferred for the running rigging and hausers of the vessels in the fisheries, coasting and foreign trade, as well as all the steam-boats on the lakes and Western waters ; it being as durable as hempen cordage and much lighter, the weight being for ropes of like size and length nearly as eight to ten. The whalemen, in the five hundred ships engaged in that adventurous navigation, have given it a thorough trial, and from its bouyancy it is universally used for their long tow-lines employed in the perilous capture of the leviathans of the deep.

All the Sisal hemp which can be procured is manufactured, and makes quite as good cordage for most purposes, as the Manilla; but the fibre not being quite as flexible—owing, probably, to the less perfect manner of prepairing it, the price is lower. For the last three years, the Manilla hemp has been from 7 to 7 1-2 cents per pound, and Sisal from 6 to 6 1-2 and 7.

The quantity of Manilla hemp imported into the United States, during the last year, is estimated by a manufacturer of cordage, who lives in this town, at 28,000 bales, each weighing 270 pounds; the cost of which, at 7 1.2 cents, amounts to \$567,000.

The above mentioned manufacturer has invented machinery, which he has in full operation, for spinning Manilla hemp; and has also made cordage from the Sisal with the same apparatus. There is another large factory in Boston, in which the process of spinning was invented by Professor Treadwell, of Harvard University. The latter works are driven by water, and the former by steam power.

| There are two rope-walks in | 1 this | town | which | manuf | actured | into cor- |
|--------------------------------------|--------|--------|-------|--------|---------|-----------|
| dage of Manilla hemp | | | | | | bales. |
| One in Boston | | | | | 1,200 | 66 |
| Five in Charlestown and Cam | bridge | | | | 1,000 | " |
| Five in Salem and Marblehead | đ. | | | | 3,200 | 66 |
| One in Windham . | | | | | 200 | 66 |
| Two in Plymouth . | | | | | 1,400 | 66 |
| | | | | | 10,000 | bales. |
| In the other New England S | States | | | | 5,000 | bales. |
| In New York, Philadelphia, Ba | ltimor | e, and | other | laces, | 13,000 | |
| Total quantity in the United States, | | | | | 28,000 | bales. |

With the best wishes for your success, in obtaining the generous pa-

tronage of Congress, and for your prosperous prosecution of an experiment in Florida, I offer assurances of my unfeigned respect.

Your most obedient servant,

H. A. S. DEARBORN.

DOCTOR HENRY PERRINE.

The American Institute having seriously considered the importance of the experiment which Doctor Perrine was anxious to make, on the naturalization of tropical plants, adopted the following resolution, in 1888.

Resolved, That the American Institute of the city of New York, have noticed with great interest and pleasure, the zealous, unprecedented, persevering efforts of their countryman, Dr. Henry Perrine, late United States consul at Campeachy, to engage the attention of our government, to encourage the acclimation and culture of tropical plants in this country; and feeling strongly impressed with the great importance of his enterprise, would respectfully, but earnestly recommend the same to the special consideration and patronage of Congress, and to the favorable notice of their fellow citizens engaged in agricultural pursuits, particularly in the southern portions of our country.

Dr. Underhill, in relation to gases from brick-yards, said, that it was not satisfactorily determined whether the injury to vegetation was produced by sulphuretted hydrogen and the other gases from coal, or sulphurous acid gas. The gas which does the injury is evidently light, from the distance its effects are observed. With a moderate breeze the gas will travel for miles from the kilns in the course of a few hours. All along the river, from New York to Albany its effects are discernible. He had carefully observed its action for six years, desiring to learn some remedy for the evil, and what he said of the extent and appearance of the injury he founded upon actual observation. Some remedy must soon be applied, or many of our best orchards and ornamental trees will be destroyed. Wherever the evil lies, in the coal or the clay, or in both, we desire only to get at the truth, and then we hope to find the much desired remedy.

Col. Clarke stated that sulphurous acid gas, when disengaged, combined with about 700 times its volume of water. He did not know how far the wind might carry it. It was evident, in cities, that the carbonic acid gas and carbonic oxide, disengaged by thousands of coal fires, is not injurious to vegetation. Sulphurous acid gas is very insidious and injurious. Sulphate of alumina exists in all clay; in some near Baltimore to such an extent that alum is made from it by the simple addition of potash.

[^] Mr. Wakeman thought this discussion out of order, inasmuch as the subject was in the hands of a committee, from whom no report had yet been received.

Mr. Van Wyck advised the committee to proceed with caution in the premises. In any event it was an attack upon the brick makers. If the premises proved false, the mater would be a blot on the reputation of the committee and the Institute; if true, the farmers would set up a cry against brick makers, and that also would react on the Institute.

Mr. Ellsworth rose to call to order. It was a very delicate question,

and he hoped no debate would be allowed anterior to the report, if the committee took two years to deliberate.

Dr. Underhill said, we should be very cautious; but when we knew we had got hold of the truth we should speak out, let who will be offended.

After a few suggestions by Messrs. Van Wyck, Underhill and Ellsworth.

Mr. Wakeman moved that Professor Renwick, of Columbia College, and Dr. Chilton, both of this city, be added to the committee on this subiect, which motion prevailed.

Mr. Wakeman, from the committee on the subject of an Agricultural College, then read the following

REPORT,

Of the committee on the establishment of an Agricultural College.

The committee appointed on Tuesday to draft a resolution, expressive of the views of the Convention, on the suggestion concerning the establishment of an Agricultural College and Pattern Farm, in or near the city of New York, beg leave to report:

Whereas, agricultural science is in its nature as extensive as life, and embraces the actions of the ponderable and imponderable elements and the proximate principles of all living things, and the reciprocal influences of form and constituence; and whereas, this science involves the investigations of these most intricate and delicate principles and actions, which investigations require such means and abilities as place them beyond the compass of private citizens. And whereas, the commercial relations of the United States and the necessary immediate connection of eight-tenths of our population with rural pursuits, and the consequent power, virtue and wealth of the nation, require the greatest agricultural results at the least expense, which can only be accomplished by personal union of science and practical skill. And whereas, agricultural science is in its infancy, and many of its leading principles just now evolving, and further, is as yet unembodied—therefore

Resolved, Agriculture requires an institution with all necessary appliances, for the cultivation and diffusion of its science, and its application to all branches of *rural industry*.

Resolved, The American Institute be and hereby is requested and urged to prosecute with zeal and perseverance the establishment of such an institution, the reasons for which are contained in the following memorial, addressed to the state legislature at its last session, to which the committee beg leave to refer:

TO THE HONORABLE LEGISLATURE OF THE STATE OF NEW YORK.

The Farmers' Club of the American Institute respectfully petition your Honorable body for the establishment near the city of New York, of an Agricultural College and Experimental Farm.

This application is caused by the growth of a new sentiment among men. They have been habituated for ages to see a very small class of the community selected for education in colleges, acquiring literature and science—thence filling the learned professions and influencing legislation. This has been deemed a great good because it secured the existence of learning at least if it did not render it sufficiently general among men. But a new sentiment exists and grows among all civilized men. That sentiment is, that the useful arts, especially above all things, agriculture, must be elevated to their highest possible rank. That all our learning must be now connected closely with these useful arts. That all the sciences of the colleges—the powers of commerce collecting from the whole world, must be brought to bear on the glorious fields of our country. That these great resources should be all united in the production of fertility where it is not, in the perfect culture of the staples which we already possess, and in the introduction of all those for which our country is adapted; and what one is there of all the climates of our globe which may not find a fit location in this empire union, embracing all the best latitudes for vegetation ?

We respectfully ask that an experiment may now be tried in this great state, of all those staples which can be found suitable to our own location; so that New York city, the emporium of commerce, may, by her thousand ships and roads, concentrate the first college and trial farm for all vegetable productions.

We ask not for private advantage. The state can provide the ground, and that will not fail to increase in value. The state can watch the progress of the experiment and arrest it if it should fail to answer the desired end. Having given by charter to the American Institute agriculture as one of its purposes, and looking at the course of the Institute during the last eighteen years in executing the purposes of its incorporation, we respectfully submit the reasonableness of the expectation that the Institute would carry out, satisfactorily, the agricultural college and farm, if it was entrusted with the trial by your honorable body. It is firmly believed by us that the college and farm can be put into operation by the grant of land and suitable accommodations; and that it can be made to flourish and increase without other limits than those of the state of New York.

We must teach our young men as much of learning as will place them on a footing with the educated man of old Europe, and at the same time fix in them a perfect knowledge of farming, and by their daily labor on the college farm, that habit of body, strength and health, without which all the book-learning in the world is but of light value.

To an enlightened and patriotic legislature it is needless for us to urge any further reasons; those reasons reach the very deepest foundations of our republic, and we well know that the legislature is imbued with them all.

Resolved, The commercial relations of the city of New York with the whole world and all parts of our own country, recommend its neighborhood as a proper location, and the city and state of New York the proper source of public endowment.

All which your committee respectfully submit.

T. B. WAKEMAN, J. DARRACH.

On motion, the report was accepted.

33 Mr. Van Epps, from the committee on the culture of silk, then read the following report :

In reporting to this Convention on the subject of silk, your committee have been at a loss to decide in what aspect to present it, in order to secure for it the greatest advantage from the action of this body.

Representing as we do almost every state in this Union, it is of the utmost importance that the subject be presented in such form as to secure a *concert* of effort when we shall have returned to our several states.

The practical connection of your committee with the silk business, will naturally lead you to anticipate from us an accurate statement of the present extent and condition of this enterprise.

It is with us a matter of regret that a branch of industry so evidently and intimately connected with our interests as a nation, and which, at the same time, has been so *fully* and *satisfactorily* tested in every latitude of our country, should advance so slowly, and elicit the energies of so few of our people.

From a large number of communications to which your committee have had access, we collect the most flattering evidences of success in regard to the *culture* of silk, wherever it has been undertaken with system, and in accordance with the nature of this most *delicate* and *particular* little insect, the silk worm.

Upon the bleakest highlands of *Maine*, among the hills of Vermont, throughout the valley of the Ohio, and the sunny regions of the extreme South, it has been alike successful—with only this difference, that in the cooler regions of the North, the employment of artificial heat has been occasionally necessary, to counteract the influence of the chilly dews of the night, which would otherwise materially retard their growth, and weaken the constitution of the silk worm.

Here, not more than six or eight weeks can be relied upon for feeding, while in some other sections the same number of *months* can be devoted to the business, with *less* labor, and augmented success.

On the subject of the mulberry-tree, your committee would refer to Resolution No. 4 of the New England Silk Convention, as published in connection with the proceedings of this Convention.

In regard to the *manufacture* of silk, we would only refer to the silk department of the "Great National Fair of the American Institute" now in progress at Castle Garden.

We would advise every member of this Convention to go there and examine and handle those rich and elegant fabrics, honorable alike to the hands that wrought them, and the soil that produced the raw material from which they were fabricated.

We will find there the cocoon, the reeled silk, and in almost every variety, satins, silks, and silk velvets; not perhaps so well finished as some we may have seen from other countries, and far inferior to what we shall ere long produce, but nevertheless beautiful and serviceable, and such as any American citizen should feel proud to wear.

Of the ultimate success of the silk culture, your committee entertain no doubt, but at the same time there are obstacles which have long borne heavily upon our progress, and which, unless obviated, must continue to embarrass us for many years to come, preventing our success, until hundreds of millions more of gold and silver are drained from our own resources to enrich those who oppress and degrade the unhappy operatives of other lands. We wish to say *emphatically* that we believe *no other* country or people so well calculated to *perfect* the whole silk business as our own.

The obstacles to which we refer are altogether artificial.

They are, unwise legislation on the part of the general government, and the want of suitable encouragement from both *nulicnal* and *state* authorities.

Your committee would here adopt Resolutions No. 3, 5 and 6, of the New England Silk Convention, and offer the following additional : viz.

Resolved, That we most earnestly urge upon the approaching Congress the importance of so correcting the duties upon both raw and manufactured silks, as to give such protection for us as to place us beyond the *possibility* of injury from foreign competition.

Resolved, That the establishment by Congress of a national filature, nursery, plantation and cocoonery in or near the District of Columbia, under the superintendence of a competent and experienced person, where individuals can obtain all the information necessary for prosecuting the *reeling* of silk, the cultivation of the mulberry-tree, and the successful nurture of the silk worm, would be a measure of the utmost importance to every section of the Union, and calculated to advance the enterprise more than any other single instrumentality can do.

Resolved, That we believe it the duty of the legislatures of the several states, each to offer immediately a *liberal bounty* for the production of cocoons; and that we regret that the state of New York should have refused, in opposition to the memorials of a considerable portion of the people, to *renew* a bounty which has been fostering the business for six years past.

Resolved, That we recommend to state and county agricultural colleges and institutes, the importance of connecting with their operations a department for the culture of silk, under the direction of those qualified to give instructions in this branch of industry.

All of which is respectfully submitted.

| A. C. VAN EPPS, J. B. Hyde, J. M. Summey, H. P. Byram, | Committee. |
|---|------------|
|---|------------|

NEW ENGLAND SILK CONVENTION.

The Convention met at Northampton on Wednesday, August 19th, pursuant to a call by the officers of the last year.

Mr. Daniel Stebbins of Northampton in the Chair, J. W. Smith, Secretary. The President stated that the officers had deemed it expedient to call

The Convention at an earlier day than usual, and had selected this as the place (Dr. D.'s cocoonery) in order to show the subject in the most practical and imposing manner. Before them were the silk-worms feeding and spinning; yonder a reel with some most beautiful silk just reeled from the coccoons, by Mr. A. C. Van Epps, of the New York filature, who with his brother have been here some time feeding a crop of worms, which have been carried through successfully, to the admiration and satisfaction of numerous citizens and strangers, who have from day to day visited them. In another part of the building might be seen an extensive and splendid exhibition of manufactured silk goods of a great variety; the handiwork of our own countrymen, and from raw material of our own production; thus the subject presented itself in its beginning, continuation and completion, and certainly left no room for scepticism. Then followed the appointment of officers for the ensuing year, viz.

Dr. Daniel Stebbins, President; J. W. Smith, Secretary.

A series of resolutions were then presented by Mr. Van Epps, which, after due discussion by the Convention, were unanimously adopted ; viz.

Resolved, That we regard the numerous applications for information in reference to the silk culture, which have been forwarded from various sections of the country, as certain indications of a general progress, and that the accumulated cases of success represented to this Convention, by communications and otherwise, furnish evidences for increased confidence in the congeniality of American soil and climate, the entire qualification of our citizens for the production of this delicate and valuable fabric; and leave no room to doubt, that in due time it will become, what its evident importance demands it should be, the *leading* staple of our country-furnishing with the raw material not only our own manufactures, but those also of France and England. Hence-

Resolved, That we esteem it a patriotic duty to urge forward the business by every means in our power, as connected with individual interests and the wealth of our common country.

Resolved, That we recommend the careful preservation and *cultivation* of the mulberry trees now among us, and to increase them to a sufficient extent to supply a constantly increasing demand; and that we urge upon every farmer the planting of at least *one acre* of trees, from the foliage of which one or more crops of worms may annually be fed, without interfering with the ordinary pursuits of the farm.

Resolved, That we learn with regret the loss of numerous orchards by frosts, the consequence of an improper selection of soil or the use of too feeble a variety of the mulberry—and hence would urge the necessity of high (or if low, well drained) locations, and the employment of those varieties of the mulberry which have been thoroughly tested and are known to endure our winters. The Canton, Brousa, Asiatic and Alpine are such. The Morus Multicaulis will thrive south of latitude 41 degrees, and may be profitably employed, but north of this is unsafe, except with the greatest care, whereas the former will thrive and prove valuable in all parts of the country, both North and South.

Resolved, That we view the change recently made by Congress in the duties on imported silks, as altogether misjudged, and calculated directly to throw additional embarrassments in our way, which we are altogether unprepared to surmount; and that unless a more judicious policy be adopted by the next Congress, the business generally must be immeasurably retarded, and in some of its branches utterly destroyed.

Resolved, That we consider the practice of family reeling productive of irregular and imperfect raw silk, and thus greatly interfering with the after uses to which such silks may be devoted. Hence, we recommend the establishment of a regular filature system, furnishing a cash market for all the cocoons produced, as the only effectual remedy for this evil, and intimately and inseparably connected with the ultimate success of the enterprise.

Resolved, That Dr. Stebbins of this place deserves the thanks of this Convention and the public generally for his unceasing exertions to secure and supply the country with the best varieties of the mulberry-tree.

Voted, That the President and Secretary be authorized to call the next Convention at such time and place as they may deem advisable; and that they also be requested to receive any communications that may be forwarded to them, for the National Convention of farmers, gardeners and silk culturers, to be held in the city of New York, October 12th, in connection with the 19th Annual Fair of the American Institute.

Voted, That they (the President and Secretary) be authorized to appoint one or more delegates to represent this Convention in New York, and to transmit by them any communications that may be forwarded to them for this purpose.

Voted, that this Convention do now adjourn.

DANIEL STEBBINS, President.

J. W. SMITH, Secretary.

On motion, the report was adopted.

Mr. Van Epps then remarked-

Now that this report has received the approval of this Convention, I wish to add a few brief suggestions, comprehending the subject of silk culture generally in the United States. Within the last few months I have spent some time in eight or ten of the most important states of the union, and have neglected no opportunity of acquainting myself with the extent and prospects of the silk business. These, with an extensive correspondence, and the facilities to which I have had access, enable me to judge somewhat accurately of the whole enterprise.

As far as I can learn, the number of persons engaged in it, and the quantity of the raw material produced are about the same as during the last three or four years. In every state more or less is doing, attended by success corresponding exactly with the care and judgment by which it is conducted. The importance of the business is universally acknowledged, as also the congeniality of all the natural facilities of our country for its prosecution. None doubt that silk can be produced and manufactured here as well and better even than in China or France. This we have taken for granted in our report, and the Convention have acquiesced in the view. But still the business progresses slowly, if indeed at all.

And why is it?

This question covers the whole field before us, and notwithstanding it has already a thousand times been answered, I would have it reiterated in this hall, and placed conspicuously on the proceedings of this Convention, and read by the tens of thousands into whose hands our report shall be thrown.

The silk cause in this country has been wholly without guardianship, an orphan, so to speak; for no systematic action has ever been put forth by government for its benefit.

I do not hesitate to say, that had Congress properly fostered or followed up the course Great Britain had commenced, we should this day have been independent of all other nations for this beautiful fabric, besides saving annually from twelve to fifteen millions of dollars to contribute to the comfort of our own people, and add to the wealth of the nation at large. What occasional encouragement has been extended by Congress or state legislatures, has been so trifling and *uncertain*, that they have failed to inspire confidence, and in the end rather retarded the cause they designed to benefit. The tariff of 1842 was favorable to our interests, when not fraudulently avoided, but even *this* has been withdrawn. I was at Washington when the question of repeal was agitating Congress. And when the subject of silk was undergoing the discussions of the committee, its interests were faithfully presented, and after Gen. M'Key's bill had been reported, an amendment every way favorable was introduced and adopted by the committee in answer to petitions forwarded, and personal influence exerted in the committee-room; but this was subsequently reconsidered and stricken out, and the wishes of speculating importers allowed to prevail over the known and acknowledged interests of our own citizens, and the welfare of the Union. We have urged, in our report, the importance of connecting the culture of silk with the other operations of our farmers, and thus making it general. In our opinion this is the only way to accomplish what we desire.

This is the course adopted by every nation in which the business is carried to any great extent. It is not common to meet with those who make it an exclusive business. I suppose that few establishments in the world exceed that of the German society at Economy, Penn. It can be made profitable upon a large scale; but we can never expect to produce a supply except through the masses of our citizens, whose other pursuits enable them to engage in it to a moderate extent without interfering materially with other branches, or adding much to their expense. The butter and cheese principle is the only one upon which we can depend.

As the only means for bringing this about, we have urged state bounties. And here, rather than upon any measures the general government can adopt, are my hopes centred. Give us from each state permanent liberal bounties, first upon mulberry-trees, and then upon coccoons and reeled silk, and the progress of the business would astonish the world.

I believe it would be a wise policy for every state to establish, under competent superintendence, an extensive nursery, from which to supply the farmers with trees; connected with which might be besides several large buildings for feeding a normal silk school and state filature. But with or without some such plan we must have bounties, or we shall never make silk. I have spent much time and some money in my efforts in this enterprise, but unless a new and better policy is soon adopted, I must withdraw my influence and abandon it forever. In this, I am sure, I speak the language of many others, who have done much, and whose influence has been *felt*, too, in forwarding this business, and who would most gladly devote their lives to it.

I would here suggest the propriety, inasmuch as this is a *national con*vention, of preparing a general circular, or memorial, addressed to the legislatures of the several states, on the importance of offering bounties, and otherwise providing for the advancement of silk culture. It will not do to delay. I think such a memorial would effect immense good. I hope it may be done.

Mr. Meigs said he had taken some pains to learn what is going on in Europe in relation to silk. Though France raises great quantities of silk, it is not done under government patronage or by large associations. It is raised by individuals, single families, giving employment to children and old people. The only way to sustain and advance the culture of silk in any country is on this principle. Suppose the amount from each farm is small—say \$25 only in value, look at the aggregate where nearly every farm has this triffing moiety.

Mr. Hyde spoke of successful cultivation in families and of instances of failure in companies.

Mr. Wakeman observed that there was one subject which should become a constituent part of agricultural and of all education—a subject very much affecting the interests of a nation; it was, "the influence of the tariffs and commercial regulations of other nations upon our agriculture. Mr. Ellsworth complimented Senator Niles, of Connecticut, on his efforts for the advancement of American manufactures, not only in public but private life.

Gen. Mercer remarked that Great Britain was like the fox who lost his tail: she had been absolutely forced to adopt free trade, and now she wants all other nations to do as she has done. America has every advantage over England for manufacturing except cheap labor. England knows if she could induce all the great powers to proclaim free trade she would become the work shop of the world. Firm and liberal laws and mineral resources like those of England and America will make any nation great. I am satisfied that our country possesses these in a greater degree than any other on the face of the earth, and especially for manufactures. Her extent is equal to that of Rome in her palmiest days; 1,600,000 square miles in the heart of the temperate zone. If Rome became so great in early ages, all the while embroiled in foreign or civil wars, what may not we become, with the intelligence of this later era and the advantages of peace ? England's power arises partly from her position, and partly from her mighty navy; but for the channel, Bonaparte would have swept her from existence; her navy, the strong arm of her defence, is sustained by her commerce, and commerce by her manufactures. Commerce and manufactures make a nation.

Hon. Mr. Simmons, U. S. Senator, from Rhode Island, said, "I have long desired for the benefit of all men to see this question of protection become the common sentiment, irrespective of party lines. We have differences of opinion enough on other subjects. This idea of protection forced itself upon me, not from books or from the declarations of others, but from the results of actual experience; and it does me good to meet men with hearts so elevated as the honorable gentleman from Virginia, who boldly comes out in favor of what he once opposed-for if one effort of the mind is more excellent than another it is the correction of early and enduring impressions. [Mr. Simmons bore testimony to the exertions of Senator Niles, of Connecticut, with whom he had been associated on committees, and who "made more impression with less ostentation upon those he addressed," than any other man with whom he was acquainted.] The "influence of tariffs" is too broad to be here entered into. The gentleman who preceded me seemed to think that her judiciary system was the sheet anchor of England. I consider the sheet anchor of any nation to be liberal wages for labor, fair remuneration for the labor of the head and hand. If you have no starving people, you have no need for an energetic police. Remuneration for labor and correct public sentiment through the medium of liberal education is the true basis of free government. One of the reasons for prosecuting all branches of industry in this country is the good influence of manufactures on agriculture. Our factories of all kinds are not congregated in one great Birmingham; we use water-power which necessarily disperses factories all over the country ; England uses steam, the effect of which is to aggregate factories and population. The moral effect of this concentration of wealth and workmen is bad, for where there is a dense population there will vice and misery seek a home. Water-power, of which we have such an abundance all over the land, is cheaper than steam, always by the value of fuel and in many instances by the cost of fuel and engine. Water-power, forbidding aggregration and

scattering factories all over the country, gives agriculture a market at her own door and furnishes the farmer with the very goods and implements he wants within an hour's ride of his homestead. In a moral view, too, it is good. The little villages springing up, new improved water-works are large enough to invite schools and academies, yet not so large as to support gambling houses and like pestilences. In regard to the free trade, no nation but England could adopt it with any degree of rationality. It is her object, it is essential to her prosperity, that she should obtain the monopoly of the world. The German league excluded her fabrics in that quarter; our coarse cottons interfered with her in several foreign ports; rise in food was increasing the cost of production-for to give corresponding increased wages would bring the actual cost of many of her manufactures above that of ours. Therefore to compete with us, and reduce the cost of her productions, she must have cheaper food, which would follow free trade as a matter of course; and therefore the duties were modified. How far her agriculturists will question this modification, remains to be seen. But it is her policy in this modification to look for remuneration to other nations ; when she takes the value of £5,000,000 she expects to send £10,000,000 in return, keeping the cash balance in her favor. I do not look upon the recent modification of our tariff as likely to be at once very pernicious ; the greatest evil that first ensues is want of confidence in the stability of the government policy. Some look upon all laws which spring from a parental regard by the government for the prosperity of her children, the people, as an interference with personal rights. Still there is no monopoly among us, as there has been in England in many instances. Trade between our states and people is unrestricted. What we desire by protection is security against foreign competition-to secure American supplies for American markets ; believing manufactures to be as desirable in this country as agriculture. In Rhode Island the cotton manufacture was begun the year she came into the Union. A memorial was immediately sent to Congress at Philadelphia asking to have the duty of 3 cents per pound on raw cotton taken off. One of the Senators from Georgia advised the petitioners to take back their memorial, telling them that if the duty was kept on, Georgia would in a few years raise cotton enough to supply all the Union. The memorial was not presented, cotton enjoyed its protective duty unmolested, and the prophecy was quickly fulfilled. From this beginning, under protection, our cotton crop has grown to an extent and importance unparalleled. still enjoying (I believe) its protective tariff; and in it we have material to clothe the world. I have always looked upon England as a great and generally well governed country, a country always looking to her own interests. There is much to admire in her character-more in her policy. Yet I never had the least apprehension of her power. We want in this country a little more self-reliance, and the position we occupy will be impregnable. I have often thought that if the government of the United States should assume any just position in opposition to European powers, and withhold our cotton from them for one year they would be willing to concede to our terms. It is our duty to be just to others, generous to ourselves. I have great hope in such bodies as the American Institute, and desire that party may never thrust its unwelcome presence therein. 1 hope that all our people, without distinction of party, will look upon protection to our industry as a question in which all are alike interested. I have no party feeling therein ; I urge it as an American measure of deep interest to all Americans; and I believe that the gratitute of laboring men will be the rich reward of those of our leading men who do most in this great cause.

Mr. Ellsworth spoke briefly of some eastern manufactories, and urged the importance of that branch of our industry.

Mr. Meigs. What is protection? A defence against something. A roof is a protection against the rain; a fort is protection against an enemy. What do you ask of a power? Do you ask protection in your religion? If it is not granted, who will blame you if you plant a cannon in your church to defend your right of conscience? Do you ask protection in your work-shops? Plant your cannon there also. My idea of protection goes this extreme length. And this protection is no new discovery; it was familiar to such men as Hamilton and Jefferson and President Stiles inculcated it in 1760.

Mr. Ellsworth spoke briefly of the water-power and manufactures in and near Hartford, Connecticut.

Dr. Underhill, from the committee of grapes and wine made the following

REPORT

Of the Committee appointed by the Convention of Farmers, Gardeners and Silk Culturists, on the culture of the native grape for wine, and for the Table.

Whereas, the culture of the native grape for *wine* and for the *table* has been tried successfully, while every attempt to introduce the foreign for vineyard purposes has failed: and whereas, the amount of money that might be kept in the country, that is now sent abroad for these purposes, would be many millions, which would open a new field for the industry of our people: and whereas, the well known antiseptic and diluent properties of the grape, when used freely, exert a beneficial influence on the constitution, enabling it to ward off the autumnal fevers, an effect observed so frequently in the vineyard districts of France, that it has become a common expression, *that if you use the grape freely you will escape the fall fevers*.

Therefore Resolved, That the culture of the *native grape* is a subject of primary importance, and that it be recommended to all the *agricultural associations* over the Union, to make experiments with the different kinds growing in *their vicinity*, to ascertain their *properties*, to *test their qualities*, procure seedlings from them, and by high cultivation to secure such a variety of choice grapes, as will lay the foundation for as successful vine-yard culture in this country as has been attained in any part of Europe.

On behalf of the committee,

R. T. UNDERHILL, Chairman.

Mr. Hall said, he was not aware that he was a member of the committee whose report had just been read. He dissented from some of its sections. The benefit of grapes in fevers he was not prepared to admit. Nor did he entirely agree with what was said in relation to raising foreign grapes in open air.

Dr. Underhill said foreign grapes could sometimes be raised with great care, in gardens, but there was not a successful vineyard of them in the country, though they had been tried in almost every state in the Union. So far as he knew, every vineyard had entirely failed. Yet if any one chooses, let him tread the beaten track of failure, he would not object.

Mr. Hall agreed as respects large vineyards. But we have a wide country, many parts of which have not yet been tried. There is at least room for further experiment.

Dr. Underhill said the foreign vines had been taken up at Georgetown College, and the Isabella and Catawba are to take their place. He related the failure of foreign grapes in Ohio, Indiana, and many other states. Still he would be glad to see foreign varieties cultivated under glass for early table fruit. But our native grapes may easily be made to produce so abundant as to supply our tables for eight months in the year, and make a sufficiency of wine besides. Moreover they may be so improved, and in some instances have been, as to be *almost*, I may say quile as good as the best foreign varieties. As an article of food, they are valuable at all seasons, more especially in Autumn, when their antiseptic properties dilute the blood, carry off the bile, and reduce the tendency to bilious fever and kindred complaints.

Gen. Dearborn said, I bestowed during eight or ten years great care and labor on foreign grape vines; after patiently trying every art and science to produce a favorable result, I succeeded in raising just no grapes at all, and all my exertions ended in smoke, for I pulled up the vines and burnt them. My father was government minister at Lisbon, and while there took great pains to get choice vines, which he forwarded with ample directions to me: I cultivated them seven years with no success, and then dug them up. I now have the Isabellas and Catawbas. There is scarcely a man near Boston but has made like experiments. Sometimes they got a bunch of grapes, generally not; unless, indeed, they kept their vines under glass, in which case the fruit was abundant and fine, as the exhibitions of the Horticultural Society, over which I have the honor to preside, have shown. We have had these grapes highly praised by men who have traveled along the shores of the Mediterranean-the very region of good grapes. When I was in Congress, I visited Col. Adam's, President Madison's and Governor Barbour's vineyards, in all which the foreign vines had failed. On the plantation once the seat of Joel Barlow, a man of considerable reputation as a horticulturist, the foreign vines had been dug up and natives substituted. When the refugees from France came to this country, Congress gave them a tract of land on the Black Warrior. There they planted a noble vineyard of foreign vines; but it was very soon abandoned. Many other instances of the disastrous result of cultivating foreign vines I could mention, but these will suffice. Concerning the healthful properties of grapes, a single statement will be satisfactory. Some years ago, while a French army was going to Italy, they halted for a time at the foot of the Alps. While there, a malignant dysentery broke out among them, and men died with alarming rapidity. The disease baffled all the efforts of the French army physicians-and of their skill fame has borne abundant witness. They went to an eminent physician of the town near by, craving his counsel. "Give them ripe grapes," said he ; "send out your commissaries and buy up all the vineyards; let those who are able go into them and eat as long as they choose, and bring in enough for their feebler companions." This advice was followed, and to the surprise of the army the disease was instantly stopped. No more were taken sick, and many who had been given up to die recovered.

Dr. Underhill was glad to hear this confirmation of his experience from a gentleman so trite and correct in his observations as the honorable chairman.

Mr. Wakeman observed that much had been said of the great stress laid upon protection by the American Institute. He thought that members should be guarded in expressing their views. He had been a member from the first, and never knew a question of politics raised. The first address was issued to the public by the Institute almost twenty years ago. It was then unanimously approved in a full meeting at Tammany Hall by all political parties. Col. Few, one of the grand sachems of Tammany, presided at the meeting, and signed the address as president, and John Mason, one of our best and most successful merchants, as vice president. Not a whisper that it was political from any quarter. The same principles have been advocated down to this time, and unhesitatingly sanctioned by the members composed of all parties. What grand discovery is now made, that has escaped the keen vision of all that have gone before ? It is preposterous ! I can bear witness that to my recollection, among all the members admitted for nineteen years, I never heard the question, to what political party the candidate belonged. And every clerk will bear testimony to the same. At his request

Mr. Meigs read a portion of the records of the Institute, dated March 11th, 1828, as follows:

ADDRESS AND RESOLUTIONS OF THE AMERICAN INSTITUTE.

At a meeting of the "American Institute of the city of New York," held at Tammany Hall on the 11th of March, 1828, the committee appointed for that purpose, submitted the following address to the society, and on motion it was resolved, That the same be adopted, signed by the president, vice presidents and secretaries, and published.

Resolved, That the formation of societies similar to this Institute, in the different counties of this state and the neighboring states, be recommended to the friends of the 'American System,' and that they be requested to give public notice of their several organs of communication.

Resolved, That associations embracing similar objects with this Institute, that already are, or that may hereafter be formed, are invited to correspond with this association, for the purpose of collecting and diffusing information.

ADDRESS.

Fellow Citizens—The members and associates of "The American Institute of the city of New York," having been impelled by motives which, we are conscious, proceed from public spirit and patriotism alone, to organize a society under the above title, it belongs to us, in submitting our proceedings to the public eye, to present to you the considerations by which we have been actuated. We shall accordingly state to you, with entire frankness, the objects of our association, and the means which we propose for their accomplishment.

The members of the society, entertaining the same views in relation to the policy of encouraging and protecting our national industry, have believed that the most effectual service that can be rendered to that cause, is the diffusion of a more thorough and intimate knowledge of our national resources—agricultural, commercial and manufacturing. Anticipating, from the inquiries and labors of zealous advocates of our principles, acting in concert, the most favorable operation upon public sentiment, they have resolved to unite themselves as a society, under the name of "The American Institute of the city of New York." In the constitution it has adopted, the objects of its foundation are declared to be : "to promote improvements in the mechanic arts : to encourage American industry in agriculture, manufactures and commerce : and to sustain such a system of policy as will protect the great national interests of our countru."

Such are the objects of our society : and although in attempting by our humble labors to contribute to the advancement of these great interests, we may not escape the charge of presumption,-we hope at least to gain credit for patriotic intentions. As our efforts are to be directed to the connection and investigation of facts-to the examination of the sure sources of national wealth and prosperity; as we propose, from time to time, to appeal to the public attention with established facts and principles ; with dispassionate reasoning and researches alone ; may we not reasonably confide, not only that our motives will be favorably appreciated, but that some success may follow our exertions? A beneficial influence may always be exerted upon the public mind by stimulating inquiry ; erroneous notions and prejudices may be corrected, and we may aid in inspiring that self-reliance upon American skill and American industry which becomes a nation of our population and resources. In a government like ours, the basis on which all legislative encouragement to national industry can alone repose, must be the information and wishes of the people. We have all seen and felt the importance, when the public sentiment was to be warmed into action, of concentrating the scattered rays of light by artificial means. It is thus that animation and movement are produced, while, in the ordinary course of events, an atmosphere would have prevailed, dense with palpable ignorance, and fatal to activity and enterprise.

Similar societies for the promotion of domestic industry, have for many years existed in several of our sister cities; much of the valuable information, and the tone of public sentiment throughout our country, in favor of the American System, may be traced to their activity and concert. Their example may serve at once for our guide and our encouragement.

The permanent prosperity of our country, we conceive, must depend upon maintaining a perfect union ; a healthful action and re-action between the three great branches of our national industry. To maintain such an equilibrium among them as nearly as possible, is the avowed object, and as we believe, the sure tendency of the principles of the American System. The agriculture, or the commerce, or the manufactures, of any particular country, may either of them, under supposable circumstances, be so lucrative a channel of employment, that the great mass of its capital and all its enterprise shall tend toward that particular employment for years together. As long as the circumstances exist which gave that impulse and direction to them, so long will that particular channel swell with a tide of capital and industry, which shall overflow and enrich the whole country. In such a peculiar state of any one branch of the industry of a nation, the comparative neglect of the others would scarcely be felt or perceived. But it is only an extraordinary state of the whole world that could produce so miraculous an effect upon any one branch of the industry of any particular country. An entirely opposite state of things now prevails, and has, with trifling exceptions, prevailed in all modern nations and times. The mutual dependence and support of agriculture, commerce and manuface

tures, in the ordinary and permanent state of our country, in particular are so universally recognized as to have passed into a maxim: it is on that basis that the policy and legislation of our country, to promote the general welfare, must be founded. The national wealth and prosperity must flow from the reciprocal action : the intimate dependence and mutual demands of all the three branches of our national industry. To produce this practical unity-to establish between agriculture, manufactures and commerce, a permanent system of mutual exchanges, has been the aim and labor of all great statesmen in modern times, who have aimed at making their country rich, prosperous and powerful. They have cherished internal as well as external commerce; not as a separate and isolated interest, but as interwoven and incorporated with agricultural and manufacturing industry. It is impossible that too much encouragement can be given to either class of industry, unless accompanied with measures tending to depress the others. To encourage one, is to encourage all; so intimate is the relation between them-so perfect their unity and identity of interest.

Fully impressed with the truth of these general principles, it is with the deepest concern and regret that we daily witness so many attempts, in various quarters, to create and perpetuate a spirit unfriendly to the growth and prosperity of our own manufactures. It is as much to be wondered at, as to be deplored, that misguided zeal should be so long able to withstand the lights of experience, as well as the deductions of reason, on this subject. We are persuaded that the idea which has obtained in some quarters, that the extension and prosperity of American manufactures are unfriendly to American commerce, internal or external, is not of domestic origin. The very first commercial regulations of our government under the new constitution—the *tariff* established at the commencement of Washington's administration :—that act proclaims, upon its face and front, that the duties are established, as well for the encouragement of our own manufactures, as for the collection of revenue.

It was at that period of our government that the sagacious and profound statesman, who then presided over the treasury department, recommended to the wisdom of Congress the protection of our infant manufactures. If the illustrious author of the report which contains that recommendation, had left behind him no other memorial of his enlarged and liberal policy, of the vast reach of his political views, of his wisdom and decision, the name of Hamilton would have gone down to posterity as the Colbert of his country. It is memorable, that at that period the correctness of his principles was almost universally assented to by American statesmen. Our manufactures had then scarcely budded. They were not of sufficient importance to awaken the jealousy of foreign manufacturers. But as they have struck their roots wider and deeper in our soil, as their branches have spread so as to cast an increasing shadow upon foreign competition, we have seen a new spirit and theory of national policy set up in opposition to the spirit and the theory which Hamilton inculcated. If this new hypothesis had been confined to those who were at the pains to instruct us, that it was our true policy to continue to buy foreign manufactures and neglect our own, because the foreign manufacturer could afford to undersell the American, then the error would not have been very extensive, or of very long continuance. But the foreign authors of it called to their aid the theories of free and unrestricted commerce ; totally inapplicable and absurd, while their own governments loaded our commerce with restrictions and prohibitions. They summoned to their aid, also, the prejudices of a large portion of the commercial community, by alarming their fears with predictions of the unfavorable operation of manufactures on foreign commerce, and by representing them as an interest rival and hostile to the commercial. They have sought also, with great success, to rouse the jealousies of the cotton planter, and to persuade him that he must buy foreign manufactures, or pay exorbitant prices for inferior American fabrics, if he did not indeed forfeit the foreign market for his cotton. These have been the chief elements of the opposition, which has been so long maintained to the American System.

Over all these obstacles and errors that system has thus far triumphed. A large majority of the American people are known and admitted to be in its favor. Its progress is steady, and its march is firm. But an active and zealous minority have often, in this as in other instances, succeeded in delaying where they could not eventually defeat. Exertions and sacrifices are made to sustain the interest of the foreign manufacturer, which, if made in the cause of American industry, from patriotic, and not from narrow and interested motives, would entitle these champions to civic wreaths, and the public gratitude.

The friends of the American system are called upon to make some efforts in counteraction of principles and designs which we believe to be subversive of the true and enlightened policy of our country. We, in particular, are called on to vindicate our commercial emporium from the reproach—that a spirit exists here, among our own citizens, unfriendly to the growth of American manufactures; unfriendly to the equal pace of agricultural, manufacturing and commercial prosperity.

As if the city of New York, the great mart to which the products of the whole country, which enter into commerce, agricultural or manufacturing, tend with a centripetal force, which every day enlarges its sphere of attraction;—to which agriculture and manufactures, even beyond the mountains, are constantly seeking avenues—as if the commerce of such a city was to be a loser and not a gainer by their general prosperity and activity!

There needs but little insight into the details of the commerce of our city and the country at large, to show how utterly groundless and fallacious in experience the idea has been proved—that manufactures are injurious to commerce, and that as they increase commerce must decline.

Precisely the reverse is the verdict of experience. For as our manufactures have increased, the variety and amount of our exports have increased along with them. Already our coarse cotton fabrics come into competition with, if they do not indeed exclude, those of European nations in South American markets. The most valuable commerce which any nation can carry on, must always be the interchange of the productions of its own industry, for those of other nations who will receive them. Agricultural products, bread-stuffs in particular, few countries will ordinarily receive from any other; for almost all depend on their own soil for their supplies, and take unwearied pains to foster their own agriculture. As our manufactures increase in extent and variety, we furnish more articles for export to the different nations in the four quarters of the globe. with whom we carry on commerce, who do not produce them. If we seize on these proffered facilities, our own agriculture and manufactures, like those of England and France, will sustain and extend our foreign commerce. We have succeeded in foreign markets, by the help of protection, in some articles of extensive demand. Why not in others with the same advantages? Is there a hopeless want of skill, of industry or of capital in our country, that should consign us to despair and inactivity?

Is there an American that will give countenance to such a reproach who will not repel it as an insulting calumny upon his country?

At this era, we need not long dread the prevalence of the idea we have alluded to, of any injurious operation upon foreign commerce resulting from manufactures. Experience is every day refuting it, with proofs that must soon accumulate to an irresistible force. But it is our task to aid, if possible, in hastening the complete triumph of a system which has yet to encounter so many and serious obstacles.

It has still to encounter, as heretofore, the resistance of an army of foreign agents; backed by the specious objections and arguments of their domestic allies, who, though refuted again and again, can argue still as ingeniously as ever. It has to encounter the threats of violent enemies, the treachery of pretended, and the neglect of lukewarm friends. It has still to contend against ancient errors and misrepresentations, and still more ancient and besotted prejudices. It belongs to its friends to pronounce, by their activity and constancy, whether the contest shall be ended at once and forever: or whether it shall be left to time and accident to bring it to a close—whether this system shall be practically enforced, or remain for years a theme of still beginning discussions and debates.

After all that has taken place, we rally, at this time, under the most auspicious circumstances. The American System has found favor in the eyes of a large majority of the American people; and their voice is daily demanding its extension, in a louder and more imperative tone. There needs but concert and activity to give it the force and form of an irreversible decree.

In adopting this mode of uniting our exertions, and in recommending the same course to our fellow citizens who concur in our views, through the state and country, we are most solicitous to avoid all imputation of party motives and designs. We have suffered no feelings or views, in relation to the parties of the day, to intrude into our deliberations. On all occasions, we shall most scrupulously abstain from any interference in the struggle for power, which has unhappily severed our country into two political parties, except in so far as either of them may evince hostility to the protection of American industry. With a deep concern for our country's welfare and honor, we cannot but deplore the spirit with which the contest is conducted. But this expression of our regret is the only allusion we shall make to its existence.

The only political object to which we direct our labors, we have already freely avowed. It is to aid in rallying the friends of the American System in support of its principles; in giving such an impulse to the public sentiment in its favor, that whoever may administer the government, and whoever may legislate for the general welfare, the voice of the people shall be heard in unison on t. is subject at least—demanding in terms not to be mistaken, that full and unstituted protection to American industry, of which our agriculture, our manufactures and commerce all stand in equal need.

New York, March, 1828.

| WILLIAM FEW, President. | | |
|-------------------------|-----|-----------------|
| JOHN MASON, | 1st | Vice President. |
| C. Bolton, | 2d | do |
| PETER H. SCHENCK, | 3d | do |
| ENOS BALDWIN, | 4th | do |
| ANSON HAYDN, | 5th | do |

JOHN B. YATES, Secretaries.

Mr. Ellsworth agreed in the importance of excluding all politics in whatever shape, from the doings of the American Institute.

Mr. Wakeman said it had been usual to call this Convention together, by resolution, at the former session, during the Fairs of the Institute. He now raised a question of expediency in regard to its meeting at such times.

Mr. Van Wyck thought, as the object was to get as full an attendance as possible, it might be expedient to meet at some other time.

Other suggestions were made by Messrs. Ellsworth and Lawrence.

Gen. Dearborn differed from the previous speakers toto calo. We don't come here to inform each other ; we come for more definite objects. I do not believe in instruction by great meetings and studied eloquence. In the learned societies of Europe a few men do all the work. In Cougress when a subject has been debated half the session, it may be referred to a committee of nine-if three of the committee attends its business session it is very good luck, and then some good, easy member must be found who is willing to undertake the getting up of the bill. He does the work as best suits him, and that is often all the committee knows or cares of it until it is read. The immortal works of Praxiteles, Milton, Newton and La Place were not produced by great conventions, nor yet small committees-only one mind could work out their immortality. I do not believe in talking-we come here to do something. But as I am not a member of your Institute, I am perhaps intruding with these remarks. I can only plead a Yankee's meddlesome privilege, and hope you will excuse me if I assume too much for my station.

Mr. Meigs said it would never do to discontinue these meetings. It does not require a large attendance to do good. The Athenæum in Liverpool is a notable instance of what a few may accomplish. Roscoe, meeting a friend one morning, began to recount the necessity for such a building. They agreed to call a meeting; advertised largely, and got together two men only—themselves. Roscoe was appointed chairman and his friend secretary; they, the meeting, "unanimously res lved" thus and so, as the case required, and published their proceedings the uext morning as those of a highly enthusiastic and respectable meeting, which none could gainsay. A subscription was opened, and in a short time the splendid edifice was erected. Dr. Mitchell, twenty-five years ago, got up an agricultural society, the preliminary meeting of which he alone attended.

Mr. Folsom remonstrated against abandoning these meetings. A great deal of knowledge was here obtained. He was aware that words were not wisdom—that the only way to advance was to work alone; but we want prompting, and we here get limits to work upon, which we scatter on our separation to all parts of the country.

Dr. Underhill was not sorry for Mr. Wakeman's suggestion; not that he by any means desired the Convention discontinued, but it showed how it was appreciated by those present. He hoped its meetings would be continued as at present; the Fair brings together just the men we want from all parts of the country.

The chairman suggested that a room nearer the Fair would be better. If a man gets but one good idea at one of these meetings it well pays him for coming.

After a few words from Mr. Ellsworth on the increase of the cattle show from year to year, On motion of Mr. Lawrence, the Convention adjourned to meet during the next annual Fairs, on a day to be hereafter fixed.

H. A. S. DEARBORN, President.

T. C. MUNN, D. J. BROWNE, Secretaries.

The following memorial was read and approved by the Convention:

TO THE HONORABLE LEGISLATURE OF THE STATE OF NEW YORK.

The Farmers' Club of the American Institute respectfully petition your honorable body for the establishment of an agricultural college and experimental farm, near the city of New York under the care of the American Institute.

Your petitioners believe that in the purchase of a farm and erection of suitable buildings, the state reserving the right of property—no pecuniary loss to the state will ensue on account of the increasing value of land near this greatly increasing metropolis.

We need not tell such men as constitute the majority of your honorable body, that to the agricultural branch of national industry every possible encouragement is eminently due.

We only endeavor to show that we are of the fixed faith that a republic rests upon agricultural labor not only for its comfort and wealth, but upon the workers of the land for virtue and for perpetuity of our great republican system. We wish also to say, that notwithstanding men have always found the true glory of their existence dependent on agricultural labors—yet it has occured in the history of nations, that a false pride, generated by wealth and prosperity has been the cause of the decline and fall of empires. When a nation has ceased to honor the cultivators of the land it has been consumed by the consequence of that neglect. We desire to say that no expense and no effort should be spared to sustain and to honor the labor of the farmer—by public protection, by public notice, by public rewards rendering that ambition now more common in the other pursuits of life—greatly more so in the noble pursuits of the farmer.

And that the highest degree of instruction should be given to our cultivators—so that every product of the farm of the world may be introduced among us, and every information in relation to them may be universally diffused.

With this view we believe that an agricultural college and experimental farm can be of distinguished advantage to our county. And as the city of New York is by commerce connected with all parts of the world, and readily receives all the productions of the earth, and by the vast consumption of food—by the manure of more *cattle and horses*, §-c., on this spot than on any other in America, by the refuse of articles employed in works of all sorts, the city of New York is capable of affording more material for fertilizing soil than any other spot in this country. For it is a fair subject of calculation and will result in this, that the half million of people in New York and the immediate vicinity furnish those means for enriching more land than will sustain a million of people. And the city is also full of strangers from all parts of the world who can be induced to bring with them from every quarter, seeds, plants, animals, books and every thing that a state experimental farm can employ, at the least expense.

And as it has a great and increasing population, of which it is desirable that thousands should be made to love and understand agriculture-as there are numerous sensible capitalists who prefer for their children the life of a farmer rather than manufactures or than the learned professions. who would avail themselves of such a college as this, we hope that your honorable body will take the first important step in our country for the establishment of such a college. We respectfully urge these as arguments for commencing the agricultural education here, hoping that when the trial here is found to be successful, then the state will establish like institutions in all the sections of our country suitable for them. If there is any thing true in our views of the distinguished importance of such an agricultural school, where could it do more good than in the vicinity, under the eye of a vast city population. We trust that of all public institutions such an one, by its wholesome example, would continually attract from inferior avocations, thousands of the growing youth of the city to the manly, noble exercises of such a school as this, keeping thus always before the eye of our great metropolis the inestimable evidence of the high value of a practical, economical, intelligent and healthy nursery of young men, contrasting deeply with the puny inefficient offspring of mere city growth. The American Institute would provide in such a college, that every student should acquire the best knowledge to be obtained from the rest of the world, and that he every day practically execute with his own hands the various work of a farm, and give him at once such an education as would enable him to farm in the best manner, and to represent his fellow citizens if necessary in the halls of legislation.

It is high time in our opinion that such should be the education of an American citizen, so that a large majority of the representatives at all times should be farmers well educated.

And when we consider how large is the amount appropriated for colleges and universities, we think that it is becoming in the landed interest to ask for a liberal appropriation for that, the superior consideration of country.

The governments of the old world are recently making great efforts at the national expense in this interesting subject. America ought to be foremost. Her people should never suffer kings and emperors to shadow the glory of our republic by leading in such eminent legislation as this. Let us have the richest farms, the most excellent crops, the most perfect ploughs, spades and hoes—and above all other things the most highly intelligent men to use them all.

This was so in the best days of the greatest nations, and we believe that it is our duty to excel them all. It is but to say so and it will be done. Your wisdom will easily regulate the conduct of the agricultural college; you will make its administration strictly economical as that of all farms should be; you will shut out all profligacy in manners or expenses; you will order it so that it shall be profitable to its members, profitable to our country and a distinguished honor to the empire state.

Your memorialists having thus stated the view taken by them of this interesting question, further beg leave thus to say that they desire only to bring before your honorable body the purpose they have in contemplation. Relying upon the wisdom of your honorable body to carry into execution the system of practical and theoretical education of men by any other ways and means more advisable in your judgment. Asking

7

leave merely to say, that from the history of the conduct of the American Institute during the eighteen years of its existence, your honorable body may, we respectfully say, place that confiddence in the Institute which is necessary to place such an institution for education under its charge.

JEREMIAH JOHNSON, President.

 H. MEIGS, Secretary.



