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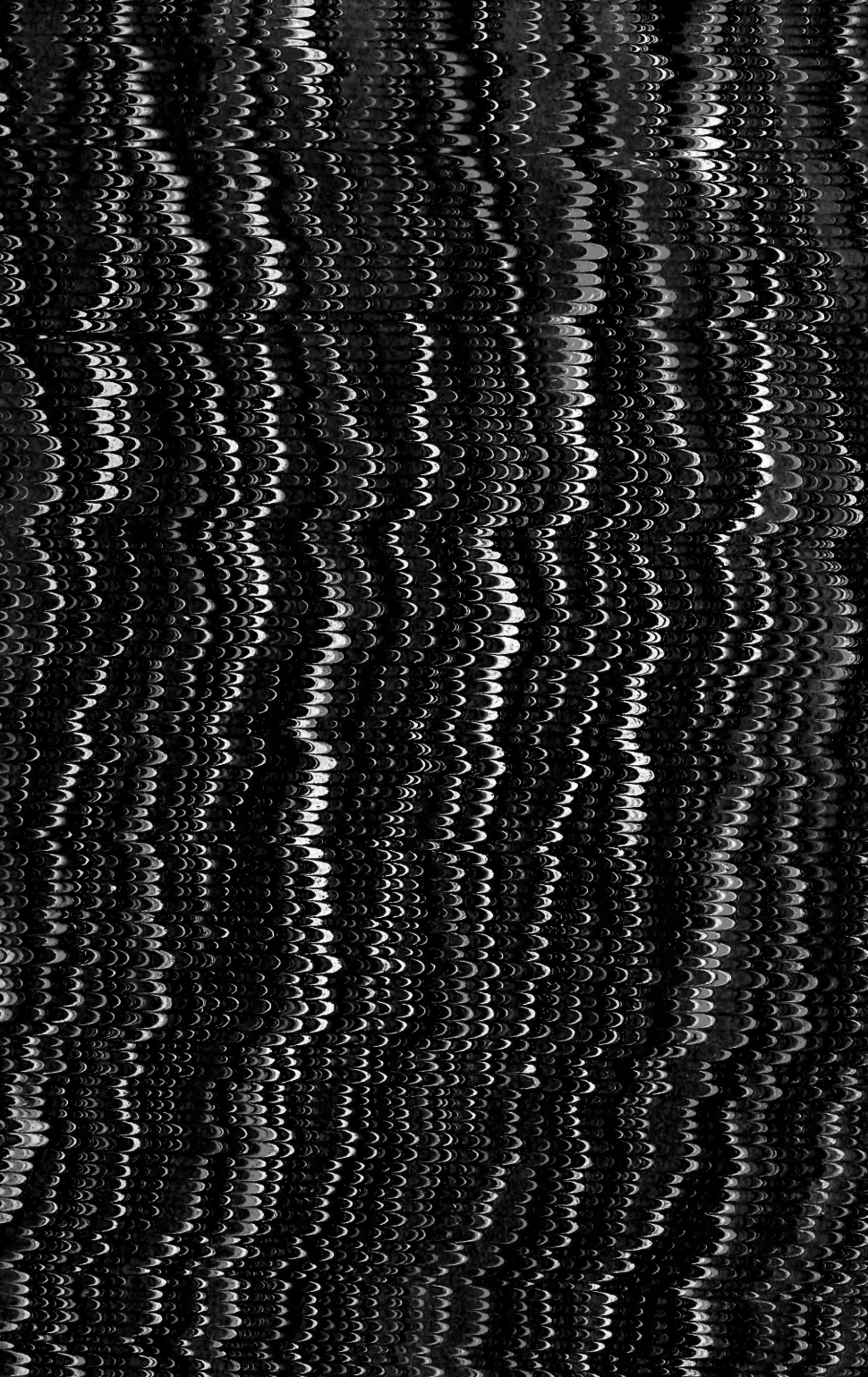
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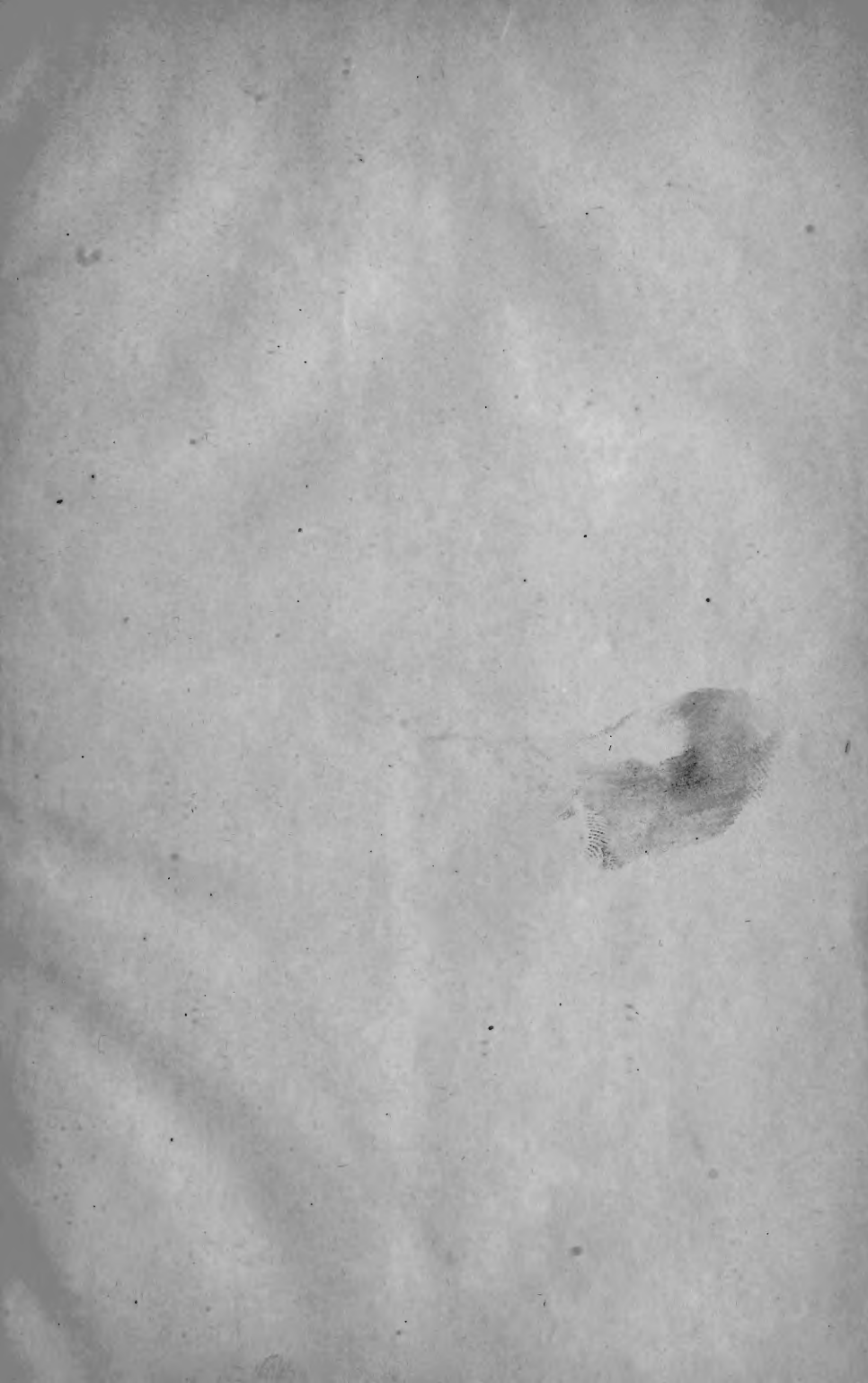
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# AGRICULTURE OF THE UNITED STATES,

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## ADDRESS

DELIVERED 14th APRIL, 1841,

BEFORE THE

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AMERICAN INSTITUTE,

IN

NEW YORK.

BY HENRY ✓ COLMAN,

COMMISSIONER FOR THE AGRICULTURAL SURVEY OF MASSACHUSETTS.

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PUBLISHED BY REQUEST OF THE INSTITUTE.

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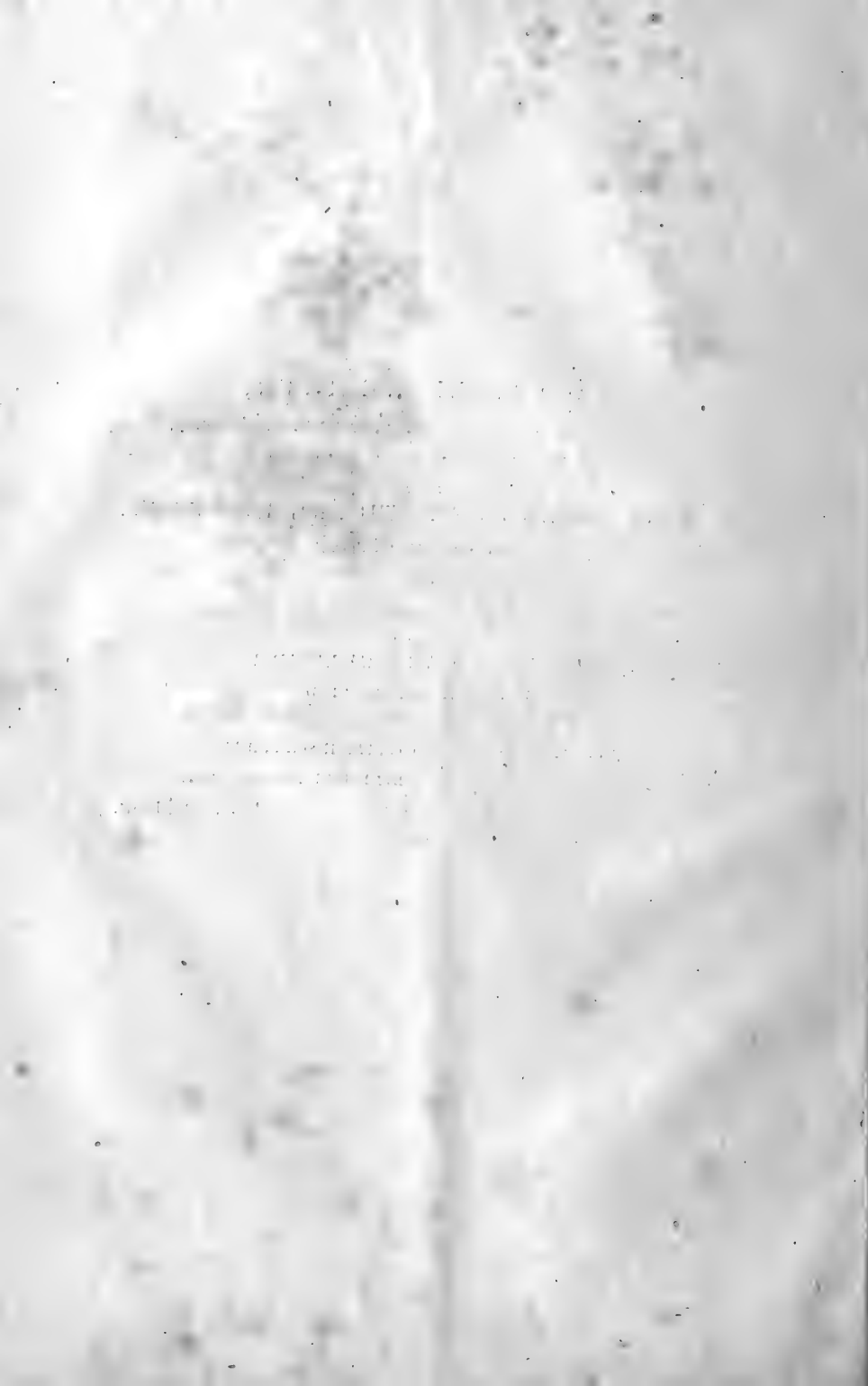
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TO DANIEL WEBSTER,  
SECRETARY OF STATE OF THE UNITED STATES;  
A FARMER OF MASSACHUSETTS,  
AND A  
A FIRM FRIEND OF NATIONAL INDUSTRY,  
WHOSE DEEP SENSE  
OF THE  
IMPORTANCE OF THE AGRICULTURAL INTEREST  
AND OF AN  
IMPROVED AGRICULTURE  
IS JUSTLY APPRECIATED  
BY THE AGRICULTURAL COMMUNITY,  
THIS ADDRESS IS RESPECTFULLY INSCRIBED BY  
HIS FRIEND AND SERVANT,  
THE AUTHOR.



MR. PRESIDENT AND GENTLEMEN  
OF THE AMERICAN INSTITUTE,—

I AM happy to meet here many of the friends of Agriculture of the State of New York, and of other parts of the country. But for an unfeigned distrust of my ability to do justice to the occasion, there would be no abatement of this pleasure. With liberal minds, however, honesty and heartiness of purpose in a good cause will secure a candid, I may hope, a favorable hearing.

In some parts of the country rude monuments are found composed of stones merely thrown together, which are supposed to have been erected by the aborigines, in order to mark some public object or event not now known. It is understood that, in forming these erections, individuals were accustomed, when they passed them, to lay each a single stone of a larger or smaller size on the pile, which was thus continually increasing. After such an example, I am glad to bring my humble contribution to a cause which alike concerns us all: Though it be a mere pebble which I cast upon the heap, and be lost among the splendid contributions of others, it will testify my sense of duty and my desire to do what I can for the common object and, at the same time, may serve to increase the general mass. The ant-hill is composed of atoms: the hive is filled by the contributions of thousands of minute laborers: the ocean is swollen by the thin vapors, condensed on the cloud-capt mountains, hundreds of miles in the interior. One of the most beautiful and one of the sublimest views of the divine Providence is in the fact, everywhere established so far as our observation extends, that nothing in the divine creation is lost; nothing stands alone; nothing is without its use. Every part of nature, from the largest to the smallest, from the planet to the atom, from the sun which irradiates a system, to the finest beam of light which strikes our vision, from the rain-charged clouds, which deluge a wide territory, to the minutest dew-drop, which sparkles in the opening flower; all have their action and use, and are bound together by a reciprocity of dependence and advantage.

The matter for our discussion on this occasion is Agriculture, and particularly the condition of Agriculture in the United States. From the extent of this subject my observations can be only general and cursory. Many volumes, indeed, would be required thoroughly to discuss it.

The intimate connection of this subject with the business and pleasures of life, as well as with man's intellectual and moral improvement, can hardly be overstated. From the earth man derives his supplies: without its products he could not live. These products are the fruits of cultivation. If he were left to depend on the spontaneous fruits of the earth, his subsistence must be uncertain and meagre; and only a small portion of the earth would be inhabited. It is a law of his being that he must toil for his bread. This toil, under those restrictions, which the healthful exercise of every physical and intellectual function demands, is conducive to animal and mental vigor and strength.

The Commerce of the country, for more than three-fourths of the objects about which it is concerned, is dependant upon agriculture. Manufactures are mainly concerned in the use and the preparation for use of the products of agriculture. Our naval power and our military defences can only be maintained by these products. The labor of such a country as ours must be almost entirely, directly or indirectly, concerned in this great business. It is the source of national wealth; it involves the comforts, the happiness, and the welfare of the whole people. It is the first step in the progress of civilization. Its improvement and extension indicate the progress, which civilization has made. In the shepherd and wandering state, where tribes of men are under the necessity of continually changing their position, or in the savage state, where men rely for a precarious subsistence upon fishing or the chase, civilization never can, under such circumstances, make any advancement. The plough should be the first missionary to be sent among the heathen nations. Until men are in some measure humanized and brought into a fixed position, a condition of mutual dependence and advantage implied by the knowledge and practice of agriculture, Christianity is likely to have little hold upon their regard and affections.

It is not necessary to extend these general remarks. I might speak of the favourable bearing of agriculture on public morals;

and, in a free country, of its intimate connection with public liberty. Upon that large portion of mankind, whose home is on the sea, whose capital is easily transferable, or whose business or profession may be pursued with equal advantage in various places, the state has an imperfect hold. But, with respect to those of the agricultural classes, who have a direct stake in the soil, whose home is fixed, and who, separate from all pecuniary interests, are tied down by innumerable associations to the place of their residence, the state has the strongest pledge of their attachment and devotion.

The highest duty of every good government should be the protection and advancement of its agriculture. As that flourishes the whole country flourishes; as that declines the country must suffer and decline. The commercial interests of the country constitute an immense interest. Most persons familiar only with the business and grandeur of cities are disposed to consider trade and commerce as the greatest interests of the country. I am not inclined to undervalue these interests, especially in a city where they have been pursued with so much intelligence and enterprise as they have in this.

I am not indisposed to deny the immense advantages which they render to Agriculture, and their intimate connection with the prosperity of the whole country. Compared with Agriculture, however, they are a mere circumstance in that prosperity. In Great Britain, the country of all others most distinguished for the extent and wealth of its Commerce, singular as the fact may seem, the value of the manure annually applied in the cultivation of its soil, exceeds that of the whole amount of its foreign trade.\* Without Agriculture Commerce could not subsist; but if the whole Commerce of the country were to be at once extinguished the substantial welfare of the people might remain untouched. If the whole country, with its seventeen millions of inhabitants, and to that millions were added, were thrown at once upon their own resources, and every inlet and outlet closed up, there need be no want of the supplies and comforts of life. The nation might still be advancing without slackening its speed, in abundance, prosperity, and power.

Of all countries, to none is Agriculture more suited, no where can it be more successfully prosecuted than in the United States.

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\* M'Queen's Statistics of the British Empire.

With a climate extending through sixteen degrees of latitude in the most favored zone, there is scarcely a vegetable, or fruit, or cereal grain, which may not in some portion of it be successfully cultivated. With an unmeasured extent of soils of unsurpassed fertility, every product conducive to comfort, health and luxury, is, under the blessing of Heaven, at the command of the cultivator. With land to be had almost for the asking, and where a year's labor will purchase for any industrious man an ample farm; with a perfect security, in the free states, of the fruits of one's own industry; with an exemption from all burdensome taxation; with markets as good as any part of the world presents; with lines of intercommunication, rapid, easy, and certain, which abolish all distance and which tend to equalize the advantages of the whole country; and with a government spreading its broad shield of protection over all, and whose weight, like that of the element in which we live, no man feels, unless he opposes it, and in the exemption from internal discord and foreign war, there is no example of a nation more favored. The fact that every sober and industrious man may become a freeholder of the soil, may have a home which he may call his own—a word so fragrant and delicious to the heart—and by reasonable toil and frugality, may rear, educate, and comfortably endow a family, and this without hindrance, or fear of oppression or authorized robbery and pillage, we witness a privileged condition of mankind, an encouragement to enterprise, labor and good conduct, the counterpart to which has never been found. In other countries the condition of labor has been a condition of restraint, servility, and degradation. Let us thank God, that there exists in our country no other rank than moral rank. Here, without prejudicing his neighbors interest, and where the success of any one brings equal good to the community as to himself, every man, may aspire to the highest attainments, which his ambition can ask. In the old countries discussions are continually going on which oppress the benevolent heart with shame and grief, as to the means by which population shall be checked, early marriages discouraged and prevented, and the condition of the poor rendered still more wretched by the want of those domestic ties and affections, which are the sources of the purest happiness and the most powerful security of virtue. Centuries must elapse before such questions can have any interest with us. We have more than three hundred and fifty millions of acres



of public lands to be disposed of; and not a state in the Union has reached a sixth part of the population, which it is capable of sustaining in abundance and luxury. When to this we add the increased production, which must come from an enlightened and improved Agriculture, even where Agriculture has been deemed among us to be most enlightened and improved, we may give ourselves little concern for a period so far distant in the coming future, as that when our nation shall be crowded for room; when, under free institutions, those who labor shall want bread; and the birth of a child be regarded as a curse to the state. Under an improved Agriculture in Scotland, we are assured upon the best authority, the crop of wheat within twelve years past, has doubled its produce upon an acre, having risen in many cases under systems of permanent improvement, from twenty-four to fifty and even sixty bushels. A few years since the average crop of wheat in Great Britain was rated at eighteen bushels per acre, it is now stated on good authority to be twenty-five bushels. The crop of Indian corn, in the best cultivated districts of our own country, until within a few years, has not averaged more than thirty bushels to the acre. I believe the time is not distant when one hundred bushels per acre will cease to be regarded as extraordinary.

I had intended to go into some statistical returns, by which the magnitude of the agricultural interest of the country would be exemplified. But I fear it would too severely tax your indulgence. These statistics, too, are necessarily imperfect; and it would avail little to say, that the cotton crop of last year amounted to twenty-two hundred thousand bales, averaging three hundred and fifty pounds each, or in other words seven hundred and seventy millions of pounds; that the annual crop of sugar in Louisiana is seventy millions of pounds; that the amount of tobacco actually consumed in the country exclusive of exportation, exceeds one hundred millions of pounds and amounts to twenty millions of dollars; that the value of the annual shearing of wool is more than twenty-one millions of dollars; and that of the product of wheat, barley, corn, rye, and other grains, no calculation has approached the actual amount. The inquiries directed to be made by the Marshals in taking the last census, if executed with even moderate care, will furnish the most important information on these subjects.\* The results ascer-

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\* See Appendix, Note A.

tained astound us by the long array of figures which represent them ; but they are nothing compared with that mine of wealth which lies buried at our feet, and which the plough is destined to uncover. What a bountiful mother is this earth ! What dutiful child has sought her favors, on the only terms on which she ever should grant them, that did not find her kindness unrestricted and ample !

In a country like ours, as yet comparatively new, and with a vast extent of land just rescued from the wild beasts and wild men, that roamed over it with undisputed sovereignty, it cannot be expected that much improvement in agriculture should have been made. The great object has necessarily been, in most cases, production and immediate returns. Where immense tracts of land lay untilled, men have used up the soil without regard to its improvement, or the continuance of its fertility. Excepting in those soils, which are annually overflowed and enriched from the contributions of other fields, no soil under perpetual cultivation can retain its fertility. This has already been demonstrated in some of the oldest states, where cultivation has been highly stimulated, the products carried from the land, and no portion of them returned for its restoration and nourishment. In the new states likewise, the fertility of whose soils to the confident and reckless seems ineshastible, this must ultimately be the case unless the principles of modern husbandry the principles of a rotation of crops and seasonable manuring be understood and adopted. The laws of nature can neither be transcended nor violated with impunity. Avarice and selfishness in every department of life are sure of a just retribution. The laboring horse must have his full manger and his comfortable bed ; or he will cease to labor. To exhaust the soil by cropping, and to be continually taking away without any replenishing, is a husbandry the fatal consequences of which are certain. In some parts of the country the soil is exhausted with perfect recklessness and with a determination on the part of the cultivator, that when it ceases to yield abundantly, he will emigrate ; but there are few cases in which emigration is not a serious evil. If the account were fairly made up and the disadvantages of removal contrasted with the advantages of a fixed location, having all those multiplied conveniences, comforts, and improvements, which are found associated only with a long established residence, the policy of such calculations would be as strongly condemned by interest as by con-

siderations of comfort and moral good. The evils of removal and emigration in our country, its physical sufferings, its social privations, and its moral trials, in a majority of cases, are necessarily great; and can be compensated only by extraordinary advantages. It is happy for us that, under a faithful and enlightened agriculture, the fertility of a soil may not only be kept up but continually increased. It is a truth in which the old states have the deepest interest, that their impoverished lands may in many cases be restored and their waste and irreclaimed lands redeemed and made productive with greater ultimate advantages and pecuniary profit than a farm can be taken up and managed on the richest prairies of the Far West. Let me state a case within my own knowledge. In the neighborhood of two or three populous villages an observing man purchased seventy acres of wet-meadow, the product of which was comparatively worthless. The land was estimated at not more than twenty dollars per acre. At an additional expense not exceeding twenty dollars per acre he drained and manured it; and obtains from it at the rate of three tons of good hay to an acre, worth, at the average price which hay has maintained in the vicinity for twenty years past, fifteen dollars per ton. From one measured acre he sold the product of one cutting for one hundred dollars, at twenty-five dollars per ton.\* We are yet, even in the old states, little acquainted with our own resources. I have no prejudice against the new states. Far from it. I admire their unrivalled magnificence, their superlative beauty, and their exuberant fertility. They are for the young and enterprising; for those, who have no means of planting themselves in the old states; or for those of foreign countries, who fleeing from the yoke of oppression and degradation which has for centuries galled their necks under the despotisms of the old world, come with their wives and children to our shores where they may breathe the air of freedom and enjoy the rights of men. Heaven prosper the virtuous, patriotic and industrious among them, as he prospered our pilgrim fathers. But at the same time I am for the improvement of the old states. I am for doing well here, before I go further under the expectation of doing better, with all the uncertainties attending a removal and the sacrifices, and the privations which, under the best circumstances it must involve. We have not yet begun a systematic and liberal course of improvement.

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\* See Appendix, Note B.

With respect to the small experiments which have been made, and many have come under my observation, I have not found a single instance conducted with judgment, skill, perseverance, and liberality, which has not been amply compensatory and successful. Your own county of Columbia presents many examples of such productive improvement. Lands in this county, which twenty years ago were scarcely worth twenty dollars, under a course of permanent improvement, are now readily sold at an hundred dollars per acre in whole farms, and pay a large profit at that.

Next to the abundance and cheapness of land, the want of capital to apply to the cultivation of land, has to a degree retarded the improvement of our Agriculture. This has not however been universally the case. The Southern portions of the country, under the stimulus of a fictitious capital, and with the flattering allurements of high prices and quick returns, have forced production to an extraordinary extent. But this, as managed, has been an unnatural process, which I shall not now discuss. In the Northern states, however, where capital has been more sound, yet, with all their characteristic shrewdness, the Yankees have been exceedingly wary of applying capital to the improvement of Agriculture. They have been engaged in raising all kinds of stock but live stock. They have been willing to risk their capital in every sort of bank but a bank of earth, where alone the investments and discounts, if not dazzling and extravagant, are sure and liberal. The alluring and specious prospects of sudden accumulation, which at one time seemed to have goaded the whole nation into frenzy, and the profligate abuse of credit, that most powerful element in human affairs, so productive and useful in its healthy operations, perverted all sober calculations, and separated the accumulation of more from its proper and only legitimate connexion, the improvement of what we have. Of speculations in land we had enough; and in a corresponding measure the cultivation of land seemed to have been checked. At one time every man was willing to sell his farm. Many, in their passion for a good bargain, seemed ready, after the Russian fashion, to convey their wives and children as a part of the live stock of the farm. The only harvest upon which they calculated in these cases was to come from the pockets of the purchaser.

It is but recently, for example, that conventions were assembled, the press teemed with encouraging publications, and everywhere

men's mouths were full of the culture of silk. It was gravely calculated that trees would not grow fast enough for the wants of the community and that even our common farmers would be able to change their tow-frocks for silken robes, made perhaps after the fashion of the Roman toga. But it was soon found that all this had its origin and its end in the price of multicaulis and the sale of mulberry trees. The actual production of silk, destined, I confidently believe, to become a most important and profitable branch of American husbandry, did not enter into the calculations of most of these persons. Their eloquent eulogiums upon its culture were for another end. The reasonable gains of wholesome industry united with systematic frugality were disdained under the dazzling expectations of sudden accumulation. Men crowded around the mountain, struggling up its ascent, and heedlessly thrusting down, if necessary to their own success, all who stood in their way, as if its glittering summits and its brilliant glaciers were of solid silver. The terrible avalanche, which has rolled down, tumbling many from its giddy heights and crushing thousands upon whom it fell, has taught the country a lesson of rebuke and wisdom necessary to their pride, and which, at least for a while, must calm the insanity of an unbridled avarice and ambition. The season of mental and moral disease through which the country has passed, and from the dreadful effects of which it is now suffering, will prove a signal blessing if it shall be instrumental in giving, especially to the rising generation, more just views of duty, happiness, and good; if, in withdrawing them from their hazardous and too often dishonest and corrupting pursuits of gambling and speculation, it shall reconcile and attach them to the pursuits of honest toil in cultivating the earth. Such a pursuit is sure to bring with it, a reasonable competence and the satisfactions of conscience, and at the same time present the widest room for the cultivation of the domestic affections, and the quiet and delicious pleasures of this true philosophy of life. I certainly would not encourage any extravagant expectations; or represent agriculture as likely, under the best circumstances, to yield enormous profits. Expectations of that character are vain and baseless, when applied to any of the business of life. Large fortunes are sometimes suddenly and unexpectedly made; but we must not be deluded by extraordinary examples. In the lottery of life we are sure to hear of the few who draw the highest prizes; but nothing is said of the

multitudes, who draw only blanks. I do not mean to compare agriculture to the operations of chance. Trade partakes much more of chance than agriculture. But I mean to say that the capital may often be invested in agricultural improvements so as to meet all reasonable expectations of profit; and when the security of such investments is considered, they will be justified by the soundest discretion.

The various parts of the country are so diversified in climate, soil, and condition that it is difficult to speak of American agriculture as a whole. I have merely glanced at its productiveness. The amount to which it has yet to rise, the most expansive imagination cannot define. There is another remark to be made, which in its present condition is applicable to no other country, which is that our country from within itself is capable of supplying everything, which the earth can yield, essential to subsistence comfort and luxury. Its various parts, diversified as they are in condition and production, are all essential and helpful to each other. In their union there is strength. In a kind intercourse and the free interchange of their different products God grant that they may cultivate a spirit of good will and mutual sympathy, and for years and centuries to come, keep the chain which binds them together, bright and unbroken.

The great object of the enlightened and patriotic of our country should be the improvement of its agriculture. I have already said that its agriculture is the great source of its wealth. What is wealth? Without referring at all to the opinions of political economists, I answer, it is that which is essential to the subsistence and is conducive to the comfort of man's being; such as shelter, food, and clothing, or that by which these may be produced or procured; such as lands, houses, seeds, manures and tools, and above all, labor, by which these are made productive of the necessities and comforts of life. Money is not wealth. We have pretty nearly settled this question, upon which, hitherto opinions have been different from what they now are, or are soon likely to be again.

With the view of getting rich, we have tried pretty extensively the domestic manufacture of money; and, after the production of many pictured millions, it has left us poorer than when we began. The Secretary of the Treasury in a late report has stated, that the losses to the country within a few years by the failure of banks; that is, our money factories has exceeded four hundred millions of dollars.

This was before the great explosion, which has scattered such wide spread ruin and brought so much dishonor upon the country. But where has it gone? It has literally gone out; because it had no substantial being. It pretended to represent that which did not exist. It resembled the autumnal fogs, which gather in low places, or on the banks of rivers, reflecting, as the streaks of light dart up in the eastern horizon, numberless beautiful colors and waving forms, and transforming the spreading valley into an inland sea. But, in a few hours, it is scattered to the four winds, from whence none but the hand of a mighty power can regather it. How would it have been with us if the same amount, the product of industrious labor, had been represented by cotton, wool, rice, tobacco, flour, wheat, grain, live stock, manufactured goods of prime necessity and innocent luxury, or by manufacturing establishments, increasing under the application of skill a hundred fold the value of the raw materials upon which they operate; or by improved and cultivated farms abounding in all the substantial comforts of life and by healthful and enlightened labor rendered continually more and more productive. This would have been real wealth which the true philanthropist might have contemplated with satisfaction; and to which the rough hand of honest toil might have pointed with conscious pride. I dare not bring into the contrast the unmixed misery of disappointment and bankruptcy with which this system has flooded the community, the idleness, profligacy and corruption of morals, which it has brought with it, the shock which it has given to commercial integrity; and the disgrace which it has inflicted upon national character.

The government is bound to protect and encourage all honest labor, for labor is its true capital; labor is the only legitimate instrument of wealth. I am no enemy to banks founded upon the only honest principle of banking, the certain ability to meet their obligations promptly and according to their tenor. I am no enemy, but the friend of credit given as the encouragement to honest enterprise and industry, and based upon a reasonable calculation of the probable gains and results of such enterprise and industry. But a currency which has no substantial basis to rest upon, and which, in too many cases, represents only a conspiracy against industry for the most selfish ends, and credit given for no other purpose, or applied to no other ends than those of speculation, and without any

of those sufficient securities by which commercial honor in all conditions of life should be protected, is among the worst species of gambling; it is the corruption of public morals and robbing of honest labor of its earnings. An individual purchases an acre of land to-day at a hundred dollars, and having done nothing for its improvement, on account of a redundancy of the currency, by which the value of money is reduced, and which is expanded or contracted at the pleasure or caprice of the money factors, sells this land a month or a year afterwards, for two hundred dollars; does he confer any benefit upon the community? Not the smallest, but most probably an injury. Is the actual value of the land increased, or the community made richer by this advancement in price? Not at all. But, on the other hand, if an individual takes an acre of land, cultivates, and enriches it, renders it productive, and actually produces a crop, he is the creator of wealth; he is a benefactor to the community; in respect to its wealth, not only in proportion to the value of the crop he produces but in having put the land in condition for future production; and greatly in respect to its morals—a gain always vastly superior to any pecuniary profits.

Allow me, in this connexion, to direct your attention to what may be called the recuperative power of Agriculture, as the creator of wealth. Money has no power of self increase. Money in specie deposited in your chest, if you can keep it safely, at the end of a month or year will not have increased at all in value; if in bank notes, though the lock of the chest may be unbroken, I cannot answer for it that it will not have been diminished. Agriculture applied with skill and judgment in subduing, cultivating and enriching the soil, not only enhances its present value and obtains an early return, but puts it into a condition of permanent productiveness and increase. But, in these strong recommendations of an improved agriculture and the increase of products, I shall be met with the objection, that in proportion to the increase of agricultural products, prices go down and their value is consequently diminished. My answer in this case is, that in a healthful state of the currency of a country, and where the standard of value is fixed and not liable to perpetual fluctuations, cost and value naturally adjust themselves and maintain a steady proportion. But I have a second answer. I estimate the prosperity of a country not by a mere pecuniary standard, but by the general comfort and improved condition of the



middling and the laboring classes. This comfort and improvement of condition will be in proportion to the cheapness and abundance of the necessaries of life. A productive and abundant Agriculture must form, therefore, the great means of their comfort and prosperity.

The perfection of Agriculture as an art consists in its productiveness, qualified by the consideration of cost, and of the condition in which it places or leaves the soil. If the proceeds of the cultivation are not sufficient fairly to meet the expenses, it becomes discouraging; and may, with good reason, be abandoned. If in prosecuting it, the first returns repay the expenditures yet the soil itself becomes impoverished and cannot be recruited but at an expense exceeding the value of the crop obtained, this husbandry is not to be commended. But when the land yields abundantly, the crops not only pay the expenses of cultivation, but leave a net profit, and the land itself is in a course of gradual improvement and increased productiveness, such husbandry may be pronounced skillful and successful. The same remarks, which apply in this case to the cultivation of the land, apply in like manner to the raising and keeping of live stock and every other department of husbandry.

The improvement of this art depends upon inquiry and knowledge, exactly as the improvement of any other art or science. It has been thought that practice was the only means, and all that was necessary, to constitute a man a farmer; and scientific inquiry has been spoken of with derision. This ignorance and these prejudices are fast passing away. There are secrets in nature, which in the present condition of our faculties we may not expect to penetrate; but in the progress of knowledge it has already happened, as we all know, that many operations of nature, which were deemed a few years since insoluble mysteries, are now made so familiar that we can only admire our own previous dullness of comprehension. More than this, too, in this case the Gordian knot has not been cut, but deliberately untied. Inquisitive minds should never be satisfied with present attainments, nor think they have gone far enough, when there is a possibility of going further. Nothing is more remarkable, when the subject is soberly considered, than the prejudice which has existed against science when applied to Agriculture. It is strange that men should admit the value of mind and of knowledge in every other department of business but this. Why

should Agriculture, involving many of the most profound inquiries, be an exception to the aids and advantages of science? When we consider what art and science has already done for it, we cannot doubt that philosophy is yet here to extend her guiding hand, and to achieve many a splendid triumph. The progress of some of the natural sciences within a few years has been so great that they may almost be said to have been created. The Supreme Being has implanted in the mind a strong desire after truth. It is the characteristic of a distinguished intellect to yearn after it as the stomach, famishing with hunger, pants for food. To seek after truth, therefore, wherever we can find it, whether we go into the field as gatherers of the bending harvest, or as gleaners of a few scattered ears, is a duty to ourselves, and an act of reverence to the Father of our Spirits. He has made truth the natural aliment of the soul, and inspired the noble minded with a thirst for it, which ever gains new ardor from indulgence. Of what is termed the vital processes in the animal and the vegetable worlds, we cannot form even a plausible conjecture; but this should not discourage our inquiries. Before the discoveries of Harvey, the circulation of the blood was an unfathomable mystery, and before the revelations of Franklin in electrical science the world did not dream of the nature and laws of that mighty ethereal fluid.

Vegetable physiology, and organic chemistry, have been within a few years so much studied, soils and manures have been so carefully analyzed, and their applications so frequently experimented upon and so carefully watched, that many principles, most important in their application to practical Agriculture, are as well established as the principles of astronomy and navigation, which enable the intrepid sailor to circumnavigate the globe, and to determine his place and distance and course with entire precision, as well by the soft beams of the sparkling stars, transmitted from the profound depths of the heavens, as by the effulgence of a noon-day sun.

One of the most distinguished botanists and vegetable physiologists\* in the world, by establishing the fact of the exudation of plants and the excretion from their roots of matter unfriendly to the successive growth of the same plant on the same land, has explained the importance and necessity of a rotation of crops. Another individual,† standing in the foremost rank among the

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\* De Candolle.

† Liebig.

learned men of Europe, has given such explanations of the soils, the operation of manures, and the remarkable dependance of plants for their food upon the atmosphere and the rain, that should his theories be established by farther experiments, his book, as it has already been pronounced, will prove a new revelation in Agriculture. A distinguished scientific and practical agriculturist\* in Great Britain, in view of what has been done and is doing, with all the enthusiasm of an ancient Greek philosopher, declares that "everything portends some extraordinary discoveries in Agriculture." May it be the happiness of this gentleman, himself an eminent, active and liberal friend of agricultural improvement, to be favored, like the ancient patriarch before his departure, with a sight of the glowing objects of his desires and hopes.

American Agriculture starts in the race of improvement in the enjoyment of singular advantages, having the benefit of all the improvements and discoveries of the philosophers and practical agriculturists of the old world. The Agriculture of Europe differs from that of this country on account of differences of climate and soils, and by various circumstances in the social condition, character and wants of the people. But the great principles of vegetation and cultivation are every where the same. Their remarkable improvements in the redemption of unproductive, waste and wet-soils, in the irrigation of lands, in draining and sub-soil ploughing, in the composting and compounding of manures, in the use of mineral manures, and more especially in the improvement of their live stock, amounting almost to the creation of new races of cattle, sheep, and swine, will not only stimulate our exertions, but serve as examples for our guidance under the qualifications, which the peculiarities of our situation require.

The French and Germans, if their progress has not been as great as that of Great Britain, are now advancing, in a course of improvement in Agriculture with an equal step. In the application of Chemistry to Agriculture, in comparative anatomy and botany, in exact experiments, in the institution of model farms, where the most important agricultural experiments are carefully going on under the supervision of some of the most enlightened men of the age and at the expense of the state, and in efforts and provisions to create an interest in the art and to extend any information, which is acquired; and especially, by a systematic arrangement and organi-

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\* P. Pusey, M. P.

zation throughout the kingdom, by which agricultural information is collected from every source, and again sent out through the arteries into every part of the political body, the French nation is at this time in advance of all others.

American Agriculture though comparatively in its infancy, having always had to struggle with the difficulties of no capital and high prices of labor, may nevertheless regard itself with a good deal of satisfaction. The earliest publication on American Agriculture was made in 1760; and Eliot's Essays on Field Husbandry will be read with interest and instruction for ages to come. Massachusetts, Pennsylvania, and New York early established agricultural societies, offered liberal premiums for successful experiments in agriculture, and held cattle shows and ploughing matches, which have awakened a strong interest and created a most salutary competition. These three states, in the reports and memoirs of their agricultural societies, have given to the public more than twenty three volumes of instructive and useful matter. Deane, Lowell and Pickering in Massachusetts, Livingston, L. Hommidieu and Hosack in New York, Peters, Mease, Lorain and Powell in Pennsylvania, Stiles and Humphreys in Connecticut are names which are destined, without prejudice to any of their distinguished contemporaries or successors, to occupy the highest niches of honor in the records of American Agriculture.

It would not be just to pass in silence, the early pioneers in agricultural improvement connected with the periodical press, Skinner, and the distinguished and lamented Fessenden and Buel, to whom the country owes a heavy debt of gratitude and honor for their intelligence, public spirit and usefulness. The agricultural press among us is singularly active, illuminating the whole national horizon with its brilliant coruscations; or rather, should I not say, its steady, condensed and glowing light. The Albany Cultivator under its late lamented editor and a successor equally worthy, the Farmer's Register in Virginia, and the New Hampshire Visitor, without disparagement to the singular ability with which many other lights are kept burning, would do honor to any country.

The geological and other scientific surveys which have been conducted with much learning and ability in Massachusetts, Maine, Rhode Island, Connecticut, New Jersey, Indiana, and Michigan, and still in progress in New York; New Hampshire and

Virginia, have developed a large amount of information, the practical bearing of which upon Agriculture must prove extremely beneficial. Massachusetts has the honor of having first instituted an agricultural survey. Notwithstanding the difficulties of an undertaking altogether novel and undefined, and of proceeding single-handed in an enterprise so arduous, without experience, or counsel or aid, my convictions of the utility of the undertaking have been strengthened by its prosecution. While I have had the highest satisfaction in the repeated expressions of approbation from gentlemen both in this country and abroad, whose good opinion is above all price, I trust I shall be pardoned for adding that the course of inquiries instituted and the prosecution of those inquiries with the publication of their results have given in the state an impulse to agricultural inquiry and improvement and an exactness to agricultural experiment and observation which have been and must continue to be productive of the best effects.

The Agriculture of the country has been singularly benefitted by the public-spirited introduction of the best live stock from Europe. Col. Humphreys of Connecticut and Chancellor Livingston of New York made the first importation of Merino sheep into the country as early as 1802. Messrs. George and Thomas Searle of Boston brought the Saxony into the country in the year 1824. Other gentlemen followed in similar importations, and when the destined extent of this interest is considered, it is difficult to say how they could have conferred a greater benefaction upon the country. Besides the distinguished importations of improved neat stock in Ohio and Kentucky by companies, many private gentlemen of fortune have, with a commendable public spirit, embarked in the importation of the finest live stock, both cattle and sheep, which Europe affords. Van Rensselaer and Corning of New York, Powell of Pennsylvania and Cushing of Massachusetts have in this way conferred most eminent benefactions upon the country. The latter gentlemen, with a liberality as distinguished as his mercantile success and honor, has not only imported the best stock, but gratuitously distributed them among the farmers. This generous appropriation of large amounts for purposes of agricultural improvement in the most disinterested manner silence all envy of his splendid fortune; and entitle him to the high honor and respect with which his fellow citizens regard him. Among individuals of more humble means but

of a spirit of improvement worthy of the largest fortune, Bement of New York, Townsend of Connecticut and Jaques of Massachusetts deserve the most honorable mention. The latter gentleman has just claims to the honor of the first systematic attempt in the country at forming a dairy stock of the most valuable properties. I might cite other honored names, who have united their liberal contributions to these public-spirited enterprises ; and I refer with singular pleasure to Henry L. Ellsworth, Commissioner of Patents, who, in his zeal to promote an improved Agriculture, has collected and distributed large amounts of valuable seeds through the states ; and commenced the establishment of an agricultural museum at the seat of government upon a plan of the highest utility to the country.

These and various other circumstances, which the time does not permit me to refer to, give strong encouragement to the friends of an improved Agriculture. Happy for us that in this matter we can unite without distinction of political party or religious sect ; and in a case where all rivalry and competition are excluded, excepting that which may be pursued with perfect good will to all ; and which must result in the common benefit.

The dependance of Agriculture upon the mechanic arts is obvious to every one ; and mechanical genius in our own country has already made many liberal contributions. The Cotton Gin of Whitney, when its great results are considered, is the most important and valuable instrument ever produced in the agricultural world. The cultivation of cotton in the country began in 1787 and in 1792 it is said the whole amount exported was two bags received at New York from Savannah. The cotton gin, by which one man performs the work which before required a thousand, gave an impulse and facility to the production of this valuable article by which it has risen to its present enormous amount. New York may claim the honor of having given the first cast-iron mould board plough to the country, by which a saving is made of full fifty per cent in the power of draught required, and great advantages gained in the facility with which repairs can be made. Wood's plough is still deservedly valued through the country. The improvements made on its construction, by Minor in your own state, by Howard, Prouty and Mears, Ruggles, Nourse and Mason, and others in Massachusetts and other parts of the country, have carried it to a high degree of perfection. The capital plough of Davis of Maryland, now rarely

to be seen, for ease of draught and excellence of work for old fields, is within my knowledge unsurpassed. In comparison of our own with the best Scotch and English ploughs, which I have seen in this country, though I have found nothing which equals the mould board of Small, constructed as it is upon the most philosophical principles, for the ease with which it enters and inverts the sward, yet, in the hands of a good ploughman, the work done by our ploughs is as good as any, and the facility with which they are managed incomparably greater than the Scotch ploughs. In skill in ploughing and neatness and precision in executing the work, we are at present very far behind the English and Scotch. The advantages of a division of labor, as where a ploughman is always a ploughman, and the extraordinary expertness and exactness acquired by early training and the concentration of the faculties and ambition to a single point, are here most obvious. For threshing we have many admirable machines, and in comparison with a Scotch machine which I have seen, said to have been constructed after the best model, in amount of work which they will perform in a given time several of ours are not inferior; and in the power required for its execution, the expense of the instrument, and the facility of its transportation from place to place, ours have greatly the advantage.

This may not be an unsuitable place to refer to a beautiful contrivance in rural economy presented at your annual exhibition by one of your associates, in the construction of a bee hive. The hive of John Sholl of this city combines superior advantages at a small expense. By the uniform temperature it is intended to preserve in the hive in summer and winter it provides effectually for the health of the colony. It obviates to a degree the necessity of swarming and allows the young to remain at home with the old folks. It is in a great measure secure against the attacks of that too often fatal enemy the bee-moth; and is easy, withal, of transportation, with its tenants enclosed, to any distance. It allows you to take the surplus honey in the purest state for your taste; and abandons the savage system, so many years practised against these industrious laborers, of piracy and murder. It would seem in this case to have other advantages in respect to these exemplary insects, since, as if acquiescing in the non-resistant principles of the sect, to which the ingenious inventor belongs, the bees permit him to handle them and go among them with perfect impunity.

This invention and the excellent hive of Weeks of Vermont and other valuable ones for a similar purpose in other states, will have some importance in your regard, when I state the fact, that a farmer in Maine the last year, from his honey and hives and swarms is said to have realized no less than a thousand dollars.

We have various other agricultural machines well adapted to our purposes. Having the advantages of the improvements of other countries in their best models, the ingenuity of our mechanics will soon enable them to meet the demands of the community. Indeed the progress already made in the mechanic arts among us, as is seen at your own splendid exhibitions, encourage the promise of distinguished benefits yet to result to Agriculture from their aid.

To these circumstances we may add others, which are ominous of eminent good. Hitherto, to a considerable degree, agricultural labor and pursuits have been regarded as servile and degrading; or, from the small gains which they are supposed to offer, have been contemned and abandoned for the glittering accumulations which presented themselves in other departments of business, and especially in trade and commerce. It will be seen likewise upon observation that most of our legislators and public men in many parts of the country, almost to the exclusion of the agricultural class, have been selected from the profession of the law, which has thus got to be considered the turnpike road to political preferment. This is not perhaps extraordinary; for the legal profession being the principal talking profession, and a large portion of our legislative business, as at present conducted, consisting of mere talk, it is natural that they should be preferred for this object. Agriculture has therefore presented no lures to political ambition. At the same time I should be doing the greatest injustice to all the learned professions, if I did not say that, both in the legislature and out of it among the enlightened men of these professions, Agriculture has found some of its most able advocates and best practical examples. This has demonstrated the advantages of intelligence and science when applied to this art, since in such hands, when united as it frequently happens with a strong passion for rural pleasures and pursuits, the art has invariably been found in its most improved condition.

In various respects public opinion, that mighty despot of human life and manners, is evidently undergoing a healthful change. Labor, actual personal labor, is becoming respectable. When a



few more of the light-fingered gentry of Europe, who have sped their way to our shores, and others of the same class among ourselves, who through greater modesty commit their robberies on the industrious classes under at least the cover of legal forms, not less robbery however for being thus protected, find their proper level in society, labor, honest useful labor, whether of body or mind will come to be duly honored. That labor, by which a man benefits not only himself but the community, if proper intelligence be joined with it, will be regarded as giving the strongest claims to its honors, privileges, and blessings. The history of the trading community, likewise, for the last few years, with its fluctuations, losses, derangements and bankruptcies, with its sudden accumulations and sudden and dreadful reverses, creates a reasonable distrust, whether the actual gains of trade with their various risks, uncertainties and temptations are to be preferred to, whether in fact they are so great, as the gradual but certain and honest gains of an improved agriculture. The charming and serene quiet of a house where books and work and healthful play divide the hours, where no changes of foreign markets, nor rise and falling of fancy stocks, nor bank contractions and expansions, nor notes payable and discounts curtailed, disturb the sleep, and chances of bargains and opportunities of overreaching do not trouble the conscience nor betray the integrity, is at least some compensation for daily toil and homely habitations. The hard bed may bring with it a sweeter repose than a couch of down; and even the pine torch of a log-cabin may often shed a more cheerful light upon its unambitious inmates than the astral lamps and the burnished mirrors, glittering with the concentrated rays of the purest gas-lights upon the ephemeral butterflies and birds of paradise of many a city palace. As to political ambition, I cannot desire that rural life should be corrupted by its presence; yet I think the time is not distant, when, if the farmers are true to their own minds, the agricultural estate will, as in our mother country, have its full share of political influence. The public will feel that their national and social interests may be as safely trusted to intelligent men, who have every thing at stake in the soil, who know the value of labor as an element of national wealth and happiness, and whose profession obliges them to habits of reflection and caution, as to so large a proportion of other descriptions of men, who hang more loosely on the state, whether taken from the

legal bar ; or, as it sometimes unfortunately happens, from the bar of justice and the bar room. Public opinion, as I have said, promises to give to the agricultural profession its proper place. We do not desire its elevation to the disparagement of any other honest calling, for there are innumerable callings as honest and as useful ; but, that the agricultural profession may be so regarded that the young, if not allured to it by its substantial attractions, may at least not be repelled from it by any false pride ; by any fear of losing *caste* ; and any want of that self-respect and that spirit of personal independence, which belongs only and always, to such men in any condition of life, as are the makers of their own fortunes, and get their living by the faithful and upright use of the faculties of body or of mind, with which their Creator has endowed them.

The agricultural interest has a just claim upon the fostering and protecting care of the government. I am not able to discover how the economy of a government differs in any respect from the economy of a well-ordered family. The highest rule in domestic economy, is for a family as far as possible, to supply from within itself its own wants ; and suffer itself to be as little as possible dependent upon others. Debt and dependence are in most cases only other names for slavery ; a slavery oftentimes more painful and degrading than African servitude. There is no element of character more ennobling in itself or more conducive to virtue and to the progressive development and exertion of all the faculties of a human being, than a conviction of his own capacity to provide for himself. There is no domestic harmony more beautiful or less likely to be disturbed, than where in a united family labor is divided, and the different parties are engaged in supplying the various wants of each other. While they cultivate a spirit of good will towards their neighbors, they have no dread of their neighbor's displeasure lest he might abridge their comforts ; and no cringing and servile dependence upon his power and caprice in the supply of their wants. This system of internal supply, if I may so denominate it, constitutes in most respects the best system of domestic education. Education, in the highest sense, is not so much the acquisition of knowledge as teaching and preparing the mind, and stimulating and developing its capacities to acquire knowledge for itself. In a family where the great duty taught is self reliance, every power is called into action and an expertness is acquired in the use of our facul-

ties, which oftentimes surprises ourselves from the facility with which they operate, and the diversity and usefulness of their results.

I know that it is the tendency of all men to push their theories to an extreme; admitting the qualifications which this may suggest, I proceed to say that political economy does not essentially differ from domestic economy; and a nation should make itself independent by providing within itself for its own wants. That nation is rich, which has no favors to ask of others. That nation, in a moral view, is signally favored, whose industry is protected and stimulated in every useful form for the common benefit. She creates within herself continually new and new power and is ever advancing in dignity, in wealth, and in all the elements, which constitute true national greatness and glory. It may happen that the actual cost or expense of supplying our own wants from our own resources may in some things be greater than to purchase the same supplies from others. But neither is national prosperity nor family prosperity to be measured by a merely pecuniary standard; but by its own internal and independent resources and abilities for the supply of its own wants, comforts and luxuries. The government is bound, therefore, upon every principle of wise and sound policy, to foster the national industry, agricultural and mechanical, in every form in which it is directed to a good and useful end.

Of the various special means within its power to encourage its agricultural industry and improvement, I have not time to speak and do even the shadow of justice to the subject. It is singular that this great interest is not made an object of the special care of the government, and that there is no constant or particular provision for its improvement and success. The first object of the government should be to collect and diffuse exact and full information in relation to it, and for that reason a department of Agriculture should be specially maintained at the seat of government, whose object should be to promote its interests, and with liberal appropriations to assist its inquiries. A similar department should exist in every state. The actual condition of its Agriculture should be, from time to time, ascertained by authority and spread before the public. The Commissioner of Patents, has made an excellent beginning in this matter; and his public spirited enterprise should be seconded in every part of the country. The collection of agricultural information, correspondence at home and abroad, so as to take advantage of every discovery and improvement, the obtaining of

seeds and plants of a rare or improved character and their distribution, and the collection of models of useful machines, tools and inventions for facilitating agricultural labor, with an infinite variety of other matters pertaining to the subject, would constitute an extensive business and prove eminently useful.

It has been suggested that a National Agricultural Society should be formed, which should hold annual meetings for discussing this great subject and for the other usual purposes of such associations. But our country is too large for this. It spreads over too wide a territory to expect ever that such meetings should be generally attended. If anything of this kind were attempted it would be more expedient to divide the country into four great agricultural districts with an association in each, which would be likely to operate with effect. It is doubtful, however, whether any associations so extensive could be managed to advantage. I have the most decided convictions, founded upon long experience and observation, of the value of state associations for agricultural objects, and for the purpose of holding annual cattle shows or fairs; and especially when these societies are endowed, as they most certainly should be, by the liberality of the state with the means of bestowing respectable premiums on successful discoveries, experiments and improvements. Town associations should be formed with libraries of agricultural publications, for discussion and reading; and in no state should the friends of an improved agriculture cease their exertions and importunities until state and county societies are instituted and liberally endowed with the means of bestowing substantial honors on the deserving. The State of Massachusetts for several years has appropriated from five to eight thousand dollars for the direct encouragement of its Agriculture. This, after all, is a mere pittance; but it has been of immense advantage. Never has seed been sown that has yielded or promises to yield a more abundant or more profitable crop. The States of New York and Pennsylvania could afford to give their ten, and their fifty thousands to these objects, and this would be abundantly returned to them.

Your own magnificent state, Citizens of New York, ought to take the lead in this noble enterprise. Your agriculture is one of the great interests of the country and must continue so as long as your extraordinary natural advantages and internal improvements continue, and extend themselves.

The Institution, which I have the honor to address, has for its

objects the encouragement of agricultural and mechanical industry. Your exhibitions and trials of ploughs have done you great honor. Their continuance will quicken throughout the country the impulses of genius and art; diffuse useful knowledge to a wide extent; awaken powers of usefulness which would otherwise lie dormant; and be of pre-eminent service to to your state and country. I know no institution adapted to more useful ends or more deserving the encouragement of the enlightened and patriotic. The central position in which it is established, rendering it accessible to all parts of the country, and holding as it does an immediate and easy commerce with the old world, and necessarily concentrating a large amount of talent of a practical as well as of an intellectual character, give your institution permanent advantages over any other position in the Union.

In France the government of the country has instituted several agricultural schools, or schools of useful and practical arts and sciences, and established model farms. I hope our state and national governments will from their example perceive the immense importance of these institutions. I see as much reason for the establishment of national agricultural schools and schools of the practical arts as for the establishment of national military and naval schools; and we may congratulate the friends of practical education, that through the extraordinary liberality of a distinguished foreigner, the government have already ample unused funds for education, which cannot be better appropriated than to these objects.

The interest which I feel in this subject is so strong that, had I the powers of an unrivalled eloquence, they should be used in urging the elevation of the rural and laboring classes. This is only to be done by education, intellectual, moral education. This is the Archimedean lever, which is to raise the world.

The importance of science to the improvement of Agriculture is so great that on this account, we should seek to educate the rural classes. But on their own account also, that we may refine and elevate their taste; that we may increase the attractions of their homes, and strengthen their attachments to their country; that we may give them resources for pleasure and mental improvement in hours and days of leisure and in the evening of advanced age; that we may multiply the incentives to good morals by increasing their self-respect and advancing their occupation and condition to its proper dignity, we should seek to extend and continually to increase

among them the advantages of education. Nothing can more effectually contribute to this than the establishment of that system of free schools already existing in your own state and in New England; and by seeking constantly to elevate the character and enlarge the course of studies at these institutions. The patronage of the government, if in this respect, it were a hundred or a thousand fold greater than it is, could not be more wisely bestowed.

*Gentlemen of the American Institute.* Honored as I have been by your invitation to address you, I feel myself even more obliged by your indulgence on this occasion. I have very imperfectly met my own wishes; and I can have little expectation therefore that I have answered yours. The subject is far too extensive for such a discussion as this evening allows. But I cannot quit the occasion without congratulating you upon the prospects of our privileged country in all that is truly valuable in the social condition of mankind. In the conditions of society in the old world, among those who call themselves civilized, men are as much divided into *castes* as in the servile provinces of Hindostan. The doom of the laboring classes is fixed and they cannot rise above it, but as they escape from their country. In our blessed country men are what they make themselves by their talents, education, and morals. Let us guard this beautiful element in our social condition, seen first and only in American society, as the great security of freedom and the certain spring and foundation of virtue and happiness. Men must be thrown upon their own resources that their talents may be brought out, and have an open field for their use and development. They must feel their personal responsibility to themselves and to society in order to feel themselves men. In the hands of men thus trained liberty will always be safe. In crowded cities, breathless in the accumulation of mere wealth as the great end of life, liberty may often be bartered for a mess of pottage, or perish in the lap of sensual indulgence. Amid political strifes and the struggles of ambition it may become a stifled victim in the clutches of party. The enlightened and virtuous yeomanry of the country, alike removed from the enervating fever of unbridled avarice and sensuality, and the violent contests of political ambition, will guard the sacred fire in its warmth and brightness. They will hold it dear as their lives, because with them it involves all that is worth living for; and transmit it unexhausted and undimmed to those, who come after them.

## APPENDIX.

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### NOTE A.

#### AGRICULTURAL STATISTICS.

The publication of the returns of the census of the United States is looked for with great interest. In the mean time I avail myself of some notices on this subject, which have appeared since the delivery of the Address, in the public press. Mistakes in copying large numbers are so easily made, that we cannot look at the returns in this case, without a degree of distrust. That the State of New York, for example, should produce seventy millions pounds of maple sugar is a very surprising fact, not absolutely incredible but requiring to be well authenticated in order to be received. In the table in the Cultivator for May however it is put down at ten millions. I shall give both tables persuaded that imagination or carelessness may have had something to do in both.

“The largest wheat growing state in the union is Ohio, the amount 16,000,000 bushels; the next largest Pennsylvania with 13,000,000; the next New York with 11,000,000; and the fourth Virginia with 10,000,000. The largest amount of Indian corn raised in one state is in Tennessee, 42,000,000 of bushels; Virginia 34,000,000; Ohio 33,000,000; Indiana 28,000,000; Illinois 22,000,000; Alabama 18,000,000; Georgia 17,000,000; Missouri 15,000,000.

New York is the greatest potatoe growing state, amount 30,999,000 bushels; Maine next with 10,000,000; Pennsylvania 8,000,000.

The greatest cotton growing states are Mississippi 289,000,000 pounds; Alabama 240,000,000; Georgia 148,000,000; South Carolina 134,000,000; Tennessee 128,000,000; Louisiana 87,000,000, Arkansas 23,000,000; Virginia 10,000,000.

Louisiana is of course the largest producer of sugar 249,000,000 pounds; New York comes next with 70,000,000 pounds, the produce of our own forests.

Tennessee is first in swine, number 2,795,000. Ohio next with 2,000,000.

New York stands first for wool; next Ohio, Vermont, Pennsylvania and Virginia.

Tennessee again stands first in tobacco, amount, 26,000,000 pounds; Maryland 18,000,000; Virginia 14,000,000. The returns from Kentucky not obtained.

New York stands first for lumber, value \$3,788,000; next Maine \$1,808,000. For products of the orchard, New York stands first, value \$1,732,000. For products of the dairy, New York is again at the head, value \$10,000,000; Vermont next \$4,892,000.

**APPENDIX.**

**AGRICULTURAL CENSUS OF NEW YORK,**

*From the Cultivator.*

Horses and Mules, - - -	476,115	Tons of Hay, - - -	3,160,915
Neat Cattle, - - -	2,202,128	Pounds of Cocoons, - - -	2,103
Sheep, - - -	5,381,225	"    Sugar, - - -	10,092,991
Swine, - - -	1,916,954	Cords of Wood sold, - - -	1,085,048
Poultry of all kinds, estimated value, - - -	\$2,372,029	Value of the produce of the Dairy, - - -	10,497,032
Bushels of Wheat, - - -	11,852,507	Value of produce of Orchard	1,722,357
"    Barley, - - -	2,498,170	Gallons of Wine made, - - -	14,710
"    Oats, - - -	20,728,738	Value of home made or family goods, - - -	\$16,335,073
"    Rye, - - -	2,984,913	Value of Nurseries and Florists, - - -	75,500
"    Buckwheat, - - -	2,244,438	Value of produce of market garden, - - -	465,308
"    Indian Corn, - - -	10,055,142	Number of persons employed, - - -	525
Pounds of Wool, - - -	14,093,134	Capital invested, - - -	\$258,608
"    Hops, - - -	362,752		
"    Wax, - - -	184,021		
Bushels of Potatoes, - - -	30,000,508		
Pounds of Tobacco gather'd	6,567		

**AGRICULTURAL STATISTICS OF MASSACHUSETTS,**

*As Reported to the Valuation Committee, 1840.*

Acres of tillage land, including orchards tilled, - - -	259,038½	Acres of woodland exclusive of pasture land enclosed, - - -	729,792
Bushels of Wheat, - - -	101,178	Acres of unimproved land, - - -	955,283½
"    Rye, - - -	453,705½	"    land unimprovable, - - -	360,278½
"    Oats, - - -	1,226,300	"    land used for roads, - - -	90,074
"    Indian Corn, - - -	1,775,703½	"    land covered with water, - - -	157,524
"    Barley, - - -	149,004	Whole quantity of land returned, acres, - - -	4,491,812½
Pounds of Hops, - - -	237,941	Horses one year old and upward, - - -	60,030
Tons of Hemp, - - -	7	Mules and Asses one year old and upward, - - -	117
"    Flax, - - -	2	Oxen four year old and upward, - - -	46,584
"    Broom Corn, - - -	580½	Cows three year old and upward, - - -	143,591
Acres of English and upland mowing, - - -	440,930	Steers and heifers one year old and upward, - - -	88,562
Tons of Hay, yearly produce of the same, - - -	467,537½	Sheep six months old and upward, - - -	343,390
Acres of fresh meadow, - - -	184,822½	Swine six months old and upward, - - -	90,335
Tons of Hay, yearly produce of the same, - - -	135,930½	Amount of real estate doomed, - - -	73,378,837
Acres of salt marsh, - - -	39,305½	Amount of personal estate doomed, - - -	43,861,305
Tons of Hay, yearly produce of the same, - - -	26,202½		
Acres of pasturage including orchards pastured, - - -	1,210,154		
Cows, the same will keep with the after feed of the farm, - - -	263,560		

**NOTE B.**

The Newark Advertiser says that fifteen years ago, a farm in Western New York of 400 acres, exhausted by bad husbandry, was bought by a Scotch farmer for \$4,000. This farm has been so improved by good husbandry, that the owner was last year offered for it \$40,000. He refused the offer on the ground that it had actually netted him \$60,000.





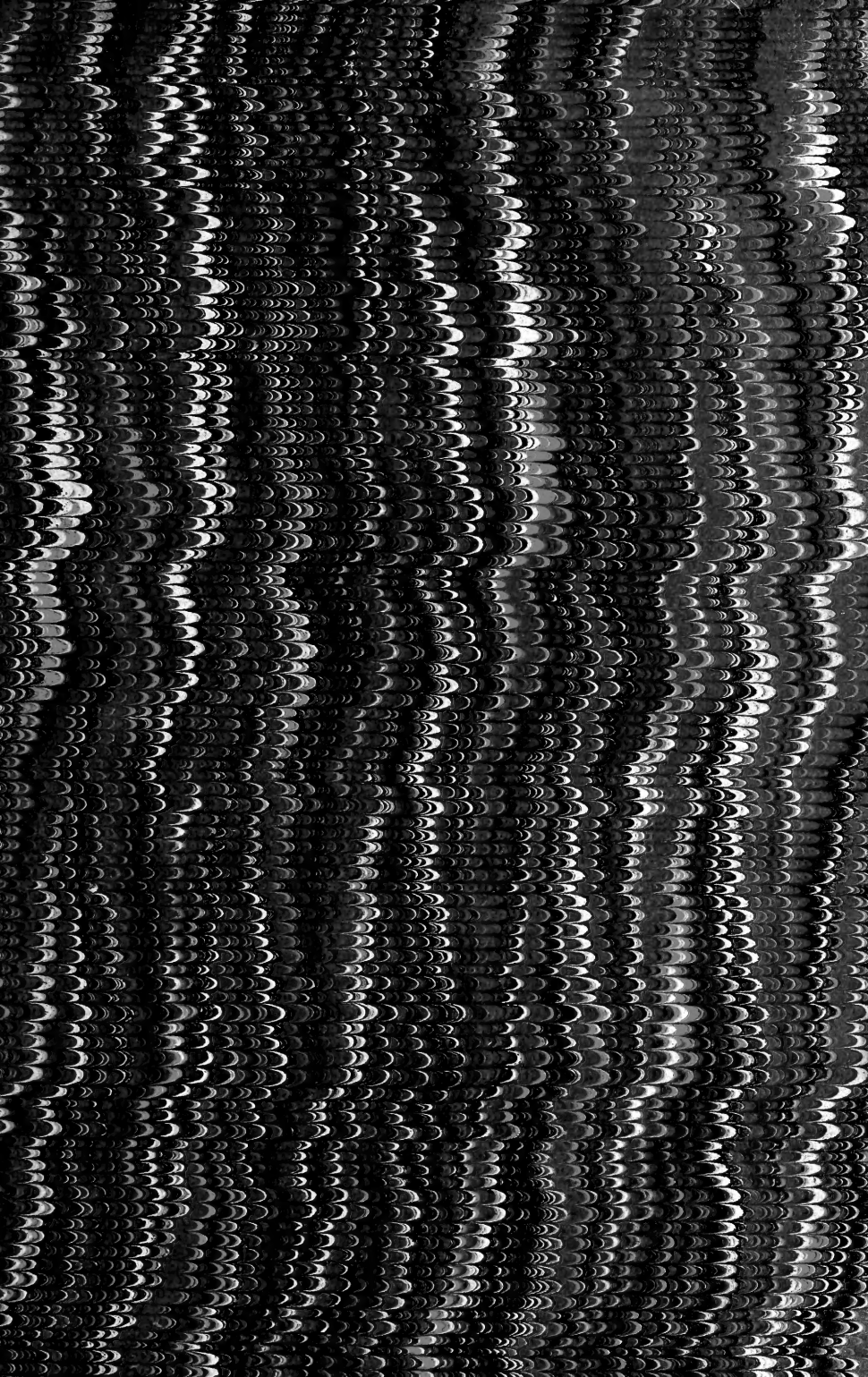












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