







ESSAYS,

LITERARY, MORAL

AND

PHILOSOPHICAL.

BY BENJAMIN RUSH, M. D. and professor of the institutes of medicine and clinical practice in the university of pennsylvania.

SECOND EDITION, WITH ADDITIONS.

PHILADELPHIA:

PRINTED BY THOMAS AND WILLIAM BRADFORD, NO. 8, SOUTH FRONT STREET.

.1806.



AS A RECORD

OF FRATERNAL AFFECTION,

THE FOLLOWING ESSAYS ARE INSCRIBED TO

JACOB RUSH,

Judge of the Third District of Pennsylvania,

By HIS FRIEND

AND BROTHER,

THE AUTHOR.

January 9, 1798.

216 July 15



PREFACE.

MOST of the following Essays were published in the Museum, and Columbian Magazine, in this City, soon after the end of the revolutionary war in the United States. A few of them made their first appearance in pamphlets. They are now published in a single volume, at the request of several friends, and with a view of promoting the ends at first contemplated by them. Two of the Essays, viz: that upon the use of Tobacco, and the account of remarkable circumstances in the constitution and life of Ann Woods, are now submitted for the first time to the eye of the public. The author has omitted in this collection two pamphlets which he published in the year 1772, upon

PREFACE.

the slavery of the Negroes, because he conceived the object of them had been in part accomplished, and because the Citizens of the United States have since that time been furnished from Great-Britain and other countries, with numerous tracts upon that subject, more calculated to complete the effect intended by the author, than his early publications.

BENJAMIN RUSH.

Philadelphia, Jan. 9, 1798.

TABLE OF CONTENTS.

p	AGE
A PLAN for establishing Public Schools in Pennsylvania,	
and for conducting education agreeably to a Republi-	
can form of Government. Addressed to the Legisla-	
ture and citizens of Pennsylvania, in the year 1786, .	1
Of the mode of Education proper in a Republic,	5
Observations upon the study of the Latin and Greek	
languages, as a branch of liberal education, with hints	
of a plan of liberal instruction, without them, accommo-	
dated to the present state of society, manners and go-	
vernment in the United States,	21
Thoughts upon the amusements and punishments, which	
are proper for Schools,	57
Thoughts upon Female Education, accommodated to the	
present state of society, manners and government, in	
the United States of America,	- معود معر
	57
A defence of the Bible as a School Book,	93
An address to the ministers of the Gospel of every deno-	
mination in the United States upon subjects interesting	
to morals,	114
An inquiry into the consistency of Oaths with Christi-	
anity,	125
An inquiry into the Effects of Public Punishments upon	
Criminals, and upon Society,	196
	230
An enquiry into the consistency of the punishment of	
Murder by Death, with Reason and Revelation,	164

TABLE OF CONTENTS.

A plan of a Peace Office for the United States, 183
Information to Europeans who are disposed to migrate to the United States of America,
An Account of the Progress of Population, Agriculture, Manners, and Government, in Pennsylvania, 213
An Account of the manners of the German Inhabitants of Pennsylvania, 226
Thoughts on Common Sense, 249
An Account of the Vices peculiar to the Indians of North America,
Observations upon the influence of the Habitual use of Tobacco upon Health, Morals, and Property, 261
An Account of the Sugar Maple Tree of the United States, 270
An account of the life and death of Edward Drinker, who died on the 17th. of November, 1782, in the 103rd. year of his age,
Remarkable circumstances in the constitution and life of Ann Woods, an old woman of 96 years of age, 293
Biographical Anecdotes of Benjamin Lay, 296
Biographical Anecdotes of Anthony Benezet,
Paradise of Negro Slaves-a dream,
An Inquiry into the causes of Premature Deaths, 310
Eulogium upon Dr. William Cullen,
Eulogium upon David Rittenhouse, \$35

Essays,

LITERARY, MORAL, AND PHILOSOPHICAL.

A PLAN FOR ESTABLISHING PUBLIC SCHOOLS IN PENNSYLVANIA, AND FOR CONDUCTING EDUCA-TION AGREEABLY TO A REPUBLICAN FORM OF GO-VERNMENT. ADDRESSED TO THE LEGISLATURE AND CITIZENS OF PENNSYLVANIA, IN THE YEAR 1786.

BEFORE I proceed to the fubject of this effay, I fhall point out, in a few words, the influence and advantages of learning upon mankind.

I. It is friendly to religion, inafmuch as it affifts in removing prejudice, fuperfitition and enthufiafm, in promoting juft notions of the Deity, and in enlarging our knowledge of his works.

II. It is favourable to liberty. Freedom can exift only in the fociety of knowledge. Without learning, men are incapable of knowing their rights, and where learning is confined to a few people, liberty can be neither equal nor univerfal. 2

III. It promotes just ideas of laws and government. "When the clouds of ignorance are difpelled (fays the Marquis of Beccaria) by the radiance of knowledge, power trembles, but the authority of laws remains immoveable."

IV. It is friendly to manners. Learning in all countries, promotes civilization, and the pleafures of fociety and conversation.

V. It promotes agriculture, the great basis of national wealth and happines. Agriculture is as much a fcience as hydraulics, or optics, and has been equally indebted to the experiments and refearches of learned men. The highly cultivated ftate, and the immense profits of the farms in England, are derived wholly from the patronage which agriculture has received in that country, from learned men and learned focieties.

VI. Manufactures of all kinds owe their perfection chiefly to learning—hence the nations of Europe advance in manufactures, knowledge, and commerce, only in proportion as they cultivate the arts and fciences.

For the purpole of diffufing knowledge through every part of the ftate, I beg leave to propole the following fimple plan.

I. Let there be one univerfity in the ftate, and let this be eftablished in the capital. Let law, physic, divinity, the law of nature and nations, œconomy, &c. be taught in it by public lectures in the winter feason,

SCHOOLS IN PENNSYLVANIA.

after the manner of the European universities, and let the professors receive such falaries from the state as will enable them to deliver their lectures at a moderate price.

II. Let there be four colleges. One in Philadelphia; one at Carlifle; a third, for the benefit of our German fellow citizens, at Lancafter; and a fourth, fome years hence at Pittfburg. In thefe colleges, let young men be inftructed in mathematics and in the higher branches of fcience, in the fame manner that they are now taught in our American colleges. After they have received a teftimonial from one of these colleges, let them, if they can afford it, complete their studies by fpending a feafon or two in attending the lectures in the university. I prefer four colleges in the state to one or two, for there is a certain fize of colleges as there is of towns' and armies, that is most favourable to morals and good government. Oxford and Cambridge in England are the feats of diffipation, while the more numerous, and lefs crouded univerfities and colleges in Scotland, are remarkable for the order, diligence, and decent behaviour of their fludents.

III. Let there be free fchools eftablished in every township, or in diffricts consisting of one hundred families. In these fchools let children be taught to read and write the English and German languages, and the use of figures. Such of them as have parents that can afford to fend them from home, and are disposed to extend their educations, may remove their children from the free school to one of the colleges.

By this plan the whole ftate will be tied together by one fyftem of education. The univerfity will in time furnifh mafters for the colleges, and the colleges will furnifh mafters for the free fchools, while the free fchools, in their turns, will fupply the colleges and the univerfity with fcholars, ftudents and pupils. The fame fyftems of grammar, oratory and philofophy, will be taught in every part of the ftate, and the literary features of Pennfylvania will thus defignate one great, and equally enlightened family.

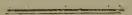
But, how fhall we bear the expense of these literary inftitutions ?——I aufwer—These inftitutions will *leffen* our taxes. They will enlighten us in the great bufiness of finance—they will teach us to encrease the ability of the flate to support government, by encreasing the profits of agriculture, and by promoting manufactures. They will teach us all the modern improvements and advantages of inland navigation. They will defend us from hasty and expensive experiment in government, by unfolding to us the experiment in government, by unfolding to us the experiment and folly of pass, and thus, instead of adding to our taxes and debts, they will furnish us with the true fecret of leffening and discharging both of them.

But, fhall the eftates of orphans, batchelors and perfons who have no children, be taxed to pay for the fupport of fehools from which they can derive no benefit ? I anfwer in the affirmative, to the first

part of the objection, and I deny the truth of the latter part of it. Every member of the community is interested in the propagation of virtue and knowledge in the flate. But I will go further, and add, it will be true æconomy in individuals to fupport public fchools. The batchelor will in time fave his tax for this purpofe, by being able to fleep with fewer bolts and locks to his doors-the eftates of orphans will in time be benefited, by being protected from the ravages of unprincipled and idle boys, and the children of wealthy parents will be lefs tempted, by bad company, to extravagance. Fewer pillories and whipping pofts, and fmaller goals, with their usual expenses and taxes, will be neceffary when our youth are properly educated, than at prefent; I believe it could be proved, that the expense of confining, trying and executing criminals, amount every year, in most of the counties, to more money than would be fufficient to maintain all the fchools that would be necessary in each county. The confessions of these criminals generally show us, that their vices and punifhments are the fatal confequences of the want of a proper education in early life.

I fubmit these detached hints to the confideration of the legislature and of the citizens of Penfylvania. The plan for the free schools is taken chiefly from the plans which have long been used with success in Scotland, and in the eaftern ftates * of America, where the influence of learning, in promoting religion, morals, manners, and good government, has never been exceeded in any country.

The manner in which thefe fchools fhould be fupported and governed—the modes of determining the characters and qualifications of fchoolmafters, and the arrangement of families in each diftrict, fo that children of the fame religious fect and nation, may be educaas much as possible together, will form a proper part of a law for the eftablishment of fchools, and therefore does not come within the limits of this plan.



of the Mode of Education proper in a republic.

THE business of education has acquired a new complexion by the independence of our country. The form of government we have affumed, has created a new class of duties to every American. It becomes us, therefore, to examine our former habits upon this subject, and in laying the

* There are 600 of these schools in the small state of Connesticut, which at this time have in them 25,000 scholars.

foundations for nurferies of wife and good men, to adapt our modes of teaching to the peculiar form of our government.

The first remark that I shall make upon this subject is, that an education in our own, is to be preferred to an education in a foreign country. The principle of. patriotifm ftands in need of the reinforcement of prejudice. and it is well known that our ftrongeft prejudices in favour of our country are formed in the first one and twenty years of our lives. The policy of the Lacedemonians is well worthy of our imitation. When Antipater demanded fifty of their children as hoftages for the fulfillment of a diftant engagement, those wife republicans refused to comply with his demand, but readily offered him double the number of their adult citizens, whofe habits and prejudices could not be fhaken by refiding in a foreign country. Paffing by, in this place, the advantages to the community from the early attachment of youth to the laws and conftitution of their country, I shall only remark, that young men who have trodden the paths of fcience together, or have joined in the fame fports, whether of fwimming, fcating, fishing, or hunting, generally feel, thro' life, fuch ties to each other, as add greatly to the obligations of mutual benevolence.

I conceive the education of our youth in this country to be peculiarly neceffary in Pennfylvania, while our citizens are composed of the natives of fo many different kingdoms in Europe. Our fchools of learning, by producing one general, and uniform fystem of education, will render the mass of the people more homogeneous, and thereby fit them more easily for uniform and peaceable government.

I proceed in the next place, to enquire, what mode of education we shall adopt fo as to fecure to the state all the advantages that are to be derived from the proper instruction of youth; and here I beg leave to remark, that the only foundation for a useful education in a republic is to be laid in Religion. Without this there can be no virtue, and without virtue there can be no liberty, and liberty is the object and life of all republican governments.

Such is my veneration for every religion that reveals the attributes of the Deity, or a future ftate of rewards and punifhments, that I had rather fec the opinions of Confucius or Mahomed inculcated upon our youth, than fee them grow up wholly devoid of a fyftem of religious principles. But the religion I mean to recommend in this place, is that of the New Teftament.

It is foreign to my purpofe to hint at the arguments which eftablish the truth of the Christian revelation. My only business is to declare, that all its doctrines and precepts are calculated to promote the happiness of fociety, and the fastety and well being of civil government. A Christian cannot fail of being a republican. The history of the creation of man, and of the relation

ģ

of our fpecies to each other by birth, which is recorded in the Old Testament, is the best refutation that can be given to the divine right of kings, and the ftrongeft argument that can be used in favor of the original and natural equality of all mankind. A Chriftian, I fay again, cannot fail of being a republican, for every precept of the Gofpel inculcates those degrees of humility, felf-denial, and brotherly kindnefs, which are directly oppofed to the pride of monarchy and the pageantry of a court. A Chriftian cannot fail of being useful to the republic, for his religion teacheth him, that no man " liveth to himfelf." And laftly, a Chriftian cannot fail of being wholly inoffenfive, for his religion teacheth him, in all things to do to others what he would wifh, in like circumstances, they should do to him.

I am aware that I diffent from one of those paradoxical opinions with which modern times abound; and that it is improper to fill the minds of youth with religious prejudices of any kind, and that they should be left to choose their own principles, after they have arrived at an age in which they are capable of judging for themselves. Could we preferve the mind in childhood and youth a perfect blank, this plan of education would have more to recommend it; but this we know to be impossible. The human mind runs as naturally into principles as it does after facts. It submits with difficulty to those reftraints or partial

discoveries which are imposed upon it in the infancy of reason. Hence the impatience of children to be informed upon all fubjects that relate to the invisible world. But I beg leave to alk, why fhould we purfue a different plan of education with refpect to religion, from that which we purfue in teaching the arts and fciences ? Do we leave our youth to acquire systems of geography, philosophy, or politics, till they have arrived at an age in which they are capable of judging for themselves? We do not. I claim no more then for religion, than for the other fciences, and I add further, that if our youth are disposed after they are of age to think for themfelves, a knowledge of one fystem, will be the best means of conducting them in a free enquiry into other fystems of religion, just as an acquaintance with one fyftem of philosophy is the beft introduction to the fludy of all the other fyftems in the world.

Next to the duty which young men owe to their Creator, I with to fee a regard to their country, inculcated upon them. When the Duke of Sully became prime minifter to Henry the IVth of France, the first thing he did, he tells us, "Was to fubdue and forget "his own heart." The fame duty is incumbent upon every citizen of a republic. Our country includes family, friends and property, and fhould be preferred to them all. Let our pupil be taught that he does not belong to himfelf, but that he is public property. Let him be taught to love his family, but let him be

taught, at the fame time, that he must forfake, and even forget them, when the welfare of his country requires it. He must watch for the state, as if its liberties depended upon his vigilance alone, but he must do this in fuch a manner as not to defraud his creditors, or neglect his family. He must love private life, but he must decline no station, however public or responsible it may be, when called to it by the fuffrages of his fellow citizens. He must love popularity, but he must despise it when set in competition with the dictates of his judgement, or the real interest of his country. He must love character, and have a due fense of injuries, but he must be taught to appeal only to the laws of the state, to defend the one, and punish the other. He must love family honour, but he must be taught that neither the rank nor antiquity of his ancestors, can command refpect, without perfonal merit. He must avoid neutrality in all queltions that divide the ftate, but he must shun the rage, and acrimony of party spir-He must be taught to love his fellow creatures in every part of the world, but he must cherish with a more intenfe and peculiar affection, the citizens of Pennfylvania and of the United States. 1 do not with to fee our youth educated with a fingle prejudice against any nation or country; but we impose a task upon human nature, repugnant alike to reafon, revelation and the ordinary dimensions of the human heart, when we require him to embrace, with equal affection, the whole family of mankind. He must be taught to amais

wealth, but it muft be only to encreafe his power of contributing to the wants and demands of the ftate. He muft be indulged occafionally in amufements, but he muft be taught that ftudy and bufinefs fhould be his principal purfuits in life. Above all he muft love life, and endeavour to acquire as many of its conveniences as poffible by induftry and economy, but he muft be taught that this life " is not his own," when the fafety of his country requires it. Thefe are practicable leffons, and the hiftory of the commonwealths of Greece and Rome fhow, that human nature, without the aids of Chriftianity, has attained thefe degrees of perfection.

While we inculcate these republican duties upon our pupil, we must not neglect, at the fame time, to infpire him with republican principles. He must be taught that there can be no durable liberty but in a republic, and that government, like all other feiences, is of a progreffive nature. The chains which have bound this fcience in Europe are happily unloofed in America. Here it is open to inveftigation and improvement. While philosophy has protected us by its difcoveries from a thoufand natural evils, government has unhappily followed with an unequal pace. It would be to difhonour human genius, only to name the many defects which still exist in the best fystems of legislation. We daily fee matter of a perifhable nature rendered durable by certain chemical operations. In like manner, I conceive, that it is poffible to combine power in

fuch a way as not only to encreafe the happines, but to promote the duration of republican forms of government far beyond the terms limited for them by history, or the common opinions of mankind.

To affift in rendering religious, moral and political instruction more effectual upon the minds of our youth, it will be neceffary to fubject their bodies to phyfical difcipline. To obviate the inconveniences of their ftudious and fedentary mode of life, they should live upon a temperate diet, confifting chiefly of broths, milk and vegetables. The black broth of Sparta, and the barley broth of Scotland, have been alike celebrated tor their beneficial effects upon the minds of young people. They fhould avoid tafting Spirituous liquors. They fhould also be accustomed occasionally to work with their hands, in the intervals of Study, and in the bufy feafons of the year in the country. Moderate fleep, filence, occafional folitude and cleanlinefs, fhould be inculcated upon them, and the utmost advantage fhould be taken of a proper direction of those great principles in human conduct,-fenfibility, habit, imitations and affociation,

The influence of these physical causes will be powerful upon the intellects, as well as upon the principles and morals of young people.

To those who have studied human nature, it will not appear paradoxical to recommend, in this effay, a particular attention to vocal music. Its mechanical

OF THE MODE OF EDUCATION

effects in civilizing the mind, and thereby preparing it for the influence of religion and government, have been fo often felt and recorded, that it will be unneceffary to mention facts in favour of its ufefulnefs, in order to excite a proper attention to it.

I cannot help bearing a testimony, in this place, against the custom, which prevails in some parts of America, (but which is daily falling into difufe in Europe) of crouding boys together under one roof for the purpose of education. The practice is the gloomy remains of monkish ignorance, and is as unfavorable to the improvements of the mind in ufeful learning, as monasteries are to the spirit of religion. I grant this mode of fecluding boys from the intercourfe of private families, has a tendency to make them fcholars, but our bufinefs is to make them men, citizens and chriftians. The vices of young people are generally learned from cach other. The vices of adults feldom infect them. By feparating them from each other, therefore, in their hours of relaxation from ftudy, we fecure their morals from a principal fource of corruption, while we improve their manners, by fubjecting them to those reftraints which the difference of age and fex, naturally produce in private families.

From the observations that have been made it is plain, that I confider it is possible to convert men into republican machines. This must be done, if we expect them to perform their parts properly, in the great machine

of the government of the flate. That republic is fophilticated with monarchy or arithrocracy that does not revolve upon the wills of the people, and thefe muft be fitted to each other by means of education before they can be made to produce regularity and unifon in government.

Having pointed out those general principles, which should be inculcated alike in all the schools of the state, I proceed now to make a few remarks upon the method of conducting, what is commonly called, a liberal or learned education in a republic.

I fhall begin this part of my fubject, by bearing a teltimony against the common practice of attempting to teach boys the learned languages, and the arts and fciences too carly in life. The first twelve years of life are barely fufficient to instruct a boy in reading, writing and arithmetic. With thefe, he may be taught those modern languages which are necessfary for him to speak. The state of the memory, in early life, is favorable to the acquisition of languages, especially when they are conveyed to the mind, through the ear. It is, moreover, in early life only, that the organs of speech yield in such a manner as to favour the just pronounciation of foreign languages.

Too much pains cannot be taken to teach our youth to read and write our American language with propriety and elegance. The ftudy of the Greek language conflituted a material part of the literature of the Athenians, hence the fublimity, purity and immortality of fo many of their writings. The advantages of a perfect knowledge of our language to young men intended for the professions of law, physic, or divinity are too obvious to be mentioned, but in a flate which boafts of the first commercial city in America, I wish to fee it cultivated by young men, who are intended for the compting house, for many fuch, I hope, will be educated in our colleges. The time is paft when an academical education was thought to be unneceffary to qualify a young man for merchandize. I conceive no profession is capable of receiving more embellishments from it. The French and German languages should likewife be carefully taught in all our Colleges. They abound with ufeful books upon all fubjects. So important and neceffary are those languages, that a degree flould never be conferred upon a young man who cannot fpeak or tranflate them.

Connected with the fludy of languages is the fludy of Eloquence. It is well known how great a part it conflituted of the Roman education. It is the first accomplishment in a republic, and often fets the whole machine of government in motion. Let our youth, therefore, be instructed in this art. We do not extol it too highly when we attribute as much to the power of eloquence as to the fword, in bringing about the American revolution.

With the ufual arts and fciences that are taught in our American colleges, I with to fee a regular course of lectures given upon Hiftory and Chronology. The fcience of government, whether it related to conftitutions or laws, can only be advanced by a careful selection of facts, and these are to be found chiefly in hiftory. Above all, let our youth be instructed in the hiftory of the ancient republics, and the progrefs of liberty and tyranny in the different flates of Europe. I with likewife to fee the numerous facts that relate to the origin and prefent fate of commerce, together with the nature and principles of Moncy, reduced to fuch a fystem, as to be intelligible and agreeable to a young man. If we confider the commerce of our metropolis only as the avenue of the wealth of the flate, the fludy of it merits a place in a young man's education ; but, I contider commerce in a much higher light when I recommend the ftudy of it in republican feminaries. I view it as the best fecurity against the influence of hereditary monopolies of land, and, therefore, the fureft protection against aristocracy. I confider its effects as next to those of religion in humanizing mankind, and laftly, E view it as the means of uniting the different nations of the world together by the ties of mutual wants and obligations.

Chemistry by unfolding to us the cflocks of heat and mixture, enlarges our acqualotance with the wonders of nature and the mysteries of art; hence

1)

it has become, in most of the universities of Europe, a necessary branch of a gentleman's education. In a young country, where improvements in agriculture and manufactures are fo much to be defired, the cultivation of this fcience, which explains the principles of both of them, should be considered as an object of the utmost importance.

Again, let your youth be instructed in all the means of promoting national profperity and independence, whether they relate to improvements in agriculture, manufactures, or inland navigation. Let him be inftructed further in the general principles of legislation, whether they relate to revenue, or to the prefervation of life, liberty or property. Let him be directed frequently to attend the courts of justice, where he will have the best opportunities of acquairing habits of comparing, and arranging his ideas by obferving the difcovery of truth, in the examination of witneffes, and where he will hear the laws of the ftate explained, with all the advantages of that fpecies of eloquence which belongs to the bar. Of fo much importance do I conceive it to be, to a young man, to attend occasionally to the decifions of our courts of law, that I with to fee our colleges eftablished, only in county towns.

But further, confidering the nature of our connection with the United States, it will be neceffary to make our pupil acquainted with all the prerogatives

of the national government. He must be inftructed in the nature and variety of treaties. He must know the difference in the powers and duties of the feveral species of ambassadors. He must be taught wherein the obligations of individuals and of states are the same, and wherein they differ. In short, he must accquire a general knowledge of all those laws and forms, which unite the fovereigns of the earth, or feparate them from each other.

I beg pardon for having delayed fo long to fay any thing of the feparate and peculiar mode of education proper for women in a republic. I am fenfible that they must concur in all our plans of of education for young men, or no laws will ever render them effectual. To qualify our women for this purpofe, they should not only be instructed in the ufual branches of female education, but they fould be taught the principles of liberty and government; and the obligations of patriotifm fhould be inculcated upon them. The opinious and conduct of men are often regulated by the women in the most arduous enterprizes of life; and their approbation is frequently the principal reward of the hero's dangers, and the patriot's toils. Befides, the first impreffions upon the minds of children are generaly derived from the women. Of how much confequence, therefore, is it in a republic, that they fhould think justly upon the great fubjects of liberty and government!

OF THE MODE OF EDUCATION, &c.

The complaints that have been made against religion, liberty and learning, have been, against each of them in a feparate state. Perhaps like certain liquors, they should only be used in a state of mixture. They mutually affift in correcting the abufes, and in improving the good effects of each other. From the combined and reciprocal influence of religion, liberty and learning upon the morals, manners and knowledge of individuals, of thefe, upon government, and of government, upon individuals, it is impoffible to meafure the degrees of happiness and perfection to which mankind may be raifed. For my part, I can form no ideas of the golden age, fo much celebrated by the poets, more delightful, than the contemplation of that happiness which it is now in the power of the legislature of Pennfylvania to confer upon her citizens, by eftablishing proper modes and places of education in every part of the state.

OBSERVATIONS UPON THE STUDY OF THE LATIN AND GREEK LANGUAGES, AS A BRANCH OF LIBERAL EDUCATION, WITH HINTS OF A PLAN OF LIBERAL INSTRUCTION, WITHOUT THEM, ACCOMMODATED TO THE PRESENT STATE OF SOCIETY, MANNERS, AND GOVERNMENT IN THE UNITED STATES.

T requires the recollection of escapes from a lion and a bear, to encounter the ftrong and univerfal prejudice, in favor of the Latin and Greek languages, as a neceffary branch of liberal education. If, in combating this formidable enemy of human reason, I should be less successful than the Hebrew stripling was in contending with the giant of the Philistines, I hope it will be aferibed wholly to the want of skill to direct arguments, which, in other hands, would lay this tyrant in the duft.

I fhall attempt to difcufs this queftion, by first delivering a few general propositions. I shall afterwards apply these propositions, and answer such arguments as are usually urged in favor of the Latin and Greek languages as necessary parts of an academic education.

I. The great defign of a liberal education is, to prepare youth for usefulness here, and for happiness hereafter.

22 OBSERVATIONS ON THE STUDY OF THE

II. The proper time for acquiring the neceffary branches of knowledge for these important purposes, is in the first eighteen years of life.

IH. From four to five years are ufually fpent in acquiring a competent knowledge of the Latin and Greek languages.

IV. The knowledge of things always preceeds the knowledge of words. Children difcover the truth of this obfervation every day. They know all the objects around them, long before they are able to call them by their proper names, or even to articulate founds of any kind. It is fuppofed that children acquire more ideas of things in the first three years of their lives, than they acquire in any thirty years afterwards.

V. The acquifition of words leffens the ability of the mind to acquire ideas. That underftanding muft have uncommon firength, which does not contract an oblique direction by being employed four or five years in learning the Latin or Greek languages.

VI. The difficulty of acquiring those dead languages, and the little pleafure which accompanies the knowledge of them in early life, occasion the principal obstacles to teaching, in masters, and and learning, in fcholars.

The famous Bufby is faid to have died of "bad Latin;" that is, the ungrammatical verfions of his scholars broke his heart. How few boys relish Latin and Greek leffons! The pleafure they fometimes difcover in learning them, is derived either from the tales they read, or from a competition, which awakens a love of honour, and which might be difplayed upon a hundred more ufeful fubjects; or it may arife from a defire of gaining the good will of their mafters or parents. Where these incentives are wanting, how bitter does the ftudy of languages render that innocent period of life, which feems exclufively intended for happiness! " I with I had never been born," faid a boy of eleven years old, to his mother : " why, my fon ?" faid his mother. " Becaufe I am born into a world of trouble." " What " trouble," faid his mother fmiling, " have you " known, my fon ?"-" Trouble enough, mamma," faid he, "two Latin leffons to get, every day." This boy was not deficient in genius nor in application to books. He often amufed himfelf in reading natural and ancient hiftory, was inquifitive after knowledge of every kind, and was never heard to alk a foolifh or impertinent question.

VII. Many fprightly boys of excellent capacities for ufeful knowledge, have been fo difgufted with the dead languages, as to retreat from the drudgery of fchools, to low company, whereby they have become bad mem-

24 OBSERVATIONS ON THE STUDY OF THE

bers of fociety, and entailed mifery upon all who have been connected with them.

VIII. The Latin and Greek languages are the first tests of genius in schools. Where boys discover a want of capacity for them, they are generally taken from school, or remain there the butts of their companions. Dr. Swift early discovered a want of taste for the dead languages. It would be unjust to mention this fact, without ascribing it to the voice of reason and nature speaking in this great man. He had no relish for the huses of literature. Truth and knowledge were alone commensurate to the dignity and extent of his mind.

IX. The fludy of fome of the Latin and Greck claffics is unfavourable to morals and religion. Indelicate amours, and flocking vices both of godsand men, fill many parts of them. Hence an early and dangerous acquaintance with vice; and hence, from an affociation of ideas, a diminfhed refpect for the unity and perfections of the true God. Those claffics which are free from this censure, contain little elfe but the histories of murders, perpetrated by kings, and related in fuch a manner as to excite pleasure and admiration. Hence the universal preference of the military character to all others.—To the fame cause we may afcribe the early passion for a cockade in fchool boys; and the the frequent adoption of the principles and vices of armies, by young men who are defined for other professions.

X. The fludy of the Latin and Greek languages is improper in the prefent flate of fociety and government in United States. While Greek and Latin are the only avenues to fcience, education will always be confined to a few people. It is only by rendering knowledge univerfal, that a republican form of government can be preferved in our country.

I fhall hereafter mention other reasons why the ftudy of these languages is improper in a peculiar manner in the United States.

XI. The cultivation of the Latin and Greek languages is a great obftacle to the cultivation and perfection of the English language.

XII. It is likewife one of the greateft obstructions that has ever been thrown in the way of propagating useful knowledge.

On each of these two last propositions I shall treat more fully in another place.

I proceed now to confider the principle arguments that have been urged in favour of the Latin and Greek languages, as neceffary parts of a liberaleducation.

E

1. A knowledge of the Latin or Greek grammar, it has been faid, is neceflary for our becoming acquainted with English grammar. There was a time when the authority of a great name imposed this opinion upon me, and even led me publicly to adopt it, but I am now fatisfied that it is wholly deftitute of truth. I have known many bachelors and mafters of arts, who were incorrect English scholars, and many perfons of both fexes, ignorant of the dead languages, who both wrote and fpoke English, agreeably to the strictest rules of modern grammar. Indeed 1 cannot help afcribing the late improvements in the English language chiefly to the neglect of the Latin and Greek languages. The Greek is fuppofed to be the most perfect language both in its construction and harmony, that has ever been fpoken by mortals. Now this language was not learned through the medium of any Hence it was acquired and fpoken with other. equal propriety by all ranks of people, and not lefs by an apple woman, than by the celebrated orators of Greece. In that highly favoured surfery of human genius, the avenues to knowledge were not obstructed by two or three dead, or even foreign languages; nor was the precious feafon of youth, when memory is most faithful, and curiofity most active, mis-spent in learning words. Hence the fame of ancient Greece in arts and fciences, and hence the fublimity of the orations of Demofthenes, and of the poems. of Homer. There was nothing in the composition

26

of the blood, or in the structure of the nerves of the ancient Greeks, which gave them a pre-cminence over the reft of mankind. It arofe entirely from their being too wife to wafte the important years of education in learning to call fubftances, by two or three different names, instead of studying their qualities and uses. The construction of the English, differs materially from that of the Latin and Greek languages; and the attempt to accommodate it to the Greek and Roman grammars has checked its improvement in many inftances. I hope to prove hereafter, that a knowledge of grammar, like a knowledge of pronunciation, fhould be learned only by the ear in early life. The practice of teaching boys English grammar, through the medium of a dead language, is as abfurd, as it would be for a parent to force his child to chew pebbles or mahogany, in order to prepare its gums or teeth to massicate bread and meat.

2. We are told that the Roman and Greek authors are the only perfect models of tafte and eloquence, and that it is neceffary to ftudy them, in order to acquire their tafte and fpirit. Strange language indeed! what ! did nature exhauft herfelf in Greece and Rome ? Are the ancients the only repositories of the great principles of tafte and genius? I reject the fuppolition; and will venture to affert, in oppolition to it, that we fhall never equal the fublime and original authors of antiquity until we ceafe to ftudy them.

Nature is always the fame. Let us yield to her infpiration alone, and avail ourfelves of allufions to the many difcoveries which have lately been made in her works. Shakefpeare owes his fame, as a fublime and original poet, to his having never read (as is generally believed) a Latin or Greek author. Hence he fpoke from nature, or rather, nature spoke thro' him. But it should be romembered that art, as well as nature feeds the flame of genius. By neglecting the ancients, we may borrow imagery from the many ufeful and well known arts which have been the inventions of modern ages, and thereby furpafs the antients in the variety and effect of our compositions. It is to this passion for ancient writers that we are to aferibe the great want of originality, that marks too many of the poems of modern times. A judicious eritie has obferved, that the deferiptions of Spring, which are published every year in England, apply chiefly to the elimates of Greece and the neighbourhood of Rome. This is the natural effect of a fervile attachment to the aneient poets. It infunfibly cheeks invention and leads to imitation. The pleafure with which the poems of the fhoemaker, the milk-maid, and the A yrefhire ploughman, have been read by all classes of people, proves that an aequaintance with the Greek or Roman poets, is not necessary to infpire just ideas, or to produce harmony in poetry. Dr. Swift, as an author, owes nothing to the ancients. He has attained to what Pope ealls the "majefty" and what Lord Shaftesbury ealls the "divinencis" of fimplicity in writing. All his compositions, exemplify his own perfect definition of ftyle. They confift of " proper words in their proper places." I have heard of & learned gentlemen in Scotland, who, when any of his friends proposed to introduce a ftranger to him, afked only, as a proof of his tafte for composition, whether he admired Dr. Young's Night Thoughts? Were I to receive a visitor upon similar terms, my only question should be, "does he admire the ftyle of Dr. " Swift?"

Under this head I fhall only add, that the moft intimate acquaintance with the Roman and Greek writers will not produce perfection of ftyle in men who are devoid of tafte and genius. Hence we fometimes find the moft celebrated teachers of the Latin and Greek languages extremely deficient in English compofition. I acknowledge that Milton, Addifon, Hume, Middleton and Bolingbroke, whofe ftyles have been fo much admired, were all Latin and Greek fcholars. But in thefe authors, a native ftrength of genius, and tafte preferved their writings from the affectation and obfcurity which are imparted to English compositions, by an adherence to the grammars and arrangement of the Latin and Greek languages.

3. It has been faid that we cannot know the ufe or meaning of those numerous English words which are derived from the Latin and Greek, without a knowledge of those languages. To this I may answer, that

what proves too much, proves nothing at all. The argument that has been mentioned, proves that a knowledge of the Celtic, the Saxon, the German, the French, the Italian and the Dutch, is neceffary to enable us to understand the use of many English words; for far the greatest part of them are derived from those languages. But I object further to this argument, that if a knowledge of the derivation of English words from the Greek and Latin languages, fhould be followed by a ftrict regard to their original meaning, it would lead us into many mistakes. The derivation of the word " angel" would lead us to contemplate a meffenger, instead of a perfect finite intelligence. ' The derivation of the word "rebellion" would lead us to contemplate a war commenced by a conquered people : inftead of a refiftance to the just authority of government. Many other inftances of fimilar incongruity might be mentioned between the meaning of certain English words, and their Roman and Greek originals. I conclude therefore that a knowledge of the derivation of words is not neceffary to teach us their proper ufe and meaning. Cuftom, which is the law and rule of fpeech, and what is, instead of what fould be common, will always govern the ufe of words. Where cuftom is unknown, modern English dictionaries will supply its place.

Here I beg leave to repeat that the fludy of the Greek and Latin languages by the English nation has been one of the greatest obstructions, that ever

has been thrown in the way of the propagation of useful knowledge. By rendering our language unintelligible to the greatest part of the people who hear or read it, it has made it an improper vehicle of instruction. The orations of Demosthenes, we are told, were, like earthquakes in ancient Greece. They moved whole nations. The reafon of this is plain. He never used a fingle word in any of them, but what was alike intelligible to all claffes of his hearers. The effect of Indian eloquence upon the councils and wars of the favages in America, depends wholly upon its being perfectly understood and felt by every member of their communities. It has often been remarked that in England no play will fucceed without action, while fentiment alone infures the loudest claps of applause, in the theatres of France. The reafon of this is obvious. The English language requires action to translate it, to half the common audience of a theatre, whereas the French language, which is uniform and flationary, is understood, and, of course, the fentiment which is conveyed by it, is felt and enjoyed by all who hear it. The writings of Voltaire are quoted by the hairdreffers and milliners of Paris, becaufe they are written in the fimple language of the country, while many of the most celebrated British authors cannot be understood by common readers, without the help of a dictionary or interpreter. Richardfon and Fielding are an exception to this remark. They are alike intelligible and acceptable to the learned and

unlearned, inafmuch as they have conveyed all their ideas in plain, but decent English words. The popularity of the methodift preachers may be afcribed in part to their fpeaking in a language that is intelligible to the common people. It is true, many of them are deficient in education, but this deficiency appears more in an ignorance of the construction of the English language, than in the proper use of English words, and perhaps this may be ascribed chiefly to their extempore mode of preaching. It is happy for fome of those churches where the Latin and. Greek languages are confidered as neceffary parts foreducation in their clergy, that part of the public worfhip of God is confined to reading the fcriptures, and to forms of prayer, both of which are written in English, and are intelligible to every class of hearers. Such congregations are not left to the mercy of their preachers in every part of divine fervice. A pious woman in London who heard her minister speak of the Deity, by the name of the great Philanthropift, afked when fhe came home, what heathen god Philanthropift was ? There are few fermons composed by Latin and Greek fcholars in which there are not many hundred words, that are equally unintelligible to a majority of their hearers. Hence I cannot help thinking that were John the Baptift to appear again in our world, and to fend to fome of our doctors of divinity, or to many of our young preachers to enquire after the figns of their divine miffion, few of them could adopt the anfwer

of our Saviour and fay that to the poor the gofpel was " preached." It will require a total ignorance of the Latin and Greek languages, or an uncommon mixture of good fenfe and piety in a preacher who is acquainted with them, to addrefs an audience in fuch a manner as to be perfectly underftood by the illiterate part of them.

I wifh to prefs the confiderations that have been mentioned under this head, home to the feelings of the friends of virtue and religion. It has been demonftrated, that the ftudy of the ancient claffics is hurtful to morals. It is equally plain that the corruption of our language by the conftant fubflitution of words of Greek and Latin origin, to those which had become familiar and univerfal, from long ufage, has greatly retarded the progrefs of knowledge of all kinds, but in a more efpecial manner, a great proportion of that fpecies of it which is delivered from the pulpit. I appeal to the confciences of ministers of the gofpel of all denominations, whether, inftead of exposing their their candidates for the ministry, to temptation from that kind of learning " which puffeth up, without " edifying," it would not be better to direct them to employ the time which is usually mif-pent in acquiring it, in ftudying the fcriptures, and in making themfelves mafters of the English language ? It is impoffible to tell what great improvements would be made by these means in moral happiness in the United States.

F

4. We are told that a knowledge of the Greek and Roman languages, is neceffary to enable us to underftand the frequent allufions that are made by English writers to the mythology of those ancient nations. To this I answer, that the lefs we know of this subject, the better; for what is the hiftory of the ancient fables, but an agreeable defcription of frauds-rapes-and murders, which, while they pleafe the imagination, shock the moral faculty? It is high time to cease from idolizing the idolatry of Greece and Rome. Truth alone is knowledge, and fpending time in ftudying Greek and Roman fictions, is only labouring to be more ignorant. If there is any moral contained in these fictions, it is fo much involved in obscurity, as not to be intelligible to a young man at that time of life in which he ufually becomes acquainted with them. Happy will it be for the prefent and future generations, if an ignorance of the Latin and Greek languages, fhould banish from modern poetry, those difgraceful invocations of heathen gods, which indicate no lefs a want of genius, than a want of reverence for the true God. I shall only add in this place, that the best writers in the English language feldom borrow allufions from the mythology of the Greek or Roman nations. Richardfon and Fielding have paffed them by, and hence arifes another reafon why the works of those authors are fo univerfally intelligible and acceptable to to all classes of readers.

5. It has been faid, that the Latin language has become a neceffary part of liberal knowledge, inasmuch as the European nations have by common confent made it the vehicle of their difcoveries. This argument had fome weight while fcience confifted only learning what was known; but fince the enquiries of philosophers have been directed to new object's of observation and experiment, the Latin language has not been able to keep pace with the number and rapidity of their difcoveries. Where shall we find Latin words to convey just ideas of the many terms which electricity-chemistry-navigation-and many other fciences have introduced into our modern languages? It is from experience of the infufficiency of the Latin language for this purpofe, that most of the modern nations of Europe have been obliged to adopt their own languages, as the vehicles of their difcoveries, in fcience. If this argument had been acknowledged to have weight in Europe, it fhould, from local circumftances, have no weight in America. Here we have no intercourfe with any part of Europe, except her coinmercial feaports, and in thefe, all business is transacted in modern languages. America, with refpect to the nations of Europe, is like the new planet, with refpect to those, whose revolutions have long been described in the folar fystem. She is placed at too great a diftance from most of them, to be within the influence of a reciprocal exchange of the rays of knowledge. Like a certain animal, defcribed by the

2.

naturalists. She must impregnate herfelf. But while she retains a friendly intercourse with Great Britain, all the valuable discoveries which are published in Latin, in any part of Europe, will be transmitted to her through the medium of English translations.

6. It, has been faid that a knowledge of the Latin and Greek languages is neceffary to the learned profeffions of law-phyfic-and divinity. To this I anfwer, that the most useful books in each of these profeffious are now tranflated, or written in English, in confequence of which, knowledge in law-phyficand divinity has been greatly multiplied and extended. I fee no use at present for a knowledge of the Latin and Greek languages, for a lawyer, a phyfician, or a divine, in the United States, except it be to facilitate the remembrance of a few technical terms which may be retained without it. Two of the most celebrated and fuccessful lawyers in the United States, are ftrangers to the Latin language. An eminent phylician, who fpent feveral of the years of his youth in learning this language, has affured me, that he had not more than three times in his life found any advantage from it. Very few phylicians, I believe, (profeffors of medecine only excepted, who are obliged to review Latin thefes previoufly to their publication) retain their knowledge of this language, after they become established in businefs, and if they do, it is preferved lefs from neceffity, than from vanity, or a defire of reviving, by reading

the claffics, the agreeable ideas of the early and innocent part of their lives.

I know that it is commonly believed, that a knowledge of the Greek language, is neceffary to enable a divine-fully to underftand the New Teftament. But I object to this opinion, that the most useful and neceffary parts of this divine book arc intelligible to the lowest capacities in its prefent English drefs; and I believe further, that there have been as many difputes among the critics, about the meaning of words, and about editions and translations of the New Testament, as there have been among unlearned chriftians about the meaning of its obfcure and difficult paffages. If a knowledge of the Greek language be neceffary to enable a divine to understand the New Testament, it follows, that a critical knowledge of all the dialects in which the different parts of it were originally composed, is equally neceffary for the fame purpofe; and, if neceffary to a divine, why not to the common people, for they are equally interefted in all the truths of revelation ? The difficulties and abfurdities into which we are led by this proposition, are too obvious to be mentioned.

We are very apt to forget the *age* in which we live. In the fifteenth century, all the knowledge of Europe was locked up in a few Greek and Latin manuferipts. In this confined flate of knowledge, an acquaintance with the Latin language was thought to be neceffary

to civilize the human mind—hence the teachers of it acquired the title of " profeffors of humanity" in the European univerfities. But we live in an age in which knowledge has been drawn from its dead repofitories, and diffufed by the art of printing, in living languages, through every part of the world. Humanity has therefore changed fides. Her gentlenefs is now altogether in favour of modern literature.

We forget not only the age, but the country likewife in which we live. In Europe many ancient conftitutions—laws—treaties_official letters—and even private deeds, are written in Latin—hence the knowledge of it has fometimes been found ufeful for ftatesmen and lawyers—but all the conftitutions, laws, treaties, public letters, and private deeds of the United States, are written in Englifh; and of courfe a knowledge of the Latin language is not neceffary to underftand them. It is therefore as ufelefs in America, as the Spanifh great-coat is in the ifland of Cuba, or the Dutch foot-flove, at the Cape of Good Hope.

We forget further the difference of *occupation* between the inhabitants of the prefent, and of the fifteenth century. Formerly public prayers and war were the only bufinefs of man: but fince agriculture, manufactures and commerce, have afforded fuch different and profitable employments to mankind, there cannot be greater folly than to learn two languages which are no ways connected with the advancement of any of them.

LATIN AND GREEK LANGUAGES.

" I once thought health, the greateft bleffing in the " world," faid Mr. Rittenhoufe to the author of this effay, " but I do not think fo now. There is one thing " of much greater value, and that is time." This opinion of our excellent American philosopher, is true every where, but in a more efpecial manner in the United States. Here the opportunities of acquiring knowledge and of advancing private and public interest are fo numerous, and the rewards of genius and induftry fo certain, that not a particle of time fhould be mis-fpent or loft. We occupy a new country. Our principal bufinefs fhould be to explore and apply its refources, all of which prefs us to enterprize and hafte. Under these circumstances, to spend four or five years in learning two dead languages, is to turn our backs upon a gold mine, in order to amufe ourfelves in catching butterflies.

It is agreeable to hear of the progrefs of human reafon in the gradual declention of the ufual methods of teaching the Latin and Greek languages within the laft forty years in Europe. Formerly boys were obliged to commit whole volumes of Latin and Greek poetry to memory, as the only means of learning thofe languages. Nor was this all; they were obliged to compofe Latin verfes, without the leaft regard being paid to genius, or tafte for poetry. The laft act of fchool tyranny, was to compel boys to read the ancient elaffics without the help of translations. All thefe methods of teaching the dead languages are now laid

afide. The next ray of truth that irradiates human reafon upon this fubject, I hope will teach us to reject the Latin and Greek languages altogether, as branches of a liberal education.

The progress of human reason should likewife be acknowledged in having banished Latin and Greek quotations from fermons, and other religious tracts, which are intended for the common people. Such quotations are to be found only in books of fcience, addressed to the members of the learned professions, or to perfons who are supposed to be acquainted with the Latin and Greek languages.

There are certain follies, like the objects of fight, which cannot be feen when the eye is placed too near Wc are ftruck with pity and horror in conthem. templating the folly difcovered by our anceftors in their military expeditions to the holy land of Paleftine. The generations which are to follow us, will probably view our partiality to the claffic ground of Greece and Rome, with fimilar emotions. We laugh at the credulity of those nations who worshipped apes and crocodiles, without recollecting, that future ages will treat our fuperstitious veneration for the ancient poets and orators, with the fame ridicule. Posterity, in reading the hiftory of the American revolution, will wonder that in a country where fo many exploits of wifdom and virtue were performed, the human understanding was fettered by prejudices in favour of the Latin and Greek

41

languages. But I hope with the hiftory of this folly, fome hiftorian will convey to future generations, that many of the most active and useful characters in accomplishing this revolution, were strangers to the formalities of a Latin and Greek education.

It is high time to diftinguish between a philosopher, and a scholar, between things and words. "He "was educated at the college of ——" faid a gentleman to his friend, speaking of a young man who was known to them both. "You mean Sir," replied his friend, "he got his learning at the college of ——; but "as to education, he appears to have received none "any where." This young man was an excellent Latin and Greek scholar, but knew nothing of men, or things.

Let it not be fuppofed from any thing that has been here advanced, that I with the knowledge of the Latin and Greek languages to be extinct in the world. Far from it. My with is to fee it preferved, like the knowledge of law, or medicine, as a diftinct profession. Let the perfons, who devote themfelves to the fludy of thefe languages, be called linguists, or interpreters, and let them be paid for their translations and explanations of Latin and Greek books, and other compositions in those languages. No more confidence will be placed by the public, in the members of this new profession, than is daily placed in lawyers and physicians, in matters of much greater importance; nor will more.

credit be given to them, than we are accuftomed to give to travellers and hiftorians. There can be no more reafon why every man fhould be capable of tranflating or judging of a Latin or Greek book, than there can be why every man fhould be a lawyer or a phyfician, or why he fhould be obliged to vifit Conftantinople or Grand Cairo, in order to become acquainted with the fituation of thefe two great cities. If this method of preferving and applying the dead languages fhould be adopted, young men will learn them as they do law and phyfic, by ferving an apprenticefhip, inftead of going to fchool.

The following advantages would immediately attend the rejection of the Latin and Greek languages as branches of a liberal education.

1. It would improve, and finally perfect the English language, by checking the increase of those superfluous words which are derived from the Latin and Greck languages. What use have we for festivity—celebrity —hilarity—amenity—and a hundred other duplicate words, with which Johnson and Harris have corrupted and weakened our language, and which are unintelligible to three fourths of common English readers? The rejection of the ancient languages, would further banish Latin and Greek words, such as, exit, fecit, excudit, pinxit, acme, finis, bona fide, ipso facto, ad valorem, and a hundred others, equally difgusting, from English compositions. It would moreover preferre

2. The rejection of the Latin and Greek langauges from our fchools, would produce a revolution in fcience, and in human affairs. That nation which fhall firft fhake off the fetters of those ancient languages, will advance further in knowledge, and in happines, in twenty years, than any nation in Europe has done, in a hundred.

3. It will have a tendency to deftroy the prejudices of the common people against fchools and colleges. The common people do not defpife fcholars, because they know more, but because they know lefs than themfelves. A mere fcholar can call a horfe, or a cow, by two or three different names, but he frequently knows nothing of the qualities, or uses of these valuable animals.

4. It would be the means of banifhing pride from our feminaries of public education. Men are generally molt proud of those things that do not contribute to the happiness of themselves, or others. Useful knowledge generally humbles the mind, but learning, like fine clothes, feeds pride, and thereby hardens the human heart.

5. It would greatly encreafe the number of fludents in our colleges, and thereby extend the benefits of education through every part of our country. The excellency of knowledge would then be obvious to every body, becaufe it would be conftantly applicable to fome of the neceffiry and ufeful purpofes of life, and particularly to the fecurity and order of wife and juft government.

6. It would remove the prefent immenfe difparity which fublifts between the fexes, in the degrees of their education and knowledge. Perhaps one caufe of the mifery of many families, as well as communities, may be fought for in the *mediscrity* of knowledge of the women. They fhould know *more* or *lefs*, in order to be happy themfelves, and to communicate happinefs to others. By ceafing to make Latin and Greek a neceffary part of a liberal education, we open the doors' for every fpecies of improvement to the female part of fociety:—hence will arife new pleafures in their company,—and hence, too, we may expect a general reformation and refinement, in the generations which are to follow us; for principles and manuers in all focieties are formed chiefly by the women.

It may be afked here, how fhall we employ those years of a boy, that are now usually fpent in learning the Latin and Greek languages? I shall endeavour to answer this question by laying down a short plan of a liberal English education. In this undertaking, I shall ftrive to forget for a while all the fyftems of education I have ever feen, and fuggeft fueh a one as is founded in the original principles of action in the human mind.

1. Let the first eight years of a boy's time be employed in learning to fpeak, fpell, read and write the English language. For this purpose, let him be committed to the care of a mafter, who fpeaks correctly at all times, and let the books he reads, be written in a fimple and correct ftyle. During these years, let not an English grammar by any means be put into his hands. It is to most boys, under even twelve years of age, an unintelligible book. As well might we contend, that a boy fhould be taught the names and number of the humours of the eye, or the muscles of the tongue, in order to learn to fee, or to fpeak, as be taught the English language, by means of grammar. Sancho, in attempting to learn to read, by chewing the four and twenty letters of the alphabet, did not exhibit a greater abfurdity, than a boy of feven or eight years old does, in committing grammar rules to memory, in order to understand the English language. Did we wifli to defcribe a fhip, fo as to have all its parts perfectly and fpeedily known, would we begin by deferibing its detached parts in a ship-yard, or a rope-walk? Or would we not first fix every part in its proper place, and then explain the names and ules of these parts, by shewing their fubserviency to each other? In like manner, I affirm, that the construction of our language should be learned by a eareful attention to the places and uses of the

different parts of speech in agreeable compositions, and not by contemplating them in a disjointed flate in an English grammar. But I will add further, that grammar fhould be taught only by the ear. Pronounciation, which is far more extensive, and difficult, is learned only in this way. To teach coucord in the arrangement of words, let the mafter converfe with his pupils as well as hear them read, and let him diffinctly mark and correct every deviation from grammatical propriety which they utter. This method of teaching grammar has been tried with fuccefs in the families of feveral gentlemen of my acquaintance. It is both rational, and practicable. It has, moreover, the authority of the wife Greeks to recommend it. Homer, Xenophon, Demofthenes and Longinus, I believe, were all taught to fpeak, read, and write their native language, without the incumbrance of a Greek grammar. I do not mean by any thing that has been advanced, to infinuate that our pupil should not be instructed in the principles and laws of our language. I have referved this part of knowledge to a much later period of his youth, at which time he will acquire it almost as foon as Moliere's " Citizen turned Gentleman," learned to diftinguish between profe and poetry. He will find that he is in poffeffion of this knowledge, and that the bufinefs of his mafter will be only to give names to things with which he is already acquainted.

Under this head, I fhall only add, that the perfection of the car, as an avenue of knowledge is not fufficiently known. Ideas acquired through that organ, are much more durable, than those acquired by the eyes. We remember much longer what we hear, than what we fee; hence, old men recollect voices, long after they forget faces. These facts are capable of great application to the bufines of education.

Having provided our pupil with a vehicle of knowledge, by teaching him to read and write, our next bufinefs fhould be to furnifh him with ideas. Here it will be neceffary to remark, that the human mind in early life firft comprehends fubftances. From thefe it proceeds to actions, from actions to qualities, and from qualities to degrees. Let us therefore in education, follow this order of nature, and begin by inftructing our pupil in the knowledge of fubftances, or things. For this purpofe, let us initiate him into the knowledge of the globe on which he exifts, by teaching him

2. Natural hiftory. This ftudy is fimple and truly delightful. Animals of all kinds are often the fubjects of converfation and difputes among boys in their walks and diverfions. But this is not all; this ftudy is the foundation of all ufeful and practical knowledge in agriculture, manufactures and commerce, as well as in philofophy, chemiftry, and medecine. By making

natural hiftory the firft fludy of a boy, we imitate the conduct of the firft teacher of man. The firft lefton that Adam received from his Maker in Paradife, was upon natural hiftory. It is probable that the dominion of our great progenitor over the brute creation, and every other living creature, was founded upon a perfect knowledge of their names and qualities, for God appears in this, as well as in other inftances, to have acted by the inftrumentality of human reaton.—Where a mufeum is wanting, all that is neceffary for a boy to know of animals and fifnes—infects —trees and herbs, may be taught by means of prints.

3. Geography, is a fimple feience, and accommodated to the capacity of a boy under twelve years of age. It may be perfectly underftood by means of cards-globes-and maps; for each of thefe modes of conveying inftruction, feizes upon the fenfes and imagination. The frequent application which a boy is obliged to make of his knowledge in geography, in reading, and converfation, will foon fix it upon his memory, and from the *time* and *manner* in which he will acquire it, he will never forget it.

I allow four years to be employed in acquiring thefe two fundamental branches of knowledge. After our pupil has become tolerably well acquainted with them, he fhould be inftructed in the

LATIN AND GREEK LANGUAGES

4. French and German languages. Thefe will be equally neceffary, whether commerce—phyfic—law or divinity is the purfuit of a young man. They fhould be acquired only by the ear. Great care fhould be taken not to permit him to learn thefe languages before he is *twelve* years old, otherwife he will contract fo much of the French and German accent as will impair the prononciation of his native tongue.

5. Arithmetic, and fome of the more fimple branches of the mathematics fhould be acquired between the twelfth and fourteenth years of his life.

6. Between his fourteenth and eighteenth years, he fhould be inftructed in grammar—oratory—criticifm—the higher branches of mathematics—philofophy —chemiftry—logic—metaphyfics—chronology—hiftory—government—the principles of agriculture, and manufactures—and in every thing elfe that is neceffary to qualify him for public ulefulnefs, or private happinefs.

7. I know it is common to introduce what is called *Moral Philofophy* into a fyftem of liberal education. The name of this fcience is derived from the Pagan fchools. The ftudy of it conftituted a material part of their learning. Inftead of continuing this anti-chriftian mode of teaching morals, I would propofe a courfe of lectures to be given upon the evidences, doctrines and *precepts* of the Chriftian religion. The laft part of this

H

49

courfe might be made to include the whole circle of moral duties, and from the connection it would have with the evidences and doctrines of Chriftanity it would produce an imprefion upon the underflauding which no time or circumflances would ever wear away. It is by neglecting to teach young men the Chriftian religion as a fcience, or by the feparation of its morals from its principles, that colleges have become in fo many inflances the nurferies of infidelity.

Extract of a letter from the reverend Mr. James Mair, princi; al of the academy of Alexandria in Virginia, to the Author, dated July 29, 1791.

" I HAVE read with fatisfaction, in the Mufeum, your obfervations on fludying the learned languages. There is little tafte for them in this place. In our academy, where there are near ninety fludents, not above ninetcen are poring over Latin and Greek. One of thefe nineteen was lately addreffed by a fludent of Arithmetic in the following language—Pray, Sir, can you refolve me, by your Latin, this queftion, If one bufhel of corn coft four fhillings, what coft fifty bufhels ?—A demand of this kind from a youth, is to me a proof of the tafte of Americans in the prefent day, who prefer the ufeful to the ornamental." ANSWER to the foregoing letter, containing further observations upon the study of the Latin and Greek languages.

DEAR SIR,

IT gave me great pleafure to find, by your polite letter of July 29th, that my opinions, upon the fubject of the Latin and Greek languages, have met with your approbation; and that the young gentlemen who compole your academy had difcovered fo much good fenfe in preferring *ufeful* to *ufelefs*, or, at beft, ornamental literature.

I have read all the replies that have been published to my opinions : and am more confirmed in the truth of them, than ever, by the weakness and fallacy of the objections that have been made to them. The ftyle of fome of those replies has established one of my propositions in the most forcible manner. It has demonfirated that a knowledge of the dead languages does not confer taste or elegance in the English language, any more than it does good breeding, or good temper. I except from this remark the candid and ingenious letters published in the Federal Gazette, faid to be written by Dr. Stuber, of this city.

To perfuade men, that white is *black*, or black, *white*, it is neceffary fomerimes to make them believe that they are grey. The mind requires a refting point, in paffing from error to truth, upon many fubjects. I fhall avail myfelf of this weaknefs in human nature, and take the

liberty of fuggesting a method of teaching the Latin and Greek languages, which I conceive, will be accommodated to the prefent state of the prejudices of our countrymen in their favour.

The late Dr. Franklin ufed to fay, that the learning of a dead or foreign language might be divided into ten parts. That it required five only to learn to read it-leven to tpeak it-and the whole ten to write it. Now, when we confider how feldom we are called upon to *speak* or write the Latin or Greek languages, fuppofe we teach our boys only to read them. This will cut off one half the difficulty of learning them, and and enable a boy to acquire as much of both, in two years, as will be neceffary for him. He will, moreover, by this plan, be able to read more of the claffics than are read at prefent in our fchools. The claffics are now read only for the fake of acquiring a knowledge of the conftruction of the languages in which they are written; but by the plan I have propofed, they would be read for the fake of the matter they contained, and there would be time enough to read each book from its beginning to its end. At prefent, what boy ever reads all the Ænead of Virgil, or the Iliad of Homer ? In fhort, few boys ever carry with them from fchool, any thing but a fmattering of the claffics. They peep into a dozen of them; but are taught to attend to every thing they contain, more than to the fubjects which are treated of by them.

LATIN AND GREEK LANGUAGES.

In the way I have proposed, a boy would be able to translate all the Latin and Greek books he would meet with, and from the perfect knowledge he would acquire of them at school, he would probably retain that knowledge as long as he lived.

To carry this mode of teaching the Latin and Greek languages into effect, it is abfolutely neceffary that a boy fhould first be instructed in history and geography. Let him read an account of the rife, progrefs, and fall of the Greek and Roman nations; and examine, upon maps, the countries they inhabited and conquered, and their languages will foon become interefting to him. The neglect of this natural and eafy mode of inftruction, is an inversion of all order. The abfurdity of it was once happily exposed by a boy of eight years old, who, with a Latin Grammar in his hand, gravely afked his father, " who made the Latin language, and what " was it made for ?" Had this boy been previoufly instructed in the Roman history, he would not have asked fuch a question. Confidering his age, it was as natural, as it was foolifh.

There is no play common among children, that ftrikes me with an idea of half the folly that I am ftruck with, every time I look into a Latin fchool, and fee thirty or forty little boys pinioned down to benches, and declining nouns, conjugating verbs, or writing Latin verfions. I confider the higheft attainment in this kind of learning, as nothing more than fuccefsful dof-

53

tards, but far lefs ufeful than those which are exhibited in the ufual athletic excercifes of fchool boys.

By adopting the plan I have proposed, a boy will not open a Latin or Greek book, till he is fourteen or fifteen years old; fo that the dead languages, inftead of being the first, will be the last things he will learn at school. At this age, he will learn them with half the trouble, and underftand them much better than he would have done at nine or ten years of age. For though languages are acquired with most eafe by the car under puberty, yet they are acquired most eafily by the eye, after that period of life. But there is another advantage in making the Latin and Greek languages the laft things that are taught at fchool. The bent of a young man's inclinations is generally known at fourteen or fifteen, and feldom fooner. Now if he incline to commerce-to a military-or a naval life-or to a mechanical employment, in all of which it is agreed, Latin and Greek are unneceffary, it will be improper to detain him any longer at fchool, by which means much money will be faved by the parents, and much time faved by the boy, both of which are walted by the prefent indifcriminate and prepofterous mode of teaching the dead languages.

The idea of the neceffity of a knowledge of those languages, as an introduction to the knowledge of the English language, begins to lose ground. It is certainly a very absurd one. We have feveral English fchools in our city, in which boys and girls of twelve and fourteen years old have been taught to fpeak and write our native language with great grammatical propriety. Some of thefe children would difgrace our bachelors and mafters of arts, who have fpent four or five years in the ftudy of the Latin and Greek languages in our American colleges. It is true, thefe Latin and Greek fcholars, after a while, acquire a knowledge of our language : but it is in the fame flow way, in which fome men acquire a knowledge of the forms of good breeding. Three months inftruction will often impart more of both, than a whole life fpent in acquiring them fimply by imitation.

Where there is one Latin fcholar, who is obliged, in the courfe of his life, to *fpeak* or *write* a Latin fentence, there are hundreds who are not under that neceffity. Why then fhould we fpend years in teaching that which is fo rarely required in future life? For fome years to come, the reading of the language, may be neceffary; but a young man of fourteen or fifteen, may be taught to do this perfectly in one year, without committing a fingle grammar rule to memory, or without *fpoiling his hand by* writing a fingle verfion.

Much more, in my opinion, might be faid in favour of teaching our young men to *fpeak* the Indian languages of our country, than to *fpeak* or write Latin. By their means, they might qualify themfelves to become ambaffadors to our Indian nations, or introduce

OBSERVATIONS ON THE STUDY, &C.

56

among them a knowledge of the bleffings of civilization and religion.

We have lately feen a large portion of power wrefted from the hands of kings and priefts, and exercifed by its lawful owners. Is it not high time to wreft the power over the education of our youth, out of the hands of ignorant or prejudiced fchoolmafters, and place it in the hands of men of more knowledge and experience in the affairs of the world? We talk much of our being an *enlightened* people; but I know not with what reafon, while we tolerate a fyftem of education in our fchools, which is as difgraceful to the human underftanding as the moft corrupt tenets or practices of the pagan religion, or of the Turkifh government.

With great refpect for your character, as well as for your prefent honourable and ufeful employment, I am, dear fir,

Your friend and moft obedient fervant. BENJAMIN RUSH. Philadelphia, August 24, 1791. THOUGHTS UPON THE AMUSEMENTS AND PUNISH-MENTS WHICH ARE PROPER FOR SCHOOLS. AD-DRESSED TO GEORGE CLYMER, E30.

DEAR SIR,

THE laft time I had the pleafure of being in your company, you did me the honour to requeft my opinion upon the AMUSEMENTS and PUNISH-MENTS which are proper for fchools The fubjects are of a very oppofite nature, but I fhall endeavour to comply with your wifhes, by fending you a few thoughts upon each of them. I am fure you will not reject my opinions becaufe they are contrary to received practices, for I know that you are accuftomed to think for yourfelf, and that every propofition that has for its objects the interefts of humanity and your country, will be treated by you with attention and candor.

I fhall begin with the fubjects of AMUSEMENTS. Montefquieu informs us that the exercifes of the laft day of the life of Epaminondas, were the fame as his amufements in his youth. Herein we have an epitome of the perfection of education. The amufements of Epaminondas were of a military nature; but as the profeffion of arms is the bufinefs of only a fmall part of mankind, and happily much lefs

58 ON THE AMUSEMENTS AND PUNISHMENTS

neceffary in the United States than in ancient Greecc, I would propofe that the amufements of our youth, at fchool, fhould confift of fuch exercifes as will be most fubfervient to their future employments in life. These are; 1. agriculture; 2. mechanical occupations; and 3. the business of the learned professions.

I. There is a variety in the employments of agriculture which may readily be fuited to the genius, tafte, and ftrength of young people. An experiment has been made of the efficacy of thefe employments, as amufements, in the Methodift College at Abington, in Maryland; and, I have been informed, with the happieft effects. A large lot is divided between the fcholars, and premiums are adjudged to thofe of them who produce the moft vegetables from their grounds, or who keep them in the beft order.

II. As the employments of agriculture cannot afford amufement at all feafons of the year, or in cities I would propofe, that children fhould be allured to to feek amufements in fuch of the mechanical arts as are fuited to their ftrength and capacities. Where is the boy who does not delight in the ufe of a hammer—a chiffel—or a faw ? and who has not enjoyed a high degree of pleafure in his youth, in conftructing a miniature houfe ? How amufing are the machines which are employed in the manufactory of cloathing of all kinds ! and how full of various entertainment are the mixtures which take place in the chemical arts ! each of thefe might be contrived upon fuch a fcale, as not only to amufe young people, but to afford a profit to their parents or mafters. The Moravians, at Bethlehem in our ftate, have proved that this proposition is not a chimerical one. All the amufements of their children are derived from their performing the fubordinate parts of feveral of the mechanical arts; and a confiderable portion of the wealth of that worthy and happy fociety is the product of the labour of their little hands.—

If, in thefe amufements, an appeal fhould be made to that fpirit of competition which is fo common among young people, it would be the means of producing more pleafure to the children, and more profit to all who are connected with them. The wealth of thofe manufacturing towns in England, which employ the children of poor people, is a proof of what might be expected from connecting amufement and labour together, in all our fchools. The product from the labour obtained in this way, from all the fchools in the United States, would amount to a fum which would almoft exceed calculation.

III. To train the youth who are intended for the learned profeffions or for merchandize, to the duties of their future employments, by means of ufeful amufements, which are *related* to those employments, will be impracticable; but their amufements may be

60 ON THE AMUSEMENTS AND PUNISHMENTS

derived from cultivating a fpot of ground; for where is the lawyer, the phylician, the divine, or the merchant, who has not indulged or felt a paffion, in fome part of his life, for rural improvements?——Indeed I conceive the feeds of knowledge in agriculture will be most productive, when they are planted in the minds of this class of feholars.

I have only to add under this head, that the common amufements of children have no connection with their future occupations. Many of them injure their cloaths, fome of them wafte their ftrength, and impair their health, and all of them prove more or lefs, the means of producing noife, or of exciting angry paffions, both of which are calculated to beget vulgar manners. The Methodifts have wifely banifhed every fpecies of play from their college. Even the healthy and pleafurable exercise of fwimming, is not permitted to their fcholars, except in the prefence of one of their mafters.

Do not think me too ftrict if I here exclude gunning from among the amufements of young men. My objections to it are as follow.

I It hardens the heart, by inflicting unneceffary pain and death upon animals.

2. It is unneceffary in civilized fociety, where animal food may be obtained from domeftic animals, with greater facility. 3. It confumes a great deal of time, and thus creates habits of idlenefs.

4. It frequently leads young men into low, and bad company.

5. By imposing long abstinence from food, it leads to intemperance in eating, which naturally leads to intemperance in drinking.

6. It exposes to fevers, and accidents. The newspapers are occasionally filled with melancholy accounts of the latter, and every physician must have met with frequent and dangerous instances of the former, in the course of his practice.

I know the early ufe of a gun is recommended in our country, to teach our young men the ufe of firearms, and thereby to prepare them for war and battle. But why fhould we infpire our youth, by fuch exercifes, with hoftile ideas towards their fellow creatures ?—Let us rather inftill into their minds fentiments of univerfal benevolence to men of all nations and colours. Wars originate in error and vice, Let us eradicate thefe, by proper modes of education, and wars will ceafe to be neceffary in our country. The divine author and lover of peace " will then " fuffer no man to do us wrong; yea, he will re-" prove kings for our fake, faying, touch not my " anointed and do my people no harm." Should the nations with whom war is a trade, approach our coafts, they will retire from us, as Satan did from our Saviour, when he came to affault him; and for the fame reafon, becaufe they will " find nothing in " us" congenial to their malignant difpolitions; for the flames of war can be fpread from one nation to another, only by the conducting mediums of vice and error.

I have hinted at the injury which is done to the health of young people by fome of their amufements; but there is a practice common in all our fchools, which does more harm to their bodies than all the amufements that can be named, and that is, obliging them to fit too long in one place, or crowding too many of them together in one room. By means of the former, the growth and fhape of the body have been impaired; and by means of the latter, the feeds of fevers have often been engendered in fchools. In the courfe of my bufinefs, I have been called to many hundred children who have been feized with indifpofitions in fchool, which evidently arofe from the action of morbid effluvia, produced by the confined breath and perfpiration of too great a number of children in one room. To obviate thefe evils, children fhould be permitted, after they have faid their leffons, to amufe themfelves in the open air, in fome of the ufeful and agreeable exercifes which have been mentioned. Their minds will be ftrengthened, as well as their bodies relieved by them. To oblige a fprightly boy to fit feven hours in a day, with his

little arms pinioned to his fides, and his neck unnaturally bent towards his book; and for *no crime* !---what cruelty and folly are manifefted, by fuch an abfurd mode of inftructing or governing young people !

I come next to fay a few words upon the fubject of PUNISHMENTS which are proper in fchools.

In barbarous ages every thing partook of the complexion of the times. Civil, ecclefiaftical, military, and domestic punishments were all of a cruel nature. With the progrefs of reafon and chriftianity, punifiments of all kinds have become lefs fevere. Solitude and labour are now fubstituted in many countries, with fuccefs, in the room of the whipping-poft and the gallows .- The innocent infirmities of human nature are no longer proferibed, and punifhed by the church. Discipline, consisting in the vigilance of officers, has leffened the fuppofed neceffity of military executions; and hufbands-fathers-and mafters now blush at the history of the times, when wives, children, and fervants, were governed only by force. But unfortunately this spirit of humanity and civilization has not reached our fchools. The rod is yet the principal inftrument of governing them, and a fchoolmafter remains the only defpot now known in frce countries. Perhaps it is because the little subjects of their arbitrary and capricious power have not been in a condition to complain. I fhall endeavour there-

54 ON THE AMUSEMENTS AND PUNISHMENTS

fore to plead their caufe, and to prove that corporal punifhments (except to children under four or five years of age) are never neceffary, and always hurtful, in fchools.—The following arguments I hope will be fufficient to cftablifh this proposition.

1. Children are feldom fent to fehool before they are capable of feeling the force of rational or moral obligation. They may therefore be deterred from committing offences, by motives lefs difgraceful than the fear of corporal punifilments.

2. By correcting children for ignorance and negligence in fchool, their ideas of *improper* and *immoral* actions are confounded, and hence the moral faculty becomes weakened in after life. It would not be more cruel or abfurd to inflict the punifhment of the whipping-poft upon a man, for not dreffing fafhionably or neatly, than it is to ferule a boy for blotting his copy book, or mif-fpelling a word.

3. If the natural affection of a parent is fometimes infufficient, to reftrain the violent effects of a fudden guft of anger upon a child, how dangerous muft the power of correcting children be when lodged in the hands of a fehool-mafter, in whofe anger there is no mixture of parental affection ! Perhaps those parents act most wifely, who never truft themfelves to inflict corporal punifilments upon their children, after they are four or five years old, but endeavour to punifh, and reclaim them, by confinement, or by abridging them of fome of their ufual gratifications, in drefs, food or amufements.

4. Injuries are fometimes done to the bodies, and fometimes to the intellects of children, by corporal punifhments. I recollect, when a boy, to have loft a fchool-mate, who was faid to have died in confequence of a fevere whipping he received in fchool. At that time I did not believe it poffible, but from what I now know of the difproportion between the violent emotions of the mind, and the ftrength of the body in children, I am difpofed to believe, that not only ficknefs, but that even *death* may be induced, by the convultions of a youthful mind, worked up to a high fenfe of fhame and refentment.

The effects of thumping the head, boxing the ears, and pulling the hair, in impairing the intellects, by means of injuries done to the brain, are too obvious to be mentioned.

5. Where there is *fhame*, fays Dr. Johnfon, there may be *virtue*. But corporal punifhments, inflicted at fchool, have a tendency to deftroy the fenfe of fhame, and thereby to deftroy all moral fenfibility. The boy that has been often publicly whipped at fchool, is under great obligations to his maker, and his parents, if he afterwards efcape the whipping-poft or the gallows.

K

65

66 ON THE AMUSEMENTS AND PUNISMMENTS

6. Corporal punishments, inflicted at school, tend to beget a fpirit of violence in boys towards each other, which often follows them through life; but they more certainly beget a fpirit of hatred, or revenge, towards their masters, which too often becomes a ferment of the fame baneful paffions towards other people. The celebrated Dr. afterwards Baron Haller declared, that he never faw, without horror, during the remaining part of his life, a fchool-mafter, who had treated him with unmerited feverity, when he was only ten years old. A fimilar anecdote is related of the famous M. de Condamine. I think I have known feveral instances of this vindictive, or indignant fpirit, to continue towards a cruel and tyrannical fchool-mafter, in perfous who were advanced in life, and who were otherwife of gentle and forgiving difpolitions.

7. Corporal punifhments, inflicted at fchools, beget a hatred to inftruction in young people. I have fometimes fufpected that the Devil, who knows how great an enemy knowledge is to his kingdom, has had the addrefs to make the world believe that *ferruling*, *pulling* and *boxing ears*, *cudgelling*, *horfing*, &c. and, in boardingfchools, a *little flarving*, are all abfolutely neceffary for the government of young people, on purpofe that he might make both fchools, and fchool-mafters odious, and thereby keep our world in ignorance; for ignorance is the beft means the Devil ever contrived, to keep up the number of his fubjects in our world. 8. Corporal punifhments are not only hurtful, but altogether unneceffary, in fehools. Some of the moft celebrated and fuccesful fehool-mafters, that I have known, never made use of them.

9. The fear of corporal punifhments, by debilitating the body, produces a corresponding debility in the mind, which coutracts its capacity of acquiring knowledge. This capacity is enlarged by the tone which the mind acquires from the action of hope, love, and confidence upon it; and all these passions might easily be cheristhed, by a prudent and enlightened schoolmaster.

10. As there should always be a certain ratio between the ftrength of a remedy, and the excitability of the body in difeafes, fo there fhould be a fimilar ratio between the force employed in the government of a fchool, and the capacites and tempers of children. A kind rebuke, like fresh air in a fainting fit, is calculated to act upon a young mind with more effect, than ftimulants of the greatest power; but corporal punishments level all capacities and tempers, as quack-medicines do, all conftitutions and difeafes. They difhonour and degrade our species; for they suppose a total absence of all moral and intellectual feeling from the mind. Have we not often feen dull children fuddenly improve, by changing their fchools? The The fuccesful teacher only reafon is obvious. accommodated his manner and discipline to the capacities of his fcholars.

68 ON THE AMUSEMENTS AND PUNISHMENTS

11. I conceive corporal punifhments, inflicted in an arbitrary manner, to be contrary to the fpirit of liberty, and that they fhould not be tolerated in a free government. Why fhould not children be protected from violence and injuries, as well as white and black fervants ?—Had I influence enough in our legiflature to obtain only a fingle law, it fhould be to make the punifhment for ftriking a fchool boy, the fame as for affaulting and beating an adult member of fociety.

To all thefe arguments I know fome well difpofed people will reply, that the rod has received a divine commiftion from the facred Scriptures, as the inftrument of correcting children. To this I anfwer that the rod, in the Old Teftament, by a very common figure in Rhetoric, ftands for punifhments of any kind, juft as the *fword*, in the New Teftament, ftands for the faithful and general administration of juffice, in fuch a way as is most calculated to reform criminals, and to prevent crimes

The following method of governing a fchool, I apprehend, would be attended with much better effects, than that which I have endeavoured to fhew to be contrary to reafon, humanity, religion, liberty, and the experience of the wifeft and best teachers in the world.

Let a fchool-mafter endeavour, in the first place, to acquire the confidence of his scholars, by a prudent deportment. Let him learn to command his passions

and temper, at all times, in his fchool,-Let him treat the name of the Supreme Being with reverence, as often as it occurs in books, or in conversation with his fcholars .- Let him exact a refpectful behaviour towards himfelf, in his fchool; but in the intervals of fchool hours, let him treat his fcholars with gentlenefs and familiarity. If he fhould even join in their amufements, he would not loofe, by his condefcenfion, any part of his authority over them. But to fecure their affection and refpect more perfectly, let him, once or twice a year, lay out a fmall fum of money in penknives, and books, and diftribute them among his fcholars, as rewards for proficiency in learning, and for good behaviour. If thefe prudent and popular meafures fhould fail of preventing offences at fchool, then let the following modes of punifhment be adopted.

1. *Private* admonition. By this mode of rebuking, we imitate the conduct of the divine Being towards his offending creatures, for his *firfl* punithment is always inflicted *privately*, by means of the *flill* voice of confcience.

2. Confinement after fchool-hours are ended; but with the knowledge of the parents of the children.

3. Holding a fmall fign of difgrace, of any kind, in the middle of the floor, in the prefence of a whole fchool.

70 ON THE AMUSEMENTS AND PUNISHMENTS

If these punishments fail of reclaiming a bad boy, he fhould be difinissed from school, to prevent his corrupting his school-mates. It is the business of parents, and not of school-masters, to use the last means for eradicating idleness and vice from their children.

The world was created in love. It is fuftained by love. Nations and families that are happy, are made fo only by love. Let us extend this divine principle, to those little communities which we call fchools. Children are capable of loving in a high degree. They may therefore be governed by love.

The occupation of a fchool-mafter is truly dignified. He is, next to mothers, the moft important member of civil fociety. Why then is there fo little rank connected with that occupation? Why do we treat it with fo much neglect or contempt? It is becaufe the voice of reafon, in the human heart, affociates with it the idea of defpotifm and violence. Let fchool-mafters ceafe to be tyrants, and they will foon enjoy the refpect and rank, which are naturally connected with their profeffion.

We are grofly miltaken in looking up wholiy to our governments, and even to ministers of the gospel, to promote public and private order in fociety. Mothers and fchool-masters plant the feeds of nearly all the good and evil which exist in our world. Its reformation must therefore be begun in nurferies and in fchools. If the habits we acquire there, were to have no influence upon our future happinefs, yet the influence they have upon our governments, is a fufficient reafon why we ought to introduce new modes, as well as new objects of education into our country.

You have lately been employed in an attempt to perpetuate our exiftence as a free people, by eftablifhing the means of national credit and defence; * but thefe are feeble bulwarks against flavery, compared with habits of labour and virtue, diffeminated among our young people. Let us eftablish schools for this purpose, in every township in the United States, and conform them to reason, humanity, and the prefent state of fociety in America. Then, Sir, will the generations who are to follow us, realize the precious ideas of the dignity and excellence of republican forms of government, which I well recollect you cherifhed with fo much ardor, in the beginning of the American revolution, and which you have manifested ever since, both by your public and private conduct.

We fuffer fo much from traditional error of various kinds, in education, morals, and government, that I have been led to wifh, that it were possible for us to have fchools established, in the United States, for teaching the art of forgetting. I think three-fourths of all our fchool-masters, divines, and legislators would

* Mr. Clymer was one of the Reprefentatives of Pennfylvania, in the first Congress of the United States which met in New York, in the year 1789.

72 ON THE AMUSEMENTS AND PUNISHMENTS

profit very much, by fpending two or three years in fuch ufeful inftitutions.

An apology may feem neceffary, not only for the length of this letter, but for fome of the opinions contained in it. I know how apt mankind are to brand every proposition for innovation, as visionary and Utopian. But good men should not be discouraged, by fuch epithets, from their attempts to combat vice and error. There never was an improvement, in any art or fcience, nor even a propofal for meliorating the condition of man, in any age or country, that has not been confidered in the light of what has been called, fince Sir. Thomas More's time, an Utopian scheme. The application of the magnet to navigation, and of fteam to mechanical purpofes, have both been branded as Utopian projects. The great idea in the mind of Columbus, of exploring a new world, was long viewed, in most of the courts of Europe, as the dream of a visionary failor. But why do we go to an cient times. for proofs of important innovations in human affairs having been treated as Utopian fchemes. You and I recollect the time, when the abolition of negro flavery in our flate, as alfo when the independence of the United States, and the prefent wife and happy confederacy of our republics, were all confidered by many of our fober prudent men, as fubjects of an Utopian nature.

If those benefactors of mankind, who have levelled mountains in the great road of human life, by the discoveries or labours which have been mentioned, have been ftigmatized with obloquy, as visionary projectors, why should an individual be assured to fimilar treatment, who has only attempted to give to that road, from its beginning, a straight direction.

If but a dozen men like yourfelf, approve of mý opinions, it will overbalance the most illiberal opposition they may meet with, from all the learned vulgar of the United States.

For the benefit of thofe perfons who confider opinions as improved, like certain liquors, by time; and who are oppofed to innovations, only becaufe they did not occur to their anceftors, I fhall conclude my letter with an anecdote of a minifter in London, who, after employing a long fermon, in controverting what he fuppofed to be an heretical opinion, concluded it with the following words, "I tell you, I tell you my bre-" thren,—I tell you again,—that an old error is better " than a new truth."

With great regard I am, Dear Sir, Your's fincerely,

BENJAMIN RUSH

Philadelphia, August 20th, 1790.

73

t,

ON THE AMUSEMENTS, &c.

P. S. Since writing the above letter, an ingenious German friend of mine has informed me, that a curious work has lately appeared in Germany, entitled, "A " treatife on human mifery," written by a Mr. Salzman, an enlightened fchool-mafter, in which a ftriking view is given of the mifery inflicted upon part of the human race, by the prefent abfurd, and cruel modes of conducting education in public fchools. The author concludes this part of his work, my friend informs me, with a dream, in which he beholds with ineffable joy, the avenging angel defcending from heaven, and afterwards confuming in an immenfe bonfire, certain abfurd fchool-books, and all the ferrules in the world.

74

THOUGHTS UPON FEMALE EDUCATION, ACCOMMODAT-ED TO THE PRESENT STATE OF SOCIETY, MANNERS, AND GOVERNMENT, IN THE UNITED STATES OF AMERICA. ADDRESSED TO THE VISITORS OF THE YOUNG LADIES' ACADEMY IN PHILADELPHIA, 28th JULY, 1787, AT THE CLOSE OF THE QUARTEREY EXAMINATION, AND AFTERWARDS PUBLISHED AT THE REQUEST OF THE VISITORS.

GENTLEMEN,

I HAVE yielded with diffidence to the folicitations of the Principal of the Academy, in undertaking to exprefs my regard for the profperity of this feminary of learning, by fubmitting to your candor, a few Thoughts upon Female Education.

The first remark that I shall make upon this subject, is, that female education should be accommodated to the state of society, manners, and government of the country, in which it is conducted.

This remark leads me at once to add,, that the education of young ladies, in this country, fhould be conducted upon principles very different from what it is in Great Britain, and in fome refpects, different from what it was when we were part of a monarchical empire.

There are feveral circumftances in the fituation, employments, and duties of women in America, which require a peculiar mode of education. I. The early marriages of our women, by contracting the time allowed for education, renders it neceffary to contract its plan, and to confine it chiefly to the more useful branches of literature,

II. The ftate of property in America, renders it neceffary for the greateft part of our citizens to employ themfelves, in different occupations, for the advancement of their fortunes. This cannot be done without the afliftance of the female members of the community. They must be the stewards, and guardians of their husbands' property. That education, therefore, will be most proper for our women, which teaches them to discharge the duties of those offices with the most fuccels and reputation.

III. From the numerous avocations from their families, to which professional life exposes gentlemen in America, a principal share of the instruction of children naturally devolves upon the women. It becomes us therefore to prepare them by a suitable education, for the discharge of this most important duty of mothers.

IV. The equal fhare that every citizen has in the liberty, and the poffible fhare he may have in the government of our country, make it neceffary that our ladies fhould be qualified to a certain degree by a peculiar and fuitable education, to concur in instructing their fons in the principles of liberty and government.

V. In Great Britain the bufinefs of fervants is a regular occupation; but in America this humble flation is the ufual retreat of unexpected indigence; hence the fervants in this country poffefs lefs knowledge and fubordination than are required from them; and hence, our ladies are obliged to attend more to the private affairs of their families, than ladies generally do, of the fame rank in Great Britain. "They are good fervants," faid an American lady of diftinguished merit, * in a letter to a favorite daughter, § " who will do well with " good looking after." This circumftance fhould have great influence upon the nature and extent of female education in America.

The branches of literature most effential for a young lady in this country, appear to be,

I. A knowledge of the English language. She should not only read, but speak and spell it correctly. And to enable her to do this, she should be taught the English grammar, and be frequently examined in applying its rules in common conversation.

II. Pleafure and interest confpire to make the writing of a fair and legible hand, a necessary branch of a lady's education. For this purpose the should be

* Mrs. Græme.

§ Mrs. Elizabeth Vergufon.

THOUGHTS UPON

taught not only to fliape every letter properly, but to pay the ftricteft regard to points and capitals.*

I once heard of a man who professed to discover the temper and difpolition of perfons by looking at their hand writing. Without enquiring into the probability of this ftory; I shall only remark, that there is one thing in which all mankind agree upon this fubject, and that is, in confidering writing that is blotted, crooked, or illegible, as a mark of vulgar education. I know of few things more rude or illiberal, than to obtrude a letter upon a perfon of rank or bufinefs, which cannot be eafily read. Peculiar care fhould be taken to avoid every kind of ambiguity and affectation in writing names. I have now a letter in my possession upon business, from a gentleman of a liberal profession in a neighbouring state, which I am unable to answer, because I cannot discover the name which is fubfcribed to it. + For obvious reafons I would recom-

* The prefent mode of writing among perfons of tafte is to use a capital letter only for the first word of a fentence, and for names of performs, places and months, and for the first word of every line in poetry. The words should be fo shaped that a straight line may be drawn between two lines, without touching the extremities of the words in either of them.

+ Dr. Franklin received many letters while he was in France during the American war, from perfons who wifhed to migrate to America, and who appeared to poffers knowledge and talents that would have been ufeful to his country, but their names were fubferibed to their letters in fo artificial and affected a manner, that he was unable to decypher them, and af courfe, did not anfwer them.

78

mend the writing of the first or christian name at full length, where it does not confist of more than two fyllables. Abbreviations of all kind in letter writing, which always denote either haste or carless, flou'd likewise be avoided. I have only to add under this head that the Italian and inverted hands which are read with difficulty, are by no means accommodated to the active state of business in America, or to the simplicity of the citizens of a republic.

III. Some knowledge of figures and book-keeping is abfolutely neceffary to qualify a young lady for the duties which await her in this country. There are certain occupations in which fhe may affift her hufband with this knowledge; and fhould fhe furvive him, and agreeably to the cuftom of our country be the executrix of his will, fhe cannot fail of deriving immenfe advantages from it.

IV. An acquaintance with geography and fome inftruction in chronology will enable a young lady to read hiftory, biography, and travels, with advantage; and thereby qualify her not only for a general intercourfe with the world, but to be an agreeable companion for a fenfible man. To thefe branches of knowledge may be added, in fome inftances, a general acquaintance with the first principles of astronomy natural philosophy and chemistry, particularly, with such parts of them as are calculated to prevent superficient, by explaining the causes, or obviating the effects of

THOUGHTS UPON

of natural evil, and fuch, as are capable of being applied to domettic, and culinary purpofes.

V. Vocal mufic should never be neglected, in the education of a young lady, in this country. Befides preparing her to join in that part of public worfhip which confifts in pfalmody, it will enable her to foothe the cares of domestic life. The distress and vexation of a hufband-the noise of a nursey, and, even, the the forrows that will fometimes intrude into her own bofom, may all be relieved by a fong, where found and fentiment unite to act upon the mind. I hope it will not be thought foreign to this part of our fubject to introduce a fact here which has been fuggested to me by my profession, and that is, that the exercise of the organs of the breaft, by finging, contributes very much to defend them from those difeases to which our climate; and other caufes, have of late exposed them .---Our German fellow citizens are feldom afflicted with confumptions, nor have I ever known but one inftance of fpitting of blood among them. This, I believe, is in part occasioned by the strength which their lungs acquire, by exercifing them frequently in vocal mufic, for this constitutes an effential branch of their education. The mufic-mafter of our academyt has furnished me with an observation still more in favour of this opinion. He informed me that he had known feveral inftances of perfons who were ftrongly difpofed to the confumption, who were reftored to health, by the moderate exercise of their lungs in finging.

‡ Mr. Adgate.

VI. DANCING is by no means an improper branch of education for an American lady. It promotes health, and renders the figure and motions of the body eafy and agreeable. I anticipate the time when the refources of converfation fhall be fo far multiplied, that the amufement of dancing fhall be wholly confined to children. But in our prefent flate of fociety and knowledge, I conceive it to be an agreeable fubflitute for the ignoble pleafures of drinking, and gaming, in our affemblies of grown people.

VII. The attention of our young ladies should be directed, as foon as they are prepared for it, to the reading of hiftory-travels-poetry-and moral effays. Thefe studies are accommodated, in a peculiar manner, to the prefent state of fociety in America, and when a relish is excited for them, in early life, they fubdue that paffion for reading novels, which fo generally prevails among the fair fex. I cannot difmifs this fpecies of writing and reading without obferving, that the fubjects of novels are by no means accommodated to our present manners. They hold up life, it is true, but it is not as yet life in America. Our paffions have not as yet " overstepped the modesty of pature." nor are they "torn to tatters," to use the expressions of the poet, by extravagant love, jealoufy, ambition, or revenge. As yet the intrigues of a British novel, are as foreign to our manners, as the refinements of Afiatic vice. Let it not be faid, that the tales of dif-

81

M

trefs, which fill modern novels, have a tendency to foften the female heart into acts of humanity. The fact is the reverfe of this. The abortive fympathy which is excited by the recital of imaginary diftrefs, blunts the heart to that which is real; and, hence, we fometimes fee inftances of young ladies, who weep away a whole forenoon over the criminal forrows of a fictitious Charlotte or Werter, turning with difdain at three o'clock from the fight of a beggar, who folicits in feeble accents or figns, a finall portion only of the crumbs which fall from their fathers' tables.

VIII. It will be neceffary to connect all thefe branches of education with regular inftruction in the chriftian religion. For this purpofe the principles of the different fects of chriftians fhould be taught and explained, and our pupils fhould early be furnifhed with fome of the most fimple arguments in favour of the truth of chriftianity*. A portion of the bible (of late improperly banished from our fchools)should be read by them every day, and fuch questions should be asked, after reading it as are calculated to imprint upon their minds the interesting ftories contained in it.

Rouffeau has afferted that the great fecret of education confifts in " wafting the time of children pro-

* Baron Haller's letters to his daughter on the truths of the chriftian religion, and Dr. Beatie's "evidences of the chriftian religion briefly ' and plainly flated " are excellent little tracks, and well adapted for this purpofe.

fitably," There is fome truth in this observation. I believe that we often impair their health, and weaken their capcities, by imposing studies upon them, which are not proportioned to their years. But this objection does not apply to religious inftruction. There are certain fimple propositions in the christian religion, which are fuited in a peculiar manner, to the infant ftate of reafon and moral fenfibility. A clergyman of long experience in the inftruction of youth + informed me, that he always found children acquired religious knowledge more eafily than knowledge upon other fubjects; and that young girls acquired this kind of knowledge more readily than boys. The female breaft is the natural foil of christianity; and while our women are taught to believe its doctrines, and obey its precepts, the wit of Voltaire, and the ftile of Bolingbroke, will never be able to destroy its influence upon our citizens.

I cannot help remarking in this place, that chriftianity exerts the moft friendly influence upon feience, as well as upon the morals and manners of mankind. Whether this be occafioned by the unity of truth, and the mutual affiftance which truths upon different fubjects afford each other, or whether the faculties of the mind be fharpened and corrected by embracing the truths of revelation, and thereby prepared to inveftigate and perceive truths upon other fubjects, I

+ The Rev. Mr. NICHOLAS COLLIN, minifler of the Swedifh church in Wicocoe.

THOUGHTS UPON

will not determine, but I believe that the greateft difcoveries in fcience have been made by chriftian philofophers, and that there is the moft knowledge in thofe countries where there is the moft chriftianity.* If this remark be well founded, then thofe philofophers who reject chriftianity, and thofe chriftians, whether parents or fchool-mafters, who neglect the religious inftruction of their children and pupils, reject and neglect the moft effectual means of promoting knowledge in our country.

IX. If the meafures that have been recommended for infpiring our pupils with a fenfe of religious and moral obligation be adopted, the government of them will be eafy and agreeable. I fhall only remark under this head, that *firitinefs* of difcipline will always render *feverity* unneceffary, and that there will be the moft inftruction in that fchool, where there is the molt order.

I have faid nothing in favour of inftrumental mufic as a branch of female education, becaufe I conceive

* This is true in a peculiar manner in the feience of medecine. A young Scotch phyfician of enterprizing talents, who conceived a high idea of the flate of medecine in the eaftern countries, fpent two years in enquiries after medical knowledge in Conflantinople, and Grand Cairo. On his return to Eritain he confeffed to an American phyfician whom he met at Naples, that after all his refearches and travels, he 44 had difcovered 44 nothing except a fingle fast relative to the plague, that he thought 44 worth remembering or communicating." The feience of medecine in China according to the accounts of De Halde is in as imperfect a flate as among the Indians of North America. it is by no means accommodated to the prefent flate of fociety and manners in America. The price of mufical inftruments, and the extravagant fees demanded by the teachers of inftrumental mufic, form but a fmall part of my objections to it.

To perform well, upon a mufical inftrument, requires much time and long practice. From two to four hours in a day, for three' or four years appropriated to mufic, are an immense deduction from that short period of time which is allowed by the peculiar circumftances of our country for the acquisition of the useful branches of literature that have been mentioned. How many useful ideas might be picked up in these hours from hiltory, philosophy, poetry, and the numerous moral effays with which our language abounds, and how much more would the knowledge acquired upon these subjects add to the confequence of a lady, with her hufband and with fociety, than the beft performed pieces of mulic upon a harpficord or a guittar! Of the many ladies whom we have known, who have fpent the most important years of their lives, in learning to play upon inftruments of mufic, how few of them do we fee amuse themselves or their friends with them, after they become mistrefies of families ! Their harpfichords ferve only as fide-boards for their parlours, and prove by their filence, that neceffity and circumftances, will always prevail over fashion, and falfe maxims of education.

Let it not be fuppofed from thefe obfervations that I am infentible of the charms of inftrumental mufic, or that I with to exclude it from the education of a lady where a mufical car irrefiftably difpofes to it, and affluence at the fame time affords a profpect of fuch an exemption from the ufual cares and duties of the miftrefs of a family, as will enable her to practife it. Thefe circumftances form an exception to the general conduct that fhould arife upon this fubject, from the prefent ftate of fociety and manners in America.

It is agreeable to obferve how differently modern writers, and the infpired author of the Proverbs, defcribe a fine woman. The former confine their praifes chiefly to perfoual charms, and ornamental accomplifhments, while the latter celebrates only the virtues of a valuable mistrefs of a family, and a ufeful member of fociety. The one is perfectly acquainted with all the faihionable languages of Europe; the other, " opens her mouth with wifdom" and is perfectly acquainted with all the uses of the needle, the diftaff, and the loom. The bufinefs of the one, is pleafure; the pleafure of the other, is bufinefs. The one is admired abroad; the other is honoured and beloved at home. "Her children arife up and " call her bleffed, her hufband alfo, and he praifeth her." There is no fame in the world equal to this; nor is there a note in mufic half fo delightful, as the refpectful language with which a grateful fon or daughter

perpetuates the memory of a fenfible and affectionate mother.

It fhould not furprize us that British customs, with respect to-female education, have been transplanted into our American fchools and families. We fee marks of the fame incongruity, of time and place, in many other things. We behold our houses accomodated to the climate of Great Britain, by eastern and western directions. We behold our ladies panting in a heat of ninety degrees, under a hat and cushion, which were calculated for the temperature of a British fummer. We behold our citizens condemned and punifhed by a criminal law, which was copied from a country, where maturity in corruption renders public executions a part of the amufements of the nation. It is high time to awake from this fervility-to ftudy our own character-to examine the age of our country-and to adopt manners in every thing, that shall be accomodated to our flate of fociety, and to the forms of our government. In particular it is incumbent upon us to make ornamental accomplishments yield to principles and knowledge, in the education of our women.

A philofopher once faid "let me make all the bal-" lads of a country and I care not who makes its laws." He might with more propriety have faid, let the ladies of a country be educated properly, and they will not only make and administer its laws, but form its manners and character. It would require a lively imaginaiton to deferibe, or even to comprehend, the

happinels of a country, where knowledge and virtue, were generally diffused among the female fex. Our young men would then be reftrained from vice by the terror of being banished from their company. The loud laugh, and the malignant fmile, at the expence of innocence, or of perfonal infirmities-the feats of fuccefsful mimickry-and the low priced wit, which is borrowed from a mifapplication of fcripture phrafes, would no more be confidered as recommendations to the fociety of the ladies. A double entendre in their prefence, would then exclude a gentleman forever from the company of both fexes, and probably oblige him to feek an afylum from contempt, in a foreign country. The influence of female education would be still more extensive and useful in domestic life. The obligations of gentlemen to qualify themfelves by knowledge and industry to difeharge the duties of benevolence, would be encreafed by marriage; and the patriot-the hero-and the legislator, would find the fweetest reward of their toils, in the approbation and applause of their wives. Children would difcover the marks of maternal prudence and wifdom in every station of life; for it has been remarked that there have been few great or good men who have not been bleffed with wife and prudent mothers. Cyrus was taught to revere the gods, by his mother Mandane -Samuel was devoted to his prophetic office before he was born, by his mother Hannah-Conftantine was refcued from paganifm by his mother Constantia-and Edward the fixth inherited those great and excellent

88

89

qualities which made him the delight of the age in which he lived, from his mother, lady Jane Seymour. Many other inftances might be mentioned, if neceffary, from ancient and modern hiftory, to establish the truth of this proposition.

I am not enthuliastical upon the fubject of education. In the ordinary course of human affairs, we shall probably too foon follow the footfteps of the nations of Europe in manners and vices. The first marks we shall perceive of our declension, will appear among our women. Their idlenefs, ignorance, and profigacy will be the harbingers of our ruin. Then will the character and performance of a buffoon on the theatre, be the fubject of more conversation and praise, than the patriot or the minister of the gospel ;- then will our language and pronunciation be enfeebled and corrupted by a flood of French and Italian words ;-then will the hiftory of romantic amours, be preferred to the pure and immortal writings of Addifon, Hawkefworth and Johnfon ;- then will our churches be neglected, and the name of the fupreme being never be called upon, but in profane exclamations ;- then will our Sundays be appropriated, only to feafts and concerts ?--- and then will begin all that train of domeftic and political calamities-But, I forbear. The prospect is to painful, that I cannot help, filently, imploring the great arbiter of human, affairs, to interpofe his almighty goodnefs, and to deliver us from these evils, that, at least one spot of the earth may be referved as a monument of the effects of good education, in order to shew in some degree, what our species was, before the sall, and what it shall be, after its restoration.

Thus, gentlemen, have I briefly finished what I proposed. If I am wrong in those opinions in which I have taken the liberty of departing from general and fashonable habits of thinking, I am fure you will difcover, and pardon my mistakes. But if I am right, I am equally fure you will adopt my opinions; for to enlightened minds truth is alike acceptable, whether it comes from the lips of age, or the hand of antiquity, or whether it be obtruded by a perfon, who has no other claim to attention, than a defire of adding to the ftock of human happines

I cannot difinifs the fubject of female education without remarking, that the city of Philadelphia firft faw a number of gentiemen affociated for the purpofe of directing the education of young ladies. By means of this plan, the power of teachers is regulated and reftrained, and the objects of education are extended. By the feparation of the fexes in the unformed flate of their manners, female delicacy is cherifhed and preferved. Here the young ladies may enjoy all the literary advantages of a boarding-fchool, and at the fame time live under the protection of their parents*. Here emulation may be excited without jealoufy,—ambition without envy,—and competition without ftrife. The attempt to eftablift this new mode of education for young ladies, was an experiment, and the fuccefs of it hath anfwered our expectations. Too much praife cannot be given to our principal ‡ and his affiftants, for the abilities and fidelity with which they have carried the plan into execution. The proficiency which the young ladies have difcovered in reading—writing—fpelling—arithmetic—grammar—geography—mufic—and their different catechifms, fince the laft examination, is a lefs equivocal mark of the merit of our teachers, than any thing I am able to express in their favour.

But the reputation of the academy muft be fufpended, till the public are convinced, by the future conduct and character of our pupils, of the advantages of the inftitution. To you, therefore, YOUNG LABIES, an important problem is committed for folution; and that is, whether our prefent plan of education be a wife one, and whether it be calculated to prepare you for the duties of focial and domeftic life. I know that the elevation of the female mind, by means of moral,

* "Unnatural confinement makes a young woman embrace with avi-"dity every pleafure when the is fet free. To relift domeftic life, one "mult be acquainted with it; for it is in the houfe of her parents a young "woman acquires the relift." Lord Kaims's thoughts upon education, and the culture of the heart.

1 Andrew Brown.

phyfical and religious truth, is confidered by fome men as unfriendly to the domestic character of a woman. But this is the prejudice of little minds, and fprings from the fame fpirit which oppofes the general diffusion of knowledge among the citizens of our republics. If men believe that ignorance is favourable to the government of the female fex, they are certainly deceived; for a weak and ignorant woman will always be governed with the greateft difficulty. I have fometimes been led to afcribe the invention of ridiculous and expensive fashions in female drefs, entirely to the gentlemen*, in order to divert the ladies from improving their minds, and thereby to fecure a more arbitrary and unlimited authority over them. It will be in your power, LADIES, to correct the miftakes and practice of our fex upon these subjects, by demonstrating, that the female temper can only be governed by reafon, and that the cultivation of reafon in women, is alike friendly to the order of nature, and to private as well as public happinfs,

* The very expensive prints of female dreffes which are published annually in France, are invented and executed wholly by GENTLEMEN. A DEFENCE OF THE USE OF THE BIBLE AS A SCHOOL BOOK. Addressed to the Rev. Jeremy Belknap, of hoston.

DEAR SIR,

T is now feveral months, fince I promifed to give you my reafons for preferring the bible as a fchool book, to all other compositions. I shall not trouble you with an apology for my delaying fo long to comply with my promife, but shall proceed immediately to the subject of my letter.

Before I flate my arguments in favour of teaching children to read by means of the bible, I fhall affume the five following propositions.

I. That chriftianity is the only true and perfect religion, and that in proportion as mankind adopt its principles, and obey its precepts, they will be wife, and happy.

II. That a better knowledge of this religion is to be acquired by reading the bible, than in any other way.

III That the bible contains more knowledge neceffary to man in his prefent state, than any other book in the world. IV. That knowledge is most durable, and religious instruction most useful, when imparted in early life,

V. That the bible, when not read in fchools, is feldom read in any fubfequent period of life.

My arguments in favor of the ufe of the bible as a fchool book are founded, I. In the conftitution of the human mind.

1. The memory is the first faculty which opens in the minds of children. Of how much confequence, then, must it be, to imprefs it with the great truths of christianity, before it is pre-occupied with lefs interesting fubjects! As all the liquors, which are poured into a cup, generally taste of that which first filled it, fo all the knowledge, which is added to that which is treasfured 'up in the memory from the bible, generally receives an agreeable and useful tincture from it.

2. There is a peculiar aptitude in the minds of children for religious knowledge. I have conftantly found them in the first fix or feven years of their lives, more inquisitive upon religious subjects, than upon any others: and an ingenious instructor of youth has informed me, that he has found young children more capable of receiving just ideas upon the most difficult tenets of religion, than upon the most fimple branches of human knowledge. It would be ftrange if it were otherwise; for God creates all his means to fuit all his ends. There must of course be a fitness between the

94

human mind, and the truths which are effential to its happinefs.

3. The influence of *prejudice* is derived from the imprefions, which are made upon the mind in early life; prejudices are of two kinds, true and falfe. In a world where *falfe* prejudices do fo much mifchief, it would difcover great weaknefs not to oppose them, by fuch as are *true*.

I grant that many men have rejected the prejudices derived from the bible : but I believe no man ever did fo, without having been made *wifer* or *better*, by the early operation of thefe prejudices upon his mind. Every juft principle that is to be found in the writings of Voltaire, is borrowed from the Bible : and the morality of the Deifts, which has been fo much admired and praifed, is, I believe, in most cafes, the effect of habits, produced by early inftruction in the principles of chriftianity.

4. We are fubject, by a general law in our natures, to what is called *habit*. Now if the fludy of the feriptures be neceffary to our happinefs at any time of our lives, the fooner we begin to read them, the more we fhall be attached to them; for it is peculiar to all the acts of habit, to become eafy, ftrong and agreeable by repetition.

5. It is a law in our natures, that we remember langest the knowledge we acquire by the greatest number of our fenfes. Now a knowledge of the contents of the bible, is acquired in fchool by the aid of the eyes and the ears; for children after getting their leffons, always fay them to their mafters in an audible voice; of courfe there is a prefumption, that this knowledge will be retained much longer than if it had been acquired in any other way.

6. The interefting events and characters, recorded and deferibed in the Old and New Teftaments, are accomodated above all others to feize upon all the faculties of the minds of children. The underftanding, the memory, the imagination, the paffions, and the moral powers, are all occafionally addreffed by the various incidents which are contained in those divine books, infomuch that not to be delighted with them, is to be devoid of every principle of pleafure that exifts in a found mind.

7. There is a native love of *truth* in the human mind. Lord Shaftefbury fays, that "truth is fo con-"genial to our minds, that we love even the *fbadow* "of it:" and Horace, in his rules for composing an epick poem, eftablishes the fame law in our natures, by advising the "fictions in poetry to refemble truth." Now the bible contains more truths than any other book in the world: fo true is the testimony that it bears of God in his works of creation, providence, and redemption, that it is called *truth* itfelf, by way of preeminence above things that are only fimply true. How

96

forcibly are we firuck with the evidences of truth, in the hiftory of the Jews, above what we difcover in the hiftory of other nations? Where do we find a hero, or an hiftorian record his own faults or vices except in the Old Teftament? Indeed, my friend, from fome accounts which I have read of the American revolution, I begin to grow fceptical to all hiftory except to that which is contained in the bible. Now if this book be known to contain nothing but what is materially true, the mind will naturally acquire a love for it from this circumftance : and from this affection for the truths of of the bible, it will acquire a difcernment of truth in other books, and a preference of it in all the tranfactious of life.

VIII. There is a wonderful property in the *memory*, which enables it in old age, to *recover* the knowledge it had acquired in early life, after it had been apparently forgotten for forty or fifty years. Of how much confequence, then, muft it be, to fill the mind with that fpecies of knowledge, in childhood and youth, which, when *recalled* in the decline of life, will fupport the foul under the infirmities of age, and fmooth the avenues of approaching death? The bible is the only book which is capable of affording this fupport to old age; and it is for this reafon that we find it referted to with fo much diligence and pleafure by fuch old people as have read it in early life. I can recollect many inflances of this kind in perfons who difcovered no attachment to the bible, in the meridian of their lives, who have notwithstanding, spent the evening of them, in reading no other book. The late Sir John Pringle, Physician to the Queen of Great Britain, after passing a long life in camps and at court, closed it by studying the scriptures. So anxious was he to increase his knowledge in them, that he wrote to Dr. Michaelis, a learned professer of divinity in Germany, for an explanation of a difficult text of scripture, a schort time before his death.

IX. My fecond argument in favour of the ufe of the bible in fchools, is founded upon an implied command of God, and upon the practice of feveral of the wifeft nations of the world.—In the 6th chapter of Deuteronomy, we find the following words, which are directly to my purpofe, "And thou fhalt love the "Lord thy God, with all thy heart and with all thy "foul, and with all thy might. And thefe words "which I command thee this day fhall be in thine "heart. And thou *fbalt teach them diligently unto thy* "*children*, and fhalt talk of them when thou fitteft in "thine houfe, and when thou walkeft by the way, "and when thou lieft down, and when thou rifeft "up."

It appears, moreover, from the hiftory of the Jews, that they flourifhed as a nation, in proportion as they honoured and read the books of Mofes, which contained, a written revelation of the will of God, to the children of men. The law was not only neglected, but loft during the general profligacy of manners which accompanied the long and wicked reign of Manaffah. But the difcovery of it, in the rubbifh of the temple, by Jofiah, and its fubfequent general ufe, were followed by a return of national virtue and profperity. We read further, of the wonderful effects which the reading of the law by Ezra, after his return from his captiviy in Babylon, had upon the Jews. They hung upon his lips with tears, and fhowed the fincerity of their repentance, by their general reformation.

The learning of the Jews, for many years confifted in nothing but a knowledge of the feriptures. These were the text books of all the inftruction that was given in the fchools of their prophets. It was by means of this general knowledge of their law, that those Jews that wandered from Judea into our countries, carried with them and propagated certain ideas of the true God among all the civilized nations upon the face of the earth. And it was from the attachment they retained to the old Testament, that they procured a tranflation of it into the Greek language, after they loft the Hebrew tongue, by their long abfence from their native country. The utility of this translation, commonly called the feptuagint, in facilitating the progrefs of the gofpel, is well known to all who are acquainted with the hiftory of the first age of the christian church.

DEFENCE OF THE USE OF THE

But the benefits of an early and general acquaintance with the bible, were not confined only to the Jewish nations. They have appeared in many countries in Europe, fince the reformation. The industry, and habits of order, which diftinguish many of the German nations, are derived from their early inftruction in the principles of christianity, by means of the bible. The moral and enlightened character of the inhabitants of Scotland, and of the New England States, appears to be derived from the fame caufe. If we defeend from nations to fects, we fhall find them wife and profperous in proportion as they become early acquainted with the fcriptures. The bible is still used as a school book among the quakers. The morality of this fect of chriftians is univerfally acknowledged. Nor is this all, -their prudence in the management of their private affairs, is as much a mark of their fociety, as their fober manners.

I wifh to be excufed for repeating here, that if the bible did not convey a fingle direction for the attainment of future happines, it should be read in our schools in preference to all other books, from its containing the greatest portion of that kind of knowledge which is calculated to produce private and publick temporal happines.

We err not only in human affairs, but in religion likewife, only becaufe " we do not know the feriptures." The opposite fystems of the numerous fects of christians

arife chiefly from their being more inftructed in catechifms, creeds, and confessions of faith, than in the fcriptures. Immenfe truths, I believe, are concealed in them. The time, I have no doubt, will come, when posterity will view and pity our ignorance of these truths, as much as we do the ignorance of the disciples of our Saviour, who knew nothing of the meaning of those plain paffages in the old testament which were daily fulfilling before their eyes. Whenever that time shall arrive, those truths which have escaped our notice, or, if difcovered, have been thought to be oppofed to each other, or to be inconfistent with themfelves, will then like the ftones of Solomon's temple, be found to exactly to accord with each other, that they shall be cemented without noife or force, into one fimple and fublime fystem of religion.

But further, we crr, not only in religion but in philofophy likewife, becaufe we "do not know or believe. "the feriptures." The feiences have been compared to a circle of which religion composes a part. To underftand any one of them perfectly it is neceffary to have fome knowledge of them all. Bacon, Boyle, and Newton included the feriptures in the inquiries to which their univerfal geniufes disposed them, and their philosophy was aided by their knowledge in them. A ftriking agreement has been lately discovered between the history of certain events recorded in the bible and fome of the operations and productions of nature, particularly those which are related in Whitchurft's observations on the deluge— in Smith's account of the origin of the variety of colour in the human fpecies, and in Bruce's travels. It remains yet to be fhown how many other events, related in the bible, accord with fome late important difcoveries in the principles of medecine. The events, and the principles alluded to, mutually eftablish the truth of each other. From the difcoveries of the chriftian philosophers, whose names have been last mentioned, I have been led to question whether most harm has been done to revelation, by those divines who have unduly multiplied the objects of faith, or by those deifts who have unduly multiplied the objects of reason, in explaining the foriptures.

I fhall now proceed to answer fome of the objections which have been made to the use of the bible as a school book.

I. We are told, that the familiar ufc of the bible in our fchools, has a tendency to leffen a due reverence for it. This objection, by proving too much, proves nothing at all. If familiarity leffens refpect for divine things, then all those precepts of our religion, which enjoin the daily or weekly worfhip of the Deity, are improper. The bible was not intended to reprefent a Jewish ark; and it is an antichristian idea, to suppose that it can be profaned, by being carried into a school house, or by being handled by children. But where will the bible be read by young people with more reverence than in a school? Not in most private families; for I believe there are few parents, who pre-

ferve fo much order in their houfes, as is kept up in our common English fchools.

II. We are told, that there are many paffages in the old testament, that are improper to be read by children, and that the greatest part of it is no way interefting to mankind under the prefent difpenfation of the gospel. There are I grant, feveral chapters, and many verfes in the old teftament, which in their present unfortunate translation, should be passed over by children. But I deny that any of the books of the old testament are not interesting to mankind, under the gospel dispensation. Most of the characters, events, and ceremonies, mentioned in them, are perfonal, providential, or inftituted types of the Meffiah: All of which have been, or remain yet to be, fulfilled by him. It is from an ignorance or neglect of thefe types, that we have fo many deifts in chriftendom; for fo irrefragably do they prove the truth of christianity, that I am fure a young man who had been regularly instructed in their meaning, could never doubt afterwards of the truth of any of its principles. If any obfcurity appears in these principles, it is only (to use the words of the poet) because they are dark, with exceffive bright.

I know there is an objection among many People to teach children doctrines of any kind, becaufe they are liable to be controverted. But where will this objection lead us?— The being of a God, and the obligations of morality, have both beercontroverted; and yet who has objected to our teaching thefe doctrines to our chilldren?

The curiofity and capacities of young people for the mysteries of religion, awaken much fooner than is generally supposed. Of this we have two remarkable proofs in the old testament. The first is mentioned in the twelfth chapter of Exodus. " And it shall come when your children shall fay unto you, " What mean you by this fervice ?" that ye fhall fay, " It is the facra-" fiee of the Lord's paffover, who paffed over the houfes " of the children of Ifrael in Egypt, when he fmote the " Egyptians, and delivered our houfes. And the chil-" dren of Ifrael went away, and did as the Lord had " commanded Mofes and Aaron." A fecond proof of the defire of children to be instructed in the mysteries of religion, is to be found in the fixth chapter of Deuteronomy. " And when thy fon afketh thee in the time to come faying, " What mean the teftimonies-and the " ftatutes-and the judgments which the Lord our God " hath commanded you ?" Then thou shalt fay unto thy fon, "We were Pharoah's bondmen in Egypt, and " the Lord our God brought us out of Egypt with a " mighty hand." Thefe enquiries from the mouths of children are perfectly natural; for where is the parent who has not had fimilar queftions propofed to him by his children upon their being being first conducted to a place of worship, or upon their beholding, for the first time, either of the facraments of our religion ?

Let us not not be wifer than our Maker. If moral precepts alone could have reformed mankind, the miffion of the Son of God into our world, would have been unnecessary. He came to promulgate a system of dostrines, as well as a fystem of morals. The perfect morality of the gospel refts upon a doctrine, which, though often controverted, has never been refuted, I mean the vicarious life and death of the Son of God. This fublime and ineffable doctrine delivers us from the abfurd hypothefes of modern philosophers, concerning the foundation of moral obligation, and fixes it upon the eternal and fell moving principle of LOVE. It concentrates a whole fyftem of ethics in a fingle text of fcripture. " A new commandment I give unto you, that ye love one another, even as I have loved you." By witholding the knowledge of this doctrine from children, we deprive ourfelves of the best means of awakening moral fenfibility in their minds. We do more, we furnish an argument, for witholding from them a knowledge of the morality of the gofpel likewife; for this, in many inftances, is as fupernatural, and therefore as liable to be controverted, as any of the doctrines or miracles which are mentioned in the new testament. The miraculous conception of the faviour of the world by a virgin, is not more oppofed to the ordinary courfe of natural events, nor is the doctrine of the atonement more above human reafon, than those moral precepts, which command us to love our enemies, or to die for our friends.

P

III. It has been faid, that the division of the bible into chapters and verfes, renders it more difficult to be read, by children than many other books.

By a little care in a mafter, this difficulty may be obviated, and even an advantage derived from it. It may ferve to transfer the attention of the fcholar to the sense of a fubject; and no perfon will ever read well, who is guided by any thing elfe, in his ftops, emphasis, or accents. The division of the bible into chapters and verfes, is not a greater obstacle to its being read with eafe, than the bad punctuation of most other books. I deliver this ftricture upon other books, from the authority of Mr. Rice, the celebrated author of the art of fpeaking, whom I heard declare in a large company in London, that he had never feen a book properly pointed in the English Language. He exemplified, notwithstanding, by reading to the fame company a paffage from Milton, his perfect knowledge of the art of reading.

Some people, I know, have proposed to introduce extracts from the bible, into our fchools, inftead of the bible itfelf. Many excellent works of this kind, are in print, but if we admit any one of them, we shall have the fame inundation of them that we have had of grammars, spelling books, and lessons for children, many of which are published for the benefit of the authors only, and all of them have tended greatly to increase the expence of education. Befides, these extracts or abridgements of the bible, often contain the tenets of particular fects or perfons, and therefore, may be improper for fchools composed of the children of different fects of christians. The bible is a cheap book, and is to be had in every bookstore. It is, moreover, esteemed and prefered by all fects; because each finds its peculiar doctrines in it. It should therefore be used in preference to any abridgements of it, or histories extracted from it.

I have heard it proposed that a portion of the bible fibuli be read every day by the mafter, as a means of inftructing children in it : But this is a poor fubflitute for obliging children to read it as a fchool book ; for by this means we infenfibly *engrave*, as it were, its contents upon their minds : and it has been remarked that children, inftructed in this way in the fcriptures, feldom forget any part of them. They have the fame advantage over those perfons, who have only heard the fcriptures read by a mafter, that a man who has worked with the tools of a mechanical employment for feveral years, has over the man who has only flood a few hours in a work flop and feen the fame bufines carried on by other people.

In this defence of the ufe of the bible as a fehool book, I beg you would not think that I fappofe the Bible to contain the only revelation which God has made to man. I believe in an internal revelation, or a moral

principle, which God has implanted in the heart of every man, as the precurtor of his final dominion over the whole human race. How much this internal revelation accords with the external, remains yet to be explored by philosophers. I am disposed to believe, that most of the doctrines of christianity revealed in the bible might be difcovered by a clofe examination of all the principles of action in man : But who is equal to fuch an enquiry ? It certainly does not fuit the natural indolence, or laborious employments of a great majority of mankind. The internal revelation of the gofpel may be compared to the ftraight line which is made through a wildernefs by the affiftance of a compafs, to a diftant country, which few are able to difcover, while the bible re'embles a public road to the fame country, which is wide, plain, and cafily found. " And a highway fhall be there, and it fhall be called the way of holinefs. The way faring men, though fools, fhall not err therein."

Neither let mc in this place exclude the Revelation which God has made of himfelf to man in the works of creation. I am far from wifhing to leffen the influence of this fpecies of Revelation upon mankind. But the knowledge of God obtained from this fource, is obfcure and feeble in its operation, compared with that which is derived from the bible. The vifible creation fpeaksof the Deity in hyeroglyphics, while the bible defcribes all his attributes and perfections in fuch plain, and familiar language that " he who runs may "read."

How kindly has our maker dealt with his creatures, in providing three different cords to draw them to himfelf! But how weakly do fome men act, who fufpend their faith, and hopes upon only one of them ! By laying hold of them all, they would approach more fpeedily and certainly to the centre of all happinefs.

To the arguments I have mentioned in favour of the use of the bible as a school book, I shall add a few reflections.

The prefent fashionable practice of rejecting the bible from our fchools, I fuspect has originated with the deifts. They difference great ingenuity in this new mode of attacking christianity. If they proceed in it, they will do more in half a century, in extirpating our religion, than Bolingbroke or Voltaire could have effected in a thousand years. I am not writing to this clafs of people. I defpair of changing the opinions of any of them. I wish only to alter the opinions and conduct of those lukewarm, or superflitious christians, who have been misled by the deifts upon this subject. On the ground of the good old custom, of using the bible as a school book, it becomes us to entrench our religion. It is the last bulwark the deifts have left it; for they have rendered instruction in the principles

110 DEFENCE OF THE USE OF THE

of chriftianity by the pulpit and the prefs, fo unfafhionable, that little good for many years feems to have been done by either of them.

The effects of the difuse of the bible, as a school book have appeared of late in the neglect and even contempt with which fcripture names are treated by many people. It is becaufe parents have not been early taught to know or respect the characters and exploits of the old and new testament worthies, that their names are exchanged for those of the modern kings of Europe, or of the principal characters in novels and romances. I conceive there may be fome advantage in bearing fcripture names. It may lead the perfons who bear them, to fludy that part of the fcriptures, in which their names are mentioned, with uncommon attention, and perhaps it may excite a defire in them to poffefs the talents or virtucs of their ancient namefakes. This remark first occurred to me, upon hearing a pious woman whofe name was Mary, fay, that the first passages of the bible, which made a ferious impreffion on her mind, were those interefting chapters and verfes in which the name of Mary is mentioned in the New Teftament.

It is a fingular fact, that while the names of the kings and emperors of Rome, are now given chiefly to *harfes* and *dogs*, foripture names have hitherto been confined only to the human fpecies. Let the enemies and contemners of those names take care, left the names of more modern kings be given hereafter only to the fame animals, and left the names of the modern heroines of romances be given to animals of an inferior fpecies.

It is with great pleafure, that I have obferved the bible to be the only book read in the Sunday fchools in England. We have adopted the fame practice in the Sunday fchools, lately eftablifhed in this city. This will give our religion (humanly fpeaking) the chance of a longer life in our country. We hear much of the perfons educated in free fchools in England, turning out well in the various walks of life. I have enquired into the caufe of it, and have fatisfied myfelf, that it is wholly to be aferibed to the general ufe of the bible in thofe fchools, for it feems the children of poor people are of too little confequence to be guarded from the fuppofed evils of reading the feriptures in early life, or in an unconfectated fchool houfe.

However great the benefits of reading the feriptures in fchools have been, I cannot help remarking, that thefe benefits might be much greater, did fchoolmafters take more pains to explain them to their fcholars. Did they demonstrate the divine original of the bible from the purity, confiftency, and benevolence of its doctrines and precepts—did they explain the meaning of the levitical inflitutions, and fhow their application to the numerous and fuceflive gofpel difpenfations—did they inform their pupils that the grefs and abominable vices

112 DEFENCE OF THE USE OF THE

of the Jews were recorded only as proofs of the depravity of human nature, and of the infufficiency of the law, to produce moral virtue and thereby to eftablish the neceflity and perfection of the gospel fystem -and above all, did they often enforce the difcourses of our Saviour, as the best rule of life, and the furest guide to happinefs, how great would be the influence of our fehools upon the order and profperity of our country ! Such a mode of inftructing children in the chriftian religion, would convey knowledge into their underflandings, and would therefore be preferable to teaching them creeds, and catechifms, which too often convey, not knowledge, but words only, into their memories. I think I am not too fanguine in believing, that education, conducted in this manner, would, in the course of two generations, eradicate infidelity from among us, and render civil government fcarcely neceffary in our country.

In contemplating the political inftitutions of the United States, I lament, that we wafte fo much time and money in punifhing crimes, and take fo little pains to prevent them. We profefs to be republicans, and yet we negled the only means of eftablifhing and perpetuating our republican forms of government, that is, the univerfal education of our youth in the principles of chriftianity, by means of the bible; for this divine book, above all others, favours that equality among mankind, that refpect for juft laws, and all those fober and frugel virtues, which conftitute the foul of republicanifm.

I have now only to apologize for havging addreffed this letter to you, after having been affured by you, that your opinion, refpecting the ufe of the bible as a fchool book, coincided with mine. My excufe for what I have done is, that I knew you were qualified by your knowledge, and difpofed by your zeal in the caufe of truth, to correct all the errors you would difcover in my letter. Perhaps a further apology may be neceflary for my having prefumed to write upon a fubject fo much above my ordinary ftudies. My excule for it is, that I thought a fingle mite from a member of a profession, which has been frequently charged with fcepticifm in religion, might attract the notice of perfons who had often overlooked the more ample contributions upon this fubject, of gentlemen of other profettions. With great refpect, I am, dear fir, your fincere friend.

BENJAMIN RUSH. Philadelphia, March 10, 1791. An address to the ministers of the gospel or every denomination in the united states, upon Subjects interesting to morals.

ROM the nature of your purfuits, and from your influence in fociety, I am encouraged to addrefs you upon fubjects of the utmost importance to the prefent and future happiness of your fellow-citizens, as well as to the prosperity of the United States.

Under the great diverfity of opinions, you entertain in religion, you are all united in inculcating the neceffity of morals. In this bufinefs you are neither catholics nor proteftants—churchmen nor diffenters. One fpirit actuates you all. From the fuccefs, or failure, of your exertions in the caufe of virtue, we anticipate the freedom or flavery of our country. Even the new government of the united flates, from which fo many advantages are expected, will neither reftore order, nor eftablifh juffice among us, unlefs it be accompanied and fupported by morality, among all claffes of people. Impreffed with a fenfe of the truth of thefe obfervations, I fhall briefly point out a few of thofe practices, which prevail in America, which exert a pernicious influence upon morals, and thereby prepare our country for mifery and flavery.

I shall begin by pointing out, in the first place, the mischevious effects of spirituos liquors upon the morals of our citizens.

I. They render the temper previfh and passionate. They beget quarrels, and lead to profane and indecent language. They are the parents of idlenefs and extravagance, and the certain forerunners of poverty, and frequently of jails, wheelbarrows, and the gallows. They are likewife injurious to health and life, and kill more than the pestilence, or the fword. Our legiflatures, by premitting the use of them, for the fake of the paltry duty collected from them, act as abfurdly as a prince would do, who fhould permit the cultivation of a poifonous nut, which every year carried off ten thousand of his subjects, because it yielded a revenue of thirty thousand pounds a year. These ten thousand men would produce annually by their labour, or by paying a trifling impost upon any one of the neceffaries of life, twenty times that fum. In order to put an end to the defolating effects of fpirituous liquors, it will be proper for our ministers to preach against, not the abufe of them only, but their use altogether. They are never neceffary but in ficknefs : and then they are better applied to the outfide, than to the infide of the body.

If Militia laws have an unfriendly influence upon morals, more efpecially where they authorife the election of the officers by the privates. The meetings of citizens for militia exercifes are generally attended with intemperance in drinking, quarrelling, profane fwearing, and acts of violence to the property of the perfons who live near the places where those meetings are held. It is a militake to fuppofe that the defence of liberty requires a well organized militia in the time of peace.

The United States proved in the beginning of the late war, and France has proved fince, that armies of difciplined irrefiftable troops may be formed in a flort time out of the peafants of a country. War has lately become a fimple art. All that is practical in it, may be acquired in a few weeks. The moft gallant exploits were performed during the late war, by men who had been but a few days in the practice of handling fire arms.

III. Fairs are a Pandora's box opened twice a year, in many of the flates. They are wholly unneceffary, fince fhops are fo common in all the civilized parts of the country. They tempt to extravagance—gaming —drunkennefs—and uncleannefs. They are proper only in defpotic flates, where the more a people are corrupted, the more readily they fubmit to arbitrary government.

IV. Law-fuits fhould be difcouraged as much as poffible. They are highly difreputable between perfons

who profe's chriftianity. The attendance upon courts exposes to idleness—drinking—and gaming; and the ufual delays of juftice feldom fail of entailing hereditary difcord among neighbours. It is with inexpressible pleafure that I have lately feen an account of a recommendation from the presbyterian fynod of New-York and Philadelphia, to all the churches under their care, to fettle their disputes after the manner of the primitive christians and friends, by arbitration. Blessed event in the history of mankind! may their practice spread among all fects of christians, and may it prove a prelude of that happy time foretold in the feriptures, when wer and murder shall be no more.

V. The licentioufnefs of the prefs is a fruitful fource of the corruption of morals. Men are deterred from injuring each other, chiefly by the fear of detection or punifhment. Now both of thefe are removed by the ufual feerecy of a licentious prefs. Hence revenge, feandal, and falfehood are cherifled and propagated in a community. By means of this engine of malice, we fometimes fee not only reputation but even life, itfelf, taken away. The patriotic Mr. Cummins, and the amiable Dr. Hawkefworth, it is faid, both died of a broken heart, in confequence of being attacked by perfons, who concealed themfelves behind a licentious prefs in London. Perfonal difputes and attacks in a newfpaper, may be compared to duels, or to the Indian mode of fighting, according as they are carried on with, or without the names of their authors. They flew in both cafes, a degree of the fame fpirit, which leads to open murder or private affaffination. But further : the caufe of liberty is greatly injured by perfonal publications, which are not true, or which have no connection with the public; for who will believe a truth that is told of a bad man, who has been accuftomed to read falfehoods publifhed every day, of a good man? Printers who vend feurrility, would do well in confidering, that the publifher of feandal, is as bad as the author of it, in the fame manner that the receiver of ftolen goods, is as bad as the thief.

VI. Horfe-racing and cock-fighting are unfriendly amufements to morals, and of courfe to the liberties of our country. They occasion idlenefs, fraud, gaming, and profane fwearing, and harden the heart against the feelings of humanity. These vulgar sports should be forbidden by law in all christian and republican countries.

VII. Clubs of all kinds, where the only bufinefs of the company, is feeding (for that is true name of a gratification that is fimply animal) are hurtful to morals. The fociety in taverns where clubs are ufually held, is feldom fubject to much order. It expofes men to idlenefs, prodigality, and debt. It is in private families, only that fociety is innocent, or improving. Here manners are ufually kept within the bounds of decency by the company of females, who generally compofe

OF EVERY DENOMINATION.

a part of all private families; and manners, it is well known, have an influence upon morals.

VIII. Amusements of every kind, on Sundays, beget habits of idlenefs and a love of pleafure, which extend their influence to every day of the week. In those manufacturing towns in England, where the Sundays are fpent in idlenefs or froli king, little or no work is ever done on the enfuing day; hence it is called St. Monday. If there were no hereafter-individuals and focieties would be great gliners, by attending public worfhip every Sunday. Reft from labour in the houfe of God, winds up the machine of both foul and body, better than any thing elfe, and thereby invigorates it for the labours and duties of the enfuing week. Should I ever travel into a chriftian country, and with to know whether the laws of that country were wife and juft, and whether they were duly obeyed, the only queftion I would afk, fhould be " do the people fpend Sunday at church, or in pleafurable entertainments at home and abroad ?" the Sunday fchcols in England have been found extremely useful in reforming the children of Who can witnefs the practices of poor people. fwimming, fliding and feating, which prevail fo univerfally on Sundays, in most of the cities of the United States, and not wifh for fimilar inftitutions to refcues our poor children from destruction ? I shall conclude my remarks upon this fubject, by declaring, that I do not wifh to fee any new laws made to enforce the keeping

of the Sabbath. I call upon minifters of the gofpel only, to increafe and extend, by their influence, the pure and ufeful fpirit of their religion. In riding through our country, we may always tell, by the appearance of the people we meet with on the road, or fee at taverns, whether they enjoy the benefit of public worfhip, and of a vigilant and faithful miniftry. Where a fettlement enjoys thefe ineftimable befings, we generally find taverns deferted on a Sunday, and a ftillnefs pervading the whole neighbourhood, as if nature herfelf had ceafed from her labours, to fhare with man in paying her weekly homage to God for his creating goodnefs

Thus I have briefly pointed out the principal fources of vice in our country. They are all of a public nature, and affect, in a direct manner, the general interefts of fociety. I fhall now fuggeft a few fources of vice, which are of a domeftic nature, and which indirectly affect the happinefs of our country.

I. The frequent or long abfence of the mafter and miftrefs from home, by diffolving the bounds of domeftic government, proves a fruitful fource of vice among children and fervants. To prevent in fome degree, the inconveniencies which arife from the neceffary abfence of the heads of a family, from home, it would be a good practice to inveft the eldeft fon or daughter, when of a fuitable age, with the government of the family and to make them refponfible for their conduct, upon the return of their parents. Government in a family is like an electric rod to a houfe. Where it is wanting a family is exposed to the attacks of every folly and vice, that come within the fphere of its attraction.

II. Frequent and large entertainments weaken domeftic government, by removing children and fervants too long from the eye of authority. They moreover, expose children and fervants to the temptation of eatting and drinking to excefs.

III. Boys and girls fhould never be admitted as fervants—into a genteel family. They are feldom inftructed properly, by their mafters or miftreffes. Their leifure hours are moreover fpent in bad company: and all the vices which they pick up, are fpread among the children of the family, who are generally more prone to affociate with them, than with any other. Where poverty or death makes it neceffary to bind out children, they fhould be bound to thofe perfons only, who will work with them. By thefe means, they will be trained to induftry, and kept from idlenefs and vice.

IV. Servants, both male and female fhould always be hired by the year, otherwife no proper government can be eftablished over them. The impertinence and irregular conduct of fervants, arife from their holding their places by too fhort a tenure. It would be a good law to fine every perfon, who hired a fervant, without a written good character, figned by his last master,

R

and counterfigned by a magistrate. This practicewould foon drive bad fervants out of the civilized parts of our country and thereby prevent much evil both in families and fociety. How many young men and women have carried through life the forrowful marks in their confeiences or characters, of their being early initiated into the mysteries of vice, by unprincipled fervants of both fexes ! Servants that are married, should be preferred to fuch as are fingle. Matrimony in all ranks of people leffens the temptation to vice, and furrishes fresh motives to just conduct:

V. Apprentices fhould always board and lodge, if poffible, with their mafters and miftreffes, when they are feparated from their parents. Young people feldom fall into bad company in the day time. It is in the evening, when they ceafe to be fubject to government, that they are in the most danger of corruption : and this danger can be obviated only by fubjecting all their hours to the direction of their mafters or mistreffes.

I fhall conclude this addrefs, by fuggefting to minifters of the gofpel, a plan of a new fpecies of federal government for the advancement of morals in the United States. Let each fect appoint a reprefentative in a general convention of chriftians, whofe bufinefs fhall be, to unite in promoting the general objects of chriftianity. Let no matters of faith or opinion ever be introduced into this convention, but let them be confider-

ed as badges of the fovereignty of each particular fect. To prevent all difputes, let the objects of the deliberations of this general convention be afcertained with the fame accuracy, that the powers of the national government are defined in the new constitution of the United States. By this previous compact, no encroachments will ever be made by the general government, upon the principles-difcipline-or habits of any one fectfor in the prefent state of human nature, the division of chriftians into fects, is as necessary to the existence and prefervation of christianity, as the division of mankind into nations, and of nations into feparate families are neceffary to promote general and private happinefs. By means of fuch an inftitution, chriftian charity will be promoted, and the difcipline of each church will be ftrengthened-for I would propofe, that a difmiffion for immorality, from any one church, fhould exclude a man from every church in the ecclefiaftical union. But the advantages of this chriftian convention will not end here. It will poffefs an influence over the laws of the United States. This influence will differ from. that of most of the ecclesiastical affociations that have existed in the world. It will be the influence of reason over the passions of men. Its objects will be morals, not principles, and the defign of it will be, not to make men zealous members of any one church, but to make them—good neighbours—good hufbands—good fathers -good mafters-good fervants-and of courfe good

124 ADDRESS TO THE MINISTERS, &c.

rulers and good citizens. The plan is certainly a practicable one. America has taught the nations of Europe by her example to be free, and it is to be hoped fhe will foon teach them to govern themfelves. Let her advance one ftep further—and teach mankind, that it is poffible for chriftians of different denominations to love each other, and to unite in the advancement of their common interefts. By the gradual operation of fuch natural means, the kingdoms of this world are probably to become the kingdoms of the prince of righteoufnefs and peace.

Philadelphia, June 21, 1788.

An enquiry into the consistency of oaths with reason and christianity.

IN difcuffing this queftion, I shall first mention the objections to oaths, which are founded in reason; and, fecondly, the objections to them which are derived from the precepts and spirit of the christian religion.

I. Oaths produce an idea in the minds of men, that there are two kinds or degrees of truth; the one intended for common, and the other for folemn occasions. Now, this idea is directly calculated to beget a want of reverence for the inferior kind of truth ; hence men are led to trifle with it in the common affairs of human life. I grant that fome men will tell the truth, when urged to it by the folemn formalities of an oath, who would not otherwife do it : But this proves the great mifchief of oaths in fociety; for as men are called upon to fpeak the truth 999 times in common life, to once they are called upon to fwear to it, we have exactly 999 falfehoods to one truth told by them. How extensive, then, must be the mischief of this great difproportion between truth and falfehood, in all the affairs of human life ! It is wrong to do

ON OATHS.

any thing that fhall create an idea of two kinds of truth. There is a fcale of falfehoods; but truth has no degrees or fubdivitions. Like its divine author, it is an eternal unchangeable UNIT.

II. The practice of fwearing according to human laws, appears to be the caufe of all profane fwearing, which is fo univerfal among all ranks of people in common converfation; for if there are two modes of fpeaking the truth, it is natural for men to prefer that mode which the laws of our country have entitled to the first degree of credibility: hence men fwear, when they wifh to be believed, in common converfation.

III. Oaths have been multiplied upon fo many triffing occasions, that they have ceased, in a great degree, to operate with any force upon the most folemn occasions: hence the universal prevalence of *perjury* in courts, armies and custom-houses, all over the world. This fact is fo notorious in Jamaica, that a law has lately been passed in that island, which requires a bond of $f_{2,200}$, instead of an oath, from every captain that enters his vessel in the custom-house, as a fecurity for his veracity in the manifest of his cargo, and for the amount of his duties to the government.

Reafon and fcripture (when perfectly underftood) are never *contrary* to each other; and revelation from God can never give a fanction to that which is fo

evidently abfurd, and unfriendly to the interefts of human fociety. Let us proceed then to examine the bible, and here we fhall find, that oaths are as contrary to the precepts and fpirit of christianity as they are to found reafon.

Before I mention either the precepts or the fpirit of the gofpel, which militate against oaths, I shall mention a few of the cases of swearing which I find upon record in the New Testament. I shall first mentions the precedents in favour of this practice, and then the precepts and precedents against it.

The *first* precedent I fhall produce, is taken from the example of the devil, who addreffes our Saviour in an oath, in Mark v. 7. "What have I to do with thee, Jefus, thou fon of the most high God? I adjure thee by God that thou torment me not."

A *fecond* precedent is taken from the example of the high prieft, who addreffes our Saviour in an oath in Matthew, xxvi. 63. "I adjure thee," fays he, juff before he confents to his death, "by the *living God*, that thou tell us whether thou be the Chrift the fon of God." It has been faid that there was no impropriety in this mode of expreffion, otherwife our Saviour would have rebuked it; but let it be remembered, that he ftood before the tribunal of a highprieft, as a *prifoner*, and **not** as a *teacher*; and hence we find he fubmits in *filence* to all the prophane infults that were offered him. In this filent fubmiffi-

ON OATHS.

on to infult, he moreover fulfilled an ancient prophefy "he is brought as a lamb to the flaughter and as a fheep before his fhearers is dumb, fo he openeth not his mouth" Ifaiah LIII. 7.

Peter furnifhes a *third* inftance of fwearing. "And again he *denied*" (fays Matthew, chap. xxv1. 72.) "with an *oath*, I know not the man." It would feem from this account, that a bare *affirmation* was fo characteriftic of a disciple of Jefus Chrift, that Peter could not use a more direct method to convince the maid, who charged him with being a follower of Jefus of Nazareth, that he was *not* a *chriftian*, than by having recourfe to the Jewish and pagan practice of taking an oath.

Herod furnishes a *fourth* instance of swearing, in Matthew XIV. 7, when he promifed to give the daughter of Herodias whatever she should ask of him: she asked for John the baptist's head in a charger: the king repented of his hasty promise; "neverthelefs, for the oath's fake, and them which fat with him at meat, he commanded it to be given her." Here it is evident he would have violated a common promise. But if common promises are not held facred, and binding, there is an end of a great portion of truth in fociety, and of all the order and happiness which arise from it. To secure constant and universal truth, men should five a *always* or not at all.

A *fifth* precedent for fwearing we find in the xix of Acts and 13th verfe. "Then certain of the vagabond Jews, exorcifts, took upon them to call over them which had evil fpirits, the name of the Lord Jefus, faying, *we adjure thee*, by Jefus whom Paul preacheth. And the man in whom the evil fpirit was, leaped on them, and overeame them; fo that they fied out of the houfe naked and wounded."

The *laft* precedent for fwearing that I fhall mention, is the one related in Acts xxiii. 21ft. It contains an account of forty men who had bound themfelves, by *an oath*, not to eat or drink, until they had killed St. Paul. It would feem that this banditti knew each other perfectly, and that they would not act together under the form of a common obligation. The occafion indeed, feems to require an oath. It was an affociation to commit murder. I am difpofed to fufpect that oaths were introduced originally to compel men to do things that were contrary to juffice, or to their conficiences.

In mentioning the precepts and precedents that are to be found in the new teftament againft fwearing, the following ftriking paffage, taken from Matthew v. verfes 34, 35, 36, 37, fhould alone determine the queftion. "Swear not at all, neither by heaven, for it is God's throne; nor by the earth, for it is his footftool; nor by Jerufalem, for it is the city of the

S

ON OATHS.

great king. Neither shalt thou swear by thy head, because thou canst not make one hair white or black But let your communication be yea, yea; nay, nay; for whatsoever is more than these, cometh of evil."

The words of the apoftle James, are equally pointed against fwearing, chap. v. 12. "But above all things my brethren, fwear not, neither by heaven, neither by the earth, neither by any other oath; but let your yea, be yea, and your nay, nay; lest ye fall into condemnation."

I know, thefe paffages are faid to be levelled only againft profane fwearing in common converfation, but this will appear improbable when we reflect, that our Saviour's words were addreffed exclusively to his difciples, and that the epiftle of St. James, from whence the prohibition of fwearing is taken, is directed to a number of pious converts to chriftianity, none of whom, any more than the difciples of our Lord, could be fuspected of profane fwearing in common converfation. Both paffages equally condemn oaths of every kind, and demonstrate their contrariety to the gofpel difpenfation.

There is a peculiar meaning in the reafon which is given for the prohibition of fwearing in the precept, of our Saviour, viz. that any thing more than a bare affirmation, *cometh of evil*. Yes, it came originally from the univerfal prevalance of falfehood in fociety; but the chriftian religion, by opening new fources of

-

moral and religious obligation, and by difcovering more fully the beauty and rewards of truth and deformity, and future punifhment of falfehood, has rendered the obligation of oaths wholly unneceffary. They comported with the feeble difcoveries of the Jewish, and the numerous corruptions of the pagan religions; but they are unneceffary under that full and clear manifestation of the divine will which is contained in the gofpel. Cæfar's wife should not be fuspected .-- With how much more propriety should this be faid of the veracity of a christian, than of the chastity of the wife of a heathen emperor, Every time a christian fwears, he exposes the purity and truth of his religion to fuspicion. " As for you, Petrarch, your word is fufficient," faid the cardinal Colonna, in an enquiry into the eaufe of a riot that had happened in his family, while that celebrated poet was a member of it; and in which he exacted an oath from every other member of his family, not excepting his own brother, the bishop of Luna. 'The fame address should be made to every christian, when he is ealled upon to declare the truth. "You believe in a future flate of rewards and punifhment-you profess to be the follower of that Being who has inculcated a regard for truth, under the awful confideration of his omnifcience, and who has emphatically flyled himfelf the TRUTH." Your word, therefore, is sufficient.

A nobleman is permitted, by the laws of England, to declare the truth upon his *honour*. The profeffion of chriftianity is declared in fcripture to be an high calling, and chriftians are faid to be *priefls* and *kings*. Strange ! that perfons of fuch high rank, fhould be treated with lefs refpect than Englifh noblemen; and ftill more ftrange ! that perfons pofferfing thefe august titles, fhould betray their illustrious birth and dignity, by conforming to a practice which tends fo much to invalidate the truth and excellency of their religion.

It is very remarkable, that in all the accounts we have of the intercourfe of our Saviour with his difciples, and of their fubfequent intercourfe with each other, there is no mention made of a fingle oath being taken by either of them.

Perhaps there never was an event in which the higheft degrees of evidence were more neceffary, than they were to effablifh the truth of the refurrection of our Saviour, as on the truth of this miracle depended the credibility of the chriftian religion. But in the eftablifhment of the truth of this great event, no oath is taken, or required. The witneffes of it fimply relate what they faw, and are believed by all the difciples except one, who ftill remembered too well the prohibition of his mafter, "fwear not at all," to afk for an oath to remove his unbelief.

It is worthy of notice likewife, that no prepofterous oath of office is required of the difciples when they affume the apoftolic character, and are fent forth to

preach the gofpel to all nations. How unlike the fpirit of the gofpel are those human conftitutions and laws, which require oaths of fidelity, every year ! and which appear to be founded in the abfurd idea that men are at all times the guardians of their own virtue.

There can be no doubt of chriftians having uniformly refuted to take an oath in the firft ages of the church: nor did they conform to this pagan cuftom, till after chriftianity was corrupted by a mixture with many other parts of the pagan and Jewifh religions.

There are two arguments in favour of oaths which are derived from the new testament, and which remain to be refuted .- Ift St. Paul uses feveral expreffions in his epiftles which amount to oaths, and even declares "an oath to be the end of ftrife." It was the character of St. Paul, that he became all things to all men. He circumcifed as well as baptized Tews, and he proves the truth of revelation by a quotation from a heathen poet. Oaths were a part of the Jewifh and pagan inftitutions-and, like feveral other ceremonies, for fome time, continued to retain a ftrong hold of the prejudices of the new converts to christianity. But the above words of the Apostle, which have been urged in favor of fwearing, are by no means intended to apply to common life. They have a retrospect to the promise made to Abraham of the coming of the Meffiah, and were defigned to fhew the

ON OATHS.

certainty of that event in a language which was accommodated to the idea of the Jewith nation.

2d. It has been faid, that the great Jehovah frequently fwears, both in the old and new teftament, and that the angel who is to found the laft trumpet will "fwear that time fhall be no more." Every exprefion of this kind fhould be confidered as an accomodation to Jewifh and pagan cuftoms, in order to render the truths of revelation more intelligible and acceptable. The Supreme Being, for the fame reafons, often affumes to himfelf the violent paffions, and even the features and fenfes of men; and yet who can fuppofe it proper to aferibe either of them to a Being, one of whofe perfections confifts in his exifting as a pure unchangeable fpirit.

If oaths are contrary to reafon, and have a pernicious influence upon morals and the order of fociety; and above all, if they are contrary to the precepts and fpirit of the gofpel; it becomes legiflators and ministers of the gofpel to confider how far they are refponfible for all the falfehood, profane fwearing and perjury that exift in fociety. It is in the power of legiflators to abolifh oaths, by expunging them from our laws; and it is in the power of minifters of the gofpel, by their influence and example, to render truth fo fimple and obligatory, that human governments fhall be afhamed to afk any other mode of declaring it, from *Chriflians*, than by a bare affirmation.

134

The friends of virtue and freedom have beheld, with great pleafure, a new conftitution eftablished in the United States, whose objects are *peace*, union and *juffice*. It will be in the power of the first congress that shall act under this conftitution, to set the world an example of enlightened policy, by framing laws that shall command obedience without the absurd and improper obligation of oaths. By this means they will add the restoration and establishment of TRUTH, to the great and valuable objects of the constitution that have been mentioned.

Jan. 20 1789.

An ENQUIRY INTO THE EFFECTS OF PUBLIC PU-NISHMENTS UPON CRIMINALS, AND UPON SOCIETY. READ IN THE SOCIETY FOR PROMOTING POLITI-CAL ENQUIRIES, CONVENED AT THE HOUSE OF BENJAMIN FRANKLIN, ESQ. IN PHILADELFHIA, MARCH 9th, 1787.

"Accultomed to look up to thole nations from whom we have derived "our origin, for our laws, owr opinions, and our manners; we have re-"tained, with undiffinguilting reverence, their errors, with their im-"provements; have blended, with our public infinitions, the policy of "diffimilar countries; and have grafted, on an infant commonwealth, "the manners of ancient and corrupted monarchies." PREFACE TO THE LAWS OF THE SOCIETY FOR POLITICAL ENQUIRIES.

THE defign of punifhment is faid to be, 1ft, to reform the perfon who fuffers it ; 2dly, to prevent the perpetration of crimes, by exciting terror in the minds of fpectators ; and, 3dly, to remove those perfons from fociety, who have manifested, by their tempers and crimes, that they are unfit to live in it.

From the first institution of governments, in every age and country (with but a few exceptions) legislators have thought that punishments should be *public*, in order to answer the two first of these intentions. It will require fome fortitude to combat opinions that have been fanctified by such long and general preju-

dice, and fupported by univerfal practice. But truth in government, as well as in philofophy, is of progreflive growth. As in philofophy, we often arrive at truth by rejecting the evidence of our fenfes; fo in government, we often arrive at it, after divorcing our first thoughts. Reason, though deposed and oppressed, is the only just fovereign of the human mind. Discoveries, it is true, have been made by accident; but they have derived their credit and usefulness only from their according with the decisions of reason.

In medicine, above every other branch of philosophy, we perceive many inftances of the want of relation between the apparent caufe and effect. Who, by reafoning a priori, would fuppofe, that the hot regimen was not preferable to the cold, in the treatment of the finall-pox? But experience teaches us, that this is not the cafe. Caufe and effect appear to be related in philosophy, like the objects of chemistry. Similar bodics often repel each other, while bodies that are diffimilar in figure, weight and quality, often unite together with impetuofity. With our prefent imperfect degrees of knowledge of the properties of bodies, we can difcover thefe chemical relations only by experiment. The fame may be faid of the connection between caufe and effect, in many parts of government. This connection often accords with reafon. while it is repugnant to our fenfes-and when this is not the cafe, from our inability to perceive it, it forces

our confent from the testimony of experience and obfervation.

It has been remarked, that the profeffion of arms owes its prefent rank, as a fcience, to its having been refcued, fince the revival of letters, from the hands of mere foldiers, and cultivated by men acquainted with other branches of literature. The reafon of this is plain. Truth is an unit. It is the fame thing in war—philofophy—medicine—morals—religion and government; and in proportion as we arrive at it in one fcience, we fhall difcover it in others.

After this apology, for diffenting from the eftablifhed opinions and practice, upon the fubject of public punifhments, I fhall take the liberty of declaring, that the great ends propofed, are not to be obtained by them; and that, on the contrary, all *public* punifhments tend to make bad men worfe, and to increafe crimes, by their influence upon fociety.

I. The reformation of a criminal can never be effected by a public punifhment, for the following reafons.

tft. As it is always connected with infamy, it deftroys in him the fenfe of fhame, which is one of the ftrongeft out-pofts of virtue.

2dly. It is generally of fuch fhort duration, as to produce none of those changes in body or mind, which are absolutely necessary to reform obstinate habits of vice.

3dly. Experience proves, that public punifhments have increased propensities to crimes. A man who has loft his character at a whipping-poft, has nothing valuable left to lofe in fociety. Pain has begotten infenfibility to the whip; and infamy to fhame. Added to his old habits of vice, he probably feels a fpirit of revenge against the whole community, whose laws have inflicted his punifhment upon him; and hence he is ftimulated to add to the number and enormity of his outrages upon fociety. The long duration of the punifhment, when public, by increasing its infamy, ferves only to increafe the evils that have been mentioned. The criminals, who were fentenced to work in the prefence of the City of London, upon the Thames, during the late war, were prepared by it, for the perpetration of every crime, as foon as they were fet at liberty from their confinement. I proceed,

II. To fnew, that public punifhments, fo far from preventing crimes by the terror they excite in the minds of fpectators, are directly calculated to produce them.

All men, when they faffer, difcover either fortitude, infenfibility, or diftrefs. Let us inquire into the effects of each of thefe upon the minds of fpectators.

Ifl. Fortitude is a virtue, that feizes fo forcible upon our efteem, that wherever we fee it, it never fails to weaken, or to obliterate, our deteftation of the crimes with which it is connected in criminals. "I call upon

" you,' faid major Andre, at the place of execution to his attendants " to bear witnefs, gentlemen, that " I die like a brave man." The effect of this fpeech upon the American army is well known. The fpy was loft in the hero: and indignation, every where, gave way to admiration and praife. But this is not all: the admiration, which fortitude, under fuffering, excites, has in fome inftances excited envy. In Denmark uncommon pains are taken to prepare criminals for death, by the conversation and instructions of the clergy. After this, they are conducted to the place of execution with uncommon pomp and folemnity. The criminals, under these circumstances, suffer death with meeknefs-piety-and fometimes with dignity. Thefe effects of this, I have been well informed have been, in feveral inftances, to induce deluded people to feign or confess crimes, which they had never committed, on purpofe to fecure to themfelves a confpicuous death, and a certain entrance into happinefs. There is fomething in the prefence of a number of fpectators, which is calculated to excite and ftrengthen fortitude in a fufferer. "It is not fo difficult a thing," faid Lewis XIV. to his courtiers, who flood round his death-bed, " to die, as I expected." " No "wonder," fays Voltaire, who relates this anecdote, " for all men die with fortitude, who die in company." The bravery of foldiers is derived in a great degree, from the operation of this principle in the human mind.

adly. If criminals difcover infenfibility under their punifhments, the effect of it muft be ftill more fatal upon fociety. It removes, inftead of exciting terror. In fome inftances, I conceive it may excite a defire in the minds of perfons whom debt or fecret guilt has made miferable, to feek an end of their diftreffes in the fame enviable apathy to evil. Should this infenfibility be connected with chearfulnefs, which is fometimes the cafe, it muft produce ftill more unfriendly effects upon fociety. But terrible muft be the confequence of this infenfibility and chearfulnefs, if they fhould lead criminals to retaliate upon the inhuman curiofity of fpectators, by profane or indecent infults or converfation.

3dly. The effects of diffrefs in criminals, though lefs obvious are not lefs injurious to fociety, than fortitude or infenfibility. By an immutable law of our nature, diffrefs of all kinds, when *feen*, produces fympathy, and a difpofition to relieve it. This fympathy, in generous minds, is not leffened by the diffrefs being the offspring of crimes: on the contrary, even` the crimes themfelves are often palliated by the reflection that they were the unfortunate confequences of extreme poverty—of feducing company—or of the wayt of a virtuous education, from the lofs or negligence of parents in carly life. Now, as the diffrefs which the criminals fuffer, is the effect of a law of the flate, which cannot be refifted, the fympathy of the fpectator is rendered abortive, and returns empty to the

bofom in which it was awakened. Let us briefly examine the confequences of this abortive fympathy in fociety. It will not be neceffary here to dwell upon all the advantages of this principle in human mature. It will be fufficient to obferve, that it is the vicegerent of the divine benevolence in our world. It is intended to bind up all the wounds which fin and death have made among mankind. It has founded hofpitals—erected charity-fchools—and connected the extremes of happinefs and mifery together in every part of the globe. Above all, fenfibility is the centinel of the moral faculty. It decides upon the quality of the actions before they reach that divine principle of the foul. It is of itfelf, to ufe the words of an elegant female poet*,

"A hafty moral-a fudden fenfe of right."

If fuch are the advantages of fentibility, now what must be the confequences to fociety, of extirpating or weakening it in the human breast? But public punishments are calculated to produce this effect. To prove this, I must borrow an analogy from the animal æconomy.—The fentibility of the human body is faid to be astrive and paffive. The first is connected with motion and fentation; the fecond only with fentation, The first is increased, the fecond is diminished, by the repetition of impressions. The fame phænomena take place in the human mind. Sensibility here is both astrive and paffive. Paffive fentibility is leffened, while that which

* Mils Moore.

is active is increafed by habit. The paffive fenfibility of a phyfician, to the diffrefs of his patients, is always, diminifhed, but his active fenfibility is always increafed by time; hence we find young phyficians feel moft— but old phyficians, with lefs feeling, difcover moft fympathy with their patients.

If fuch be the conflitution of our minds, then the effects, of diftrefs upon them will be, not only to deftroy paffive, but to eradicate active fenfibility from them. The principle of fympathy, after being often oppofed by the law of the ftate, which forbids it to relieve the diftress it commiserates, will cease to act altogether; and, from this defect of action, and the habit arifing from it, will foon lofe its place in the human breaft. Mifery of every kind will then be contemplated without emotion or fympathy .- The widow and the orphan-the naked-the fick, and the prifoner, will have no avenue to our fervices or our charity-and what is worfe than all, when the cen_ tinel of our moral faculty is removed, there is nothing to guard the mind from the inroads of every politive vice.

I paſs over the influence of this fympathy in its frft operation upon the government of the ftate. While we pity, we fecretly condemn the law which inflicts the punifhment : hence, arifes a want of refpect for was in general, and a more feeble union of the great ties of government.

143

I have only to add, upon this part of my fubject, that the pernicious effects of fympathy, where it does not terminate in action, are happily provided againft by the Jewifh law. Hence'we read of a prohibition againft it where perfons fuffer for certain crimes. To fpectators, the voice of heaven, under fuch circumftances, is, " thine eye fhall not pity him."

4thly. But it is poffible the characters or conduct of criminals may be fuch, as to excite indignation or contempt instead of pity, in the minds of spectators. Let us there enquire, briefly, into the effects of these paffions upon the human mind. Every body acknowledges our obligations to univerfal benevolence; but these cannot be fulfilled, unless we love the whole human race, however diversified they may be by weaknefs or crimes. The indignation or contempt which is felt for this unhappy part of the great family of mankind, must necessarily extinguish a large; portion of this universal love. Nor is this all the men, or perhaps the women whole perlons we deteft, poffcfs fouls and bodies compofed of the fame materials as those of our friends and relations. They are bone of their bone; and were originally fashioned with the fame spirits. What, then, must be the confequence of a familiarity with fuch objects of herrer, upon our attachments and duties to our friends and connections, or to the reft of mankind? If a spectator should give himself time to reflect upon fuch a fight of human depravity, he would naturally

recoil from the embraces of friendship, and the endearments of domeftic life, and perhaps fay with an unfortunate great man, after having experienced an inftance of treachery in a friend, "Oh! that I were a dog, " that I might not call man my brother." The Jewish law forbade more than nine and thirty lashes, left the fufferer fhould afterwards become "vile" in the fight of fpectators. It is the prerogative of God alone, to contemplate the vices of bad men, without withdrawing from them the fupport of his benevolence. Hence we find, when he appeared in the world, in the perfon of his Son, he did not exclude eriminals from the benefits of his goodnefs. He difmiffed a women caught in the perpetration of a erime, which was eapital by the Jewish law, with a friendly admonition : and he opened the gates of paradife to a dying thief.

5thly. But let us fuppofe, that eriminals are viewed without fympathy—indignation—or contempt.—This will be the cafe, either when the fpectators are themfelves hardened with viee, or when they are too young, or too ignorant, to connect the ideas of crimes and punifhments together. Here, then, a new fource of injury arifes from the public nature of punifhments. Every portion of them will appear, to fpectators of this defcription, to be mere arbitrary acts of cruelty : hence will arife a difpolition to exercife the fame arbitrary cruelty over the feelings and lives of their fellow creatures. To fee blows, or a halter, impofed

U

4

in cold blood upon a criminal, whofe paffive behaviour, operating with the ignorance of the fpectators, indicates innocence more than vice, cannot fail of removing the natural obftacles to violence and murder in the human mind.

6thly. Public punifhments make many crimes known to perfons who would otherwife have paffed through life in a total ignorance of them. They moreover produce fuch a familiarity, in the minds of fpectators, with the crimes for which they are inflicted, that, in fome inftances, they have been known to excite a propenfity for them. It has been remarked, that a certain immorality has always kept pace with public admonitions in the churches in the eaftern ftates. In proportion as this branch of ecclefiaftical difcipline has declined, fewer children have been born out of wedlock.

7thly. Ignominy is univerfally acknowledged to be a worfe punifhment than death. Let it not be fuppofed, from this circumftance, that it operates more than the fear of death in preventing crimes. On the contrary, like the indiferiminate punifhment of death, it not only confounds and levels all crimes, but by increasing the difproportion between crimes and punifhments, it creates a hatred of all law and government; and thus difpofes to the perpetration of every crime. Laws can only be refpected and obeyed, while they bear an exact proportion to crimes.—The law which punifhes 'the fhooting of a fwan with death, in England, has produced a thoufand murders. Nor is this all the mifchievous influence, which the punifhment of ignominy has upon fociety. While murder is punifhed with death, the man who robs on the high-way, or breaks open a houfe, muft want the common feelings and principles which belong to human nature, if he does not add murder to theft, in order to fcreen himfelf, if he fhould be detected, from that punifhment which is acknowledged to be more terrible than death.

It would feem ftrange, that ignominy fhould ever have been adopted, as a milder punifhment than death, did we not know that the human mind feldom arrives at truth upon any fubject, till it has first reached the extremity of error.

8thly. But may not the benefit derived to fociety, by employing criminals to repair public roads, or to clean ftreets, overbalance the evils that have been mentioned? I anfwer, by no means. On the contrary, befides operating in one, or in all the ways that have been deferibed, the practice of employing criminals in public labour, will render labour of every kind difreputable, more efpecially that fpecies of it, which has for its objects the convenience or improvement of the ftate. It is a well-known fact, that white men foon decline labour in the Weft Indies, and in the fouthern ftates, only becaufe the agriculture, and mechanical

employments of those countries, are carried on chiefly by negro flaves. But I object further to the employment of criminals on the high-ways and ftreets, from the idleness it will create, by alluring spectators from their business, and thereby depriving the flate of greater benefits from the industry of its citizens, than it can ever derive from the labour of criminals.

The hiftory of public punifhments, in every age and country, is full of facts, which fupport every principle that has been advanced. What has been the operation of the feventy thoufand executions, that have taken place in Great Britain from the year 1688, to the prefent day, upon the morals and manners of the inhabitants of that ifland ? Has not every prifon-door that has been opened, to conduct criminals to public fhame and punifhment, unlocked, at the fame time, the bars of moral obligation upon the minds of ten times the number of people ? How often do we find pockets picked under a gallows, and highway robberies committed in fight of a gibbet ? From whence arole the confpiracies, with affaffinations and poifonings, which prevailed in the decline of the Roman empire? Were they not favoured by the public executions of the amphitheatre? It is therefore to the combined operation of indolence, prejudice, ignorance and the defect of culture of the human heart, alone, that we are to afcribe the continuance of public punifhments, after fuch long and multiplied experience of their inefficacy to reform bad men, or to prevent the commission of crimes.

PUBLIC PUNISHMENTS.

III. Let it not be fuppofed, from any thing that has been faid, that I with to abolifh punifhments. Far from it: I with only to change the place and manner of inflicting them, fo as to render them effectual for the reformation of criminals, and beneficial to fociety. Before I propofe a plan for this purpofe, I beg leave to deliver the following general axioms:

1st. The human mind is difpofed to exaggerate every thing that is removed from it, by time or place.

2dly. It is equally difpofed to enquire after, and to magnify fuch things as are facred.

3dly. It always afcribes the extremes in qualities, to things that are unknown; and an excels in duration, to indefinite time.

4thly. Certain and definite evil, by being long contemplated, ceafes to be dreaded or avoided. A foldier foon lofes, from habit the fear of death in battle; but retains, in common with other people, the terror of death from ficknefs or drowning.

5thly. An attachment to kindred and fociety is one of the ftrongeft feelings of the human heart. A fepeparation from them, therefore has ever been confidered as one of the feverest punishments that can be inflicted upon man.

6thly. Perfonal liberty is fo dear to all men, that the lofs of it, for an indefinite time, is a punifhment fo fevere, that death has often been preferred to it.

These axioms being admitted (for they cannot be controverted) I shall proceed next to apply them, by suggesting a plan for the punishment of crimes, which, I flatter myself, will answer all the ends that have been proposed by them.

1. Let a large house be erected in a convenient part of the state. Let it be divided into a number of apartments, referving one large room for public worfhip. Let cells be provided for the folitary confinement of fuch perfons as are of a refractory temper. Let the house be supplied with the materials, and instruments for carrying on fuch manufactures as can be conducted with the least instruction, or previous knowledge. Let a garden, adjoin this house, in which the culprits may occasionally work, and walk. This fpot will have a beneficial effect not only upon health, but morals, for it will lead them to a familiarity with those pure and natural objects which are calculated to renew the connection of fallen man with his creator. Let the name of this house convey an idea of its benevolent and falutary defign, but let it by no means be called a prifon, or by only other name that is affociated with what is infamous in the opinion of mankind. Let the direction of this inflitution be committed to perfons of effablished characters for probity, diferention and humanity, who shall be amenable at all times to the legislature, or courts of the state.

2dly. Let the various kinds of punifhment, that are to be inflicted on crimes, be defined and fixed by law. But let no notice be taken, in the law, of the punifhment that awaits any particular crime. By thefe means, we fhall prevent the mind from accuftoming itfelf to the view of thefe punifhmeats, fo as to deftroy their terror by habit. The indifference and levity with which fome men fuffer the punifhment of hanging, is often occafioned by an infenfibility which is contracted by the frequent anticipation of it, or by the appearance of the gallows fuggefting the remembrance of fcemes of criminal feftivity, in which it was the fubject of humour or ridicule. Befides, punifhments fhould always be varied in degree, according to the temper of criminals, or the progrefs of their reformation.

3dly. Let the duration of punifhments, for all crimes be limitted : but let this limitation be unknown I conceive this fecret to be of the utmoft importance in reforming criminals, and preventing crimes. The imagination, when agitated with uncertainty, will feldom fail of connecting the longeft duration of punifhment, with the fmalleft crime.

I cannot conceive any think more calculated to diffufe terror through a community, and thereby to

prevent crimes, than the combination of the three circumfiances that have been mentioned in punifhments. Children will prefs upon the evening fire in liftening to the tales that will be fpread from this abode of mifery. Superfition will add to its horrors : and romance will find in it ample materials for fiction, which cannot fail of increasing the terror of its punifhments,

Let it not be objected, that the terror produced by the hiftory of thefe fecret punifhments, will operate like the abortive fympathy I have defcribed. *Active* fympathy can be fully excited only through the avenues of the eyes and the ears. Befides, the recollection that the only defigu of punifhment is the reformation of the criminal will fufpend the action of fympathy altogether. We liften with palenefs to the hiftory of a tedious and painful operation in furgery, without a wifh to arreft the hand of the operator. Our fympathy, which in this cafe is of the *paffive* kind, is mixed with pleafure, when we are affured, that there is a certainty of the operation being the means of faving the life of the fufferer.

Nor let the expence of erecting and fupporting a houfe of repentance, for the purpofes that have been inentioned, deter us from the undertaking. It would be eafy to demonstrate, that it will not coft one fourth as much as the maintenance of the numerous jails that are now neceffary in every well regulated ' ftate. But why fhould receptacles be provided and fupported at an immenfe expense, in every country, for the relief of perfons afflicted with bodily diforders, and an objection be made to providing a place for the cure of the difeafes of the mind?

The nature—degrees—and duration of the punifhments, fhould all be determined beyond a certain degree, by a court properly conflituted for that purpofe, and whofe bufinefs it fhould be to vifit the receptacle for criminals once or twice a year.

I am aware of the prejudices of freemen, against entrufting power to a diferentionary court. But let it be remembered, that no power is committed to this court, but what is poffeffed by the different courts of justice in all free countrics; nor fo much as is now wifely and neceffarily poffeffed by the fupreme and inferior courts, in the execution of the penal laws of Pennfylvania. I fhall fpend no time in defending the confiftency of private punifhments, with a fafe and free government. Truth, upon this fubject, cannot be divided. If public punifhments are injurious to criminals and to fociety, it follows that crimes fhould be punished in private, or not punished at all. There is no alternative. The opposition to private punishments, therefore is founded altogether in prejudice, or in ignorance of the true principles of liberty.

X

The fafety and advantages of private punifhments, will appear, further, when I add, that the beft governed families and fchools are thofe, in which the faults of fervants and children are rebuked privately, and where confinement and folitude are preferred for correction, to the use of the rod.

In order to render thefe punifhments effectual, they fhould be accommodated to the conftitutions and tempers of the criminals, and the peculiar nature of their crimes. Peculiar attention fhould be paid, likewife, in the nature, degrees, and duration of punifhments, to crimes, as they arife from paffion, habit or temptation.

The punifhments, fhould confift of bodily pain, labour, watchfulnefs, folitude, and filence. They fhould all be joined with cleanlinefs and a fimple diet. To afcertain the nature, degrees, and duration of the bodily pain, will require fome knowledge of the principles of fenfation, and of the fympathies which occur in the nervous fyftem. The labour fhould be fo regulated and directed, as to be profitable to the ftate. Befides employing criminals in laborious and ufeful manufactures, they may be compelled to derive all their fubfiftance from a farm and a garden, cultivated by their own hands, adjoining the place of their confinement.

These punishments may be used separately, or more or less combined, according to the nature of the crimes, or according to the variations of the conftitution and temper of the criminals. In the application of them, the utmost possible advantages should be taken of the laws of the affociation of ideas, of habit, and of imitation.

To render these physical remedies more effectual they should be accompanied by regular instruction in the principles and obligations of religion, by perfons appointed for that purpose.

Thus far I am fupported, in the application of the remedies I have mentioned, for the cure of crimes, by the facts contained in Mr. Howard's hiftory of prisons, and by other observations. It remains yet to prefcribe the *specific* punifhment that is proper for each specific crime. Here my fubject begins to opprefs me. I have no more doubt of every crime having its cure in moral and physical influence, than I have of the efficacy of the Peruvian bark in curing the intermitting fever. The only difficulty is, to find out the proper remedy or remedies for particular vices. Mr Dufriche de Valaye, in his elaborate treatife upon penal laws, has performed the office of a pioneer upon this difficult fubject. He has divided crimes into claffes; and has affixed punifhments to each of them, in a number of ingenious tables. Some of the connections he has established, between crimes and punishments, appear to be just. But many of his punishments are contrary to the first principles of action in man;

and all of them are, in my opinion, improper, as far as he orders them to be inflicted in the *eye* of the *public*. His attempt, however, is laudable, and deterves the praife of every friend to mankind.

If the invention of a machine for facilitating labour, has been repaid with the gratitude of a country, how much more will that man deferve, who fhall invent the moft fpeedy and effectual methods of reftoring the vicious part of mankind to virtue and happinefs, and of extirpating a portion of vice from the world ? Happy condition of human affairs ! when humanity, philofophy and chriftianity, fhall unite their influence to teach men, that they are brethren; and to prevent their preying any longer upon each other ! Happy citizens of the United States, whofe governments permit them to adopt every difcovery in the moral or intellectual world, that leads to thefe benevolent purpofes !

Let it not be objected, that it will be impofible for men, who have explated their offences by the mode of punifhment that has been propofed, to recover their former connections with fociety. This objection arifes from an unfortunate affociation of ideas. The infamy of criminals is derived, not fo much from the remembrance of their crimes, as from the recollection of the ignominy of their punifiments. Crimes produce a ftain, which may be wafhed out by reformation, and which frequently wears away by time; but public punifhments leave fcars which disfigure the whole character; and hence perfons, who have fuffered them, are ever afterwards viewed with horror or averfion. If crimes were explated by private difcipline, and fucceeded by reformation, criminals would probably fuffer no more in character from them, than men fuffer in their reputation or ulefulnefs from the punifhments they have undergone when boys at fchool.

I am fo perfectly fatisfied of the truth of this opinion, that methinks I already hear the inhabitants of our villages and townships counting the years that shall complete the reformation of one of their citizens. I behold them running to meet himon the day of his deliverance. His friends and family bathe his cheeks with tears of joy; and the universal shout of the neigbourhood is, "This our brother was lost, and is found—was dead and is alive."

It has long been a defideratum in government, that there fhould exift in it no pardoning power, fince the *certainty* of punifhment operates fo much more than its feverity, or infamy, in preventing crimes. But where punifhments are exceffive in degree, or infamous from being public, a pardoning power is abfolutely neceffary. Remove their feverity and public infamy, and a pardoning power ceafes to be neceffary in a code of criminal jurifprudence. Nay, further—it is fuch a defect in penal laws, as in fome meafure defeats every invention to prevent crimes, or to cure habits of vice.

If punifhments were moderate, juft, and private, they would exalt the feelings of public juftice and benevolence fo far above the emotions of humanity in witneffes, juries and judges, that they would forget to conceal, or to palliate crimes; and the *certainty* of punifhment, by extinguifhing all hope of pardon in the criminal, would lead him to connect the beginning of his repentance with the laft words of his fentence of condemnation. To obtain this great and falutary end, there fhould exift *certain* portions of punifhment, both in duration and degree, which fhould be placed by law beyond the power of the difcretionary court before mentioned, to fhorten or mitigate.

I have faid nothing upon the manner of inflicting death as a punishment for crimes, because I confider it as an improper punifliment for any crime. Even murder itfelf is propagated by the punifliment of death for murder. Of this we have a remarkable proof in Italy. The duke of Tufcany foon after the publication of the marquis of Beccaria's excellent treatife upon this fubject, abolished death as a punishment for murder. A gentleman, who refided five vears at Pifa, informed me, that only five murders had been perpetrated in his dominions in twenty years. The fame gentleman added, that after his refidence in Tufcany, he fpent three months in Rome, where death is still the punishment of murder, and where executions, according to Dr. Moore, are conducted with peculiar circumstances of public parade. Du-

PUBLIC PUNISHMENTS.

ring this fhort period, there were fixty murders committed in the precincts of that city. It is remarkable, the manners, principles, and religion, of the inhabitants of Tufcany and Rome, are exactly the fame. The abolition of death alone, as a punifhment for murder, produced this difference in the moral character of the two nations.

I fuspect the attachment to death, as a punishment for murder, in minds otherwife enlightened, upon the fubject of capital punifhments, arifes from a falle interpretation of a paffage contained in the old teftament, and that is, " he that fheds the blood of man, by man shall his blood be shed." This has been fuppofed to imply that blood could only be expiated by blood. But I am difpofed to believe, with a late commentator* upon this text of fcripture, that it is rather a prediction than a law. The language of it is fimply, that fuch will be the depravity and folly of man, that murder, in every age, shall beget murder. Laws, therefore, which inflict death for murder, are, in my opinion, as unchriftian as those which justify or tolerate revenge; for the obligations of chriftianity upon individuals, to promote repentance, to forgive injuries, and to difcharge the duties of univerfal benevolence, are equally binding upon flates.

The power over human life, is the fole prerogative of him who gave it. Human laws, therefore,

^{*} The reverend Mr. William Turner, in the fecond vol. of Memoir. of the Literary and Philosophical Society of Manchefter

rife in rebellion against this prerogative, when they transfer it to human hands.

If fociety can be fecured from violence, by confining the murdercr, fo as to prevent a repetition of his crime, the end of extirpation will be anfwered. In confinement, he may be reformed : and if this fhould prove impracticable, he may be reftrained for a term of years, that will probably, be coeval with his life.

There was a time, when the punifhment of captives with death or fervitude, and the indiferiminate deftruction of peaceable hufbandmen, women, and children, were thought to be effential, to the fuccefs of war, and the fafety of flates. But experience has taught us, that this is not the cafe. And in proportion as humanity has triumphed over thefe maxims of falfe policy, wars have been lefs frequent and terrible, and nations have enjoyed longer intervals of internal tranquility. The virtues are all parts of a circle. Whatever is humane, is wife—whatever is wife, is juft—and whatever is wife, juft, and humane, will be found to be the true intereft of flates, whether criminals or foreign enemies are the objects of their legiflation.

I have taken no notice of perpetual banifhment, as a legal punifhment, as I confider it the next in degree, in folly and cruelty, to the punifhment of death. If the receptacle for criminals, which has been propofed, is erected in a remote part of the flate, it will act with the fame force upon the feelings of the human heart, as perpetual banifhment. Exile, when perpetual, by deftroying one of the moft powerful principles of action in man, viz. the love of kindred and country, deprives us of all the advantages, which might be derived from it, in the bufinefs of reformation. While certain paffions are weakened, this noble paffion is ftrengthened by age: hence, by preferving this paffion alive, we furnifh a principle, which, in time may become an overmatch for thofe vicious habits, which feparated criminals from their friends and from fociety.

Notwithstanding this testimony against the punishment of death and perpetual banishment, I cannot help adding, that there is more mercy to the criminal, and less injury done to fociety, by both of them, than by *public* infamy and pain, without them.

The great art of furgery has been faid to confift in faving, not in deftroying, or amputating the difeafed parts of the human body. Let governments learn to imitate, in this refpect, the fkill and humanity of the healing art. Nature knows no wafte in any of her operations. Even putrefaction itfelf is the parent of ufeful productions to man. Human ingenuity imitates nature in a variety of arts. Offal maters, of all kinds, are daily converted into the means of increafing the profits of induftry, and the pleafures of human life.

Y

The foul of man alone, with all its moral and intellectual powers, when mifled by paffion, is abandoned, by the ignorance or cruelty of man, to unprofitable corruption, or extirpation.

A worthy prelate of the church of England once faid upon feeing a criminal led to execution, "There goes my wicked felf." Confidering the vices to which the frailty of human nature exposes whole families of every rank and class in life, it becomes us, whenever we fee a tellow creature led to public infamy and pain, to add further. "There goes my unhappy father, my unhappy brother, or my unhappy fon," and afterwards to afk ourfelves, whether *private* punifhments are not to be preferred to *public*.

For the honour of humanity it can be faid, that in every age and country, there have been found perfons in whom uncorrupted nature has triumphed over cuftom and law. Elfe, why do we hear of houfes being abandoned near to places of public execution? Why do we fee doors and windows flut on the days or hours of criminal exhibitions? Why do we hear of aid being fecretly afforded to criminals, to mitigate or elude the feverity of their punifhments? Why is the public executioner of the law an object of fuch general deteftation? Thefe things are latent ftruggles of reafon, or rather the fecret voice of God himfelf, fpeaking in the human heart, againft the folly and eruelty of public punifhment.

I shall conclude this enquiry by observing, that the fame falfe religion and philosophy, which once kindled the fire on the alter of perfecution, now doom the criminal to public ignominy and death. In proportion as the principles of philosophy and christianity are underftood, they will agree in extinguishing the one, and destroying the other. If these principles continue to extend their influence upon government, as they have done for fome years past, I cannot help entertaining a hope, that the time is not very diftant, when the gallows, the pillory, the flocks, the whipping-post and the wheel-barrow, (the usual engines of public punifhments) will be connected with the hiftory of the rack and the stake, as marks of the barbarity of ages and countries, and as melancholy proofs of the feeble operation of reason and religion upon the human mind.

AN ENQUIRY INTO THE CONSISTENCY OF THE PUNISH; MENT OF MURDER BY DEATH, WITH REASON AND REVELATION.

I. THE Punishment of Murder by Death, is contrary to *reason*, and to the order and happiness of fociety.

1. It leffens the horror of taking away human life, and thereby tends to multiply murders.

2. It produces murder by its influence upon people who are tired of life, and who, from a fuppofition that murder is a lefs crime than fuicide, deftroy a life (and often that of a near connection) and afterwards deliver themfelves up to the laws of their country, that they may efcape from their mifery by means of a halter.

3. The punifhment of murder by death multiplies murders, from the difficulty it creates of convicting perfons who are guilty of it. Humanity, revolting at the idea of the feverity and certainty of a capital punifhment, often fteps in, and collects fuch evidence in favour of a murderer, as foreens him from death altogether, or palliates his crime into manflaughter. Even the law itfelf favours the acquital of a murderer

165 ON THE PUNISHMENT OF MURDER &c.

by making the circumftance of premeditation and malice, neceffary to render the offence, a capital crime. Mr. Townfend tells us in his travels into Spain* that feventy murders were perpetrated in Malaga in the 16 months which preceeded his vifit to that city, all of which efcaped with impunity, and probably from the caufes which have been mentioned. If the punifhment of murder confifted in long confinement, and hard labour, it would be proportioned to the meafure of our feelings of juffice, and every member of focicty would be a watchman, or a magiftrate, to apprehend a deftroyer of human life, and to bring him to punifhment.

4. The punifhment of murder by death checks the operations of univerfal juffice, by preventing the punifhment of every fpecies of murder.

5. The punifhment of murder by death has been proved to be contrary to the order and happinefs of fociety, by the experiments of fome of the wifeft legiflators in Europe. The Emprefs of Rufia, the King of Sweden, and the Duke of Tufcany, have nearly extirpated murder from their dominions, by converting its punifhments into the means of benefiting fociety, and reforming the criminals who perpetrate it.

II. The punifhment of murder by death is contrary to divine revelation. A religion which commands

* Vol. 3.

166 ON THE PUNISHMENT OF MURDER

us to forgive, and even to do good to, our enemies, can never authorife the punifhment of murder by death. "Vengence is mine," faid the Lord; "I will repay." It is to no purpofe to fay here, that this vengeance it taken out of the hands of an individual, and directed against the criminal by the hand of government. It is equally an usurpation of the prerogative of heaven, whether it be inflicted by 2 fingle perfon, or by a whole community.

Here I expect to meet with an appeal from the letter and fpirit of the gofpel, to the law of Mofes, which declares, " he that killeth a man fhall be put to death." Forgive, indulgent heaven! the ignorance and cruelty of man, which, by the mifapplication of this text of fcripture, has fo long and fo often ftained the religion of Jefus Chrift with folly and revenge.

The following confiderations, I hope, will prove that no argument can be deduced from this law, to juftify the punifhment of murder by death;—on the contrary, that feveral arguments against it, may be derived from a just and rational explanation of that part of the Levitical institutions.

1. There are many things in fcripture above, but nothing contrary to, reafon. Now, the punifhment of murder by death, is contrary to reafon. It cannot, therefore, be agreeable to the will of God. 2. The order and happine's of fociety cannot fail of being agreeable to the will of God. But the punifhment of murder by death, deftroys the order and happine's of fociety. It must therefore be contrary to the will of God.

3. Many of the laws given by Mofes, were accommodated to the ignorance, wickednefs, and "hardnefs " of heart," of the Jews. Hence their divine legiflator expressly fays, " I gave them flatutes that were " not good, and judgments whereby they fhould not live." Of this, the law which refpects divorces, and the law of retaliation, which required, " an eye for " an eye, and a tooth for a tooth," are remarkable inftances.

But we are told, that the punifhment of murder by death, is founded not only on the law of Mofes, but upon a politive precept given to Noah and his polterity, that "whofo fheddeth man's blood, by man fhall his blood be fhed," If the interpretation of this text given in a former effay* be not admitted, I fhall attempt to explain it by remarking, that foon after the flood, the infancy and weaknefs of fociety rendered it impoffible to punifh murder by confinement. There was therefore no medium between inflicting death upon a murderer, and fuffering him to efcape with impunity, and thereby to perpetrate more acts of violence againft his fellow creatures. It pleafed God, in this condition of the world, to permit a lefs, in

* Enquiry into the effects of public punifhments. p. 159.

168 ON THE PUNISHMENT OF MURDER

order to prevent a greater evil. He therefore commits for a while his exclusive power over human life, to his creatures for the fafety and prefervation of an infant fociety, which might otherwife have perifhed, and with it, the only flock of the human race. The command indirectly implies that the crime of murder was not punished by death in the mature state of fociety which existed before the flood. Nor is this the only inftance upon record in the fcriptures in which God has delegated his power over human life to his creatures. Abraham expresses no furprife at the command which God gave him to facrifice his fon. He fubmits to it as a precept founded in reafon and natural juffice, for nothing could be more obvious, than that the giver of life had a right to claim it, when and in fuch manner as he pleafed. 'Till men are able to give life, it becomes them to tremble at the thought of taking it away. Will a man rob God ?-Yes-he robs him of what is infinitely dear to him-of his darling attribute of mercy, every time he deprives a fellow creature of life.

4. If the Mofaic law, with refpect to murder, be obligatory upon Chriftians, it follows that it is equally obligatory upon them to punifh adultery, blafphemy and other capital crimes that are mentioned in the Levitical law, by death. Nor is this all: it juftifies the extirpation of the Indians, and the enflaving of the Africans; for the command to the Jews te

BY DEATH.

deftroy the Canaanites, and to make flaves of their heathen neighbours, is as politive as the command which declares, "that he that killeth a man, fhall furely be put to death."

5. Livery part of the Levitical law, is full of types of the Mefliah. May not the punifhment of death, inflicted by it, be intended to represent the demerit and confequences of fin, as the cities of refuge were the offices of the Mefliah ? And may not the enlargement of murderers who had fled to those cities of refuge, upon the death of a high prieft, represent the eternal abrogation of the law which inflicted death for murder, by the meritorious death of the Saviour of the world ?

6. The imperfection and feverity of thefe laws were probably intended farther—to illuftrate the perfection and mildnefs of the gofpel difpenfation. It is in this manner that God has manifefted himfelf in many of his acts. He created darknefs firft, to illuftrate by comparifon the beauty of light, and he permits fin, mifery, and death in the moral world, that he may hereafter difplay more illuftrioufly the bleffings of righteoufnefs, happinefs, and immortal life. This opinion is favoured by St. Paul, who fays, " the " law made nothing perfect, and that it was a " thadow of good things to come."

How delightful to difcover fuch an exact harmony between the dictates of reafon, the order and hap-

169

pinefs of fociety, and the precepts of the gofpel! There is a perfect unity in truth. Upon all fubjects —in all ages—and in all countries—truths of every kind agree with each other. I fhall now take notice of fome of the common arguments, which are made use of, to defend the punifhments of murder by death.

1. It has been faid, that the common fenfe of all nations, and particularly of favages, is in favour of punifhing murder by death.

The common fenfe of all nations is in favour of the commerce and flavery of their fellow creatures. But this does not take away from their immorality. Could it be proved that the Indians punish murder by death, it would not establish the right of man over the life of a fellow creature; for revenge we know in its utmost extent is the universal and darling passion of all favage nations. The practice morever, (if it exist,) must have originated in necessary : for a people who have no fettled place of refidence, and who are averse from all labour, could restrain murder in no other way. But I am difpofed to doubt whether the Indians punish murder by death among their own tribes. In all those cafes where a life is taken away by an Indian of a foreign tribe, they always demand the fatisfaction of life for life. But this practice is founded on a defire of preferving a balance in their numbers and power; for among nations which confift of only a few warriors, the lofs of an individual

often deftroys this balance, and thereby exposes them to war or extermination. It is for the fame purpofe of keeping up an equality in numbers and power, that they often adopt captive children into their nations and families. What makes this explanation of the practice of punishing murder by death among the Indians more probable, is, that we find the fame bloody and vindictive fatisfaction is required of a foreign nation, whether the perfon loft, be killed by an accident, or premeditated violence. Many facts might be mentioned from travellers to prove that the Indians do not punish murder by death within the jurifdiction of their own tribes. I shall mention only one, which is taken from the Rev. Mr. John Megapolenfis's account of the Mohawk Indians, lately publifhed in Mr Hazard's hiftorical collection of flate papers.-" There is no punifhment, (fays our author) " here for murder, but every one is his own avenger. " The friends of the deceafed revenge themfelves " upon the marderer until peace is made with the " next a kin. But although they are fo cruel, yet " there are not half fo many murders committed " among them as among Christians, notwithstanding " their fevere laws, and heavy penalties."

2. It has been faid, that the horrors of a guilty conficience proclaim the justice and necessity of death, as a punishment for murder. I draw an argument of another nature from this fact. Are the horrors of conficience the punishment that God inflicts upon

172 ON THE PUNISHMENT OF MURDER

murder? Why, then thould we thorten or deftroy them by death, efpecially as we are taught to direct the moft atrocious murderers to expect pardon in the future world? No, let us not counteract the government of God in the human breaft : let the murderer live—but let it be to fuffer the reproaches of a guilty confeience; let him live, to make compenfation to fociety for the injury he has done it, by robbing it of a citizen; let him live to maintain the family of the man whom he has murdered; let him live, that the punifhment of his crime may become univerfal; and, laftly, let him live, that murder may be extirpated from the lift of human crimes !

Let us examine the conduct of the moral Ruler of the world towards the first murderer .- See Cain, returning from his field, with his hands recking with the blood of his brother ! Do the heavens gather placknefs, and does a flash of lightning blast him to the earth? No. Does his father Adam, the natural legislator and judge of the world, inflict upon him the punifhment of death? No. The infinitely wife God becomes his judge and executioner. He expels him from the fociety of which he was a member. He fixes in his confeience a never dying worm. He fubjects him to the necessity of labour; and to fecure a duration of his punifhment, proportioned to his crime, he puts a mark of prohibition upon him, to prevent his being put to death, by weak and angry men; declaring, at the fame time, that " whofeever flayeth

" Cain, vengeance shall be taken on him seven-" fold.

But further, if a neceffary connection exifted between the crime of murder and death in the mind and laws of the Deity, how comes it that Mofes and David efcaped it? They both imbrued their hands in innocent blood, and yet the horrors of a guilty confeience were their only punifhment. The fubfequent conduct of thofe two great and good men, proves that the heart may retain a found part after committing murder, and that even murderers, after repentance, may be the vehicles of great temporal and fpiritual bleffings to mankind.

3. The declaration of St. Paul before Feftus, refpecting the punifhment of death,* and the fpeech of the dying thief on the crofs,† are faid to prove the lawfulnefs of punifhing murder by death: but they prove only that the punifhment of death was agreeable to the Roman law. Human life was extremely cheap under the Roman government. Of this we need no further proof than the head of John the Baptift forming a part of a royal entertainment. From the frequency of public executions, among those people, the *fword* was confidered as an emblem of public juffice. But to

+ "We indeed" faffer " *jafily*, for we receive the due reward of our "deeds."——Luke xxiii. and 41.

174 ON THE PUNISHMENT OF MURDER

fuppofe, from the appeals which are fometimes made to it as a fign of juftice, that capital punifhments are approved of in the New Teftament, is as abfurd as it would be to fuppofe that horfe-racing was a chriftian exercise, from St. Paul's frequent allusions to the Olympic games.

The declaration of the barbarians upon feeing the fnake faften upon St. Paul's hand, proves nothing but the ignorance of thofe uncivilized people; — " and " when the barbarians faw the venomous beaft hang on " his hand, they faid among themfelves, no doubt this " man is a murderer, whom, though he hath efcaped " the fea, yet vengeance fuffereth not to live." — Acts xvii. and 4th.

Here it will be proper to diflinguifh between the fenfe of juffice fo univerfal among all nations, and an approbation of death as a punifhment for murder. The former is written by the finger of God upon every human heart, but like his own attribute of juffice, it has the happinefs of individuals and of fociety for its objects. It is always mifled, when it feeks for fatisfaction in punifhments that are injurious to fociety, or that are difpreportioned to crimes. The fatisfaction of this univerfal fenfe of juffice by the punifhments of impriforment and labour, would far exceed that which is derived from the punifhment of death; for it would be of longer duration, and it would more frequently occur; for, upon a principle formerly mentioned, fearcely any fpecies of murder would efeape with impunity.[‡]

The conduct and difcourfes of our Saviour fhould outweigh every argument that has been or can be offered in favour of capital punishment for any crime When the woman caught in a lultery was brought to him, he cvaded inflicting the bloody fentence of the Jewish law upon her Even the maining of the body appears to be offenfive in his fight ; for when Peter drew his fword, and fmote off the ear of the fervant of the high prieft, he replaced it by miracle, and at the fame time declared, that " all they who take the " fword, shall perish with the fword." He forgave the crime of murder, on his crofs; and after his refurrection, he commanded his difciples to preach the gospel of forgiveness, first at Jerusalem, where he well knew his murderers ftill refided. These ftriking facts are recorded for our imitation, and feem intended to fnew that the Son of God died, not only to reconcile God to man, but to reconcile men to cach , other. There is one paffage more, in the hiftory of our Saviour's life which would of itfelf overfet the

† A feale of punithments, by means of impriforment and labour, might eatily be contrived, fo as to be accomodated to the different degrees of attocity in murder. For example—for the first or highest degree of guilt, let the punishment be follude and darkness, and a total reant of employment. For the ferond, follude and labour, with the benefit of light. For the third, confinement and labour. The *duration* of thefe punishments thould like vife be governed by the atrocity of the murder, and by the fights of contrition and amendment in the criminal.

176 ON THE PUNISHMENT OF MURDER

justice of the punishment of death for murder, if every other part of the Bible had been filent upon the fubject. When two of his difciples, actuated by the fpirit of vindictive legiflators, requested permission of him to call down fire from Heaven to confume the inhofpitable Samaritans, he anfwered them " The " Son of Man is not come to deftroy men's lives but " to fave them." I wish these words composed the motto of the arms of every nation upon the face of the earth. They inculcate every duty that is calculated to preferve, reftore, or prolong human life. They militate alike against war-and capital punishments-the objects of which, are the unprofitable de-Aruction of the lives of men. How precious does a human life appear from thefe words, in the fight of heaven ! Paufe, Legiflators, when you give your votes for inflicting the punifhment of death for any crime You frustrate in one instance, the defign of the miffion of the Son of God into the world, and thereby either deny his appearance in the flefh, or reject the truth of his gofpel. You, moreover, strengthen by your conduct the arguments of the Deifts against the particular doctrines of the Chriftian revelation. You do more, you preferve a bloody fragment of the Jewish institutions .- " The Son of " Man came not to destroy men's lives, but to save " them." Excellent words! I require no others to fatisfy me of the truth and divine original of the Chriftian religion; and while I am able to place a finger, upon this text of fcripture, I will not believe an angel

from heaven, flould he deelare that the punifhment of death, for *any* crime, was ineulcated, or permitted by the fpirit of the gofpel.

The precious nature of human life in the eyes of the Saviour of mankind, appears further in the comparative value which he has placed upon it in the following words.* "For what is a man profited, if he fhall gain the whole world, & lofe his life, or what fhall a man give in exchange for his *life*." I have rejected the word *foul* which is ufed in the common tranflation of this verfe. The original word in the Greek, fignifies *life*, and it is thus happily and juftly tranflated in the verfe which precedes it.

4. It has been faid, that a man who has committed a murder, has difeovered a malignity of heart, that renders him ever afterwards unfit to live in human fociety. This is by no means true in many, and perhaps in moft of the eafes of murder. It is moft frequently the effect of a fudden guft of paffion, and has fometimes been the only ftain of a well-fpent, or inoffenfive life. There are many crimes which unfit a man much more for human foeiety, than a fingle murder; and there have been inftances of murderers, who have effeaped, or bribed the laws of their country, who have afterwards become peaceable and ufeful members of fociety. Let it not be fuppofed that I

* Matthew, x. v. 26.

A a

178 ON THE PUNISHMENT OF MURDER

wifh to palliate, by this remark, the enormity of murder. Far from it. It is only becaufe I view murder with fuch fuperlative horror, that I wifh t⁰ deprive our laws of the power of perpetuating and encouraging it.

It has been faid, that the confessions of murderers have, in many inftances, fanctioned the justice of their punishment. I do not with to leften the influence of fuch vulgar errors as tend to prevent crimes, but I will venture to declare, that many more murderers escape discovery, than are detected, or punished .--Were I not afraid of trefpassing upon the patience of my readers, I might mention a number of facts, in which circumstances of the most trifling nature have become the means of detecting theft and forgery; from which I could draw as ftrong proofs of the watchfulnefs of Providence over the property of individuals, and the order of fociety, as have been drawn from the detection of murder. I might mention instances, likewife, of perfons in whom confcience has produced reftitution for ftolen goods, or confession of the juffice of the punifhment which was inflicted for theft. Confcience and knowledge always kcep pace with each other, both with refpect to divine and human laws.

The acquiefcence of murderers in the juftice of their execution, is the effect of prejudice and education. It cannot flow from-a confeience acting in concert with reafon or religion-for they both fpeak a very different language.

The world has certainly undergone a material change for the better within the laft two hundred years. This change has been produced chiefly, by the fecret and unacknowledged influence of Christianity upon the hearts of men. It is agreeable to trace the effects of the Christian religion in the extirpation of flavery-in the diminution of the number of capital punifhments, and in the mitigation of the horrors of war. There was a time when mafters poffefied a power over the lives of their flaves. But Christianity has depofed this power, and mankind begin to fee every where that flavery is alike contrary to the interefts of fociety, and the fpirit of the gofpel. There was a time when torture was part of the punifhment of death, and when the number of capital crimes in Great Britain, amounted to one hundred and fixty-one .---Christianity has abolished the former, and reduced the latter to not more than fix or feven. It has done more. It has confined, in some instances, capital punifiments to the crime of murder-and in fome countries it has abolifhed it altogether. The influence of Christianity upon the modes of war, has still been more remarkable. It is agreeable to trace its progrefs.

1st. In refcuing women and children from being the objects of the defolations of war, in common with men.

180 ON THE PUNISHMENT OF MURDER

2dly. In preventing the destruction of captives taken in battle, in cold blood.

3dly. In protecting the peaceable hufbandman from fharing in the carnage of war.

4thly. In producing an exchange of prifoners, inflead of dooming them to perpetual flavery.

5thly. In avoiding the invalion or deflruction, in certain cafes, of private property.

, 6thly. In declaring all wars to be unlawful but fuch as are purely defensive.

This is the only tenure by which war now holds its place among Chriftians. It requires but litle ingenuity to prove that a defensive war cannot be carried on fuccefsfully without offenfive operations. Already the princes and nations of the world difcover the ftruggles of opinion or confcience in their preparations for war. Witness the many national difputes which have been lately terminated in Europe by negociation, or mediation. Witnefs too, the eftablishment of the constitution of the United States without force or bloodflied. Thefe events indicate an improving state of human affairs. They lead us to look forward with expectation to the time, when the weapons of war shall be changed into implements of hufbandry, and when rapine and violence fhall be no more. Thefe events are the promifed fruits of the gofpel. If they do not come to pafs, the prophets

have deceived us. But if they do-war muft be as contrary to the fpirit of the gofpel, as fraud, or murder, or any other of the vices which are reproved or extirpated by it.

P. S. Since the publication of this effay and the preceeding one, the Author has had the pleafure of feeing his principles reduced to practice in the State of Pennfylvania, in the abolition of the punifhment of death for all erimes, (the higheft degree of murder excepted) and in private punifhments being fubstituted to those which were public. The effects of this reformation in the penal laws of our flate have been, a remarkable diminution of crimes of all kinds, and a great enerease of convictions in a given number of offenders. The expenses of the house appropriated to the punifhment of criminals have been more than defrayed by the profits of their labor. Many of them have been reformed, and become ufeful members of fociety, and very few have relapfed into former habits of vice.

The Author is happy in adding, that a reformation in the penal laws of the flates of New York and New Jerfey has taken place, nearly fimilar to that which has been mentioned, in Pennfylvania.

It would be an act of injuffice in this place not to acknowledge that the principles contained in the foregoing effays, would probably have never been realized, had they not been fupported and enforced by the elo-

182 ON THE PUNISHMENT OF MURDER, &c.

quence of the late William Bradford Efq. and the zeai of Caleb Lownes. To both these gentlemen, humanity and reafon owe great obligations. Mr. Lownes has demonstrated by facts, the fuccefs or fehences of philanthrophy, once deemed visionary and impracticable. His plans for employing, and reforming his unfortunate fellow creatures in the Philadelphia prifon, alfcover great knowledge of the economy of the body, and of the principles of action in the miud. To comprehend fully the ingenuity and benevolence of these plans. it will be neceffary to visit the prifon. There fcience and religion exhibit a triumph over vice and mifery, infinitely more fublime and affecting, than all the monuments of ancient conquelts. It is thus the father of the human race has decreed the ultimate extermination of all cvil, viz. by manifestations of love to his fallen creatures. For the details of the discipline, order, products of Labor, &c. of this prifon, the reader is referred to two elegant pamphlets, the one by Mr. De Liancourt, of France, the other by Mr. Turnbull of South Carolina.

July, 4 1797.

A PLAN OF A PEACE-OFFICE FOR THE UNITED S T A T E S.

MONG the defects which have been pointed out in the federal conflitution by its antifederal enemies, it is much to be lamented that no perfon has taken notice of its total filence upon the fubject of an office of the utmost importance to the welfare of the United States, that is, an *effice* for promoting and preferving perpetual *peace* in our country.

It is to be hoped that no objection will be made to the eftablishment of fuch an office, while we are engaged in a war with the Indians, for as the War-Office of the United States was established in the time of peace, it is equally reasonable that a Peace-Office should be established in the time of war.

The plan of this office is as follows :

I. Let a Secretary of the Peace be appointed to prefide in this office, who shall be perfectly free from all the prefent abfurd and vulgar European prejudices upon the subject of government; let him be a genuine republican and a sincere Christian, for the principles of republicanism and Christianity are no lefs friendly to universal and perpetual peace, than they are to universal and equal liberty.

II. Let a power be given to this Secretary to effablifh and maintain free-fchools in every city, village and township of the United States; and let him be made refponfible for the talents, principles, and morals, of all his fchoolmafters. Let the youth of our country be carefully inftructed in reading, writing, arithmetic, and in the doctrines of a religion of fome kind : the Chriftian religion flould be preferred to all others; for it belongs to this religion exclusively to teach us not only to cultivate peace with men, but to forgive, nay more-to love our very enemies. It belongs to it further to teach us that the Supreme Being alone poffeffes a power to take away human life, and that we rebel against his laws, whenever we undertake to execute death in any way whatever upon any of his creatures.

III. Let every family in the United States be furnished at the public expense, by the Secretary of this office, with a copy of an American edition of the BIBLE. This meafure has become the more neceffary in our country, fince the banishment of the bible, as a fchool-book, from moft of the fchools in the United States. Unlefs the price of this book be paid for by the public, there is reason to fear that in a few years it will be met with only in courts of juffice or in magistrates' offices; and should the abfurd mode of eftablishing truth by kiffing this facred book fall into difufe, it may probably, in the courfe of the next

generation, be feen only as a curiofity on a fhelf in a public mufeum.

IV. Let the following fentence be inferibed in letters of gold over the doors of every State and Court house in the United States.

```
THE SON OF MAN CAME INTO THE WORLD, NOT TO
DESTROY MEN'S LIVES, BUT TO SAVE THEM.
```

V. To infpire a veneration for human life, and an horror at the fhedding of human blood, let all thofe laws be repealed which authorife juries, judges, fheriffs, or hangmen to affume the refertments of individuals and to commit murder in cold blood in any cafe whatever. Until this reformation in our code of penal jurifprudence takes place, it will be in vain to attempt to introduce univerfal and perpetual peace in our country.

VI. To fubdue that paffion for war, which education, added to human depravity, have made univerfal, a familiarity with the inftruments of death, as well as all military fhows, fhould be carefully avoided. For which reafon, militia laws fhould every where be repealed, and military dreffes and military titles fhould be laid afide: reviews tend to leffsn the horrors of a battle by connecting them with the charms of order; militia laws generate idlenefs and vice, and thereby produce the wars they are faid to prevent; military dreffes fafcinate the minds of young men, and lead them from ferious and ufeful profefions; were there no *uniforms*, there would probably be no armies; laftly, military titles feed vanity, and keep up ideas in the mind which leffen a fenfe of the folly and miferies of war.

VII. In the laft place, let a large room, adjoining the federal hall, be appropriated for transacting the bufinefs and preferving all the records of this *effice*. Over the door of this room let there be a fign, on which the figures of a LAME, a DOVE and an OLIVE BRANCH should be painted, together with the following inferiptions in let:ers of gold:

PEACE ON EARTH-GOOD-WILL TO MAN. AH! WHY WILL MEN FORGET THAT THEY ARE BRETHREN ?

Within this apartment let there be a collection of ploughfhares and pruning-hooks made out of fwords and fpears; and on each of the walls of the apartment, the following pictures as large as the life:

1. A lion eating ftraw with an ox, and an adder playing upon the lips of a child.

2. An Indian boiling his venifon in the fame pot with a citizen of Kentucky.

3. Lord Cornwallis and Tippoo Saib, under the fhade of a fycamore-tree in the Eaft Indies, drinking Madeira wine together out of the fame decanter. 4. A group of French and Austrian foldiers dancing arm and arm, under a bower erected in the neighbourhood of Mons.

5. A St. Domingo planter, a man of color, and a native of Africa, legislating together in the fame colonial affembly.

To complete the entertainment of this delightful apartment, let a group of young ladies, clad in white robes, affemble every day at a certain hour, in a gallery to be erected for the purpofe, and fing odes, and hymns, and anthems in praife of the bleflings of peace.

One of these fongs should confist of the following lines.

Peace o'er the world her olive wand extends, And white-rob'd innocence from heaven defeends; All crimes fhall ceafe, and ancient frauds fhall fail, Returning justice lifts aloft her feale.

In order more deeply to affect the minds of the citizens of the United States with the bleffings of peace, by *contrafting* them with the evils of war, let the following inferiptions be painted upon the fign, which is placed over the door of the War Office.

I. An office for butchering the human species.

2. A Widow and Orphan making office.

[†] At the time of writing this, there exifted wars between the United States and the American Indians, between the British nation and Tippoo Saib, between the planters of St Domingo and their African flaves, and between the French nation and the emperor of Germany. 188 A PLAN OF A PEACE OFFICE, &c.

3. A broken bone making office.

4. A Wooden leg making office.

5. An office for creating public and private vices.

6. An office for creating a public debt.

7. An office for creating fpeculators, flock Jobbers, and Bankrupts.

8. An office for creating famine.

9 An office for creating peftilential difeafes.

10. An office for creating poverty, and the deftruction of liberty, and national happinefs.

In the lobby of this office let there be painted reprefentations of all the common military inftruments of death, alfo human fkulls, broken bones, unburied and putrifying dead bodies, hofpitals crouded with fick and wounded Soldiers, villages on fire, mothers in befieged towns eating the flefti of their children, fhips finking in the ocean, rivers dyed with blood, and extensive plains without a tree or fence, or any other object, but the ruins of deferted farm houfes.

Above this group of wocful figures,—let the following words be inferted, in red characters to reprefent human blood,

" NATIONAL GLORY."

INFORMATION TO EUROPEANS WHO ARE DISPOSED TO MIGRATE TO THE UNITED STATES OF AMERICA. IN A LETTER TO A FRIEND IN GREAT BRITAIN.

GREEABLY to your requeft contained in your letter of the 29th of Auguft, 1789. Ihave at laft fat down to communicate fuch facts to you, upon the fubject of migration to this country, as have been the refult of numerous enquirics and obfervation. I am aware that this fubject has been handled in a mafterly manner by Doctor Franklin, in his excellent little pamplet, entitled "Advice to thofe who would wifh " to remove to America," but as that valuable little work is very general, and as many important changes have occurred in the affairs of the United States fince its publication, I fhall endeavour to comply with your wifnes, by adding fuch things as have been omitted by the Doctor, and fhall accommodate them to the prefent flate of our country.

I fhall begin this letter by mentioning the deferiptions of people, who ought not to come to America.

I. Men of independent fortunes who can exift only in company, and who can converfe only upon public amufements, fhould not think of fettling in the United States. I have known feveral men of that character in this country, who have rambled from State to State, complaining of the dulnefs of each of them, and who have finally returned and renewed their former connexions and pleafures in Europe.

II. Literary men, who have no professional pursuits, will often languish in America, from the want of fociety. Our authors and fcholars are generally men of bufinefs, and make their literary purfuits fubfervient to their interefts. A lounger in book ftores, breakfafting parties for the purpofe of literary converfation, and long attic evenings, are as yet but little known in this country. Our companies are generally mixed, and conversation in them is a medley of ideas upon all fubjects. They begin as in England with the weather -foon run into politics -now and then diverge into literature-and commonly conclude with facts relative to commerce, manufactures and agriculture, and the beft means of acquiring and improving an eftate. Men, who are philosophers or poets, without other purfuits, had better end their days in an old country.

III. The United States as yet afford but little encouragement to the profeffers of most of the fine arts. Painting and fculpture flourish chiefly in wealthy and luxurious countries. Our native American portrait painters who have not fought protection and encouragement in Great Britain, have been obliged to travel accasionally from one State to another in order to fupport themfelves. The teachers of music have been more fortunate in America. A tafte for this accom-

190

MIGRATING TO THE UNITED STATES. 191

plifhment prevails very generally in our large cities : and eminent mafters in that art, who have arrived here fince the peace, have received confiderable fums of money by exercifing their profession among us.

I fhall now mention those deferiptions of people, who may better their condition by coming to America.

I. To the cultivators of the earth the United States open the first afylum in the world. To infure the fucces and happiness of an European Farmer in our country, it is necessary to advise him either to purchase or to rent a farm which has undergone fome improvement.

The bufiness of settling a new tract of land, and that of improving a farm, are of a very different nature. The former must be effected by the native American, who is accuftomed to the ufe of the axe and the grubbing hoe, and who poffeffes almost exclusively a knowledge of all the peculiar and namelels arts of felf-prefervation in the woods. I have known many inftances of Europeans who have fpent all their cafh in unfuccefsful attempts to force a fettlement in the wildernefs, and who have afterwards been exposed to poverty and diftrefs at a great diftance from friends and even neighbours. I would therefore advife all farmers with moderate capitals, to purchase or rent improved farms in the old fettlements of our States. The price and rent of these farms are different in the different parts of the union. In Pennfylvania, the price of farms

is regulated by the quality of the land—by the value or the improvements which are erected upon it—by their vicinity to fea ports and navigable water—and by the good or bad flate of the roads which lead to them. There is a great variety, of courfe, in the price of farms: while fome of them have been fold for five guineas others have been fold at lower prices, down to one guinea, and even half a guinea per acre, according as they were varied by the above circumflances.

It is not expected that the whole price of a farm fhould be paid at the time of purchafing it. An half, a third, or a fourth, is all that is generally required. Bonds and mortgages are given for the remainder, (and fometimes without intereft) payable in two, three, five, or even ten years.

The value of thefe farms has often been doubled and even trebled, in a few years, where the new mode of agriculture has been employed in cultivating them: fo that a man with a moderate capital, may, in the courfe of fifteen years, become an opulent and independent freeholder.

If, notwithstanding what has been faid of the difficulties of effecting an establishment in the woods, the low price of the new lands should tempt the European Farmer to settle in them, then let me add, that it can only be done by affociating himself in a large company, under the direction of an active and intelligent American farmer. To secure even a

MIGRATING TO THE UNITED STATES. 193

company of European fettlers from difappointment and want in the woods, it will be necessary to clear a few acres of land the year before, and to fow them with grain, in order to provide fubfiftance for the company, till they can provide for themfelves, by clearing their own farms. The difficulties of eftablishing this new fettlement, will be further lessened, if a few cabins, a grift and a faw mill be erected, at the fame time the preparations are made for the temporary fubfistance of the company. In this manner, most of the first fettlements of the New England men have been made in this country. One great advantage, attending this mode of fettling, is, a company may always carry with them a clergyman and a fchoolmafter, of the fame religion and language with themfelves. If a fettler in the woods should posses a taste for rural elegance, he may gratify it without any expense, by the manner of laying out his farm. He may shade his houfe by means of ancient and venerable forrefttrees. He may leave rows of them standing, to adorn his lanes and walks-or clusters of them on the high grounds of his fields, to fhade his cattle. If he should fix upon any of those parts of our western country, which are covered with the fugar-trees, he may inclose a fufficient number of them to fupply his family with fugar; and may confer upon them at the fame time the order and beauty of a fine orchard. In this manner, a highly improved feat may

INFORMATION TO EUROPEANS

be cut out of the woods in a few years, which will furpafs both in elegance and value a farm in an old fettlement, which has been for twenty years the fubject of improvements in tafte and agriculture. To contemplate a dwelling-houfe—a barn—ftables—fields —meadows—an orchard—a garden, &c. which have been produced from original creation by the labour of a fingle life, is, I am told, to the proprietor of them, one of the higheft pleafures the mind of man is capable of enjoying. But how much muft this pleafure be increafed, when the regularity of art is blended in the profpect, with the wildnefs and antiquity of nature ?

It has been remarked in this country, that clearing the land of its woods, fometimes makes a new fettlement unhealthy, by exposing its damp grounds to the action of the fun. To obviate this evil, it will be neceffary for the fettler either to drain and cultivate his low grounds, as foon as they are cleared, or to leave a body of trees between his dwelling house, and the spots from whence the morbid effluvia are derived. The last of these methods has, in no instance that I have heard of, failed of preferving whole families from such difeases as arise from damp or putrid exhalations.

To country gentlemen, who have been accuftomed to live upon the income of a landed effate in Europe, it will be neceflary to communicate the following information, viz. that farms, in confequence of the

194

MIGRATING TO THE UNITED STATES.

unproductive woodland, which is generally connected with them, feldom yield more than three or four per cent. a year in the neighbourhood of large cities. Befides, from the facility with which money enough may be faved in a few years, to purchafe land in this country, tenants will not accept of long leafes : and hence they are not fufficiently interested in the farms they rent, to keep them in repair. If country gentlemen with to derive the greatest advantage from laying out their money in lands, they must reside in their vicinity. A capital of five thousand guineas, invested in a number of contiguous farms, in an improved part of our country, and cultivated by tenants under the eye and direction of a landlord, would foon yield a greater income than double that fum would in most parts of Europe. The landlord in this cafe must frequently visit and infpect the flate of each of his farms : and now and then he must stop to repair a bridge or a fence in his exeurfions through them. He muft receive all his rents in the produce of the farms. If the tenant find his own flock, he will pay half of all the grain he raifes, and fometimes a certain proportion of vegetables and live flock, to his landlord. The division of the grain is generally made in the field, in fheaves or flacks, which are earried home to be thrashed in the barn of the laudlord. An eftated gentleman, who can recoucile himfelf to this kind of life, may be both happy and useful. He may instruct his

195

tenants by his example, as well as precepts in the new modes of hufbandry: he may teach them the art and advantages of gardening he may infpire them with habits of fobriety, induftry, and œconomy; and thereby become the father and protector of a dependant and affectionate neighbourhood. After a bufy fummer and autumn, he may pafs his winters in polifhed fociety in any of our cities, and in many of our country villages.

But fhould he be difinclined to fuch extensive fcenes of bulinefs, he may confine his purchafes and labours to a fingle farm, and fecure his fuperfluous cafh in bonds and mortgages, which will yield him fix per cent,

Under this head, it is proper to mention, that the agricultural life begins to maintain in the United States, the fame rank that it has long maintained in Great Britain. Many gentlemen of education among us have quitted liberal profeffions, and have proved, by their fuccefs in farming, that philofophy is in no bufinefs more ufeful or profitable, than in agriculture.

II. MECHANICS and MANUFACTURERS, of every defcription, will find certain encouragement in the United States. During the connection of this country with Great Britain, we were taught to believe that agriculture and commerce fhould be the only purfuits of the Americans: but experiments and reflexion have taught us, that our country abounds with re-

MIGRATING TO THE UNITED STATES. 197

fources for manufactures of all kinds: and that moft of them may be conducted with great advantage in all the ftates. We are already nearly independent of the whole world for iron-work, paper, and malt liquors : and great progrefs has been made in the manufacturies of glafs, pot-afh, and cloths of all kinds. The commercial habits of our citizens have as yet prevented their employing large capitals in thofe manufacturies : but I am perfuaded that if a few European adventurers would embark in them with capitals equal to the demand for thofe manufactures, they would foon find an immenfe profit in their fpeculations. A fingle farmer in the ftate of New York, with a capital of five thoufand pounds, has cleared one thoufand a year by the manufacture of pot-afh alone.

Those mechanical arts, which are accomodated to the infant and fimple ftate of a country, will bid faireft to fucceed among us. Every art, connected with cultivating the carth—building houses and fhips, and feeding and clothing the body, will meet with encouragement in this country. The prices of provisions are fo different in the different ftates, and even in the different parts of the fame ftate, and vary fo much with the plenty and fcarcity of money, that it would be difficult to give you fuch an account of them as would be useful. I need only remark, that the differoportion between the price of labour and of provisions, is much greater in every part of the United States, than in any part of Europe : and hence our tradefmen every where eat meat and butter every day: and most of them realize the wish of Henry IV. of France, for the peafants of his kingdom, by dining not only once, but two or three times, upon poultry, in every week of the year.

It is a fingular fact in the hiftory of the mechanical zrts in this country, that the fame arts feldom deicend from father to fon. Such are the profits of even the humbleft of them, that the fons of mechanics generally rife from the lower to the more refpectable occupations: and thus their families gradually afcend to the first ranks in fociety among us. The influence, which the profpects of wealth and confequence have in invigorating industry in every line of mechanical bufinefs, is very great. Many of the first men in America, are the fons of reputable mechanics or farmers. But I may go farther, and add, that many men, who diftinguished themfelves both in the cabinet and field, in the late war, had been mechanics. I know the British officers treated the American caufe with contempt, from this circumftance : but the event of the war fhewed, that the confidence of America was not mifplaced in that body of citizens.

III. LABOURERS may depend upon conftant employment in the United States, both in our towns and in the country. When they work by the day, they receive high wages : but thefe are feldom continued

MIGRATING TO THE UNITED STATES. 199

through the whole year. A labourer receives annually, with his bounding, washing, and lodging, from fifteen to eighteen guineas, in the middle states. It is agreeable to obferve this class of men frequently raifed by their industry from their humble stations, into the upper ranks of life, in the course of twenty or thirty years.

IV. PERSONS who are willing to indent themfelves as fervants for a few years, will find that humble ftation no obftacle to a future eftablishment in our country. Many men, who came to America in that capacity, are now in affluent circumstances. Their former fituation, where they have behaved well, does not preclude them from forming refpectable connections in marriage, nor from sharing, if otherwise qualified, in the offices of our country.

V. The United States continue to afford encouragement to gentlemen of the *learned profeffions*, provided they be prudent in their deportment, and of fufficient knowledge : for fince the eftablifhment of colleges and fchools of learning in all our ftates, the fame degrees of learning will not fucceed among us, which fucceeded fifty years ago.

Several lawyers and phyficians, who have arrived here fince the peace, are now in good bufinefs: and many elergymen, natives of England, Scotland, and Ireland, are comfortably fettled in good parifles. A

minister of the gospel in a country place must not expect to have all his falary paid in cafh : but he will notwithstanding feldom fail of obtaining a good fubfiftance from his congregation. They will furnish his table with a portion of all the live flock they raife for their own use : they will shoe his horses-repair his implements of hufbandry, and affift him in gathering in his harvefts, and in many other parts of the bufinefs of his farm. From thefe aids, with now and then a little cash, a clergyman may not only live well, but, in the courfe of his life, may accumulate an handfome estate for his children. This will more certainly happen, if he can redeem time enough from his parochial duties, and the care of his farm, to teach a fchool. The people of America are of all fects : but the greateft part of them are of the independent, prefbyterian, epifcopal, baptift, and methodift denominations. The principles held by each of these focicties in America are the fame as those which are held by the protestant churches in Europe, from which they derive their origin.

VI. SCHOOLMASTERS of good capacities and fair characters may excepct to meet with encouragement in the middle and fouthern ftates. They will fucceed better, if they confine their inftructions to reading, writing, Englifh grammar, and the fciences of number and quantity. Thefe branches of literature are of general neceffity and utility : and of courfe every

200

MIGRATING TO THE UNITED STATES. 201

township will furnish fcholars enough for the maintenance of a schoolmaster. Many young men have risen by means of the connexions they have formed in this useful employment, to rank and consequence in the learned professions in every part of this country.

From this account of the United States, you will eafily perceive, that they are a hot-bed for industry and genius in almost every human purfuit. It is inconceivable how many ufeful difcoveries neceffity has produced within thefe few years, in agriculture and manufactures, in our country. The fame neceffity has produced a verfatility of genius among our citizens : hence we frequently meet with men who have exercifed two or three different occupations or professions in the courfe of their lives, according to the influence which intereft, accident, or local circumftances have had upon them. I know that the peculiarities, which have been mentioned in the American character, ftrike an European, who has been accustomed to confider man as a creature of habit, formed by long established governments, and hereditary cuftoms, as fo many deviations from propriety and order. But a wife man, who knows that national characters arife from circumftances, will view thefe peculiarities without furprife, and attribute them wholly to the prefent flate of manners, fociety, and government in America.

From the numerous competitions in every branch of bufinefs in Europe, fuceefs in any purfuit, may be

D d

looked upon in the fame light as a prize in a lottery. But the cafe is widely different in America. Here there is room enough for every human talent and virtue to expand and flourish. This is so invariably true, that I believe there is not an instance to be found, of an industrious, frugal prudent European, with sober manners, who has not been successful in business, in this country.

As a further inducement to Europeans to transport themfelves across the Ocean, I am obliged to mention a fact that does little honour to the native American; and that is, in all competitions for bufincfs, where fuccels depends upon industry, the European is generally preferred. Indeed, fuch is the facility with which property is acquired, that where it does not operate as a ftimulus to promote ambition, it is fometimes accompanied by a relaxation of industry in proportion to the number of years or generations which interpofe between the founder of an American family and his pofterity. This preference of European mechanics arifes, likewife, from the improvements in the different arts, which are from time to time imported by them into our country. To thefe facts I am happy in being able to add, that the years of anarchy, which proved fo difgufting to the Europeans who arrived among us immediately after the peace, are now at an end, and that the United States have at last adopted a national government which unites with the vigour of monarchy and the ftability of ariftocracy, all the freedom of

202

a fimple republic. Its influence already in invigorating industry, and reviving credit, is univerfal. There are feveral peculiarities in this government, which caunot fail of being agreeable to Europeans, who are difpofed to fettle in America.

1. The equal fhare of power it holds forth to men of every religious fect. As the first fruits of this perfection in our government, we already fee three gentlemen of the Roman Catholic church, members of the legislature of the United States.

2. Birth in America is not required for holdingeither power or office in the federal government, except that of Prefident of the United States. In confequence of this principle of juffice, not only in the national government, but in all our flate conftitutions, we daily fee the natives of Britain, Ireland, Germany, advanced to the most respectable employments in our country.

3. By a late act of congress, only two years refidence in the United States are necessary to entitle foreigners of good character to all the priviliges of citizenship. Even that short period of time has been found fufficient to give strangers a visible interest in the stability and freedom of our governments. *

It is agreeable to obferve the influence which our republican governments have already had upon the

^{*} By a law paffed fince the above, five years refidence are neceffary to entitle a foreigner to citizenship.

tempers and manners of our citizens. Amufement is every where giving way to bufinefs: and local politenefs is yielding to univerfal civility. We differ about forms and modes in politics : but this difference begins to fubmit to the reftraints of moral and focial obligation. Order and tranquility appear to be the natural confequence of a well-balanced republic : for where men can remove the evils of their governments by frequent elections, they will feldom appeal to the lefs certain remedies of mobs or arms. It is with fingular pleafure that I can add further, that notwithstanding the virulence of our diffensions about independence and the federal government, there is now fcarcely a citizen of the United States, who is not fatisfied with both, and who does not believe this country to be in a happier and fafer fituation, than it was, in the most flourishing years of its dependence upon Great Britain.

The encouragment held out to European emigrants is not the fame in all the ftates. New England, New York, and New Jerfey, being nearly filled with cultivators of the earth, afford encouragement chiefly to mechanicks and labourers. The inhabitants of New England have far furpaffed the inhabitants of the other ftates, in the eftablifhment of numerous and profitable manufactories. Thefe wonderful people difcover the fame degrees of industry in cultivating the arts of peace, that they did of enterprize and perfeverance, in the late war. They already export large quantities

MIGRATING TO THE UNITED STATES. 205

of wrought iron, hats, women's fhoes, cheefe, and linen and woolen cloth. The flate of New-York has likewife difcovered a Jaudable fpirit for manufacturers and domeflic improvements. European artifls, therefore, cannot fail of meeting with encouragement in each of the above flates.

Pennfylvania affords an equal afylum to all the defcriptions of people that have been mentioned, under the fccond head of this letter. Agriculture, manufactures, and many of the liberal arts feem to vie with each other for pre-eminence in this state. Each of them is under the patronage of numerous and refpectable focieties. No ftate in the union affords greater refources for thip building, malt liquors, maple fugar, fail cloth, iron work, woolen and linen cloths, potafh, and glafs. Coal, likewife, abounds on the fhores of the Sufquehanna, a large river which runs through half the flate. The variety of fects and nations, which compofe the inhabitants of this flate, has hitherto prevented our having any fleady traits in our character. We poffefs the virtues and weakneffes of most of the fects and nations of Europe. But this variety has produced fuch a collifion in opinions and interefts, as has greatly favoured the progress of genius in every art and fcience. We have been accufed of being factious by our lifter states. This must be aferibed chiefly to our late flate conftitution, which was effablished by violence in the beginning of the late war, and which was never affented to by a majority of the people. But that majority have at length afferted their power. A convention, composed of an equal representation of the people, has met and formed a new conflitution, which comprehends in it every principle of liberty and just government. From the excellency of this conflitution—from the harmony it has referred to our citizens —from the central fituation of our flate—from the number and courfes of our rivers—from the facility with which we are able to draw the refources of the lakes to the Delaware—from the wealth of our capital—and above all, from the industry and fober habits of our citizens—there can be no doubt that Pennfylvania will always maintain the first rank, for national profperity and happines, in the United States.

There is one circumftance, peculiar in a great degree to Penfylvania, which cannot fail of directing the eyes of the inhabitants of feveral of the European nations to this flate—and that is, the natives of Britain, Ireland, Germany, France, Switzerland, and Holland, may here meet with their former fellow fubjects, and receive from them that welcome and affiftance, which are the natural confequences of the tie of country. So ftrongly does this principle operate in America, that the natives of Germanyand Ireland have formed themfelves into focicites in the city of Philadelphia, for the exprets purpofe of protecting, advifung, and affifting their country-

MIGRATING 10 THE UNITED STATES. 207

men, as foon as they fet their feet upon the fliores of Pennfylvania.

It has been faid, that the lands in Penn'ylvania are dearer than in fome of our fifter flates. They fell, it is true, for a greater nominal fum, than the lands of the neighbouring states : but in the end, they are much cheaper. The foil is deep, rich, and durable, and from the fuperior industry and skill of our farmers, our lands are more productive than those of our neighbours; hence their higher price; for the price of lands is always in a ratio to their quality, produce and fituation : hence likewife, we are able to tell the value of a farm in any part of the ftate, by first finding out the quantity of grain an acre will produce, and the price of this grain at the nearest mill or store, making some little allowance for the improvements which are connected with the farm. This remark is fo univerfally true, that a farmer never miltakes the application of it in purchafing land. There is a certain inftinct, which governs in all purchases and fales of farms, and which arifes out of the principle I have mentioned : it is in general as accurate, as if it arofe out of the niceft calculation. It is from an ignorance or neglect of this principle, that fo many of our citizens have migrated to Kentucky, under a delufive expectation of purchasing lands cheaper than in the old states. They are in fact often much dearer when you cflimate their price by the profit of the grain which is cultivated upon them. For inftance, an acre

of land in Kentucky, which fells for a quarter of a guinea, and yields 30 bushels of corn, at four pence fterling per bushel, is dearer than land of the fame quality in Pennfylvania, at a guinea per acre, that yields the fame quantity of corn, which can be fold at the neareft mill or ftore for two shillings sterl. per bushel. To cure this passion for migrating to the waters of the Ohio, there is but one remedy, and that is, to open the navigation of the Mifliffippi. This, by raifing the price of produce, will raife the value of land fo high, as to deftroy the balance of attraction to that country. This truth is at prefent a fpeculalative one, but I hope it will be reduced to practice before the waters of the Ohio and Miffiflippi have been dyed with the blood of two or three hundred thousand men.

The flates to the fouthward of Pennfylvania poffefs immenfe refources for political happinefs: but while they tolerate negro flavery, they can never be an agreeable retreat for an European. This objection applies chiefly to the fea coafts of thofe flates; for in the weftern parts of them, the land is cultivated chiefly by freemen. The foil and climate of the extensive weftern country of thofe flates is kind and mild to a very great degree. There Europeans may profper and be happy.

Thus, Sir, have I complied in a few words with your requeft. In communicating many of the facts contained in this letter, I have not confidered you

MIGRATING TO THE UNITED STATES. 209

fimply as a citizen of London, or a fubject of the erown of Britain. The whole family of mankind, I know are your brethren; and if men be happy I am fure it is a matter of indifference to you, whether they enjoy their happines on this fide, or on the other fide of the Atlantic ocean.

From a review of the facts that have been mentioned, you will perceive that the prefent is the age of reafon and action in America. To our posterity we must bequeath the cultivation of the fine arts and the pleafures of tafte and fentiment. The foreigners who have vifited and defcribed our country without making allowances for those peculiarities which arife from our present state of society, have done as little honour to their understandings, as they have donc to human nature. Nor have those Europeans difcovered more wifdom, who have blended with the American character, the accidental diforders, which were the offspring of our late public commotions. They refembled the fwelling of the fea, which fucceeds a ftorm. At prefent, they have as perfectly fubfided as the diforders produced by the civil wars in England, in the laft century.

It is fomewhat remarkable that in every age, great inventions and great revolutions in human affairs have taken place in a quick fucceffion to each other. The many curious machines for leffening labour, which

Еe

O INFORMATION TO EUROPEANS

have lately been difcovered in Europe, will neceffarily throw many thousand artificers out of employment. Perhaps the late fuecefsful application of the powers of fire and water to mechanical purpofes in your country, was delayed until the prefent time, only that the fanctuary of our national government might be perfectly prepared to receive and protect those industrious bodies of people, who formerly lived by the labour of their hands, and who might otherwife become a burden to the countries in which they had been deprived of the means of fupporting themfelves. Perhaps, too, the revolutions, which are now going forward in feveral of the governments on the continent of Europe, have occurred at the prefent juncture for a purpole equally wife and benevolent. The first effect of the establishment of freedom in those countrics, will be to promote population, by reducing taxes, difbanding flanding armies, and abolifhing the vows and practices of eelibaey: for I take it for granted that military inftitutions in the time of peace, and monafteries of all kinds, must yield to the prefent force and cultivated ftate of human reafon, in those countries, which are now the theatres of revolutions in favour of liberty. This increase of population will require an increase of territory, which must be fought for in the United States : for it is not probable that men who have once tafted of the fweets of liberty' will ever think of transporting themselves to any other country. This outlet for fupernumerary inhabitants

MIGRATING TO THE UNITED STATES. 211

from the nations of Europe, will eventually promote their interests and prosperity: for when a country is fo much crouded with people, that the price of the means of subfishence is beyond the ratio of their industry, marriages are restrained: but when emigration to a certain degree takes place, the balance between the means of subfishence and industry is restored, and population thereby revived. Of the truth of this principle there are many proofs in the old counties of all the American states. Population has constantly been advanced in them by the migration of their inhabitants to new or distant fettlements.

In fpite of all the little fyftems of narrow politicians, it is an eternal truth, that univerfal happines is univerfal intercft. The divine government of our world would admit of a controversy, if men, by acquiring moral or political happines, in one part, added to the misery of the inhabitants of another part, of our globe.

I fhall conclude this long letter by the two following remarks:

I. If freedom, joined with the facility of acquiring the means of fubfiftence, have fuch an influence upon population—and if exiftence be a title to happinefs then think, fir, what an ocean of additional happinefs will be created, by the influence which migration to the free and extensive territories of the United States will have, upon the numbers of mankind.

212 INFORMATION TO EUROPEANS, &C

II. If wars have been promoted in all ages and countries, by an over proportion of inhabitants to the means of eafy fubliftence, then think, fir, what an influence upon the means of fupporting human life, migration to America, and the immenfe increase of the productions of the earth, by the late improvements in agriculture, will probably have, in leffening the temptations and refources of nations to carry on war. The promifes of heaven are often accomplifhed by means in which there is no departure from the common operations of nature. If the events, which have been alluded to, fhould contribute in any degree to put an end to wars, it will furnish a noble triumph to your fociety +, by fhewing how much enlightened policy, and national happinefs, are connected with the dictates of chriftianity.

I am,

Dear fir, With great refpect, And funcere regard, Yours very affectionately,

Philadelphia, April 16. 1790.

† The gentleman to whom this letter is addreffed, is of the fociety of the people called quakers. AN ACCOUNT OF THE PROGRESS OF POPULATION, AGRICULTURE, MANNERS, AND GOVERNMENT IN PENNSYLVANIA, IN A LETTER TO A FRIEND IN ENGLAND.

DEAR SIR,

Whatever tends to unfold *facts* in the hiftory of the human fpecies, muft be interefting to a curious enquirer.—The manner of fettling a new country, exhibits a view of the human mind fo foreign to the views of it which have been taken for many centuries in Europe, that I flatter myfelf the following account of the progrefs of population, agriculture, manners, and government in Pennfylvania will be acceptable to you. I have chofen to confine myfelf in the prefent letter to Pennfylvania only, that all the information I fhall give you may be derived from my own knowledge and obfervations.

The *first* fettler in the woods is generally a man who has outlived his credit or fortune in the cultivated parts of the State. His time for migrating is in the month of April. His first object is to build a fmall cabbin of rough logs for himfelf and family. The floor of this cabbin is of earth, the roof is of fplit logs—the light is received through the door, and, in

fome inftances, through a fmall window made of greafed paper. A coarfer building adjoining this cabbin affords a shelter to a cow and a pair of poor horfes. The labor of creeting thefe buildings is fucceeded by killing the trees on a few acres of ground near his cabbin; this is done by cutting a circle round the trees, two or three feet from the ground. The ground around these trees is then ploughed and Indian-corn planted in it. The feafon for planting this grain is about the 20th of May-It grows generally on new ground with but little cultivation, and yields in the month of October following, from forty to fifty bufhels by the acre. After the first of September it affords a good deal of nourifhment to his family, in its green or unripc flate, in the form of what is called roafling ears. His family is fed during the fummer by a fniall quantity of grain which he carries with him, and by fifh and game, His cows and horfes feed upon wild grafs, or the fucculent twigs of the woods. For the first year he endures a great deal of diftrefs from hunger-coldand a variety of accidental caufes, but he feldom complains or finks under them. As he lives in the neighbourhood of Indians, he foon acquires a ftrong tincture of their manners. His exertions, while they continue, are violent; but they are fucceeded by long intervals of reft. His pleafures confift chiefly in fifting and hunting. He loves fpirituous liquors, and he eats, drinks and fleeps in dirt and rags in his little cabbin. In his intercourse with the world

he manifests all the arts which characterize the Indians of our country. In this fituation he passes two or three years. In proportion as population increafes around him, he becomes uneafy and diffatisfied. Formerly his cattle ranged at large, but now his neighbours call upon him to confine them within fences, to prevent their trefpaffing upon their fields of grain. Formerly he fed his family with wild animals, but thefe, which fly from the face of man, now ceafe to afford him an eafy fubliftence, and he is compelled to raife domestic animals for the fupport of his family. Above all, he revolts against the operation of laws. He cannot bear to furrender up a fingle natural right for all the benefits of government,-and therefore he abandons his little fettlement, and feeks a retreat in the woods, where he again fubmits to all the toils which have been mentioned. There are inftances of many men who have broken ground on bare creation, not lefs than four different times in this way, in different and more advanced parts of the State. It has been remarked, that the flight of this clafs of people is always increafed by the preaching of the gofpel. This will not furprife us when we confider how opposite its precepts are to their licentious manner of living. 1f our first fettler was the owner of the spot of land which he began to cultivate, he fells it at a confiderable profit to his fuccesfor; but if (as is oftner the cafe) he was a tenant to fome rich landholder,

216 AN ACCOUNT OF THE PROGRESS OF

he abandons it in debt; however, the fmall improvements he leaves behind him, generally make it an object of immediate demand to a *fecond* fpecies of fettler.

This fpecies of fettler is generally a man of fome property,-he pays one third or one fourth part in cash for his plantation, which confists of three or four hundred acres, and the reft in gales or inftalments, as it is called here; that is, a certain fum yearly, without interest, 'till the whole is paid. The first object of this fettler is to build an addition to his cabbin; this is done with hewed logs: and as faw-mills generally follow fettlements, his floors are made of boards; his roof is made of what are called clapboards, which are a kind of coarfe fhingles, fplit out of fhort oak logs. This houfe is divided by two floors, on each of which are two rooms : under the whole is a cellar walled with ftone. The cabbin ferves as kitchen to this house. His next object is to clear a little meadow ground, and plant an orchard of two or three hundred apple trees. His ftable is likewife enlarged; and, in the courfe of a year or two, he builds a large log barn, the roof of which is commonly thatched with rye ftraw : he moreover encreafes the quantity of his arable land ; and, inftead of cultivating Indian corn alone, he raifes a quantity of wheat and rye: the latter is cultivated chiefly for the purpose of being distilled into whiskey. This spe-

POPULATION, &C. IN PENNSYLVANIA. 217

cies of fettler by no means extracts all from the earth, which it is capable of giving. His fields yield but a fcanty increase, owing to the ground not being fufficiently ploughed. The hopes of the year are often blafted by his cattle breaking through his half made fences, and destroying his grain. His horses perform but half the labor that might be expected from them, if they were better fed ; and his cattle often die in the fpring from the want of provision, and the delay of grafs. His houfe, as well as his farm, bear many marks of a weak tone of mind. His windows are unglazed, or, if they have had glafs in them, theruins of it are fupplied with old hats or pillows. This fpecies of fettler is feldom a good member of civil or religious fociety : with a large portion of a hereditary mechanical kind of religion, he neglects to contribute fufficiently towards building a church, or maintaining a regular administration of the ordinances of the golpel: he is equally indifpofed to fupport civil government : with high ideas of liberty, he refufes to bear his proportion of the debt contracted by its eftablifhment in our country : he delights chiefly in company-fometimes drinks fpirituous liquors to excefswill fpend a day or two in every week, in attending political meetings ; and, thus, he contracts debts which, (if he cannot difcharge in a depreciated paper currency) compel him to fell his plantation, generally in the courfe of a few years, to the third and last fpecies of fettler.

F f

218 AN ACCOUNT OF THE PROGRESS OF

This fpecies of fettler is commonly a man of property and good character-fometimes he is the fon of a wealthy farmer in one of the interior and ancient counties of the state. His first object is to convert every fpot of ground, over which he is able to draw water, into meadow : where this cannot be done, he felects the most fertile spots on the farm, and devotes it by manure to that purpose. His next object is to build a barn, which he prefers of stone. This building is, in some instances, 100 feet in front, and 40 in depth : it is made very compact, fo as to thut out the cold in winter; for our farmers find that their horses and cattle, when kept warm, do not require near as much food, as when they are exposed to the cold. He uses æconomy, likewife, in the confumption of his wood. Hence he keeps himfelf warm in winter, by means of stoves, which fave an immense deal of labour to himfelf and his horfes, in cutting and hawling wood in cold and wet weather. His fences are every where repaired, fo as to fecure his grain from his own and his neighbour's cattle. But further, he increases the number of the articles of his cultivation, and, inftead of raifing corn, wheat and rye alone, he raifes oats, buckwheat, (the fagopyrum of Linnæus) and spelts. Near his house, he allots an acre or two of ground for a garden, in which he raifes a large quantity of cabbage and potatoes. His newly cleared fields, afford him every year a large increase of turnips. Over the spring which supplies

him with water, he builds a milk-houfe and over this, in fome inftances, he builds a fmoke houfe ; he likewife adds to the number, and improves the quality of his fruit trees :- His fons work by his fide all the year and his wife and daughters forfake the dairy and the fpinning wheel, to fhare with him in the toils of harveft. The last object of his industry is to build a dwelling This bufinefs is fometimes effected in the houfe. course of his life, but is oftener bequeathed to his fon, or the inheritor of his plantation : and hence we have a common faying among our beft farmers, " that " a fon should always begin where his father left off;" that is, he should begin his improvements, by building a commodious dwelling-houfe, fuited to the improvements and value of the plantation. This dwelling-houfe is generally built of ftone-it is large, convenient, and filled with useful and fubstantial furniture-It fometimes adjoins the houfe of the fecond fettler, but is frequently placed at a little distance from it. The horses and cattle of this species of settler, bear marks in their strength, fat and fruitfulnefs-of their being plentifully fed and carefully kept. His table abounds with a variety of the beft provisions-his very kitchen flows with milk and honey-beer, cyder, and home made wine are the ufual drinks of his family : the greatest part of the cloathing of his family is manufactured by his wife and daughters: in proportion as he encreafes in wealth, he values the protection of laws: hence

220 AN ACCOUNT OF THE PROGRESS OF

he punctually pays his taxes towards the fupport of government. Schools and churches likewife, as the means of promoting order and happinefs in fociety, derive a due fupport from him : for benevolence ard public hirit, as to thefe objects, are the natural offfpring of affluence and independence. Of this clafs of fettlers are two-thirds of the farmers of Penufvlvania. These are the men to whom Pennsylvania owes her ancient fame and confequence. If they poffels lefs refinement than their fouthern neighbours, who cultivate their land with flaves, they poffefs more republican virtue. It was from the farms cultivated by thefe men, that the American and French armies were chiefly fed with bread during the late revolution ; and it was from the produce of these farms, that those millions of dollars were obtained from the Havanna after the year 1780, which laid the foundation of the bank of North America, and which fed and cloathed the American army, till the peace of Paris. This is a fhort account of the happiness of a Pennfylvania farmer-To this happinefs our ftate invites men of every religion and country.

We do not pretend to offer emigrants the pleafures of Arcadia—It is enough if affluence, independence, and happinefs are enfured to patience, induftry, and labour. The moderate price of land,* the credit which

* The unoccupied lands are fold by the flate for about fix guineas inclusive of all charges, per hundred acres. But as most of the lands that are fettled, are procured from perforts who had purchased them from the flate, they are fold to the first fettler for a much higher price. The

POPULATION, &C. IN PENNSYLVANIA. 221

arifes from prudence, and the fafety from our courts of law, of every fpecies of property, render the bleffings which I have deferibed, objects within the reach of every man.

From a review of the three different fpecies of fettlers, it appears, that there are certain regular ftages which mark the progrefs from the favage to civilized life. The first fettler is nearly related to an Indian in his manners—In the fecond, the Indian manners are more diluted : It is in the third species of fettlers only, that we behold civilization completed—It is to the third species of fettlers only, that it is proper to apply the term of *farmers*. While we record the vices of the first and second fettlers, it is but just to mention their virtues likewife.—Their mutual wants produce mutual dependance : hence they are kind and

quality of the foil—its vicinity to mills, court-houfes, places of worfhip, and navigable water : the diftance of land-carriage to the fea-ports of Philadelphia or Baltimore, and the nature of the roads, all influence the price of land to the firft fettler. The quantity of cleared land, and the nature of the improvements, added to all the above circumflances, influence the price of farms to the fecond and third fettlers. Hence the price of land to the firft fettlers is from a quarter of a guinea to two guineas per acre; and the price of farms is from one guinea to ten guineas per acre, to the fecond and third fettlers, according as the land is varied by the before-mentioned circumflances. When the first fettler is unable to purchafe, he often takes a traft of land for feven years on a leafe, and contracts inflead of payin; a rent in cafh, to clear 50 acres of land, to build a log cabbin, and a barn, and to plant an orchard on it. This traft, after the expiration of this leafe, fells or rents for a confideratle profit.

222 AN ACCOUNT OF THE PROGRESS OF

friendly to each other—their folitary fituation makes vilitors agreeable to them ;—hence they are hofpitable to ftrangers: their want of money, (for they raife but little more than is neceffary to fupport their families) has made it neceffary for them to affociate for the purpofes of building houfes, cutting their grain, and the like :—This they do in turns for each other, without any other pay than the pleafures which ufually attend a country frolic—Perhaps what I have called virtues are rather *qualities*, arifing from neceffity, and the peculiar ftate of fociety in which thefe people live.—Virtue fhould, in all cafes, be the offspring of principle.

I do not pretend to fay, that this mode of fettling farms in Pennfylvania is univerfal-I have known fome inftances where the first fettler has performed the improvements of the fecond, and yielded to the third. I have known a few inftances likewife, of men of enterprizing fpirits, who have fettled in the wildernefs, and who, in the course of a fingle life, have advanced through all the intermediate ftages of improvement that I have mentioned and produced all those conveniences which have been ascribed to the third fpecies of fettlers; thereby refembling, in their exploits, not only the pioneers and light-infantry, but the main body of an army. There are inftances likewife, where the first fettlement has been improved by the fame family, in hereditary fucceffion, 'till it has reached the third ftage of cultivation. There are many fpacious ftone houfes and highly cultivated

POPULATION, &C. IN PENNSYLVANIA. 2

farms in the neighbouring counties of the city of Philadelphia, which are poffeffed by the grandfons and great-grandfons of men who accompanied William Penn acrofs the ocean, and who laid the foundation of the prefent improvements of their pofterity, in fuch cabbins as have been defcribed.

This paffion for migration which I have defcribed, will appear ftrange to an European. To fee men turn their backs upon the houfes in which they drew their first breath-upon the church in which they were dedicated to God-upon the graves of their anceftors-upon the friends and companions of their youth-and upon all the pleafures of cultivated fociety, and exposing themselves to all the hardthips and accidents of fubduing the earth, and thereby establishing fettlements in a wilderness, must strike a philosopher on your fide the water, as a picture of human nature that runs counter to the ufual habits and principles of action in man. But this paffion, strange and new as it appears, is wifely calculated for the extention of population in America: and this it does, not only by promoting the increase of the human fpecies in new fettlements, but in the old fettlements likewife. While the degrees of induftry and knowledge in agriculture, in our country, are proportioned to farms of from 75 to 300 acres, there will be a languor in population, as foon as farmers multiply beyond the number of farms of the

224 AN ACCOUNT OF THE PROGRESS OF

above dimensions. To remove this languor, which is kept up alike by the increase of the price, and the division of farms, a migration of part of the community becomes absolutely necessary. And as this part of the community often confists of the idle and extravagant, who eat without working, their removal, by increasing the facility of subsistence to the frugal and industrious who remain behind, naturally increases the number of people, just as the cutting off the fuckers of an apple-tree increases the fize of the tree, and the quantity of fruit.

I have only to add upon this fubject, that the migrants from Pennfylvania always travel to the fouthward. The foil and climate of the western parts of Virginia, North and South-Carolina, and Georgia, afford a more eafy fupport to lazy farmers, than the ftubborn but durable foil of Pennfylvania.-Here, our, ground requires deep and repeated plowing to render it fruitful-there, fcratching the ground once or twice affords tolerable crops. In Pennfylvania, the length and coldnefs of the winter make it neceffary for the farmers to beftow a large fhare of their labour in providing for and feeding their cattle ; but in the fouthern states, cattle find pasture during the greatest part of the winter, in the fields or woods. For thefe reafons, the greatest part of the western counties of the States, that have been mentioned, are fettled by original inhabitants of Pennfylvania. During the late war, the

POPULATION, &C. IN PENNSYLVANIA. 225

militia of Orange county, in North Carolina, were enrolled, and their number amounted to 3,500, every man of whom had migrated frem Pennfylvania. From this you will fee, that our State is the great outport of the United States for Europeans; and that, after performing the office of . a fieve by detaining all those people who posses the ftamina of industry and virtue, it allows a passes to the reft, to those States which are accommodated to their habits of jndolence.

I fhall conclude this letter by remarking, that in the mode of extending population and agriculture, which I have deferibed, we behold a new fpecies of war. The *third* fettler may be viewed as a conqueror. The weapons with which he atchieves his conquefts, are the implements of hufbandry: and the virtues which direct them, are induftry and economy. Idlenefs extravagance—and ignorance fly before him. Happy would it be for mankind, if the kings of Europe would adopt this mode of extending their territories : it would foon put an end to the dreadful connection, which has exifted in every age, between war and poverty, and between conqueft and defolation.

With great refpect,

I have the honor to be,

Sir,

Gg

Your most obedient humble fervant. AN ACCOUNT OF THE MANNERS OF THE GERMAN INHABITANTS OF PENNSYLVANIA.

THE state of Penusylvania is so much indebted for her prosperity and reputation, to the German part of her citizens, that a short account of their manners may, perhaps, be useful and agreeable to their fellow citizens in every part of the United States.

The aged Germans, and the anceftors of those who are young, migrated chiefly from the Palatinate; from Alcace, Swabis, Saxony, and Switzerland : but natives of every principality and dukedom, in Germany, are to be found in different parts of the ftate. They brought but little property with them. A few pieces of gold or filver coin, a cheft filled with clothes, a bible, and a prayer or an hymn book constituted the whole stock of most of them. Many of them bound themfelves, or one or more of their children, to mafters after their arrival, for four, five, or feven years, in order to pay for their paffages acrofs the ocean. A clergyman always accompanied them when they came in large bodies.

The principal part of them were farmers; but there were many mechanics., who brought with them a knowledge of those arts which are necef-

AN ACCOUNT OF THE GERMAN INHABITANTS &C. 22.7

fary and useful in all countries. These mechanics were chiefly weavers, taylors, tanners, shoemakers, comb-makers, fmiths of all kinds, butchers, papermakers, watch makers, and sugar bakers. I shall begin this account of the German inhabitants of Pennsylvania, by describing the manners of the German farmers.

This body of citizens are not only induffrious and frugal, but fkilful cultivators of the earth. I fhall enumerate a few particulars, in which they differ from most of the other farmers of Pennfylvania.

If. In fettling a tract of land, they always provide large and fuitable accomodations for their horfes and cattle, before they lay out much money in building a houfe for themfelves. The barn and the ftables are generally under one roof, and contrived in fuch a manner as to enable them to feed their horfes and cattle, and to remove their dung, with as little trouble as poffible. The first dwelling houfe upon this farm is fmall, and built of logs. It generally lafts the life time of the first fettler of a tract of land; and hence they have a faying, that "a " fon fhould always begin his improvements where " his father left off,"—that is, by building a large and convenient ftone houfe.

2d. They always prefer good land or that land on which there is a large quantity of meadow ground. From an attention to the cultivation of grafs, they often double the value of an old farm in a few years, and grow rich on farms, on which their predeccflors of whom they purchafed them, have nearly flarved. They prefer purchafing farms with fome improvements to fettling on a new track of land.

3d. In clearing new land, they do not girdle the trees fimply, and leave them to perifh in the ground, as is the cuftom of their English or Irish neighbours; but they generally cut them down and burn them. In deftroying under-wood and bufhes, they generally grub them out of the ground; by which means a field is as fit for cultivation the fecond year after it is cleared, as it is in twenty years afterwards. The advantages of this mode of clearing, confift in the immediate product of the field, and in the greater facility with which it is ploughed, harrowed and reaped. The expense of repairing a plough, which is often broken two or three times in a year by fmall ftumps concealed in the ground, is often greater than the extraordinary expense of grubbing the fame field completely, in clearing it.

4th. They feed their horfes and cows, of which they keep only a finall number, in fuch a manner, that the former perform twice the labour of those horfes, and the latter yield twice the quantity of milk of those cows, that are less plentifully fed. There is great œconomy in this practice, especially

INHABITANTS OF PENNSYLVANIA.

in a country where fo much of the labour of a farmer is neceffary to fupport his domeftic animals. A German horfe is known in every part of the ftate : indeed he feems to "feel with his "lord, the pleafure and the pride" of his extraordinary fize or fat.

5th. The fences of a German farm are generally high, and well built; fo that his fields feldom fuffer from the inroads of his own or his neighbours, horfes, cattle, hogs, or fheep.

6th. The German farmers are great œconomifts of their wood. Hence they burn it only in floves, in which they confume but a 4th. or 5th. part of what is commonly burnt in ordinary open fire places: befides, their horfes are faved by means of this economy, from that immenfe labour, in hauling wood in the middle of winter, which frequently unfits the horfes of their neighbours for the toils of the enfuing fpring. Their houfes are, moreover, rendered fo comfortable, at all times, by large close floves, that twice the bufinefs is done by every branch of the family, in kniting, fpinning, and mending farming utenfils, that is done in houfes where every member of the family crouds near to a common fire-place, or fhivers at a diftance from it,-with hands and fingers that move, by reafon of the cold, with only half their ufual quickncfs.

AN ACCOUNT OF THE GERMAN

They difcover economy in the prefervation and increafe of their wood in feveral other ways. They fometimes defend it, by high fences, from their cattle; by which means the young foreft trees are fuffered to grow, to replace thofe that are cut down for the neceffary use of the farm. But where this cannot be conveniently done, they furround the ftump of that tree which is most useful for fences, viz. the chefnut, with a fmall triangular fence. From this ftump a number of fuckers shoot out in a few years, two or three of which in the course of five and twenty years, grow into trees of the fame fize as the tree from whose roots they derived their origin.

7th. They keep their horfes and cattle as warm as poffible in winter, by which means they fave a great deal of their hay and grain; for those animals when cold, eat much more than when they are in a more comfortable fituation.

8th. The German farmers live frugally in their families, with refpect to diet, furniture and apparel. They fell their moft profitable grain, which is wheat; and eat that which is lefs profitable, but more nourifhing, that is rye or Indian corn. The profit to a farmer, from this fingle article of œconomy, is equal, in the courfe of a life time, to the price of a farm for one of his children. They eat fparingly of boiled animal food, with large quantities of vegetables, particularly fallad, turnips, onions, and eabbage,

INHABITANTS OF PENNSYLVANIA.

the last of which they make into four crout. They likewife use a large quantity of milk and cheefe in their diet. Perhaps the Germans do not proportion the quantity of their animal food, to the degrees of their labour; hence it has been thought, by fome people, that they decline in ftrength fooner than their English or Irish neighbours. Very few of them ever use distilled spirits in their families: their common drinks are cyder, beer, wine, and fimple water. The furniture of their house is plain and useful. They cover themfeves in winter with light feather beds inftead of blankets: in this contrivance there is both convenience, and œconomy, for the beds are warmer than blankets, and they are made by themfelves. The apparel of the German farmers is -ufually home (pun. When they use European articles of drefs, they prefer those which are of the best quality, and of the highest price. They are afraid of debt, and feldom purchase any thing without paying safh for it.

oth. The German farmers have large or profitable gardens near their houfes. Thefe contain little elfe but ufeful vegetables. Pennfylvania is indebted to the Germans for the principal part of her knowledge in horticulture. There was a time when turnips and cabbage were the principal vegetables that were used in diet by the citizeus of Philadelphia. This will not furprife those perfons, who know that the first English fettlers in Pennfylvania left England while horticulture was in

232 AN ACCOUNT OF THE GERMAN

its infancy in that country. It was not till the reign of William III. that this ufeful and agreeable art was cultivated by the Englifh nation. Since the fettlement of a number of German gardeners in the neighbourhood of Philadelphia, the tables of all claffes of citizens have been covered with a variety of vegetables, in every feafon of the year; and to the ufe of thefe vegetables, in diet, may be afcribed the general exemption of the citizens of Philadelphia from difeafes of the fkin.

toth. The Germans feldom *hire* men to work upon their farms. The feeblenefs of that authority which mafters poffefses over hired fervants, is fuch that their wages are feldom procured from their labour, except in harveft, when they work in the prefence of their mafters. The wives and daughters of the German farmers frequently forfake, for a while, their dairy and fpinning-wheel, and join their hufbands and brothers in the labour of cutting down, collecting and bringing home the fruits of their fields and orchards The work of the gardens is generally done by the women of the family.

11th. A large and ftrong waggon covered with linen cloth, is an effential part of the furniture of a German farm. In this waggon, drawn by four or five large horfes of a peculiar breed: they convey to market over the rougheft roads, between 2 or 3 thoufand pounds weight of the produce of their farms. In

233

the months of September and October, it is no uncommon thing, on the Lancaster and Reading roads, to meet in one day from fifty to an hundred of these waggons, on their way to Philadelphia, most of which belong to German farmers.

12th. The favourable influence of agriculture, as conducted by the Germans in extending human happinefs, is manifested by the joy they express upon the birth of a child. No dread of poverty, nor diftruft of Providence from an encrealing family, deprefs the foirits of these industrious and frugal people. Upon the birth of a fon, they exult in the gift of a ploughman or a wargoner; and upon the birth of a daughter, they rejoice in the addition of another fpinster, or milkmaid to their family. Happy flate of human fociety ! what bleffings can civilization confer, that can atone for the extinction of the ancient and patriarchal pleasure of raifing up a numerous and healthy family of chudren, to labour for their parents, for themfelves, and for their country; and finally to partake of the knowledge and happinels which are annexed to existence ! The jcy of pareats upon the birth of a child is the grateful echo of creating goodnefs. May the mountains of Pennfylvania be for ever vocal, with fongs of joy upon thefe occifions! They will be the infallible figns of innocence, industry, wealth and happines in the state.

13th. The Germans take great pains to produce, in their children, not only *habits* of labour, but a *love* of it. In this they fubmit to the irreverfible fentence inflicted upon man, in fuch a manner, as to convert the wrath of heaven into private and public happinefs. "To fear God, and to love work," are the first leffons they teach their children. They prefer industrious habits to money itfelf; hence; when a young man afks the confent of his father to marry the girl of his choice, he does not enquire fo much whether she be rich or poor? or whether she posses any personal or mental accomplishments—as whether she be industrious, and acquainted with the duties of a good house-wife ?

14th. The Germans fet a great value upon patrimonial property. This ufeful principle in human nature prevents much folly and vice in young people. It moreover leads to lafting and extensive advantages, in the improvement of a farm ; for what inducement can be ftronger in a parent to plant an orchard, to preferve foreft-trees or to build a commodious and durable houfe, than the idea, that they will all be possible by a fucceffion of generations, who shall inherit his blood and name.

15th. The German farmers are very much influence ed in planting and pruning trees, also in fowing and reaping, by the age. and appearances of the moon. This attention to the flate of the moon has been afcribed to fuperflition; but if the facts related by Mr. Wilson in his observations upon climates are true, part of their fuccess in agriculture must be afcribed to their being fo much influenced by it.

INHABITANTS OF PENNSYLVANIA.

toth. From the hiftory that has been given of the German agriculture, it will hardly be neceffary to add that a German farm may be diffinguished from the farms of the other citizens of the state, by the superior size of their barns; the plain, but compact form of their houses; the height of their enclosures; the extent of their orchards; the fertility of their fields; the luxuriance of their meadows, and a general appearance of plenty and neatness in everything that belongs to them.

The German mechanic possession of the traits of the character that has been drawn of the German farmer. His first object is to become a freeholder; and hence we find few of them live in rented houses. The highest compliment that can be paid to them on entering their houses is to ask them, " is this house your own." They are industrious, frugal, punctual and just. Since their fettlement in Pennfylvania, many of them have acquired a knowledge of those mechanical arts, which are more immediately neceffary and useful in a new country; while they continue at the fame time, to carry on the arts they imported from Germany, with vigour and fucces.

But the genius of the Germans of Pennfylvania, is not confined to agriculture and the mechanical arts. Many of them have acquired great wealth by foreign and domeftic commerce. As merchants they are candid and punctual. The bank of North America has witneffed, from its first institution, their fidelity to all their pecuniary engagements.

236 AN ACCOUNT OF THE GERMAN

Thus far have I described the indiviance choracter of feveral orders of the German citizens of Poonfyrema. I shall now take notice of fome of their manners in a collective capacity. All the different feels attend them are particularly attentive to the religiou. cation of their children, and to the eftablisher and such fupport of the chriftian religion. For this pur vie they fettle as much as pollible together-and ender the crection of a fchool house and a place of worthip the first object of their care. They commit the education and inftruction of their children in a peculiar manner to the ministers and officers of their churches; -hence they grow up with prejudices in favour of pub- . lic worfhip, and of the obligations of chriftianity. Such has been the influence of a pious education among the German Lutherans in Pennfylvania, that in the courfe of nincteen years, only one of them has ever been brought to a place of public fhame. on punishment.

As members of civil government, the Germans are peaceable—and exact in the payment of their taxes. Since they have participated in the power of the ftate, many of them have become fentible and enlightened in the feience of legiflation. Pennfylvania has had the fpeaker's chair of her affembly, and the vice-prefident's office of her council, filled with dignity by gentlemen of German families. The fame gentlemen have fince been advanced to feats in the houfe of reprefentatives, under the new confliction

INHABITANTS OF PENNSYLVANIA. 237

of the United States. In the great controverfy about the national government, a large majority of the Germans in Pennfylvania decided in favour of its adoption, notwithstanding the most popular arts were used to prejudice them against it.

The Germans are but little addicted to convivial pleafures.

They feidom meet for the fimple purpofe of eating and drinking in what are justly called " feeding " parcies"; but they are not ftrangers to the virtue of hofpitality .- The hungry or benighted traveller, is always fure to find a hearty welcome under their roofs. A gentleman of Irifh extraction, who loft his way in travelling through Lancaster county, called late at night at the door of a German farmer. He was kindly received and entertained with the best of every thing the house afforded. The next morning, he effered to pay his hoft for his lodging, and other accommodations : " No" faid the friendly German, in broken English-" I will take nothing " from you. I was once loft, and entertained, as " you have been, at the house of a stranger who " would take no pay from me for his trouble. I " am therefore now only difcharging that debt :---" do you pay your debt to me in the fame way " to fomebody clfe."-

They are extremely kind and friendly as neighbours. They often afift each other by loans of money for a fhort time, without intereft, when the purchase of a plantation makes a larger fum necessary than is commonly possessed by a fingle farmer. To feeure their confidence, it is necessary to be punctual. They never lend money a feeond time, to a man who has once disappointed them in paying what he had borrowed agreeably to his promise or obligation. It was remarked, during the late war, that there were very few inflances of any of them discharging a bond, or a debt, with depreciated paper money.

It has been faid, that the Germans are deficient in learning; and that in confequence of their want of more general and extensive education, they are much addicted to fuperflition, and are frequently imposed upon in the management of their affairs. Many of them have loft valuable effates by being unaequainted with the common forms of law, in the most fimple transactions; and many more of them have loft their lives, by applying to quaeks in ficknefs: but this objection to the Germans will foon ceafe to have any foundation in Pennfylvania. Several young men, born of German parents, have been educated in law, phyfic and divinity, who have demonstrated by their abilities and knowledge, that the German genius for literature has not depreciated in America. A college has lately been founded by the state in Laneaster, + and committed chiefly to the care

† This college is called after Dr. FRANKUIN, who was prefident of the flate at the time it was founded, and who concluded very liberally to its funds.

INHABITANTS OF PENNSYLVANIA.

of the Germans of all fects, for the purpole of diffufing learning among their children. In this college they are to be taught the German and English languages, and all those branches of literature which are usually taught in the colleges of Europe and America. The principal of this college is a native of Pennfylvania, of German parentage.* His extensive knowledge and tafte in the arts and feiences, joined with his industry in the difcharge of the duties of his station, have afforded to the friends of learning in Pennfylvania, the most flattering prospects of the future importance and usefulness of this institution,

Both fexes of the Germans difcover a ftrong propenfity to vocal and inftrumental mufic. They excel, in pfalmody, all the other religious focieties in the ftate.

The freedom and toleration of the government has produced a variety of fects, among the Germans in Pennfylvania. The Lutherans compose a great proportion of the German citizens of the ftate. Many of their churches are large and fplendid. The German Prefbyterians are the next to them in numbers. Their churches are likewife large and furnished, in many places, with organs. The clergy, belonging to these churches, have moderate falaries, but they are punctually and justly paid. In the country they have glebes which are stocked and occasionally worked by their congregations. The

* The Reverend Dr. Monry Mahlenberg.

extra expences of their minifters, in all their excursions to their ecclesiaftical meetings, are borne by their refpective congregations. By this means the difcipline and general interests of their churches are preferved and promoted. The German Lutherans and Prefbyterians live in great harmony with each other, infomuch that they often preach in each other's churches, and in fome inftances unite in building a church, in which they both worfhip at different times. This harmony between two fects, one fo much oppofed to each other, is owing to the relaxation of the Prefbyterians in fome of the peculiar doctrines of Calvanifm. I have called them Prefbyterians, because most of them object to being defignated by the name of Calvanifts. The Menonifts, the Moravians, the Swingfielders, and the Catholics, compose the other fects of the German inhabitants of Pennfylvania. The Menonifts hold war and oaths to be unlawful. They admit the facraments of baptism, by fprinkling, and the supper. From them a fect has arisen, who hold, with the above principles and ceremonics, the neceffity of immersion baptism ; hence they are called Dunkers, or Baptifts. Previoufly to their partaking of the facrament of the fupper, they wash each other's feet, and fit down to a love-fcast. They practice these ceremonies of their religion with great humility and folemnity. They, moreover, hold the doctrine of univerfal falvation. From this fect there have been feveral feceders, one of whom devoted themfelves to perpetual celibacy. They have exhibited

for many years, a curious spectacle of pious mortification, at a village called Ephrata, in Lancaster county They are at prefent reduced to fourteen or fifteen members. The Separatifs who likewife diffented from the Dunkers, reject the ordinances of baptifm and the facrament; and hold the doctrine of the Friends, concerning the internal revelation of the gofpel. They hold, with the Dunkers, the doctrine of universal falvation. The fingular piety, and exemplary morality cf. thefe fects, have been urged, by the advocates for the falvation of all mankind, as a proof that the belief of that doctrine is not fo unfriendly to morals, and the order of fociety, as has been fuppofed. The Dunkers and Separatists agree in taking no interest upon money, and in not applying to law to recover their debts.

The German Moravians are a numerous and refpectable body of chriftians in Pennfylvania. In their village of Bethlehem, there are two large ftone buildings, in which the different fexes are educated in habits of induftry in ufeful manufactures. The fifters (for by that epithet the women are called) all fleep in two large and neat apartments. Two of them watch over the reft, in turns, every night, to afford relief from thofe fudden indifpolitions which fometimes occur, in the moft healthy perfons, in the hours of fleep. It is impoffible to record this fact, without paufing a moment to do homage to that religion, which pro-

241.

duces fo much union and kinduefs in human fouls. The number of women, who belong to this fequeftered female fociety, amounts fometimes to 120, and feldom to less than 100. It is remarkable that notwithftanding they lead a fedentary life, and fet constantly in close flove-rooms in winter, that not more than one of them, upon an average, dies in a year. The difeafe which generally produces this annual death, is the confumption. The conditions and ages of the women of the village, as well as of the fociety that has been mentioned, are diffinguished by ribbons of a peculiar kind which they wear on their caps: the widows, by white ; the married women, by bluc ; the fingle women, above 18 years of age, by pink; and those under that age, by a ribbon of a cinnamon colour. Formerly this body of Moravians held all their property in common in imitation of the primitive christians; but, in the year 1760, a division of the whole of it took place, except a tavern, a tan-yard, 2000 acres of land near Bethlehem, and 5000 acres near Nazareth, a village in the neigbourhood of Bethlehem. The profits of thefe eftates are appropriated to the fupport and propagation of the gofpel. There are many valuable manufactures carried on at Bethlehem. The inhabitants poffefs a gentlenefs in their manners, which is peculiarly agreeable to ftrangers. They inure their children, of five and fix years old, to habits of early industry. By this means they are not only taught those kinds of labor which are fuited to

INHABITANTS OF PENNSYLVANIA. 243

their flrength and capacities, but are preferved from many of the hurtful vices and accidents to which children are exposed.

The Swingfielders are a fmall fociety. They hold the fame principles as the Friends, but they differ from them in using pfalmody in their worfnip.

The German Catholics are numerous in Philadelphia, and have feveral fmall chapels in other parts of the ftate.

There is an incorporated charitable fociety of Germans in Philadelphia, whofe objects are their poor and diffreffed countrymen.

There is likewife a German fociety of labourers and journeymen mechanics, who contribute 2s. 6d. eight times a year, towards a fund, out of which they allow 30s. a week to each other's families, when the head of it is unable to work; and 7l. 10s to his widow, as foon as he is taken from his family by death.

The Germans of Pennfylvania, including all the fects that have been mentioned, compose nearly one third part of the whole inhabitants of the ftate.

The intercourfe of the Germans with each other, is kept up chiefly in their own language; but most of their men, who visit the capital, and the trading or country towns of the state, speak the English lan-

244 AN ACCOUNT OF THE GERMAN

guage. A certain number of the laws of the flate are now printed in German, for the benefit of those of them who cannot read English. A large number of German news-papers are likewise circulated through the flate, through which knowledge and intelligence have been conveyed, much to the advantage of the government. There is fearcely an inflance of a German, of either fex, in Pennfylvania, that cannot *read*; but many of the wives and daughters of the German farmers cannot write. The prefent flate of fociety among them renders this accomplishment of little confequence to their improvement or happines.

If it were possible to determine the amount of all the property brought into Pennfylvania by the prefent German inhabitants of the state, and their ancessors, and then compare it with the prefent amount of their property, the contrast would form such a monument of human *industry* and *acconomy* as has feldom been contemplated in any age or country.

I have been informed that there was an ancient prophecy which foretold, that "God would blefs "the Germans in foreign countries." This prediction has been faithfully verified in Pennfylvania. They enjoy here every bleffing that liberty, toleration, independence, affluence, virtue and reputation, can confer upon them.

How different is their fituation here; from what it was in Germany ! Could the fubjects of the prince INHABITANTS OF PENNSYLVANIA.

of Germany, who now groan away their lives in flavery and unprofitable labour, view from an eminence, in the month of June, the German fettlements of Stratfburg, or Manheim in Lancaster county, or of Lebanon or Bethlehem in the counties of Dauphin and Northampton ; could they be accompanied on this eminence, by a venerable German farmer, and be told by him that many of those extensive fields of grain, full-fed herds, luxuriant meadows, orchards, promifing loads of fruit, together with the fpacious barns-and commodious ftone-dwelling houfes, which compose the prospects that have been mentioned, were all the product of the labour of a fingle family, and of one generation; and that they were all fecured to the owners of them by certain laws; I am perfuaded, that no chains would be able to detain them from fharing in the freedom of their Pennfylvania friends and former fellow-fubjects. "We will affert our dignity-(would be their language) we will be men-we will be free-we will enjoy the fruits of our own labours-we will no longer be bought and fold to fight battles-in which we have neither interest nor refentment-we will inherit a portion of that bleffing which God has promifed to the Germans in foreign countries-we will be Pennfylvanians."

I shall conclude this account of the manners of the German inhabitants of Pennfylvania by remark-

ing that if I have failed in doing them justice, it has not been the fault of my fubject. The German character once employed the pen of one of the first historians of antiquity. I mean the elegant and enlightened Tacitus. It is very remarkable that the Germans in Pennfylvania retain in a great degree all the virtues, which this author afcribes to their ancestors in his treatife "de moribus Germanorum".-They inherit their integrity-fidelity-and chaftitybut christianity has banished from them, their drunkennefs, idlenefs, and love of military glory. There is a fingular trait in the features of the German Pennfylvania, which fhews how character in long the most trifling customs may exist among a people who have not been mixed with other nations. Tacitus defcribes the manner in which the ancient Germans build their villages in the following words. " Suam quifque domum spatiis circumdat sive adversus casus ignis remedium, sive inscitia adisticandi."+ Many of the German villages in Pennfylvania are constructed in the fame manner. The fmall houfes are compofed of a mixture, of wood, brick and clay, neatly united together. The large houfes are built of ftone, and many of them after the English fashion. Very few of the houses in Germantown are connected together. -Where the Germans connect their houses in their

+ Each min leaves a farce between his houfe, and those of his neighbours, either to avoid the danger from fire, or from unfili-fulnels in a chitecture.

INHABITANTS OF PENNSYLVANIA.

247

villages, they appear to have deviated from one of the cuftonis they imported from Germany.

CITIZENS of the United States learn from the account that has been given of the German inhabitants of Pennfylvania, to prize knowlédge and industry in agriculture and manufactures, as the basis of domestic happiness and national prosperity.

LEGISLATORS of the United States, learn from the wealth, and independence of the German inhabitants of Pennfylvania, to encourage by your example, and laws, the republican virtues of industry and economy. They are the only pillars which can fupport the prefent conftitution of the United States.

LEGISLATORS of Pennfylvania,—learn from the hiftory of your German fellow citizens that you poffefs an inexhaustible treasure in the bosom of the state, in their manners and arts. Continue to patronize their newly established feminary of learning and spare no expense in supporting their public free-schools. The vices which follow the want of religious instruction, among the children of poor people, lay the foundation of most of the jails, and places of public punishment in the state. Do not contend with their prejudices in favour of their language. It will be the channel through which the knowledge and discoveries of one of the wisest nations in Europe, may be conveyed into our country. In proportion as they are inftructed and enlightened in their own language, they will become acquainted with the language of the United States. Invite them to fhare in the power and offices of government : it will be the means of producing an union in principle and conduct between them, and those of their enlightened fellow-citizens who are defcended from other nations. Above all, cherifh with peculiar tenderness, those fects among them who hold war to be unlawful.—Relieve them from the oppression of abfurd and unnecessfary militia laws. Protect them as the repositories of a truth of the gospel, which has existed in every age of the church, and which must fpread hereafter over every part of the world.

The opinions refpecting the commerce and flavery of the Africans, which have nearly produced a revolution in their favour, in fome of the European governments, were transplanted from a fect of christians in Pennfylvania. Perhaps those German fects of christians among us, who refuse to bear arms for the purpose of shedding human blood, may be preferved by divine providence, as the centre of a circle, which shall gradually embrace all the nations of the earth in a perpetual treaty of friendship and peace.

THOUGHTS ON COMMON SENSE.

THE human mind in common with other branches of philosophy, has become the subject of attention in the present age of free and general enquiry. While new faculties are discovering in it, it will conduce equal to our acquiring a perfect knowledge of its powers, to detect and remove such supposed faculties as do not belong to it.

I have long suspected the term common sense to be applied improperly to designate a faculty of the mind. I shall not repeat the accounts which have been given of it by Cicero-Buffier-Berkely-Shaftesbury-Bentely-Fenelon-Locke Hume-Hobs-Priestly and others, all of whom agree in describing it as a faculty or part of a faculty, possesing a quick and universal perception of right and wrong, truth and error, and of propriety and impropriety in human affairs.

I shall copy, as the substance of all that those authors have said upon this subject, Dr. Reid's account of common sense, published in the 2d. chapter of the sixth number of his Essays on the intellectual powers of man.—" It is absurd to concieve " (says the Doctor) that there can be any opposition between " reason and common sense. It is the first born of reason, " and, as they are commonly joined together in speech and " writing, they are inseperable in their nature."

"We ascribe to reason two offices or two degrees. The first is to judge of things self-evident; the second is to draw con-

THOUGHTS ON COMMON SENSE.

" clusions that are not self-evident from things that are. The first of these is the province, and the sole province, of common sense, and therefore it *coincides* with reason in its *whole* extent, and is only *another* name for one *branch* or one *degree* of reason."

" There is an obvious reason why this degree of reason should have a name appropriated to it, and that is, that in the greatest part of mankind no other degree of reason is to be found. It is this degree of reason that entitles them to the denomination of reasonable creatures."

" These two degrees of reason differ in other respects, " which would be sufficient to entitle them to distinct names. " The first is the gift of heaven—the second is learned by " practice and rules, when the first is not wanting."——— Thus far Dr. Reid.

It is with great diffidence that I object to any thing that comes from a gentleman from whose writings I have derived so much entertainment and instruction, and who has done so much towards removing the rubbish that has for many ages obscured the science of metaphysicks. This diffidence to offer a single objection to Dr. Reid's opinion upon the subject under consideration, is encreased by the groupe of popular and respectable names under which he has supported it.

The idea which I have adopted of common sense is plain and simple. I consider it as the perception of things as they appear to the greatest part of mankind. It has no relation to their being true or false, right or wrong, firofier or imfirofier. For the sake of perspicuity, I shall define it to be, Ofinions

and Feelings in unison with the Opinions and Feelings of the bulk of mankind.

From this definition it is evident that common sense must necessarily differ in different ages and countries and, in both, must vary with the progress of taste, science, and religion. In the uncultivated state of reason, the opinions and feelings of a majority of mankind will be wrong, and, of course, their common or universal sense will partake of their errors. In the cultivated state of reason, just opinions and feelings will become general, and the common sense of the majority will be in unison with truth. I beg leave to illustrate what I mean by a few examples.

1. There are many things which were contrary to common sense in former ages, both in philosophy and religion, which are now universally believed, insomuch that to call them in question is to discover a want of judgment, or a defective education.

2. It is contrary to common sense to speak or write in favour of republicanism, in several European countries; and it is equally contrary to it to speak or write in favour of monarchy, in the United States of America.

3. The common sense of the planters in Jamaica, is in favour of the commerce and slavery of the Africans.—In Pennsylvania, reason, humanity, and common sense, have universally declared against them.

4. In Turkey, it is contrary to the common sense of delicacy which prevails in that country for a gentleman to dance with a lady. No such common sense prevails in any of the western countries of Europe, or in the States of America.

THOUGHTS ON COMMON SENSE,

5. It is contrary to the common sense of many numerous sects to believe that it is possible for men to go to heaven, who do not embrace their principles, or mode of worship.— Among rational men, this common sense is contrary to truth and christian religion.

6. The common sense of mankind has generally been in favour of established modes and habits of practice, in medicine. Opium, bark, mercury and the lancet have all forced their way into general use, contrary to this common sense. Their utility is a proof how little common sense accords with the decisions of reason, and how improperly it is supposed to be a part of that noble power of the mind.

7. It is agreable to the common sense of a great part of of mankind, to revenge public and private injuries by wars and and duels, and yet no wise or just reason has ever been given to justify the practice of either of them.

8. The common sense of the bulk of the inhabitants of the British Dominions, and of the United States, is in favour of boys spending four or five years in learning the Latin and Greek languages, in order to qualify them to understand the English language. Those persons who recollect that the most perfect language in the world, viz. the Greek, was learned without the medium or aid of a dead or foreign language, consider the above practice (founded in common sense) as contrary, to right reason and productive of many evils in education. But further, under this head. The common sense of the same immense proportion of people, is in favour of teaching boys *words*, before they are taught *ideas*. Now nature and right reason both revolt at this absurd practice.

THOUGHTS ON COMMON SENSE

9. The common sense of nearly all nations, is in favour of preventing crimes by the punishment of death, but right reason, policy, and the experience of a wise and enlightened prince,[†] all concur in proving that the best means of preventing crimes, is by *living* and not by *dead* examples.

In the perfection of knowledge, common sense and truth will be in unison with each other. It is *now more* related to error than to truth, and in the sense in which I have described it, it implies more praise than censure to want it.

To say that a man has common sense, is to say that he thinks with his age or country, in their *false*, as well as their *true* opinions; and the greater the proportion of people, he acts and thinks with, the greater share he possesses of this common sense.—After all that has been said in its favour, I cannot help thinking that it is the characteristic only of common minds.

To think and act with the majority of mankind, when they are *right*, and differently from them, when they are *wrong*, constitutes in my opinion, the perfection of human wisdom and conduct.

The feelings and opinions of mankind are often confounded; but they are widely different from each other. There may be just feelings connected with erroneous opinions and conduct. This is often the case in religion and government—But, in general, opinions and feelings are just and unjustin equal degrees, according to the circumstance of age, country, and the progress of knowledge before mentioned.

† Leopold, Emperor of Germany.

THOUGHTS ON COMMON SENSE.

Had this common sense depended upon the information of any ene of the *five external* senses, I should have had no difficulty in admitting Dr. Reid's account of it, inasmuch as the perceptions they afford are the *same*, in their nature, in all healthy men, and in all ages and countries. But to suppose it to be an inferior degree, or the *first* act of reason, and afterwards to suppose it to be *universal*, is to contradict every thing that history and observation teach us of human nature.*

In matters addressed to our reason, the principal business of reason is to correct the evidence of our senses. Indeed, the perception of truth, in philosophy, seems to consist in little else than in the refutation of the ideas acquired from the testimony of our senses. In the progress of knowledge, when the exact connection between the senses and reason is perfectly understood, it is probable that the senses and reason will be in unison with each other, and that mankind will as suddenly connect the evidence of all the senses with the decisions of reason, as they now connect, with certainty, the distance of objects with the evidence of the eyes. This general unison between the senses and reason, as in the case of vision, must be the result only of experience and habit.

I cannot dismiss this subject without adding the following remark.

Mankind are governed, says Mr. Bayle, by their prejudices, and not by their principles. To do them good, we must, in some measure, conform to those prejudices;—hence we find

* The King of Prussia, in his posthumous works, says, "Reason never did any thing great," by which he must have ment the common degrees of it, or what is called, by Dr. Reid, common sense.

THOUGHTS ON COMMON SENSE.

the most acceptable men in practical society, have been those who have never shocked their cotemporaries, by opposing popular or common opinions. Men of opposite characters, like objects placed too near the eye, are seldom seen distinctly by the age in which they live. They must content themselves with the prospect of being useful to the distant and more enlightened generations which are to follow them. Galileo, who asked pardon of the Pope, on his knees, for contradicting the *common sense* of the church, respecting the revolution of the earth, and Dr. Harvey, who lost all his business by refuting the *common sense* of former ages, respecting the circulation of the blood, now enjoy a reputation for their opinions and discoveries, which has in no instance ever been given to the cold blood of common sense.

April 3d. 1791.

An account of the vices peculiar to the Indians of North America.

T has become fashionable of late years for the philosopher's of Europe to celebrate the virtues of the savages of America. Whether the design of their encomiums was to expose christianity, and depreciate the advantages of civilization, I know not; but they have evidently had those effects upon the minds of weak people. Without contradicting the accounts that have been published by those gentlemen, of the virtues of the Indians in North America, I shall briefly add an account of some of their vices, in order to complete their natural history. My information shall be taken from the travels of Charlevoix Hennepen—Carver—Romans and Bartram, and from conversations with persons of veracity who have resided among them.

The first vice I shall name, that is universal among our savages, is UNCLEANNESS. They are, in general, strangers to the obligations both of morality and decency, as far as they relate to the marriage bed.—The exceptions to this remark, have been produced among those nations chiefly, who have had an occasional intercourse with civilized nations.

2. NASTINESS is another Indian vice: This is exemplified in their food—drinks—dress—persons—and above all, in their total disregard to decency in the *time—place*—and *manner* of their natural evacuations.

PECULIAR TO THE INDIANS.

3. DRUNKENNESS is a more general vice among savages than among civilized nations.—Whole Indian tribes have been destroyed by it. Indeed they glory in their fondness for strong liquors, and consider it as a part of their character. A countryman who had dropt from his cart a keg of rum, rode back a few miles in hopes of finding it. On his way he met an Indian who lived in his neighbourhood, whom he asked if he had seen his keg of rum on the road? The Indian laughed in his face, and addressed him in the following words. "What a fool you are to ask an Indian such a question. Don't you see I am sober? Had I met with your keg, you would "have found it empty on one side of the road, and Indian "Tom drunk and asleep on the other."

4. GLUTTONY is very common among Indians. To this their long abstinence, produced by their idleness, naturally tempts them.—It is very common to see them stretch themselves on the ground after a full meal, and grunt there for several hours till they recover from the effects of their intemperance. Mr. Bartram tells us, that they sometimes rise in the middle of the night, in order to gratify their appetites for eating.

5. TREACHERY is another Indian vice. Who ever trusted to an Indian treaty ?---They generally begin their wars, with professions of peace and perpetual friendship.

6 The CRUELTY of Indians is well known. They consider compassion as a mark of effeminacy. Their treatment of their prisoners, shews them to possess a spirit of revenge, which places them upon a footing with infernal spirits.

7 IDLENESS is the universal vice of savages. They are not only too lazy to work, but even to think. Nothing but the

powerful stimulus of hunger, or revenge, is sufficient to rouse them into action.

8. THEFT is an Indian vice. The Indians not only steal from their civilized neighbours, but from each other. A horse —a gun—or spirits, have charms in the eyes of an Indian that no restraints can prevent his stealing, whenever they come in his way.

9. GAMING belongs in an eminont degree to the Catalogue of indian vices.

10. But the infamy of the Indian character is completed by the low rank to which they degrade their women. It is well known that their women perform all their work. They not only prepare their victuals, but plant, hoe and gather their corn and roots. They are seldom admitted to their feasts, or share in their conversation. The men oblige them to lie at their feet, when they sleep without fire; and at their backs when they sleep before a fire. They afford them no assistance in the toil of tending, feeding, and carrying their children. They are even insensible of the dangers to which their women are often exposed in travelling with them. A gentleman from Northumberland county, informed me, that he once saw a body of Indian men and women wading across the river Susquehannah. The men arrived first on the opposite shore, and pursued their journey along the river. The women, some of whom had children on their backs, upon coming to a deep and rapid current, suddenly cried out for help, and made signs to their husbands and fathers to come to their assistance. The men stood for a few minutes-and after attentively surveying their distress, bursted out a laughing, and then with a merry indifference, walked from them along the shore.

This is a short nomenclature of the vices of the Indians of North America. If it were necessary, I would quote the chapters and pages of the authors who have established, by their observations, the truth of the character I have given of them. I am not disposed to enter into an examination of their virtues, but I cannot help supposing them to be rather the qualities of necessity, than the offspring of feeling, or principle. Their hospitalitiy-their friendships-their patience-and their fidelity to engagements, are the effects of necessity, and are as essential to their existence, as honesty is to a band of associated Their politeness in never contradicting any person, robbers. I believe is the effect of indolence, for I know of nothing that lazy people dislike more than to dispute, even where truth is that in a lazy fit (to which all men at times are subject) has not heard false and absurd opinions advanced in company, without contradicting them ?

The taciturnity of the Indians which has been so much celebrated, as a mark of their wisdom, is the effect of their want of ideas. Except in cases of extraordinary pride, I believe taciturnity, in nine cases out of ten, in civilized company, is the effect of stupidity. I will make one more exception to this rule, and that is in favour of those people who are in the habits of communicating their thoughts, by writing for the public, or by corresponding with their friends. Ideas, whether acquired from books, or by reflection, produce a plethora in the mind, which can only be relieved by depletion from the pen, or tongue.

of the influence of property, upon the human mind.—Property, and a regard for law, are born together in all societies. The passion for liberty in an Indian, is as different from the passion for it in a civilized republican, as the impurity of lust, is, from the delicacy of love. There is a certain medium to be observed between an affection for law, and for liberty. An excess of the former has sometimes led to tyranny, while an excess of the latter, leads to idleness and vice. The Athenians appear to have been intoxicated with an excess of liberty when they spent their whole time in hearing and telling news. There is always an excess of law or liberty in a community where poor men are idle, or where vices of any kind are suffered with impunity.

The only reflections that I shall add upon this subject, shall be, how are the blessings of civil government which exter pates, restrains, or punishes the vices that have been mentioned! and how great is the efficacy of christianity, which, by purifying the heart, renders the practice of the contrary virtues natural and agreeable? OBSERVATIONS UPON THE INFLUENCE OF THE HABITUAL USE OF TOBACCO UPON HEALTH, MORALS, AND PROPERTY.

WERE it possible for a being who had resided upon our globe, to visit the inhabitants of a planet, where reason governed, and to tell them that a vile weed was in general use among the inhabitants of the globe it had left, which afforded no nourishment—that this weed was cultivated with immense care—that it was an important article of commerce—that the want of it produced real misery—that its taste was extremely nauseous, that it was unfriendly to health and morals, and that its use was attended with a considerable loss of time and property, the account would be thought incredible, and the author of it would probably be excluded from society, for relating a story of so improbable a nature. In no one view, is it possible to contemplate the creature man in a more absurd and ridiculous light, than in his attachment to TOBACCO.

This weed is of a stimulating nature whether it be used in smoaking, chewing or in snuff. Like opium and spiritous liquors, it is sought for in all those cases where the body is debilitated *indirectly* by intemperance in eating, or by excessive application to study, or business, or *directly* by sedative passions of the mind, particularly by grief and fear. Persons after losing relations or friends by death, often resort to it. One of the greatest snuffers I ever knew, used it for the first time, in order to console her under a presentiment she entertained, that she should die in childbed. Fear creates a desire for Tobacco. Hence it is used in a greater quantity by soldiers and sailors than by other classes of people. It is used most profusely by soldiers when they act as picket guards, or centinels, and by sailors in stormy weather. Persons labouring under that state of madness which is accompanied with a sense of misery, are much devoted to it, hence the renants of mad-houses often accost their attendants and visitors, with petitions for TOBACCO,

The progress of habit in the use of Tobacco is exactly the same as in the use of spiritous liquors. The slaves of it begin, by using it only after dinner-then during the whole afternoon and evening, afterwards before dinner, then before breakfast, and finally during the whole night. I knew a lady who had passed through all these stages, who used to wake regularly two or three times every night to compose her system with fresh doses of snuff. Again-the progress in the decay of the sensibility of the nose to the stimulus of snuff is analogous to the decay of the sensibility of the stomach, to the stimulus of spiritous liquors. It feels for a while the action of Rappee ; next it requires Scotch snuff, afterwards Irishblack-guard-and finally it is affected only by a composition of Tobacco and ground glass. This mixture is to the nose, what Cayenne pepper and Jamaica spirits are to the stomachs of habitual dram drinkers.

The appetite for Tobacco is wholly artificial. No person was ever born with a relish for it. Even in those persons who are much attached to it, nature frequently recovers her disrelish to it. It ceases to be agreeable in every febile indisposition. This is so invariably true, that a disrelish to it is often a sign of an approaching, and a return of the appetite for it, a sign of a departing fever. In considering the pernicious effects of Tobacco, I shall begin agreeably to the order I have laid down, by taking notice of its influence upon health; and here I shall mention its effects not only upon the body, but upon the mind.

1. It impairs the appetite. Where it does not produce this effect,

3. It produces many of those diseases which are supposed to be seated in the nerves. The late Sir John Pringle was subject in the evening of his life to tremors in his hands. In his last visit to France, a few years before he died, in company with Dr. Franklin, he was requested by the Doctor to observe, that the same disorder was very common among those people of fashion who were great snuffers. Sir John was led by this remark to suspect that his tremors were occasioned by snuff which he took in large quantities. He immediately left off taking it, and soon afterwards recovered the perfect use of his hands. I have seen head-ache, vertigo, and epilepsy produced by the use of Tobacco. A Physician in Connecticut has remarked that it has in several instances produced palsy and apoplexy; and Dr. Tissot ascribes sudden death in one instance, to the excessive use of it in smoaking. 4. A citizen of Philadelphia lost all his teeth by drawing the hot smoke of Tobacco into his mouth by means of a short pipe, and I have been informed of a cancer on the lip, which terminated fatally from the same cause, in a farmer in Northumberland county in this state. The acrid nature of the matter which is mixed with the smoke of the Tobacco may easily be discovered by the taste or smell of a pipe stem that has been in use for two or three weeks.

5. Tobacco when used in the form of snuff seldom fails of impairing the voice by obstructing the nose. It moreover imparts to the complexion a disagreeable dusky colour.

I have thus briefly enumerated the morbid effects of Tobacco upon the human body. It remains under this head to mention, that the want of it is a source of uncasiness more distressing than many bodily disorders. This uneasiness in persons who have long been accustomed to the use of Tobacco has in some instances produced an agitation of mind that has bordered upon distraction. Colonel Burr informed me that the greatest complaints, dissatisfaction and suffering that he heard the soldiers who accompanied General Arnold in his march from Boston to Quebec through the wilderness, in the year 1775, were from the want of Tobacco. This was the more remarkable, as they were so destitute of provisions as to be obliged to kill, and cat their dogs. The Persians, we are told by travellers, expatriate themselves, when they are forbidden the use of Tobacco, in order to enjoy it in a foreign country. These facts will not surprise those persons who have been accustomed to view our appetites when perverted to such things as artificial and disagreeable, to be much more ungovernable than the appetite for things that are originally natural and agreeable.

But the use of Tobacco has been known to produce a more serious effect upon the mind than the distress that has been mentioned. Sir John Pringle's memory was impaired by snuff. This was proved by his recovering the perfect exercise of it after he left off taking snuff agreeably to the advice of his friend Dr. Franklin. Dr. Masillac informed me that his father lost his memory at forty years of age by the excessive use of snuff. He took for several years two ounces of it every day.

In answer to these observations upon the morbid effects of Tobacco it has been said,

1. That it possesses many medical virtues. I grant it, and the facts which establish its utility in medicine furnish us with additional arguments against the *habitual* use of it. How feeble would be the effects of opium and bark upon the the body, if they constituted a part of the condiments of our daily food ;—While I admit the efficacy of tobacco as a medicine, I cannot help adding, that some of the diseases; or symptoms of diseases which it relieves, are evidently induced by the habit of using it. Thus a dram of ardent spirits suspends, for a while, a vomiting and tremors of the hands, but who does not know that those complaints, are the effects of the intemperate and habitual use of spiritous liquors ?

2. The advocates for Tobacco, tell us that smoking and snuff relieve that uneasiness which succeeds a plentiful meal. I admit that the stimulars of the Tobacco restores the system from the indirect weakness which is induced by intemperance in eating, but the relief which is thus obtained, illy compensates for the waste of the saliva in smoking, at a time

M m

when it is most wanted, or for the mixtre of a portion of the tobacco with the aliment in the stomach by means of snuffing. But why should we cure one evil by producing another ? Would it not be much better to obviate the necessity of using Tobacco by always eating a moderate meal ? The recollection of the remedy probably disposes to that intemperance in eating which produces the uneasiness that has been mentioned.

3. We are sometimes told that Tobacco is a preservative from contagious diseases. But many facts contradict this assertion. Mr. Howard informs us that it had no efficacy in checking the contagion of the plague, and repeated experience in Philadelphia has proved, that it is equally ineffectual in preserving those who use it, from the Influenza and Yellow Fever.

4. It has been further said that chewing and smoking Tobacco assist the intellectual operations. So do wine, and distilled spirits, but shall we upon that account, have recourse to those liquors when we wish to stimulate our thinking faculties? Tea and Coffee are to be preferred, when we wish to stimulate the mind. Mr. Pope recommends a trotting horse for the same purpose. Rousseau excited his invention by walking backwards and forwards in his room. I suspect that Tobacco is often used, rather to supply the want of ideas than to collect, or excite them. The absence of sensation, whether of external impressions upon the body, or of the reaction of the mind in thought, is always accompanied with misery. The Indians afford a striking proof of this remark -hence they spend whole days and even weeks in smoking, in order to relieve themselves from the anguish which attends the inactivity and vacuum of their minds.

We proceed next to mention the influence of the habitual use of Tobacco upon morals.

1. One of the usual effects of smoaking and chewing is thirst. This thirst cannot be allayed by water, for no sedative or even insipid liquor will be relished after the mouth and throat have been exposed to the stimulus of the smoke, or juice of Tobacco. A desire of course is excited for strong drinks, and these when taken between meals soon lead to intemperance and drunkenness. One of the greatest sots I ever knew, acquired a love for ardent spirits by swallowing cuds of Tobacco, which he did, to escape detection in the use of it, for he had contracted the habit of chewing, contrary to the advice and commands of his father. He died of a Dropsy under my care in the year 1780.

2. The use of Tobacco, more especially in smoking, disposes to idleness, and idleness has been considered as the root of all evil. "An idle man's brain, (says the celebrated and original Mr. Bunyan) is the Devil's work shop."

3. The use of Tobacco is necessarily connected with the neglect of cleanliness. The influence of this neglect upon morals has been happily pointed out in an extract from captain Cook's journal, which is published by Sir John Pringle in one of his Orations before the Royal Society of London.

4. Tobacco, more especially when used in smoking, is generally offensive to those people who do not use it. To smoke in company under such circumstances, is a breach of good manners; now, manners have an influence upon morals. They may be considered as the out post of virtue. A habit of offending the senses of friends or strangers, by the use of

OESERVATIONS ON THE

Tobacco, cannot therefore be includged with innocence. It produces a want of respect for our fellow creatures, and this always disposes to unkind and unjust behaviour towards them. Who ever knew a rude man compleatly, or uniformly moral?

The methodists forbad the use of Tobacco in the infancy of their society. The prohibition discovered high and just sense of the self-denial, decency, and universal civility which are required by the gospel. What reception may we suppose would the apostles have met with, had they carried into the cities and houses to which they were sent, snuff-boxes, pipes, segars, and bundles of cut, or rolls of hog, or pigtail Tobacco? Such a costly and offensive apparatus for gratifying their appetites, would have furnished solid objections to their persons and doctrines, and would have been a just cause for the clamours and contempt which were excited against them. It is agreeable to observe that a regard to good manners, upon this subject, has at last awakened in some parts of the world. In England smoking is not permitted in taverns and coffec-houses until after 10 o'clock at night, and in France snuffing is becoming unfashionable and vulgar. How much is it to be lamented that while the use of Tobacco is declining in two of the most enlightned countries in Europe, it is becoming more general in America. Who can see groups of boys of six or eight years old in our streets smoking segars, without anticipating such a depreciation of our posterity in health and character, as can scarcely be contemplated at this distance of time without pain and horror!

It remains now that I briefly point out the influence of the use of tobacco upon time and property. Snuffing makes a great inroad upon time. A man who takes a pinch of snuff every twenty minutes, (which most habitual snuffers do) and snuffs tifteen hours in four and twenty, (allowing him to consume not quite half a minute every time he uses his box,) will waste about five whole days of every year of his life in this useless, and unwholesome practice. But when we add to the profitable use to which this time might have been applied, the expences of Tobacco, pipes, snuff and spitting boxes—and of the injuries which are done to the cloathing, during a whole life, the aggregate sum would probably amount to several hundred dollars. To a labouring man this would be a decent portion for a son or daughter, while the same sum, saved by a man in affluent circumstances, would have enabled him by a contribution to a public charity to have lessened a large portion of the ignorance, or misery of mankind.

In reviewing the account that has been given of the disagreeable and mischievous effects of Tobacco, we are led to enquire, what are its uses upon our globe,—for we are assured that nothing, exists in vain. Poison is a relative term, and the most noxious plants have been discovered to afford sustenance to certain animals. But what animal besides man, will take Tobacco into its mouth ? Horses, Cows, Sheep, Cats, Dogs, and even Hogs refuse to taste it. Flies, Musquetoes, and the Moth are chased from our cloaths by the smell of it. But let us not arraign the wisdom and economy of nature in the production of this plant. Modern Travellers have at last discovered that it constitutes the food of a solitary and filthy wild beast, well known in the deserts of Africa, by the name of the Rock GOAT.

I shall conclude these observations by relating an Anecdote of the late Dr. Franklin. A few months before his death, he declared to one of his friends that he had never used Tobacco in any way in the course of his long life, and that he was dis-

270 OBSERVATIONS ON THE USE OF TOBACCO.

posed to believe there was not much advantage to be derived from it, for that he had never met with a man who used it, who advised him to follow his example.

AN ACCOUNT OF THE SUGAR MAPLE-TREE OF THE UNITED STATES: IN A LETTER TO THOMAS JEFFERSON, ESQ. THEN SECRETARY OF STATE OF THE UNITED STATES, AND ONE OF THE VICE PRESIDENTS OF THE AMERICAN PHILOSO-PHICAL SOCIETY.

DEAR SIR,

IN obedience to your request, I have sat down to communicate to our society, through the medium of a letter to you, a short account of the Sugar Maple-Tree of the United States, together with such facts and vemarks as I have been able to collect, upon the methods of obtaining sugar from it, and upon the advantages both public and private, of this Sugar.

The Acer Sacharinum of Linnæus, or the Sugar Maple-tree, grows in great quantities in the western counties of all the Middle States of the American Union. Those which grow in New-York and Pennsylvania yield the sugar in a greater quantity than those which grow on the waters of the Ohio.

AN ACCOUNT OF THE SUGAR MAPLE TREE.

These trees are generally found mixed with the Beech, (a) Hemlock, (b) White and water Ash, (c) the Cucumber tree, (d) Linden, (e) Aspen, (f) Butter Nut, (g) and Wild Cherry trees (h). They sometimes appear in groves covering five or six acres in a body, but they are more commonly interspersed with some, or all of the forest trees which have been mentioned. From 30 to 50 trees are generally found upon an acre of ground. They grow only in the richest soils and frequently in stony ground. Springs of the purest water abound in their neighbourhood. They are, when fully grown, as tall as the white and black oaks, and from two to three fect in diameter.* They put forth a beautiful white blossom in the Spring before they show a single leaf. The colour of the blossom distinguishes them from the acer rubrum, or the common maple, which affords a blossom of a red colour. The wood of the Sugar Maple-tree is extremely inflammable, and is prefered upon that account by hunters and surveyors for fire wood. Its small branches are so much impregnated with sugar as to afford support to the cattle, horses, and and sheep of the first settlers during the winter, before they are able to cultivate forage for that purpose. Its ashes afford

(a) Fagus Ferruginea.
 (b) Pinus abies.
 (c) Fraxinus Americana.
 (d) Magnolia acuminata.
 (e) Tilia Americana.
 (f) Populus tremula..
 (g) Juglans alba (oblonga.)
 (h) Prunus Virginiana, of Linnxus.

* Baron La Hontan, in his voyage to North America, gives the following account of the Maple-tree in Canada. After describing the black Cherry-tree, some of which he says are as tall as the loftiest oaks, and as big as a hogshead, he adds, "The Maple-tree is much of the same height " and bulk. It bears no resemblance to that sort we have in " Europe."

a great quantity of pot ash, exceeded by few, or perhaps by none of the trees that grow in the woods of the United States.

The tree is supposed to arrive at its full growth in the woods in twenty years.

It is not injured by tapping; on the contrary, the oftner it is tapped, the more syrup is obtained from it. In this respect it follows a law of animal secretion. A single tree has not only survived, but flourished after forty-two tappings in the same number of years. The effects of a yearly discharge of sap from the tree in improving and increasing the sap, is demonstrated from the superior excellence of those trees which have been perforated in an hundred places, by a small woodpecker which feeds upon the sap. These trees after having been wounded in this way, distil the remains of their juice on the ground, and afterwards acquire a black colour. The sap of these trees is much sweeter to the taste than that which is obtained from trees which have not been previously wounded, and it affords more sugar.

From twenty-three gallons and one quart of sap procured in twenty hours from only two of these dark coloured trees, Arthur Noble, Esq. of the state of New-York, obtained four pounds and thirteen ounces of good grained sugar.

A tree of an ordinary size yields in a good season from twenty to thirty gallons of sap, from which are made from five to six pounds of sugar. To this there are sometimes remarkable exceptions. Samuel Low, Esq. a Justice of Peace in Montgomery county, in the state of New-York, informed Arthur Noble, Esq. that he had made twenty pounds and one ounce of sugar between the 14th and 23d of April, in the year 1789, from a single tree that had been tapped for several successive years before.

From the influence which culture has upon forest and other trees, it has been supposed, that by transplanting the Sugar Maple-Tree into a garden, or by destroying such other trees as shelter it from the rays of the Sun, the quantity of the sap might be increased; and its quality much improved. I have heard of one fact which favours this opinion. A farmer in Northampton county, in the state of Pennsylvania, planted a number of these trees above twenty years ago in his meadow from *three* gallons of the sap of which he obtains every year a pound of sugar. It was remarked formerly that it required *five* or *six* gallons of the sap of the trees which grow in the woods, to produce the same quantity of sugar.

The sap distils from the wood of the tree. Trees which have been cut down in the winter for the support of the domestic animals of the new settlers, yield a considerable quantity of sap as soon as their trunks and limbs feel the rays of the Sun in the spring of the year.

It is in consequence of the sap of these trees being equally diffused through every part of them, that they live three years after they are *girdled*, that is, after a circular incision is made through the bark into the substance of the tree for the purpose of destroying it.

It is remarkable that grass thrives better under this tree in a meadow, than in situations exposed to the constant action of the Sun.

Νn

AN ACCOUNT OF

The season for tapping the trees is in February, March, and April, according to the weather which occurs in these months.

Warm days and frosty nights are most favourable to a plentiful discharge of sap.* The quantity obtained in a day from a tree, is from five gallons to a pint, according to the greater or less heat of the air. Mr. Low, informed Arthur Noble, Esq. that he obtained near three and twenty gallons of sap in one day (April 14, 1789.) from the single tree which was before mentioned. Such instances of a profusion of sap in single trees are however not very common.

There is always a suspension of the discharge of sap in the night if a frost succeed a warm day. The perforation in the tree is made with an axe or an auger. The latter is prefered from experience of its advantages. The auger is introduced about three-quarters of an inch, and in an ascending direction (that the sap may not be frozen in a slow current in the mornings or evenings) and is afterwards depened gradually to the extent of two inches. A spout is introduced about half an inch into the hole, made by this auger, and projects from three to twelve inches from the tree. The spout

* The influence of the weather in increasing and lessening the discharge of the sap from trees is very remarkable.

Dr. Tongue supposed, long ago, (Philosophical Transactions, No. 68) that changes in the weather of every kind might be better ascertained by the discharges of sap from trees than by weather glasses. I have seen a journal of the effects of heat, cold, moisture, drought and thunder upon the discharges from the sugar trees, which disposes me to believe there is some foundation for Dr. Tongue's opinion. is general made of the Sumach (a) or Elder, (b) which commonly grow in the neighbourhood of the sugar trees. The tree is first tapped on the *South* side; when the discharge of its sap begins to lesson, an opening is made on its *North* side, from which an increased discharge takes place. The sap flows from four to six weeks, according to the temperature of the weather. Troughs large enough to contain three or four gallons made of white pine, or white ash, or of dried water ash, aspen, linden, poplar, (c) or common maple, are placed under the spout, to receive the sap, which is carried every day to a large receiver, made of either of the trees before mentioned. From this receiver it is conveyed, after being strained, to the boiler.

To preserve the sap from rain and impurities of all kinds, it is a good practice to cover the troughs with a concave board, with a hole in the middle of it.

It remains yet to be determined whether some artificial heat may be applied so as to increase the quantity and improve the quality of the sap. Mr. Noble informed me, that he saw a tree, under which a farmer had accidently burnt some brush, which dropped a thick heavy syrup resembling molasses. This fact may probably lead to something useful hereafter.

During the remaining part of the spring months, as also in the Summer, and in the beginning of Autumn, the Maple Tree yields a thin sap, but not fit for the manufactory of sugar. It affords a pleasant drink in harvest, and has been used

(a) Rhus. (b) Sambucus canadensis. (c) Liriodendron Tulipifera. instead of rum, in some instances by those farmers in Connecticut, whose ancestors have left to them here, and there, a sugar maple tree, (probably to shade their cattle,) in all their fields. Mr. Bruce describes a drink, of the same kind prepared by the inhabitants of Egypt, by infusing the sugar cane in water, which he declares to be "the most refreshing drink in the world."*

There are three methods of reduceing the sap to sugar.

1. By *freezing* it; this method has been tried for many years, by Mr. Obediah Scott, a farmer in Luzerne county in this state, with great success. He says that one half of a given quantity of sap reduced in this way, is better than one-third of the same quantity reduced by boiling. If the frost should not be intense enough, to reduce the sap to the graining point, it may afterwards be exposed to the action of the fire for that purpose.

2. By spontaneous evaluation. The hollow stump of a maple-sugar tree, which had been cut down in the spring, and which was found sometime afterwards filled with sugar, first suggested this method of obtaining sugar to our farmers. So many circumstances of cold and dry weather, large and

* Baron La Hontan, gives the following account of the sap of the sugar maple-tree, when used as a drink, and of the manner of obtaining it. " The tree yields a sap which has a much pleasanter taste than the best lemonade or cherry water, and makes the wholesomest drink in the world. This liquor is drawn by cutting the tree two inches deep in the wood, the cut being made sloping to the length of ten or twelve inches; at the lower end of this gash, a knife is thrust into the tree slopingly, so that the water runs along the cut or gash, as through a gutter and falls upon the knife, which has some vessels placed underneath to receive it. Some trees

flat vessels, and above all so much time are necessary to obtain sugar, by either of the above methods, that the most general method among our farmers is to obtain it,

3. By *boiling*. For this purpose the following facts which have been ascertained by many experiments, deserve attention.

1. The sooner the sap is boiled, after it is collected from the tree, the better. It should never be kept longer than twenty four hours, before it is put over the fire.

2. The larger the vessel in which the sap is boiled, the more sugar is obtained from it.

3. A copper vessel affords a sugar of a fairer colour than an iron vessel.

The sap flows into wooden troughs from which it is carried and poured into stone troughs or large cisterns in the shape of a canoe or large manger made of white ash, linden, bass wood, or white pine, from which it is conveyed to the kettle in which it is to be boiled. These cisterns, as well as the kettle, are generally covered by a shed to defend the sap

will yield five or six bottles of this water in a day, and some inhabitants of Canada might draw twenty hogsheads of it in one day, if they would thus cut and notch all the maple trees of their respective plantations. The gash does no harm to the tree. Of this sap they make sugar and syrup which is so valuable that there can be no better remedy for fortifying the stomach. 'Tis but few of the inhabitants that have the patience to make them, for as common things are slighted, so there are scarce any body, but children that give themselves the trouble of gashing these trees." from the rain. The sugar is improved by straining the sap through a blanket or cloth, either before or after it is half boiled. Butter, hogs-lard, or tallow are added to the sap in the kettle to prevent its boiling over, and lime, eggs or new milk are mixed with it in order to clarify it. I have seen clear sugar made without the addition of either of them. A spoonful of slack lime, the white of one egg, and a pint of new-milk are the usual proportions of these articles which are mixed with fifteen gallons of sap. In some samples which I have lately seen of maple-sugar clarified with each of the above articles, that, in which milk alone was used, had an evident superiority over the others, in point of colour.

The sugar after being sufficiently boiled, is grained and clayed, and afterwards refined, or converted into loaf sugar. The methods of conducting each of these processes is so nearly the same with those which are used in the manufactory of West-India sugar, and are so generally known, that I need uot spendiany, time in describing them.

It has been, a subject of enquiry whether the maple sugar might not be improved; in its quality and increased in its quantity by the establishment of boiling houses in the sugar maple country to be conducted by *associated* labor. From the scattered situation of the trees, the difficulty of carrying the sap to a great distance, and from the many expenses which must accrue from supporting labourers and horses in the woods in a season of the year in which nature affords no sustenance to man or beast. I am disposed to believe, that the most productive method, both in quantity and profit, of obtaining this sugar will be by the labour of private families. For a great number of years many hundred private families in New-York and Fennsylvania have supplied themselves plentifully with this sugar during the whole year. I have heard of many families who have made from two to four hundred pounds in a year; and of one man who sold six hundred pounds, all made with his own hands in one season.*

Not more knowledge is necessary for making this sugar than is required to make soap, cyder, beer, sour-crout, &c. and yet one or all of these are made in most of the farm houses of the United States. The kettles and other utensils of a farmer's kitchen, will serve most of the purposes of making sugar, and the time required for the labor, (if it deserves that name) is at a season when it is impossible for the farmer to employ himself in any species of agriculture. His wife and all his children above ten years of age, moreover may assist him in this business, for the profit of the weakest of them is nearly equal to that of a man, when hired for that purpose.

A comparative view of this sugar has been frequently made with the sugar which is obtained from the West-India sugar cane, with respect to its *quality*, *frice*, and the possible or probable *quantity* that can be made of it in the United States, each of which I shall consider in order.

* The following receipts published by William Cooper, Esq. in the Albany Gazette, fully establishes this fact.

"Received, Cooper's Town, April 30th, 1790, of William Cooper, sixteen pounds, for six hundred and forty pounds of sugar made with my own hands, without any assistance in less than four weeks, besides attending to the other business of my farm, as providing fire wood, taking care of the cattle, &c. John Nicholls. Witness R. Smith.

A single family, consisting of a man and his two sons, on the maple sugar lands between the Delaware and Susquehannah made 1800lb. of maple sugar in one season.

1. The quality of this sugar is necessarily better than that which is made in the West Indies. It is prepared in a scason when not a single insect exists to feed upon it, or to mix its excretions with it, and before a particle of dust or of the pollen of plants can float in the air. The same observation cannot be applied to the West India sugar. The insects and worms which prey upon it, and of course mix with it, compose a page in a nomenclature of natural history. I shall say nothing of the hands which are employed in making sugar in the West Indies, but, that men who work for the exclusive benefit of others, are not under the same obligations to keep their persons clean while they are employed in this work, that men women and children are, who work exclusively for the benefit of themselves, and who have been educated in the habits of cleanliness. The superior purity of the maple sugar is farther proved by its leaving a less sediment, when dissolved in water, than the West India sugar.

It has been supposed that the maple sugar is inferior to to the West India sugar in *strength*. The experiments which led to this opinion, I suspect have been inaccurate, or have been made with maple sugar, prepared in a slovenly manner. I have examined equal quantities, by weight, of both the grained and the loaf sugar, in hyson tea, and in coffee, made in every respect equal by the minutest circumstances that could effect the quality or taste of each of them, and could percieve no inferiority in the strength of the maple sugar. The liquors which decided this question were examined at the same time, by Alexander Hamilton, Esq. Secretary of the Treasury of the United States, Mr. Henry Drinker, and several Ladies, who all concurred in the above opinion.

2. Whoever considers that the gift of the sugar maple trees is from a benevolent Providence, that we have many millions of acres in our country covered with them, that the tree is improved by repeated tappings, and that the sugar is obtained by the frugal labour of a farmer's family, and at the same time considers the labour of cultivating the sugar cane, the capitals sunk in sugar works, the first cost of slaves and cattle, the expenses of provisions for both of them, and in some instances the additional expence of conveying the sugar to a market, in all the West India islands, will not hesitate in believing that the maple sugar may be manufactured much cheaper, and sold at a *less furice* than that which is made in the West Indies.

3. The resources for making a sufficient quantity of this sugar not only for the consumption of the United States, but for exportation, will appear from the following facts. There are in the states of New-York and Pennsylvania alone at least ten millions of acres of land which produce the sugar maple-tree, in the proportion of thirty trees to one acre. Now, supposing all the persons capable of labour in a family to consist of three, and each person to attend 150 trees and each tree to yield 5lbs. of sugar in a season, the product of the labour of 60,000 families would be 135,000,000 pounds of sugar, and allowing the inhabitants of the United States to compose 600,000 families, each of which consumed 200 pounds of sugar in a year, the whole consumption would be 120,000,000 pounds in a year, which would leave a balance of 15,000,000 pounds for exportation. Valuing the sugar at 6-90 of a dollar per pound, the sum saved to the United States would be 8,000,000 dollars by home consumption, and the sum gained by exportation would be, 1,000,000 dollars. The only part of this calculation that will appear improbable is, the number of families supposed to be employed in the the manufactory of the sugar, but the difficulty of admitting this supposition will vanish when we consider, that double that number of families are employed every year, in making cyder, the trouble, risks and expences of which are all much greater than those of making maple-sugar.

But the profit of the maple tree is not confined to its sugar. It affords a most agreeable molasses, and an excellent vinegar. The sap which is suitable for these purposes is obtained after the sap which affords the sugar has ceased to flow, so that the manufactories of these different products of the maple tree, by succeeding, do not interfere with each other. The molasses may be made to compose the basis of a pleasant summer beer. The sap of the maple is moreover capable of affording a spirit, but we hope this precious juice will never be prostituted by our citizens to this ignoble purpose. Should the use of sugar in diet become more general in our country, it may tend to lessen the inclination or supposed necessity for spirits, for I have observed a relish for sugar in diet to be seldom accompanied by a love for strong drink. It is the sugar which is mixed with tea which makes it so generally disagreeable to drunkards. But a diet, consisting of a plentiful mixture of sugar has other advantages to recommend it, which I shall briefly enumerate:

1. Sugar affords the greatest quantity of nourishment in a given quantity of matter of any substance in nature; of course it may be preserved in less room in our houses, and and may be consumed in less time, than more bulky and and less nourishing aliment. It has this peculiar advantage over most kinds of aliment, that it is not liable to have its nutritious qualities affected by time or the weather; hence it is preferred by the Indians in their excursions from home.

THE SUGAR MAPLE-TREE.

They mix a certain quantity of maple sugar, with an equal quantity of Indian corn, dried and powdered, in its milky state. This mixture is packed in little baskets, which are frequently wetted in travelling, without injuring the sugar. A few spoons full of it mixed with half a pint of spring water, afford them a pleasant and strengthening meal. From the degrees of strength and nourishment, which are conveyed into animal bodies by a small bulk of sugar, I concieve it might be given to horses with great advantage, when they are used in circumstances which make it difficult or expensive to support them, with more bulky or weighty aliment. A pound of sugar with grass or hay, I have been told, has supported the strength and spirits of an horse, during a whole day's labour in one of the West-India Islands. larger quantity given alone, has fattened horses and cattle, during the war before last in Hispaniola, for a period of several months, in which the exportation of sugar, and the importation of grain, were prevented by the want of ships.

2. The plentiful use of sugar in diet, is one of the best preventives that has ever been discovered of the diseases which are produced by worms. The Author of Nature seems to have implanted a love for this aliment in all children, as if it were on purpose to defend them from those diseases. I know a gentleman in Philadelphia, who early adopted this opinion, and who by indulging a large family of children, in the use of sugar, has preserved them all from the diseases usually occasioned by worms.

3. Sir John Pringle has remarked, that the plague has never been known in any country where sugar composes a material part of the diet of the inhabitants. I think it probable, that the frequency of malignant fevers of all kinds has

AN ACCOUNT OF

been lessened by this diet, and that its more general use would defend that class of people, who are most subject to malignant fevers, from being so often affected by them.

4. In the numerous and frequent disorders of the breast, which occur in all countries, where the body is exposed to a variable temperature of weather, sugar affords the basis of many agreeable remedies. It is useful in weaknesses, and acrid defluxions upon other parts of the body. Many facts might be adduced in favour of this assertion. I shall mention only one, which from the venerable name of the person, whose case furnished it, cannot fail of commanding attention and credit. Upon my enquiring of Dr. Franklin, at the request of a friend, about a year before he died, whether he had found any relief from the pain of the stone, from the Blackberry-Jam, of which he took large quantities, he told me that he had, but that he believed the medicinal part of the jam, resided wholly in the sugar, and as a reason for thinking so, he added, that he often found the same relief, by taking about half a pint of a syrup, prepared by boiling a little brown sugar in water, just before he went to bed, that he did from a dose of opium. It has been supposed by some of the early physicians of our country, that the sugar obtained from the maple tree, is more medicinal, than that obtained from the West-India sugar cane, but this opinion I believe is without foundation. It is preferrable in its qualities to the West-India sugar only from its superior cleanliness.

Cases may occur in which sugar may be required in medicine, or in diet, by persons who refuse to be benefited,

THE SUGAR MAPLE-TREE.

even indirectly by the labour of slaves. In such cases, the innocent maple sugar will always be preferred*.

It has been said, that sugar injures the teeth, but this opinion now has so few advocates, that it does not deserve a serious refutation.

To transmit to future generations, all the advantages which have been enumerated from the maple tree, it will be necessary to protect it by law, or by a bounty upon the maple sugar, from being destroyed by the settlers in the maple country, or to transplant it from the woods, and cultivate it in the old and improved parts of the United States. An orchard consisting of 200 trees, planted upon a common farm would yield more than the same number of apple trees, at a distance from a market town. A full grown tree in the woods yields five pounds of sugar a year. If a greater exposure of a tree to the action of the sun, has the same effects upon the maple, that it has upon other trees, a larger quantity of sugar might reasonably be expected from each tree planted in an orchard. Allowing it to be only seven pounds, then 200 trees will yield 1400 pounds of sugar, and deducting 200 from the quantity, for the consumption of the family, there will remain for sale 1200 pounds which at 6-90 of a dollar per pound will yield an annual profit to the farmer

* Dr. Knowles, a physician of worthy character in London, had occasion to recommend a diet to a patient, of which sugar composed a material part. His patient refused to submit to his prescription, and gave as a reason for it, that he had witnessed so much of the oppression and cruelty which were exercised upon the slaves, who made the sugar, that he had made a vow never to taste the product of their misery as long as he lived.

AN ACCOUNT OF

of 80 dollars. But if it should be found that the shade of the maple does not check the growth of grain any more than it does of grass, double or treble that number of maple trees may be planted on every farm, and a profit proportioned to the above calculation be derived from them. Should this mode of transplanting the means of obtaining sugar be successful, it will not be a new one. The sugar cane of the West-Indies, was brought originally from the East-Indies, by the Portuguese, and cultivated at Madeira, from whence it was transplanted directly or indirectly, to all the sugar Islands of the West-Indies.

It were to be wished, that the settlers upon the sugar maple lands, would spare the sugar tree in clearing their lands. On a farm of 200 acres of land, according to our former calculation, there are usually 6,000 maple trees. If only 2,000 of those original and ancient inhabitants of the woods, were suffered to remain, and each tree were to afford only five pounds of sugar, the annual profit of such a farm in sugar alone, at the price formerly mentioned, would amount to 666 dollars, 150 dollars of which would probably more than defray all the expences of making it, and allow a plentiful deduction for family use.

According to the usual annual profit of a sugar maple tree, each tree is worth to a farmer, two dollars and 2-3 of a dollar; exclusive therefore of the value of his farm, the 2,000 sugar maple trees alone confer a value upon it of 5,330 dollars and 33-90 of a dollar.

It is said, that the sugar trees when deprived of the shelter and support they derive from other forest trees, are liable to be blown down, occasioned by their growing in a rich, and

THE SUGAR MAPLE-TREE.

of course, a loose soil. To obviate this, it will only be necessary to cut off some of their branches, so as to alter its center of gravity, and to allow the high winds to have an easy passage through them. Orchards of sugar maple trees, which grow with an original exposure of all their parts to the action of the sun, will not be liable to this inconvenience.

In contemplating the present opening prospects in human affairs, I am led to expect that a material share of the happiness, which Heaven seems to have prepared for a *hart* of mankind, will be derived from the manufactory and general use of maple sugar, for the benefits which I flatter myself are to result from it, will not be confined to our own country. They will, I hope, extend themselves to the interests of humanity in the West-Indies. With this view of the subject of this letter, I cannot help contemplating a sugar maple tree with a species of affection and even veneration, for I have persuaded myself, to behold in it the happy means of rendering the commerce and slavery of our African brethren, in the sugar Islands as unnecessary, as it has always been inhuman and unjust.

> From, dear Sir, your sincere friend, BENJAMIN RUSH.

July 10th, 1791.

AN ACCOUNT OF THE LIFE AND DEATH OF EDWARD DRINKER, WHO DIED ON THE 17TH OF NOVEMBER, 1782, IN THE 103RD. YEAR OF HIS AGE.

DWARD DRINKER was born on the 24th. of December, 1680, in a small cabbin, near the present corner of Walnut and Second-streets, in the city of Philadelphia. His parents came from a place called Beverly, in the state of Massachusetts. The banks of the Delaware, on which the city of Philadelphia now stands, were inhabited, at the time of his birth, by Indians, and a few Swedcs and Hol-He often talked to his companions of picking landers. whortle berries and catching rabbits, on spots now the most improved and populous in the city. He recollected the second time William Penn came to Pennsylvania, and used to point to the place where the cabbin stood, in which he, and his friends, that accompanied him, were accommodated upon their arival. At twelve years of age, he went to Boston, where he served his apprenticeship to a cabinet maker. In the year 1745, he returned to Philadelphia, with his family, where he lived until the time of his death. He was four times married, and had eightcen children, all of whom were by his first wife. At one time of his life, he sat down, at his own table, with fourteen children. Not long before his death he heard of the birth of a grand-child, to one of his grand-childrcn, the fifth in succession to himself.

He retained all his faculties till the last year of his life. Even his memory, so early and so generally diminished by

AN ACCOUNT OF THE LIFE OF E. DRINKER. 289

age was but little impaired. He not only remembered the incidents of his childhood and youth*, but the events of latter years; and so faithful was his memory to him, that his son has informed me he never heard him tell the same story twice, but to different persons, and in different companies. His cye-sight failed him, many years before his death, but his hearing was uniformly perfect and unimpaired. His appetite was good till within a few days before his death. He generally ate a hearty breakfast of a pint of tea or coffee, as soon as he got out of his bed, with bread and butter in pro-

* It is remarkable that the incidents of childhood and youth are seldom remembered or called forth until old age. I have sometimes been led, from this and other circumstances, to suspect that nothing is ever lost that is lodged in the memory, however it may be buried for a time by a variety of causes. How often do we find the transactions of early life, which we had reason to suppose were lost from the mind for ever, revived in our memories by certain accidental sights or sounds, particularly by certain notes or airs in music. I have known a young man speak French fluently when drunk, that could not put two sentences of that language together, when sober. He had been taught it perfectly, when a boy, but had forgotten it from disuse. A French countess was nursed by a Welsh woman, from whom she learned to speak her language, which she soon forgot, after she had acquired the French, which was her mother tongue. In the delirium of a fever, many years afterwards, she was heard to mutter words which none of her family or attendants understood. An old Welsh woman came to see her, who soon perceived that the sounds which were so unintelligible to the family, were the Welsh language. When she recovered, she could not recollect a single word of the language, she had spoken in her sickness. I can conceive great advantages may be derived from this retentive power in our memories, in the advancement of the mind towards perfection in knowledge (so essential to its happiness) in a future world.

P p

AN ACCOUNT OF THE LIFE AND DEATH

portion. He ate likewise at eleven o'clock, and never failed to eat plentifully at dinner of the grossest solid food. He drank tea, in the evening, but never ate any supper: he had lost all his teeth thirty years before his death, which was occasioned, his son says, by drawing excessive hot smoke of tobacco into his mouth : but the want of suitable mastication of his food, did not prevent its speedy digestion, nor impair his health. Whether the gums, hardened by age, supplied the place of his teeth in a certain degree, or whether the juices of the mouth and stomach became so much more acrid by time, as to perform the office of dissolving the food more speedily and more perfectly, I know not, but I have often observed, that old people are most disposed to excessive eating, and that they suffer fewest inconveniences from it. He was inquisitive after news in the last years of his life. His education did not lead him to increase the stock of his ideas any other way. But it is a fact well worth attending to, that old age, instead of diminishing, always increases the desire of knowledge. It must afford some consolation to those who expect to be old, to discover, that the infirmities to which the decays of nature expose the human body, are rendered more tolerable by the enjoyments that are to be derived from the appetite for sensual and intellectual food.

He was remarkably sober and temperate. Neither hard labout, nor company, nor the usual afflictions of human life, nor the wastes of nature, ever led him to an improper or excessive use of strong drink. For the last twenty-five years of his life, he drank twice every day of toddy, made with two table spoonfuls of spirit, in half a pint of water. His son, a man of fifty-nine years of age, told me that he had never seen him intoxicated. The time and manner in which he used spiritous liquors, I believe, contributed to lighten the

weight of his years, and probably to prolong his life. " Give wine to him that is of a heavy heart, and strong drink to him that is ready to perish with age, as well as with sickness. Let him drink and forget his sorrow, and remember his misery no more."

He enjoyed an uncommon share of health, insomuch that in the course of his long life he never was confined more than three days to his bed. He often declared that he had no idea of that most distressing pain called the head ache. His sleep was interrupted a little in the last years of his life with a defluxion on his breast, which produced what is commonly called the old man's cough.

The character of this aged citizen was not summed up in his negative quality of temperance : he was a man of the most amiable temper: old age had not curdled his blood; he was uniformly cheerful and kind to every body; his religious principles were as steady as his morals were pure. He attended public worship about thirty years in the Rev. Dr. Sproat's church, and died in a full assurance of a happy immortality. The life of this man is marked with several circumstances, which perhaps have seldom occurred in the life of an individual events. He saw and heard more of those events which are measured by time, than have ever been seen or heard by any name since the age of the patriarchs; he saw the same spot of earth, which at one period of his life, was covered with wood and bushes, and the receptacle of beasts and birds of prey, afterwards become the seat of a city not only the first in wealth and arts in the new, but rivalling in both, many of the first cities in the old world. He saw regular streets where he once pursued a hare : he saw churches rising upon morasses, where he had often heard the croak-

292 AN ACCOUNT OF THE LIFE OF E. DRINKER.

ing of frogs; he saw wharfs and ware-houses, where he had often seen Indian savages draw fish from the river for their daily subsistence; and he saw ships of every size and use in in those streams, where he had often seen nothing but Indian canoes; he saw a stately edifice filled with legislators, astonishing the world with their wisdom and virtue, on the same spot, probably, where he had seen an Indian council fire; he saw the first treaty ratified between the newly confederated powers of America and the ancient monarchy of France, with all the formalties of parchment and seals, on the same spot, probably, where he once saw William Penn ratify his first and last treaty with the Indians, without the formality of pen, ink or paper; he saw all the intermediate stages through which a people pass, from the most simple to the highest degrees of civilization. He saw the beginning and end of the empire of Great-Britain, in Pennsylvania. He had been the subject of seven successive crowned heads, and afterwards became a willing citizen of a republic; for he embraced the liberties and independence of America in his withered arms, and triumphed in the last years of his life in the salvation of his country.

REMARKABLE CIRCUMSTANCES IN THE CONSTITUTION AND LIFE OF ANN WOODS, AN OLD WOMAN OF 96 YEARS OF AGE.

N the summer of the year 1788, while I was engaged in collecting the facts upon the subject of old age, which I have since published,* a poor woman came to my house to beg for cold victuals. Perceiving by her countenance, and the stoop in her walk, that she was very old, I requested her to sit down by me, while I recorded the following information, which I received from her, and which was confirmed to me a few days afterwards, by one of her daughters with whom she lived. Her name was Ann Woods. Her age at that time was 96. She was born in Herefordshire, in England, and came to this city when she was but ten years old, where she had lived ever since. She had been twice married. By her first husband, William Dickson, she had nine children, four of whom were then living. By her second husband, Joseph Woods, whom she married after she was sixty years old, she had one child, born within ten months after her marriage. There were intervals of two and nearly three years between each of her children. Three died soon after weaning them at the usual age in which children are taken from the breast. This led her to suckle her other children during the whole time of her pregnancy, and in several instances, she suckled two of them, born in succession to each other, at the same

Medical Enquiries and Observations. vol. 2.

AN ACCOUNT OF THE LIFE AND

time. One of her children by her first husband, sucked until it was five years old. Her menses appeared between her uncteenth and twentieth years and continued without any intermission, except during her pregnancy and eleven months after the birth of each of her children, until she was eighty years of age. At the time I saw her, she heard tolerably well, but her sight was lost in one eye, and was weak in the other. She lost all her teeth when she was between fifty and sixty years of age. Her hair became grey when she was between forty and fifty. Her sleep was not sound, owing to her having been afflicted with the Rheumatism, a disease which was brought on her by the alternate heat and cold to which she had exposed herself, by following the business of a washer woman for many years. She had had several attacks of the Intermitting Fever and of the Pleurisy, in the course of her life, and was much afflicted with the Head-Ache, after her menses ceased. She had been frequently bled while afflicted with the above diseases. Her diet was simple, consisting chiefly of weak tea, milk, chcese, butter and vegetables. Meat of all kinds, except veal, disagreed with her stomach. She found great benefit from frequently changing her aliment. Her drinks were water, cyder and water, molasses and vinegar in water. She had never used spirits. Her memory was but little impaired. She was cheerful and thankful that her condition in life was happier than hundreds of other old people.

From the history of this old woman's constitution and manner of life, the following observations will naturally occur to the reader.

1. That there is a great latitude in the time in which the menses cease. It is more common for them in their excen-

tricities, to disappear at the usual time, and to return in extreme old age. In the year 1795, I saw a case of this kind in a woman of seventy years of age in the Pennsylvania Hospital.

2. There is a great latitude in the time in which women bear children. Many children are born between fifty and sixty, but very few I believe beyond sixty.

3. It appears from the history that has been given, that acute and chronic diseases if opposed by temperance and suitable remedies, do not necessarily shorten the duration of human life.

4. That child-bearing, and suckling children, do not materially affect health, or longevity, where their effects are opposed by temperance and moderate labour.

5. That the evils of life are seldom so numerous, as not to leave room for thankfulness for an exemption from a great deal of misery. This poor woman did not complain of her weakness, pains or poverty. On the contrary, she appeared thanful under all the afflictions of her life. While the indolent are commanded by the wise man to go to the ant to learn industry, those persons who abound with all the external means of happiness, and at the same time complain of the moral government of our world, may be invited to sit down by the side of Ann Woods, and learn from the example of her gratitude to heaven, for a single drop of divine goodness, to render unceasing thanks for the ocean of blessings they derive from the same source.

BIOGRAPHICAL ANECDOTES OF BENJAMIN LAY.

THERE was a time when the name of this celebrated Christian Philosopher, was familiar to every man, woman and to nearly every child, in Pennsylvania.—His size, which was not much above four feet, his dress, which was always the same, consisting of light coloured plain clothes, a white hat, and half-boots;—his milk-white beard, which hung upon his breast; and, above all, his peculiar principles and conduct, rendered him to many, an object of admiration, and to all, the subject of conversation.—

He was born in England, and spent the early part of his life at sea. His first settlement was in Barbadoes, as a merchant, where he was soon convinced of the iniquity of the slave trade. He bore an open testimony against it, in all companies, by which means he rendered himself so unpopular, that he left the island in disgust, and settled in the then province of Pennsylvania. He fixed his home at Abington, ten miles from Philadelphia, from whence he made frequent excursions to the city, and to different parts of the country.—

At the time of his arrival in Pennsylvania, he found many of his brethren, the people called Quakers, had fallen so far from their original principles, as to keep negro slaves. He remonstrated with them, both publickly and privately, against the practice; but frequently with so much indiscreet zeal, as

BIOGRAPHICAL ANECDOTES OF BENJAMIN LAY. 297

to give great offence. He often disturbed their public meetings, by interrupting or opposing their preachers, for which he was once carried out of a meeting-house, by two or three friends.—Upon this occasion he submitted with patience to what he considered a species of persecution.—He lay down at the door of the meeting-house, in a shower of rain, till divine worship was ended; nor could he be prevailed upon to rise, till the whole congregation had stepped over him in their way to their respective homes.—

To shew his indignation against the practice of slavekeeping, he once carried a bladder filled with blood into a meeting; and, in the presence of the whole congregation, thrust a sword, which he had concealed under his coat, into the bladder, exclaiming, at the same time, "Thus shall God shed the blood of those persons who enslave their fellow creatures." The terror of this extravagant and unexpected act, produced swoonings in several of the women of the congregation.—

He once went into the house of a friend in Philadelphia, and found him seated at breakfast, with his family around him. Being asked by him to sit down and breakfast with them, he said, "Dost thou keep slaves in thy house?" Upon being answered in the affirmative, he said, "Then I will not partake with thee, of the fruits of thy unrighteousness."

He took great pains to convince a farmer and his wife, in Chester county, of the iniquity of keeping negro slaves, but to no purpose. They not only kept their slaves, but defended the practice. One day he went into their house, and after a short discourse with them upon the wickedness, and particularly the inhumanity of seperating children from their parents, which was involved in the slave trade, he seized the only child of the family, (a little girl about three years old) and pretended to run away with her.—The child cried bitterly, " I will be good,—I will be good," and the parents shewed signs of being alarmed. Upon observing this scene, Mr. Lay said, very-emphatically,—" You see, and feel now, a little of the distress you occasion every day, by the inhuman practice of slave-keeping."

This singular philosopher did not limit his pious testimony against vice, to slave-keeping alone. He was opposed to every species of extravagance. Upon the introduction of tea, as an article of diet, into Pennsylvania, his wife bought a small quantity of it, with a sett of cups and saucers, and brought them home with her. Mr. Lay took them from her, brought them back again to the city, and from the balcony of the court-house scattered the tea, and broke the cups and saucers, in the presence of many hundred spectators, delivering, at the same time, a striking lecture upon the folly of preferring that foreign herb, with its expensive appurtenances, to the simple and wholesome diet of our country.

He possessed a good deal of wit, and was quick at repartee. A citizen of Philadelphia, who knew his peculiarities, once met him in a croud, at a funeral, in Germantown. Being desirous of entering into a conversation with him that should divert the company, the citizen accosted him, with the most respectful ceremony, and declared himself to be "his most humble servant." "Art thou my servant." said Mr. Lay, —"Yes—I am" said the citizen. "Then, said Mr. Lay, (holding up his foot towards him,) clean this shoe."—This unexpected reply turned the laugh upon the citizen. Being desirous of recovering himself in the opinion of the company, he asked him to instruct him in the way to heaven. "Dost thou indeed wish to be taught," said Mr. Lay. "I do," said the citizen. "Then," said Mr. Lay, "Do justice-love mercy, and walk humbly with thy God."

He wrote a small treatise upon negro-slavery, which he brought to Dr. Franklin to be printed. Upon looking over it, the Doctor told him that it was not paged, and that there appeared to be no order or arrangement in it. " It is no matter said Mr. Lay—print any part thou pleasest first."— This book contained many pious sentiments, and strong expressions against negro slavery; but even the address and skill of Dr. Franklin were not sufficient to connect its different parts together, so as to render it an agreeable or useful work. This book is in the library of the city of Philadelphia.

Mr. Lay was extremely attentive to young people. He took great pleasure in visiting schools, where he often preached to the youth. He frequently carried a basket of religious books with him, and distributed them as prizes, among the scholars,

He was fond of reading. In the print of him, which is to be seen in many houses in Philadelphia, he is represented with "Tryon on Happiness" in his hand, a book which he valued very much, and which he frequently carried with him in his excursions from home.

He was kind and charitable to the poor, but had no compassion for beggars. He used to say, "there was no man or woman, who was able to go abroad to beg, that was not able to earn *four pience* a day, and this sum, he said, was enough to keep any person above want, or dependence, in this country." His humanity was as ingenious as it was extensive, and embraced the sufferings which arise from even the common inconveniences of life. One, among many instances that might be mentioned of this species of humanity, was his advising the farmers who lived near to public roads to plant fruit trees along them, in order " to protect the weary traveller by their shade, and to refresh him with their fruits."

He was a severe enemy to idleness, insomuch that when he could not employ himself out of doors, or when he was tired of reading, he used to spend his time in spinning. His common sitting room was hung with skains of thread, spun entirely by himself. All his clothes were of his own manufactory.

He was extremely temperate in his diet, living chiefly upon vegetables.—Turnips boiled, and afterwards roasted, were his favourite dinner. His drink was pure water. From a desire of imitating our Saviour, in every thing, he once attempted to fast for forty days. This experiment, it is said had nearly cost him his life. He was obliged to desist from it, long before the forty days were expired; but the fasting, it was said, so much debilitated his body, as to accelerate his death. He lived above eighty years, and died in his own house in Abington, about thirty years ago.

In reviewing the history of this extraordinary man, we cannot help absolving him of his weaknesses, when we contemplate his many active virtues. He was the pioneer of that war, which has since been carried on, so successfully, against the commerce and slavery of the negroes.—Perhaps the turbulence and severity of his temper were necessary to rouse the torpor of the human mind, at the period in which he lived, to this interesting subject. The meekness and

gentleness of Anthony Benezet, who compleated what Mr. Lay began would probably have been as insufficient for the work performed by Mr. Lay, as the humble piety of De Renty, or of Thomas A. Kempis, would have been to accomplish the works of the zealous Luther, or the intrepid Knox in the sixteenth century.

The success of Mr. Lay, in sowing the seeds of a principle which bids fair to produce a revolution in morals—commerce —and government, in the new and in the old world, should teach the benefactors of mankind not to despair, if they do not see the fruits of their benevolent propositions, or undertakings, during their lives.—No one seed of truth or virtue ever perished.—Wherever it may be sowed, or even scattered, it will preserve and carry with it the principle of life.— Some of these seeds produce their fruits in a short time, but the most valuable of them, like the venerable oak—are centuries in growing; but they are unlike the pride of the forests, as well as all other vegetable productions, in being incapable of a decay;

They exist and bloom for ever. February 10th. 1790. BIOGRAPHICAL ANEODOTES OF ANTHONY BENEZET.

THIS excellent man was placed by his friends in early life in a counting-house, but finding commerce opened temptations to a worldly spirit, he left his master, and bound himself as an apprentice to a cooper. Finding this business too laborious for his constitution, he declined it, and devoted himself to school-keeping; in which useful employment, he continued during the greatest part of his life.

He possessed uncommon activity and industry in every thing he undertook. He did every thing as if the words of his Saviour were perpetually sounding in his ears, " wist ye not, that I must be about my Father's business ?"

He used to say, "the highest act of charity in the world' was to bear with the unreasonableness of mankind."

He generally wore plush clothes, and gave as a reason for it, that after he had worn them for two or three years, they made comfortable and decent garments for the poor.

He once informed a young friend, that his memory began to fail him; "but this," said he, "gives me one great ad-"vantage over thee—for thou canst find entertainment in "reading a good book only *once*—but I enjoy that pleasure "as often as I read it; for it is always new to me."

He published several valuable tracts in favor of the emancipation of the blacks, and of the civilizing and christianizing

BIOGRAPHICAL ANECDOTES OF ANTHONY BENEZET. 303

the Indians. He also published a pamphlet against the use of ardent spirits. All these publications were circulated with great industry, and at his own expense, throughout every part of the United States.

He wrote letters to the queen of Great-Britain, and to the queen of Portugal to use their influence with their respective courts to abolish the African trade. He accompanied his letter to the queen of Great-Britain with a present of his works. The queen received them with great politeness, and said after reading them, " that the author appeared to be a very good " man."

He also wrote a letter to the king of Prussia, in which he endeavoured to convince him of the unlawfulness of war.

During the time the British army was in possession of the city of Philadelphia, he was indefatigable in his endeavours to render the situation of the persons who suffered from captivity as casy as possible. He knew no fear in the presence of his fellow men, however dignified they were by titles or station, and such were the propriety and gentleness of his manners in his intercourse with the gentlemen who commanded the British and German troops, that when he could not obtain the objects of his requests, he never failed to secure their civilities, and frequently their esteem.

So great was his sympathy with every thing that was capable of feeling pain, that he resolved towards, the close of his life, to eat no animal food. Upon coming into his brother's house one day, when his family was dining upon poultry, he was asked by his brother's wife, to sit down and dine with them. "What!" (said he,) " would you have eat my neigh-" bours ?"

304 BIOGRAPHICAL ANECDOTES OF ANTHONY BENEZET.

This misapplication of a moral feeling, was supposed to have brought on such a debility in his stomach and bowels, as produced a disease in those parts of which he finally died.

Few men, since days of the apostles, ever lived a more disinterested life. And yet, upon his death bed, he said, he wished to live a little longer, that "he might bring down " SELF."

The last time he ever walked across his room, was to take from his desk six dollars, which he gave to a poor widow whom he had long assisted to maintain.

He bequeathed after the death of his widow, a house and lot in which consisted his whole estate, to the support of a school for the education of negro children, which he had founded and taught for several years before his death.

He died in May 1784, in the 71st. year of his age.

His funeral was attended by persons of all religious denominations, and by many hundred black people.

Colonel J——n, who had served in the American army, during the late war, in returning from the funeral, pronounced an eulogium upon him. It consisted only of the following words: "I would rather," said he, "be Anthony "Benezet in that coffin, than George Washington with all "his fame."

July 15, 1788.

PARADISE OF NEGRO-SLAVES .---- A DREAM.

COON after reading Mr. Clarkson's ingenious and D pathetic essay on the slavery and commerce of the human species, the subject made so deep an impression upon my mind, that it followed me in my sleep, and produced a dream of so extraordinary a nature, that I have yielded to the importunities of some of my friends, by communicating it to the public, I thought I was conducted to a country, which in point of cultivation and scenery; far surpassed any thing I had ever heard, or read of in my life. This country, I found, was inhabited only by negroes. They appeared cheerful and happy. Upon my approaching a beautiful grove, where a number of them were assembled for religious purposes, I perceived at once a pause in their exercises, and an appearance of general perturbation. They fixed their eyes upon me-while one of them, a venerable looking man, came forward, and in the name of the whole assembly, addressed me in the following language:

" Excuse the panic which you have spread through this peaceful and happy company: we perceive that you are a *white man.*—That colour which is the emblem of innocence in every other creature of God, is to us a sign of guilt in man. The persons whom you see here, were once dragged by the men of your colour from their native country, and consigned by them to labour—punishment—and death. "-We are here collected together, and enjoy an ample " compensation in our present employments for all the mise-" ries we endured on earth. We know that we are secured " by the Being whom we worship, from injury and oppres-" sion. Our appearance of terror, therefore, was entirely " the sudden effect of habits which have not yet been eradi-" cated from our minds."

"Your apprehensions of danger from the sight of a white "man," said I, "are natural. But in me—you behold a "friend. I have been your advocate—and."—Here, he interrupted me, and said, "Is not your name—?" I answered in the affirmative. Upon this he ran up and embraced me in his arms, and afterwards conducted me into the midst of the assembly, where, after being introduced to the principal characters, I was seated upon a bank of moss; and the following account was delivered to me by the venerable person who first accosted me.

"The place we now occupy, is called the *haradise of negro* "slaves. It is destined to be our place of residence 'till the general judgement; after which time, we expect to be admitted into higher and more perfect degrees of happiness. Here we derive great pleasure from contemplating the infinite goodness of God, in allotting to us our full proportion of misery on earth; by which means we have escaped the "punishments, to which the free and happy part of mankind too often expose themselves after death. Here we have learned to thank God, for all the afflictions our task-masters heaped on us; inasmuch, as they were the means of our present happiness. Pain and distress are the unavoidable portions of all mankind. They are the only possible avenues that can conduct them to peace and felicity. Happy are " they, who partake of their proportion of both upon the " carth." Here he ended.---

After a silence of a few minutes, a young man, who bore on his head the mark of a wound, came up to me and asked "If I knew any thing of Mr.—, of the Island of—," I told him "I did not.", "Mr.—," said he, " was my " master. One day, I mistook his orders, and saddled his " mare instead of his horse, which provoked him so much, " that he took up an axe which laid in his yard, and with a " stroke on my head dismissed me from life.

" I long to hear, whether he has repented of this unkind action. Do, sir, write to him, and tell him, his sin is not too great to be forgiven, tell him, his once miserable slave, Scipio, is not angry at him—he longs to bear his prayers to the offended majesty of heaven—and—when he dies— Scipio will apply to be one of the convoy, that shall conduct his spirit to the regions of bliss appointed for those who repent of their iniquities."

Before I could reply to this speech, an old man came and sat down by my side. His wool was white as snow. With a low, but gentle voice, he thus addressed me.

"Sir, I was the slave of Mr., in the Island of I served him faithfully upwards of sixty years. No rising sun ever caught me in my cabin—no setting sun ever saw me out of the sugar field, except on Sundays and holydays. My whole subsistence never cost my master more than forty shillings a year. Herrings and roots were my only food. One day, in the eightieth year of my age, the overseer saw me stop to rest myself against the side of a tree, where I was at work. He came up to me, and beat me,

PARADISE OF NEGRO SLAVES,

"''' 'till he could endure the fatigue and heat occasioned by the " blows he gave me, no longer. Nor was this all-he com-" plained of me to my master, who instantly set me up at " public vendue, and sold me for two guineas to a tavern-" keeper, in a distant parish. The distress I felt, in leaving " my children, and grand-children(28 of whom I left on my " old master's plantation) soon put an end to my existence, " and landed me upon these happy shores. I have now no " wish to gratify but one-and that is to be permitted to visit " my old master's family. I long to tell my master, that " his wealth cannot make him happy .--- That the sufferings " of a single hour in the world of misery, for which he is " preparing himself, will overbalance all the pleasures he " ever enjoyed in his life-and that for every act of unneces-" sary severity he inflicts upon his slaves, he shall suffer ten-" fold in the world to come."

He had hardly finished his tale, when a decent looking woman came forward, and addressed me in the following language.—Sir,

" I was once the slave of Mr.—, in the state of —, " From the healthiness of my constitution, I was called upon " to suckle my Master's eldest son. To enable me to per-" form this office more effectually, my own child was taken " from my breast, and soon afterwards died. My affections " in the first emotions of my grief, fastened themselves upon " my infant master. He thrived under my care and grew " up a handsome young man. Upon the death of his father, " I became his property.—Soon after this event, he lost \pounds .100 " at cards. To raise this money I was sold to a planter in a " neighbouring state. I can never forget the anguish, with " which my aged father and mother followed me to the end

A DREAM.

" of the lane, when I left my master's house, and hung upon " me, when they bid me farewell."

" My new master obliged me to work in the field; the consequence of which was, I caught a fever which in a few weeks ended my life. Say, my friend, is my first young master still alive? —If he is—go to him, and tell him, his unkind behaviour to me is upon record against him. The gentle spirits in heaven, whose happiness consists in expressions of gratitude and love, will have no fellowship with him. His soul must be melted with pity, or he can never escape the punishment which awaits the hard-hearted, equally with the impenitent, in the regions of misery."

As soon as she had finished her story, a middle aged woman approached me, and after a low and respectful curtscy, thus addressed me.

"Sir I was born and educated in a christian family in one of the southern states of America. In the thirty-third year of my age, I applied to my master to purchase my freedom. Instead of granting my request, he conveyed me by force on board of a vessel and sold me to a planter in the island of Hispaniola. Here it pleased God."______ Upon pronouncing these words, she paused, and a general silence ensued.—All at once, the eyes of the whole assembly were turned from me, and directed towards a little white man who advanced towards them, on the opposite side of the grove, in which we were seated. His face was grave, placid, and full of benignity. In one hand he carried a subscription paper and a petition—in the other, he carried a small pamphlet, on the unlawfulness of the African slave-trade, and a letter directed to the King of Prussia, upon the unlawfulness of war. While I was employed in contemplating this venerable figure—suddenly I beheld the whole assembly running to meet him—the air resounded with the clapping of hands and I awoke from my dream, by the noise of a general acclamation of—

ANTHONY BENEZET!

AN INQUIRY INTO THE CAUSES OF PREMATURE DEATHS.

THE frequency of death in infancy, childhood, and middle life, and the immense disproportion between the number who die in those periods, and of those who die in old age, have often been urged as arguments against the wisdom and goodness of the divine government. The design of this inquiry is to shew that, in the present state of the world those supposed evils, or defects, are blessings in disguise, and a part of a wise and extensive system of goodness to the children of men.

The reasons for this opinion are:

1. Did all the people who are born, live to be seventy or eighty years of age, the population of the globe would soon so far surpass its present cultivation, that millions would perish yearly from the want of food.

INQUIRY INTO THE CAUSES OF PREMATURE DEATHS. 311

2. Did all the men and women who come into the world, live to be old, how miscrable would be the condition of most of them, from weakness, sickness, and pain! Unable to assist each other, and neglected or deserted by their children, or friends, they would perish from want, or perhaps putrify above ground. This view of the consequences of universal longevity is not an exaggerated one. A tribe of northern. Indians, Mr. Hearnes says, always leave their parents, when they become old and helpless, to die alone with hunger. They meet death, he adds, with resignation, from an idea of its necessity, and from the recollection of their having treated their parents in the same manner. In support of the remark, under this head, let us recollect how many old people in humble life, are maintained by the public, and how few parents in genteel life, after they have exhausted their liberality upon their children, receive from them a due proportion of gratitude or respect.

3. In the present depraved state of human nature, how great would be the mass of vice in the world, if old age were universal? If avarice in an individual strikes a whole city with surprise and horror, how great would be the mass of this vice in a city that contained 30 or 40,000 old people, all equally absorbed in the love of money? Again, what would be the extent and degrees of ambition, malice and cruelty, nurtured and cherished for 70 or 80 years in the same number of human beings? But, to do justice to this part of our subject, let us view the effects of universal longevity upon another and greater scale. Suppose Alexander, Cæsar, Nero, Caligula, and many others of the conquerors and tyrants of the ancient world, had lived to be old men with the ambition and love of power that have been ascribed to them, growing with their years, how much more accumulated would have been their crimes, and how much more distressing would have been the history of the nations which were conquered and enslaved by them! The same Alexander, who at thirty years of age, only demanded divine homage from his captives, would probably at seventy have exacted human sacrifices to satisfy his assumed divinity; and the same Nero, who, when a young man, only fiddled at the sight of the houses of Rome in a blaze, had he lived to be old, would probably have danced at the sight of all the inhabitants of that city perishing in its general conflagration. But I will not rely upon mere supposition, to evince the pernicious influence which universal longevity has upon Corals. The inhabitants of the antediluvian world exhibited a memorable instance of it. Their wickedness is characterized by the sacred historian in the following words. " And God saw that the wickedness of man was great in the earth, and that every imagination of the thoughts of his heart was only evil, continually. The earth also was corrupt before God: and the earth was filled with violence." Gen. vi. 6 & 11. The extent of the wickedness among the antediluvians may easily be conceived from the two following circumstances.

1. The small number of those persons who escaped the general depravity of morals which had overspread the world, being *eight* only; and that at a time when the world was probably more populous than it has ever been since.

2. The abortive issue of the means that God employed to reform them. Noah preached to them several hundred years, and probably during that long period, travelled over a great portion of the world, and yet not a single person was converted, or saved from destruction by his ministry, except the members of his own family. It was from a review of this wickedness, by the Supreme Being, that life was shortened, as if in mercy to present a a similar accumulation of it in any future age of the world. " And the Lord said, my breath shall not always remain in these men because they are flesh, yet shall their days be one hundred and twenty years."* For the same reason they were afterwards reduced to seventy, or a few more years, as is obvious from the 10th verse of the 90th Psalm.

4. The mass of vice is not only lessened by the small proportion of the human race who live to be old, but the mass of virtue is thereby greatly increased. The death of p "sons who have filled up the measure of their days, and who descend to the grave in a good old age, seldom excites a serious reflection; but every death that occurs in early or middle life, has a tendency to damp the ardor of worldly pursuits, to weaken the influence of some sinful passion, and to produce some degrees of reverence for that religion which opens prospects of life and happiness beyond the grave.

* This translation of the verse is copied from the LXX. whose version is justified by all the circumstances of the case. The Creator had breathed into man's nostrils the breath of life, (Gen. ii. 7.) and a continuance in life was promised him during his continuance in innocence; but upon his transgression he became mortal; and upon an increase of wickedness, human life was proportionably shortened. It was for this reason (Gen. vi. 13.) that God determined to destroy the old world; and this occasioned the above declaration: the punctuality with which it was verified deserves particular notice; for Noah was employed 120 years in building the ark; and at the expiration of that time the flood came, and destroyed "all in whose nostrils was the *breath of life*, of all that was in the dry land." Gen. vii. 22.

S s

INQUIRY INTO THE CAUSES OF

5. If vice, as we are taught to believe, will be punished, according to its degrees, in a future state of existence, how much greater would be the mass of misery hereafter, if the whole human race lived to be old, and with increasing habits of wickedness, than it will be in the present contracted duration of human life? It is therefore no less an act of mercy, than justice, that the " wicked live not out half their days."

6. If old age were universal, how difficult and severe would be the conflicts of virtue! To be exposed to the malignant passions of bad men, or, what is often worse, to contend with our own evil propensities for seventy or eighty years, would render the warfare of good men much more perilous, and their future happiness much more precarious, than it is at present. How few persons who live to be old, escape the idolatrous passion of covetousness? Were old age universal, this passion would probably exclude one half of them from the kingdom of heaven.

7. Did all men live to be old, it would render knowledge stationary. Few men alter their opinions, or admit new truths, after they are forty years of age. None of the contemporary physicians of Dr. Harvey, who had passed that age, admitted his discovery of the circulation of the blood. Now considering that nearly all discoveries in science are made by men under forty, and considering the predominating influence and authority which accompany the hostility of old men to new truths, discoveries made by young men could never acquire belief, or an establishment in the world. They owe both, to the small number of philosophers who live to be seventy or eighty years of age.

3. Were longevity universal, with all the deformity from wrinkles, baldness, and the loss of teeth and complexion,

that are usually connected with it, what a gloomy and offensive picture would the assemblies of our fellow-creatures exhibit? In the present small proportion of old people to the young and middle aged, they seem like shades in painting, or like a few decayed trees near a highly cultivated garden, filled with blooming and fragrant flowers, to exhibit the charms of youth and beauty to greater advantage. From an assembly composed exclusively of old men and women, we should turn our eyes with pain and disgust.

If the causes of premature deaths which have been assigned, be correct, instead of complaining of them, it becomes us, in the present state of the cultivation, population, government, religion, morals, and knowledge in the world, to consider them as subjects for praise and thanksgiving to the wise and benevolent Governor of the Universe.

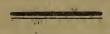
While we thus do homage to the divine wisdom and goodness, let us look forward to the time when the improvements in the physical, moral, and political condition of the world, predicted in the Old Testament, shall render the early and distressing separation of parents and children, and of husbands and wives, wholly unnecessary; when the physical and moral sources of those apparent evils shall be removed by the combined influence of philosophy and religion, and when old age shall be the only outlet of human life. The following verses, taken from the 65th chapter of the prophecy of Isaaih, justify a belief in an order of things, such as has been mentioned: "There shall be no more thence an infant of days," [or an infant that has lived but a few days] " nor an old man that hath not filled his days, for the child shall die an hundred years old. And they shall build houses, and

2

316 INQUIRY INTO THE CAUSES OF FREMATURE DEATHS.

inhabit them, and they shall plant vineyards, and eat the fruit of them. They shall not build, and another inhabit, they shall not plant, and another eat, for as the days of a tree, are the days of my people, and mine elect shall long enjoy the work of their hands."

AN EULOGIUM UPON DR. WILLIAM CULLEN, PROFESSOR OF THE PRACTICE OF PHYSIC, IN THE UNIVERSITY OF EDIN-BURGH; DELIVERED BEFORE THE COLLEGE OF PHYSI-CIANS OF PHILADELPHIA, ON THE 9TH OF JULY, AGREEA-BLY TO THEIR VOTE OF THE 4TH OF MAY, 1790, AND AFTERWARDS FUBLISHED AT THEIR REQUEST.



Mr. President and Gentlemen,

BY your unanimous vote, to honor with an Eulogium, the character of the late DR. WILLIAM CULLEN, Professor of medecine in the University of Edinburgh, you have done equal homage to science and humanity. This illustrious Physician was the Preceptor of many of us:--He was moreover a distinguished citizen of the republic of medicine, and a benefactor to mankind; and although, like the sun, he shone in a distant hemisphere, yet many of the rays of his knowledge have fallen upon this quarter of the globe. I rise, therefore, to mingle your grateful praises of him, with the numerous offerings of public and private respect which have been paid to his memory in his native country. Happy

AN EULOGIUM UPON DR. WILLIAM CULLEN.

will be the effects of such acts of distant sympathy, if they should serve to unite the influence of science with that of commerce, to lessen the prejudices of nations against each other, and thereby to prepare the way for the operation of that divine system of morals, whose prerogative alone it is, to teach mankind that they are brethren, and to make the name of a fellow-creature, in every region of the world, a signal for brotherly affection.

In executing the task you have imposed upon me, I shall confine myself to such parts of Dr Cullen's character as came within the compass of my own knowledge, during two years residence in Edinburgh.—To his fellow citizens in Great Britain, who were more intimately acquainted with him, we must resign the history of his domestic character, as well as the detail of all those steps which, in early life, led him to his unparalleled height of usefulness and fame.

DR. CULLEN possessed a great and original genius. By genlus, in the present instance, I mean a power in the human mind of discovering the relation of distant truths, by the shortest train of intermediate propositions. This precious gift of Heaven, is composed of a vigorous imagination, quick sensibility, a talent for extensive and accurate observation, a faithful memory, and a sound judgment. These faculties were all united in an eminent degree in the mind of Dr. Cullen. His imagination surveyed all nature at a glance, and, like a camera obscura, seemed to produce in his mind a picture of the whole visible creation. His sensibility was so exquisite that the smallest portions of truth acted upon it. By means of his talent for observation he collected knowledge from' every thing he heard, saw, or read, and from every person with whom he conversed. His memory was the faithful re-

pository of all his ideas, and appeared to be alike accurate upon all subjects. Over each of these faculties of his mind a sound judgment presided, by means of which he discovered the relation of ideas to each other, and thereby produced those new combinations which constitute principles in science. This process of the mind has been called invention, and is totally different from a mere capacity of acquiring learning, or collecting knowledge from the discoveries of others. It elevates man to a distant resemblace of his Maker; for the discovery of truth, is the perception of things as they appear to the Divine Mind.

In contemplating the human faculties, thus exquisitely formed, and exactly balanced, we feel the same kind of pleasure which arises from a view of a magnificent palace, or an extensive and variegated prospect; but with this difference, that the pleasure, in the first instance, is as much superior to that which arises from contemplating the latter objects, as the mind of man is superior, in its importance, to the most finished productions of nature or of art.

Dn. CULLEN possessed not only the genius that has been described, but an uncommon share of learning, reading, and knowledge.

His learning was of a peculiar and useful kind—He appeared to have overstepped the slow and tedious forms of the schools, and, by the force of his understanding, to have seized upon the great ends of learning, without the assistance of many of those means which were contrived for the use of less active minds. He read the ancient Greek and Roman writers only for the sake of the knowledge which they contained, without wasting any of the efforts of his genius in attempting to imitate their style. He was intimately acquainted with modern languages, and through their means, with the improvements of medicine in every country in Europe. Such was the facility with which he acquired a language, and so great was his enterprise in his researches in medicine, that I once heard him speak of learning the Arabic for the sake of reading Avicenna in the original, as if it were a matter of as little difficulty to him, as it was to compose a lecture, or or to visit a patient.

DR. CULLEN'S reading was extensive, but it was not confined wholly to medicine. He read books upon all subjects; and he had a peculiar art of extracting something from all of them which he made subservient to his profession. He was well acquainted with ancient and modern history, and delighted in the poets, among whom Shakespeare was his favourite. The history of our globe, as unfolded by books of geography and travels, was so familiar to him that strangers could not converse with him, without supposing that he had not only travelled, but that he had lived every where. His memory had no rubbish in it. Like a secretory organ, in the animal body, it rejected every thing in reading that could not be applied to some useful purpose. In this he has given the world a most valuable lesson, for the difference between error and useless truth is very small; and a man is no wiser for knowledge which he cannot apply, than he is rich from possessing wealth, which he cannot spend.

DR. CULLEN'S knowledge was minute in every branch of medicine. He was an accurate anatomist, and an ingenious physiologist. He enlarged the boundaries, and established the utility of Chemistry, and thereby prepared the way for the discoveries and fame of his illustrious pupil Dr. Black

He stripped Materia Medica, of most of the errors that had been accumulating in it for two thousand years, and reduced it to a simple and practical science. He was intimately acquainted with all the branches of natural history and philosophy. He had studied every ancient and modern system of physic. He found the system of Dr. Boerhave universally adopted when he accepted a chair in the University of Edinburgh. This system was founded chiefly on the supposed presence of certain acrid particles in the fluids, and in the departure of these, in point of consistency, from a natural state. Dr. Cullen's first object was to expose the errors of this pathology; and to teach his pupils to seek for the causes of diseases in the solids. Nature is always coy. Ever since she was driven from the heart, by the discovery of the circulation of the blood, she has concealed herself in the brain and nerves. Here she has been pursued by Dr. Cullen; and if he has not dragged her to public view, he has left us a clue which must in time conduct us to her last recess in the human body. Many, however, of the operations of nature in the nervous system have been explained by him; and no candid man will ever explain the whole of them, without acknowledging that the foundation of his successful inquiries was laid by the discoveries of Dr. Cullen.

He was intimately acquainted with the histories and distinctions of the diseases of all countries, ages, stations, occupations, and states of society. While his great object was to explode useless remedies, he took pains to increase the influence of diet, dress, air, exercise, and the action of the mind, in medicine. In a word he was a great practical physician; and he has left behind him as many monuments of his success in curing diseases, as he has of accuracy and ingenuity in describing their symptoms and explaining their causes. But his knowledge was not confined wholly to those sciences which are intimately connected with medicine. His genius was universal, as to natural and artificial subjects. He was minutely acquainted with the principles and practices of all the liberal, mechanical, and chemical arts; and tradesmen were often directed by him to new objects of observation and improvement in their respective occupations. He delighted in the study of agriculture, and contributed much to excite that taste for agricultural science, which has of late years so much distinguished the men of genius and leisure in North-Britain. I have been informed, that he yielded at last to that passion for rural improvements, which is common to all men, and amused himself in the evening of his life by cultivating a farm in the neighbourhood of Edinburgh. Happy would it be for the interests of agriculture, if physicians in all countries, would imitate Dr. Cullen by an attachment to this noble science; for their previous studies are of such a nature as frequently to enable them to arrive at improvements in it without experiments, and to apply the experiments of others, in the most extensive and profitable manner.

DR. CULLEN'S publications were few in number compared with his discoveries. They consist of his Elements of Physiology, his Nosologia Méthodica, his First Lines of the Practice of Physic, an Essay upon the Cold produced by Evaporation, published in the second volume of the Physical and Literary Essays of Edinburgh, a Letter to Lord Cathcart upon the method of recovering persons supposed to be dead from drowning, and a system of the Materia Medica. These are all the works which bear his name; but the fruits of his inquiries are to be found in most of the medical publications

Tt

that have appeared in Great-Britain within the last thirty years. Many of the Theses, published in Edinburgh during his life, were the vehicles of his opinions or practice in medicine: and few of them contained an important or useful discovery, which was not derived from hints thrown out in his lectures.

As a TEACHER of medicine, Dr. Cullen possessed many peculiar talents. He mingled the most agreeable eloquence with the most profound disquisitions. He appeared to *lighten* upon every subject upon which he spoke. His language was simple, and his arrangement methodical, by which means he was always intelligible. From the moment he ascended his chair, he commanded the most respectful attention from his pupils, insomuch that I never saw one of them discover a sign of impatience during the time of any of his lectures.

In the investigation of truth, he sometimes ventured into the regions of conjecture. His imagination was an hot-bed of hypotheses, which led him to constant observation and experiment. These often proved the seeds of subsequent discoveries. It was thus Sir Isaac Newton founded an empire in science; for most of his discoveries were the result of preconceived hypotheses. In delivering new opinions, Dr. Cullen preserved the strictest integrity. I have known him more than once, refute the opinions which he had taught the preceding year, even before the fallacy of them had been suspected by any of his pupils. Such instances of candor often pass with the vulgar for instability; but they are the truest characteristics of a great mind. To be unchangeable, supposes perpetual error, or a perception of truth without the use of reason; but this sublime act of intuition belongs only to the Deity.

There was no tincture of credulity in the mind of Dr. Cullen. He taught his pupils the necessity of acquiring " the slow consenting academic doubt." I mention these words of the poet with peculiar pleasure, as I find them in my notes of one of his lectures, in which he has delivered rules for judging of the truth of things related as facts; for he frequently remarked that there were ten false facts (if the expression can be allowed) to one false opinion in medicine. His Materia Medica abounds with proofs of the truth of this part of his character. With how much caution does he admit the efficacy of medicines, as related in books, or as suggested by his own experience. Who could have expected to have found so much modesty in the writings of a physician in the 77th year of his age? But let it be remembered, that that this physician was Dr. Cullen: and that he always preferred utility to novelty, and loved truth, more than fame.

He took great pains to deliver his pupils from the undue influence which antiquity and great names are apt to have upon the human mind. He destroyed the superstitious veneration which had been paid for many ages to the names of Hippocrates, Galen, and other ancient authors, and inspired his pupils with a just estimate of the writings of modern physicians. His constant aim was to produce in their minds a change from a passive to an active state ; and to force upon them such habits of thinking and observation, as should enable them to instruct themselves.

As he admitted no truth without examination, so he submitted to no custom in propagating it that was not reasonable. He had a principal share in the merit of delivering medicine from the fetters of the Latin, and introducing the English hanguage, as the vehicle of public instruction in the university of Edinburgh. Much of the success of the revolution he effected in medicine, I believe, may be ascribed to this circumstance. Perhaps the many improvements which have lately been made in medicine, in the British dominions, may likewise be ascribed to the present fashionable custom of communicating medical knowledge in the English language. By this means, our science has excited the notice and inquiries of ingenious and observing men in all professions, and thereby a kind of galaxy has been created in the hemisphere of medicine. By assuming an English dress, it has moreover been prepared more easily to associate with other sciences; from each of which it has received assistance and support.

In his intercourse with his pupils Dr. Cullen was truly kind and affectionate. Never have I known a man who possessed in a higher degree those qualities which seize upon every affection of the heart. He knew the rare and happy arts, as circumstances required, of being affable without being sociable; sociable without being familiar; and familiar, without losing a particle of respect. Such was the interest he took in the health, studies, and future establishment of all his pupils, that each of them believed that he possessed a pre-eminence in his friendship; while the equal diffusion of his kind offices proved that he was the common friend and father of them all. Sometimes he would lay aside the distance, without lessening the dignity of the professor, and mix with his pupils at his table upon terms of the most endearing equality. Upon these occasions his social affections seemed to have an influence upon his mind. Science, sentiment, and convivial humor, appeared for hours together to strive which should predominate in his conversation. I appeal to you, gentlemen, who have shared in the pleasure which I

have described, for the justice of the picture which I have drawn of him at his hospitable table. You will recollect, with me, how agreeably he accommodated himself to our different capacities and tempers; how kindly he dissipated our youthful blushes, by inviting us to ask him questions; and how much he taught us, by his inquiries, of the nature of the soil, climate, products, and diseases of even our own country.

From the history that has been given of Dr. Cullen, we shall not be surprised at the reputation which he gave to the university of Edinburg, for upwards of thirty years. The city of Edinburg during his life became the very atmosphere of medicine. But let me not here be unjust to the merits of his illustrious colleagues. The names of Whytt, Rutherford, the Monroes, Black, the Gregories, Hope, and Home, will always be dear to the lovers of medical science. May every healing plant bloom upon the graves of those of them who are departed! and may those who have survived him together with their new associate, the learned and excellent Dr. Duncan, long continue to maintain the honor of that justly celebrated school of medicine !

It remains now that I add a short account of Dr. Cullen's conduct as a physician and a man.

In his attendance upon his patients, he made their health his first object, and thereby confirmed a line between the mechanical and liberal professions; for while wealth is pursued by the former, as the end of labour, it should be left by the latter, to follow the more noble exertions of the mind. So gentle and sympathizing was Dr. Cullen's manner in a sick room, that pain and distress seemed to be suspended in

AN EULOGIUM UPON

his presence. Hope followed his footsteps, and death appeared frequently to drop his commission in a combat with his skill. He was compassionate and charitable to the poor; and from his pupils, who consulted him in sickness, he constantly refused to receive any pecuniary satisfaction for his services.

In his intercourse with the world he exhibited the manners of a well-bred gentleman. He exercised upon all occasions the agreeable art, in which true politeness is said to consist, of speaking with civility, and listening with attention to every body. His conversation was at all times animated, agreeable and instructing. Few persons went into his company without learning something; and even a common thought, by passing through his mind, received an impression, which made it ever afterwards worthy of being preserved.

He was a strict economist of time. He seldom went out of his house in his carriage, or a sedan chair, without a book in his hand; and he once told me, that he frequently employed one of his sons to read to him after he went to bed, that he might not lose that portion of time which passes between lying down, and falling asleep.

He was remarkably punctual to all his professional engagements. He appeared to consider time as a species of property which no man had a right to take from another without his consent.

It was by means of his economy and punctuality in the use of time, that he accomplished so much in his profession. I have read of some men who have spent more time in their closets, and of others who have done more business; but I

have never read, nor heard of a man, who mingled more study and business together. He lived by rule, without subjecting himself to the slavery of forms. He was always employed, but never in a hurry; and amidst the numerous and complicated avocations of study and business, he appeared to enjoy the pleasure of society, as if company-keeping and conversation were the only business of his.life.

I shall mention but one more trait in the character of Dr. Cullen, and that is, that he was distinguished by no one singularity of behaviour from other men. It is true he stood alone; but this singularity was occasioned, not by his quitting the society of his fellow-men by wolking on their left, or right side, but by his walking before them. Eccentricities in behaviour are the offspring of a lively fancy only, but order is inseparably connected with real genius. The actions of the former may be compared to the crooked flash of distant lightning, while the latter resembles in its movements the steady revolutions of the heavenly bodies.

In reviewing the character which has been given of Dr. Cullen, I am forced to make a short digression, while I do homage to the profession of physic by a single remark. So great are the blessings which mankind derive from it, that if every other argument failed to prove the administration of a providence in human affairs, the profession of medicine alone would be sufficient for that purpose. Who can think of the talents, virtues, and services of Dr. Cullen, without believing that the Creator of the world delights in the happiness of his creatures, and that his tender mercies are over all his works !

For the information of such of the members of our college as have not seen Dr. Cullen, it may not be improper to add

AN EULOGIUM UPON

the following description of his person. He was tall, slender, and had a stoop in his shoulders; his face was long; his under lip protruded a little beyond the upper; his nose was large, and inclined to a point downwards; his eye, which was of a blue colour, was penetrating, but soft; and over his whole face was diffused an air of mildness and thought, which was strongly characteristic of the constant temper and operations of his mind.

It pleased God to prolong his life to a good old age. He lived near 78 years. He lived to demonstrate how much the duration of all the faculties of the mind depends upon their constant exercise. He lived to teach his brethren by his example, that the obligations to acquire and communicate knowledge, should cease only with health and life; and lastly, he lived to reap the fruits of his labours in the most extensive fame; for not only his pupils, and his works, had conveyed his reputation; but canvass, paper, and clay, had borne even the image of his person to every quarter of the globe.

The public papers, as well as private letters, inform us, that he survived his usefulness but a few months. He resigned his professorship in the autumn of 1789, on account of bodily weakness, and died in the month of January of the present year; a year fatal to the pride of man; for this year Franklin and Howard, as well as Cullen, have mingled with the dust. During the interval between his resignation and his death he received the most affectionate marks of public and private respect. The city of Edinburgh voted him their thanks, and presented him with a piece of plate. This instance of public gratitude deserves our particular attention, as it is more common for cities to treat their eminent literary characters with neglect during their lives, and centurics afterwards to con-

tend for the honor of having given them birth. The different medical societies of Edinburgh followed him to his chamber with addresses full of gratitude and affection. In mentioning these facts, I am led to contemplate the venerable subject of our praises in a situation truly solemn and interesting. How pregnant with instruction is the death-bed of a physician, who has spent a long life in extensive and successful practice! If the sorrows we have relieved are the surest support in our own, how great must have been the consolation which Dr. Cullen derived, in his last hours, from a review of his active and useful life! How many fathers and mothers, husbands and wives, brothers and sisters, whose tears he had wiped away by averting the stroke of death from the objects of their affections, must have presented themselves to his imagination, and soothed his soul with grateful prayers for his eternal welfare! But the retrospect of the services he had rendered to his fellow-creatures, was not confined to the limits of his extensive busines in the city of Edinburgh. While the illustrious actions of most men may be viewed with a naked eye, the atchievements of Dr. Cullen in the distant regions of humanity and science, can only be perceived by the help of a telescope. Let us apply this instrument to discover his exploits of beneficence in every quarter of the world. He had filled the capitals, and most of the towns of Great-Britain and Ireland with eminent physicians. Many of his pupils had arrived at the first honors in their profession in the principal citics on the continent of Europe. Many of them had extended the blessings of his improvements in the principles and practice of medicine, to every British settlement in the East and West Indics, and to every free state in America. But the sum of his usefulness did not end here. He had taught the different Professors in the University of Pennsyl-

AN EULOGIUM UPON

vania, the art of teaching others the most successful methods of curing diseases, and thereby he had conveyed the benefits of his discoveries into every part of the United States. How great was the mass of such accumulated beneficence! and how sublime must have been the pleasure which the review of it created in his mind! Had it been possible for the merit of such extensive and complicated services to mankind to have rescued one mortal from the grave, Dr. Cullen had never died. But the decree of death is universal, and even the healing art, is finally of no effect in saving the lives of those who have exercised it with the most success in saving the lives of others.

DR. CULLEN is now no more. What a blank has been produced by his death in the great volume of science! Behold! The Genius of Humanity weeping at his fect, while the Genius of Medicine lifts up the key, which fell from his hand with his last breath, and with inexpressible concern, crics out, "to whom shall I give this instrument? Who now will unlock for me the treasures of universal nature?"

Venerable Shade, adien! What though thy American pupils were denied the melancholy pleasure of following thee from thy Professor's-chair to thy sick bed, with their effusions of gratitude, and praise! What though we did not share in the grief of thy funeral obsequies, and though we shall never bedew with our tears the splendid monument which thy affectionate and grateful British pupils have decreed for thee in the metropolis of thy native country; yet the remembrance of thy talents and virtues, shall be preserved in each of our bosems, and never shall we return in triumph from beholding the efficacy of medicine in curing a disease, without feeling our obligations for the instructions we have derived from thee!

I repeat it again, Dr. Cullen is now no more——No more, I mean, a pillar and ornament of an ancient seat of science no more, the delight and admiration of his pupils—no more the luminary of medicine to half the globe—no more the friend and benefactor of mankind.——But I would as soon believe that our solar system was created only to amuse and perish like a rocket, as believe that a mind endowed with such immense powers of action and contemplation had ceased to exist. Reason bids us hope that he will yet *live*—And Revelation enables us to say, with certainty and confidence, that he shall again *live*——Fain would I lift the curtain which separates eternity from time, and inquire——But it is not for mortals to pry into the secrets of the invisible world.

Such was the man whose memory we have endeavoured to celebrate. He lived for our benefit. It remains only that we improve the event of his death in such a manner, that he may die for our benefit likewise. For this purpose I shall finish our Eulogium with the following observations.

I. Let us learn from the character of Dr. Cullen duly to estimate our profession. While Astronomy claims a Newton, and Electricity a Franklin, Medicine has been equally honoured by having employed the genius of a Cullen. Whenever therefore we feel ourselves disposed to relax in our studies, to use our profession for selfish purposes, or to neglect the poor, let us recollect how much we lessen the dignity which Dr. Cullen has conferred upon our profession.

II. By the death of Dr. Cullen the republic of medicine has lost one of its most distinguished and useful members. It is incumbent upon us therefore to double our diligence in order to supply the loss of our indefatigable fellow-citizen. That physician has lived to little purpose, who does not leave his profession in a more improved state than he found it. Let us remember, that our obligations to add something to the capital of medical knowledge, are equally binding with our obligations to practise the virtues of integrity and humanity in our intercourse with our patients. Let no useful fact therefore, however inconsiderable it may appear, be kept back from the public eye; for there are mites in science as well as in charity, and the remote consequences of both are often alike important and beneficial. Facts are the morality of medicine. They are the same in all ages and in all countries. They have preserved the works of the immortal Sydenham from being destroyed by their mixture with his absurd theories; and under all the revolutions in systems that will probably take place hereafter, the facts which are contained in Dr. Cullen's works, will constitute the best security for their safe and grateful reception by future ages.

III. Human nature is ever prone to extremes. While we celebrate the praises of Dr. Cullen, let us take care lest we check a spirit of free inquiry, by too great a regard for his authority in medicine. I well remember an observation suited to our present purpose which he delivered in his introduction to a course of lectures on the Institutes of Medicine in the year 1766. After speaking of the long continued and extensive empire of Galen in the schools of physic, he said, "It is a great disadvantage to any science to have been imformed by a great man. His authority imposes indolence, "timidity, or idolatry upon all who come after him."—Let us avoid these evils in our veneration for Dr. Cullen. To believe in great men, is often as great an obstacle to the progress of knowledge, as to believe in witches and conjurers. It is the image worship of science; for error is as much an

attribute of man, as the desire of happiness; and I think I have observed, that the errors of great men partake of the dimensions of their minds, and are often of a greater magnitude than the errors of men of inferior understanding. Dr. Brown has proved the imperfection of human genius, by extending some parts of Dr. Cullen's system of physic, and by correcting some of its defects. But he has left much to be done by his successors. He has even bequeathed to them the labor of removing the errors he has introduced into medicine by his neglect of an important principle in the animal economy, and by his ignorance of the histories and symptoms of diseases. Perhaps no system of medicine can be perfect, while there exists a single disease which we do not know, or cannot cure. If this be true, then a complete system of medicine cannot be formed, till America has furnished descriptions and cures of all her peculiar diseases. The United States have improved the science of civil government. The freedom of our constitutions, by imparting vigor and independence to the mind, is favourable to bold and original thinking upon all subjects. Let us avail ourselves therefore of this political aid to our researches, and endeavour to obtain histories and cures of all our diseases, that we may thereby contribute our part towards the formation of a complete system of medicine. As a religion of some kind is absolutely necessary to promote morals; so systems of medicine of some kind, are equally necessary to produce a regular mode of practice. They are not only necessary, but unavoidable in medicine; for no physician, nay more, no empire, practices without them.

The present is an age of great improvement. While the application of reason to the sciences of government and religion, is daily meliorating the condition of mankind, it is

S34 AN EULOGIUM UPON DR. WILLIAM CULLEN.

agreeable to observe the influence of medicine, in lessening human misery, by abating the mortality or violence of many diseases. The decrees of heaven appear to be fulfilling by natural means; and if no ancient prophecies had declared it, the late numerous discoveries in medicine would authorize us to say, that the time is approaching, when not only tyranny, discord and superstition shall cease from our world, but when diseases shall be unknown, or cease to be incurable; and when old age shall be the only outlet of human life,

" Thus heaven-ward all things tend."

In that glorious xra, every discovery in medicine shall meet with its full reward; and the more abundant gratitude of posterity to the name of Dr. Cullen; shall then bury in oblivion the feeble attempt of this day to comply with your vote to perpetuate his fame. An EULOGIUM UPON DAVID RITTENHOUSE, LATE PRESI-DENT OF THE AMERICAN PHILOSOPHICAL SOCIETY; DE-LIVERED BEFORE THE SOCIETY IN THE FIRST PRESBY-TERIAN CHURCH IN HIGH-STREET, PHILADELPHIA, ON THE 17TH DECEMBER, 1796, AGREEABLY TO APPOINT-MENT, AND FUBLISHED AT THE REQUEST OF THE SOCI-ETY.

Gentlemen of the Philosophical Society.

Friends and Colleagues,

E are assembled this day upon a mournful occasion. Death has made an inroad upon our Society. Our illustrious and beloved PRESIDENT, is no more. RITTEN-HOUSE, the ingenious, the modest and the wise—RITTEN-HOUSE, the friend of God and man, is now no more !_______ For this, the temple of science is hung in mourning—for this our eyes now drop a tributary tear. Nor do we weep alone. ______The United States of America sympathize in cur grief, for his name gave a splendor to the American character, and the friends of humanity in distant parts of the world, unite with us in lamenting our common loss—for he belonged to the whole human race.

By your vote to perpetuate the memory of this great and good man, you have made a laudable attempt to rescue philosophers from their humble rank in the history of mankind. It is to them we owe our knowledge and possession of most of the necessaries and conveniences of life. To procure these blessings for us, " they trim their midnight lamp, and hang o'er the sickly taper." For us, they traverse distant regions, expose themselves to the inclemencies of the weather, mingle with savages and beasts of prey, and in some instances, evince their love of science and humanity by the sacrifice of their lives.

The amiable philosopher whose talents and virtues are to be the subject of the following culogium, is entitled to an uncommon portion of our gratitude and praise. He acquired his knowledge at the expense of uncommon exertions, he performed services of uncommon difficulty, and finally he impaired his health, and probably shortened his life, by the ardor of his studies and labors for the benefit of mankind.

In attempting to discharge the difficult and painful duty you have assigned to me, it will be necessary to give a short account of the life of Mr. Rittenhouse, inasmuch as several of the most interesting parts of his character are intimately connected with it.

The village of Germantown in the neighbourhood of this city, had the honor of giving birth to this distinguished philosopher on the 8th day of April, in the year 1752. His ancestors migrated from Holland about the beginning of the present century. They were distinguished, together with his parents, for probity, industry, and simple manners. It is from sourses thus pure and retired, that those talents and virtues have been chiefly derived, which have in all ages enlightened the world. They prove by their humble origin, that the Supreme Being has not surrendered up the direction of human affairs to the advantages acquired by accident or vice, and they bear a constant and faithful testimony of his impartial goodness, by their necessary and regular influence in equalizing the condition of mankind. This is the divine order of things, and every attempt to invert it, is a weak and unavailing effort to wrest the government of the world, from the hands of God.

The early part of the life of Mr. Rittenhouse was spent in agricultural employments under the eye of his father, in the county of Montgomery, twenty miles from Philadelphia, to which place he removed during the childhood of his son. It was at this place his peculiar genius first discovered itself. His plough, the fences, and even the stones of the field in which he worked, were frequently marked with figures which denoted a talent for mathematical studies. Upon finding that the native delicacy of his constitution unfitted him for the labors of husbandry, his parents consented to his learning the trade of a clock and mathematical instrument maker. In acquiring the knowledge of these useful arts, he was his own instructor .- They afforded him great delight inasmuch as they favoured his disposition to inquire into the principles of natural philosophy .-- Constant employment of any kind, even in the practice of the mechanical arts has been found, in many instances, to administer vigor to human genius. Franklin studied the laws of nature, while he handled his printing types. The father of Rousseau, a jeweller at Geneva, became acquainted with the principles of national jurisprudence, by listening to his son while he read to him in his shop, the works of Grotius and Puffendorf; and Herschel conceived the great idea of a new planet, while he exercised the humtle office of a musician to a marching regiment.

Xx

It was in this retired situation, and while employed in working at his trade, that he planned and executed an orrery, in which he represented the revolutions of the 'heavenly bodies in a manner more extensive and complete, than had been done by any former astronomers. A correct description of this orrery drawn up by the Rev. Dr. Smith, is published in the first volume of our Transactions. This master-piece of ingenious mechanism was purchased by the college of New-Jersey. A second was made by him, after the same model, for the use of the college of Philadelphia. It now forms part of the philosophical apparatus of the University of Pennsylvania, where it has for many years commanded the admiration of the ingenious and the learned, from every part of the world.

The reputation he derived from the construction of this orrery, as well as his general character for mathematical knowledge, attracted the notice of his fellow-citizens in Pennsylvania, and in several of the neighbouring states, but the

discovery of his uncommon merit belonged chiefly to his brother-in-law, the Rev Mr. Barton, Dr. Smith, and the late Mr. John Lukens, an ingenious mathematician of this city. These gentlemen fully appreciated his talents, and united in urging him to remove to Philadelphia, in order to enlarge his opportunities of improvement and usefulness. He yielded with reluctance to their advice, and exchanged his beloved retirement in the country for this city, in the year, 1770. Here he continued for several years, to follow his occupation of a clock and mathematical instrument maker. He excelled in both branches of that business. His mathematical instruments have been esteemed by good judges to be superior in accuracy and workmanship to any of the same kind that have been imported from Europe.

About the time he settled in Philadelphia, he became a member of our Society. His first communication to the Society was a calculation of the transit of Venus as it was to happen on the 3d of June, 1769, in 40° north latitude, and 5 hours west longitude from Greenwich. He was one of a committee appointed by the Society to observe, in the township of Norrington, this rare occurrence in the revolution, of that planet, and bore an active part in the preparations which were made for that purpose. Of this Dr. Smith who was likewise of the committee, has left an honourable record in the history of that event which is published in the first volume of the transactions of our Society. " As Mr. Rittenhouse's dwelling (says the Doctor) is about twenty miles north west from Philadelphia; our other engagements did not permit Mr. Lukens or myself to pay much attention to the necessary preparations; but we knew that we had intrusted them to a gentleman on the spot [meaning Mr. Rittenhouse] who had, joined to a complete skill in mechanics, so extensive and astronomical,

AN EULOGIUM UPON

and mathematical knowledge, that the use, management and even construction of the apparatus, were perfectly familiar to him. The laudable pains he had taken in these material articles will best appear from the work itself, which he hath committed into my hands, with a modest introduction, giving me a liberty with them, which his own accuracy, taste and abilities leave no room to exercise."

We are naturally led here to take a view of our philosopher with his associates in their preparations to observe a phænomenon which had never been seen but twice before by any inhabitant of our earth, which would never be seen again by any person then living, and on which depended very important astronomical consequences. The night before the long expected day, was probably passed in a degree of solicitude which precluded sleep. How great must have been their joy when he beheld the morning sun, " and the whole horizon without a cloud;" for such is the description of the day given by Mr. Rittenhouse in the report referred to by Dr. Smith. In pensive silence, and trembling anxiety they waited for the predicted moment of observation; it came, and brought with it all that had been wished for and expected by those who saw it. In our philosopher, it excited in the instant of one of the contacts of the planet with the sun, an emotion of delight so exquisite and powerful, as to induce fainting. This will readily be believed by those who have known the extent of that pleasure which attends the discovery, or first perception of truth. Soon after this event, we find him acting as one of a committee appointed to observe the transit of Mercury on the 9th of November in the same year. This was likewise done at Norrington. An account of it was drawn up, and published at the request of the committee by Dr. Smith. A minute history of the whole of these events.

in which Mr. Rittenhouse continued to act a distinguished part, is given in our transactions. It was received with great satisfaction by the astronomers of Europe, and contributed much to raise the character of our then infant country for astronomical knowledge.

In the year 1775, he was appointed to compose and deliver the annual oration before our society. The subject of it, was the history of astronomy. The language of this oration is simple, but the sentiments contained in it are ingenious, original, and in some instances sublime. It was delivered in a feeble voice, and without any of the advantages of oratory, but it commanded, notwithstanding, the most profound attention, and was followed by universal admiration and applause from a crowded and respectable audience.

From the contents of this oration, it appears that Astronomy was the favourite object of his studies.

Attempts have been made to depreciate this branch of natural philosophy, by denying its utility, and application to human affairs.—The opinion is an unjust one, and as it tends to convey a limited idea of the talents of Mr. Rittenhouse, I hope I shall be excused in saying a few words in favour of this science.

It is to astronomy we are indebted for our knowledge of navigation, by which means the different parts of our globe have been discovered, and afterwards cemented together by the mutual wants and obligations of commerce.

It was astronomy that taught mankind the art of predicting and explaining eclipses of the Sun and Moon, and thereby

AN EULOGIUM UPON

delivered them from the superstition which in the early ages of the world, was connected with those phanomena of nature.

We are taught by astronomy to correct our ideas of the visible heavens, and thus by discovering the fallacy of the simple evidence of our senses, to call to their aid, the use of our reason, in deciding upon all material objects of human knowledge.

Astronomy delivers the mind from a groveling attachment to the pursuits and pleasure of this world. " Take the miser (says our philosopher in his oration) from the earth, if it be possible to disengage him—he whose nightly rest has been long broken by the loss of a single foot of it, uscless perhaps to him; and remove him to the planet Mars, one of the least distant from us—Persuade the ambitious monarch to accompany him, who has sacrificed the lives of thousands of his subjects to an imaginary property in certain small portions of the earth, and point out this earth to them, with all its kingdoms and wealth, a glittering star, close by the moon, the latter scarce visible, and the former, less bright than our evening star.—They would turn away their disgusted sight from it, not thinking it worth their smallest attention, and seek for consolation, in the gloomy regions of Mars."

Once more—the study of astronomy has the most friendly influence upon morals, and religion. "Yes," (says our philosopher in another part of his oration) "the direct tendency of this science is to dilate the heart with universal benevolence, and to enlarge its views. It flatters no princely vice, nor national depravity. It encourages not the libertine by relaxing any of the precepts of morality, nor does it attempt to undermine the foundations of religion. It denies none of

those attributes, which the wisest and best of mankind have in all ages ascribed to the Deity. Nor does it degrade the human mind from that dignity which is ever necessary to make it contemplate *itself* with complacency. None of these things does astronomy pretend to, and if these things merit the name of philosophy, and the encouragement of a people, then let scepticism flourish, and astronomy lie neglected.— Let the names of Barkley and Hume become immortal, and that of Newton be lost in oblivion."—

The following is a list of such of Mr. Rittenhouse's other publications as are contained in the three volumes of our transactions.

Observations of the comet which appeared in June and July 1770, with the elements of its motion and the trajectory of its path, in a letter to Dr. William Smith.

An easy method of deducing the true time of the sun's passing the meridian, by means of a clock, from a comparison of four equal attitudes, observed on two succeeding days, without the help of the equation tables, communicated by Dr. William Smith.

An explanation of an opticle deception, namely, that the surfaces of bodies viewed through the double microscope, sometimes appear to be reversed, that is, those parts which are elevated seem depressed, and the contrary.

An account of a remarkable meteor observed at Philadelphia on the 31st of October, 1775, with some conjectures relative to the theory of meteors, in answer to a letter from John Page Esq. giving an account of the same meteor seen in many distant places in Virginia. Conjectures, corroborated by experiments, relative to a new theory of magnetism; in a letter to John Page, Esq. of Virginia.

A new method of placing a meridian mark for a transit instrument within a few feet of the observatory, so as to have all the advantages of one placed at a great distance; in a letter to the Rev. Dr. John Ewing.

Observations on a comet discovered in the month of January 1784.

An explanation of a curious optical phænomenon, namely, if a candle or other luminous body be viewed through a silk umbrella, handkerchief or the like, the luminous body will appear to be doubled; in a letter to Francis Hopkinson, Esq.

A series of observations made at sundry times in the years 1784, 85, and 86 on the new planet, or Georgium Sidus, also an observation of the transit of Mercury over the Sun's disk on the 12th of November 1782.

An account of three houses in Philadelphia struct with lightning on the 7th of June 1789.

An account of the effects of a stroke of lightning upon a house furnished with two metallic conductors on the 17th of August, 1789; in a letter to Mr. Robert Patterson.

Astronomical observations made at Philadelphia, containing an account of the eclipse of the Moon on the 2d of November 1789.

An account of the transit of Mercury over the Sun's disk, on the 5th of November 1789. An account of the eclipse of the Sun, on the 6th. of November 1790, with an account of corresponding observations, made at the University of William and Mary, in Virginia, by Dr. J. Madison, and at Washington College, in Maryland, by the Rev. Dr. Smith.

Short and elegant theorems for finding the sum of the several powers of the lines, either to a radius of unity, or any other; in a letter to Mr. Robert Patterson.

An account of a comet discovered in the month of January 1793; in a letter to Mr. Robert Patterson.

Besides these publications, our society is in possession of the following communications from Mr. Rittenhouse, which are now in the press and will be speedily published in the fourth volume of our transactions.

A method of determining the true plane of a planet in an eliptical form by converging series, directly from the mean anomaly.

A new and easy method of calculating logarithms; in a letter to Mr. Rober Patterson.

A description of an improvement on pendulum clocks, by which the error arising from the different density, or resistance of the medium in which the pendulum vibrates, is effectually obviated.

Lastly, experiments on the expansion of wood by heat.

Talents so splondid, and knowledge so practical in mathematicks, are like mines of precious metals. They become

Yy

AN EULOGIUM UPON

public property by universal consent. The State of Pennsylvania was not insensible of the wealth she possessed in the mind of Mr. Rittenhouse. She claimed him as her own, and employed him in business of the most important nature.

In the year 1779 he was appointed by the legislature of Pennsylvania, one of the commissioners for adjusting a territorial dispute between Pennsylvania and Virginia, and to his talents, moderation and firmness, were ascribed in a great degree, the satisfactory termination, of that once alarming controversy in the year 1785.

In the year 1784 he assisted in determining the length of five degrees of longitude from a point on the Delaware, in order to fix the western limits of Pennsylvania.

In 1786, he was employed in fixing the northern line which divides Pennsylvania from New-York.

But the application of his talents and knowledge to the settlement of territorial disputes, was not confined to his native state. In the year 1769, he was employed in settling the limits between New-Jersey and New-York, and in 1787 he was called upon to assist in fixing the boundary line between the States of Massachusetts and New-York. This last business, which was executed with his usual precision and integrity, was his farewell peace offering to the union and happiness of his country.

In his excursions through the wilderness, he carried with him his habits of inquiry and observation. Nothing in our mountains, soils, rivers, and springs escaped his notice. It is to be lamented that his private letters, and the memories of his friends, are the only records of what he collected upon these

DAVID RITTENHOUSE.

occasions. Philosophers, or naturalist, whosoever thou art ! that shalt hereafter traverse the unfrequented woods of our state, forget not to respect the paths, first marked by the feet of this ingenious and faithful servant of the public. Honour the fountains consecrated to science by his skilful hand, and inhale with double pleasure the pure atmosphere of the mountains, on which he renewed his acquaintance with the canopy of heaven, after passing whole weeks in forests so shady, as to conceal from him the rays of the sun. And citizens of Pennsylvania, friends and patrons of literature, be grateful for his services. Let the remembrance of them be dear to the present generation, and let a part of the state distinguished in a more especial manner for its resources in natural knowledge, bear his name with honor to the latest posterity.

In the year 1791, he was chosen successor to Dr. Franklin in the chair of our society. In this elevated station, the highest that philosophy can confer in our country, his conduct was marked by its usual line of propriety and dignity. Never did the artificial pomp of station command half the respect, which followed his unassuming manners in the discharge of the public duties of this office. You will often recollect, gentlemen, with a mixture of pleasure and pain, the delightful evenings you passed in the society, every time he presided in your meeting. They were uniformly characterized by ardor in the pursuits of science, urbanity and brotherly kindness. His attachment to the interests of the society was evinced soon after he accepted of the President's chair, by a donation of three hundred pounds.

But his talents and knowledge were not limited to mathematical or material subjects; his mind was a repository of the knowledge of all ages and countries. He had early and deeply

studied most of the different systems of theology. He was well acquainted with practical metaphysicks. In reading travels he took great delight. From them, he drew a large fund of his knowledge of the natural history of our globe He possessed talents for music and poetry, but the more serious and necessary pursuits of his life, prevented his devoting much time to the cultivation of them. He read the English poets with great pleasure. The muse of Thomson charmed him most. He admired his elegant combination of philosophy and poetry. However opposed these studies may appear, they alike derive their perfections from extensive and accurate observations of the works of nature. He was intimately acquainted with the French, German and Dutch languages, the two former of which he acquired without the assistance of a master. They served the valuable purpose of conveying to him the discoveries of foreign nations, and thereby enabled him to prosecute his studies with more advantage, in his native language.

In speaking of Mr. Rittenhouse, it has been common to lament his want of what is called a liberal education.—Were education what it should be, in our public seminaries, this would have been a misfortune, but conducted as it is at present, agreeably to the systems adopted in Europe in the sixteenth century, I am disposed to believe that his extensive knowledge, and splendid character are to be ascribed chiefly to his having escaped the pernicious influence of monkish learning upon his mind in early life. Had the usual forms of a public education in the United States been imposed upon him; instead of revolving through life in a planetary orbit, he would probably have consumed the force of his genius by fluttering around the blaze of an evening taper. Rittenhouse the philosopher, and one of the luminaries of the eighteenth century, might have spent his hours of study in composing syllogism, or in measuring the feet of Greek and Latin poetry.

It will be honourable to the citizens of the United States, to add, that they were not insensible of the merit of our philosopher. Inventions and improvements in every art and science, were frequently submitted to his examination, and were afterwards patronised by the public, according as they were approved by him. Wherever he went, he met with public respect, and private attentions. But his reputation was not confined to his native country. His name was known and abmired in every region of the earth, where science and genius are cultivated and respected.*

Such were the talents and knowledge, and such the fame, of our departed President! His virtues now demand our tribute of praise.—And here, I am less at a loss to know what to say, than what to leave unsaid. We have hitherto beheld him as a philosopher, soaring like the eagle, until our eyes have been dazzled by his near approaches to the sun. We shall now contemplate him at a less distance, and behold him in the familiar character of a man, fulfilling his various duties in their utmost extent. If any thing has been said of his talents and knowledge that has excited attention, or kindled

* The degree of master of Arts was conferred upon him by the College of Philadelphia, in 1768. The same degree was conferred upon him by the College of William and Mary, in Virginia, in 1784. In the year 1789, he received the degree of Doctor of Laws from the College of New-Jersey. He was elected a Member of the American Academy of Arts and Sciences at Boston in 1782, and of the Royal Society in London in 1795.

desires in the younger members of our society, to pursue him in his path of honor, let me request them not to forsake me here. Come, and learn by his example, to be good, as well as great.----- His virtues furnish the most shining models for your imitation, for they were never obscured in any situation or stage of his life, by a single cloud of weakness or vice. As the source of these virtues, whether of a public or private nature, I shall first mention his exalted sense of moral obligation, founded upon the revelation of the perfections of the Supreme Being. This appears from many passages in his oration, and from his private letters to his friends. In his oration we find the following pious sentiment. "Should it please that Almighty Power who hath placed us in a world in which we are only permitted ' to look about us and to die,' to indulge us with existence throughout that half of eternity which still remains unspent, and to conduct us through the several stages of his works, here (meaning in the study of astronomy) is ample provision made for employing every faculty of the mind, even allowing its powers to be enlarged through an endless repetition of ages. Let us not complain of the vanity of this world, and that there is nothing in it capable of satisfying us. Happy in those wants -happy in those desires, forever in succession to be gratified -happy in a continual approach to the Deity."

"I must confess that I am not one of those sanguine spirits who seem to think that when the withered hand of death has drawn up the curtain of eternity, all distance between the creature and the Creator, and between finite and infinite, will be annihilated. Every enlargement of our faculties every $p_{\pm}w$ happiness conferred upon us, every step we advance towards the Divinity, will very probably render us more and more sensible of his inexhaustible stores of comscanicable bliss, and of his inaccessible perfections."

There appears to be a natural connection between a knowledge of the works of nature and just ideas of the divine perfections; and if philosophers have not in all ages been equally devout with our President, it becomes us to acquire how far the beneficial influence of philosophy upon religion, may have been prevented by their minds being pre-occupied in early life with the fictions of ancient poets, and the vices of the heathen gods. It remains yet to be determined, whether all the moral as well as natural attributes of the Deity may not be discovered in the form, and economy of the material world, and whether that righteousness which descended from heaven near eighteen hundred years ago, may not wait for philosophical truth to spring up from the earth, in order by uniting with it, to command universal belief and This opinion, as far as it relates to one of obedience. the moral attributes of the Deity, seems to have been admitted by our philosopher in the following elegant and pious extract from a letter to one of his friends " give me leave (says he) to mention two or three proofs of infinite goodness in the works of creation. The first is, possessing goodness in ourselves. Now it is inconsistent with all just reasoning to suppose, that there is any thing good, lovely, or praise-worthy in us, which is not possessed in an infinitely higher degree by that Being who first called us into existence. In the next place I reckon the exquisite and innocent delight that many things around us are calculated to afford us. In this light the beauty and fragrance of a single rose is a better argument for divine goodness than a luxuriant field of wheat. For if we can suppose that we were created by a malevolent Being with a design to torment us for his amusement, he must have furnished us with the means of subsistence, and either have made our condition tolerable, or not have left the means of quitting it at pleasure, in our own power. Such

AN EULOGIUM UPON

being my opinions, you will not wonder at my fondness for what Mr. Addison calls ' the pleasures of the imagination.' They are all to me, so many demonstrations of infinite goodness."

If such be the pious fruits of an attentive examination of the works of the Creator, cease ye ministers of the gospel to defeat the design of your benevolent labors, by interposing the common studies of the schools between our globe, and and the minds of young people. Let their first ideas be those which are obtruded upon their senses, by the hand of nature. Permit the firmament of heaven, and the animal, vegetable and mineral productions of the earth, to instruct them in the wisdom and goodness of the Creator, and let the effects of physical evil upon general happiness, vindicate the divine government, in permitting the existence of moral evil in our world. Thus the perverse passions of man, may be made to unite with 'storms and tempests, in furnishing proofs of the goodness of the Creator of the Universe.

But the religion of Mr. Rittenhouse, was not derived wholly from his knowledge and admiration of the material world. He believed in the Christian revelation. Of this, he gave many proofs, not only in the conformity of his life, to the precepts of the gospel, but in his letters and conversation. I well recollect in speaking to me of the truth and excellency of the Christian religion, he mentioned as an evidence of its divine origin, that the miracles of our Saviour differed from all other miracles, in being entirely of a kind and benevolent nature. It is no small triumph to the friends of Revelation to observe, in this age of infidelity, that our religion has been admitted and even defended by men of the most exalted understanding, and of the strongest reasoning powers. The

DAVID RITTENHOUSE.

355

single testimony of David Rittenhouse in its favor, outweighs the declamations of whole nations against it.*

As the natural effect of his belief in the relation of the whole human race to each other in a common Father and Redeemer, he embraced the whole family of mankind in the arms of his benevolence. The force and extent of this virtue in his heart, will appear from my reading one more extract from his oration. I am aware how much I suffer by introducing quotations from that eloquent performance, for they will cast a shade upon all I have said, or shall say upon this occasion.

" How far, (says our philosopher) the inhabitants of the other planets may resemble men, we cannot pretend to say. If like them they were created liable to fall, yet some, if not all of them may still retain their original rectitude. We will hope they do; the thought is comfortable.—Cease then Gallileo to improve thy optic tube, and thou great Newton, forbear thy ardent search, into the mysteries of nature, lest ye make unwelcome discoveries. Deprive us not of the pleasure of believing that yonder orbs, traversing in silent majesty the etherial regions, are the peaceful seats of innocence and bliss, where neither natural or moral evil has ever intruded, and where to enjoy with gratitude and adoration the Creator's bounty, is the business of existence. If their inhabitants resemble man in their faculties and affections, let us suppose

* Since the publication of the Eulogium in a pamphlet, I have received the following account of Mr. Rittenhouse's religious principles, in a letter from his widow, dated August 20th 1797. "I hat you were sufficiently authorized to assert what you did respecting Mr. Rittenhouse's religious principles, I that they are wise enough to govern themselves according to the dictates of that reason, God has given in such a manner, as to consult their own, and each other's happiness upon all occasions. But if on the contrary, they have found it necessary to erect artificial fabrics of government, lct us not suppose they have done it with so little skill, and at such an enormous expense, as to render them a misfortune, instead of a blessing .- We will hope that their statesmen are patriots, and that their kings (if that order of beings has found admittance there) have the feelings of humanity. Happy people! -and perhaps more happy still, that all communication with us is denied. We have neither corrupted you with our vices, nor injured you by violence. None of your sons and daughters have been degraded from their native dignity, and doomed to endless slavery in America, merely because their bodies may be disposed to reflect, or absorb the rays of light, different from ours. Even you, inhabitants of the Moon, situated in our very neighbourhood, are effectually secured from the rapacious hands of the oppressors of our globe. And the utmost efforts of the mighty Frederick, the tyrant of the North, and scourge of mankind, if aimed to disturb your peace, becomes inconceivably ridiculous and impotent."

now add my testimony to what you have said, for well I know the great truths of religion engaged much of his attention, and indeed were interwoven with almost every important concern of his life. I do not recollect, if in any of the conversations I have had with you, I informed you, what I now do, that Dr. Price's opinions respecting Christianity were more in unison with his own, than any others of the divines; that Dr. Price's sermons was the last book he requested me to read to him, and that the last morning of his life, he reminded me that I had not finished one of the Doctor's discourses which I had began the preceeding evening."

" Pardon these reflections. They arise not from the gloomy spirit of misanthropy. That Being, before whose piercing eye all the intricate foldings of the human heart, become expanded, and illuminated, is my witness with what sincerity, with what ardor-I wish for the happiness of the whole race of mankind .- How much I admire that disposition of lands and seas which affords a communication between distant regions, and a mutual exchange of benefits-How sincerely I approve of those social refinements, which add to our happiness, and induce us with gratitude to acknowledge our Creator's goodness, and how much I delight in a participation of the discoveries made from time to time in nature's works, by our philosophical brethren in Europe. But (adds our philosopher) when I consider that luxury, and her constant follower tyranny, which have long since laid the glories of Asia in the dust, are now advancing like a torrent, irresistible, and have nearly completed their conquest over Europe -I am ready to wish----vain wish! that nature would raise her everlasting bars between the new and the old world, and make a voyage to Europe as impracticable as one to the moon."

As when a traveller in passing through a wilderness, slackens his pace to prolong the pleasure of a sudden and unexpected prospect of a majestic river pouring its waters down the declivity of a cloud-clap't mountain, and spreading fertility and verdure throughout the adjacent vallies, so we feel disposed to pause, and feast upon the sublime sentiments contained in the passage which I have read. Citizens of the United States, receive and cherish them as a legacy from a friend, or a brother. Be just, and loose the bands of the African slave. Be wise, and render war odius in our country. Be free, by assuming a national character and name, and be greatly happy, by erecting a barrier against the corruptions in morals, government, and religion, which now pervade all the nations of Europe.*

But the philanthropy of Mr. Rittenhouse did not consist simply in wishes for the happiness of mankind. He reduced this divine principle to practice by a series of faithful and disinterested services to that part of his fellow creatures, to which the usefulness of good men is chiefly confined. His country, his beloved country, was the object of the strongest affections of his heart. For her, he thought, ——for her, he laboured,——and for her, in the hours of her difficulties and danger, he wept,—in every stage of the American revolution. Patriots of 1776, you will acquit me of exaggeration here, for you feel in the recollection of what passed in your own bosoms, a witness of the truth of each of these assertions. The year of the declaration of Independence, which changed our royal governments

*Mr. William Barton, nephew to Mr. Rittenhouse, has favoured me with the following extract of a letter in September, 1755, to his brother-in-law, the Rev. Mr. Barton, who was the friend and correspondent of his youth, which shews how early and deeply the principles of universal benevolence were fixed in his mind.

" I would sooner give up my interests in a future state, than be divested of humanity; —I mean that good will I have to the species, although one half of them are said to be fools, and almost the other half knaves. Indeed I am firmly persuaded, that we are not at the disposal of a Being who has the least tincture of ill-nature, or requires any in us.—You will laugh at this grave philosophy, or my writing to you on a subject which you have thought of a thousand times: but, can any thing that is serious, be ridiculous?—Shall we suppose Gabriel smiling at Newton, for labouring to demonstrate whether the earth be at rest or not, because the former plainly sees it move !" into Republics, produced no change in his political principles for he had been educated a Republican by his father. I can never forget the pleasure with which he avowed his early but secret attachment to an elective and representative form of government. Often have Is heard him above twenty years, ago, predict the immense encrease of talents and knowledge which has been produced by the strength and activity that have been infused into the American mind, by our republican constitutions. Often, likewise, at the same remote period of time, have I heard him anticipate with delight, the effects of our revolution in sowing the seeds of a new order of things in other parts of the world. He believed political, as well as moral evil to be intruders into the society of manthat general happiness was the original design, an ultimate end of the divine government, and that a time would come, when every part of our globe, would echo back the heavenly proclamation of universal peace on earth, and good will to man.

Let it not be said, that he departed from the duties of a Philosopher, by devoting a part of his time and talents to the safety and happiness of his country. It belongs to monarchies, to limit the business of government to a privileged order of men, and it is from the remains of a monarchical spirit in our country, that we complain when clergymen, physicians, philosophers and mechanics, take an active part in civil affairs. The obligations of patriotism are as universal and binding, as those of justice and benevolence, and the virtuous propensities of the human heart are as much resisted by every individual who neglects the business of his country, as they are by the extinction of the domestic affections in a cell. Man was made for a republic, and a republic was made for man, otherwise Divine power and goodness have been wasted,

AN LULOGIUM UPON

in the creation and gift of his public affections.—Our philosopher adopted this truth from the evidence of his feelings, in common with the rest of mankind, but it was strongly reinforced in his mind by numerous analogies of nature. How was it possible for him to contemplate light and air as the common and equal portions of every man, and not acknowledge that heaven intended liberty to be distributed in the same manner among the whole human race! Or how could he behold the beauty and harmony of the universe, as the result of universal and mutual dependence, and not admit that heaven intended rulers to be dependent upon those, for whose benefit alone, all government should exist. To suppose the contrary, would be to deny unity and system in the plans of the great creator of all things.

I shall make no apology for these sentiments. They are not foreign to the solemnity of this discourse. Had I said less of the political principles and conduct of our enlightened President, hundreds and thousands of my fellow-citizens would have accused me, of an act of treachery to his memory. May the time never come, in which the praises of our republican governments, shall not be acceptable to the ears of an American audience !

In the more limited circles of private life, Mr. Rittenhouse commanded esteem and affection. As a neighbour he was kind and charitable. His sympathy extended in a certain degree to distress of every kind, but it was excited with the most force, and the kindest effects, to the weakness, pain and poverty of old age.—As a friend he was sincere, ardent, and disinterested. As a companion, he instructed upon all subjects. To his happy communicative disposition, I beg heave to express my obligations in this public manner. I can

5.55

truly say, after an acquaintance with him for six-and-twenty years, that I never went into his company, without learning something. With pleasure have I looked beyond my present labours to a time, when his society should constitute one of the principal enjoyments of the evening of my life... But alas! that time, so often anticipated, and so delightful in prospect—will never—come.

I hope it will not be thought that I tread too closely upon his footsteps, when I presume to lift the latch of his door, and to exhibit him in the domestic relations of a husband and father. It was the practice of the philosophers of former ages, to pass their lives in their closets, and to maintain a formal and distant intercourse with their families! but our philosopher was a stranger to pride and imposture in every thing. His family constituted his chief society, and the most intimate circle of his friends. When the declining state of his health, rendered the solitude of his study, less agreeable than in former years, he passed whole evenings in reading or conversing, with his wife and daughters. Happy family ! so much and so long blessed with such a head! and happier still, to have possessed dispositions and knowledge to discern and love his exalted character, and to enjoy his instructing conversation !--- Thus Sir Thomas Moore lived with his accomplished wife and daughters ;- Thus Cicero educated his beloved Tullia; and in this way only, can the female sex be elevated to that dignity, and usefulness in society, for which they were formed, and by which from their influence upon manners, a new era would be created in the history of mankind.

The house and manner of living of eur president, exhibited the taste of a philosopher, the simplicity of a republican.

and the temper of a Christian. He was independent, and contented with an estate, small in the estimation of ambition and avarice, but amply suited to all his wants and desires. He held the office of treasurer of Pennsylvania, by an annual and unanimous vote of the legislature, between the years 1777, and 1789. During this period, he declined purchasing the smallest portion of the public debt of the state, thereby manifesting a delicacy of integrity, which is known and felt only by pure and elevated minds.

In the year 1792, he was persuaded to accept of the office of Director of the mint of the United States. His want of health, obliged him to resign it in 1795. Here his conduct was likewise above suspicion, for I have been informed by his colleague in office,* that in several instances, he paid for work done at the mint out of his salary, where he thought the charges for it would be deemed extravagant by the United States.

His economy extended to a wise and profitable use of his time. No man ever found him unemployed. As an apology for detaining a friend a few minutes, while he arranged some papers he had been examining, he said, "that he had once thought health, the greatest blessing in the world, but that he now thought there was one thing of much greater value, and that was time." The propriety of this remark will appear when we consider, that Providence, so liberal in other gifts, bestows this, in a sparing manner. He never gives a second moment, until he has withdrawn the first, and still reserves the third in his own hand.

The countenance of Mr. Rittenhouse, was too remarkable to be unnoticed upon this occassion. It displayed such a

* Dr. Way.

mixture of contemplation, benignity, and innocence, that it was easy to distinguish his person in the largest company, by a previous knowledge of his character. His manners were civil, and engaging to such a degree, that he seldom passed an hour, even in a public house, in travelling through our country without being followed by the good wishes of all who attended upon him. There was no affectation of singularity, in any thing he said or did : even his hand writing, in which this weakness so frequently discovers itself, was simple and intelligible at first sight to all who saw it.

Here I expected to have finished the detail of his virtues, but in the neighbourhood of that galaxy created by their connected lustre, I behold a virtue of inestimable value, twinkling like a rare, and solitary star. It is his superlative modesty. This heaven born virtue was so conspicuous in every part of his conduct, that he appeared not so much to conceal as to be ignorant of his superiority as a philosopher and a man, over the greatest part of his fellow creatures.

In reviewing the intellectual endowments and moral excellency of Mr. Rittenhouse, and our late intimate connection with him, we are led to rejoice in being men.

We proceed now to the closing scenes of his life.

His constitution was naturally feeble, but it was rendered still more so, by sedentary labor, and midnight studies. He was afflicted for many years with a weak breast, which, upon unusual exertions of body or mind, or sudden changes in the weather, became the seat of a painful and harrassing disorder. This constitutional infirmity was not without its uses. It contributed much to the perfection of his virtue, by pro-

Aaa

AN EULOGIUM UPON

ducing habitual patience and resignation to the will of heaven and a constant eye to the hour of his dissolution. It was a window through which he often looked with pleasure towards a place of existence, where from the encrease and perfection of his intuitive faculties, he would probably acquire more knowledge in an hour, than he had acquired in his whole life, by the slow operations of reason; and where, from the greater magnitude and extent of the objects of his contemplation, his native globe, would appear like his cradle, and all the events of time, like the amusements of his infant years.

On the 26th of June, of the present year, the long expected messenger of death, disclosed his commission. In his last illness, which was acute, and short, he retained the usual patience and benevolence of his temper. Upon being told that some of his friends had called at his door to enquire how he was; he asked why they were not invited into his chamber to see him. " Because (said his wife) you are too weak to speak to them." "Yes (said he) that is true, but I could still have squeezed their hands."-Thus with a heart overflowing with love to his family, friends, country, and to the whole world, he peacefully resigned his spirit into the hands of his God. Let the day of his death be recorded in the annals of our society, and let its annual return be marked by some public act, which shall characterise his services and our grief, and thereby animate us and our successors, to imitate his illustrious example !

It has been the fashion of late years, to say of persons who had been distinguished in life, when they left the world in a state of indifference to every thing, and believing, and hoping in nothing, that they died like philosophers. Very

different was the latter end of our excellent president. He died like a christian, interested in the welfare of all around him—believing in the resurrection, and the life to come, and hoping for happiness from every attribute of the Deity.

Agreeably to his request, his body was interred in his observatory near his dwelling house, in the presence of a numerous concourse of his fellow-citizens. It was natural for him in the near prospect of appearing in the presence of his Maker, to feel an attachment to that spot in which he had cultivated a knowledge of his perfections, and held communion with him through the medium of his works. Hereafter it shall become one of the objects of curiosity in our city. Thither shall the philosophers of future ages resort to do homage to his tomb, and children yet unborn, shall point to the dome which covers it, and exultingly say, " there lies cur Rittenhouse."

Let us my respected colleagues, repair for a few minutes to that awful spot.—In entering it—we behold the telescope, dear instrument of his discoveries, turned upon its axis, and pointed to the earth, which has closed its master's eyes.— How artless—the inscription upon his tombstone !—It contains nothing but his name, and the simple record of the days and years of his birth and death.—Very different would have been the monument of his worth and fame, had not the gratitude and affection of his friends been controuled by his dying request. His head would have reclined in marble, upon the lap of religion. At his feet, science would have sat—bathed in tears; while the genius of republican liberty, in the figure of a venerable hermit, bending over his grave, would have have deplored the loss of his favourite son.—Alas !—too—too soon has our beloved president been torn from the chair of our

364 AN EULOGIUM UPON DAVID RITTENHOUSE.

society !-- Too soon has he laid aside his robes of office, and ceased to minister for us day and night at the alter of science ! -Ah! who now will elevate his telescope, and again direct it towards yonder heavens ? Who now will observe the transit of the planets? Who now will awaken our nation to view the trackless and stupenduous comet? Who now will measure the courses of our rivers, in order to convey their streams into our city, for the purposes of health and commerce ?_____ Nature is dumb ;-----for the voice of her chief interpreter is hushed in death.-In this hour of our bereavement, to whom shall we look ?- but to THEE, FATHER of life and light :--thou author of great and good gifts to man. O! let not thy Sun, thy Moon, and thy Stars now shine unobserved among us! may the genius of our departed president, like the mantle of thy prophet of old, descend upon some member of our society, who shall, as he did, explain to us the misteries of thy works, and lead us step by step, to THYSELF, the great overflowing fountain of wisdom, goodness and mercy, to the children of men!

FINIS.







