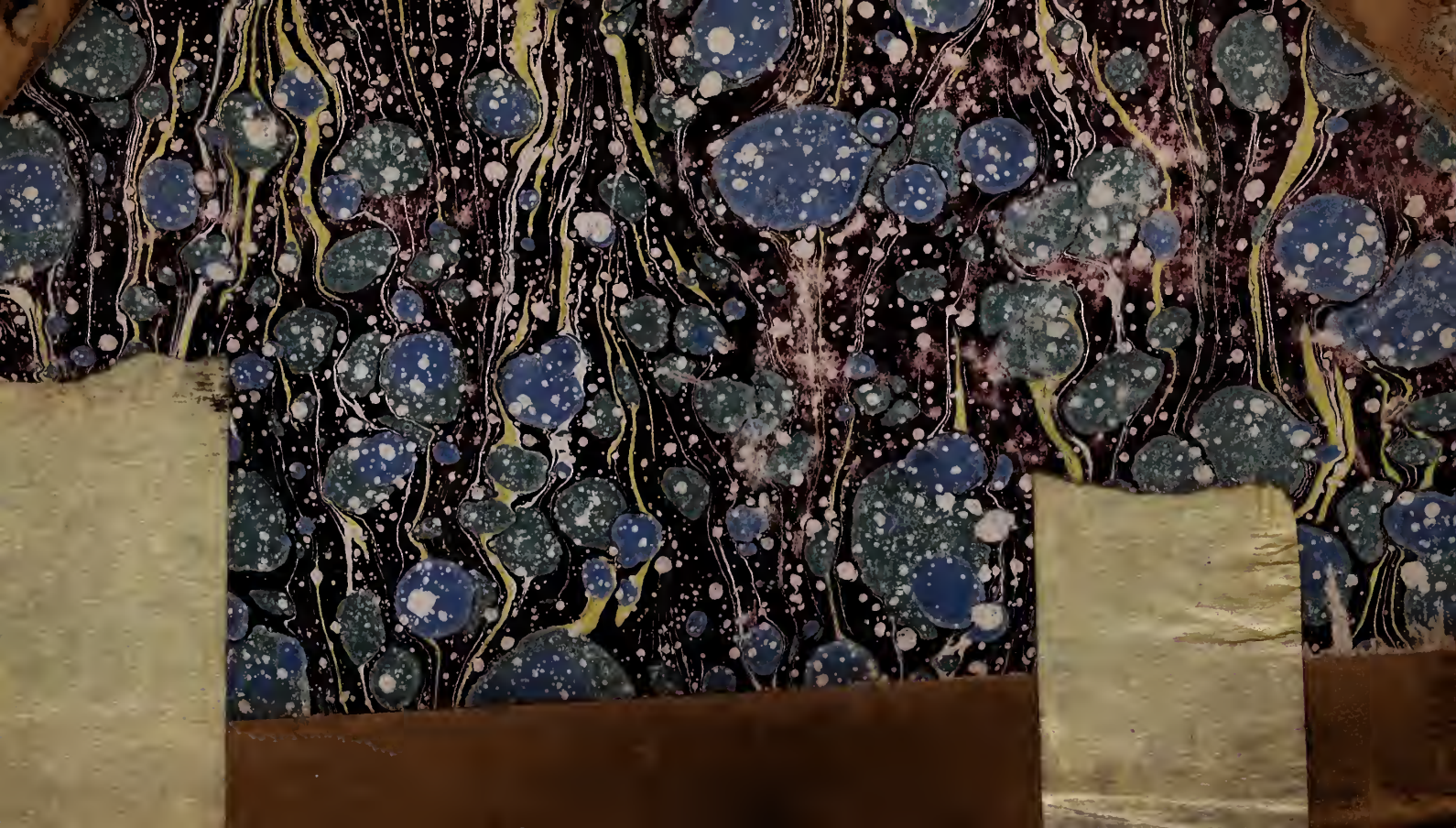

THE

PRINCETON REVIEW.

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ART. I.—1. *Report of the Committee on Arts and Sciences and Schools, of the Board of Assistants of the City Government of New York, on the subject of appropriating a portion of the School Money to Religious Societies, for the support of Schools.* April 27, 1840.

2. *The important and interesting debate on the claim of the Catholics to a portion of the Common School Fund, with the arguments of Counsel before the Board of Aldermen of the City of New York.* Oct. 29 and 30, 1840.

3. *Report of the Special Committee, to whom was referred the petition of the Catholics relative to the distribution of the School Fund, together with the remonstrances against the same.* January 11, 1841.

4. *The Question—Will the Christian Religion be recognised as the basis of the system of public instruction in Massachusetts? discussed in four letters to Rev. Dr. Humphrey, President of Amherst College.*

WE know not that any subject appropriate to our pages involves more of the essentials of religion and liberty than the true relative position of Christianity in a scheme of national education. This relation has been set forth in various and opposing forms, some of which seem to us as opposite

to reason and truth and right, as they are to each other. We shall occupy a portion of our present number, greater than we are wont to devote to any one subject, with a condensed view of these conflicting opinions, interweaving without much arrangement or connexion a sort of running commentary.

There are on our table a dizzy pile of unpretending pamphlets, and a still more imposing array of stiff 8vos. and stitched folios, which are full of exceedingly interesting and valuable facts on this subject, and each of which would form an abundant *substratum* for all we have to say; but we occupy, for the moment, not so much the place of reviewers or educationists, as that of supporters and defenders of the great principles of the Protestant faith, and impartial chroniclers of facts, involving, to our apprehension, the vital interests of Christianity.

We consider the conflicting views of men respecting text-books, Normal Schools, and the modes and principles of teaching, as of very subordinate consequence. The question we suppose to be presented, is not after what order we shall build an inconceivably vast and expensive structure for the security and happiness of unborn myriads, but whether it shall be founded on a rock or on the sand. Until this last point is determined the other is not worth a thought.

In the history of past ages we find no trace of what are now known as the institutions of popular instruction. So far as the human mind has been brought at all under a training process, that process has either been free without religion or religious without freedom. There can be no doubt that in the ancient republics the education of the mass of the populace was of a high order, and in many respects (of a moral and physiological nature) far superior in its general character, and especially in its utility and thoroughness, to modern systems. It is obvious however that this distinction applies only to the secular aims and results of their schemes, for they had no other, and for want of other and higher aims, they not only failed in their attempts, but found a curse where they looked for a blessing.

In later times, under forms of civil and ecclesiastical governments, whose very existence is bound up in the ignorance of the people, the means of instruction were doled out in stinted measure, and this only to such as would hold their acquisitions subserviently to the ambitious designs of their

masters. The Reformation involved a compound force, having been itself nourished into form and power by the irrepressible longing of the mind for the enjoyment of its inalienable rights, and then opening the way for its universal emancipation from every form and degree of bondage. We do not learn however that even this momentous revolution in the intellectual world resulted in any very general extension of the means of public education. The rights of conscience were asserted, freedom of discussion was secured, and a restless desire for knowledge was kindled to some extent in the common mind. But the diffusion of useful knowledge among the people, by the early education of children and youth, seems not to have been regarded as a very important, and perhaps not as a practicable measure. The highest attainments in science and philosophy might characterize an age of the most profound popular ignorance. While the knowledge which puffeth up was stored away among the privileged few in groves and cells, the vast throng of an intelligent and immortal generation passed away in barbarous ignorance of their duties, capacities and destinies.

It seems to us that the embryo of all the modern systems of popular education is to be found in the early legislation of the Plymouth colonists, and that the principles they established are to this hour the most wise and practical, and most skilfully adapted to the peculiar character of our country. Indeed we can scarcely persuade ourselves that they were not guided by some more than ordinary influence, so wonderfully was their scheme of education fitted to the past and present exigencies of the country and the world. We are not disposed to exalt unduly the Puritan character, but we are persuaded that if the plan of schools they devised had been extended in its general principles to the expanding wants of the country, we should have been at this moment strangers to some very fearful apprehensions, and to many fearful perils, which now seem inevitable.

The great question which is presented more or less distinctly in all the publications whose titles we have given is —WHAT PLACE RELIGION SHOULD HAVE IN THE PROCESS OF POPULAR INSTRUCTION? And upon this point we find two grand parties. The one opposes itself to every kind and degree of religious instruction, contending that any scheme which is sustained by the people at large, and which claims the confidence of all, should embrace nothing but what is agreeable to all. And hence, as there is an endless diversity

of opinion as to what religion is; and as it is peculiarly the office of parents and spiritual teachers to attend to this matter, the schoolmaster, it is contended, should confine himself to the exercises of the understanding and the cultivation of those powers which belong to a child as an intellectual and not as a religious being.

This position is taken very broadly in the report of the Committee on Arts and Sciences and Schools of the New York Board of Assistants.

"It is evident from the strictly popular character of the system of public instruction as originally established, that the legislature intended the public school fund to be employed for the purpose of communicating to the children of the State instruction of a strictly secular character, altogether unconnected with either religious or political education."

Again—"If the doctrines of all the religious denominations in the State were taught, *in the slightest degree*, at the expense of the people, under the authority of law, there would still be a legal religious establishment, not confined to one or a few sects it is true, but covering many. Taxes under such a system would still be raised for religious purposes, and those who professed no religion, or belonged to no sect, would be taxed for the benefit of those who did. It is immaterial in the eye of the law, whether a citizen possesses any or no religious faith; he is still a citizen, and as such is entitled to the free enjoyment of whatever opinions he may entertain, &c."

And once more—"If religious instruction is communicated, it is foreign to the intention of the school system, and should be instantly abandoned. Religious instruction is no part of a common school education. The church and the fireside are the proper seminaries, and parents and pastors are the proper teachers of religion, &c."

To the same purport is the third of a series of resolutions passed unanimously by the controllers of the public schools of the city and county of Philadelphia, composing the first School District of Pennsylvania, December 9, 1834.

"That as all the sects contribute in the payment of taxes to the support of public schools, the introduction of any religious or sectarian forms* as part of the discipline of the schools must have a tendency to impair the rights of some;

* In Mr. Barnard's report to the New York Legislature hereafter examined, the use of *forms* (prayer, singing, &c.) is expressly defended on the ground that it is no part of a course of instruction.

and that whilst this Board is convinced of the utter impossibility of adopting a system of religious instruction that should meet the approbation of all religious societies, they are equally satisfied that no injury need result to the pupils from confining the instruction in our schools to the ordinary branches of elementary education, inasmuch as ample facilities for religious improvement are presented for the choice of parents and guardians in Sabbath Schools and other establishments for that purpose, which are organized and supported by various religious communities."

These authorities show with sufficient exactness the ground occupied by the non-religious party.* To show them more forcibly by contrast, we subjoin a few detached paragraphs from cotemporaneous writers.

"It may be truly maintained that religious instruction is not merely an important part of education, but that all real education ought to be based upon religion—that it is not merely to be regarded as an essential *branch*, but as the very *root* of all sound and really profitable instruction." Powell on State Education, p. 13.

"Education without religion is defective in its *foundation.*" Ib. p. 22.

The rule explicitly laid down for the regulation of the Normal Schools in England, proposed in Privy Council, April 1839, was that religion must be combined with the whole matter of instruction, *and regulate the entire system of discipline.*

"True education should train to the exercise of all the social and Christian virtues. The Dutch schools have nothing of a catechetical or dogmatic instruction in morals or religion, and yet the very air of these schools is pregnant with the purest moral and religious influences—it mixes up a moral with every lesson it teaches, and not the moral merely of reasoned ethics, but the holier moral of revealed religion. The commandments of God in the old law, and the divine precepts of the Redeemer in the new, constitute by far the most important part of the Christian code of morals, and what difference is there about these amongst the Christian sects?" O'Malley's Sketch, p. 13.

"More than any thing seems to depend upon the manner

* We mean nothing offensive by this term, but adopt it for convenience, to denote those who are against the introduction of religious instruction as part of the common process of school education. It is better than anti-religious or irreligious.

of elementary instruction, whether it be a mere mechanical one in reading, writing and arithmetic, and some geographical and historical knowledge, confining the highest information to the reading of the scriptures, and to committing biblical verses to memory, or whether it is one resting on a religious and moral foundation, where all other knowledge imparted to the child, finds its test and its confirmation."

"This instruction (of the church) ought to have for a preparative, the moral and religious instruction given in the school—of an infinitely less special character to be sure, but still Christian." Cousin de l'Instruction Publique, en Hollande—p. 66, &c.

There is, however, a curious distinction, taken by some portion of the non-religious party, between morals and religion—so curious that the most strenuous opposition to the latter is made to consist with the most unflinching vindication of the former.

"Persons of all religious persuasions, who think soberly on the subject, probably allow some distinction between morality, properly so called, and religion. With some sects, in fact, the two are held to be in no small degree distinct from and at variance with each other." Powell on State Education, p. 10.

"The exposition of moral principles and duties, as such, is not only distinct from all consideration of religion, but the principles laid down must cease to possess the character of simply moral principles precisely in proportion as they are mixed up with the doctrines and precepts of religion." Ibid, p. 11.

"To teach Christian morals, referring to the Bible both for their principles and their illustrations, is a widely different thing from teaching what is understood to be the Christian religion. Religion is a matter between a man and his God.* It has reference to the worship of the Supreme Being and the mode of such worship; and has relation to a future state of existence and the retributions of that future state; and it is concerned with creeds and articles of faith. Now religious freedom consists in a man's professing and enjoying what religious faith he pleases, or in the right *of rejecting all religions*, and this freedom is in no degree evaded when the

* True religion and undefiled before God and the Father is this—to visit the fatherless and widows in their affliction, and to keep himself unspotted from the world.—James 1: 27.

Is not this last injunction the very body and essence of Christian morals?

morals of the Bible are taught in public schools." Barnard's Report in the New York Legislature, on the petition of Wm. G. Griffin and others, January 23, 1838.

One of the queries proposed by the Irish Commissioners of Education to the applicants for government aid mentions reading, writing, arithmetic, grammar and geography, as branches of literary and *moral* education, and a committee of the House of Commons, in May 1824, proposing that four days in the week should be appropriated to literary and *moral* instruction, dispensed with the use of the scriptures in any version or even a selection from them. Of course the *moral* part of the four days instruction would be derived from some inferior source.

But there is another subdivision of the party; for those who advocate the use of the Bible as a text-book of morals are by no means agreed among themselves as to the mode of using it. Some contend that though it is a text book it is not to be studied like other text books, lest its sacred and imposing character should be impaired. It is therefore only to be read at appointed times, and with some degree of ceremony. In the public schools of New York, the teacher reads it at the opening of the school in the morning. Others would have its moral passages separated from those that are doctrinal, and drawn out in the form of selections of lessons to be used like other reading books, or to be committed to memory.

Some very singular notions prevail also among teachers as to the nature of morals. "Many masters," it is said, "have no idea of moral education beyond flogging a boy when he does wrong." In answer to an inquiry whether he taught morals, a schoolmaster replied: "How can I teach morals to the like of these?" And a female teacher responded to a similar inquiry. "How can you expect me to teach morals at two pence a week?" And it may not be wise to dismiss this as a distinction without a difference—for we find that the learned President of one of our colleges has so perfectly defined it, at least by illustration, as to show many important bearings and tendencies of it. "If I have an impression," he says, "that it is my duty to obey my father because God has commanded it, it is a *religious* impression, but if it is because he is my father, it is a *moral* impression." It would not be difficult to run this distinction out between large classes of duties. Thus—stealing would be religiously wrong if committed against the 8th command-

ment, but it would be morally wrong, if committed in violation of the statute in such case made and provided. And that is the reason perhaps why the indictment for some offences charges the offender with not having the fear of God before his eyes when he violated the law—it shows that the offence was religious as well as moral. Temperance, chastity, obedience to parents, reverence for the Sabbath, &c., would of course be subject to the like distinctions, and in this sense morality is to be understood and inculcated by us as it was in the age and country of Socrates and Aristotle—apart from the sanctions of revealed religion. Even Plato would hardly be a safe instructer under this scheme, inasmuch as he would be very likely to introduce some of the crude notions of a Supreme Being, which he is supposed to have derived from the writings of Moses through the Egyptian priests. It may be added that where these notions (of a distinction or variance between religion and morality) do not prevail, there is a very general feeling among many religious parties, that instruction in *moral duties*, as such, is objectionable, and we think the objection well lies if such instruction really involves a disregard to the higher sanctions of religion.

It is very clear however that a considerable portion of those who would exclude religion from the process of public education, while they favour instruction in morals, would readily amalgamate with the advocates of an exclusively *secular* and intellectual education. And on the other hand, it would not be very difficult perhaps to convince those that are for inculcating the morals of the Christian religion without its doctrines, that the thing is impracticable. This disposal of the fragments brings us back to the point from which we started, viz: that there are two grand parties, one of which opposes itself to every kind and degree of religious instruction.

We have mentioned some of the published views of this party, but its principles require still farther elucidation. We find their operation somewhat minutely traced in the Letters to President Humphrey.

"The first annual report of the Secretary to the Board, dated January 1, 1838, contains the following remarkable passage:

"In regard to moral instruction, the condition of our public schools, presents a singular, and, to some extent at least, an alarming phenomenon. To prevent the school from being

converted into an engine of religious proselytism; to debar successive teachers in the same school from successively inculcating hostile religious creeds, until the children in their simple-mindedness, shall be alienated, not only from creeds but from religion itself; the Statute of 1826 specially provided that 'no school-book should be used in any of the public schools, calculated to favour any particular religious sect or tenet.' The language of the revised Statute is slightly altered, but the sense remains the same. Probably no one would desire a repeal of this law, while the danger impends it was designed to repel. The consequence of the enactment, however, has been, that among the vast libraries of books expository of the doctrines of revealed religion, none have been found free from that advocacy of particular tenets or sects which includes them within the scope of legal prohibition; or at least no such books have been approved by committees and introduced into the schools. Independently, therefore, of the immeasurable importance of moral teaching; THIS ENTIRE EXCLUSION OF RELIGIOUS TEACHING, THOUGH JUSTIFIABLE UNDER THE CIRCUMSTANCES, enhances and magnifies a thousand fold, the indispensableness of moral instruction and training. Entirely to discard the inculcation of the great doctrines of morality and natural theology, has a vehement tendency to drive mankind into opposite extremes; to make them devotees on one side or profligates on the other; each about equally regardless of the true constituents of human welfare. Against a tendency to these fatal extremes, the beautiful and sublime truths of ethics and natural religion have a poising power. Hence it will be learned with sorrow that of the multiplicity of books used in our schools, only three have this object in view; and these three are used only in six of the two thousand nine hundred and eighteen schools from which returns have been received.' pp. 61, 62.

"There is no room here for doubt or misconception. It is plainly declared, in so many words, not only that the Christian religion has ceased to be the basis of public instruction, but that RELIGIOUS TEACHING IS ENTIRELY EXCLUDED BY LAW; and that this entire exclusion of religious teaching is, in the Secretary's opinion, 'justifiable under the circumstances' of the case. And, (what is worse than all) the justifying circumstances are, it would seem, unchangeable from the very nature of the case, as he apprehends it.

"No two constructions can be put upon the language of the report. The syllogism might be stated thus:

"No school-book shall be used in any of the public schools,

says the Statute, calculated to favour any particular religious sect or tenet.

"Every religious book is calculated (says the Secretary,) to favour some particular religious sect or tenet.

"Therefore no religious book can be used in the public schools.

"The Secretary stretches the language of the law (not a little perhaps) to exclude all religious *teaching*, as well as all religious *school books;* but the design of the law, as he expounds it, (viz. 'to debar successive teachers in the same school from successively inculcating hostile religious creeds,') would necessarily embrace all modes and degrees of religious teaching, whether printed, written, or oral.

"Now in the exigency which is occasioned by this 'singular, and, to some extent at least, alarming phenomenon,' the Secretary proposes to introduce 'the sublime truths of ethics and natural religion,' as a sort of 'poising power between bigotry and profligacy,' and he tells us with sorrow, that this poising power is found at the present moment in only *six* out of nearly three thousand schools! The law which 'entirely excludes religious teaching,' has been in force about twelve years. Boys and girls trained up in the schools, during that interval, are now from eighteen to thirty years of age; and the only poising power between bigotry and profligacy which is tolerated by law, has been introduced as yet, into only one of every five hundred schools!! Who would have believed that the Massachusetts schools had sunk so low?

"But was not the Bible quietly exerting its influence all this time? Surely this would not be excluded as a book 'calculated to favour any particular sect or tenet!' We have at hand a very full report on this point, from the Secretary of the Board, which shows that of *two hundred and ninety* schools making returns, *thirty-six* only use the Bible, *eighty-three* the New Testament, leaving *one hundred and seventy-one* who use neither. Of nearly *two-thirds* of your schools, it may be said that the Bible is not reported as among their books. I do not know how many good reasons may be assigned for this apparent neglect or disuse of this book; nor of how many explanations the statement is susceptible. I only affirm, what is easy of proof, that this document contains the report of books used in two hundred and ninety schools, and in one hundred and seventy-one of them the Bible has no place.

"In this connexion I should like to have you examine another paragraph of the same report. I will transcribe it.

'Arithmetic, grammar, and the other rudiments, as they are called, comprise but a small part of the teaching in a school. The rudiments of feeling are taught, not less than the rudiments of thinking. The sentiments and passions get more lessons than the intellect. Though their open recitations may be less, their secret rehearsals are more. And even in training the intellect, much of its chance of arriving, in after life, at what we call sound judgment or common sense; much of its power of perceiving ideas as distinctly as though they were coloured diagrams, depends upon the tact and philosophic sagacity of the teacher. He has a far deeper duty to perform than to correct the erroneous results of intellectual processes. The error in the individual case is of little consequence. It is the false projecting power in the mind—the power which sends out the error, which is to be discovered and rectified. Otherwise the error will be repeated as often as opportunities recur. It is no part of a teacher's vocation to spend day after day in moving the hands on a dial plate backwards and forwards, in order to adjust them to the true time; but he is to adjust the machinery and the regulator, so that they may indicate the true time; so that they may be a standard and measure for other things, instead of needing other things as a standard and measure for them. Yet how can a teacher do this, if he be alike ignorant of the mechanism and of the propelling power of the machinery he superintends?'—pp. 58, 59.

"Here is a volume of truth in half a line—'THE FALSE PROJECTING POWER IN THE MIND.' It seems the great duty of the teacher is to discover and rectify this power, viz. '*the power that sends out the error.*' Can the Secretary mean error in intellectual process merely? No; for he says, the rectification of these is quite a subordinate matter; and besides, he speaks of 'feeling,' 'passion,' 'sentiments.' These are rather emotions of the heart. Surely he must mean by this 'false projecting power of the mind,' what you and I should call a depraved heart; for the rectification of which we should look to the Spirit of God, accompanying the use of appointed means. Among these means we should place the diligent reading of the Holy Scriptures, and daily faithful instruction in the truths which they reveal. But alas! if the positions of the Secretary's report are well-grounded, we must dispense with all these, and betake ourselves to

the beggarly elements of ethics and natural philosophy; and this, by the operation of law!

"But I have a difficulty here. Perhaps you can relieve me. The law, as cited in this very report, lays its weighty injunctions upon teachers in the following solemn and impressive language. 'It shall be the duty of all instructers of youth, to exert their best endeavours to impress on the minds of children and youth committed to their care and instruction, the *principles of piety*,' &c. It would appear then that the *principles of piety* are required by law, to be inculcated in schools from which *all religious teaching* is by law entirely excluded! You see my difficulty. The problem is, so to construct a vessel, that it shall be full and empty at one and the same time."

There can be no doubt, we apprehend, that the morals inculcated under the Massachusetts system, (as thus officially expounded) are not only separated from religion, but also from the Bible, which Mr. Barnard's report commends as containing the best code of morals known to the country and the age. "Hence the Bible," he says, "as containing that code, and for the sake of teaching and illustrating that code, so far from being arbitrarily excluded from our schools ought to be in common use in them. The use of the Bible for that purpose cannot be dispensed with."

But it may be asked whether in the system of moral instruction advocated by this party, there is not some provision made for admitting the sanctions of religion without its particular doctrines. We do not perceive any such provision. We suppose all reference to a written revelation of God's will is expressly excluded. Indeed it must be so, for it is a difference of opinion upon the question whether the book we call the Bible is, in fact, a revelation of God's will, which divides the community into believers and unbelievers; and furthermore it is the difference of construction put by different men on this very written revelation which divides those who believe in its divine authority into so many different sects and denominations; and it is to avoid a preference for either of these parties or constructions that all of them are rejected. Where there is a perfect uniformity of sentiment among all men on a subject which the scriptures happen to mention, the uniformity of sentiment is not impaired by this circumstance; neither is it strengthened, for it was perfect before. And where there is not a uniformity of sentiment, the use of the scriptures is denied to all parties, that they

may not be used to the prejudice of any. To illustrate our meaning, it may be relevant to say, that we have stated the following case to members of several school-controlling Boards, in order to test the operation of the principle they would establish.

Two school boys have been engaged in a violent quarrel, ending in blows. The parties are summoned into school, panting for breath, covered with dirt and blood, their lips pale and quivering, and their whole frame convulsed with passion. The teacher, after the irritation has subsided, and the offenders have become calm enough to listen, calls them to his desk, and suspending for a season the ordinary exercises of the school, requests their attention to the unhappy case before them. He represents to the combatants the nature and enormity of their offence—the sin of indulging such malevolent feelings, the duty of forbearance and forgiveness, &c.; and to give the highest possible sanction to his reproof and exhortation, he adverts to the precepts and example of the divine Redeemer. "You are directed in this gospel," he may say, "to love your enemies, to pray for them that despitefully use you and persecute you, and when the aggressor in the present case did the wrong, it was the duty of the sufferer at once to forgive. And in confirmation of this truth, we have the example of our Lord Jesus Christ, and we may remember that it is not the example of a mere man, but of him who has all power in heaven and on earth, and it has therefore all the authority of God himself. He came to our world to bless and to save it, but the world despised, rejected and slew him. And did he smite when he was smitten? Did his bosom swell with indignation and his eye kindle with anger when he was insulted? No! So far from him were all evil and sinful passions, that he prayed for his enemies—he wept over the delusion and unhappy doom of those who reviled and persecuted him, and even when the hands of his betrayers and murderers were stretched out to take his guiltless life, his meek voice was heard, in all that tumult and outrage, 'FATHER FORGIVE THEM, FOR THEY KNOW NOT WHAT THEY DO.' Compare this, my boys, with your feelings and conduct during the past hour. Here, in these Holy Scriptures, is the law you have broken, and it is sanctioned by divine authority. Here is the precept you have violated, enforced and illustrated by the eternal Son of God in his life upon earth. Do you not see that your offence is rank, and ought you not to repent, confess your faults, for-

give each other, and resolve never again to fall under the dominion of unholy passions? Such a resolution, taken in the fear of God, and with an humble prayer for his grace to strengthen you, may save you from a multitude of sins."

Upon proposing this case to one or more individuals officially connected with the Education Boards of New York, Massachusetts and Pennsylvania, they severally replied that such a course would unquestionably be regarded as an infringement of the neutral principle which the school systems of those States have recognised.

We have then put the following case:—A boy is detected in a falsehood. The offence is known throughout the school, and all proper means have been taken to bring the offender to repentance, but in vain. The teacher, at some suitable moment, calls the attention of the school to the subject, and thinks proper to improve the occurrence for impressing on their minds the enormity of this sin. He turns to the history of Ananias and Sapphira, and to the fearful retribution with which this particular sin is threatened. It is natural for him to cite the passage which declares that the fearful and unbelieving—and ALL LIARS shall have their part in the lake which burneth with fire and brimstone, which is the second death. "Thus you see, young friends," he might say, "this wicked child not only incurs present censure and pain, but he offends God, and incurs the dreadful peril of being eternally punished in the world beyond the grave. As Dr. Watts's hymn says:—

> 'There is a dreadful hell
> And everlasting pains:
> There sinners must with devils dwell
> In darkness, fire and chains.'"

This, we remarked, is simply the inculcation of the moral duty of speaking the truth, and our reference to the bible is for authority and sanction. Shall we be allowed to make the reference or not? They replied without hesitation or qualification, No! It would be clearly religious instruction, or instruction in religious doctrines, and it must of course be excluded by the loosest construction of the neutral principle. And one of them observed more particularly, that it would offend the Universalists, who were among the most active and liberal supporters of the public schools, and who would rather see the whole system abolished than suffer such opinions to be inculcated.

Once more—I am a teacher—I direct James, one of my

boys, to stay after the school is dismissed, to sweep the room and put the desks, &c., in proper order. He murmurs, but very impatiently yields to my positive commands. He usually obeys me with great cheerfulness, but it seems he has engaged to join two boys of the neighbourhood in a skating-frolic on a mill-pond near by, and the frustration of this plan occasions all the sullenness and discontent. James stays reluctantly and does his work, and the other boys hasten cheerily to their amusement. One of them glides into an air hole and is sucked under the ice, and the other, in attempting to rescue him, sinks into the same current, and both are drowned. The melancholy tale is soon told in every dwelling place of a country school district, and is in the mouths of all my scholars as they assemble the next morning. I seize the sad occasion to impress on their minds the mysterious appointments of a righteous superintending Providence. If I had not insisted on James's compliance with my wishes, it is more than possible he would have made the third victim. So that while he was impatiently and fretfully doing his duty, the hand of a kind Providence was gently holding him back from danger. Hence I would have you all learn, that while we attend to what seems clearly our present duty, we may expect the divine protection and blessing, and that nothing is more unwise and dangerous, than for such blind and feeble creatures as we are to attempt to live or move but in God. The steps of a good man are ordered by the Lord. In all thy ways acknowledge him, &c. There is a beautiful hymn of Cowper's on this subject, which you would do well to learn.

"God moves in a mysterious way, &c. &c."

How would this case stand in reference to the neutral principle? "It would be decidedly inadmissible," they replied. "It is obviously doctrinal," and at least one of them thought it inculcated a false doctrine.

These illustrations serve to define the boundaries between secular and religious education, as one of the two grand parties have marked them; and it would be easy to show by a more extended series of them, that some at least who profess to be friendly to a moral influence in education, would not permit it to be sustained or sanctioned by reference to divine authority. We are aware that many whose names are given to the non-religious theory would utterly disclaim any such sentiment as this. But in consequence of the very indefinite notions men have of the principles they profess to approve,

they are not unfrequently betrayed into the most palpable inconsistencies when they attempt to explain or define their views. Thus we find that the very men who unanimously passed the resolution that religious instruction should be excluded from the schools of the first district in Pennsylvania, suffer scarcely one annual report to go out without expressing some sentiment totally at variance with that principle. Take the following as examples. "It (the institution of public schools) imparts to thousands the rudiments of learning combined with habits of order, and the superior benefits of moral and religious instruction." 6th Report, 1824. p. 5.

"It is the anxious care, &c., that the pupils shall not only be instructed in useful literary knowledge, but that they also be taught respect for moral order and truth, and without any sectarian bias reverence for the fundamental and enduring principles of Christianity." 10th Report, p. 9.

"The children of the public care, without any sectarian bias whatever, are instructed in the great principles and solemn obligations of Christianity, as set forth in the Holy Scriptures." 12th Report, p. 6.

"It is to *sound practical* CHRISTIAN EDUCATION (the italics and capitals are in the original) that we must look for improved morals, judicious industry, &c." 16th Report, p. 7.

And not to extend our extracts, the 17th Report, (1835, p. 6.) speaks of "furnishing concurrently the soundest principles of *Christian* and Scholastic instruction, and the schools are described as destined to diffuse the light of knowledge and the blessings of *Christian Education* to thousands and tens of thousands of the rising generation."

These passages, from the reports of the controllers, unequivocally recognise a very high grade of systematic religious instruction, and if they truly set forth the principles which governed them from 1824 to December 9, 1834, the resolution passed that day, to which we have already referred, if not wholly inoperative, must have worked a radical change in their administration. But yet we find the same principles distinctly recognised—as distinctly after as before the resolutions were adopted. Now what shall we infer from all this but that the practice of the schools is essentially at variance with the theory of the controllers, as disclosed in their resolution of December 9, 1834: and what does the aspect of the times authorize us to anticipate from it, but that when the ripe hour comes, the theory and practice will be

made concurrent, not by abandoning the former, but by prohibiting the latter? With the funds, the selection of teachers and books, and the influence of power and patronage in their hands, they must be more or less than men, if they fail to carry out whatever theory they have adopted.

We, of course, cordially respond to the sentiment which all these passages from the reports breathe, and we cite them only to show how irreconcilable they are with the resolution of December 1834. And even if the controllers studiously endeavoured "to confine the instruction in their schools to the ordinary branches of elementary education, without the introduction of any religious or sectarian forms," a majority of teachers would insensibly slide into forbidden ground. They would find it impossible to inculcate moral truth without resorting to religious sanctions—nay more—there are teachers, and the very best of teachers, who would abandon the employment rather than yield the right of inculcating the truths of revelation—not with a proselyting spirit—not for sectarian ends, but in the fear of God and for the advancement of holiness and happiness. They are oftentimes unconscious of the restrictions which are nominally imposed upon them, and pursue the course which an intelligent reflecting person would almost instinctively follow in seeking to lead out, guide and strengthen the faculties of a child. It never occurs to them to inquire what their rights are, supposing them to be of course co-extensive with their sense of duty.*

"And why not let the matter rest in this position?" say some. "If we have the substance why contend about the shadow? If religion and morality do actually have their place in our schools—right or wrong—lawful or unlawful —why not let the exclusive theory stand *(as a theory)* for what it is worth?"

* "We are to teach children their duties to God; but all duties are grounded on some relation between the person doing them and the person to whom they are owed. What this is we must therefore also declare. This we must do plainly and simply, avoiding all technicalities and formalities, making all our words living and personal. But as to asking myself, when I am giving information, which I believe to be necessary for the very life and being of a child, in order that he may be able to fulfil any duty that is appointed him to do in the world, whether every body living within ten miles of me acknowledges the facts of which I am speaking, to be troubled with our thoughts and questionings as these must utterly destroy all honesty and simplicity of feeling in me, and hinder me from communicating an honest and simple feeling to the pupil."

Our answer to these pregnant questions is a very simple one. The present position of affairs is but temporary. The machinery for essentially changing it is planned with great ingenuity, and if completed and put in motion, will be opposed or controlled with great difficulty.

We can only stop to glance at this machinery and leave our readers to examine it at their leisure.

1. A public school fund is the motive power. And as this must be more or less under the control of the Legislature, it is obvious, that, without a very radical change in the character of the people, the controlling influence will not probably be on the side of religion. And even if there were a disposition in any Legislature to favour it, the constitutions under which our general and most of our state governments are administered, would be construed to forbid the use of that influence in support of religious education, as such, even in the remotest degree. Any state therefore which has a permanent fund on which the public schools rely for aid, has made quite sure of a popular plea for the exclusion of religious instruction from them.

2. Normal schools may be made to answer a similar end. If endowed by the state, and placed under the supervision of a government board, the same principle of exclusion must be adopted as in the schools under the state patronage. And in addition to this, most of the pupils of a Normal seminary, would have their religious habits and predilections established, and the difficulty of adapting a course of religious instruction to their circumstances, (if it were required) would be a thousand fold greater than in a school. It would be necessary therefore in such a school, frequented by persons of all religions and of no religion, to establish the exclusive principle, and in the view taken of the subject by the warmest and most intelligent friends of the Normal system, such a course would be fatal to the religious character of most of the schools. "In any Normal or model school to be established by the committee of privy council, four principal objects should be kept in view, viz., religious instruction, general instruction, moral training and habits of industry."*

"The education of persons to whom elementary schools are to be confided, cannot be conceived of, unless its basis is firmly laid in the knowledge of some Christian confession."†

3. Next in order would be a government agent, or min-

* Lord John Russell. † Prof. Thiersch.

ister of public instruction, or some other superintendent of public schools, who will be expected to advocate and carry out the state principle. He exerts his influence (and if he is an intelligent, active man, it is a prodigious influence) in ten thousand unobserved and unobservable forms. Without seeming to be very busy, or prominent, or positive in his movements, he can easily diffuse the leaven of exclusiveness, through the agency of authors, editors, booksellers and local committees. In public meetings for the advancement of educational purposes, where all classes and professions meet, there must be profound silence on all controverted topics. Decency requires what policy dictates. Hence questions respecting the construction and location and furniture of school houses, the details of teaching to read and write, and the general influence and advantages of education, are presented for discussion, and after much has been eloquently said and (we may hope) usefully done, the convention separates on the strength of two or three resolutions, declaring the advancement and animating prospects of the good cause, and yet not a word has been uttered nor a thought entertained that religion has the remotest connexion with the subject. Such conventions held regularly for a few years, and wisely managed on this point, will soon but insensibly work a divorce of education from religion, so complete that the suggestion of their union would seem impertinent.

4. And, finally, a school district library, or a collection of books prepared for the public schools, with due regard to "existing prejudices (as they are called) on religious subjects," would cap the climax. A series of entertaining biographies, travels, voyages, histories and scientific works, written in a lively style and with attractive illustrations, (carefully excluding every allusion even to those doctrines of revelation which are held by ninety-nine in a hundred Christian professors), placed at public expense in every district school house; and constituting, in many cases, the principal reading of the neighbourhood, must powerfully aid in warding off all alliances with religion. And thus we have the machinery completed.

These various agencies working for and into each other could not fail, in the course of a few years, to put a school system entirely beyond the pale of religious influence; but if there could be a higher and more influential seminary, like a well endowed college or ancient university, which could be made indirectly subservient to the same end, either in sup-

plying students to the Normal seminaries, or directly to the schools, or by patronising books and authors of a particular class, the same end would be attained still earlier and more efficiently. And when attained, we need not predict that what is now apprehended as possible, would then become a stern and galling reality. Every school book and teacher would be sifted as wheat, and any rule, usage, exercise or requirement that savoured of religion would be abolished, and forbidden under severe penalties.

It is in this view that we regard the principles of the exclusives with so much jealousy. It is the tendency of them rather than any positive existing evil that alarms us. It is not of any present, rigid or intolerant application of the principle we complain. Its supporters are too politic thus prematurely to awaken the apprehensions of the religious community. An easy neutrality will imperceptibly accomplish much more than direct opposition.

It must not be inferred from these remarks, that we oppose the interpretation which the exclusives have put upon the principle on which our public school systems are declared to rest. It is to the principle that our objections are made, and not to the construction of it. Respecting this we are with them to the very letter. They are unquestionably right; and the more ultra the more right. The position that our schools should not be religious, is utterly untenable. They ought to be religious; they are, and must be religious. The point we would establish is, that our country cannot maintain its present form of government, nor any other form of free government, unless the general education of our children is accompanied with or built upon a religious education. It has been well said that reading and writing are no more education than a saw and chisel are cabinet-making. They are mere instruments capable of being applied to good or evil purposes, according to the amount of presiding intelligence and moral principle in the possessor. "The acquirements mechanically imparted to evil minded men, can serve only as so many master-keys put into their hands to break into the sanctuary of humanity; and on the other hand, to withhold these instruments, is not to render the depraved powerless, for he who cannot read will learn a seditious speech or a treasonable song as well as he who can read, and ignorance of writing will not hinder the firing of machinery or the drawing of a trigger." As religious freemen, we say, that our public schools must have a religious character—without

it, their utility is exceedingly questionable. As Protestants, we say, that the religious character of our public schools should be decidedly Protestant, and of course as it respects Roman Catholics, decidedly sectarian. As it respects other Protestant sects, they should be religious but not denominational. They should recognise the free and unrestricted use of the Holy Scriptures, and such religious forms and exercises as may be agreeable to the majority of the district or territory within which the school is situated.

We will not stay to prove how directly in opposition to all this are the doctrines which we are attempting to combat. The Massachusetts board declare that religious teaching is entirely excluded by law from their schools. The board of assistants of the city of New York affirm that religious instruction is no part of a common-school education, and the controllers of the public schools of the first district of Pennsylvania take the ground that the introduction of any religious or sectarian forms as part of the discipline of the schools is a violation of the tax-payer's rights. If these positions are right, no man can reasonably deny that William G. Griffin and others* are right in the principle of their memorial, and the answer of the Legislature to it is a palpable evasion of the question which the memorial presents. W. G. G. pays his tax to support a public school, and sends his children. The Legislature assures him that there his children may obtain useful knowledge without being liable to any religious influence. He is a Universalist, and he wishes his children to think as he does. Does it matter at all to him whether the teacher directly and dogmatically teaches the doctrine of eternal punishment in the world to come from a Catechism, or from the Bible, or in a prayer, or in a hymn? Does any man need to be told that a creed may be taught in any one of these forms as well as in any other? What answer is it, then, to the memorial of W. G. G. and others, to say that "praying is a mere conventional form, akin to sitting with heads covered like the Society of Friends, or to dancing like the community of Shakers?" What answer is it to say that "the teacher is not paid for praying," and that therefore the memorialists' money is not contributed to support that branch of the school exercises? Might not the same reply be made, had it been set forth and proved that the doctrine of eternal rewards and punishments had been

* The memorialists to the New York Legislature, upon whose memorial Mr. Barnard's report was made.

taught in an essay read at the opening of the school? Is it not a religious exercise? Is not the very reading of the Bible a religious exercise?* So of singing, does it matter to the Unitarian whether we teach the doctrine of the Trinity in prose or poetry, in sermon or song; whether our tenets are inculcated from the first verses of the first chapter of John, or from the last verse of Bishop Heber's beautiful missionary hymn,

> "Till o'er our ransomed nature,
> The Lamb for sinners slain,
> Redeemer, King, Creator,
> Return in bliss to reign!"

It is enough to make out their case that a sentiment is inculcated which they hold to be erroneous and pernicious; and that their money is used to pay the wages of the teacher who is thus employed. To say that the singing is no part of the exercises of the school, which the teacher is employed to conduct, is trifling. The rule of the school requires the pupil to be present at 9 o'clock, and the offensive doctrine is read or said or sung after that hour, and under the authority of the teacher. How can a case be more completely made out? and what a bold evasion it is to say, that the public money is not applied as directly to this as to any exercise of the school during the day? It would have been perfectly competent for the memorialists to reply, the man is paid by the week or month or year, not for this, that and the other exercise or branch.

We say then that the report which has been so much and so justly applauded for many of its sentiments, does not fairly meet the question presented. It dodges the stroke of the memorial. That was aimed at every shade and degree of religious influence or cultivation. It assumed the ground, (since taken for a different purpose) that if the discipline or instruction of a school, sustained at the common charge of the people, is in the *slightest degree* religious, the rights of the tax-paying citizen, who has no religious faith, are as much violated as are the rights of Roman Catholics when Protestant peculiarities are introduced, or as are the rights of

* It has been long ago deliberately, and we think correctly, settled by the Board of Education in Ireland, that the reading of the Bible either in the authorised or Douay version is a religious exercise, and as such it was required to be confined to those doctrines which were specially set apart for religious instruction. And the same regulation was to be observed respecting prayer.—[Regulations of the National Schools.]

the Methodist when Calvinistic doctrines are inculcated. If it is true, as the committee of the New York Board of Assistants assert, that "the legislature intended the public school fund to be employed for the purpose of communicating to the children of the state, instruction of *a strictly secular character, altogether unconnected with religious education*," the objection lies as logically and as strongly against the religious prayer, or the religious psalm or hymn, as against the homily, the creed, or the catechism. And the irreligious man has an equal right to insist on the most rigid construction of this law, with the Protestant who insists on the exclusion of Roman Catholic doctrines or forms. So that we are forced to the conclusion, that the idea of neutrality in this matter is utterly preposterous. Education must be religious or not religious. If it is religious, the public school fund, by the showing of its sworn friends, is perverted. And at this point, as we have seen, one of the two great parties rests itself. Before we introduce the other, however, there is a very grave and important question to settle, viz:—whether the party, whose position we have just described, is resisting innovations, and defending long-established and universally admitted claims, or whether it is itself an innovator, ruthlessly bent upon subverting and destroying ancient principles essential to our security and happiness. The result of this inquiry will not make right less right, or wrong less wrong, but it will serve to throw light on the general subject, and perhaps guide us to some important conclusions.

We have already intimated, that what we understand by a system of popular instruction was never known, and is not to this day known, in any part of the earth, nor under any other government than ours. It was devised to answer the purposes of just such a government as ours. Of most governments, it would be utterly subversive. Of ours, it is the only preservative. In those countries, where they have made the nearest approaches to it, there are checks and incumbrances (not easily to be thrown off) which essentially modify the character of the institution in their hands.

The origin of the system of which we speak, was *purely and emphatically religious.*

"It being one chief project of Satan," said the colonists of 1620, "to keep men from the knowledge of the scripture, as in former times keeping them in unknown tongues, so in these latter times by persuading from the use of tongues,

that so at least the true sense and meaning of the original might be clouded and corrupted with false glosses of deceivers, &c. It is therefore ordered, &c."

And after the first generation of the pilgrims had gone to the grave—in the year 1671—it was ordained, that "forasmuch as it greatly concerns the welfare of this country that the youth thereof be educated not only in good literature but in sound doctrine, it be commended to the serious consideration and special care of the overseers of the college, and the selectmen of the several towns, not to admit or suffer any such to be continued in the office of teaching, educating or instructing youth or children in the college or schools that have manifested themselves unsound in the faith, or scandalous in their lives, and have not given satisfaction according to the rules of Christ."

In process of time the colonies became states, and the states were divided into counties, and these into towns, embracing from six to eight miles square, the dividing lines being marked by natural or artificial bounds. Each of these towns is a corporation for certain purposes and is represented in the legislature. They are required to provide for their own poor, to keep roads and bridges in repair, to preserve the health and morals of the inhabitants, to provide for the education of the children and youth, and for the support of the gospel ministry. The towns are again divided (for religious purposes principally) into parishes, which have limited corporate powers, independent of the town; and for educational purposes the town is subdivided into still smaller sections called school districts, embracing perhaps from one to two miles square, and a sufficient population to maintain a school from two to twelve months annually. Each of these districts is likewise invested with sovereign authority as to the ends of its organization. The inhabitants determine all things relating to the location and occupation of the school house—as well as the employment of the teacher and his duties. They are, in short, little *school-republics* holding a relation to the town not unlike that which each of the States sustains to the national confederacy.

A meeting of the inhabitants of the town who are qualified by law to vote, is held annually to elect the officers of the corporation, to raise money for municipal purposes, and among others for the support of schools. Whatever sum is voted is assessed on the polls and estates of the inhabitants, and collected in the usual form.

The school money is appropriated to the several school districts, sometimes according to the number of scholars they enrol; sometimes according to the share of taxes they pay, and sometimes in a ratio compounded of both these, and the district school is maintained for such time as the appropriation will allow, unless it is prolonged by a district tax, which may be imposed if a majority of the inhabitants shall so direct. When the share of school money falling to a district is insufficient to maintain a master, they employ a female, and the desire to have the term of instruction protracted, doubtless leads, sometimes, to the employment of cheap and inferior teachers.

But the glory of the system is this. It looks upon the rich and the poor as alike interested in the early education of children and youth, and it considers the whole wealth of the community as pledged for this purpose. The protection of property and of the rights of its possessors is involved in the predominance of virtue, intelligence and subordination to law—so that the school tax is to the rich, an indirect premium of insurance against the prevalence of ignorance, violence and anarchy. The poor man's labour is a contribution to the wealth of the community, and his children, if educated, are capable of contributing something to its intelligence, prosperity and moral strength; but he has not the means of furnishing them from his scanty earnings, with the education that shall fit them for the high responsibilities of freemen. In the annual town meetings, to which we have referred, these two classes are brought together; and the poor man is allowed to thrust his hand to the very bottom of his rich neighbour's purse, and take out just as much money as he wants for the plain but useful and thorough education of his troop of children. The many, whose means are limited, can always control the few, who have an abundance. The right is exercised for a purpose in which both parties are alike interested; there is no motive to abuse it, nor can the avails of its exercise be, by any contrivance, essentially misappropriated.

We see then that the weakest in purse is the strongest in power. And this single feature in that system works like a charm in allaying the discontents and jealousies which spring from the unequal distribution of wealth. At least once a year the tables are turned, and the treasure of the town is laid at the feet of legal voters. It is, moreover, a necessary result of this system that those who pay so

largely for the boon of popular education, should interest themselves to some extent in its character. "If we must pay roundly for education," say they, "let us have good education." And especially is this feeling entertained in larger towns, where a grammar school, or a school for instruction in the higher branches of learning is maintained for the benefit of the whole town—for in such schools the children of the richest and the poorest sit side by side, and no distinction is recognised apart from personal merit.

The direction and preservation of this most wise and beautiful machinery is entrusted to the largest possible number of hands; for, as we have seen, the lowest practicable subdivision of the population is into school districts, and the highest and most unlimited sovereignty that can consist with the preservation of the system is conferred on these districts for school purposes. It would be difficult to reduce the fraction lower, without giving a school to each family. We need not point out the harmony of this great principle of our early school-system, with the popular or democratic nature of our government. *It throws the whole power into the hands of the people, and so distributes it, that its concentration in the hands of a few is utterly impracticable.*

But the crowning glory of the scheme was its bold, uncompromising recognition of religious truth as its basis.

In twice ten thousand forms is this distinguishing feature in the old common school laws of New England to be traced; and even, to this hour, the operative law of the "Bay State" requires of teachers that they use their best endeavours to impress on the minds of children and youth committed to their care and instruction THE PRINCIPLES OF PIETY as well as those of justice, and a sacred regard to truth.

And yet, strange to tell, the learned counsel in the late New York debate, exultingly inquires, "who ever went to a common school to be taught religion? The idea that we are bound to teach religion in our common schools is a perfectly novel idea to an American mind."

We have traced the power over this vast subject into the hands of that little humble secluded republic, *the school district.* And why not leave it there? Why not let these plain husbandmen and mechanics take a share of the annual school appropriation, select a teacher, and have a school to please themselves? If they choose to have a Mormonite or a Shaker, let them have him, and let the minority do, as other minorities do, make the best of their circumstances,

till they can better them. If here and there a single district runs into folly and atheism, the mischief is hedged up within narrow limits. Across the mill-stream, or over the hill, there is a conscientious and godly man, who seeks at once the intellectual and eternal improvement of his pupils, and the momentary reign of error and superstition may serve to excite a counteracting influence to more activity. And even if a whole town should be betrayed into some extravagance or other, it is a local evil, and easily restrained or corrected. Why interfere then, with a system so congenial to the civil institutions of the country, and so happily contrived for the distribution of power and responsibility among the many?

"Because," say wise and influential men, "there will never be a general improvement of the system till there is more concentration of power. We must have better school-houses, and better books, and better teachers. Perhaps the people are not prepared just now to come up to our mark in taxes, and we must therefore have a fund—a public fund—to eke out the supply. And then we must have a few choice men (the aristocracy of educators) to supervise the whole business, leaving the nominal power in the hands of the people, as it ever has been, but silently gathering up a subtle, overbearing, all-pervading influence, that shall bind, never to loose, and loose, never to bind."

But why doubt the readiness of the people to come up to any mark in taxes that the exigencies of the age demand? Every dollar, every dwelling, every foot of land is holden for this very purpose in every town. The people have only to say it, and one hundred thousand dollars are as one thousand.*

"Yes," say the new powers, "but the people are slow to perceive, and still slower to preserve their interests. There are besides wonderful improvements in the science of teaching. New light has sprung up in the path of the educator. Books and teachers of a new order are now to be had—the principles of organization and discipline have become more perfect, and for the purpose of introducing these improvements, we must have an efficient organization adapted to all sects, classes and conditions. The State fund, which is partially to supply the means of sustaining the public schools, is to be distributed. It is common property, and must be

* The various bearings of the fund scheme are set forth in a very convincing manner, in a late pamphlet, entitled "Thoughts on Popular Education, by a citizen of Pennsylvania."

used for purposes of common interest and utility. Hence it must not be applied to pay a teacher, or to pay for instruction, or to purchase books, unless the teacher, the instruction and the books, are alike acceptable to all who have contributed to the public fund. The Roman Catholic interdicts its appropriation to any person or thing that savours of Protestantism, and the Protestant remonstrates against any favour or countenance to Popery. The Protestant sects are also jealous of each others influence, and watch with a wakeful eye for the first deviation from strict neutrality. And over and above all these, the great irreligious or no-sect party rises up, and in tones of thunder would forbid the use of a farthing of the "people's money," for the propagation directly or indirectly of the creeds and dogmas of a false or fabulous religion. Inviolability of conscience! right of private judgment! no Popery! no religion! no infidelity! no prayers! no psalm-singing! no Bible! evils of popular ignorance! universal diffusion of knowledge! Church and State! Religion and Politics! These and similar outcries rend the air; and the voice of reason and good sense is lost in the general clamour.

Wealth and population increase—the public lands are divided, and the surplus revenue (whenever there is any) distributed with a lavish hand, and all is swallowed up in that most popular of all reservoirs, the common school fund. The school tax becomes light, and is finally abolished. The tie which this tax formed between the rich and the poor, and between both and the public school is severed, and the education of the people is in the hands of a small band of government officers, and they in turn in the hands of some active, intelligent, crafty Atheist or Universalist! A wonderful metamorphosis this, and yet by no means an imaginary one. It seems but yesterday since the sovereignty of the people, in each one of their thousand school districts, was supreme. To-day their rights and privileges, *though nominally undisturbed*, are really subject to a foreign power, residing out of the district, out of the town, and out of the country, and associated directly with the government of the state. The transforming power which we have attributed to a public school fund, is not hidden. Placed at the disposal of the state, it must be distributed at the will of the state, and on such condition as the state chooses to prescribe. The state government is organized for specific purposes, none of which embrace the interests of religion. Hence it

claims the privilege of looking over the heads of all sects and bodies of men, religious and irreligious, and refuses to lend itself to favour or prejudice any of them. The right, once possessed by the school district, to order the schools according to its own liking, is thus merged in the general principle, that a public school, receiving aid from a common fund, should occupy common ground, and must of necessity exclude all instruction on controverted subjects; and especially all instruction of a religious character, about which scarcely any two persons perfectly agree. From this point the parties diverge. The political and anti-religious power being in the ascendant, (whatever might be the opinions and wishes of a majority of a given school district) the infusion of the fund-influence sinks the whole system to the level of heathen morality. The principle once settled, that no religious instruction can be tolerated but with the consent of all the tax-payers, and there is an end (as we shall show by and by) to all practicable schemes of introducing religion into the public schools. And it should be borne in mind, that the surrender of the independence of the school district in this matter is made, at present, for a very inadequate compensation.* In the State of New York, for example, the people raise among themselves four dollars for every five that are expended on the public schools, and of this four-fifths, the control would of course rest with those who pay it. It is the one-fifth derived from the public fund which brings all the schools under the stern interdict of which we are speaking.

The nature and extent of this interdict is very fully illustrated in the original progress of a controversy which has just occurred in one of our chief cities. We think an examination of some of its details will show conclusively that it is

* This was one of the strongest arguments used by the friends of specific religious instruction against the Kildare Street Society's schools in Ireland—in that the concession costs more than it is worth. "As a proof how little such a system can prevail," says the Hon. and Rev. Baptist Noel, "the Kildare Society, after ten years exertions, could get less than 30,000 children into their schools, out of half a million that should have been instructed." They proposed to give no religious instruction, except the mere reading of the Bible, in order that they might draw into their schools children of parents who would not take religious instruction at their hands. They agreed to abstain from any explanation or application of Bible truth. And what did they gain by this fearful sacrifice? Why a mere handful of children from a countless multitude who were left in ignorance. And even the Bible reading soon degenerated into a mere heartless form, and as some affirm, was oftentimes entirely laid aside. The gain is utterly disproportioned to the risk.

religion and not sectarianism against which the war is waged. And as this word is of frequent occurrence, we may as well ascertain its application, and that of its various cognates, to our circumstances.

"A *Sectarian* is one of a sect or party in religion, which has separated itself from the established church, or which holds tenets different from those of the prevailing denomination in a kingdom or state." Webster. The word is not in Johnson.

"*Sectarianism* is a disposition to dissect from the established church or predominant religion, and to form new sects." Webster—not in Johnson.

"*Sectarism* is a disposition to petty sects, in opposition to things established." Johnson.

"*Sectary*, a person who separates from the established church, or from the prevailing denomination of Christians—one who divides from further establishments, (Webster) and joins with those distinguished by some particular whims." Johnson.

An example of the use of the last word may suffice for all: "Roman Catholic tenets are inconsistent on the one hand, with the truth of religion professed and protested by the Church of England (whence we are called Protestants); and the Anabaptists, separatists and *sectaries* on the other hand, whose tenets are full of schism, and inconsistent with monarchy." Bacon.

In our country, we have neither church nor monarchy—nothing to adhere to; nothing to separate from. Each man is an establishment, and any two men may make a sect. A sect in this sense is defined by Webster, to be a number of persons united in tenets, (chiefly in philosophy or religion) but constituting a distinct party, by holding sentiments different from those of other men—and by Johnson, it is defined to be a body of (two or more) men following some particular master, or united in some settled tenets. In these senses, the Mormonites are as properly called a sect as the Methodists or Baptists. The Dunkers, Shakers, Universalists, Deists, Owenites, are all sects, and are entitled to equal deference and consideration, *as sects*, with any of the most numerous and influential of our Christian communities.

As we have no standard by which to determine the relative importance or consequence of a sect, we must regard them all as on an equal footing. There was a time in this country, when Methodists and Baptists were thought and

talked of very much, as the Perfectionists and Campbellites are now. Whose province is it to form a scale of rank or consideration, and to assign each sect its proper grade? Who can determine to-day how their position and weight may be shifted to-morrow, and who would undertake to adopt systems, and books, and instruments of teaching, to a state of things so unsettled and fluctuating as this?

The ground we assume, therefore, is that, in this country, there is no practicable scheme of blending any kind or degree of religious instruction with the ordinary exercises of our schools, without some kind or degree of sectarianism, as it is called, and that under these circumstances we must pursue one of three courses, viz:

1. To exclude all religious instruction.
2. To let every sect educate its own children.
3. To adopt a system which shall avowedly embrace religious instruction on the broadest principles that will admit of its free and efficient introduction.

We will examine these methods in their order.

1. *Of the exclusion of all religious instruction.* This course is characteristic of the systems now prevalent in New York and Massachusetts. The necessity of this course is avowed with great freedom and emphasis by Mr. Simpson of Scotland, the author of several works on education. "The Bible should not be taught from two to fourteen. Masters should be dismissed for meddling with the subject of revealed religion. I would prohibit the teacher from any reference in his lessons to Christian doctrines or Christian history. The Bible had better not be placed in the secular school at all. Without this (exclusion) we never shall carry into effect a system of national education." Parliamentary Debate, June 19, 1839.

We are not surprised at this. It is well known that Unitarian influence has the seat of its power in Massachusetts. It has appropriated to its support and propagation the revenues, and charities, and renown of that most ancient and venerable institution, *Harvard University.* The educational interests of the State are in the hands of a Board, a majority of whom are of the Unitarian or some lower school. The Secretary is a Unitarian, and a very considerable part of his salary is (or was) paid by a wealthy Unitarian gentleman of Boston, who also, if common report may be relied on, contributed one half of the amount invested in the two Normal schools of that state. Now we confidently submit that with

such an influence bearing upon the interests of education in that state, it would be very difficult for any thing in the form of positive religious instruction to be introduced into the schools, except with prunings and modifications which the great body of Christian professors in that state, would regard as destructive of its scriptural character. In England, the idea of union with Unitarians in any plan of positive scriptural instruction, on the most liberal principles which dissenters hold, is not entertained, so great and radical is the difference between them and all other bodies of Christians.

We present these views not as in any manner discreditable to those whose religious opinions are involved. With their impressions of truth and duty, any other course would be decidedly reprehensible. But it is discreditable to those who hold the faith of the puritans, and who stand where BRADFORD and CARVER and WINSLOW stood, to be indifferent or inactive while the children of the people are coming to years of maturity under a system of popular education, which takes no sanctions from the religion of the gospel, and which gives power to the mind, without care for the regulating influence of godliness in the heart. We would show them, if this be the plan, the slow and stealthy steps by which the foundations of *evangelical morality* are subverted, and how surely the absence of religious principle from the public schools, will work a corresponding defect in all the social and civil relations of life. We mentioned the New York plan of public instruction as founded on the same exclusive principle, and shall refer to but two sources of evidence, and these have been already introduced.

The first is Mr. Barnard's report to the New York Legislature, (January 1838). The extract we have made, (supra p. 322) is very decisive of the point, and indeed the whole argument of that report is directed to the establishment of the broad position that religion is not taught in the public schools. "If the Christian religion as a system of faith, whether according to our creed or another creed, according to the notions of one sect or of another sect, is not taught in these schools, then of course there can be no pretence, (for the assertion of the memorialists) that religion is supported by the State."

No one can misinterpret this language. The doctrine is that the right of rejecting all religions must be respected as an element of religious liberty, and that the compulsory recognition of any religion is an invasion of that liberty.

The other source of evidence is the report of the New York committee on arts and sciences, from which we have already made one or two extracts. (See p. 318.)

We are furnished, in this document, with some very positive and conclusive declarations. "If any books are used in the public schools relating *in the slightest degree* to the doctrines or ceremonies of the Roman Catholic or *any other religious denomination*, the directors of the school, or those proper officers, should cause them to be *immediately removed.* Religious instruction is no part of a common school education," &c. &c.

A close comparison of these sentiments, with those we have drawn from the reports of the Massachusetts Board, shows clearly that these two States, which are regarded as taking the lead on educational subjects, have virtually discarded the Christian religion, and all inculcation of its doctrines, from the course of public instruction.

The same feature, or rather the same defect, is seen in the character of the district school libraries, which though now published under the express sanction of those states respectively, are as really and truly the creatures of State patronage as if every volume bore the *imprimatur* of the Executive department. So long as there is in these libraries nothing immoral on the one hand, and nothing religious on the other, the state may safely favour their circulation and efficiently further the non-religious principle on which the whole fabric rests. And whenever any objection is raised it will be easy to call it a bookseller's enterprise, and thus throw on all purchasers, "past, present and to come," the responsibility of their acts. When we say concerning the states of Massachusetts and New York, that they solemnly renounce all connexion between religion and public education, we do not mean that this is done in the spirit of hostility or disdain. The ground assumed is that the state is not expected to be religious, that it *is* in its very nature destitute of religious susceptibility. It denies all knowledge of religion and disowns all connexion with or sympathy for her. "Religion has her proper friends, let them take care of her." Her concern is with the spiritual man. The state is exclusively concerned with secular interests, and its power terminates where the authority of religion may be lawfully exercised.

In order to show that the advocates of the non-religious principle are sensible of the impossibility of excluding all religious instruction from our common schools, we quote the

following passage from the report of the debate in the recent New York case. "It is argued," said one of the learned counsellors, "that if the doctrines of some known sect are not taught in the public shools, there is no religion. Why, Sir, we have been taught sound morals in all our schools. I do not know any school in which they have not been taught. We are bound to teach them. Thou shalt not lie, thou shalt not steal, are precepts which we teach in our schools, and if we are bound to teach them, we are at liberty to teach those general religious truths which give them sanction. This is not teaching religion. This is morality, and an invoking of the common sanctions of that morality. We don't teach purgatory. We don't teach baptism or no baptism. We don't teach any thing that is disputed among Christians. We have no right to do so. But we have a right to declare moral truths, and this community gives us that right; NOT THE LAW, but public sentiment. And is there no common principle in which all agree? Is there not a principle to which all religious men refer? And have we not a right thus far to teach the sanctions of morality in these schools? And because we teach the principles which everybody acknowledges and nobody disputes; which give offence to nobody and ought not, are we to be told that these are religious schools? Why, in our common schools we have all been taught the common truths of religion, and yet no one ever went there to receive religious education."

The advocate speaks of the sanctions of moral truth as a subject on which the opinions of all Christians harmonize. Does he not know that the extent of these sanctions, and the authority on which they rest, are among the most prominent lines of distinction between denominations. "Thou shalt not steal" is a moral precept to be taught in school. Where are its sanctions? The command of God as recorded in the twentieth chapter of Exodus. Will you send the pupil to the Protestant Bible for it? Who dare forbid it? And yet hundreds of thousands of Christians will complain that in so doing you expose their children to what they consider mischievous error, for you lead them to suppose, (say they) in the absence of the checks and guards with which they have surrounded the sacred text, that some of their holiest services are expressly prohibited by God himself! Does the pupil inquire for the penal sanctions of this law, and is his eye directed to 1 Cor. vi. 9, 10: "Know ye not that the unrighteous shall not inherit the kingdom of God? Be not de-

ceived; neither fornicators, nor idolaters, * * * * * * * * * nor thieves, &c., shall inherit the kingdom of God. Will the Universalist be satisfied to have the child infer or be told that there is but one other kingdom, that of eternal darkness and despair?

What principle is it to which all religious men refer as the measure of moral sanctions? Who determines what constitutes a religious man? Are not Jews and Roman Catholics and Unitarians and Swedenborgians, religious men? And why should even irreligious men be thus summarily pushed aside? Are they not taxed for the support of our schools, and do not their children frequent them, and does not the very report of the body whose views the advocate is supporting, claim for them the same deference which is paid to their religious neighbours?

It would seem moreover, that the common truths of religion may be taught to a child without giving him religious education. And what are common truths, if the being and attributes of God, the mission and offices of Christ, the divine agency of the Holy Spirit, the over-ruling providence of God, the resurrection of the dead and the eternal retributions of the future world, are not? And what is religious education but to bring the mind and will under the influence of these common truths?

Thus we see that the struggle of the advocates of the non-religious system, to relieve themselves from the dilemma into which they are thrown, respecting the *moral* basis of their scheme, only involves them in greater difficulties.* We

* "A standard of some kind must be had, or else morals can never be taught. Is the standard then by which the Legislature or corporation intend the children of this state or city to be educated, to be the standard of Heathens, or Jews, or Deists, or Mahommedans or CHRISTIANS? For the word *religion* we care nothing: it may be expunged from the language without detriment; and perhaps, in the present bewilderment of men's minds, with benefit. In propriety of speech, as well as of thought, we take *morals* to be the generic term of which *religion* is only a species or an attribute. By morals we mean the science which explains the relations, and their resulting duties, which exist between ALMIGHTY GOD and his accountable creatures; and which, because they *bind* men to the service of GOD, are aptly enough called, (from *religo, to bind*) *religion*. The only question in which we have any solicitude—and in this we do feel a deep solicitude—is, whether the legislature of this state, in requiring and sanctioning a system of moral instruction for the education of the people, have also required and sanctioned the doctrine of our Saviour as the basis and standard of morality?

"The state imposes a tax for the education of the citizens, and inclusively for moral education. But the state prescribes no rule or standard of moral education. Citizens of all denominations are left free to prescribe their own standard,

avail ourselves of a very clear and forcible exposition of their ground furnished by a cotemporaneous print, and the more valuable from the circumstance that it comes from the *locus in quo* of the controversy.

or a standard for their own children. We choose to avail ourselves of the right conceded to us by the state: we choose to prescribe the standard for our own children, and not to accept that which the managers of the Public Schools have provided for us without the sanction of legislative authority. We charge it as a usurpation on the Trustees of the Public Schools, that they have established any standard. Be the standard what it may, Christian, Jewish, Mahommedan or Pagan, the state has neither prescribed nor sanctioned it. Neither did the state suppose that the people would give moral instruction without a standard of morals, for this would be either impossible or subversive of all social institutions. But the state has left the citizens free to prescribe their own standard; and therefore in the exercise of this freedom, and in order fairly to carry out the design of the state, we demand our portion of the public money, in order that we may dispense moral instruction to our children by a standard of our own prescription.

"We are well aware of the difficulty of separating *practical* or *moral* from the *dogmatic* of Christianity. In our view of Christianity, such a separation is impracticable. Still it is no more than what other governments have attempted; and what the Trustees of the Public Schools have themselves aimed to accomplish. We are not prepared to recommend this course to the legislature; but our opinion is, that unless they shall adopt it, they will be driven in equity to the alternative of granting the petition of the Romanists; and, consequently, similar petitions from other denominations.

"We cannot leave the subject without pointing out what seems to us a dangerous fallacy in connexion with it: that morality, in its principles, precepts and motives, is to be conformed to public opinion. We call this a fallacy, because the very fact of dispensing moral instruction to the public involves the office of forming the opinion of the public by means of that instruction. The legislature have repudiated this fallacy. In providing for the moral education of the people of the state, they have in effect declared their determination to form, as far as is in their power, the public opinion of the people of the state.

"The single question therefore is, by what standard of morals does the legislature design that the public opinion of the rising generation of this state shall be formed? By the Christian standard? If so, let them avow and define it. By the standard which the Trustees and Superintendents of the public schools have virtually erected? If so, let them give it their sanction. By the standard which the people in their individual or denominational capacities may choose? If so, let them provide for a *pro rata* distribution of the funds.

"The advantages of a state system, (though as Churchmen we are by no means prepared to recommend its adoption) are, in a political point of view, great and numerous; but if we cannot, or rather *since* we cannot—have a system which fairly acknowledges and establishes Christianity, and so makes it formative of public opinion; and since on the contrary we are forced to take up with a system which does not acknowledge Christianity, and which consequently does not form public opinion by the Christian standard, but which leaves public opinion to degenerate according to the established laws of human nature, and stands ready to follow and adapt itself to it, as fast as it degenerates, since this is the case, why then, as the safer and better alternative, we are inclined to wish that the fund might, by legislative enactment, be distributed to the various denominations, Romanists, Protestants, Jews and Atheists, who may use it, under proper securities and according to their abilities, to advance secular and moral education in their own way." (The Churchman.)

As it is undesirable and impracticable to exclude religious instruction from the schools, the second of the three courses proposed is, *that every religious sect or denomination shall educate its own children.*

We assume that religious people generally of all denominations desire that our school-going population should be religiously educated by some means or other, and a very large proportion of the irreligious would prefer that their children should at least be taught to fear God and obey his laws. Those who attend the public schools in the cities are chiefly from families who have not the means to obtain education elsewhere, and no one who is conversant with such subjects need be told that religious teaching, in a majority of families both in city and country, is very rare and imperfect. It is common with them to reason much after the manner of the state. "We are not associated as families for a religious purpose. Religion is a matter between each individual and God. Industry and sobriety, economy and good order are essential to our comfort and respectability, and therefore they should be observed; but religious feelings and duties, are of individual and not family or social concern." We need not stop to expose the fallacy and danger of such views. They are sufficiently obvious.

Apart from the family, the mass of children in our country cannot receive appropriate religious instruction, unless it is furnished by Sunday or daily schools, and as to the former, (invaluable as they are in the absence of what is better) it is clear that their power must be prodigiously increased before it is adequate to counteract or even to neutralize the influence of examples, and evil communications during the other six days of the week. But who does not know that a very small proportion of the children of this country, are in stated attendance on Sunday schools, or are enjoying even the comparatively meager protection which is afforded by them? A parent therefore who may be desiring that his offspring should be trained up in the knowledge and belief of the Scriptures, and in habits of obedience to the laws and precepts which they reveal, has a right to insist upon the introduction of these principles of education into the process of daily tuition, and especially is he justified in so doing by the unqualified testimony of educators, all the world over, to the truth that religion is to education what air is to vitality. Education without religion is at least as likely to prove a curse as a blessing. We do not say that he

may attempt to compel others to adopt his views. This would be to maintain his rights at the expense of the equally sacred rights of others. But his principles are sound; and whenever a majority of these whose children frequent the school think with him, it is unquestionably their duty to adopt them and make religion, practically, what it is allowed to be theoretically, the ground work of the whole process. Nothing will more forcibly illustrate the relations and bearings of the principles which are involved in this branch of our subject, than a brief history of the controversy to which we have before alluded.

The State of New York, some forty-five years ago, passed an Act appropriating $20,000 for the support of their schools in the different counties of the state, in which the children should be instructed in "English Grammar, Arithmetic, Mathematics and such other branches of knowledge as are most useful and necessary to complete a good English education." This language has been quoted to show, that "at the root of the present towering tree of knowledge in New York, lies a *pure secular education.*" We do not see however that there is any thing exclusive in the words employed. It surely will not be contended that good manners, (meekness, gentleness, truth, kindness, purity, &c.) might not be taught. A bow might be required of the boys and a curtsy from the girls, though a good English education may be had without either. Profane swearing, contempt for authority, disregard for the rules and orders of the school might be reproved and punished, for though not within the express object, they are essentially subsidiary to the usefulness and existence of the school. And if they may be reproved and punished, then surely the principles on which the teacher's judgment and sentence rest, may be explained and illustrated. This is necessary to secure its proper effects, and when we have reached this point without exceeding the limits of a "*pure secular education*," it would be difficult to show, that any thing beyond, in the form of religious instruction, is not admissible.

The small appropriation of the legislature was soon increased by the fruits of several lotteries, but the distribution of it was confined to those who taxed themselves voluntarily to the same or a greater amount. If a town or district was inclined to take care of its own interests or to neglect them in this respect, the state had nothing to say. But in 1813-14 an Act passed, *compelling* towns and coun-

ties to adopt the system, and *authorizing* a tax equal to the dividend of the school fund. And it is worthy of special remark, that although the original act, (the germ of the present towering tree) contemplated, as it is maintained, a *purely secular education*, the Act of 1814, which was in furtherance of the original object, authorized the fund to be distributed, (among others) to such incorporated *religious* societies as supported charity schools, and if an incorporated religious society of Roman Catholics had applied to the distributers of the fund at any time between 1814 and 1824 for a certain portion of the fund in and of a charity school under their care, the application could not have been rejected, for the appropriation would have been strictly legitimate. This is admitted on all hands. It would seem very clear therefore, that the legislature of the State of New York from 1795 to 1824, (so far as it has any bearing on the subject,) furnishes no ground for the opinion that religious instruction was not contemplated as a part of the common school education of the state. It certainly did contemplate for many years such an education as any incorporated religious society might choose to give to a charity school under its care, even if it was *purely religious* and *not at all secular.* Indeed it is admitted that something more than a purely secular education is still contemplated, viz., "*an education which instructs the children in those fundamental tenets of duty which are the basis of all religion.*" This is the very language ascribed to one of the counsel by the report of the late New York discussion.

Up to the 19th of Nov. 1824, the Acts for distributing the school fund of New York, contemplated just such instruction as it is now proposed to give to certain charity schools under the care of a particular denomination. The allowance of which by public authority, is said to be inconsistent with the whole spirit of the laws and constitutions of that state and country.

A year or two before this period, a gross fraud, perpetrated, (as was alleged) by a particular church with the appropriation of the aid which it had received from the state, awakened public attention, and a memorial from the Common Council to the legislature, urged the pregnant inquiry: "Whether the school fund of the state is not purely of a civil character, designed for a civil purpose, and whether therefore the entrusting of it to religious or ecclesiastical bodies is not a violation of an elementary principle in the politics of the state and country."

A report on the subject by a committee of the legislature answered this inquiry of the Memorialists in the affirmative, and therefore an Act was passed authorizing the corporation of the city to determine, at least once in three years, what institution or schools shall receive the school money; which Act is now in force except that in the revision of the statute, the word "societies is substituted for institutions."

It is to be carefully observed that neither the memorial nor the report of the committee to which we have reference, is any part of the law. So far as as the reasoning is sound and pertinent it should have its due weight, let it come from what source it may; but the ACT REQUIRES NO CHANGE IN THE PRINCIPLE OF DISTRIBUTION. If the corporation see fit to make any, the Act gives them the authority. It cannot be truly said therefore that the legislature has ever interposed its authority to prevent the distribution of the school money in New York to incorporated religious societies, supporting charity schools, if the corporation shall see fit to appropriate it to such uses.

The corporation have determined that the school money for that City shall be apportioned in a fixed ratio to the public school society and certain other societies and schools of various descriptions, now amounting to nine in number. The first named institution has however thirteen-fourteenths of the whole, and provides perhaps for one hundred schools. And what is the public school society? Certainly a very efficient, benevolent and excellent society. But what is its object? Is it to give a "*purely secular education*," in accordance with the late construction of the law? Does it act on the principle that "religious instruction is no part of a common school education," "that it is foreign to the intentions of the school system and should be instantly abandoned?" Let us see. The original Act of April 9, 1805, authorized the "establishment of two or more free schools for the education of poor children who do not belong to or who are not provided for by any religious society." And was it designed that these neglected children shall have a *pure secular education*, or a secular and moral education combined to the exclusion of that which is termed a religious education?

The design, as declared by the original Acts, and set forth in the supplementary Acts of April 2, 1806 and February 27, 1807, was to implant in the minds of children the principles of RELIGION, not those "fundamental tenets of duty which are the basis of all religion," BUT IN RELIGION ITSELF.

And not to follow the history of their operations minutely, it may suffice to say that in several of their latest reports, the same design is recognised with great distinctness. But we shall advert to but one, the thirty-third.

"The constitution of the society, and public sentiment, wisely forbid the introduction into these schools of *any such religious instruction as shall favour the peculiar views of any sect.*"

It is to be observed that the foregoing extract justifies the exclusion of sectarian (not religious) instruction from their schools *by the constitution of the society and public sentiment.* If the constitution of the state or the provisions of the statute were, in the remotest degree, auxiliary to this construction, would they not have summoned these to their aid? Though the laws have omitted to *provide* for religious instruction, THEY DO NOT PROHIBIT IT. The moment a legislature or popular convention should attempt to prescribe limits within which religious instruction should be confined, the impracticability of the measure would be demonstrated. It would become evident at once that there is no point short of the positive prohibition of all religious expressions, allusions and actions, or what is the same thing, the position contemplated by the memorial of W. G. Griffin and others to the New York legislature; and even then it would be equally impracticable to constitute a tribunal to establish the rules of evidence, or to provide sanctions appropriate to the execution of such a law. We must conclude, therefore, that the public school society does actually give religious instruction in spite of the exclusive interpretation which may have been put upon the law.

III. We are inclined therefore to adopt the only remaining course suggested, viz. to embrace in our public school systems generally, the efficient, practical, intelligent, constant inculcation of scriptural truth as received by the great body of Protestant Christians in the United States, and that the patronage and countenance of Christian people in the respective districts, should not be extended to any schools from which religious instruction is excluded.

We are disposed to believe, or at least to hope, that this position might be taken with reference to the educational interest of this country. And in relation to the nature and practicability of such a scheme, we may say, that there is perhaps no point in which all foreign systems of education are more stern and unequivocal than in requiring that reli-

gious instruction in common schools should be thorough, in contradistinction to that indifferentism or liberality which looks upon "all religions and no religion," with equal complacency. We do not mean that they would require the "lesser books to have alternate lines of scripture and syntax, of psalms and sums, combining orthography with orthodoxy, and piety with the pence table," nor do we think it necessary (even if it were practicable) to define its precise place in the circle of school duties. Indeed it is inaccurate for us to speak of the limit or space which religion, *as a ground of education*, is to occupy in a given system. This mode of expression befits those countries where religion is inseparably connected by law with all the political and social relations of the citizens. There religion is strictly a branch of science. It is its history, its doctrines, (as expounded under the authority of the government,) its rules and orders, its outward observances and requirements, that are to be understood. Hence with them an irreligious man is regarded as deficient in education.

In our country, where there is no established religious faith or order—we must have religion in its spirit. To give it a local habitation or a name, is to deprive it both of place and power, and to make it "an awkward appendage—an incoherent part of our public seminaries which seem a clog upon the whole machine." If we have it at all, it must rather be "the main-spring of every movement, it must rule and influence every thing, like the divinity itself whose searching energy pervades all space, and originates as well as directs the gravitations, motions and actions of all the bodies in the universe."* The working of this principle in our schools may be illustrated by supposing (what ought to be the fact) that the Constitution of the United States is adopted a as common school book, to be read and studied, or committed to memory, or made a text book, as the teacher may find occasion. Now there are certain grand features of this instrument which give it its distinctive character and importance; among which are the following: that all legislative power resides in Congress, that one branch of this body represents the states as sovereignties without reference to wealth or population, while, in the other, the twenty-six communities are represented solely by numbers—that Congress alone shall impose and collect duties, &c.—that commerce between

* Christian Observer, Vol. xi. p 430.

the states shall be free—that individual states shall not coin money or make any thing but gold and silver a tender—that the judicial power shall be independent of the executive and legislative—that the confederacy shall protect each individual state in the enjoyment of a republican form of government, &c. &c.

Now there are conflicting opinions regarding the force and construction of sundry provisions of this constitution. For example, Congress has power to provide for the calling forth of the militia to execute the laws of the union, suppress insurrections and repel invasions. This is a general principle, and its use and bearing may be properly set forth to a class or school of boys, who are sufficiently advanced to understand and be interested in it. They may also very properly be told that during the last war with Great Britain the question arose whether the state is, in any case, at liberty to judge whether either of the exigencies contemplated has occurred, and also whether the militia when called out are to be under the command of the state or of United States officers. The leading arguments used on the one side and the other would be in place, and it would be seen that great principles are involved in what might seem to be very unimportant provisions. For it is well known that the discussion of these points wrought up the passions of men to a very extraordinary degree of excitement, and arranged political parties in the most violent opposition to each other. No rational parent will object however, whatever his private views might be to such an elucidation of this passage of our constitution as we have supposed, and he would not fear that the teacher was exerting an undue political influence over the minds of his sons by so doing.

We might apply the same remarks to various other topics, such as the right of the general government to construct works of internal improvement, to establish a national bank, a protective tariff, &c. &c. It is obvious, we think, that all the peculiarities of our constitution and form of government might be thus delineated, so that a class would fully understand the general rights and duties of citizens, without broaching a single topic that should engender improper bias or prejudice. Nor will it be necessary to introduce the subject with stiffness and formality, the lessons and occurrences of the day, an affair in the play-ground, a newspaper paragraph, an election, an interesting item of foreign intelligence, &c., would open the way for a multitude of apposite illus-

trations and comments, and for showing the force and application of principles to persons and subjects, and thus almost insensibly a school would obtain a very thorough general knowledge of the constitution without one set lecture or exercise.

And we may present a case still more analogous. The constitution of the state of Pennsylvania, Art. ix. 6, 7, declares that "no person who acknowledges the being of a God and a future state of rewards and punishments, shall, on account of his religious sentiments, be disqualified to hold any office or place of trust or profit under this commonwealth." Of course we are constrained to conclude that a person who does not acknowledge these two religious truths would be disqualified to hold any such office. Now it is certainly right and proper that every boy receiving instruction in the public schools should be taught the grounds or reasons of these two articles of faith, a belief of which is so essentially connected with the rights and privileges of citizenship. But it is difficult to conceive how a plain teacher would be able to prove the latter of these doctrines without some reference to some version of the scriptures, and then there would be many questions occurring to a shrewd child, and necessarily growing out of this subject, which it would be difficult to answer without reference to the nature and employments of that future state, and to the being and attributes of God. Could a fair and satisfactory exhibition of the truth be presented without much direct religious instruction? It might offend the Atheist and the materialist, and perhaps many others, but while their constitution contains this clause, is not such instruction due to the children of Pennsylvania, maugre these and all other objections?

We can proceed to suggest two or three reasons for the opinion that the public schools of this country should be decidedly under the influence of *Protestant Christianity,* without proselytism or dogmatism.

1. The peculiar character of the institutions of the United States involves, in the same respect, a good and an evil. The evil is that we are shut out from the benefits that might otherwise flow from the experience of other countries, and the good is that we are free from the influence of prescription and prejudice, and are at liberty to mould our plastic institutions to any model we choose. The educators and debaters of the old world have torn the subject of popular education into shreds and fibres of almost invisible minute-

ness. The whole body of it has been laid open and dissected to the last divisible particular. But their theories and conclusions are quite out of place whenever we attempt to use them in our country. We occupy an entirely novel position. If it was an object to ascertain what is the highest degree of pressure society will bear in the shape of arbitrary domination or exaction, without sundering its bands and forcing its resolution into new elements, history might furnish an unerring scale. But we are on an opposite experiment. We are determining how much *liberty* society can bear without falling by its own weight—or what are the weakest bands that will hold men together in a safe, happy and improvable social state. We have government, but it is the creature of public opinion. It is to-day what the people of to-day will have it. To-morrow the people change, and the government changes with them. There is nothing old for us to venerate—there is nothing stable for us to cling to. As a nation, we have neither throne nor temple, nor altar. That which in other governments is fixed and rigid, in ours is most shifting and flexible. That which in them is "stern and solemn," is with us "the sport of temporary emotions and impulses." Public sentiment—our sovereign lord and master—may be—it often has been the most ruthless, reckless, merciless tyrant. In our country, and in late years, it has sanctioned deeds of deep criminality. Public sentiment is expressed in the will of the majority. Of course the majority give us our government and laws. The governing power is constituted by a direct representation of the principles and wishes of the people. Hence it has been well said that we might as reasonably expect by letting down a bucket in the sea to bring up milk, as to find a religious government emanating from an irreligious people, or the reverse. To say that infidelity and atheism are predominant in the government, is only to say that such principles predominate among the people. No artificial arrangements or temporary expedients can alter or essentially modify this state of things. Every government institution is an image of government itself, as the government is an image of the people. And to influence the government we must influence the character of the people. It may be said of ours with much more force than of the British government, that if Protestants desire that government institutions should bear a Protestant character, it must be by maintaining and advancing Protestant influence in the mass of society. And it is

well that Protestants should have fully and distinctly before their eyes this truth, that just in proportion to the advancement of Roman Catholics in influence, (that is in numbers, wealth and intelligence) Protestant institutions are brought into danger. Should this country—the people—the generation for the time being—become opposed to Protestantism—no legislative enactments—no guards or fences of the constitution will preserve Protestant institutions from change or destruction.* And how are Roman Catholics to be prevented from acquiring this predominance? Surely not by such measures as have been adopted in New York; not by such representations of their character and designs as are made in the debate on our table. These are only calculated to exasperate and goad them, on adding to the natural thirst of all sects for power, "the still man stimulating desire of breaking the power of an oppressor and mortifying an implacable enemy." It must be done, and candidly be done, by putting the school children of the country under Protestant influence, and, this it effected at all, must be effected by the zeal and labour, and self-denial of those who love Protestantism. The prediction has come forth from an influential source that Protestantism in our country is destined to pass away into infidelity, because it has no vital elements. We think the spirit of Protestantism is the spirit of liberty, and that that spirit is as permanent as man's existence, and can be extinguished only in extinguishment of the soul. We, therefore, maintain that Protestantism should give a distinct character of our public schools.

2. The influence of Protestant Christianity is to be propagated by Christian, and not by political influence. It might seem to a stranger taking his position upon the Roman Catholic side of this question, as if religious Protestants were banded together against a common enemy, and that to carry their point, they were willing to form alliance offensive and defensive with the irreligious and anti-religious—the world, the flesh and the devil. And one of the stipulations of the treaty would of course be, that religion is discarded. This is not in the letter we admit, but when the state comes to the districts, with her hands full of money, she proposes, in substance, this condition, (at least so her agents construe her wishes) and the schools accept her gift on those terms. Her

* Thoughts on the mixed character of government institutions in Ireland, &c. By Rev. James Carlile, p. 15.

language is:—"I have a large sum of money to divide among you annually, and I only ask in return that you should let alone the vexed subject of religion. You know there are differences of opinion among the people—we have a mere political transient existence for political purposes, and can know nothing beyond the maxims of self-preservation. If you are willing to make your schools of like character, here is the consideration."

Now it is not strange that worldly and thoughtless men should fall into this snare, but it is passing strange that good men—Christian men—evangelical men, and even ministers of the gospel should lend their influence to the support of a scheme so unsubstantial and baseless. If it were carried out as it is here presented, it would not be tolerated, but the Bible comes in once a day, and moral precepts are inculcated, and because there is nothing in the instruction about the trinity, or predestination, or the perseverance of the saints, &c., they call it a compromise to avoid sectarism, but surely they must know that the essential article of the compromise is broadly and most offensively sectarian—that it divides between the two grand sects of Christendom *(and that too in favour of the minority)* on a point of vital importance to each party, a compromise of which must involve the defeat and ruin of one or the other!

The principle for which we contend would bind together the Protestant class or order of sects; and hence the term free Protestant schools would denote their true character. To be consistent Protestants, we must value, defend and propagate by all lawful and proper means the principles of the Protestant faith. To the irreligious, these principles are of no moment, except in a mere speculative regard; but the great body of the Protestant Christians in this country, hold them to be of vital importance. The right of private interpretation—the inspiration of the Holy Scriptures, and their sufficiency as a rule of faith and practice—justification through the atoning sacrifice of Jesus Christ alone—the necessity of regeneration by the spirit of God, the resurrection of the just and the unjust, and the everlasting condemnation of the wicked, are among the doctrines held by nineteen-twentieths of the religious Protestants of this country. Of the residue of the community, the larger portion would prefer on the whole, (as a safeguard) that children should be religiously taught, but they are for the most part indifferent as to form and substance. Let a good school be opened

in any neighbourhood, and very rarely would it be found that any family objects to sending its children, because a religious influence pervaded the order and exercises. A daily prayer, offered in a proper manner, recognising the great doctrines of the Reformation, would not be a bar to their attendance, nor would a habitual reference to the divine precepts of the gospel, and the fearful sanctions of eternity, be considered at all out of place or season.

The compromising system now prevalent in this country is the most unchristian that is to be found on the earth. In the mixed schools of other Christian countries, the essential doctrines of our common faith are honourably recognised—in ours they are contemptuously set aside. We say "*recognised*" when we might better say *inculcated*—boldly, efficiently, unequivocally inculcated. We have a very opposite illustration of this remark in rather an anomalous class of schools in Liverpool, of which we have a very interesting account from *Mr. Trevelyan* in one of the pamphlets on our table.

"The corporation schools of Liverpool are maintained out of a common fund which belongs to all the inhabitants of the borough, and they are managed by the town council, acting through a committee of their own number, which is subdivided into smaller committees for the superintendence of the details of each school. The population of Liverpool is probably 250,000, of whom 80,000 are supposed to be Irish. These schools were established in 1827 on strict Church-of-England principles, but in 1836, the plan was modified, so as to admit as much of religious instruction as might be agreeable to the views of the Christian community at large, and to offer every facility for farther instruction by ministers of religion in such points of faith as are not held in common. The teachers are required to be of *decided religious principle*, and of course there is an approved standard up to this point. The schools are located opposite to each other, one in the northern and southern sections of the city, and each of them has three departments, boys, girls and infants. The whole number taught is 1,686, of whom nearly two-thirds are Catholic children. The pupils are admitted to the infant school at two years of age, and at six are transferred to the boys' or girls' department. In the infant school, the exercises of each day are commenced with a prayer, in which all unite. No distinctions of faith are recognised in this school. Boys and girls, Catholic and Pro-

testant are taught together to fear God; to confess their sins, and to seek forgiveness of the same through the atonement and intercession of the Lord Jesus Christ.

The nature of the instruction in the higher departments, and the character of the books are decidedly evangelical. They distinctly enforce the doctrines of the divinity of Christ, the atonement he has made for sin, and the offices of the Holy Spirit in the work of regeneration and sanctification. The religious instruction is Protestant and orthodox, but not anti-Roman Catholic. The idea of accommodating religious instruction to the taste of all, finds no favour in these schools.

Besides this common instruction, the last hour of every afternoon session is devoted exclusively to religious instruction, which is given to the children of Roman Catholics and Protestants apart, and on one day in the week the latter are separated—the children of Dissenters and of Churchmen being religiously instructed by those of their respective denominations. The Bible is used only during the hours devoted to religious instruction.

We may have many doubts as to the utility and result of some parts of this system. We have introduced it only to show how much religious instruction is allowed in mixed public schools in Liverpool, and to urge the inquiry, why we must be satisfied with any less in ours. We think schools might be maintained, without interfering with Roman Catholics, or seeking their co-operation, where Protestant children might be instructed in the branches of useful learning, and, at the same time, in the great doctrines and duties of the Christian religion, without giving offence to any candid and sober-minded parent.

3. The general diffusion of the scriptures, and a knowledge of their contents must be effected through Protestant exertions, and mainly through the agency of school children.

The Bible is our political panacea. It must not be laid away in a dark corner, nor boxed up with useless rubbish. It must send forth into all ranks of society the most active, penetrating and powerful influence.* The history of man from his very origin confirms and illustrates the sad story of his fall. All his motions and tendencies show that he has broken away from some controlling power, whose influence

* "A Protestant state cannot fairly be called upon to furnish any other education for the lower classes, than that education in which the Bible would be a fundamental part." Digest of Evidence, &c. p. 66.

was essential to his safety and happiness.* And now, wherever we find him, we find a poor, weak, helpless, erring, ruined creature. There are indeed various grades in the depth and odiousness of human degeneracy, as there are various degrees of violence in the paroxysms of insanity —but the disease is the same—the difference is only in its development. As soon as the social relations are assumed, the evil passions of our nature (pride, selfishness, ambition, avarice, &c.) like a legion of fallen spirits, are awakened in the heart, and would separate utterly between man and man, but for the restraining influence of some law. It may be the law of self-preservation, or the law of conscience, or of human society. But it is only the eternal and unchangeable law of God, that is universal in its obligations—that is suited to man in all states and conditions of his being, and that is adequate in its requisitions and sanctions to sustain the holiness and justice of Jehovah's throne. This law, violated in the first transgression, was honoured in the obedience and death of the Lord Jesus Christ, and the man who believes in him, though he were dead, yet shall he live, and the man that lives and believes in him shall never die. Here, and here alone is found the restoring principle—the mystery of the divine economy. And if we look over the wide world, we shall find that the knowledge of this mystery marks the boundaries of social and individual happiness. It is the knowledge of God, not as Creator only, but as the moral governor of the universe, manifesting his glorious attributes in the mysterious purposes of his mercy towards our fallen world, that makes the striking difference. "We admire,"

* "The object of the common school system of Massachusetts," says a distinguished advocate of the new philosophy, "is to give every child in the commonwealth a free, straight, solid pathway by which he could walk directly up from the ignorance of an infant to a knowledge of the primary duties of man, and could *acquire a power and an invincible will to discharge them.*" First Report of Secretary of Massachusetts Board of Education, p. 24.

This will do for a rhetorical flourish, but do tell us whether to love the Lord our God, with all the heart, and soul, and mind, and strength, and to love our neighbours as ourselves, must not be ranked among "the primary duties of a man," and in what part of the common school education of Massachusetts is the "invincible will to discharge these duties acquired?" Alas! alas! poor human nature. It may be easy for the man whose breasts are full of milk, and his bones moistened with marrow, to boast of an "invincible will"—but how shall he arise whose whole head is sick, and whose whole heart is faint, and who is covered from the crown to the sole with wounds and bruises, and putrifying sores? To will may be present to such an one, but how to perform that which he would, he knows not.

says the Archbishop of Paris, "the prodigious labour of thought employed upon all that nature displays to the senses upon the laws of the physical and the moral world, upon the monuments and traditions of the past, and upon the interests of the present; but a disease of violent wills and feeble minds prevails at present, and the symptoms are the most common wherever human science prevails over the science of God." The Bible is the great *elevator* of our race. It gives man a knowledge of his unalienable rights, duties and destinies as a reasoning, reflecting, responsible and immortal being, and shows him why the fear of God takes away all other fear. It may be—it has been—dreadfully perverted. It has been so wrested as to furnish pretexts for every species of cruelty and oppression, and apologies for lust and crime. It has brought into collision the fiercest passions of our nature, and has been called to sanction deeds of revolting enormity. And does not the same sun which quickens into life the flowers and fruits of the earth, hasten the decomposition of nature, and fill the air with noxious and offensive odours?

The Bible is the *corrector* of moral and social evils. It teaches man that the whole of the present life, as it respects joy and sorrow, disappointment and success, wealth and poverty, fame and obscurity—is but the first stage in a journey of countless millions of miles. Hence it "offers motives of endurance and forbearance, which cannot elsewhere be supplied." To the poor, the depressed, the wronged, it reveals a power over all supreme, and pledged to make all that is crooked straight, and all that is wrong right. It disowns anger and revenge, and even conciliates chief enemies. It proposes the only unfailing specific to soothe, restrain and console the spirit of man—SUBMISSION TO GOD—and it establishes, by sanctions peculiar to itself, the relations of ruler and subject, and man with man.

It is the *preventer* of false and sceptical opinions. It interposes its authority between the diseased and irregular action of our blindfold reason, and the dogmas of a vain philosophy, which we should be foolish enough to entertain, and claims our implicit faith in its sublime and mysterious truths. Our partial and imperfect knowledge of the simple elements of truth; our ignorance of first causes, and the confused and distorting medium through which we contemplate second causes and their effects, must necessarily lead to false conclusions, and should constrain us, if we are wise, to

submit our judgment to the revelation of God. Philosophy has no power to discern between the spirit of man that goeth upward, and the spirit of a beast that goeth downward, but the blessed gospel of our Lord and Saviour Jesus Christ comes in with its authoritative voice, and assures us that they that are in their graves shall come forth, that the dead shall be raised incorruptible, and that every man shall then receive, according to the deeds done in the body, whether they are good or evil. This annunciation spreads light over all the deep mysteries of Divine Providence, and gives the wearied mind a sure and certain rest. It is to this and kindred truths, that the minds of school children should be taught to cling. This is the shield of faith, wherewith they shall be able to quench all the fiery darts of the devil.

The Bible is the preserver of society. It is the grand repository and illustration of those principles of justice, purity, temperance, industry, frugality and moderation, upon the observance of which the very existence of a commonwealth depends. Whence come the modern theories of agrarianism, socialism, and a train of still more destructive and delusive notions about new modifications of human society, and enlarged liberty for human reason and passion? Do they come from those who believe, or from those who despise the Bible? With an early, intelligent and thorough acquaintance with this sacred volume, the youth of our country will not suddenly become the dupes of imposture or the victims of atheism and corruption.

The Bible is the only great *renovator* of the social state. For man, even at the summit of his present attainments in wisdom and virtue, to form a scheme for this end, is as if the victim of plague or leprosy were to go upon a healing mission with the disease rife upon him. The bane would be more powerful than the antidote, and contagion and death would hang upon his polluted footsteps. But the Bible reveals the principles by which the throne of eternal right and justice is sustained, and which secure (against every contingency) the order, harmony and endless progression of the intelligent universe. In the observance of these principles, human society, even in this fallen world, would soon assume a new character. Fraud, oppression, love of power, ignorance, superstition, war, idleness, discontent, intemperance, licentiousness, (we might fill pages with the catalogue) would be done away, and the arts of peace, the interests of humanity and the love of God would be cherish-

ed and promoted all over the earth. The chimera of renovating society, by the equalization of property, the dissolution of domestic relations, the abrogation of authority and government, and the introduction of man to a state of absolute personal independence, springs from ignorance of human nature, from a rejection of the authority of the Bible, or from a perverted and whimsical apprehension of its truths. The gospel of Jesus Christ is alone adequate to produce a transformation so complete, so permanent and so universal; and we look to a period when it will accomplish this grand design. But to this end it must be *taught* in our schools (not READ merely); it must be studied and applied, (not *heard and forgotten*)—it must be the book of books, the study of studies—THE MASTER OF MASTERS—the universal regulator of the mind of man in all periods, conditions, pursuits, relations and circumstances of his life.

It is under these impressions that we most earnestly protest against the doctrines which appear to find favour in some of our eldest and most influential states, and those states in which the *machinery* of education seems to be most expensively and efficiently in motion. 1. We contend for the free and unrestricted use of the Bible for all lawful and proper purposes in all public schools. 2. We protest against the interference of the government with the matter and manner of instruction, and especially against annexing any condition to its grants, that shall affect in the slightest degree the independence of the whole district or of the teacher whom they employ—and least of all on the subject of religious instruction. If there must be political interference of any kind, let it be boldly claimed and clearly defined.

3. We appeal to Christian men of all Protestant denominations and parties, to renounce all connexion with any system of public instruction which does not fully and distinctly recognise the religion of Jesus Christ, revealed in this gospel, as the ground-work of the whole scheme. If our teachers are incompetent to administer a system of instruction, embracing these controlling principles and motives of the human mind, let them be qualified. Unbelievers in his gospel, bigots, fanatics and ultraists of any class, may have schools on their plan. If ours must be smaller and more expensive, because of their separation, let us retrench some of the grosser extravagances of fashionable education, and apply the fruits of our economy to the better service of those who

used it. And if the trifling boon of government patronage cannot be enjoyed, but upon terms which may (and probably will) convert it into a curse, let us throw ourselves upon the principles which educated the generations of our fathers, and which educated them in reference to eternity as well as time. Fidelity to these principles will give to truth and liberty a speedy and perfect triumph.

ART. II.—*On the relation between the Holy Scriptures and some parts of Geological Science.* By John Pye Smith, D.D., F.G.S. New York: D. Appleton & Co. 200 Broadway. 1840.

IF we have not misinterpreted certain indications of the public mind, there exists, especially among those whose means of information are not commensurate with their thirst for knowledge, a strong desire to be acquainted with the progress of geological inquiries, and their bearings upon the Scriptures.

Geology has a peculiar claim upon the attention of the ministry, and the friends of revelation generally, from its professed and obvious relationship to subjects which belong to their peculiar province. What that relationship is has been warmly disputed—whether inimical or friendly or neutral—and in the issue of the dispute we are deeply interested.

We propose therefore to give a brief sketch of the origin and history of geology, and point out the indications which satisfy us perfectly of the part it has to play in settling the controversy between the friends and foes of revelation.

The observations and reasonings of geology may be traced back, with some degree of certainty, to the early part of the 16th century. In making some improvements in the town of Verona, in Italy, a large number of shells were discovered imbedded in the earth. Similar facts had been noticed before in several instances; and even so early as the time of Strabo we find him accounting for these fossil shells, by supposing them to have been deposited at the bottom of the ocean, and elevated afterwards by earthquakes. But little attention, however, was paid to the subject; and it appears to have been wholly lost sight of for a long period.

The discovery at Verona attracted the notice of the learned

men of the day very extensively; and gave rise to discussions of such warmth and interest, that the subject has never since passed entirely out of view. The questions which grew out of the discovery we have mentioned, were, first, whether these fossils were real shells, and had actually belonged to living animals; and, secondly, whether, if this were so, their deposit, in the situation in which they were found, was effected by the deluge described in the Bible. The negative of the first question was for some time the prevailing doctrine of the learned; and various theories were framed to account for the existence of these fossils. Some maintain that they were the result of a certain fat matter set in fermentation by the natural heat of the earth. Others insisted that they were nothing but stones which had received a peculiar form from the influence of the stars. The celebrated anatomist Fallopio, of Padua, taught, that they were formed by "the tumultuary movements of terrestrial exhalations," that the elephant's tusks were only earthly concretions, and that the vases and other pottery of the Monte Testaceo, near Rome, were "sports of nature to mock the works of man." A professor of anatomy at Basil referred the bones of an elephant, found at Lucerne, to a giant at least nineteen feet high; and, in England, similar bones were, it is said, regarded as those of the fallen angels! The question, however, was ultimately settled in the affirmative: and the whole force of the discussion was turned to the second query above named, viz. whether the phenomena of these remains could be explained by the deluge of Noah. The affirmative was maintained by the advocates of revelation, who were by no means sparing in applying the epithet of infidels to all who questioned the truth of their dogmas.

Almost the only good effect which followed from these warm discussions, was that men were led to investigate and accumulate facts, and thus prepare materials for sounder inductions. This disposition was increased, by the unsatisfactory result of the labours of Burnet, Woodward, Whiston, Leibnitz and others, which grew out of what they deemed the anti-scriptural tendency of geology, in constructing theories of the earth which should account for its original formation and subsequent changes, according to their understanding of the Bible, on principles which were not only hypothetical, but whimsical. We have not space to give even a specimen of these visionary theories. From the observation and accumulation of facts, relating to the surface of the earth,

sprung the science of geology, more properly so called. The first attempts worthy of mention, at generalizing and explaining these facts, resulted in the formation, about fifty years ago, and almost simultaneously, of the two great theories of Werner and Hutton, the one a Professor of the art of mining in Germany and the other a celebrated Scotch geologist and physician. These theories are more currently known as the Neptunian and Plutonian; because the one referred the formation of the earth's crust solely to deposits from water, and the other contended, that their materials were all originally produced by the cooling of a melted mass, in which state the earth was supposed to have been originally formed.

Our present design will not lead us into a more minute description of general theories, and the arguments by which they have been assailed and defended; nor will our limits permit it. We pass on therefore to give a rapid sketch of the general facts and opinions of modern geology, only so far as they are indispensable to enable the general reader to understand the points of contact with the Scriptures.

To a common observer, the surface of the earth appears broken and confused—made up of mountains and valleys, and plains, coated with soils and rocks of infinite variety, and all apparently without order and without design. When however, it comes to be examined with a close and practiced eye, and its depths explored with the torch of science, the apparent confusion admits of being reduced to order, and the whole arrangement, instead of being accidental, is referible to certain principles, as fixed as the law of gravitation. The crust of the earth instead of being a jumbled mass, is found to be composed of certain layers or strata, of given materials, whose surfaces intermingle, but which are still perfectly distinguishable; and which always follow a fixed order in their relative arrangement. Some of these strata are wanting in particular localities, and they vary greatly in thickness, but they never change places. They are like the leaves of a book correctly paged;—sometimes one, and sometimes several are missing, but they are never misplaced. The thickness of these layers as they are observed to emerge from beneath one another, "like the edges of so many cards swept slantingly aside," is commonly estimated at ten miles. This is the portion of the earth which it is the province of geology to examine; and on the observation of which, all its principles and reasonings depend. And it is only by the

outlying of the edges of these strata, in different localities, and at different elevations, that they become subjects of study. It would be impossible to perforate the aggregated mass far enough to gain information by this means of their relative position and magnitude, and the materials of which they are composed. The deepest mine in the world, so far as we know, that at Kitzpuhl in Austria, which is a little more than half a mile in depth, only burrows beneath the surface of the immense mass of these statified formations.

Of the interior or central mass of the earth, of course nothing can be known by actual observation, but the prevalent belief of geologists is, that it is in a state of igneous fusion, at a depth of about thirty miles from the surface. This belief is founded on the fact, that the temperature of the earth is found to increase in a fixed ratio proportioned to the depth, so far as it has been perforated,* on certain of the phenomina of volcanoes and earthquakes, and on the evident marks of the action of fire, on the lowest series of rocks that has come under actual observation.

As it is not indispensable to our purpose, we shall not attempt to criticize, or even describe the classifications of the geological strata, adopted by different authors. It is sufficient to call attention to the immense depth of the aggregate mass, and to state that it is divisible into layers, characterized by their materials and arrangement. The well marked difference in the mineral character of these strata, was the first to attract attention, and furnished the primary grounds of their classification. The application of comparative anatomy, in the study of the organized fossil remains which abound in all except the lowest formations, marked a new era in geology. This era is due mainly to the labours of Baron Cuvier and Alexander Brougniart, in France, and

* The subject of the internal heat of the earth is extremely curious; and has received considerable attention. Numerous experiments have been made to ascertain the rate of increase in the interior of the earth. M. Aargo makes it 1 . 8, Fah. for 101, 2 Eng. feet. (Journal of Franklin Inst. June 1838,) Kupffer states the average increase in all the countries examined at 36.81 feet for each degree. (Ed. Jour. Science, April 1832.) The British Association have fixed upon forty-five feet to a degree. Important papers may be found on this subject in the Ed. Jour. Science. American Jour. Science, vols. 32 and 34, and Cordier's Essay, "Sur la temperature de l' interieure de la Terre." Those who are at home in the highest mathematics, may find the subject most profoundly treated by Baron Fourier, maintaining the existence of a central heat, and by M. Poisson, in his elaborate work entitled Mathematical Theory of Heat, in which he accounts for the facts observed on other principles entirely.

William Smith in England.* Two important results followed from these investigations:—first, that corresponding strata, in localities widely apart, could be identified with considerable certainty by their fossil remains; and secondly, by the profound anatomical skill of Cuvier and his successors in that department, these fragments of animal and vegetable remains were restored, so as to display their original and complete form, and to give data for a probable opinion as to to their specific natures and habits. These fossils, thus restored, were classified and arranged, and their relations to existing genera and species were minutely pointed out. To such a degree of perfection has this science been carried, "that from the character of a single limb, and even of a single tooth or bone, the form and properties of other bones, and condition of the entire animal, not only the frame work of the skeleton, but also the character of the muscles, by which each bone was moved, the external form and figure of the body, the food and habits, and haunts and mode of life, may be inferred." (Buckland's Bridg. Treat.) It happened in several cases, where Cuvier had restored fossil animals, on the principles of comparative anatomy, that more complete skeletons were afterward found, and in every such instance his conjectural restoration proved to be correct. See his "Recherches sur les Ossemens fossiles."

We have now brought into view, historically, all the principal elements of geological reasoning, so far as we are concerned with it at present. These elements are the extent of the formations of which geology treats, estimated at ten miles in depth, the arrangement of these formations in layers, or strata, the mineral character or the nature and materials of the rocks which form and distinguish them, and the fossil organic remains which abound throughout the whole mass with the single exception of the lowest series of all. These are the great facts that are to be generalized and accounted for. In the mere matter of classification and description, geologists are now tolerably agreed; so far as observation has furnished them actual data. The engrossing part of the business is to deduce the laws which have governed their phenomina, and to trace the history of their original produc-

* The works which gave the impulse to geology in this department, were those of Cuvier and Brougniart, "On the Mineral Geography and Organic Remains of the Neighbourhood of Paris," which appeared in 1811, Cuvier's splendid work on "Ossemens Fossiles" in 1812, and the several productions of Wm. Smith, from 1790 to 1815.

tion. It is here that they come in contact with the Scriptures: and it is only this bearing of the science with which we are concerned at present.

We propose now to state, with all possible brevity, the several points of contact between geology and revelation; and give, merely as historians, not as partizans of any theory whatever, a condensed view of the reasonings, pro and con, in relation to each.

The first and chief subject of debate, is the history of the creation of the earth, and the date and manner of that event. The issue is thus stated by Dr. Smith, in the work before us.

We ought, however, in justice to say in advance, that Dr. Smith, and indeed the great body of eminent geologists of the present day, contend, that it is not the Scriptures themselves but only a common, and as they hold erroneous interpretation of the Scriptures, with which geology conflicts.

"It is a prevailing opinion, that the dependent universe, in all its extent, was brought into existence by the Almighty power of its Creator, *within the period of the six days* laid down in the first portion of the Book of Genesis. The same conclusion is also drawn from the language of the fourth commandment: 'In six days the Lord made heaven and earth, the sea and all that in them is.' To this position the discoveries of geological science are directly opposed." Mr. Babbage, one of the most gifted minds of the age, in his work "The Ninth Bridgewater Treatise," expresses the same sentiment thus strongly:—"In truth the mass of evidence which combines to prove the great antiquity of the earth itself is so irresistable, and so unshaken by any opposing facts, that none but those who are alike incapable of observing the facts, and appreciating the reasoning, can for a moment conceive the present state of its surface to have been the result of only six thousand years of existence."

Now there must be strong reasons to induce such men, (and they only express the received doctrine of geology on the subject,) to take such ground as this. We shall try to give a synopsis of those reasons; and in doing so, shall, for the sake of brevity, and in order to do them justice, identify ourselves, for the moment, with the advocates of the doctrines in question.

It is conceded on all hands, that the strata of the earth's crust were deposited under water, as soft sediment, and accumulated layer upon layer, and hardened into rock, by a natural process. The proof of this is so manifest that it is

undisputed, except by a few who maintain with the old speculators on the subject, that these masses, with all their imbedded contents of shells, bones, plants, and animals, were created just as they are now found. This position is so unreasonable, that it scarcely deserves to be recorded as an exception to the universality of the concession, that the stratified formations are sedimentary deposits. On this concession geology bases an important part of its claim, to a vast antiquity for its operations.

First and deepest we find beds of the rock called Gneiss, composed of the same elements, essentially, with granite, on which it rests, and to the flexures and cavities of which it fits so accurately as to evince its deposit in a soft semi-fluid state. Its elements are changed in shape and disposition, from those which compose the granite, precisely as might be expected from the action of water, in suspending, floating and then precipitating them in laminæ and beds of greater thickness. Over the Gneiss, come the beds of Mica Schist and Slates, evincing the same fact, of deposit from suspension in a fluid, whose thickness, added to the gneissic rocks, is estimated at three or four miles: (Dr. Smith, p. 322.)

The same observations apply to the numerous beds of silicious, slaty, and limestone aggregates, (known as the silurian system, since the publication of Mr. Murchison's work upon it,) the united depth of which is about a mile and a half. Above, in the ascending order, we have several thousand feet in depth of old red sandstone,—the series of rocks commonly known by the term Oolitic, half a mile in thickness; masses of chalk and its accompaniments, of a thousand feet or more, then a succession of beds, clays, sands, and limestones, occupying some six or eight hundred feet in height; and finally beds of detritus and alluvium, which have till recently been regarded as the results of the deluge, and the action of the causes since that date. Now combining in a single view this immense series of deposits, and assuming that they are, what they have every appearance of being, sedimentary precipitates, and the natural conclusion would force itself strongly on the observer, that a long period of time must have been consumed, in accumulating ten miles thickness, or even half of that depth, over so large a surface as these deposits are found to cover.*

* From the measurements made by Prof. Rogers in his survey of Pennsylvania, he estimates the rocks that contain animal and vegetable remains, from the coal strata downwards, at 40,000 feet, or more than seven miles and a half in depth. Report on the Geology of Pennsylvania, for 1838, p. 82.

In order to preserve distinctions between the strata, (and they are divisible into hundreds of distinct series,) it is almost inconceivable, on the known laws of matter, that there should not have elapsed periods of time, corresponding to these separate formations. If they were the result of sudden and violent disruptions, they must, one would suppose, have been piled together in wild confusion, instead of being disposed in regular distinct layers, composed of specific materials.

The probability of this inference is greatly strengthened, when any portion of the mass is subjected to minute examination. Take for instance the old red sandstone formation. A large portion of this rock is composed of pebbles from the size of coriander seeds to that of birds eggs and much larger, which bear demonstrative evidence of having been broken from the deeper rocks, rounded like other pebbles by rolling under water, then subsiding into the loose sand, where they are agglutinated by mineral paste, into masses called "conglomerate." "Let any one," says Dr. Smith "first acquire a conception of the extent of this formation, and of its depth, often many hundreds and sometimes two or three thousand feet, (but such a conception can scarcely be formed without actual inspection;) then let him attempt to follow out the processes, which the clearest evidence of our senses show to have taken place: and let him be reluctant and skeptical to the utmost that he can, he cannot avoid the impression that ages innumerable must have rolled over the world, in the making of this single formation." p. 328.

In still farther confirmation of the doctrine under discussion, (for the argument is of the kind which Dr. Paley calls cumulative,) geology adduces the proofs of a quiet and gradual, and therefore immensely long continued, deposit of these miles deep of strata. One of these proofs is furnished by the amazing accumulation of organic remains with which some of the strata are loaded. A large proportion of their entire substance, in some cases, is composed of myriads of comminuted shells. The formation termed "Mountain Limestone," for instance, consists almost entirely of shells and corallines, imbedded in a deposition of carbonate of lime; and is often a thousand feet and more in thickness. In other strata the presence of countless myriads of unbroken corallines, and of fragile shells, having their most delicate spines still attached and undisturbed, shows that the animals which formed them, lived and died upon or near the spot, where these remains are found. Besides minute examination dis-

closes, occasionally, prodigious accumulations of microscopic shells. Some idea of their numbers and diminutive size, may be formed from the statement of Soldani, who collected from an ounce and a half of stone, 10,454 microscopic chambered shells. Immense numbers of them would pass through a paper in which holes had been pricked with a needle of the smallest size. In the district of Auvergne, in France, there is a formation at least seven hundred feet thick, to the marly beds of which the remains of the genus Cypris, give a foliated appearance, in consequence of their immense number, and create divisions in the marl as thin as paper. (Buckland's Bridgewater Treatise).

Ehrenberg, a Prussian naturalist, assures us that in one place in Germany is a bed of rocks fourteen feet thick, made up of the shields of animalcula, so small that it requires 41,000,000,000 of them to form a cubic inch! In Andover, Massachusetts, is a bed composed of the silicious shields of infusoria, of a somewhat larger size than those mentioned above, fifteen feet in thickness. And similar beds occur all over New England and New York. (Hitchcock's Geology and Am. Jour. of Science, vol. 35).

This prodigious accumulation of such remains, and the existence of ten of the most fragile of them, in an unbroken and undisturbed state, are offered in evidence of the lapse of long periods of time. The argument from these facts, is twofold:—1st. from the immense number of animals required to produce such masses of remains: and 2nd. from the evidence which their position is supposed to furnish, that they must have lived and died in numerous successive generations, in the spot where they are found accumulated. All the facts of the case taken together, go to show that these formations were not due to any violent and sudden accumulation of the materials which enter into their composition.

But the facts most relied upon in proof of the immense antiquity, and successive formation of the strata of the earth, are those which have been brought to light by the application of comparative anatomy, in determining the specific character of animals and vegetables, whose remains are imbedded in those strata. We have already mentioned, that Cuvier gave to geologists a clue, by which to explore the windings and recesses of the earth's crust, a key by which to decypher the inscriptions written upon the ruined monuments of other ages, and other generations. Whether this clue and this key are the true ones, is a disputed point, but we

proceed to give in brief the result of their application, and then state with equal candour, what has been alleged in opposition.

By the consummate skill of modern science the fossil organic remains of the geological strata have been sufficiently restored to enable us to make out their original forms, to classify them in families, genera and species, and ascertain with almost entire certainty their characteristic natures and habits. From a laborious comparison of these fossils, thus restored, with each other, and with the animals and plants now existing on the earth, the important principle has been deduced, that the deeper we descend into the earth, the more unlike, in general, are the organic remains to existing species. Nearly all the principal classes of organized existence both animal and vegetable; are found represented throughout the whole series of strata, but species and genera differ more and more in proportion to the depth. The most numerous class of remains by far, consists of the shells of mollusca, which abound in all the fossiliferous strata. In these there is manifestly a steady change, both of genera and species, from the lowest series upwards, and it is not till we have passed the chalk, and reached the most recent tertiary formations, that we find a single species now alive on the earth. The same is true of the fossil fishes, the remains of which are next to the mollusca in point of number. Of reptiles, no trace has been discovered, in ascending through the great mass of the strata, till we reach the new red sandstone, where we find a few sauroid or lizard-like animals, and next those appalling monsters of this family, which may be found figured and described in Dr. Buckland's Bridgwater Treatise. These again pass out of existence, and are superceded by existing species of lizards, crocodiles, &c. Of the class of birds, the first vestiges are found as high up as the sandstone formation, and consist of tracks or foot marks of about twenty species, which seem to show that these sandstone rocks, whose place in the series of strata, is at a depth of several miles, were at the time they received these marks, soft clay; and that they once formed the surface of the earth, on which animals lived and moved;—and consequently that they could not have been formed by the sudden accumulation of the masses which compose them, by the action of a deluge, or any other violent convulsion of nature. It is only in the late formations of the tertiary period, almost at the top of the geological mass, that we find well ascertained re-

mains of mammiferous animals, and they are all exceedingly different in their magnitude, their form and their habits from existing species and even genera. Finally, in the formations immediately preceding our own, we find animals falling into existing genera, but specifically different; and as they gradually cease, our present species succeed to their places.

The last circumstance which we shall stop to notice, in this connexion, and on which the geologists rely with much confidence, is that no trace of human existence has ever been discovered in any portion of these strata, of 50,000 feet in depth, crowded with the remains of other living beings. The controversy respecting fossil human bones, we may notice in another connexion; but we believe it is not pretended by any one at present that the remotest indications of such fossils have yet been discovered, in any of the older formations.* Now if the creation of man was contemporaneous with the other classes of animals, why is there no vestige of his remains entombed among the deep ruins of the world, which owes its destruction to his wickedness? Those ruins embalm the most delicate creatures which existed at that awful period, even to the most fragile microscopic shells, and that in countless multitudes, then why not man? And if the flood did this destruction, why are there no monuments of God's wrath against the guilty race, while the remains of inconceivable myriads of creatures, who could not sin, attest the fearful catastrophe? The answer commonly alleged is that investigations are yet too limited to allow inferences of such importance to be drawn. To this geologists rejoin, that at least ten thousand distinct species of fossil animals have been discovered, embracing countless numbers of individuals, so that if human remains existed at all, the strong presumption is, that some fragment would have come to light. And besides, it is not only man, but all his living congenera, that are wanting, in all except the mere surface of the fossilliferous crust of the earth. Among all the creatures whose remains people the old deep strata, there is no single species identical with existing races. The difference is as entire as if they belonged to different creations. All analogy, therefore, as well as all actual observation, is against

* The deepest locality contended for by any geologist, is the upper surface of the tertiary rocks, designated by Mr Lyell, "the newer *Pliocene* strata;" and even this is disputed by many.

the probability that human fossils ever will be found. Not only is there a distinction thus marked between the oldest animal remains and existing genera, but it is alleged that there are several successive changes of animal races, indicated by the sepulchral monuments of geology. Instead of being huddled together, as might be supposed if their destruction had been the work of one single overwhelming catastrophe, "fresh water productions with salt, land animals with fishes, present with extinct genera or species, they lie as methodically in regard to their general arrangement, as the shelves of specimens in a cabinet." Formations of the same age, or (to speak without presuming on the truth of the theory implied,) formations which hold the same relative place in the series, contain, in general, the same animal remains, though widely separated in locality, so as to be identified much more readily by their fossil than their mineral characteristics. This regularity of change and distribution in the character of organic fossils, it is contended by geologists, renders the discovery of human remains about as improbable as that the polar bear will yet be found among the unexplored jungles of Bengal, or the Iceland moss vegetating on the rocks of some tropical island. They claim therefore, (with how much justice we pretend not here to say,) the whole benefit of the argument, that human remains do not exist in any but the superficial, or, as it is commonly called, diluvial gravel, and in formations manifestly more recent than the deluge itself.

Such is a condensed view of some of the facts and reasonings, which have led geologists to reject the old hypothesis, that the whole mass of the strata of the earth, with all their contents, was due to the action of the flood; and to place the date of the "beginning" of the formations, as they have done ages before the creation of man.

Without expressing any opinion of the truth and conclusiveness of these facts and reasonings, we have only to say, as a matter of history, that we know of no practical geologist, of any school whatever, at the present day, who refers the formation of the geological strata *solely* to the action of Noah's flood. The opinion we know is held by many highly intelligent persons of all professions; but not, so far as we can ascertain, by any one who has studied practically the science of geology. Great as is the diversity of sentiment on almost every other point, this, we believe, is conceded by all. As this hypothesis is maintained, therefore,

on other than geological grounds, whatever may be our own opinion of its merits, it does not fall properly within the sphere of this article.

The leading theory which undertakes to explain the phenomina of geology, in consistency with the common interpretation of the Bible, which includes the primeval creation of matter, and all its subsequent changes within the period of 6,000 years, is that maintained by Granville Penn, in his work, "A Comparative Estimate of the Mineral and Mosaic Geologies," and by Fairholme, in a work entitled "The Geology of Scripture." According to this theory the chief part of the stratified formations, were deposited during the interval between the creation and the deluge, placing the former event at a period about 6,000 years back, and the remainder of the strata are due to the action of the diluvial waters. It follows, of course, that the dry land and the ocean must have changed places at the deluge. Accordingly the advocates of this theory suppose that it was the submerging of "the earth that then was," and the corresponding elevation of the bottom of the ocean, into a "new earth," which caused that destructive catastrophe. The gentlemen whom we have named, are the prominent, and perhaps the most scientific advocates of this hypothesis. Professional men deny that either of them can lay claim to the character of practical geologists; but while it is undeniable that the materials of their arguments have been derived less from actual inspection of geological phenomina, than from the observations of other writers who maintain a different doctrine, yet the works of both are interesting and ingenious, and that of Mr. Fairholme, in particular, extremely plausible and imposing.

The commonly assumed 'facts' of geology are admitted by these writers; and their mode of argument, so far as it is geological, is to select some of the inferences considered by their opponents as established truths, and endeavour to show that they are erroneous; and then "if such inferences prove erroneous, in some extensive and most important instances, it must be held as a fair ground for withdrawing our confidence from others, which may appear, at first sight, equally plausible.*" In pursuance of this mode of warfare, they select the most vulnerable points of the opposing argu-

* See a paper over the signature of A Layman, (who, if we are not greatly mistaken is Mr. Fairholme himself) in the Christian Observer, (London) August, 1834, together with very able notes in reply, by the Editor.

ment, and bring the whole force of their artillery to bear upon it, and if a breach can be effected, they propose to enter by it and take possession of the whole works of the enemy. Accordingly they have arrayed against the doctrine of the slow and gradual deposit of the strata, certain facts which are very unmanageable on that theory, and they have taken active and skilful advantage of certain other facts and principles which are yet in dispute.

One of the arguments urged by the able writer last quoted, is based on the singleness of the series of strata. "It is admitted," he argues, "that we have but *one* series of strictly similar strata in the superficies of the earth; but *one* great coal series; but *one* oolitic series; but *one* formation of magnesian limestone; but *one* chalk deposit: whereas if the earth has existed for such vast periods as are assumed by geologists; and if during these periods, as they likewise assume, there have been endless convulsions and changes from land to sea, and from sea to land, and consequently similar marine deposits in progress during all these periods; if this has been really the case, why should these deposits be so regular in their relative situations? Why should we not have the whole variously mixed up, and repeatedly alternating, in correspondence with the numerous convulsions by which seas and lands are said to have changed places? If a hundred, nay a thousand such changes have occurred, with long periods of time between the supposed natural convulsions by which they were brought about, why should not we find a hundred, or a thousand distinct coal series, and as many formations of magnesian lime stone, and of chalk?"

The strongest fact for their purpose, adduced by these writers, is, that tall trees have in several instances been found in an upright position, and intersecting several successive strata. It is argued with great force, that the strata thus pierced cannot have been slowly deposited, for then trees of fifty feet in height, could not have been held in this upright posture, by a few feet of sediment slowly thrown about their roots; nor would they have stood the action of either water or air, while strata of sufficient depth to bury them entirely, were deposited by the slow natural process, contended for by geologists. "It is thus shown that many of these strata must have been deposited with vast and preternatural rapidity, so as to inclose and cover up in an upright or inclined position, entire stems of very tall and bulky trees, with their branches torn off, and otherwise demonstrating

a shattered state and a violent mode of transport." This fact together with the amazing accumulation of vegetable matter necessary to form the vast beds of coal, and the existence of this immense formation but once in the series, are held as conclusive evidences that the coal measures where the work of the deluge, and of course therefore all the strata that overlie them.

The hypothesis which has been set forth to account for phenomina, in the short space of six thousand years, which seemed to geologists of the other school to demand countless ages for their production, is this. The disruption of the earth, incident to that command of Omnipotence which prepared a bed for the primeval sea, and caused the dry land to appear, furnished abundant materials for the deposits known as the transition series of rocks. Their position at the bottom of the stratified formations, and the absence of all organic remains, are urged in proof that they were produced prior to the creation of all animal and vegetable existence, and correspond in this respect with that first mighty disturbance to which the forming earth was subjected, viz: the formation of a bed for the ocean. The action of air, water, and other agencies upon the primitive soil, furnished the debris, which was carried into the ocean, and distributed over its bottom by the power of currents and of tides, and thus formed the lower division of the secondary rocks, giving evidence as they do, at first scantily, but with constantly increasing abundance, of the remains of "the living creature that moveth, which the waters brought forth abundantly." The remainder of the strata were formed simultaneously, by the stupendous action of the diluvial waters;—and the whole mass then heaved up by the hand of Omnipotence, to constitute the "new earth" for the abode of man, "the earth that then was, being destroyed," and now forming the bottom of the sea.

Mr. Sharon Turner, in his "Sacred History of the World," suggests a modification of this theory, by supposing that the stratified formations, from the lowest up to the highest secondary, were produced in the 1656 years from the creation of man to the deluge, and the tertiary by the deluge itself. Other writers of considerable ability, but no very great celebrity, have advocated the same general views. It must be confessed, however, that this theory has not met with that degree of favour from scientific men which might have been anticipated from its ingenuity, and the ability of its ad-

vocates. Whether this is to be regarded as an evidence that it is really untenable, or is to be set down to the account of scientific prejudice, as its advocates contend, we shall not undertake to decide.

Aside from the geological considerations which bear against it, there is alleged the grave objection, that the Bible undertakes to give, with great precision, the geography of the garden of Eden;—while, according to the theory in question, it must lie at what is now the bottom of the sea. The force of this objection may be seen from the fact, that while the leading object of these writers is to vindicate the scriptures against the encroachment of geologists, they are obliged to reject the whole passage which describes the locality of Eden as spurious, and to contend without any critical evidence whatever, except what arises from their own theory, that it was originally an explanatory gloss in the margin, and introduced into the text by some ignorant transcriber.

As the grand objection to the system of geology which attributes to the earth a much greater antiquity than to man, is, that it contradicts what the Bible is understood to teach, in relation to the date of the creation, we return to consider the answer, which Christian geologists have given to this objection. And here the unanimity, which characterized their vote in relation to the doctrine itself, ceases entirely, and we have several widely different opinions as to the mode of reconciling it with the scriptures.

We cannot but express our regret that one so distinguished in the ranks of science as Mr. Babbage, should have avowed an opinion at once so untenable and so dangerous, as that it is impossible for us, at this distance, to determine the meaning of the Hebrew, with sufficient accuracy to decide what the Bible really teaches on the subject. This strange hypothesis is accounted for however, by his candid declaration, that he is unacquainted "with the language in which the sacred volume is written."

Others, among whom we are sorry to find Rev. B. Powell, Prof. Geom. Oxford, has allowed his neological partialities to permit him to regard the passage in Genesis, "as not intended for historical narrative," but only to set forth the creation "in the language of figure and poetry," and in "the form of dramatic action," for "the better inforcement of its objects." We need not offer a word of comment on such an unwarrantable hypothesis.

But the theory which was for a long time exceedingly current among geologists, was that originated about thirty years ago, and maintained by Cuvier, Professors Jameson, Silliman and others, and which regards the six days of creation, not as literal days of twenty-four hours, but as long periods of time: understanding the word in its figurative sense, as designating a portion of time, marked by a continuous series of events. Thus we speak of "a day of prosperity" —"the day of salvation," &c. Prof. Jameson of Edinburgh, as a modification of this theory, suggested that the revolution of the earth on its axis, was at first inconceivably slow, and thus the days of creation while they were natural days, i. e. comprising one alteration of light and darkness, may have been of long duration. This hypothesis has been advocated by Bishop Horsely and Dr. Keith.

But to this whole theory of demi-urgic or indefinite days it has been objected that it is manifestly forced and unnatural, a desperate resource of geologists, to avoid conflicting with the authority of Scripture. Admitting that the word 'day' has, in certain cases, this figurative sense, yet the passage in hand is evidently not figurative at all. It is a plain narrative; and the whole context requires it to be so understood. Besides, the same thing is explicitly taught in the fourth commandment, where the creation in six days is made the reason for devoting six days to labour, and resting on the seventh. If the word day designates "a long period," in this commandment, in the clause, "for in six days the Lord made heaven and earth," &c., then must it also in the previous clause, "six days shalt thou labour," &c.: and even if we were to concede the propriety of changing the meaning of the leading word, in the two immediately adjoining clauses of a sentence, the reason for the appointment of the day of rest, would then be a complete non sequitur. Let any one read it, and see.

Professor Bush, we believe, is the only writer who has attempted to make out, on philological grounds, that the word 'day' in Genesis, most naturally means something else than a natural day of twenty-four hours.* But we deem it unnecessary to go further into the history of this theory. It has had its day; and is now nearly abandoned by geologists themselves. Dr. Buckland, while he contends that the in-

* For an examination of Prof. Bush's reasoning, see Biblical Repertory, for April 1839, p. 279.

terpretation is philologically allowable, concedes that it is unnecessary. (Bridgewater Treatise.) Professor Sedgwick goes further, and urges that it is contradicted by geological phenomina, instead of reconciling them, as was at first supposed, to the Mosaic account. We are told, by the inspired historian, that vegetables were created on the third day, and animals not until the fifth. Hence about one third of the fossilliferous rocks, reckoning upwards, ought to contain only vegetables; whereas, in the lowest group nothing but animal remains has yet been found. Dr. Smith and Professor Hitchcock, the two latest writers on the science, regard it as given up by the leaders in geology. Even Mr. Faber, one of the most thorough of its former advocates, has abandoned the doctrine.

"The theory of interpretation which is now the most extensively adopted among geologists, supposes that Moses merely states that God created the world in the beginning, without fixing the date of that beginning; and that passing, in silence, an unknown period of its history, during which the extinct animals and plants found in the rocks might have lived and died, he describes only the present creation, which took place in six literal days, less than 6,000 years ago." (Hitchcock's Geology, p. 270.) According to this hypothesis it is only necessary to consider the first verse of Genesis as a general announcement, "that there was an epoch, a point in the flow of infinite duration, when the whole of the dependent world was brought in being: not from pre-existent materials, nor by fortune, chance, or accident, but absolutely and solely, by the will, wisdom, and power of the ONE AND ONLY GOD." Having vindicated by divine testimony this peculiar act of Omnipotence from the theories of false philosophy and scpticism, the sacred writer then proceeds to the consecutive history of man and his congenera; without stopping to give an account of the gradual process by which the earth was prepared for the habitation of the human race, or of the races that lived and died upon it, during the protracted period of that process. All this was foreign to the subject, and therefore passed by in silence.

Dr. Smith, in the work before us, propounds a modification of this hypothesis, which we believe is original with himself. He proposes to interpret the word "earth," in the second and subsequent verses of Genesis, as expressing only *"the part of our world which God was adapting for the dwelling of man, and the animals connected with him:"*

defending this restriction of the term, on the principle that "the practical understanding of the phrase, in conformity with the ideas of the people who used it," would thus limit its meaning. In illustration he cites passages where it manifestly designates the land of Palestine. The portion of the earth meant in the history of the creation, he conceives to have been "a large part of Asia, lying between the Caucasian ridge, the Caspian Sea, and Tartary on the north, the Persian and Indian seas on the south, and the high mountain ridges which run at considerable distances on the eastern and the western flank." It is to this region that he confines the description of all the transactions of the early bible history, including even the deluge. "This region was first, by atmospheric and geological causes, of previous operation under the will of the Almighty, brought into a condition of superficial ruin or some kind of general disorder. This may have been produced by volcanic agency, occasioning the subsidence of the region, as has since occurred in various districts upon the earth's surface. Extreme darkness has often been known to accompany such phenomina. These changes are designated by the descriptive phrases "without form and void," and "darkness was upon the face of the deep." Under the formative hand of the Almighty, "the atmosphere over this district had by the fourth day become pellucid: and had there been a human eye to have beheld, the sun would have been seen, and the other heavenly bodies after the sun was set." Animals and vegetables were produced by immediate creation in the order indicated in the Scriptures: but only that portion of these two kingdoms, which were peculiar to the region above specified. He maintains, on the principles of natural history, that all the families of plants and animals could not have been derived from one centre of creation: that those intended fer the extreme polar and equatorial regions, could not have been formed in or near Eden, which "was in the finest part of the temperate zone," that they could not have subsisted in that latitude, and that if this point were conceded, "the further inquiry presents itself, by what means the respective races could make their way to congenial climes; some to the regions of fierce equatorial heat, others to those of eternal ice: that such a transmigration would require an entire change "in the forms and functions of their bodily structure internal as well as external: and that in point of fact, "the flora and fauna" of certain regions are "so completely dis-

tinct from those of any other" as to indicate demonstratively a distinct creation from that which occurred in Eden. And of course it is only this latter, associated with man in paradise, which forms the subject of scriptural history.

We feel strongly tempted to depart from our prescribed task, as historians, and express our own opinion in relation to this novel theory. But as we have not space to do so satisfactorily, and as the theory is purely hypothetical, and not an inference from geological facts, strictly speaking, and more especially, as we do not conceive that it is very likely to compromise the authority of revelation, we dismiss it as undeserving of criticism.

To the objection, against the whole system of the geologists, that the scriptures expressly ascribe the creation of the heavenly bodies to the work of the fourth day, while according to their theory, the whole planetary system must have been in existence for ages, it is replied:—That it is manifest from the inspired history itself, that it is not the absolute creation of those bodies, that is described in the narrative of the fourth day; but only the appearance developed at that period of time. The light which it is their province to supply, was in existence on the first day, and the alternation of evening and morning, produced as it is by the movements of the complete planetary system, and existing as it did, from the very first, is proof that that system was already in harmonious operation. The heavenly bodies are therefore represented not as being *created* on the fourth day, but "*made*, (i. e. constituted or appointed to be) luminaries." They existed before, but they were then appointed to the office of furnishing light and standards for the division of time, to the new inhabitants of the earth, (see Gen 1: 14, 15.) This whole passage is considered as furnishing a strong case, in proof of the principle, contended for by geologists, that "it was not the purpose of revelation to give a view of creation according to the physical reality," but only to describe what occurred, as it would have appeared to one who could have witnessed the sublime spectacle. "Hence the sun is mentioned as the greatest luminary, the moon as the *next* in magnitude, and the other shining orbs are grouped together as if they formed, even when all combined, the least object of importance." "It is most evident, that any person not acquainted with the true system of the world, would after his most careful study of this portion of the Bible, rest in the conclusions, that our earth is not in moral importance only

but in physical magnitude, by far the greatest of the Creator's works; and that the entire furniture of the heavens is solely a provision for our convenience and comfort. Yet the actual truth is, that if not our earth merely, but the entire solar system, were to be blotted out of existence, it would be no more missed in the aspect of the universe, except to the glorious Creator's eye, than a grain of sand blown away from the sea shore." Smith, pp. 236-7.

Another leading point of contact between geology and re-relation, is, that the doctrines of the former imply "the dominion of pain and death over the animal creation," ages before the existence of man: while the latter is generally understood to teach, that, "before our first parents fell from innocence and happiness, death and its harbingers had no place in the inferior animal creation."

It is urged in reply, that it is only in relation to the human family, that "death and its harbingers" are ascribed in the Bible to the introduction of sin: that their previous existence is supposed in the very threatning which guarded the forbidden fruit, for otherwise that threatning would have been unintelligible; and that the law of propagation, established in connexion with the countless tribes of animals, necessarily implied the existence of death, for otherwise they would soon have exceeded in multitude, the limits of possible subsistence. The same thing is argued from the existence of carnivorous animals. It is one of the established fundamental principles of comparative anatomy, that the character and habits of animals are displayed in every bone and muscle of the body. To suppose that the lion, e. g. was not carnivorous before the fall of man, would require not only a change in the form of its teeth and the structure of its claws, but that the functions of its stomach, its nutritive powers, the form and size of its bones the strength and fastenings of its muscles, in a word almost every fibre of its body, must have undergone, not modifications merely, but radical alterations. It would in fact be tantamount to supposing that carnivorous animals were created since the fall;—of which the Bible gives us no intimation, although they form so large a portion of the brute race. The argument is still strengthened by the consideration, that animal subsistence, even upon vegetable food, is impossible without amazing destruction of animal life. Every one knows that vegetables of all sorts swarm with insects, and even the very juices of plants, and the water we drink are full of animalcula. These must have

perished in countless myriads, before the fall of man, on any theory we can adopt, unless they too, were a subsequent creation. The common impression on this subject, therefore, has other facts to grapple with than those of geology, and the geologists are not alone in the difficulty.

The connexion of geological discoveries with the scriptural history of the deluge, is a topic of great interest. But we have already gone far beyond our intended limits, and must therefore omit for the present the important facts which we had thrown together. The history of opinions on this subject is peculiarly interesting: but much as they would conduce to the impression which we wish to make in our closing paragraphs, we must forego their introduction.

Our object in preparing the preceding sketch, has been, in the first place, to furnish a condensed view of the principles and reasonings of the geologists, for the benefit of those who have not free access to the sources of such information, or the time to explore them; and secondly and mainly, to dissipate "the ill-defined and shadowy apprehensions," occassioned by the vague impression, which we have reason to know is far more general than it should be, that science is found arrayed against the scriptures. In stating the arguments we have held back nothing that has been alleged, from a fear of the consequences. We have put the case as strongly as could be fairly done for the geologists: and yet after all how little there is to cause a moments uneasiness to the enlightened friend of revelation. Dr. Wiseman quotes Justin Martyr and Gregory Nazianzen, in favour of the opinion, "that an indefinite period elapsed between the creation of matter, 'in the beginning,' and the first ordering of all things:" and Basil and Origin both adopt the view of modern geologists, as to the existence of the heavenly bodies from the beginning, "yet so as that their rays were prevented by the dense chaotic atmosphere from penetrating to the earth; that this was on the first day so far rarified, as to allow the transmission of the sun's rays, though not the discernment of its disk, which was fully displayed on the third (fourth?) day." There can not, we think, be much ground for apprehension from the prevalence of opinions advocated by some of the most enlightened Christian minds, including eminent biblical scholars of our own age. We are not much afraid, for instance, for the evidences of revealed religion, when they are in the keeping of such men as Dr. Chalmers.

For ourselves we do not mean to express at present, any opinion on the theories we have described. We could show, as we believe, good reason, from the present state of geology, for not committing ourselves on either side of its prominent hypothesis. We think no impartial mind can examine all their pretensions carefully and without professional enthusiasm, without a feeling of uncertainty, to say the least, which does not belong to the exact sciences. The history of the science, for the last fifty or twenty, or even ten years, is enough one would think, to inspire caution. And as our duties lie mainly in another direction, we propose, without entering into the discussion ourselves, to give a full and candid hearing to all that can be said on both sides of the great questions that may rise by those who are best qualified to discuss them, and then adopt whatever theory we conceive to be best established by evidence and reasoning. The time for making up an ultimate opinion on the whole subject has manifestly not yet arrived, even in the opinion of some of the best geologists themselves.

We have no faith whatever in the a priori arguments for the antiquity of the earth. The only thing which weighs with us, in settling this controversy, is the exhibition of facts, which are totally incompatible with the belief, that the material of the earth was created only a few days before man and his congenera. If such facts are clearly made out, we will promptly receive the inference, without a single fear either for the truth or the plenary inspiration of the sacred record. And in estimating the value of these facts we are far from admitting the explanation of all the phenomina, by the action of natural causes, without the intervention of miracle. We are free to avow, that an examination, conducted without prepossession or prejudice, has failed utterly to convince us, notwithstanding the plausible reasoning of Playfair and Lyell, that these causes are competent to such mighty results, however long the time allotted to their production. We agree perfectly in the conclusion reached by Mr. De La Beche, after stating strongly the facts to be explained:—"It is useless to appeal to time: time can effect no more than its powers are capable of performing. If a mouse be harnessed to a piece of ordinance, it will never move it, even if centuries on centuries could be allowed: but attach the necessary force and the resistance is overcome in a minute." We see what strikes us, as incontrovertible proof, that mighty forces have been in play, under the agency of

the Almighty, in producing the fearful results which appear in the present state of the earth.

While we say this, we cannot help thinking that some of the zealous friends of revelation bring discredit on themselves, and the cause they have so much at heart, by the excessive jealousy with which they regard geological inquiries, and by the spirit with which they sometimes treat men distinguished for their conscientious regard for religion, as well as their scientific attainments. We are often pained to see the exhibitions of a spirit, which the calm spectator will attribute either to narrow bigotry or to the consciousness of having a bad cause. It is too late in the day to put down these investigations by authority, or to decide them by ridicule.

If we are sure that the scriptures are true, we are equally sure, that the real facts and true theory of geology cannot conflict with their inspired teaching. There can be no contradiction between what God does and what he says. If any one is confident on scriptural grounds, that geology must be wrong, let him grapple with its alleged facts and deductions; and show that the former are incorrectly observed, and that the other do not follow by logical sequence. This surely can be done, if such be the fact. But if he shrinks from the contest on the field of geology itself, and takes refuge behind the bulwarks of revelation alone, however boldly he may send forth his challenges of defiance, the world will ascribe the victory to the enemy.

We have no patience with that sceptical spirit, which investigates the phenomina of science, for the purpose of finding arguments against a revelation which it hates, and magnifies every appearance of discrepancy between the facts of the two systems. It is as far removed from the spirit of true philosophy, as from that of true piety. But on the other hand, it will not do to stigmatize geology as essentially anti-Christian, and launch indiscriminate anathemas against its cultivators, on the ground that in trying to develope its principles, they are fighting against God. On the contrary, it is of the utmost importance that in receiving its form, and taking its position among the accredited sciences, it should be moulded by pious hands. It is well therefore, that the distinguished Professors in both the great English Universities, where it receives so much of its character, are both warm and enlightened friends of revelation. Instead of goading them with taunts and reproaches, let them rather be encour-

aged to maintain their commanding position, prepared to wrest every weapon from the hand of scepticism, and baptize with the spirit of Christianity, and thus secure as a servant of the church, this young and important science. Surely they have done no unimportant service, in driving from the field, the whole host of continental theorists, and securing an acknowledged triumph to the party, stigmatized by Humboldt, as "those Hebraising geologists, whose efforts to connect the chronology of Moses with the phenomina of nature, cannot but be unavailing."

In making these remarks, it is far from our intention to take sides with any party in the contest. If Penn, and Fairholme, and Gisborne, and Comstock, and the champions of that school in geology, should succeed in making good their position;—well. If truth is on their side, we wish them success: and success they will undoubtedly obtain in the end. Magna est veritas. But we cannot allow their claim to the advantages which they have sought, as we think to an undue extent, by representing their opponents as infidels in disguise, or as misguided friends, who are really fighting under the opposing banner. We protest against the use of "the argumentum ad invidiam," in settling a question of pure science. Let us have the truth—the whole truth, and nothing but the truth. The more clearly it is brought out, the more fully will it harmonize with, and throw light upon the truths of revelation rightly understood. The day is coming in all probability, when we shall wonder how any one contrived to find any thing to perplex him in the case.

The case of astronomy should teach us a lesson. There is not, we confidently believe, the smallest probabillity that geology will ever make good its demand for a greater change in the received interpretation of the scriptures, than did the Copernican system of astronomy: nor have harsher denunciations been dealt out against modern geologists, than were poured upon Galileo by the misguided friends of religion. Let us profit by the instructions of history.

Before we lay down our pen, we wish to suggest a similar caution on the other side of the question. Philosophers, we are compelled to think, show a strong tendency to generalize too hastily, and to speak too confidently of the truth of their hypotheses. Thus, for example, we begin to hear it assumed, and the assumption laid at the foundation of other theories, that the nebular hypothesis suggested by La Place is the true theory of the universe. This we need hardly say

is going too fast and too far. Sometimes those very conclusions which appear most beautiful and most satisfactory, are disproved by the discovery of some new element, for which they had made no provision. Thus La Place supposed he had demonstrated with all the certainty of the most exact mathematics, that the revolutions of the heavenly bodies were under laws that would preserve them from confusion forever, by correcting the periodical oscillations to which they were subject. But this striking and beautiful conclusion appears to be involved in great doubt, by observations made upon the body known as Encke's comet; which seem to show that there is a resisting medium in the planetary spaces: and if there be, however rare it may be, it would first retard, then derange, and finally, however remote the period, throw into confusion and ruin the whole planetary system. Now we could wish the geologists to be less confident, in stating as ascertained truth, that which is only ingenious and plausible hypothesis; and to remember that the discovery of some new element, so simple a thing as a fossil human bone, for instance, in some unexpected deposit, may materially modify if not overthrow all the deductions of geology, as to the age of the earth's surface. What we wish, is to have all parties to this controversy imbued with the spirit of that charming prayer of Kepler, appended to one of his astronomical works. "It remains only that I should now lift up to heaven my eyes and hands from the table of my pursuits, and humbly and devoutly supplicate the Father of lights. Oh! Thou, who by the light of nature, dost enkindle in us a desire after the light of grace, that by this Thou mayest translate us into the light of glory, I give Thee thanks, Oh! Lord and Creator, that Thou hast gladdened me by Thy creation, when I was enraptured by the work of Thy hands. Behold! I have here completed a work of my calling, with as much of intellectual strength as Thou hast granted me. I have declared the praise of Thy works to the men who will read the evidences of it, so far as my finite spirit could comprehend them in their infinity. My mind endeavoured to its utmost to reach the truth by philosophy; but if any thing unworthy of Thee has been taught by me—a worm born and nourished in sin—do Thou teach me that I may correct it. Have I been seduced into presumption by the admirable beauty of Thy works, or have I sought my own glory among men, in the construction of a work designed for Thine honour! Oh! then graciously and mercifully forgive me;

and finally grant me this favour, that this work may never be injurious, but may conduce to Thy glory and the good of souls."

Samuel Tyler

ART. III—1. *The Mathematical Correspondent, Edited by G. Baron*, New York, 1804.

2. *The Analyst, Edited by Robert Adrain*, Philadelphia, 1808.

3. *The Scientific Journal, Edited by W. Marratt*, New York, 1818.

4. *The Ladies' and Gentlemen's Diary, Edited by M. Nash*, New York, 1820.

5. *The Mathematical Diary, Edited by Robert Adrain and afterwards by Mr. Ryan*, New York, 1825.

6. *The Mathematical Miscellany, Edited by C. Gill*, New York, 1836.

"SCALIGER, who was very far from being overburthened with piety, (says Harwood in his preface to Bailey's Dictionary,) whenever lexicographers were mentioned, is said very devoutly to have thanked God, that of his infinite goodness, he had endowed some men with the spirit of Dictionary-making. This celebrated hypercritic deemed the task of compiling lexicons and dictionaries to be so tedious and toilsome an office, that he thought it was impossible that any man would voluntarily choose such a profession either as an amusement or occupation, who had not a mind peculiarly formed by Heaven for collecting words and measuring syllables, and that had not by a special decree been ordained of old to this condemnation." And doubtless Scaliger would have been strengthened in this opinion if he had lived to see Walker in his Dictionary working himself into a passion about vowels and consonants, and contending with all the heroic zeal of a general defending the capital of his country from a besieging foe, against the tendency in the English language to place the accent on the antepenultimate syllable, in "words which come down to us whole from the Greek and Latin;" and with a heart overflowing with grief pointing to "orator, auditor, senator, cicatrix, &c." as having fallen victims to this awful tendency; and exclaiming with alarm, that "abdomen, bitumen and accumen," would have

shared the same fate, "if the learned had not stepped in to rescue these classical words from the invasion of the Gothic accent." The same view of humanity which led Scaliger to his opinion about Dictionary-making, would we think lead most men to a similar opinion in regard to editing a Mathematical Journal; for of all occupations, it does appear to us, to be one of the most tedious and farthest removed from the ordinary tastes of men. To review and correct, and for the fear of giving offence, to publish the productions of contributors, (as most editors have to do) whatever their abilities in mathematics may be, is an office of criticism not altogether agreeable to every mind. When then we consider the drudgery of editing a Mathematical Journal, and that little or no pecuniary emolument is ever derived from such an avocation, we do not wonder that the journals at the head of this article had each so short an existence. But we are glad to learn, that the Mathematical Miscellany, whose pages were so rich with mathematical learning, will be resumed in the spring. It surely will be a reproach on mathematicians, if they do not sustain a work so useful in exciting mathematical inquiry, and in creating a wholesome emulation in so noble a science, when they have so able a mathematician, as Professor Gill, willing to undertake the drudgery of editor. Besides other mathematical journals, the "Ladies Diary," has been sustained in England from 1704 up to the present time, enrolling amongst its contributors many of the ablest mathematicians that England has ever produced, and has done much to advance and disseminate mathematical knowledge in Great Britain; and it has been the great magazine from which authors have derived the examples which illustraate the mathematical text books for schools and colleges. We hope that the same advantage may be derived to our country from the Mathematical Miscellany.

Our chief object in noticing the journals at the head of this article, is to give our readers a biographical sketch of one of the ablest contributors to their pages, who from the peculiar circumstances of his life is little known; though his productions have elicited much inquiry in regard to his personal history. We allude to William Lenhart of York, Pennsylvania.

We shall endeavour to exhibit our subject in all the vicissitudes of his life, in privacy and in public, in the careless ease of the domestic circle with all its joys and all its sorrows,

and in the reserve and concealment necessarily attendant on one's intercourse with the world. For it is only by this mode of treatment, that we can exhibit the real character of any one —can give a full portrait of the whole man; and thereby enable the world to form a just opinion of his life and character. "I am of opinion, (says Xenophon at the beginning of his Banquet) that as well the sayings as the actions of great men deserve to be recorded, whether they treat of serious subjects with the greatest application of mind; or, giving themselves some respite, unbend their thoughts to diversions worthy of them." After Xenophon had written his "Memorabilia," in which he exhibits Socrates as he appeared to the world, in the more serious pursuits of life, in other words, as a philosopher, he wrote his "banquet," in which he exhibits him as a man in the domestic circle, at the dinner-table of a friend, amid all the ease and freedom of social life, in order that posterity might estimate fully the character of that great man. We will follow the example of Xenophon, and exhibit our subject in every scene of life calculated to give a just and complete view of his character; as in this way no trait will be ascribed to him that is not illustrated by the historical manifestations of his life.

William Lenhart was born in York, Pennsylvania, on the 19th of January, 1787, of respectable parents of German descent. He had received little or no education until he was twelve or fourteen years of age, when Dr. Adrain, then an obscure individual, came to York and opened a school. William became one of his pupils and soon discovered to his sagacious teacher, his wonderful talents for the mathematics. Mr. Adrain was delighted at the opportunity of developing the mind of one who had a genius for his own favourite study. Smitten with that affection for his pupil, which a kindred genius inspires, and instigated by a strong anticipation of his future renown, he devoted to him a care beyond what mere duty demanded; and such was the rapid progress of young Lenhart, that he seemed to his teacher more like a companion in study than a pupil. As William's father did not fully appreciate the value of an education, or because his means were scanty, he took his son from school, after he had been under the tuition of Mr. Adrain fifteen or eighteen months, with no other knowledge of letters, than what he had acquired during that time. William had always evinced great mechanical genius—had made in mineature every kind of machine which he had ever seen, such as fire-en-

gines, water-mills, &c. and made them so skilfully that they would always operate well. He also evinced great talent for drawing and music. Indeed, he seemed to excel in every thing that he had an opportunity to learn. He was frequently in the shop of his father, who was a silversmith; and on more than one occasion was near killing himself in experimenting with steam; as he had no idea at that early age, of the immense expansive force of water when under the influence of heat. Just before William left the school of Mr. Adrain, he began to contribute to the "Mathematical Correspondent" then published in New York, by Mr. G. Baron.

As William was now about seventeen years of age, his father thought it time that he was in some business, and procured for him a situation in a store in Baltimore. As he was a remarkably handsome youth, of great gaiety of countenance indicating a soul full of amiable mirth, and possessed of great amenity of manner, his employers were greatly prepossessed in his favour; and when further acquaintance enabled them to see his great diligence in business and his expertness as an accountant, and his gentlemanly deportment, their prepossession grew into the strongest affection. After being in this store for some time, he obtained a situation in the sheriff's office, as he detested selling goods, and in his new situation would have nothing to do but write, in which he delighted, as he was the best penman that we have ever known. During his sojourn in Baltimore, he improved himself by reading and by mathematical studies, he also continued to contribute to the "Mathematical Correspondent;" and obtained, when only seventeen years of age, a medal for the best solution to one of the prize questions, as will be seen by reference to the 174th page of that periodical. He also contributed to the "Analyst," as soon as it was commenced, in 1808, by Dr. Adrain in Philadelphia.

Young Lenhart, after remaining in Baltimore about four years, was, upon the recommendation of a friend, invited to Philadelphia by Messrs Hassinger and Reese, to take charge of the books of their commercial house. He accepted the offer; and at the end of the first year, these gentlemen, in consequence of his diligence and skill in business, gave him just double the salary, though a good one, which they had contracted to give. He acted as book-keeper in this house for two or three years; and the books which he kept were long exhibited as models of book-keeping, and the accounts which he made out for merchants from abroad, who dealt with this

house, were kept by many of them as forms. It is doubted whether there ever was a more finished clerk and book-keeper. Messrs Hassinger and Reese now offered to take him into partnership, they to furnish the capital, and he, nothing but his personal services. An offer so honourable to these gentlemen and so flattering to him, he of course accepted at once. During all this time, amidst the toils of active business, he did not altogether relinquish the study of the mathematics. Indeed, it would have been almost impossible to have done so, as he was continually written to by Dr. Adrain, who never lost sight of his favourite pupil; and in order to show in what estimate he was held by this distinguished mathematican, we will here insert an extract from a letter written by Dr. Adrain to young Lenhart soon after he went to Baltimore; it is dated April 26th, 1805. "The problem, which you say was proposed to you, respecting the heat of Mercury or Venus, has come from some person very indifferently acquainted with Astronomy, and who took advantage of your inexperience in that science. I hope to see the day when those conceited smatterers will feel with trembling and surprise, your unfathomable superiority in all the parts of mathematics. I sincerely hope that you employ your leisure hours in making still farther progress in science. The greatest glory that this world can afford, confessedly belongs to him who stands foremost in the ranks of science: and you may certainly fill that station for some years, if God in his mercy spare your life, and inspire you with the noble and just resolution of dedicating, to grateful posterity, the excellent talents for mathematics with which you are endowed."

As Mr. Lenhart was now about to enter into a partnership with Messrs Hassinger and Reese, he went to York on a visit to his father and friends. While there, he rode in a gig with a young friend into the country, the horse took fright at a menagerie passing along the road, ran off, upset the gig and broke Mr. Lenhart's leg. He was taken to York, and there remained until he recovered. He then returned to Philadelphia to enter upon the scene of his new duties; but alas! his prospects, heretofore so bright, began to wear a foreboding aspect. While pitching quoits upon the suburbs of Philadelphia, he was seized with a violent pain in the back, accompanied with great debility of his lower extremities. He was taken to his boarding house; and the late Dr. Parish was sent for. The Dr. visited him for some time, when Dr. Physic was called in consultation. These distin-

guished physicians continued to visit him for eighteen months; and tried every expedient which their eminent skill could devise; for he submitted himself to their hands to be dealt with as they pleased; and though some of the remedies were as severe as human nature can endure, such as actual cautery, and deep salivation, yet he bore them all with that philosophical heroism for which he became so distinguished in after life.

Both physicians concurred in opinion, that his disease was an affection of the spine, probably produced by the fall from the gig when his leg was broken. His lower extremities now became so paralized as to render walking difficult; and his physicians told him his case was hopeless. During all this time, he had periodical attacks of the most excruciating spasms in his legs. He now saw that all his worldly prospects were blasted; and that in all probability he would drag out an existence of extreme suffering. The anguish of his despair was heightened by the fact that he was engaged to be married to an accomplished young lady, between whom and himself there had existed an attachment from childhood.

From this period, Mr. Lenhart became subject, at irregular but frequent intervals, to the most excrutiating spasmodic pains of which we have any knowledge, though we are not altogether unread in the sorrowful records of medical history. Indeed, so severe were his attacks, that he could not have survived almost any one of them, had he not used large quantities of laudanum during the paroxysms. He was now constrained to lead that sort of life which was best calculated to alleviate his afflictions; as he was utterly unable to attend to any kind of business, on account of the frequency and uncertainty of his attacks of spasms. He therefore spent his time in reading light literature, in drawing, in music, and in travelling, when he was able to do so. This was his course of life up to 1828, when he broke his leg again, by a fall from an icy door step. He bore this affliction with the same equanimity which had heretofore characterized him; though his sufferings were terrible indeed, as he frequently had paroxysms of spasms which rendered it necessary to unloose the bandages, and leave the broken limb to be tossed by the convulsion. This may appear to the reader like a fancy sketch, but it is a true picture from the inscrutable dispensations of Providence.

Mr. Lenhart's infirmities now increased so much, that he was compelled to spend his summers in York, and his winters

with a sister in Frederick (Maryland.) His lips became so paralized that he had to abandon his favourite recreation of playing on the flute; and as he was confined to the house during the winter, and his usual sources of pleasure had failed him, he found it necessary to have some mental employment more engrossing than the reading of light literature. He therefore directed his attention to his early love, the mathematics, solely with a view to amusement; and it was from this period to 1839, inclusive, during the winter seasons, for he never studied in the summer, that he accomplished his profound researches in the Diophantine Analysis, and this without the aid of books, and calculated his extensive tables relative to cubes, in the midst of as great bodily suffering as human nature can bear. We have often seen him, while engaged in his investigations, stop every three or four minutes, and seize his limb, to intercept as far as practicable, the excruciating spasm, by pressure on the nerve, and then resume his studies without the least apparent diversion of mind, while the perspiration produced by the agony coursed down his forehead. How admirably does this illustrate the motto prefixed to his tables: "There are few difficulties which will not yield to perseverance." And in order to show the spirit of philosophic fortitude with which he bore these tortures of the body, we will here insert an extract from a letter written by him to Professor Gill of St. Paul's College, New York. It is dated June 20th, 1837. "My body, my dear sir, may be broken to pieces, and the mind in consequence may be injured; but I have a spirit that cannot be broken; a cheerfulness and health survive that shall bear me up superior to all the ills of life, and whilst I have an X and a Y in addition, and am capable of using them, I will not, must not despair." In another letter to the same gentleman, dated July 15, 1839, he says;—"Pardon the thought —but my afflictions appear to me to be not unlike an infinite series, composed of complicated terms, gradually and regularly increasing (in sadness and suffering as it were) and becoming more and more involved; and hence the abtruseness of its summation; but which, when it shall be summed in the end, by the Great Arbiter and Master of all, it is to be hoped that the formula resulting, will be found to be not only entirely free from surds, but perfectly pure and rational, yea, even unto an integer." A more eloquent and at the same time just description of his sufferings could not be penned. His disease furnishes phenomena just as interest-

ing to the medical philosopher, as his life and character do to the moral and intellectual one.

From the year 1812, when Mr. Lenhart broke his leg the first time, up to 1825, his afflictions were such that he did nothing at the mathematics; and therefore did not contribute to the "Scientific Journal," published in New York by Mr. Marrat, nor to the Ladies' and Gentlemen's Diary" published in the same place by Mr. Nash; though he was solicited to do so, by the Editors of both these journals. But when the "Mathematical Diary" was started in New York, in 1825, by his old preceptor and friend, Dr. Adrain, he became a contributor to it, until it ceased to be published, in 1832. He contributed to this periodical not only over his own signature, but over that of Mary Bond, Frederick Town, Maryland. All the solutions over this last signature are by Mr. Lenhart. He also contributed the solution over the signature of Diophantus, Frederick Town, Maryland, on the 162d page, 2d Vol. of the Diary. We need not speak in detail, of his contributions to these journals, as all mathematicians appreciate the great beauty of their mathematical style, the lucid simplicity of their arrangement, and the ingenious artifices displayed in them. The fertility of his mind is shown by the fact of his giving solutions of the same questions over his own name, and that of Mary Bond, which were so different, and so excellent, that they were published, as they were supposed to be by different contributors. When the M. Miscellany was begun by Professor Gill, in 1836, Mr. Lenhart, at the request of that gentleman, became a contributor; and all their letters from which we make extracts are from the correspondence which ensued between them relative to the Miscellany. It is chiefly upon his contributions to this periodical, that Mr. Lenhart's fame as a mathematician rests. They have gained for him the reputation of the greatest Diophantine Algebraist that ever lived; and this is no mean renown, when it is considered that a Euler, a Lagrange, and a Gauss, are his competitors. To be placed in the same order of renown with these illustrious men, and to stand the first in the order, as far as the Diophantine Analysis is concerned, is indeed a scientific eminence which the greatest intellects may envy. And how amazing are these profound researches, when we reflect that they were the mere amusements of the author amidst his afflictions. In a letter to Professor Gill in Dec., 1836, he says;—"With the exception of a neat little solution, now

and then, to a question of the same kind, I have never felt much inclined to publish any thing of mine; and, therefore, whenever my researches however trifling or important, or perfect or defective, they may have been, had the desired effect of 'driving dull care away,' or of amusing me during my retirement and time of affliction, I was amply satisfied, and that was all I cared for." And to show what real delight he felt in his studies, though resumed from necessity, he thus writes to the same gentlemen, in reference to his researches in the Diophantine Analysis: "Whilst I was engaged in the study which produced so many curious results, and which had occnpied the attention of so many eminent mathematicians, in ancient as well as in modern times, I felt as though I had been (and perhaps I really was) admitted into the Great Temple of numbers, even into the sanctum sanctorum—and permitted to revel amongst the curiosities contained therein, and to select from them whatever I might desire—a privelige not granted by the monitor of the Temple to any one living, before, and hence the vast variety that I have, and may probably in future produce, must be ascribed or accredited to the great master of the Temple, and not to any peculiar talent or extraordinary exertion of your humble friend." We will here insert an abstract of his Diophantine Speculations, published in the Mathematical Miscellany, which has been furnished by the editor, Professor Gill.

"I do not find any thing of Mr. Lenhart's, published on Diophantine Analysis, that can be considered of particular moment until the 11th number of the Diary, (1830) although many of the investigations afterwards published must have been entered upon, at least, previous to this date, judging from his manuscripts he was so kind as to exhibit to me while visiting him in, I think, 1836. In this number he proposes and resolves the question: 'It is required to find three or more positive numbers whose sum shall be unity; and such, that if each of the numbers be increased by unity the respective sums shall be rational squares.' He shows that the question depends on another one, 'To divide a given number (A) into (A—1) square numbers, each square number being greater than unity.' He then gives several solutions of this question with a number of examples; and in the succeeding number of the Diary, published in 1832, he has a memoir on the same subject, showing how, by a method slightly tentative, this question can be resolved un-

der all circumstances. As an example, he divides the number 31 into thirty square numbers, each greater than unity; the roots of these squares are fractions having the common denominator 993, and their numerators are 994, 995, 996, 997, 998, 999, 1000, 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1008, 1009, 1010, 1011, 1013, 1014 1015, 1016, 1018, 1019, 1020, 1021, 1022, 1023, 1024, 1031.

"It was undoubtedly the solution of this question that led Mr. Lenhart to investigate the analogous, but far more difficult one, 'To divide a given number (A) into (A—1) cube numbers, each greater than unity; or into (A+1) cube numbers each less than unity.' From the time of Diophantus, but little was done to improve the branch of analysis which bears his name, until the celebrated Euler wrote on the subject. He extended his investigations to the properties of cube numbers, and elicited many interesting relations among them. The only improvement in the theory of these numbers from his time until our friend commenced his inquiries, is embraced in a problem published by Mr. Joseph Waters in the Ladies' Diary, (London 1825.) 'To divide any natural number into three rational cubes, in any number of ways.' The solution, however, is little more than a demonstration that every natural number may be decomposed into three rational cubes; which is no mean step in the science: but the forms of the component cubes are such as to make them of very little practical use when applied to other purposes. For instance, the formulas for the roots of the three cubes whose sum is equal to 4, although they embrace an infinite variety of numbers, do not and can not include any case in which the roots are each greater than unity. I do not think our friend was aware of this important improvement until he was far advanced in his own speculations on the subject, nor would it indeed have been any advantage in the path which he pursued; which I will now endeavour to point out.

"Observing that his investigations on cube numbers usually resulted in the necessity of finding two cube numbers whose sum should be equal to a specified number; he commenced with this problem, and found many different forms for the roots of two cube numbers whose sum should be equal to the given number, arranging his results so that the numbers and their component cubes should form a series of increasing numbers. The investigation of these forms was published in the Mathematical Miscellany (St. Paul's Col-

lege, L. I., Nov. 1836.) In a subsequent number of that periodical, the table calculated from these formulas, 'exhibiting a variety of numbers, between 1 and 100,000, and the roots of the two cubes of which they are composed.' He continued, from time to time, to extend this table, which will ever be the most striking monument of his untiring industry, and indomitable perseverance, among circumstances the most disheartening, and in a state of alternate bodily debility and acute pain, that renders his success astonishing. The applications which Mr. Lenhart has made of these tables are no less interesting than are the tables themselves, and the process of deducing them; most of these are exhibited in a series of papers published in the Mathematical Miscellany, under the title of 'Diophantine Speculations.' The first of these is the problem 'To divide a given number (A) into three cubes.' Two methods of solution are given, the first and most simple of which, is the following:—Rule I. Multiply the given number (A) by any cube, (r^3,) and from the product deduct a series of cubes, prime to (r^3,) until you find a remainder (t) that shall be equal to one of the tabular numbers composed of two cubes. Substitute the two cubes in place of the remainder, transpose the deducting cube that made the remainder, divide by the multiple cube, (r^3), and the result will be three cubes, equal to the given number, (A.)'

"The evident defect in this process, as well as in its accompanying one, is its tentative character; for as it nowhere appears that the given number (A) is necessarily capable of being decomposed into three cubes, in the manner proposed, there is nothing to insure us that by successive trials we shall at last arrive at a number which is the sum of two cubes, much less that we shall arrive at one of those already tabulated, since it can scarcely be expected that *all* the numbers within reasonable limits, composed of two cube numbers, will ever be tabulated.

"Whatever may be the theoretical defects of his methods, however, the application of them affords the most triumphant vindication of their practical utility. For instance, he finds that the number 4 is composed of three cube numbers, whose roots are fractions, each greater than unity, their common denominator being 3789702, and their numerators 3918564, 3961405, and 4568867; and by means of these numbers he arrives at far less numbers than had ever before been attained, to answer the question which had so long

puzzled the Arithmeticians of England and America, viz: 'To divide unity into three such positive parts, that if each part be increased by unity, the sums shall be three rational cubes.' The common denominator of these three parts of unity is 5442709850427501640S, and the three numerators are 5743015291812773736, 7738158S93915488717, and 40945924318546753955. As was before intimated, it would be impossible to deduce a solution to this question, from the investigation in the Ladies' Diary of 1825.

"The next question Mr. L. resolves, is the one previously noticed as being the one which probably first turned his attention to this class of problems; and for this he gives various methods of solution, illustrated by numerous examples. We can do little more than give the enunciation of the problems which he has either originated or improved, in these excellent articles. 'To find n cube numbers, such that if from each or them a given number (a) be subtracted the sum of the remainders shall be a square number.' 'To find n numbers such that, if each of them be added to the cube of their sum, the respective sums shall be cube numbers.' 'To find n numbers such that each of them, being severally subtracted from the cube of their sum, the n remainders may be cubes.' 'To find m numbers, in arithmeticial progression, such that the sum of their cubes shall be itself a cube number.' As an example of this last problem, he finds that if the cubes of the 1000 consecutive numbers of the natural series, beginning with 1134, and ending with 2133, are added together, their sum will be the cube of the number, 16830. These numbers had been previously exhibited as possessing this property, by M. Pagliani, who had incautiously boasted that no other solution, than his own, could be obtained to this question, except by a very complicated analysis. But, perhaps, the most difficult application of these principles, is in the solution of the question, 'To find four integers, such that the sum of every two of them may be a cube number,' proposed by Mr. Lenhart, in the second number of the Mathematical Miscellany, and resolved by himself in the succeeding number. Mr. L. succeeds in obtaining the following numbers,

20809130829564551426 36,
49378013475106807329 48,
72628104764100161630 52,
21497210869324158934 0948;

and if these numbers be added, two and two, the results will

be the six numbers which are the cubes of the following six numbers:

19146344, 21062342, 60097344,
23021160, 60359866, 60571840;

they are therefore such as are required in the question. Large as these numbers really are, it is extremely questionable if numbers so small could be obtained by any other process.

"Many problems are combined in these interesting speculations, one number of which still remains in my hands unpublished, which, although important to the general cause of the branch of science on which they treat, are only so in a sense which could only be insisted on in an article professedly scientific, and the discussion would therefore only embarrass the memoir you are preparing. I thought, from the articles successively transmitted to me by our lamented friend that his intellect continued to burn brighter to the last—that the beauty of his style of writing, (mathematical style I mean,) and the vigour of his conceptions increased continually, even at times when he could scarcely hold the pen to commit them to paper."

This abstract is drawn up with ability and exhibits a correct outline of Mr. Lenhart's Diophantine speculations published in the Miscellany: but we are greatly surprised at the following remarks. "The evident defect in this process, as well as in its accompanying one, is its tentative character; for as it nowhere appears that the given number (A) is necessarily capable of being decomposed in three cubes in the manner proposed, there is nothing to insure us that by successive trials we shall at last arrive at a number which is the sum of two cubes, much less that we shall arrive at one of those already tabulated, since it can scarcely be expected that *all* the numbers within reasonable limits composed of two cube numbers will ever be tabulated."

It is evidently proper to present Mr. Lenhart's own answer to this objection.

In a letter from Prof. Gill, dated 26th of Nov. 1836, there is an elaborate criticism from which we make the following extract to show that it is precisely the same criticism now reiterated. "Your system, if I properly understand your object, goes as far as possible, to find the roots of the two cubes which compose *a given number*. This solution is necessarily limited, inasmuch as every number is not the sum of two cubes;—do you point out the limits?—or even, were your table completed from your formulas, does it necessarily in-

clude *all* numbers within the limits you take it, which are the sum of two cubes? If it does, you do not prove it, and if it does not, it is incomplete.

"You see the reason of this—I bring out a numerical result which I want to decompose into two cubes, (on this problem all your applications hinge) how shall I do—first is it the sum of two cubes? You give me no criteria by which to determine this; but point me to your tables, and say it is not there, and therefore I must seek another numerical result, and so on until I find a tabular number,—but where I to happen to hit upon such an one, would it not be rather too much like guessing work—and if not, then am I to conclude that the problem is impossible, or shall I go to work and form another table?"

We see that this is the very same criticism uttered in a different form. All the rest of the letter was an effort to prove or illustrate the positions here taken.

To this Mr. Lenhart replied in a letter dated December, 1836, from which we extract what follows.—"Had I enunciated problem II, as I have it in my manuscript, viz. 'Remarks on the division of $n \pm 1$ into, &c.'' and stated the different articles contained in the solution of that problem, as so many rules algebraically expressed, by which the several divisions may be effected numerically; and also given the details of the numerical calculations, by which it would have been seen that there is as much regularity and system, and as much freedom from any thing like 'guessing,' in the applications, as there is in the equations in the investigation, I might probably have escaped the animadversions, which appear to me to have been made without a due or respectful consideration of the subject on that part of my paper. I gave the problem, the solution and the applications in the manner I did, because I thought it preferable; with a hope too, that they would have been understood as I intended they should, and have stated above; but without the least suspicion on my part of being charged with any thing like 'guessing:' but it seems I have been mistaken. To that charge therefore, though rather indirectly made, and to the term 'loose' which you have used, I must and now do seriously object, though not in anger or to give offence, or with any ill-will, for I am incapable of either, but because I think them unkind and not respectful. Guessing forsooth! I should like indeed to see the man who could divide eight into seven cubes each greater than unity, and produce such a set of roots, as

I have done, by any species of guessing he might invent! Why, such a problem, ten years ago, would I am sure have been considered quite impossible: but we see that it is now an easy matter. Besides, I am clearly of the opinion, that the method of a known case as practised in the resolution of Diophantine Problems, is more like, and comes nearer to a species of guessing than any method I know: but it is all right in those who fancy its use, to employ it when necessary." To this Prof. Gill replied in a letter from which we make these extracts. "I never construed the matter extracted from one of your letters, as in the least respect as boasting or tending to dictation, (Mr. L. had intimated in his letter that, perhaps Prof. Gill supposed that he wished to dictate to him:) but had I so construed it I should have considered you fully justified in doing it. You are well qualified to dictate to any man on that subject, much more to me." Prof. Gill then, after stating that while every other branch of science had improved, the Diophantine Analysis had remained almost stationary, remarks, "Diophantus left it in as complete a state as a science, as it is at the present day. Do not misunderstand me again. I do not mean that Diophantus could have done what Euler has done, what Barlow or you have done. While I admire and wonder at the almost magical works of geometrical analysis, I cannot but regret that the theory of abstract numbers, has not joined in the onward march. I have it is true, glimpses uncertain and transient, of points where the march should begin, and one of these points I have, in so bungling a manner tried to point out to you. In order to do so, I took a specimen of the analysis in an article of your own: but I might have gone, and with far greater justice to the most finished works of the analysts who have preceded you. Scarcely a problem of Euler's but is liable to the same objection—and the argument I wished to urge was, the usual mode of numerical interpretation of Diophantine analysis is 'loose and unsatisfactory,' it is liable to the charge of 'guessing.' I beg you sir to believe, that if I have sinned it is the sin of execution alone not that of design. My purpose was good, and my aim single. No one will now deny that you have done more with the Diophantine analysis than any man who ever lived: then who better qualified than yourself to detect the deficiencies of the analysis and to amend them. To urge you to this was my aim." To this Mr. L. rejoined in a letter from which we make the following extract: "When I so anxiously solici-

ted you to point out what you might consider defects in my system, (Mr. L. had solicited Prof. Gill to do so after that gentleman had intimated that he would do so, if he were better acquainted with Mr. L.) I took it for granted that they would be of a nature to effect the substance of it, in such a manner as to render another edition or possibly a total change in its construction necessary. Hence my anxiety. But such it seems has not been the case; for you have not offered a suggestion or asked a single question that I had not in the course of my study on the subject anticipated, and in consequence had under full consideration. Indeed, I cannot well imagine after having furnished you with my paper, and thus made you conscious of the study necessary to produce it, how you could for one moment suppose that I had not observed all these things. Among many which you have not yourself noticed, because you did not view the subject in the same light, I shall only mention briefly, the nature and form of the remainders $4r^3-s^3$, $2r^3-s^3$, r and s being prime to each other; a knowledge of which in my search after three cubes, each greater or less than unity and equal to four or three, was highly important, and saved me much time and unnecessary labour. I cannot stop to say more about them at present, knowing that you will understand my meaning, and their value. In order to show you that I was not as unmindful of the nature of the formulas in Rule II, and their applications in a more scientific manner, as you may have supposed, I will briefly sketch a few considerations relative to them which ought to have been attached to Rule II, as a remark, like that to Rule I, or else have been embodied in Article 2, page 124. That the formulas in Rule II, or the values of ax, bx, and ex in the solution to Prob. I, may be each greater or less than unity, we must have s $(2r^3\mathrm{A}+s^3)$, b $(r^3\mathrm{A}-s^3)$ and a $(r^3\mathrm{A}-s^3)$ each greater or less than r $(r^3\mathrm{A}+2s^3)$; or by a reduction of these inequalities, $\frac{r^3}{s^3}$ greater or less than $\frac{2r+a}{\mathrm{A}(a-r)}$, $\frac{2r+b}{\mathrm{A}(b-r)}$ and $\frac{2r-s}{\mathrm{A}(20-r)}$. Now we readily perceive that a, b and 20 must each be greater than r, and that the nearer a, b and 20 approach an equality the greater the latitude for r, and the greater the certainty of effecting the required division. Hence when we have the equation $r^3\mathrm{A}+s^3=a^3+b^3$, as in Art. II, we may easily ascertain from what has been here shown whether the numbers resulting from a substitution of the terms which compose it, in the for-

mulas in Rule II, will be greater or less than unity or not. This I think is legitimate reasoning on the subject and sufficiently scientific; what think you, my very good friend and playful critic? In conclusion permit me humbly, and with deference to say, that as the right-angled triangle 3, 4 and 5 was used by Diophantus in the resolution of problems relative to squares and the known case to cubes, so the tables of numbers composed of two cubes, is used by me in the resolution of problems relative to cubes, and also to squares as I may probably show you some day hence, and that if this, therefore, in connection with my paper in the Miscellany may not be considered as advancing the Diophantine Analysis as a science, I must confess myself at a loss to know what would constitute an advancement in any science."

To this Prof. Gill sur-rejoined in a letter from which we make the following extract. "I very much like the remarks you make on the formulas in Rule II; and not only think it legitimate reasoning, but when carried out, all that could be desired or expected on the subject. It confirms me in the opinion which I had half formed on reading some of your works in the Diary since I wrote you—that your *studies* are more severe and exact than your writings, especially on those points that are so generally neglected, and that did you give the results of your labours fully and fairly, you would indeed advance the science. With regard to the term *loose*, it was certainly applied unadvisedly; for I ought to have considered, what you have since made apparent to me, that there was a great deal of work unseen; and that probably for every formula you use, you had in your own study applied a course of reasoning similar to that you give in your last." This letter Mr. Lenhart considered satisfactory, and here the matter rested. About a year afterwards Prof. Gill published some of his own solutions of Diophantine problems which Mr. L. complimented in a letter to him. Prof. Gill replied expressing his satisfaction at the compliment: but said that he thought his work did not merit it, as he had always been disheartened by the difficulties of the Diophantine Analysis. "In short, (says he) I was dissatisfied with my progress, and I am sure whatever I might say to you unpleasant in the letter I wrote you some time ago, arose more from my own vinegary feelings from this very circumstance, than from any other cause. In truth I believe it was only the home-truths, you put to me in consequence of that letter, that determined me to print my own solutions to the questions, and

thus let you see that even if I did consider your analysis deficient, the best that I could do myself was in a far worse predicament."

Besides the productions published in the different mathematical periodicals, Mr. Lenhart left a large number of manuscripts, which he bequeathed to Prof. Gill in the following words:—"I give and bequeath to Professor Charles Gill of St. Paul's College, New York, my three bound manuscript books, entitled severally, 'A Collection of Mathematical Questions with their solutions, &c.' and 'Mathematical speculations on several subjects, &c.' as a mark of my friendship for him, and as evidence of my high respect for his talents, and attainments in the mathematics; and in order that they may be preserved as evidence of the manner in which I amused myself during the hours of respite from excruciating pain, with which I have suffered for years, by one, who will know how to appreciate their contents, a greater portion of which, if not important, is at least curious and original. I also give and bequeath to the said Charles Gill a package marked 'for C. Gill A,' containing a variety of manuscript papers connected with the above mentioned books, to be disposed of together with the contents of the books, as the said Charles Gill may deem proper."

The first of the bound volumes spoken of contains a great many beautiful geometrical and algebraical solutions of problems with notes and comments. Many of the problems are selected from "Simpson's select exercises for young proficients in the mathematics." At the end of the vol. there is a table exhibiting all the prime numbers from 1 to 10,000, and also the other odd numbers, excepting those terminating in five, and their prime factors. The second vol. among other matter, contains extensive comments on Euler. At the end of this vol. he says:—"And now, in conclusion, we cannot but express an anxious hope that some competent mathematical gentleman will undertake to publish an American Edition of the 2d vol. of Euler's Algebra, as an elementary treatise on the Diophantine Analysis, and availing himself of the novelties and improvements contained in these pages, introduce them either as notes or original matter, into the body of that valuable and truly interesting work." The last vol. contains comments on Barlow's Theory of numbers, on Young's Algebra and Ward's additions to Young's Algebra, Bonnycastle's Diophantine Questions, and many other works; and ingenious and beautiful solutions of questions selected

from these works, together with a great many questions relative to squares taken from Brickley's introduction to the Analytic Art, or the Egyptian method of square and cube numbers, solved in a new way. These questions though, are generally expressed differently from what they are in the work just mentioned. These volumes contain also a great amount of original matter, as well as new and beautiful solutionsof various curious and abstruse Diophantine problems of ancient date, with extensive notes and observations; together with very extensive tables relating to cubes. In all the Diophantine problems, selected from books, numbers of a much lower denomination than those published in the works from which they are taken, have been found to answer the conditions of the problems, which, as mathematicians know, is a great object in Diophantine solutions. Most of Mr. Lenhart's contributions to the Miscellany have been selected from these volumes. The package mentioned contains a great many tables, viz: A table exhibiting a great variety of numbers, between 100,000 and 1,000,000, and the roots of two cubes of which they are composed: Also a table containing numbers between 100,000 and 1,000,000, and the roots not exceeding two places of figures of two cubes to whose difference the numbers are equal: Also tables of odd numbers, except those terminating in 5 and prime factors, from 1 to 100,033, and other tables of odd numbers and their prime factors. Besides the Diophantine speculations published in the Mathematical Miscellany, Mr. Lenhart sent a fourth that completed the series, which is still unpublished in the hands of Prof. Gill, as had been said before, and will we presume be published when the Miscellany shall be resumed. We will merely add that these manuscripts are beautifully bound and are the finest specimens of chirography that we have ever seen.

Some may perhaps wonder why Mr. Lenhart did not extend his researches as far into the modern analysis and the differential calculus as he did into the Diophantine Analysis. He has left his own answer to this inquiry in a letter to Prof. Gill, dated 7th of Sept. 1837. He says:—"My taste lies in the old fashioned pure Geometry and the Diophantine Analysis, in which every result is perfect: and beyond the exercise of these two beautiful branches of the mathematics, at my time of life, and under present circumstances, I feel no inclination to go." He then adds that in early life he had no opportunity to prosecute these studies, for says he in his

facetious way—"I might just hint to you as a friend, that I got to—bah—selling 'knob-locks and butt-hinges, &c.' and afterwards for years 'tape and ribbon, &c. by the piece, *(not by the yard).*' In short they made a merchant of me to gather lucre, instead of a mathematician, to gather honour and fame, and become useful: or, mathematically speaking, they made a figure of nine of me with the tail cut off—a cipher—an irreducible surd, instead of a real positive quantity." The reason then why Mr. Lenhart did not extend his researches into the other departments of mathematics, is that in early life, as we have already shown, he had not an opportunity, and in after life, his afflictions were such that he studied mathematics merely for amusement, and therefore selected those branches which in his case were the best adapted to that purpose. For it was not ambition, but the mere pleasure which mental pursuits awaken, that set in motion all the powers of his mind; and it was merely from the fact, that the mathematics was the only science which he had studied in his youth, or, in fact, was the only study which calls forth much mental effort, to which his mind had been directed at that period, that when his other sources of pleasure failed, he sought a retreat up its difficult paths. For from the peculiar structure of his mind, his lively imagination so susceptible of every thing beautiful, his wit, his astonishing acuteness, and all the other fine qualities necessary to enable one to excel in literature and art, it was always manifest to others and to himself, (for he often gave vent to his disappointed feelings, at not being able to gratify his inclinations in this respect, on account of his defective early education)—that he would have excelled in philology and criticism and all that constitutes an accomplished scholar, if his mind had at an early period received a direction towards such studies.

Mr Lenhart had as much talent for business as genius for scientific pursuits; as was clearly evinced when he was engaged in commerce. And as evidence of the estimate in which his business talents were held we will state that he was at various times offered the place of cashier in several banks; and after the death of Mr. Joseph Roberts, in 1835, he was offered the situation of actuary to the Pennsylvania Company for insurances on lives and granting annuities, notwithstanding his frequent sickness. His practical talent was also evinced by the facility with which he could make any kind of machine, even the most complicated, so artistly that they would always operate successfully. Indeed, he pos-

sessed the inventive and practical talent in equal degree, and that the very highest: and he had the most exact eye, and the most dexterous hand that we have ever known; and of course, with these high intellectual and physical endowments, he must have excelled in any of the mechanic arts, as well as in those of a higher order. He was a poet too of no mean degree; and has left some effusions which were written to friends as letters, that for wit, humour, sprightliness of fancy and pungent satire, and flexibility of versification, will not lose in comparison with any of Burns's best pieces of a similar kind. His talent for facetious satire, was such, that hardly any humourous incident ever occurred among his acquaintances, that was not made the occasion of an amusing impromptu. Indeed, his fancy was so playful, that

> "A carman's horse could not pass by,
> But stood ty'd up to poetry,
> No porter's burthen passed along,
> But served for burthen of his song."

And some of his pieces of a graver cast written upon real occasions, are full of the finest sentiments, the deepest pathos, the justest delineations of human nature, clothed in the very richest diction. He was also a musician of a high order—had devoted much time to the study of the art, and was perhaps the best chamber flute-player in this country. There were some pieces, especially those to which he had composed variations expressive of the sorrowful reminiscence of how all the early domestic hopes of his youth had been blasted, that he played with such exquisite pathos, as to bring tears from the eyes of those who are at all susceptible to musical impressions. His whole soul was in the matter: and melody seemed to breathe from his lips, and harmony to flow from his fingers, as the mellifluous strains thrilled through the bosoms of those who heard him, melting down all their sensibilities into the most delirious tenderness.

Mr. Lenhart's moral nature was in perfect keeping with his intellectual. He was of a sanguine temperament, extremely cheerful, without the least mixture of that melancholic vein, which leads some men under the influence of an education which encourages it, to occupy the solitary cell, and consume themselves with sorrow, in the capacity of religious mystics. He had an eye freely open to the beauties of external nature, and a heart in full sympathy with the worldly interests of man; though, at the same time, he placed the moral in its proper elevation above the physical. Of

high-toned feelings, yet he was amiable and simple in his manners, and full of the kindliest charities of the heart. He was also a man of great social accomplishments, delighting all who visited him with his pleasantry, and ability to accommodate himself to their pleasure. And he was the most communicative of his knowledge to those who could appreciate it, of any one we have ever known; yet totally free from pedantry; for he never would talk, even on the subjects of which he was fondest, to those who were unacquainted with them, even though pressed by the most importunate interrogatories. He was of too noble a nature ever to play the great man before astonished ignorance. Indeed, he was so totally devoid of that egotism, which, when destitute of merits of its own, and yet by a strange paradox of character has cunning enough to know it, will, to gratify its vanity, clothe itself in plagiarism and strut in borrowed plumage, before the gaze of admiring ignorance, that he was always more disposed to conceal his own noble endowments, than to make a show of them. Profound thought was so much the habit of his mind, was so easy and natural to him, that even in the moments of his most successful investigations in the abstruse science in which he made such advances, he was as modest as a child; and though he knew that he was achieving triumphs over difficulties which had stayed the progress of the greatest intellects, yet it was all done by him with such comparatively easy steps of progress, that he would often deny himself any credit for his success.

In the fall of 1839, Mr. Lenhart's health had declined so much, even from its former feeble state, as to make it very apparent that the final scene of his tragic life was fast approaching. He however prepared during this fall, the fourth Diophantine speculation which we have mentioned as unpublished. He lingered on with the most intense suffering, until his body was wasted to the extremest point of emaciation, yet his intellectual faculties were in all their vigour. He made his will and settled his earthly concerns with a view to the great event, which he saw approaching: and on the 10th of July, 1840, he died at Frederick, (Maryland) in a full knowledge of the solemn fact, with the calmness which had always characterized him in all the trials of life: but we hope, that in this last great trial which closed the drama of his life, that his fortitude was strengthened by a power more potent than philosophy, and that his vision rested beyond the horizon of time, upon a bow of promise with far brighter

hues, than the dim light of philosophy can ever cast upon the dark clouds of the future, to animate the hopes of the dying man.

Such was the life and character of William Lenhart. Though living in retirement and affliction, his life was varied and instructive. Industry will be cheered in its toils as it contemplates the assidious perseverance with which he acted out the maxim prefixed to his tables. "There are few difficulties which will not yield to perseverance." Genius will be fired with new ardour, as it beholds the triumphs of his intellect over the difficulties of science, amid so many disadvantages and discouragements; and misfortune, disappointment and disease will be reconciled to their lot, as they view the afflictions with which he was scourged from youth to the grave.

Stephen Colwell

ART. IV.—*A Statistical Account of the British Empire, exhibiting its Extent, Physical Capacities, Population, Industry, and Civil and Religious Institutions.* By J. R. M'Culloch, Esq., assisted by numerous contributors. Second Edition, Enlarged. London: Printed for Charles Knight & Co. 1839. 2 vols. 8vo. pp. 733 & 718.

THIS is one of the most valuable of the voluminous publications which have appeared, "under the superintendance of the Society for the Diffusion of Useful Knowledge;" but as the least known in this country, we have thought the attention of our readers might be invited to it with advantage, even though somewhat more than a year has elapsed since the appearance of this improved edition. The author of this compilation was well fitted by previous studies for the arduous task, unless his having written various works upon political economy, and having edited Smith's Wealth of Nations, with voluminous notes, be evidence of his greater love of theory than of facts. His Commercial Dictionary, which has had an extensive sale in this country, and is now in course of publication here, may well vindicate Mr. M'Culloch from such undue bias, and challenge for him the reputation of having produced a volume of more value to the statesman and merchant, than any single work upon political economy which has yet been given

to the world. We do not approve all the opinions which are put forth in the production before us: far from it. Its author has often attempted to mingle his theories with facts, so as to give them an appearance of relationship: our remark was only designed to show that the compiler knew the value of facts and could be relied upon for his statements. We have sometimes felt in turning through these closely printed pages, that information was withheld which was due to the reader, yet after much examination and comparison of his statements with other sources of authentic information, we are inclined to believe that few men could have been found more fully to digest, and more accurately and judiciously to report the facts which it was the object of the work to disclose. He admits that he "seldom scrupled when a fair opportunity presented itself briefly to expound the general principles applicable to the subject under review," but remarks further that as "these discussions are always separated from the descriptive and arithmetical details, they may be passed over by those anxious only to acquire information as to the latter." It is but too plain however that he is disposed to apologize for the state of things in England, and to screen the holders of power from their just responsibilities. He exhibits something like spleen towards writers, who, like Colquhoun and M'Queen, display with less reserve facts bearing on the abuse of power. The choice of his collaborators was left to the editor, and so far as we know by their reputation, or can judge by the results, it seems to have been wisely directed.

As the importance of statistical inquiries, and their general scope are not sufficiently appreciated in this country, it may not be inappropriate to furnish here a rapid outline of the plan and main features of this compilation, before making such other observations as its contents may suggest.

The First Part, extending to 396 pages of the first volume, treating of England, Scotland, and Ireland, relates to the names, extent, and face of these countries, to their mountains, moorlands, vales, fens, marshes, rivers, river-ports, lakes, sea-coasts, sea-ports, geology, climate, botany, zoology, and to the general civil divisions. These are followed by a special statistical account of every country, containing many particulars in relation to each, not embraced in the foregoing statements.

This interesting portion of the work well repays an examination. It appears to have been drawn up with care

after a due acquaintance with the best authorities. And this was no small labour, for almost every locality of these countries has its special historian, geographer, or illustrator, who has minutely set forth its claims upon public attention. These writers, old as well as recent, have been made to contribute largely to the interest of these pages.

After having thus examined the ground, the Second Part exhibits the numbers and distribution of the population. A slight allusion being made to the origin of the present races in the British isles, our author seems impelled, at once, to notice an event which threatens, in his estimation, a serious injury to the pure Saxon blood which flows in English veins.

We allude," says he, "to the late extraordinary immigration of Irish, or Celtic labourers into Great Britain. Considering the general want of employment, and low rate of wages in Ireland, the temptation to emigrate to England is all but irresistible; and steam communication has reduced the expenses of transit to almost nothing; having established, as it were, floating bridges between Dublin and Liverpool, Belfast and Glasgow, Waterford and Bristol; so great has been this immigration that at present, it is believed, about a fourth part of the population of Manchester and Glasgow, consists, either of native Irish, or their descendants; and in various other places the proportion of Irish blood is still greater, and threatens to entail very pernicious consequences on the people of England and Scotland. The wages of the latter are reduced by the competition of the Irish; and which is still worse, their opinions as to what is necessary for their comfortable and decent subsistence, are lowered by the contaminating influence of example, and by familiar intercourse with those who are content to live in filth and misery. Hitherto the Irish have been very little, if at all, improved by their residence in England; but the English and Scotch, with whom they associated, have been certainly deteriorated. It were better that measures should be adopted to check, if that be possible, the spread of pauperism in Ireland; but if this cannot be done, it seems indispensable that we should endeavour to guard against being overrun by a pauper horde." What emotions must this earnest complaint excite in the minds of those who are acquainted with the condition of the English poor! What must be the condition of those Irish poor of whose inroads such apprehensions are entertained? What must be their moral condition whose association could injure English paupers? And what sort of beings

are they who are so *content* with a state of filth and misery, that thus commend it by their example to others?

The population of England and Wales, from the period of the conquest to the year 1801, has been the subject of much discussion, and many ingenious estimates. At the former time it is believed to have been

An. 1000,	about	2,000,000.
1387,		2,350,000.
1528,		4,356,000.
1575,		5,000,000.
1696,		5,500,000.
1750,		6,467,000.
1801,	First census	8,872,980.
1811,	Second census, increase 14 per. ct.	10,150,615.
1821,	Third do. do. 18 do.	11,978,875.
1831,	Fourth do. do. 16 do.	13,897,187.

The number of families is stated to be, 2,911,874; of inhabited houses 2,481,544, showing a deficiency of houses equal to 430,330, so that an equal number of families numbering about 2,581,980 persons, are either houseless, dependent upon public charity for shelter, or crowded two or more into a house.

There seems to be something more than mere coincidence in the following statement of the way in which the numbers of marriages, births, and burials, correspond to the price of wheat in England and Wales.

Year.	Mean price of wheat per quarter of 8 bushels.	Marriages.	Baptisms.	Burials.	Remark.
1798	£2 14	77,919	262,337	181,313	
1799	3 15	76,036	258,685	183,267	These years are taken as furnishing great variations in the price of wheat.
1800	6 7	68,481	247,147	201,128	
1801	6 8 6	67,228	237,029	204,434	
1802	3 7 3	90,396	273,837	199,889	
1803	3	94,379	294,108	203,728	
1813	6	83,860	314,432	186,477	
1814	4 5	92,804	318,806	206,403	
1815	3 10	99,944	344,931	197,408	

Mr. M'Culloch having adverted to the law which exercised such a perceptible influence upon the proportion of marriages, births, and deaths, we have by reference to various authorities verified it by the above table. It is somewhat remarkable that such events should so manifestly be adjust-

ed by the price of food. It seems that any considerable advance in the price of wheat puts it out of the power of multitudes to marry, and retards the fruitfulness of those who are married.

In 1833 an act of parliament provided for a new and complete registration of marriages, births, and deaths, the operation of which, in the course of a few more years, will furnish the most authentic information on these subjects, which has ever been given to the public. It will be specially useful in reference to vital statistics, and may suggest ameliorations in the treatment of the poor, important to the interests of humanity.

The probable duration of life has long been an object of important inquiry, in reference to the value of annuities, and other life estates, survivorships, toutines, life insurances; and the present registration will settle that subject in England and Wales, upon a firm basis. It is cause of much gratulation that from 1740 to 1815, the value of life has increased in that country, from 20 to 50 per cent, and many have used this as a proof that the condition of the poor has in that period been proportionably ameliorated. That their lives have in some way been lengthened seems clear; what it may be owing to is not so certain, and various causes have been assigned, such as the banishment of the small pox, the improvement in medical skill, the draining of marshes, and the use of more wholesome food.

It strikes us, strongly, that this great increase in the value or expectation of human life, in England, is due to the fact that in 1723 the government undertook the support of the poor, by the establishment of the work-house system. We gave some of our views on this subject in our number for last January, and whatever more may be said in relation to the sufferings of the poor, before and after that period, it cannot be denied that in general they were more humanely treated afterwards than before. The amount of food was not always enough, but it was sufficient to support life and promote increase of population. The regularity of the new system was more conducive to health and long life, than the alternate gorging and starving of a life of beggary. What the proportions formerly were between the poor and those above that condition, cannot easily be determined, but it is pretty clear that the former are far the most numerous at this day. There is good reason to believe that the poor, under the present system, are increasing proportionably faster

than the other class; and this *increase* has of late years compelled the nation to look more closely to the administration of the poor laws. This state of things is styled by certain writers, the *pressing of the population on the means of subsistence.* It would be much more fitly styled, however, a management of their capital by the rich, to secure the labour of the poor, for the remuneration of scanty food, and scanty raiment. It can be easily shown that England can support double the present population in comfort, so far as food is concerned. It is the policy of the country which presses upon the poor, and not the latter upon the resources of the soil to feed and clothe them.

Scotland has not increased in population in the same proportion with England and Wales, "but we are warranted in affirming that from the close of the American war, down to the present day, the progress of Scotland in civilization and the accumulation of wealth, has not been surpassed, if it ever have been equalled by that of any other European country."

In 1755 the population was	1,265,380
1801	1,599,068
1811	1,805,688
1821	2,093,456
1831	2,365,114.

Whilst the population of the whole country increased in the last period of 10 years at the rate of 13 per cent, that of the towns was at the rate of 26½ per cent. The proportion of persons dwelling in the large towns is about the same as in England, being nearly one third.

The progress of population in Ireland, presents undeniable evidence that a great increase may take place under circumstances apparently the most unfavourable.

The increase of numbers in England, and the prolongation of life, are often used to prove an actual amelioration in the condition of the people, whilst the same proof exists in a much stronger degree in Ireland, where the misery of the people has grown into a proverb.

In 1754 the population was estimated at		2,372,634
1777		2,690,556
1805		5,395,456
1821	according to the first census,	6,801,827
1831		7,767,401

This shows the population to have tripled in 77 years in the face of an unexampled emigration to the United States, to the various British dependencies, and to England and Scotland. In England the growth of population was pro-

moted by better feeding the poor, who were all excluded from any interest in the soil; and, with the help of the *pauper horde* from Ireland, its population was doubled in 77 years. If, apart from the condition of the people, the increase be matter of rejoicing, then there is more joy for Ireland than England. This fact is a sore thorn in the side of our author, and he struggles hard to forestall the proper conclusion. He is obliged to bring forward, among others, what appears to be the true reason of this great growth of Irish population, the subdivision of the large farms, to which the landlords, many of them absentees, were tempted by the double motive of heavy rents, and increased political influence. This splitting of farms was precisely the opposite of the process in England, where they were consolidated, and the retiring occupiers converted into poorly fed labourers, and confirmed paupers. If the stern policy which prevailed for several centuries in England in regard to the poor had been continued after their expulsion from the land, and if in consequence they had been left to the benefit of the voluntary system, without a rood of land to raise a root, then the check would have been complete, and their numbers must have rapidly diminished. In Ireland the land was again restored to the possession of the people upon terms most ruinous indeed, to their independence of mind, and to their hopes of accumulating property, but with some guarantee against starvation. We can readily imagine how much more marriages would increase among those who could hope for a home, of their own, however humble and for food the produce of their own labour, than among those who could have no home, and were wholly dependant on charity for food and raiment. Doubtless the potatoe has done its part, as alleged, in feeding the growing hordes of Ireland, and doubtless it would have done the same for England, if the people had been in condition to plant and dig for themselves.

Mr. M'Culloch thinks that if a compulsory provision for the poor had existed in Ireland, the landlords so tempted by "exorbitant rents offered for small patches of land," would have been deterred by the liability to which they would have exposed their estates, for the support of the infirm and destitute among these small occupiers, from this practice of spliting farms, carried to such extent, that "swarms of cotters are hutted over the land." Let it be noted that these cotters, ground as they are to the dust by "exorbitant rents" and

taxes, and without any provision by law for their infirm and disabled, have tripled the population of their own country in the short period of seventy-seven years, besides sending *pauper hordes* to people other lands. The whole population of the three kingdoms in 1831, was 24,410,429, and according to the ratio of increase observed since 1801, may at the present time be estimated at 28,000,000.

The Third Part of the work relates to "the industry of the British Empire," which is treated under the separate heads of agriculture, mines and minerals, fisheries, manufactures and commerce. The statements on these important topics cover upwards of three hundred and fifty pages, and abound in useful facts and instructive details. In regard to agriculture he enters fully into the sizes of farms, condition of leases, buildings, fences, tillage, grazing, the various kinds of live stock, timber, rents, profits of farmers, numbers employed in agriculture and the progress of agricultural improvement. The main feature of English farming is the great size of the farms which have so long been in the process of enlargement. Our author is one of a school of political economists who extol this mode of farming as that alone from which the best results can be expected, and the argument seems to be on their side in every particular except that which relates to the welfare of the mass of the people.

The beauty of English landscape is the pride of the island, and strikes the dullest observer. In fine weather the traveler is charmed with the lovely views which are continually unfolding as he advances. No one who has seen these prospects can be at a loss for the origin of the exquisite taste in landscape gardening displayed in that country, which consists in presenting in miniature what the natural landscape presents on a large scale. See what a measureless extent of meadow and pasture, of wheat and barley, of oats and fallow, diversified by patches of timber, by verdant hedges, by hills and slopes and vales, by streams and parks, by winding roads and curious porter's lodges, by occasional beautiful edifices imbedded among trees; but the people where are they, where are their homes? Their cottages have long since been destroyed as blots upon the lovely scene, and the poor have been banished from the fastidious presence of the rich and from the eye of the traveller. Driven to hovels, sheds and workhouses, degraded from farmers to labourers, to till the soil with four-footed companions, without so good a share of the product, to be muzzled whilst they tread out

the corn. It cannot be denied that the landscape is improved by this banishment of the poor and their cottages; for, fields of waving wheat and barley, and pastures covered with cattle, are far more attractive to the eye than their humble dwellings, with patches of potatoes, turnips and beans. This evil has engaged the attention of a high authority in all that regards agriculture, gardening and architecture, and has received his severe animadversion. Speaking of the porter's lodges, which are constructed for show and without regard to the comfort of the inmates, he proceeds: "The existence of so many such lodges and of the equally miserable houses for gardeners in the back sheds of hot houses and kitchen gardens, almost every where shows how very little sympathy there exists between the rich and poor in England. The cause of this we believe to be in most cases want of reflection and ignorance of the moral fact that the more extended our sympathy is for our own fellow creatures the greater will be our enjoyments." He mentions another cause worthy of being noted. "The greater number, he says, of the architects, landscape gardeners and builders, have sprung *from the people*, and when introduced among the higher classes in the way of their business, they have more or less the character of *parvenus*."

"Observing in these higher classes the contempt and disdain with which they look upon the mass of the people, they naturally avoid every thing which may remind themselves or their employers of their low origin."

Hence, he remarks further, they are rarely found, to have moral courage to advocate the cause of the poor, to suggest improvements in their dwellings or other ameliorations for their benefit. Then follows this monition. "Humanity dictates this line of action (increasing the comforts of the poor) as well as prudence; for it would be easy to show that if improvement did not pervade every part of society, the breach between the extreme parts would soon become so wide as to end in open rupture." *(Loudon's notes to H. Repton's Landscape Gardening and Architecture.)* The evil here mentioned is chiefly in reference to the poor in the immediate employment of the rich as gardeners, porters and labourers. How those are housed, who cannot boast even of these advantages, the annals of the poor tell us but with too much truth.

Mr. M'Culloch is the stanch advocate of large farms in agriculture, but is so pressed by the argument against them

that he labours to show they are not large in England. "Nothing, he avers, can be a greater mistake than to suppose that the well being of a country is promoted by dividing its lands into minute portions and covering them with cottages." "It is true, he admits, that a large farm managed according to the best principles may not employ or rather keep so many people as if split into smaller portion; but the large surplus obtained from such a farm, and which goes partly to the landlord as rent, and partly to the farmer as profit, *is not retained by them*; they exchange it for the various products of art and industry for which they have occasion." This is very cool in the way of argument, and with much more in the same tone, not less so in the way of feeling.

Our objection to the size of farms does not go so far as to deny that the interests of the land owner have been promoted by this enlargement. Capital, which brings its advantages wherever it is judiciously applied, has carried its improvements into agriculture. It required larger farms for the scope of its action, and the men without capital had to yield. It is the injury to the agricultural population which this process has wrought that is to be lamented. The advantage of the landlord has been the ruin of his tenants, driven to the ranks of the labourer. But they are not merely driven to these ranks; the economy and perfection of modern English farming consist in so arranging the crops as to save labour. A heavy capital is required for this mode of farming, equal to about £ 10 per acre; of course none but those who have capital can embark in it. Crops of wheat and barley, and droves of sheep and cattle require much less labour than many other products which minister more efficiently to human subsistence. The more the capitalist farmer could dispense with labour in his large operations, the cheaper that labour became when he required it. The real solution of this problem of large farms consists in cheap labour. The whole system would fall before adequate remuneration to the labourer. The skilful farmer with land enough, with the needful capital and a rate of wages which barely sustains the life of the labourer, can make the face of the country smile, but anguish will be in the hearts and leanness in the sinews of those by whom he has done these wonders. He will calmly appropriate to himself all that the labourer can earn, more than will sustain him in existence. The owner receives his rent, the farmer his profit, but he

who does the work is not even so well fed as the four-footed sharers of his annual toil, yet he is taught to feel that even such labour is a boon, and he daily dreads those improvements in agriculture, which deprive him of every chance of livelihood except that dispensed in the workhouse. What must be the feelings of these hard-working and ill-paid men as they find themselves gradually excluded from the possibility of earning a living, not needed in their native land, a burden to their country. Their state of mind may be described in the language of a witness before the parliamentary committee, appointed in 1836, to report upon the subject of the agricultural distress, who being asked "if the want of employment had any demoralizing effect upon the labourers," answered, "it has demoralized nearly the whole of them, they are in a very desperate state, they are in such a state of excitement, that they are ripe for every thing in the world, I will venture to say that I could take my horse in the district in which I reside and put the whole of it in a state of revolution before to-morrow at this time, and any well known farmer could do the same." (Hutt's compendium of the report, page 53.)

It may be that this evil which the improvements in British agriculture have brought upon the people, is beyond the reach of legislation. Owners of land must be left to the management of their own estates; they must be permitted to consult their own interests and to spend their incomes in their own way. It does appear to us however, that there are considerations involved in this matter higher than legislative action, higher than shillings and pence. Those minds so active in devising plans of philanthropy to be carried into execution all over the world, those arms so nerved to break off the chains of the bondsman, those hands so open to purchase the boon of liberty, can they not devise and execute some project for their relief upon whose labour they live?

In this country we readily comprehend that the whole advantage of large farms is confined to those nations and districts where capital is abundant, and labour cheap. It is admitted here that no more common error is prevalent among our farmers than occupying too much land; and the product of more or less land, is found to be in proportion rather to the quantity of labour, and capital applied judiciously, than to the number of acres. There is no part of the United States where the small farms are not known to be most advantageous, except in those states where slavery prevails. The rich planters of the south are able with hosts of well fed

slaves to reap all the benefits of capital applied to agriculture on a large scale. The American slave-holder labours under the disadvantages of being obliged to support all the year a force of which he needs the whole only in the busy season, and of furnishing to his slaves the same quantity of food and raiment, however his own products may fall in value or the prices of these articles may be enhanced. The English farmer, on the other hand, pays the meager wages of his labourers only during the time he wants them, and when adverse times come, he reduces their wages or ceases to employ them. He can consult his own interest in all that regards the wages and usage of the labourer, and so he does, and so we dare say would the abolitionists of this country do in the same case, and so in all probability would the wealthy southern planter were he in England. In the latter country it requires a capital equal to about £10 per acre, to carry on farming in the large way, or nearly $25,000 for 500 acres of land, and this we believe to be about the same which is required to provide a southern plantation of that size with the requisite force of slaves, and to meet other needful expenditures. A comparison of the condition of the slaves and their families with the English agricultural labourers and their families, would show which of these situations is the more tolerable and more consonant with the interests of humanity. So far as our knowledge extends, and it is not very limited, the American may safely challenge the comparison. Names do not change the substance of things. The planter can manage a large plantation with profit, because he is rich and has a host of slaves who give him their labour for food, raiment, medical attendance and a cottage: the British farmer can manage with profit a large farm, because he has capital and can command the labour of as many men as he pleases, at a rate which neither adequately feeds nor clothes them, while he is under no obligation to support their wives and children, or to find them a hovel or medical attendance. This comparison is not made to justify slavery; far from it; it is made to show there is a condition worse than that of African bondage.*

* The following extract from a late number of the London Herald, strongly confirmatory of some of the views expressed in our late January number, is given as not irrelevant here.

"Great was the outcry which the flogging of female negro slaves excited in this country. Petition upon petition, and speech upon speech, followed each other in rapid succession against the practice—a practice which, if indecent and

The condition of the agricultural population of Great Britain will be more fully comprehended by the following statements from the census of 1831.

England and Wales.

Familes chiefly employed in agriculture,	834,543
Occupiers of land employing labourers, 161,188	
Occupiers of land not employing labourers, 114,188	
	276,037
Leaving,	558,506

families dependant for livelihood upon the 161,188 who employ labourers, or a population of upwards of 3,000,000 of souls dependant for employment and a living upon 161,188 farmers. These farmers leading a hard life between high rents and taxes, the one averaging $4 85 per acre, and the other absorbing half their income, on the principle of taking care of themselves, arrange all the processes and plans of their husbandry to save labour and the payment of wages. This will be seen by the distribution of crops, of which the following is offered by our author as the best statement:

barbarous in Jamaica, can hardly be accounted decent and civilized in England —a practice which, if justly exciting public indignation when the black bondwomen of Africa were the sufferers, can hardly deserve the national applause when it flagellates the backs of the white women of England.

"Yet so it is; and the melancholy fact must not be unnoticed, that the sympathy for black sufferers in this country is far more extensive, active, and earnest, than for white victims of oppression. There seems to be a fashion in philanthropy as well as in many other things, and fashion demands a homage which humanity durst not ask. How many among the hundreds of thousands of English men and English women who used to pour in petitions to the legislature on behalf of oppressed negroes, have petitioned on behalf of the white slaves of England? We were neither cold nor remiss when the sufferings of negro slaves, and the degradation of human nature in their form and fate, were the topics put forward to excite public attention and awaken public sympathy. We gave our countrymen and countrywomen credit for the generous interest which they took, or seemed to take, in the redemption of the negro race from bondage, and its lash. Why is it that in this free country, under the very eyes of the weeping friends of the negro, things may be done that should never be heard of, except in lands sunk in the deepest debasement of slavery, and no national hatred for the wrong—no national sympathy for the sufferer be excited? We fear we must answer that the fashion of our philanthropy is to exercise its energies rather abroad than at home—rather in the redressing of remote wrongs, than of those which are immediate and near. We agree with those who say that 'charity should begin at home,' though we do not say that it ought to end there. It is difficult to say that people are sincere who look across the globe for objects of compassion to succour and relieve, and are blind and deaf to sights and sounds of human misery grovelling at their feet."

	Acres.
Wheat,	3,800,000
Barley and Rye,	900,000
Oats and Beans,	3,000,000
Clover,	1,300,000
Meadow and Pastures,	17,000,000
Turnips, Potatoes, Roots,	1,200,000
Hops and Gardens,	150,000
Fallow,	1,650,000
	29,000,000.

More than one half of the whole land in culture is converted into meadow and pastures, in which shape it ministers least to the necessities of the poor, either by making their food abundant or furnishing them employment. Of the remainder, 10,650,000 acres are applied to the production of wheat, barley, rye, oats, beans, clover, and to fallow for these crops, the preparation for which is chiefly made by the plough and animal labour. Only 1,200,000 acres are alloted to potatoes, turnips, and other roots. An acre of ground yields in England, according to our author, 8, 10 or 12 tons of potatoes, or from 17,000 to 25,000 lbs., and by the same authority, wheat yields from 21 to 26 bushels an acre, or from 1200 to 1500 lbs. Wheat is estimated by some English writers, to contain from three to six times as much nutriment in an equal weight as potatoes. Mr. M'Culloch, though objecting to potatoes as a principle reliance for food, allows them one third the nutriment of wheat. A report made not many years since, by Messrs Percy and Vauquelin of the French Institute, to the minister of the interior, on the comparative nutriment of food, fixed the following proportions:

Wheat,	80 parts in	100
French beans,	92	"
Peas,	93	"
Average of meat,	35	"
Turnips and greens,	8	"
Carrots,	14	"
Potatoes,	25	"

This valuation of the potatoe does not differ much from that adopted by Mr. M'Culloch. An acre of potatoes therefore must yield a quantity of food equal in value to five or more acres of wheat, besides having created a demand for

more labourers in planting, hoeing, weeding and gathering in the crop. Yet Mr. M'Culloch is vehemently opposed to the use of potatoes as the common food of the country, *(See "Potatoes," in his Commercial Dictionary.)* And this in the face of many millions of his countrymen suffering for want of food.

In Scotland the number of families subsisting chiefly by agriculture is stated to be 126,591

Occupiers of land employing labourers,	25,887	
Occupiers not employing labourers,	53,966	
		79,853
Leaving,		46,738

families, or a population of 280,428 dependant upon the 25,887 who employ agricultural labourers. The following is the distribution of crops.

Wheat,	220,000	Turnips,	350,000
Barley,	280,000	Flax,	15,000
Oats,	1,275,000	Gardens,	32,000
Beans and peas,	100,000	Fallow,	150,000
Potatoes,	130,000	Meadow & Pastures,	2,489,000
			5,041,000

In Ireland the number of agricultural families is stated to be 884,339

Occupiers of land employing labourers,	95,339	
Occupiers of land not employing labour,	564,274	
		659,613
Leaving,		224,726

families, or 1,348,356 souls dependant for labour and subsistance on 95,339 farmers who employ labourers.

The distribution of crops in Ireland is not well known. It is estimated that five millions of the population are dependant on the potatoe for their chief food, and of the remaining three millions, 2,500,000 are believed to be principally dependant on oats. The greatest attention is paid to the culture of the potatoe. "Every ounce of manure is carefully husbanded and every weed is destroyed. The drainage is complete, and the hoe, or rather the apology for that instrument, is constantly going. The potatoe is the only crop, the

cot'er reserves for himself. All the rest—cattle, corn, butter, pigs, poultry and eggs go to the landlord. They thrive under it, and with plenty of ventilation, enjoy good health and have the cleanest skins in the world. But if the crop fail or the season should prove unfavourable for preserving it, the months of April and May are trying seasons; then it is they are driven to subsist on weeds; fevers spread, and the utmost distress prevails. (*Ireland and its Economy, by L. E. Bicheno*, Esq. p. 21.)

Mines and minerals come next in order in the work before us; and under the heads of coal, iron, tin, copper, lead, salt, manganese, quarries of stone and slate, lime and fuller's earth, we are presented with ample and interesting details, exhibiting in a striking view the wealth of the empire in these departments of national industry. So in regard to the fisheries.

The subject of manufactures, in all their various branches, and in regard to the number of persons employed, the annual production, the moral and physical circumstances contributing to their progress, their history, present condition, profits, is treated as its importance demands, and a mass of useful facts condensed in small space. The account of the industry of the empire is continued under the head of commerce, foreign, domestic and colonial, with the means of carrying it on, such as money, weights and measures, roads, rail roads, canals, shipping, and the number of persons to whom it gives employment.

The next portion, PART IV., is devoted to an outline of the English government in its various departments, legislative, executive and judicial, the municipal corporations, the constitution and courts of Scotland and Ireland, the religious establishments, the churches of England and Ireland, the kirk of Scotland, the English, Scotch and Irish dissenters, in relation to all which there is more information conveyed than is to be found in any similar compilation. The remainder of the work, PART V., embraces the subjects of education in the three kingdoms; the society for propagating Christian knowledge; the General Assembly's education committee; parochial, secession and private schools:—revenue expenditure, local taxation and national debt:—the army and navy:—of crimes, punishments and prisons:—of food, clothing and lodgings:—classification and income of the people:—of the colonies and dependencies:—of vital statistics:—of the poor:—and of the origin and progress of the English language.

In the arrangement thus slightly delineated there are glaring faults, unworthy of the general execution of the work, but not perhaps detracting greatly from its usefulness.

The British Empire, of the wealth, power, resources, and expenditure of which, we have in these volumes such a full account, has long been in many respects the admiration of mankind. In some particulars it may now be justly regarded as the wonder of the world. Its power, exerted over all the earth, its unwonted accumulation of capital, the incalculable resources of its industry, the beauty and endless variety of its manufactures, the extent and perfection of its internal communications, may with other things justly challenge admiration.

Whilst the national debt, of a magnitude which staggers our computation, the heavy annual expenditure and taxation, the abject, hopeless, and starving condition of two-thirds of the population, contrasted with the incomparable comforts and enormous wealth of the remaining third, are subjects specially evoking our wonder. We propose to dwell on these topics with the view of setting forth the nature and extent of the burdens borne by these people, and of distinguishing the classes upon which the pressure falls.

The frame of civilized societies implies a division of employment indispensable to its purposes. While government is necessary, there must be organized agencies in its various departments, and agents to fill them. If manufactures, or the common arts of life be carried on successfully, it must be by means of special skill, or capital, or facilities, enjoyed by some over others. If commerce be pursued, there must be the various grades of merchants and their subordinates and agents, and all the aids of commerce, such as roads, canals, ships, money, and those who take care of and manage them. Agriculture must be carried on by those who have sufficient capital to do it with advantage. There must be also a host who contribute their efforts to sustain society, in its relation with education, religion, law, medicine, and other intellectual occupations and conditions. This superstructure of agencies is intended to secure to all the benefits of common defence, mutual justice, and the enjoyment of personal rights and individual possessions; and it is sustained by the mass which creates it, and furnishes the labour which defrays the expense. This mass feeds and clothes and protects the various agents it employs; it pays the interest or profits upon all capital; it makes agriculture effective; it produces the arti-

cles of which the continual interchange constitutes commerce, and which are thus distributed at home, or sent abroad to pay for those imported. The labour of this mass is the basis of all wealth, and of the power and enjoyments which wealth affords. If this necessary distribution of powers and functions be well sustained, it secures the benefits intended. If those whom superior talents, energy, capital, or good fortune, place in these various stations abuse their position, as history teaches us they have invariably done, in a greater or less degree, the balance of society is lost, and the reign of anarchy and oppression begins. These unfaithful agents, disregarding the trust, actual or implied, under which they are acting, hasten to grasp, for their exclusive benefit, all the political power, all the land, all the capital, and all the labour. It is in the light of these obvious truths that we propose to make some remarks upon the burdens of the people of Great Britain, which may be offered as a continuation of those made in our January (1841) number, on the subject of the *poor, and poor laws.*

It is falling far short of the mark to estimate the burdens of a people by the amount of taxation or legislative imposition which they endure; there are others in every flourishing community which press with equal, if not superior, force upon the producing classes. That tax is no less a burden to which the wants of nature compel submission, than that which is enforced by public authority. The concentration of capital in that country in few hands, is without parallel. What does this imply? Property in lands, in buildings, in machinery, in implements, in merchandize, in money, is capital; it is the produce of labour, the saving or profit made upon previous labour. All accumulation of capital made by those who employ labour at fixed wages is made chiefly at the expense of the labourer. To a certain extent, which we cannot here undertake to specify, this is an advantage to both parties, and to the public, but that it may be carried to a ruinous extreme, is what we purpose to show. Capital whatever shape it may assume, derives all its value from its power to command labour, or the products of labour. Farming lands the most fertile, are worthless, unless labour can be applied to them; buildings can yield no rent unless the tenant, by his own labour, or that which his capital can command from others, produces the amount to be paid or its equivalent; machinery, however costly and well adapted, is useless, unless human hands are found to keep it going; mo-

ney is barren, unless its possessor gives it in exchange for labour or its products; evidences of debt are valueless, unless the debtor can command those products of labour which will redeem his obligation. Every accumulation of capital is therefore a charge upon the labour of that community where it exists, and it can only be made productive, or be preserved in value, by that charge being enforced The interest of money and all profits charged upon goods, are interposed between the producer and consumer, and retained by the capitalist as compensation for his share in the business. If the labourer, by whose immediate agency the production takes place, were in a condition to do so, he would sell to the consumer himself, and thus save this interest of money and those profits which are extracted from his earnings to pay for the intervention of capital not his own. This intervention is, however, an advantage to the producer, and its charges are cheerfully endured so long as it leaves him the power of extracting a fair remuneration for his labour. But when the capitalist, using his facilities to the utmost, pushes his advantage over the labourer, until by degrees he absorbs all the avails of his labour, except that which is barely adequate to maintain his existence, then is he *held to labour* by hunger and the love of life. He has no master. No one is bound to provide him food nor clothing, or to take care of him when sick. He has no choice left,—he must find labour, he must obtain wages; he cannot hesitate about compensation, nor refuse what is offered, his appetite is urgent, he must live. The question with him is no longer one of gain or saving, it is a daily struggle with nakedness and starvation. No vision of riches lures him, but the spectre of famine glares constantly on his sight.

The conquest of capital becomes now complete. It has all the land, all the machinery and buildings, all the raw material, all the food, all the raiment, and all the money. It yields none of these things, nor the use of them without labour, and economy teaches how to make capital available with the least possible employment of labour. The less demand capital makes for labour, the cheaper that labour becomes. The less the labourer is needed, the more urgent become his wants, and the more abject becomes his bondage to the power of capital. He crawls at the feet of his fellow man; his liberty, his manhood, the powers of his body and mind, and too often, we fear, the interests of his soul are sacrificed on the altar of Mammon. What stronger illustration of the wisdom which taught that "it is easier for

a camel to pass through the eye of a needle, than for a rich man to enter the kingdom of God."

It is providential that those idolaters and barbarians to whom British Christians send the great law of charity by their missionaries, do not, by way of precaution, send deputations to Great Britain, to ascertain the practical value of the system so earnestly commended to their adoption. It would perplex the most astute of the heathen to find warrant in the scriptures for some of the great features of civilized society, which stand glaringly in contrast with the inappreciable blessings conferred by the Christian religion.

Such is the condition, as we believe, of the bulk of the population of the British Isles, and such are some of the causes which have contributed to this degradation. For better assurance let us examine the facts so far as they may be accessible.

Estimate of the capital of Great Britain and Ireland, exclusive of public property, such as military stores, churches, hospitals, &c., and of unproductive private property, such as furniture, and wearing apparel.

Lands under cultivation,	$5,760,000,000
Farming capital, implements, stock, grain, &c.	960,000,000
Dwelling houses, ware houses, and manufactories,	1,920,000,000
Manufactured goods, on sale, and making,	672,000,000
Shipping, of every description,	96,000,000
Mercantile and manufacturing capital, machinery, &c.,	624,000,000
Mines, and minerals,	312,000,000
Canals, tolls, and timber,	216,000,000
	$10,560,000,000.*

Of all this immense sum of capital, how much falls to the portion of the poor?

Agricultural labourers of G. B. No.	4,800,000,	capital none.
Mining labourers,	600,000	none.
Manufacturing labourers,	2,400,000	none.
Mechanics, (not masters,)	2,000,000	none.
Seamen and soldiers,	831,000	none.
The poor of Ireland,	5,000,000	none.
	15,631,000.	

* Lowe's *Present State of England*, appendix to Chapter viii; the pound sterling converted into dollars, at $4 80.

More than fifteen millions of people in a wholly dependant condition;—dependant on eight millions and a half. These fifteen millions have no lands, nor mines, nor shops, nor houses, nor ships, of their own; they have no money, no goods, no meal, no meat, except as they are permitted to earn them from week to week. They have no work unless it be *given them*—unless they are *allowed* to do it. They see the horse, the ox, and the ass, with whom they toil, well fed, and sheltered; work or no work, these neither starve nor grow lean, whilst they are often fain to solicit the burden of the beast, with less than the beast's compensation. They are stripped of every thing but their muscles, and their appetites, and the capitalist has full command of the former by his having exclusive control of what ministers to the latter. He has used the power, as men generally use power, unchecked, for his own advantage. British labour and British capital have been long separated, and the separation, under the influence of selfishness, has long been growing more apparent, until it has reached a point at which the vested rights on the one hand, and the distribution of political power on the other, will prevent any remedy or redress for the suffering party, except it come through a great political, and perchance bloody, or a great moral revolution.

In pleading the cause of the labourers and in alleging the undue ascendency of capital, we do not mean to undervalue the talent, the skill, or the industry of the other agencies by which the business of life is accomplished. They are indispensable to success, and if labouring men and their families asked no more sympathy than steam engines and spinning jennies, our rejoicing at the accumulations of the rich might be unalloyed. We have come to the conclusion, however, that whatever may be the legal rights of the wealthy, and whatever may be the social necessity of duly respecting them, yet the truth of the case should be carefully sought and unreservedly told, to open the way for that moral revolution, which must inevitably take place as soon as Christian principles shall pervade the higher classes, the holders of capital and power in Great Britain.

It is to be regretted that the statistics of the British Empire do not furnish us with a more minute analysis of occupations and wealth. Although there is much uncertainty in relation to this matter, we do not hesitate to express our belief, founded on approximations made by Beeke, Colquhoun, Lowe, Marshall and others, that three-fourths of the whole capital,

as above estimated, belongs to 75,000 families, including less than half a million of persons. So long however as the labouring classes are wholly stripped of all property, it is not of much concern whether their masters number half a million or eight millions; for the whole of the ascendant mass are interested in keeping down the lower mass—the lower classes on whose labour they thrive, and exhibit to the world an unmatched display of splendour in living and comfort in enjoyment. The great annual business of the nation is to produce, for domestic use, food and manufactures; to make such a surplus of the latter as may find a market abroad, and be exported in exchange for such articles as may be wanted from other climes. The working classes are required upon the terms of the capitalist to give their labour for all this vast production. The land, the seed and the implements of husbandry are furnished to those who work in the soil, and the raw material and machinery, are furnished to those who toil in the manufactories; but the whole production is the proper result of the labour of those men from whose hands it is taken at a compensation which is never above, and often insufficient to sustain, the lowest state of human living.

The merchants and bankers, their various clerks and subordinates, the shop-keepers and their assistants, the owners of warehouses, ships, boats, wagons, drays, turnpikes, railroads and canals, with all their various agents and helpers, are all engaged in merely distributing, exchanging and purchasing and selling the products of this labour, until they finally reach those who are to enjoy them as consumers. Now it is certainly right that these various agents, in the distribution of the productions of labour, should be duly paid for their agency, in proportion to its necessity and importance. But is it right, does it consist with the great law which binds men to love one another, that these secondary agencies should absorb all the profits realized upon the final sale of these fruits of industry? We know that it is right, legally right, and that perhaps no human law can be framed to obviate the whole evil; there appears in our view such a failure in human institutions, to meet certain emergencies, that after all, a necessity arises of calling in the aid of the higher principles of morality, and in a Christian country, of yielding some respect to Christian precepts, in our relations with our fellow men. No man can hope to be acquitted at the bar of God, for preying upon his fellow man by rendering obedience to the laws

of his country. It does appear to us that there is something more due from men to men in this life, than merely abstaining from legal murder, robbery and theft; something more than giving alms to the destitute, or even building workhouses for labouring people. It is something beyond the reach of human legislation and government; but very clearly provided for in that religion which is established by law in England, and also in that so established in Scotland; and those who will not read their duty in the law which those religions recognise, will find, when it is too late, that this fact, however disregarded in this life, will have an important bearing on the weight of their condemnation for eternity: "Thou shalt love thy neighbour as thyself." We may not inquire in this world who fulfils this requisition, but we may observe *who most contemns and goes furthest from it?*

The estimate of the capital of the empire, which we gave above from Mr. Lowe, a writer whose statements and the soundness of whose views have been generally approved, is far below the true amount at this time. Nearly twenty years of accumulation have swelled the mass of values to an amount of which figures furnish us very little conception. A full generation of labourers has added its earnings to this great sum of wealth; if their enjoyments in this world were limited, they, at least, carried as much away with them as those who reap the fruits of their toil. But we should form a very inadequate idea of the sum of the savings which have been made by British economy out of the labour of the working classes, if we found our opinions solely upon such an estimate as that of Mr. Lowe. It it not enough to value the *splendid grounds*, the smiling fields, "the gorgeous palaces, the cloud capped towers," the *planted* forest, the huge manufactories, the countless engines and the vast array of warehouses, dwellings and ships, and the rich merchandize they contain: all these fall far short of the sum of that wealth which the bulk of the population has mainly created, but in which it has no share. These are enumerated as the actual tangible existing riches of the nation; there remain yet the credits, the mortgages, the bonds, the bank stocks and other stocks in endless variety and of vast amount, of which the interest and dividends if paid must be made good by labour. It is true that in one sense it may little concern the labourer, how that which is abstracted from his wages may be spent, yet such a mass of credits undoubtedly impels the capitalist to

tax his sinews to their utmost, to furnish a return which shall yield not only the interest to be paid but ample allowance beside for enjoyment of English comforts.

Then comes to swell this amount the sum lost in ruthless speculation and wild adventure, of which no monument speaks the part which the labouring classes had in furnishing the sum of the expenditure. We must not forget to mention too the liberality of British capitalists in supplying the demands of foreign borrowers. Between the years 1818 and 1829, loans were contracted for by various powers in London to the amount of 267,814,940 dollars, and since 1829 a sum not much less has been lent to the states and citizens of our confederacy.* This does not still declare the magnitude of the sums levied upon the industry of the working classes. The prodigious quantity of goods furnished from the manufactories, and the immense capital which manufacturers and merchants have invested in them, make it necessary that constant and vigorous efforts should be making for markets; every corner of the world is explored to find outlets for British goods. They are to be met in all climes and among people in all degrees of civilization. They are thrust upon every nation and every tribe. Vast quantities are lost in all parts of the world, in a thousand varied attempts to dispose of them to advantage. Who can estimate the value of the goods sacrificed in this country with the double view of injuring our infant manufactures, and raising ready money; or the greater value of those sold here upon credit and never paid for? However clearly merchants understood their interests in regard to a market, they have long been thwarted by a delusion in legislation which has been one of the heaviest burdens laid upon the whole people. There is no single fact in commerce more undeniable, none so capable of demonstration *a priori*, or of proof *a posteriori*, as that commerce has always been and must always be an exchange of goods. Goods are given for goods; money is only necessary to aid in this,

* It is with emotions of deep regret we find some of these debtors hesitating about a faithful fulfilment of their contracts, and attempting to explain away their obligation. We trust no one of the United States will ever so disgrace the nation in the eyes of the world. We have enough to endure in this way that seems past all remedy, without incurring the imputation of fraud aforethought. With what unavailing sorrow must we regard the losses sustained, through the prostration of the Bank of the United States, by the best friends of our country in England,—those who had the firmest confidence in our personal integrity and in the safety of our institutions, political andcommercial!

the very object of commerce, and to pay occasional balances. Those who are not content to carry on commerce in obedience to this principle, may carry it safely to any extent which their mutual powers of production may permit. If either party attempts by legislation to obtain an advantage by rejecting the goods of the other and demanding money, one of two things must happen, the parties so attempting must lose their market or their goods.

The apparent exceptions to this rule will be found, on examination, to be either very limited in amount, or if followed up to end in a circuitous exchange between three or four nations, by which they give goods for goods. Money, as such, is never, and cannot ever be used for any other purpose, than to assist in effecting these exchanges of goods. Yet much of the legislation of Great Britain is in direct defiance of this principle, to the manifold injury of her subjects. We do not believe that nation would have lost in this country one-tenth of one per cent. on the whole amount of our mutual trade, if she had been willing to take pay for her industry in the fruits of ours. How much better to have fed her starving millions with our bread and meat, than to have beheld our people wearing stuff for which the importers never made payment. We never had money enough in this country to pay for the whole of one year's importations, and our yearly importations from England alone are often equal to our whole stock of the precious metals. Yet the policy of English legislation is to seek for payment in gold and silver, which cannot be obtained, or cannot be kept when they are obtained, and to refuse those very articles which would place commerce on a safe basis, and give labour and its due reward to the suffering poor. Even now, this delusion is exercising its full force, and we are told that efforts are making to supply British factories with cotton from the East Indies. This may be true; but when that supply is obtained, the manufactured goods cannot be sold here, or if sold, payment will never be made. This market will be lost the day that money is demanded for our importations.

We have adverted to this, only to show that all events combine alike in that country to the further wrong and oppression of the working classes; economy and prudent management in merchants, and farmers, and manufacturers, wise and unwise policy in the government, all conspire to that unhappy result. The only green spot for the labourer in all this, is the provision made for him in the poor laws and kin-

dred enactments. As instances of the latter, we may mention the parliamentary prohibition of employing lads in chimney sweeping, granted in obedience to a mighty sympathy got up for this class of sufferers in London ; and the factory bill, which forbade the over-working of children ; in both which enactments, the wisdom of the nation disregarded the fact, that starvation, the other alternative of the poor wretches in question, was a much more severe process than either of the evils attempted to be abolished. But may we doubt the good intentions and *humanity* of a legislative body, which, with such other pressing claims upon it, has enacted rigorous penalties against cruelty to horses, dogs and other animals ?

It cannot be denied, that almost any condition in life would be preferable to that of the present labouring poor population of Great Britain and Ireland. The American slave is better fed, better clothed, better lodged, and withal far more contented. He is not harassed by incessant anxiety and apprehension of want ; no care hangs upon his brow, either of high or low prices ; he never dreams of scarcity of food. The American Indian often suffers the pangs of hunger, but never in the presence of another Indian who is enjoying a feast. If he fail to obtain his usual supply of game, he has no one to blame. No one takes away what he has captured and feeds upon it in his presence. The beggar on the continent of Europe may be as destitute as the pauper of England, but he is not vexed by parish poor law regulations. He is neither confined to limits within half an hour's walk of his birth place, nor is he driven from sight as a being to be hated and shunned. The very boldness with which he approaches to ask for alms, shows that he has never been rudely repelled. The whole treatment of the English poor, both private and public, has been such, as to plant discontent, envy and revenge in their hearts, to fit them for deeds of outrage and violence whenever they shall obtain the power. Such being the benefits enjoyed by the poor under the English constitution, let us see what they contribute towards sustaining the government in its various departments.

For the last six years, the whole amount of taxes collected in every form for the support of government, amounted to a fraction over fifty millions sterling a year.

This is equivalent to 1,440,000,000 dollars for six years, or 240 millions for a single year. To this must be added

the sums raised by local taxation for poor and county rates, which for the year 1832 amounted to nearly ten millions sterling. As the poor rates have been reduced considerably by the economy of the London Commission, this item may be safely taken at a mean of seven millions sterling, or 33,600,000 dollars. The next item is the income of the church, variously estimated at from five to ten millions sterling, but taken at the former sum, which is perhaps nearest the truth, it is equal to 24,000,000 dollars.

The sum of these impositions, 297,600,000 dollars, is annually levied upon the people of the three kingdoms, equal to one hundred dollars for every family, to one hundred and twenty dollars for every inhabited house, and to ten dollars a head, for every man, woman and child. A very high authority, Dr. Hamilton, has estimated the gross amount of taxes in 1813 at nearly half the income of the nation, that is, each individual having income, yielded nearly one-half in payment of taxes. (Hamilton on National Debt.) Since that time, important deductions have been made, and it is not probable that the government and church now absorb more than a fourth of the national income by immediate taxation. The mode of raising the revenue adds greatly to the burden, as has long been averred, and as has recently been very clearly established. In May, 1840, a committee of the House of Commons, Mr. Hume being chairman, was appointed to inquire upon the subject of import duties, and report how far they were imposed for protection, or for revenue alone. Towards the end of the year, a report was made, embodying a mass of valuable commercial facts. The testimony of such men as S. D. Hume, who has served thirty-eight years in the Customs' Department, and nine years as one of the Secretaries of the Board of Trade; of Mr. J. M'Gregor, who has been for many years employed by the government in commercial negotiations in various parts of the world, and who is also a Secretary of the Board of Trade; of Mr. G. R. Porter, the author of the "Progress of the Nation," and the compiler of the elaborate and ample statistical tables of population, commerce and expenditure, published annually by authority; of Dr. Bowring, who has distinguished himself by various valuable commercial reports made to Parliament, and of many others of practical knowledge and special skill, cannot but be regarded as convincing, and as entitled to sway the minds of those less informed.

It is seldom too that we find men agreeing so closely on subjects involving political prejudices and opposing theories. These witnesses aver that the discriminating duty in favour of British West India sugar operates as a tax upon consumers in the United Kingdom of £3,500,000, says Dr. Bowring, and of £7,000,000, according to Mr. Porter, and of fifty per cent. on the current price, according to Mr. M'Gregor. A similar reason makes the consumers of coffee pay annually £625,000. Dr. Bowring is of opinion that the corn laws operate as a burden on consumers to the amount of £11,000,000, and that the prohibition of butchers' meat imposes a burden of from £5,000,000 to £20,000,000, according as the consumption of the country is estimated. These and many other duties falling upon the necessaries of life nearly double the weight of taxation, and carry the charge upon the incomes of individuals, to the proportion at which it was fixed by Dr. Hamilton; and this without any benefit to the treasury. It is averred, on the contrary, by the most intelligent of these witnesses, men in public employment, that a much larger revenue could be raised by a very great reduction of the duties.

No man of unbiassed mind can examine this subject in the light thrown upon it by this report, without arriving at the conclusion, that protection is not needed in England for any of their manufactures except those of silk; and those have never flourished with all the benefit of the fullest protection. The skill of the British manufacturers is such, and the prostration of their working classes so complete, that they can compete successfully against the world in every department in which they can now be said to be successful. In reviewing this report, we cannot resist the conviction that the British tariff, as it now stands, is injurious in the highest degree to every interest, excepting that of the large farmers and landowners, not exceeding, probably, 225,000 in number. We do not mean to include among those enjoying this benefit the 1,845,400 families chiefly employed in agriculture.

We prefer rather to restrict the number receiving substantial benefit from this tariff, to that class of landowners alone, who do not exceed, in our estimation, 75,000. These are the men in whom the political power and beneficial agricultural interest are concentrated. The report of 1836, to which we have already referred, places it beyond doubt, that the occupiers of large farms were then, and had long

been in the greatest distress. Employing a large capital, and exercising all the skill of improved husbandry, they were losing money, and suffering constantly from extreme fluctuation of prices, brought on, as they generally declared, by the operation of the corn laws. From the time of that report to the last dates from England, the distress of farmers has been a standing theme of English journals. Whatever then may be the state of the discussion between the friends of free trade and those advocating the policy of legislative protection and discriminating duties, we are forced to the conclusion, that all the advantages to be derived from the protective policy have long since been attained in Great Britain. We are not of the number who deem the theory of free trade to be infallible and applicable at all times, and in all nations, without regard to circumstances. There is no infallible mode of procedure in commerce, individual or national. British manufactures have, however, under the policy of protection, grown to a magnitude, of which the authors of the system could have had no conception. The production is now so immense, that the great want is of course not protection, but vent abroad, a good foreign market. It is rare now that British manufacturers have full employment, and the extent of their productive powers are never taxed, except in seasons of speculative demand, the result of which is more frequently disastrous than profitable. The true state of the case is, that Great Britain can now manufacture and send abroad a vast quantity of merchandize, more than the rest of the world can pay for in any thing that she takes in return. The home market is extremely limited by the poverty of the labouring classes, and the supply of the foreign market is equal to, and beyond its means of payment. It is worse than useless to protect a manufacturer in this situation. If it were possible to increase his power of production, it would confer no benefit. The very extent of the market now enjoyed shows clearly that protection is not needed. Give vent for the goods at the ordinary prices and the production could be doubled. At present, the manufacturers are exposed to certain loss upon every apparent revival of business, because what is sold on credit, if it happen to exceed considerably the amount of British imports, must be lost, and the manufacturer cannot know whether there has been an over-exportation, until it is too late to apply a remedy. He is fluctuating between an under-production, which affords him no profit upon his capital, and doubly

starves his operations, and the excitement of an over-production by which he is but too certain to incur an ultimate loss. If the government be true to the interest of nineteen-twentieths of the population, it must, as the report of the committee of 1840 recommends, abandon the protective policy, as not only no longer needed, but as positively baneful to the best prospects of the country. The manufacturing interest has been fostered to a growth and magnitude at which it only needs scope and field of action to realize the highest hopes which the friends of protection could ever have entertained. Its power must now be called forth; an ample market for all the merchandize it can yield, can be obtained by simply receiving in return the bread, meat, sugar, tea, coffee and other articles of food which will feed the famishing multitudes who now pine in beggary. Such a policy, while it gladdened the hearts of the poor, would in ten years cause a greater advance in the wealth and prosperity of the nation than any equal term of its history. It would call into action the whole productive power of its population, and the industry of every operation would be rewarded by an ample supply of the necessaries of life. The commerce of the country would be nearly doubled, and large additions to the ranks of the commercial, shipping and manufacturing interests would be required to perform their increased work. A market for the supply of ten to fifteen millions of people at home, with articles they had not previously been able to purchase, would be established.

All this seems clear to us, and all this and more has been urged in a thousand various ways upon those holding the political power in Great Britain, for many years, without the least apparent success. The poor are still half employed and scarcely half fed: they are still unsoothed and left without hope in the world.* They form a mass of angry, struggling, revengeful wretchedness, heaving with the fires

* Since these remarks were written we are cheered by the intelligence that the British ministry have determined to bring forward at an early day a measure for the repeal or relaxation of the corn law system. The present ministry, whatever may be said of the wisdom or talents of its members, must be admitted to be adroit in reading the signs of the times, and this movement shows they deem it safe to press even now this measure so fraught with results to the best intesests of commerce, industry and humanity. Doubtless the report of 1840, to which we have referred, and which has been widely circulated in Great Britain, has contributed to hasten the introduction into parliament of this proposition. It must succeed eventually, but perhaps it may suffer years of postponement. If the present ministry can maintain their position, we may expect a favourable result at no distant day.

of revolution, and ready when opportunity offers to burst the bonds, civil and commercial, which now hold them in subjection, to crush all the institutions of a government from which they have received no favour, and to show as little mercy as they have received. It does seem extraordinary that the landowners of the United Kingdom should persist, in the face of Christendom, in a system of extortion for their individual benefit, attended by ills to their suffering countrymen, so intense and varied as to be incredible. We say incredible, for the most of those to whom these fearful statements are made are either unable or unwilling to receive them as truth. Mr. M'Gregor, the witness before mentioned, thus states his views of the protection afforded to the owners of lands. "The following articles are prohibited to protect British agriculture and grazing interests; viz. corn, flour and meal of all kinds, by prohibitory duties except when the price reaches what would amount to famine prices in other countries; malt, beef and pork fresh or slightly cured; lamb and mutton, cattle, sheep and swine."—"High duties are levied on the following articles to protect British agricultural and grazing interests; tongues, bacon, salted pork, sausages, potatoes, beer, beans, fruits, cider, hay, lard, onions, lentils."—"The effect is twofold, exclusion of bread and salted provisions except at great scarcity prices; and to keep up the prices of the same articles in England."—"Being the necessaries of life they impose upon all the consumers of the united kingdom, the greatest tax to which they are subjected."—"With respect to bread and flour the difference which the labourer pays in money, is from forty to eighty per cent more than the foreign consumer."—"I consider that the taxation imposed upon the country by our duties on corn, and the provision duties and prohibitions is far greater, probably much more than double the amount (taking that at £50,000,000) of the taxation paid into the treasury."

If this witness be correct in his estimate, the landowners annually put at least £50,000,000 or 240,000,000 dollars into their pockets at the expense of the rest of the people: owners who with their families do not exceed in all one twentieth of the population. They impose besides upon sugar, molasses, tea, coffee and other articles, not the produce of the country, increased prices of which they have to pay very little more individually than the poorest labourer who consumes them. Bearing in mind the actual state of the British and Irish poor, what must be thought of that abuse of pow-

er, in a representative government, which stops bread and meat on their way to the mouths of the famished, that it may sell the same articles to the poor at "*famine prices*," and thus pocket in the operation 240,000,000 dollars, a sum equal to the whole revenue of the country? A sum of which it has never returned in any year *in poor rates* more than $40,000,000, and frequently not half that amount. What must be thought of that abuse of power which burdens all that the poor consume, with heavy duties, and by the pains of hunger compels them to pay fifteen-twentieths of the national expenditure? No option is left to the poor in this matter, they must pay or not eat. Examine the sources of revenue in England, and it will be found to press on numbers and not on wealth.

In 1839 the following articles yielded thus:

Spirits,	£8,059,929	Tea,	£3,658,800
Malt,	4,845,949	Coffee,	779,115
Sugar & Molasses,	4,827,019	Tobacco & Snuff,	3,495,687
Corn,	1,098,778	Soap,	784,168
Butter,	213,078	Candles & Tallow,	182,000
	19,042,753		8,899,770
		£27,942,523.	

In the same year the taxes and duties bearing more immediately on the rich produced as follows:

Land,	£1,174,100
Windows,	1,298,622
Horses,	384,286
Carriages,	447,467
Wine,	1,849,710

Thus the land, for the benefit of the owner of which the enormous levy of £50,000,000 is made upon the labour of the nation, pays for national defence and the support of that government of which it reaps all the benefits, only £1,174,100. The rich consume 7,239,567 gallons of wine, paying as above; the poor consume the larger portion, and that is one of their misfortunes, 8,414,790 gallons of spirits, British and foreign, on which duties and excise to the amount of upwards of £8,000,000 are exacted. Believing as we do, against the assertions and arguments of a certain school of political economists, that all annual taxes fall mainly and eventually upon the labourer, we should not think it necessary thus to ex-

hibit so carefully the immediate bearing of British taxation, but that it shows the temper and spirit of those who sway the power of that country. They do not conceal from the world that in a great measure they exempt themselves and their capital from the burdens of taxation, and that they shift the immense loads upon the working classes without hesitation or remorse. They do not directly tax their clothes, nor their persons; there would be loss in collecting such a tax; but the labourer cannot swallow a mouthful which is not taxed or the price of which is not greatly increased by taxation; if he take a pinch of snuff or a piece of tobacco he is taxed; if in the bitterness of his lot he drown his sorrows in rum he is taxed. Bread is prohibited except at *famine prices*, meat is wholly prohibited; the working man is however allowed the free use of spirits, paying 7*s*. 6*d*. per gallon as an excise on all he drinks. But this privilege is only accorded when he drinks spirits of domestic or colonial manufacture, on which the landowner has his share of the gain. We forbear further particulars; having shown enough to exhibit the spirit and tendency of British revenue laws. Those who pursue the subject will find the same spirit and tendency pervade the whole fiscal legislation.

Can human selfishness achieve further conquests in Great Britain? Can it become more hardened? Can the rich men in power earn for their deeds any heavier condemnation. Can they more strongly contemn the obligations of Christian charity? Have they not driven the poor to the verge of human sufferance, and do they not keep them there? Is there any kind or degree of suffering which they have not inflicted? What further proof can we have of the high authority of that book which first distinctly taught that the "heart of man is deceitful above all things and desperately wicked?" We desire that these queries may be understood in their strongest sense. If the facts we have adduced have failed, we are sure that no language of ours can create the proper impression.

Let us not be misunderstood. We mean not to aver that the British nobility, gentry and capitalists are the worst people on earth. There are many palliations, as the world goes, in their case; there may be many people who pretend to even more virtue, who are quite as much, if not more unfeeling. If the accusation were of less import, we might be more willing to judge, but in such a case, motives are of such grave consequence, that we forbear conclusions. We only say they have been guilty of the worst deeds which

man can commit against his fellow—guilty of the most attrocious injustice, and of continuing the most unpitying, remorseless oppression. The present generation, however, are accountable only for the continuance of the mischief. The laws, the institutions and the poor, were handed down to them with all the machinery of torture, by their immediate ancestors. They grew to manhood in the daily contemplation of these abuses, and in the enjoyment of the benefits. In a country, where the rights of property are so habitually respected, the lot of the paupers appeared irremediable. The wealth once in the hands of a few, they could neither be forced to surrender, nor could they be expected to give to others what, according to law, and by general consent, was their own. Individuals might feel and deplore the condition of the poor, but what could they do? The magnitude of the difficulty was such, that any partial attempt at palliation was regarded as Quixotic, and those who made such efforts were deemed more foolish than kind. The attempts of the visionary were not well directed nor well devised, and the more wise and experienced could see no chance of success. It required the popularity, the talent, the energy of Wilberforce, during thirty years, backed as he was by other principal men of the day, to procure the abolition of the slave trade, in which but a small amount of English capital was invested; in the face of this fact, could any philanthropist, whatever his advantages, have hoped to succeed in any measure for the regeneration of the poor against the interests of nine-tenths of the men in power? If the Sovereign had at any time made any such effort, the existing ministry must have repressed it, resigned, or been forced to retire. No ministry, however sensible of the evil, could move in so important a matter without imminent risk of being overthrown. A tenure of office founded on small majorities, could hitherto never hope to carry such a measure. No political party, as such, could ever conceive any motive less interested than to keep power and office once obtained, or to regain it when lost. No single member of the government, or of the legislature, could be made to feel that any special responsibility in this matter rested upon him, as by himself he could do nothing. Besides, but few of those in stations of power have any adequate knowledge of the facts we have stated. They know not their agency in this great work of oppression, and of course not that of others. They know neither the extent nor the intensity of the distress. If it be written, they do not read; if it be spo-

ken, they do not hear. It seems a hopeless attempt to bring the facts to their knowledge. It is a matter too deep, and too wide, too great for their comprehension. After all, perhaps, no obstacle to the required reform is more in the way than the spirit of faction, because there is none which more absorbs and destroys every feeling of humanity, and every sentiment of virtue. Every consideration but success sinks into insignificance before it; the warfare of party is so close, so incessant and so vigilant, that it leaves no time nor talent for any other conquest, nor can it yield a jot of its advantages for any benefit to those who have no power.

How far any of these particulars may excuse the parties affected *in foro conscientiæ*, or in the light of divine truth, it is not our province to decide. We much fear that however strong some of them may appear in human eyes, the time is coming, when they will be found of no avail. Even, humanly speaking, it appears impossible that men by any scheme of society, or any plan of association, can evade responsibility for a great wrong, for which, if committed individually, they would be held guilty. Surely those who have all the power, and make laws to suit themselves, cannot arrogate much merit for obeying their own behests, nor claim, on that account, exemption at that tribunal before which human laws will be as strictly judged as human actions.

By Prof. J. Addison Alexander with Dr. Hodge

ART. V.—1. *A Brief Examination of the Proofs, by which the Rev. Mr. Boardman attempts to sustain his charge that "a large and learned body of the clergy of the church (of England) have returned to some of the worst errors of Popery; with a word or two as to his attempt, without proof, to cast the suspicion of Popery on the Protestant Episcopal Church in the United States of America:* By the Right Rev. George W. Doane, D.D., LL.D., Bishop of New Jersey. Burlington, 1841.

2. *A further Postscript to Bishop Doane's Brief Examination of Rev. Mr. Boardman's Proofs: Touching Bishop Kenrick's Letter on Christian Union*, pp. 230.

COLERIDGE tells us of a man who never spoke of himself without taking off his hat. This, though very absurd, is

nevertheless amusing. Such a man could never be the object of any unkind feeling. So far from quarrelling with the subject of a hallucination so agreeable, the gravest looker on may indulge his curiosity in watching the illusions which appear so grand to him who suffers them, and so grotesque to all the world besides. It is a curious fact that the more conceited a man is, beyond a certain point, the more endurable he is to others. A little vanity provokes you; a little more incenses you; a good deal more amazes you; but after that, every addition is positively agreeable. This is the secret of the charm which the writings of Dr. Samuel H. Cox have for the generality of readers. And to this source we are constrained to ascribe the pleasure with which we have read Bishop Doane's pamphlets. We are glad for the author's sake that we have read them. They have really corrected some unfavourable prepossessions which we had against him. In addition to believing what must needs be true, according to the canon of Vincentius Lerinensis—quod semper, quod ubique, quod ab omnibus—that the worthy Bishop was not a little vain, we had received a vague impression that he was not particularly good natured, and at the same time not entirely sincere in his pretensions. It seemed to us incredible, that a man in this country and in the nineteenth century, and especially a man of Dr. Doane's previous history and training, could really believe that even a mitre could confer all the dignity with which he claimed to be invested. Of these uncharitable misgivings we now heartily repent. We no longer doubt his honesty in laying claim to any thing. He is certainly sincere in every syllable he writes to glorify himself. We acquit him also of ill-nature and malignity. We fully believe him when he says that for Mr. Boardman he entertains "no feeling that is not altogether kind."* We believe that he might say the same of nearly all the world. His pages overflow with that complacency towards others which arises from absolute complacency in self. It is impossible to read him and be angry with him. Neither critical bitterness nor Presbyterian sourness has enabled us to withstand his irresistible *bonhomie*. He is so happy in the worship of himself, and so benevolently anxious to make others happy in the same way, that, although we are not prepared to join in the idolatry, we cannot help catching the infection of good humour, and sympa-

* Brief Examination, p. 154.

thizing in the delight with which our author talks and writes about himself. Nor is this sympathetic feeling counteracted by the smarting of those deep cuts which he deals out right and left upon "Puritans," "Genevans" and "other denominations," who have assailed and almost made a martyr of him with their "cant and Calvinism," their "savage howl" and "sanctimonious whine." They are hard blows certainly. Still we forget the pain in admiration of the man, who seems to say in every look and action,

Populus me sibilat at mihi plaudo.

Even insolence, in the present case, loses all its virulence in its absurdity. The examiner sets out with a typographical sneer at his antagonist as "Pastor" of a "Presbyterian church," and as having put forth a pamphlet "purporting to be correspondence[?] between the Right Rev. Bishop Doane, &c." The same use is made of the interrogation mark on a subsequent page. Of this courageous innuendo the interpretation which will strike every reader as the true one, is, that it was intended to check the undue familiarity with which Mr. Boardman had ventured to "come between the wind and his nobility." Such an intimation, considered as coming from an Episcopal Bishop to a Presbyterian Pastor, would be very feeble and very much out of taste. But in the present case, coming from Dr. Doane to Mr. Boardman, considering their relative standing as Christian gentlemen, it is simply ridiculous; and is merely another evidence of the hallucination with regard to himself, under which our author habitually labours. Not long since there was a valet of Lord Somebody figuring at Saratoga in his master's clothes, and we can easily imagine the air with which he would have met the presumptuous advance of a "Mr." Clay or a "Mr." Webster.

Of all the illusions under which Bishop Doane labours, we are not sure whether the most remarkable is not the paradoxical belief that he is a fine writer. So he is, in the same sense in which some men are fine gentlemen without being gentlemen at all. But that our author can be reckoned a good writer, even in America, with all our zeal in his behalf we cannot venture to affirm. If there is one improvement more conspicuous than any other, in the taste and practice of contemporary writers, especially in England, it is the exchange of pompous rhythm and pedantic phraseology, for homely plainness and pure native idiom. That this exchange is per-

fectly compatible with elegance and beauty of the highest kind, has been proved by the example of some noted English writers, and by none more clearly than by several of the Oxford Theologians. To our taste Newman, as a writer, stands pre-eminent, as being more musical and elegant than Pusey, and at the same time less mawkish and more masculine than Keble. But in all three, and especially in Newman, what attracts us is the restoration of the old English freedom as to the length of sentences, and variety of structure, but without those harsh inversions, and those sesquipedalian vocables, by which many of the best early writers are disfigured. In a word, the grand improvement is the happy combination of a free and flowing with a chaste and simple style; whereas of old, the flowing writer was almost in every case an incorrect one, and the simple writer was an awkward and constrained one. Now if we were required to select a kind of writing just as far removed as possible from that which we have been describing as the style of the best modern English writers, we should certainly select that of the "Bishop of New Jersey." It is not the want of talent which makes him thus to differ, not even of that peculiar talent which enables men to shine in composition. It is the want of proper culture, and, as a cause or an effect of this, the want of taste. His parts may be those of a Bishop; but his taste is the taste of a Sophomore. It does indeed appear wonderful how any man of his years and opportunities can be a passionate admirer and assiduous imitator of the best English writers and yet so unlike them; how he can even read them and be turgid, pompous and bombastical himself. That he is perfectly unconscious of his failure in attempting to adopt the Oxford style, is clear from the frequency with which he brings the two styles into mortifying juxtaposition. We would gladly quote if we had room for it a striking instance of this indiscreet arrangement, which the reader may find on pages 160, 161 of the Brief Examination, where in the very middle of a fustian paragraph the author suddenly exclaims, "I quote the burning words of Mr. Newman," and then gives an extract so unlike himself that it was perfectly superfluous to tell us he was quoting somebody. He calls them "burning words," and so they may be in the sense which he intended, but to us they seemed like fresh air and cold water on escaping from the hot blast of a smithy, or like the singing of birds compared with the ringing anvil or the puffing bellows. The contrast in the case referred

to, is the more remarkable because the extract from Newman approaches unusually near to the tone of declamation, and was therefore more susceptible of combination with the stuff that goes before it, but the two refuse to coalesce, and the quotation stands out in as strong relief from the preceding context as an antique column from the rubbish which at once disfigures and preserves it.

We ask attention also to the style of the following extract. "The rabid rage with which this paper (Catholic Herald) has assailed the present writer, finds no fit resemblance short of a mad dog. The smoke of Smithfield may be smelled in every line. But it is all well. One cannot greatly be in wrong when so between the fires of errors that profess to be antagonist." p. 16, note.

On the rhetoric of this passage we make no remark, but we feel constrained to correct an error into which our author seems to have fallen. We have occasionally seen the animadversions of the Herald here complained of, and so far as those examples go, the opposition savoured less of "rabid rage" than of cool contempt. It is natural that any man, and especially a vain one, should choose to be vilified rather than laughed at, and should see mad dog and smell Smithfield, where his neighbours can see nothing but smiles at his expense, and smell nothing but squibs set off for his annoyance.

The wittiest passage in the "Brief Examination" is to be found on p. 155. "Who has not heard—and that by those with whom Mr. Boardman closely sympathises—the sweeping charge of Popery brought not only against the church of which Hooker was a Presbyter, and its American sister, but against all and singular their doctrines, rules and usages. Did they believe and teach the doctrine of the Apostolic succession? It was rank Popery. Popery was thus a matter of history. Did they maintain baptismal regeneration? Still it was Popery. Then Popery was a doctrine. Did they administer confirmation? All Popery! Then Popery became a rite. Do they use a liturgy? Popery! Popery is a form of prayer. Do they make the sign of the cross in baptism? Popery! Popery is a gesture. Do they kneel in the communion? Popery! Popery is a posture. Do they wear a surplice? Popery Popery is a garment. Do they erect a cross upon a church, or a private dwelling? Sheer Popery! A bit of wood is Popery!"

Without in the least detracting from the force or dignity

of this passage it might be carried a little further. Does he write tustian? Popery! Popery is nonsense and bombast. Does he publish a series of pamphlets just as he sets sail for England? Popery! Popery is a sea voyage. Does he bring back a shovel hat and wear it in America? Popery! Popery is an old fashioned beaver. We submit whether the merit of our continuation be not quite equal to the original.

It seems obvious that Bishop Doane got up this controversy with Mr. Boardman simply to serve a purpose. The remark incidentally made by that gentleman respecting the Oxford Tracts had been made a thousand and one times, by Protestants and Catholics, by bishops, priests and deacons, by Episcopalians and Presbyterians, yet our author remained silent. The moment however it dropped from Mr. Boardman, he comes out with a demand at once pompous and pragmatical, and which he says, was meant to be "most peremptory" for proof of a charge which was in every body's mouth. He says that he was moved to this extraordinary proceeding by "no chivalry of companionship;" that "the honest hope was entertained, that ground which is untenable, would candidly be yielded to the just convictions of a new investigation. It is not so." p. 7. No, and it was not so. No such anticipations of a change of sentiment on such a subject were felt in any quarter. The only "honest hope" entertained about the matter, was the "honest hope" of figuring on both sides of the Atlantic as the advocate of Oxford. The "chivalry of companionship," whatever else may be asserted of phrase, is perfectly descriptive of the spirit, taste, and motive of this "Brief Examination."

For the church to which Bishop Doane belongs, and for the office which he bears we have the highest respect—for himself we are sorry we cannot say so much. The man, who can deal damnation with a smile, and claim for himself the awful power to communicate the Holy Ghost as he would descant upon the polish of his boots, cannot expect to be respected. And when, in the spirit of frivolity, he comes before the public with his fearful claims of spiritual power, he must expect to be frankly told how they are regarded. We yield to no set of men in our respect for such prelates as White, Moore, Meade and M'Ilvaine; and we yield to none in our contempt for prelatical coxcombry.

Having thus freely expressed our opinion of Bishop Doane's pamphlet, we shall dismiss the subject:

> Nonsense or sense I'll bear in any shape,
> In gown, in lawn, in ermine or in crape,

but from the duty of answering nonsense, we hold ourselves and all other men, excused.

The question respecting the Popish tendency of the Oxford Tracts, if parties are agreed as to the meaning of terms, does not admit of discussion; without such agreement, discussion must be endless and useless. The three characteristic forms which Christian doctrine has assumed, may be called the evangelical, the rationalistic, and the sacramental. The first, as we believe was taught by Christ and his apostles, and has always had its confessors in the church. It was the system of the Reformers, and is embodied in the Thirty-Nine Articles, in the Augsburg Confession, in the symbols of the French, Swiss, Dutch and Scotch churches. It is therefore the Protestant, in opposition to the Romish system. The second had its representative, first, in Pelagius; at the time of the Reformation, in Socinus; and since that period, in multitudes of all communions. Its great characteristic, is the striving to remove from the gospel all that is supernatural and mysterious, and to bring down its doctrines to the standard of common sense, and to accommodate them to the taste of the unrenewed heart.

The sacramental, or church system, supposes that the sacraments (and not preaching) are the great means of salvation. To the question, How religion, or the grace of God is to be obtained and preserved? it answers, Receive the sacraments; they are the channels through which the merits of Christ and the Holy Spirit are communicated. In baptism plenary pardon and spiritual renovation are conveyed to the soul. Baptized persons, therefore, are not to be addressed as though they were to be converted. The spiritual life begun in baptism is maintained by the real body and blood of Christ received in the Lord's supper. These ordinances to be effectual must be administered by duly authorized men, who have "the awful power to make the body and blood of Christ." To possess this power, they must receive appointment to office, and the communication of the Holy Ghost by the imposition of a Bishop's hands. Bishops have the power to communicate the Holy Spirit in confirmation and ordination. The church, in its officers, is the representative and vicar of Christ, and hence has power to forgive sins, to renew the heart, and to give the Spirit. It is the storehouse of Christ's merits; it is the channel through which, by means of the sacraments those merits are conveyed to his people. Religion is therefore something com-

municated ab extra, by the hands of men. To be in communion with these men, is consequently essential to salvation; to be a member of the church whose treasures they dispense, is to be a member of Christ; to be excluded from its pale, is to be beyond the covenant of mercy.

This system developed itself very early in the church It reached its full maturity in Romanism. It has existed in various forms. It has been combined with mysticism, and been the religion of devotees; it has maintained itself as a mere system of forms, and been the religion of bandits. It accommodates itself to all classes of men, to the worldly and wicked, to the devout and the fanatical. It is a great temple, which offers an asylum not only to the penitent and believing, but to fugitives from justice.

That this sacramental system is inculcated in the Oxford Tracts, we presume no one will venture to deny. While their authors maintain that it is the true Anglican system, they admit that it is not that of the English Reformers. Though the denunciations of the Reformation, which were contained in Froude's Remains, published under their auspices, had given great offence, yet when they came to publish the continuation of that work, they openly vindicated his language. They distinctly maintained that the system of the Reformers and that of the church in the fourth century were not only different, but opposite, so that we are forced to reject the one, if we choose the other.

The following extract from one of the organs of the Tract party, contains almost all the points mentioned in the above account of their system. "The essence of the doctrine of the one only Catholic and apostolic church," it is said "lies in this—that it is the representative of our absent Lord, or a something divinely interposed between the soul and God, or a visible body with invisible privileges. All its subordinate characteristics flow from this description. Does it impose a creed, or impose rites and ceremonies, or change ordinances, or remit and retain sins, or rebuke or punish, or accept offerings, or send out ministers, or invest its ministers with authority, or accept of reverence or devotion in their persons—all this is because it is Christ's visible presence. It stands for Christ, can it convey the power of the Spirit? does grace attend its acts? can it touch or bathe, or seal, or lay on hands? can it use material things for spiritual purposes? are its temples holy? all this comes of its being, so far, what Christ was on earth. Is it a ruler, prophet, priest,

intercessor, teacher? It has titles such as these, in its measure, as being the representative and instrument of him that is unseen. Does it claim a palace and a throne, an altar and a doctor's chair, the gold, frankincense, and myrrh of the rich and wise, an universal empire and a never-ending cession? all this is so, because it is what Christ is. All the offices, names, honours, powers which it claims, depend upon the simple question, Has Christ, or has he not, left a representative behind him? Now if he has, all is easy and intelligible; this is what Churchmen maintain; they welcome the news; and they recognise in the church's acts, but the fulfilment of the high trust committed to her." British Critic, No. 66, p. 451.

All is "indeed easy and intelligible," if the bishops are the church, and if the church "is what Christ is." Then indeed may she remit sin, confer the Holy Spirit, give grace, claim devotion in the person of her ministers, assert her right to a throne and altar, to the gold and frankincense of the rich, to an universal empire and never ending succession. Beyond this, when or how has the Romish Church ever advanced a claim? How indeed is it possible to claim more than to be what Christ is, to be his visible presence, upon earth?

It would seem that these writers are disposed to put to shame all who pretend to distinguish between them and the Romanists. Speaking in the same number of the Critic respecting the church of Rome, they say, "All the great and broad principles on which she may be considered Babylon, may be retorted upon us. Does the essence of Antichrist lie in interposing media between the soul and God? We interpose baptism. In imposing a creed? We have articles for the clergy, and creeds for all men. In paying reverence to things of time and place? We honour the consecrated elements, take off our hats in churches, and observe days and seasons. In forms and ceremonies? We have a service book. In ministers of religion? We have bishops, priests and deacons. In claiming an imperium in imperio? Such was the convocation; such are elective chapters. In a high state of prelacy? Our bishops have palaces and sit among princes. In supporting religion by temporal sanctions? We are established. In the mixture of good and bad? We are national. In the discipline of the body? We fast. England does not differ from Rome in principles; but in questions of fact, of degree, of practice; and whereas

Antichrist differs from Christ, as darkness from light, if one of the two churches is Antichrist, the other must be also." p. 429. The same authority insists upon it, that the titles, Antichrist, Babylon, Mother of harlots, Beast, which are so liberally applied by the authorized standards of the Church of England to the Church of Rome, "are as much a note of her being Christ's church as her real inward sanctity is. Rome must not monopolize these titles; Rome has them not alone; we share them with Rome; it is our privilege to share them; Anglo-Catholics inherit them from the Roman family, from their common Lord and Saviour. Rome must not appropriate them. The early church had them. We take it as a clear mark that we are the church, and Rome the church, and both the same the church, because in these titles we are joint heirs of the Church of St. Cornelius and St. Augustine. Heretics have generally taken high ground, considered themselves saints, called the church by foul and frightful names; it is their very wont to speak, not against the Son of Man, for he is away, but against those who represent him during his absence." p. 418.

This language is sufficiently intelligible, however unbecoming it may be in the mouth of men whose own standards most expressly apply these terms of condemnation to the Church of Rome. It is the world they say who apply such titles to the church; it is heretics that give these foul and frightful names to the representative of the absent Saviour. Then surely the Church of England is heretical, or these men are apostates from her faith and testimony.

It is not Rome however in her purest and best days, but Rome when most deeply sunk in superstition and corruption, that is the object of the admiration of these theologians. "People," they say, "really use this term the Dark Ages, as if to excuse their ignorance of the most interesting, the most soul-stirring, the most enthusiastic, and perhaps the most truly religious eras the world has seen." p. 483.

These writers, therefore, distinctly assert that they do not differ in "principles" from the Church of Rome, and Tract number ninety was prepared and published, to show that the thirty-nine articles do not condemn those principles; and consequently that those who agreed with the Papists may with a good conscience remain members of the Church of England. The articles declare that "Holy Scripture containeth all things necessary to salvation; so that whatsoever is not read therein, nor may be proved thereby, is not

to be required of any man that it should be believed as an article of the faith, or be thought requisite or necessary for salvation." This plainly asserts that the Scriptures are the rule of faith, but Mr. Newman, in this Tract, endeavours to prove, that "In the sense in which it is commonly understood at this day, Scripture, is *not*, on Anglican principles the rule of faith."

"General councils," says the twenty-first Article, "may not be gathered together without the commandment and will of princes. And when they be gathered together (forasmuch as they be an assembly of men, whereof all be not governed by the Spirit and word of God) they may err, and sometimes have erred even in things pertaining unto God. Wherefore things ordered by them as necessary to salvation, have neither strength nor authority, unless it may be declared that they be taken out of Holy Scripture." The Tract asserts that there "is a consistency of this article with the belief in the infalibility of Oecumenical councils." It asserts that there is a promise that councils shall not err, where they "are not only gathered together according to the 'commandment and will of princes,' but *in the name of Christ*, according to his promise. The Article merely contemplated the human prince, not the King of Saints."

The thirteenth Article is entitled "Of works before justification," and is of the following import: "Works done before the grace of Christ, and the inspiration of his Spirit, are not pleasant to God, forasmuch as they spring not of faith in Jesus Christ; neither do they make men meet to receive grace, or as the School authors say, deserve grace of congruity; yea rather, for that they are not done as God hath willed and commanded them to be done, we doubt not but they have the nature of sin." Mr. Newman tries to persuade men that it is consistent with this Article, to believe "that works done with divine aid, and in faith, *before* justification, do dispose men to receive the grace of justification." And that "works before justification, when done by the influence of divine aid, gain grace."

The twenty-second Article says—"The Romish doctrine concerning purgatory, worshipping and adoration, as well of images as of relics, and also invocation of saints is a fond thing, vainly invented and grounded upon no warrant of scripture, but rather repugnant to the word of God." This is met by such comments as the following: "Neither is all doctrine concerning purgatory, pardons, images, and saints

condemned by the Article, but only 'the Romish.'" "The Homily then, and therefore the Article, does not speak of the Tridentine purgatory." "The pardons then spoken of in the Article are large and reckless indulgences from the penalties of sin obtained on money payments." "By invocation here is not meant the mere circumstance of addressing beings out of sight, because we use the Psalms in our daily service, which are frequent in invocation of angels to praise the Lord. In the *Benedicite* too, 'we address the spirits and souls of the righteous, and in the *Benedictus*, St. John Baptist." "Invocations are not censurable, and certainly not 'fond,' if we mean nothing by them, addressing them to beings which we know cannot hear, and using them as interjections."

In the twenty-eighth Article it is said, "Transubstantiation (or change of the substance of bread and wine) in the supper of the Lord, cannot be proved by Holy Writ, but is repugnant to the plain words of Scripture, overthroweth the nature of a sacrament, and hath given occasion to many superstitions. The body of Christ is given, taken, and eaten only after a heavenly and spiritual manner; and the mean whereby the body of Christ is received and eaten in the supper, is faith." On this Mr. Newman says, "We see, then, that by transubstantiation, our Article does not confine itself to any abstract theory, nor aim at any definition of the word substance, nor in rejecting it, rejects a word, nor is denying a *mutatio panis et vini*, a denying every change." "There is nothing in the explanatory paragraph . . . . (viz: The natural body and blood of our Saviour Christ are in heaven not here,) to interfere with the doctrine elsewhere taught in our formularies, of a real super-local presence in the holy sacrament."

The thirty-first Article declares that "The sacrifice of masses in which it was commonly said that the priest did offer it for the quick and the dead, to have remission of pain or guilt, were blasphemous follies and dangerous deceits." This Article Mr. Newman says "Neither speaks against the mass in itself, nor against its being an offering for the quick and the dead for the remission of sins."

All the important points of difference between the Church of England and that of Rome are disposed of in the same way. Now we do not hesitate to declare our conviction that no honest man could write or approve of the Tract from which these quotations have been made; Bishop Doane

may call Dr. Pusey, Mr. Newman, and Professor Keble, "the holy three" as long as he pleases, if they sanction, (and Mr. Newman has avowed himself its author) the Jesuitical perversions of that Tract, the Christian public will not and can not believe them to be honest men. A man might as well assert that theft, murder, and adultery are not forbidden in the Decalogue, as that the Thirty-Nine Articles do not condemn the doctrines of Mr. Newman. We are therefore not surprised that the publication of this Tract has shocked the moral sense of the people of England, and led to the interference of the ecclesiastical authorities to stop the publication of the series. To the honor of the University of Oxford its Hebdomadal Board has officially repudiated the Tract in question; which has even excited the scorn of worldly men. Mr. Macaulay, in his place in Parliament, when speaking on the bill for removing the civil disabilities of the Jews, said, "He should be glad if the learned persons who were now engaging so much attention elsewhere could communicate to the Jews some of their ingenuity, and then he had no doubt that the declaration which they now scrupled at, and which now excluded them from participation in civil rights, would be swallowed by them without difficulty. The Jew might then declare that he entertained views favourable to Christian principles with as much sincerity as those persons could subscribe to the Articles who held the faith of Rome with the emoluments of the established church."

It would be idle, after the publication of Mr. Newman's Tract, to discuss the Popish tendency of these Oxford writings. And we much doubt whether even Bishop Doane, had he been aware of its existence, would have ventured to publish his Brief Examination. If however he chooses to be more Popish than the Pope, and shall assert that his Holiness, instead of being delighted with the Oxford Tracts, ought to be dreadfully alarmed at them, we shall not object. He and his Holiness may settle the matter as they think best.

QUARTERLY LIST

OF

NEW BOOKS AND PAMPHLETS.

The Antiquities of the Christian Church. Translated and Compiled from the Works of Augusti, with numerous Additions from Rheinwald, Siegel, and others. By Rev. Lyman Coleman. Andover, New York, Boston and Philadelphia: 1841. 8vo. pp. 557.

This is a very valuable and interesting work. The constitution, officers, and usages of the early church are all subjects which deserve more attention than ministers commonly devote to them. The want of a good compendium, with references to the sources of further information, has doubtless been one cause of the neglect which this interesting department of knowledge has long laboured under. This want, we think, is adequately supplied by the work before us. It is founded upon the copious work of Augusti, and enriched with additions from various later writers. It is well executed and elegantly printed; and is therefore well worthy of general approbation.

Eulogy on the Life and Character of the late Rev. Dr. Fredcrick Rauch; President of Marshall College, Pa. By John W. Nevin, D. D. Chambersburg, Pa. 1841. pp. 23.

The premature death of Dr. Rauch is an event deeply to be deplored. His amiable character, his extensive learning, and distinguished talents had secured for him the affection and respect of a large circle of friends. His German education, and his long residence in this country gave him great and peculiar advantages for filling with success the post to which, in the Providence of God, he had been called; and render his unexpected departure at the early age ot thirty-four, a calamity not only to the college over which he presided, but to the Christian public generally. The Eulogy pronounced on his Life and character, by his friend and associate, Dr. Nevin, is worthy of its author and of its subject. It sets in a strong light the excellencies and promise of the deceased president, and transfuses to the breasts of his readers the respectful regrets which the writer himself had so much reason to entertain, and which he has so eloquently expressed. We wish we could pass in silence one feature of this discourse, which we noticed, we confess,

with more pain than surprise. There is a tone of apology for some of the worst systems of German philosophy, a designating of destructive errors by the respectful appellation of "foreign forms of thought," which we think unworthy of the stedfastness and fidelity of a teacher of Christian doctrine. We know very well that nothing we could say on this subject would have the least effect upon the author of this Eulogy. It would be set down to the score of ignorance and bigotry; and thus be pitied and forgiven. But we think it should excite some misgiving in the minds even of those who have made the profoundest attainments in German philosophy, to find that good men in Germany itself, men not restricted by the trammels which are supposed to confine all English minds, regard with disapprobation and even abhorrence the systems which are directly or indirectly eulogized in this discourse. A man should be very well at home in his subject, and very sure of himself, to be able, without uneasiness, to find himself fondling as scientific forms of truth, doctrines which German scholars of the first eminence regard as atheistic. Dr. Nevin we know, and have known long, and doubt not he has in his American education and in the grace of God, an anchor which will prevent his being carried over the cataract to whose fearful brink, attracted by the rainbow tints of the mists which overhang the "hell of waters," he seems to us to be drawing perilously near. We have not courage to follow in his wake.

Speech of Rev. W. L. Breckinridge, delivered in the First Presbyterian Church, on Tuesday evening, June 1. In vindication of his principles and conduct against the aspersions of the Rev. Mr. Taylor, uttered in the Unitarian Church, on Sabbath morning, May 29, 1841. Louisville, 1841. pp. 23.

It appears from this pamphlet that Mr. Taylor was invited to Louisville to preach for a time at the Bethel Church in that city. Mr. Breckinridge met him with cordial confidence, proposed his occupying his pulpit, and was disposed in every way to promote the object of his visit. Finding however from Mr. Taylor himself, that notwithstanding his nominal connexion with the Methodist Church, he was in habits of free ministerial communion with Unitarians and Universalists, except those of the latter class who deny all future retribution, he felt it to be his duty to withdraw the offer of his pulpit, and respectfully to say to him that he thought his continuing to preach in the Bethel church would have a tendency to promote division among the friends of the cause, and thus do more harm than good. Such a simple matter as this, it appears, was sufficient to cause quite a commotion in the city, and Mr. Breckinridge was so vehemently censured for bigotry, impoliteness, want of hospitality and so on, as to find it necessary to call the people together to hear his defence. We have not heard what effect his speech produced on the excitable people to whom it was addressed, but we are very certain that his readers will be satisfied that there was nothing in his conduct to justify the outcry which had been raised against him.

Sermons by the Rev. Joseph J. Foot. D. D., late President elect of Washington Coll ge, East Tennessee: with a brief Biographical Sketch, by Rev. George Foot. Philadelphia: Hooker & Agnew, New York, Gould, Newman & Saxton. 1841.

The author of these discourses was a ripe scholar and theologian. His sudden and tragical death, just as he had reached the meridian of his years, strength and usefulness, while he was on his way to pass through the ceremony of being inducted into an office which, more than any other, would have called his faculties and endowments into profitable use, is one of those mysteries of Providence, by which God shows the church that his ways are not as our ways. Amidst the general dearth of profound theological erudition, and thorough mastery of the vital points of Christian doctrine, the loss of such a man as Dr. Foot, in the fulness of his powers, is a calamity to the church. He had faithfully studied the Scriptures; he was well read in the master treatises of the Reformed and Puritan divines; he gave pleasing evidence of being illuminated by the Holy Ghost, who guides into all truth; withal he was valiant for the truth, and under all circumstances, however urgent the temptation to a contrary course, he was an unwavering and uncompromising defender of the faith once delivered to the saints, against all the errors by which it is either directly and boldly, or indirectly and covertly impugned. But if the loss of such a man is to be devoutly deplored, it is a solace that being dead he yet speaketh. We rejoice therefore that this collection of his sermons has been published, not only because they form a durable and honourable monument of the author's worth, but because we think them fitted to instruct and edify the church—and thus the void occasioned by his untimely death may be measurably filled.

These sermons are remarkable for the amount of sound and edifying instruction which they contain in regard to the more vital points of religion. Whoever gives these discourses a careful perusal, will find that he has not been wasting his time and attention upon frigid moral essays, vapid sentimentalities, empty declamations, metaphysical refinings, speculative dreams, or mere vague exhortations to duty, without any clear and full enunciation of those lifegiving truths, which alone can nourish or stimulate Christian practice. He will find that he rises from the perusal not merely with some twilight shadowy impressions, which confuse and perplex his mind instead of clarifying and guiding it in the great concern of salvation—that he has not been feeding on husks which heathen moralists, philosophers and others, who know not whether there be any Holy Ghost, would furnish him as abundantly as writers professedly Christian—that he has not been dealing with treatises on Christian truth only to be thrown into uncertainty and confusion in his views of them, by reason of that loose, indefinite and distrustful manner, wherewith some Christian divines handle them as those that beat the air, as if they feared the clear announcement of what God has revealed would injure rather than benefit the souls of men. He will find in this vo-

lume the cardinal and distinctive truths which lie at the foundation of Christian experience, set forth, vindicated, distinguished from those counterfeits of them which so largely abound at this day, and applied to the heart and conscience with clearness, force and fidelity. He will find such topics as the natural depravity of mankind, the blindness of the natural understanding and conscience in spiritual things, regeneration, the renovation of the heart, the illumination of the understanding, sanctification and perseverance, operations of the spirit on the unregenerate, justification, the prophetical, kingly and priestly offices of Christ, faith, repentance, holiness, the final judgment, the respective destinies of the righteous and wicked, treated in a style so lucid, cogent and faithful, as cannot but leave definite and durable traces on his memory, increase his stock of religious knowledge, and constrain the assent of his mind and conscience, if they do not win his heart. One trait in these sermons is, that while they abound in clear and conclusive reasoning on those vital truths which have been so much assailed of late, they reason out of the Scriptures. If our philosophic divines who talk so largely of the province and discoveries of reason and philosophy in theology, will give us reasonings and discoveries based on Scripture, instead of prostrating the authority and testimony of God under their own reasonings, we will bid them God speed, and welcome whatever "new light" they can gather from this source. Dr. Foot uniformly summons us to the law and the testimony, and pretends not to offer any religious doctrine for our belief, which we cannot prove out of the Holy Oracles to be the doctrine of God. Hence he speaks with authority and not as the scribes. And who are the ambassadors of God, that they should even presume to preach aught else beside the word? In our judgment this feature is a chief source of that unusual convincing power which seems like a torrent to sweep away all opposition before it, that is so conspicuous in their discourses.

Although these discourses in point of style and manner are by no means faultless models, especially that larger proportion of them which had never been prepared by the author for the press, yet they have some qualities which deserve the attention of young preachers. They are always lucid. There can be no mistake as to his meaning and aim even when he is treating the profoundest topics of Theology.

We will add that this volume is well fitted to be an antidote to the new theology and new measures, whereever it is read. All the Calvinistic doctrines which are now most impugned, are enforced by scriptural proofs so abundant, apposite, and skilfully arranged, as to be absolutely irresistible. This is not all. Dr. Foot was situated for several years in the state of New York, during the reign of those spurious revivalists, measures and doctrines, which have made such fearful havoc with that portion of God's heritage. Such a man was not slow to discern their true nature and tendency. He became their steady and unflinching opponent, and was a strong man among the champions of truth. He saw their heresies, and most ably exposed and demolished them,

as the pages of the Literary and Theological Review amply testify. Hence his sermons which ably inculcate the doctrines of the reformation, always have an aspect towards those prevailing errors by which they are most invaded in our day. And there is an edge and temper in the weapons with which he repels them, which renders them absolutely fatal. He exposes with a master hand the corrupt and pernicious character of those principles, proceedings and attendant religious excitements, which have swept over many parts of the country, under the different titles of new divinity, new light and new measures. We can conceive of no better antidote to these corruptions, than this volume of Sermons. We see not how they could take root on a soil pre-occupied by the thorough study of such books as this. If any suppose that the danger of these things is past, they are entirely misinformed. The persons who formerly "rode in the whirlwind and directed the storm," have indeed had their day: their folly has been made manifest: they have gone into obscurity, or espoused heresies so gross and palpable, as to cut the nerve of their influence in all communities pretending to be evangelical. But their spirit still lives in a host of followers and imitators in various sects, some of whom have risen to a like sudden celebrity, and will doubtless run an equally ephemeral career. These persons will often spring upon a community, and raise a ferment by their hot and tumultuous proceedings, before their influence begins to be suspected or feared. And a in moment, all evangelical churches find an unlooked for irruption made upon themselves, as sudden, terrific and irresistible as if it had been a burst of thunder. Let none then cry peace, peace when there is no peace. For sudden destruction cometh as a whirlwind.

We are constrained in this connexion to notice the perfect agreement between the New Haven Divinity, and that which gave birth and sustenance to the wild measures in Western New York. It has always been earnestly denied by the gentleman at New Haven that the two have any sympathy or affinity. But we venture to assert that wherever these sermons expose a prevalent error in regard to depravity or regeneration, a common reader, who had been accustomed to hear the views advanced by Dr. Taylor's school, and had never heard of the theology of Western New York, would suppose he was aiming point-blank at the former. And we venture to assert that the former class would find as much fault with many of the doctrines taught in this book, as the western revivalists and for the same reasons. Now we recollect hearing Dr. Foot on one occasion to speak of the importance of exposing the errors of the New Haven school. He said however that this was not his field. He has not paid attention to the particular type which these things take at New Haven. He had occupied himself as a controversialist almost entirely with these heresies and disorders, as they developed themselves, where he had been obliged to meet them, i. e., in Western New York, and he deemed himself more capable of serving God and the church by confining himself to this field. When therefore he speaks of modern errors in these ser-

mons, there can be no doubt where or in what connexion they appeared. And if in doing this it should seem as if he was aiming at a school of theologians in another part of the country, which he has not at all in his eye, it only proves that these two classes have one system.

Causes of the decline of doctrinal preaching. A Sermon preached before the Pastoral association of Massachusetts, in Park Street church, Boston, May 25, 1841. By Parsons Cooke. Published by request, Boston: Press of T. R. Marvin.

Considering the occasion on which this sermon was preached, its very title wins from us a favourable regard. In view of the theological tendencies in New England for the last twenty years, it is surely cause of joy unfeigned that God keeps watchmen on the walls of Zion, who descry her declensions and perils, and are faithful to sound the notes of warning, remonstrance and alarm. This is particularly gratifying in Massachusetts. In Connecticut, where doctrinal errors had a more immediate and formidable developement some years since, the Pastoral Union was organized to withstand their further incursions. But unless we are mistaken, most of the Orthodox in Massachusetts have flattered themselves heretofore that this doctrinal declension was an endemic confined mostly to Connecticut, because its most able and devoted champions happened to be located there. But the truth is, that whatever be the residence of its most prominent advocates, the distemper itself has not been local; but has had a simultaneous development and growth all over the land, and has infected in greater or less degrees most of the Calvinistic communions. And it has been obvious enough to the most superficial observer, that Massachusetts has not been exempt from her due proportion of the evil. We are glad therefore that her leading ministers are opening their eyes to this portentous state of things, and frankly and fully admonishing their leading ecclesiastical bodies of it before it is too late to recover. We have no doubt that much good will result from the publication of this sermon. Mr. Cook is in the meridian of life, and, *Deo volente*, may yet do much for the cause of religion. He is one of the editors of the Puritan, in which he has stated, that he consented to publish it because some differed from him in opinion, and he wished to give opportunity for full and thorough discussion. We doubt not this discussion will be highly salutary. This is a sermon of uncommon power. It is not like too many sermons a dead level of common-place remarks, relieved here and there by a spirited and striking passage. It is a constant succession of racy, stirring, well-timed thoughts. It goes on with a bounding pulse from beginning to end, without fear or favour he tells the whole truth, no matter who or what stands in his way. In a few rapid touches he shows that a hatred of doctrinal preaching has been diffused among the people; by a timid neglect to preach doctrine on the part of ministers; by superficial religious training of the young; by the shallowness of current literature, secular and religious; the stirring character of the age; the present mode of theological education; by the introduction of German writers

into our theological seminaries; by the machinery used to promote revivals; and a morbid haste for immediate results. He then shows that it is the root of most of the troubles and desolations in the churches, and concludes by telling us that, "when the interests of Christian truth are at stake it is no time to take counsel of our fears and shrink from declaring the whole counsel of God." When God raises up such witnesses for his truth, we cannot but regard it as a token that he is about to deliver the churches of NewEngland, his ancient and favoured heritage, from the errors that infest or threaten them.

The Theatre. By the Rev. S. G. Winchester. Philadelphia: Wm. S. Martien, pp. 239, 12mo.

This work had its origin in an address delivered by the author before the Literary Societies of Oakland College, Miss. Upon being requested to furnish a copy for publication, he was led to give to the subject a more extended examination, the result of which is this work containing an impartial and thorough discussion of the question, "whether the stage as it now is, and ever has been, is an evil or a benefit to the community." Instead of indulging in loose declamation, upon vague and general grounds, the author has traced the rise and progress of the drama, in different ages, showing that it has always been unfriendly to moral improvement, and accumulating a mass of evidence and authority against it, which it would be difficult for any honest inquirer to resist. The whole is presented in a style of uncommon directness and force, and with rare typographical beauty.

Salvation for the Heathen. A Sermon preached in Philadelphia, May, 1841, before the Board of Foreign Missions of the Presbyterian Church. By J. M'Elroy. New York. Robert Carter. 1841. 18mo. pp. 62.

Just as our number was closing, we received this excellent discourse. Time and space are no more than sufficient for expressing the high estimate which we set upon the production, which is in every respect worthy of its author's distinguished reputation. It is fraught with evangelical truth and sound argument, conveyed in a style at once polished and masculine. We have only to regret that Dr. M'Elroy does not more frequently favour the church with similar publications.

NOTICES.

Having been prevented, by providential circumstances, from preparing our usual notice of the proceedings of the General Assemby in time for this number, we hope to present it in the number for October.

Owing to its length, the continuation of the Review of Bacchus and Anti-Bacchus, is not inserted in this number, but may be expected in the next.