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SCIENCE
BY THE
REV. J. CLOWES



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ON SCIENCE,

ITS DIVINE ORIGIN, OPERATION, USE, AND END;

TOGETHER WITH

ITS VARIOUS INTERESTING PROPERTIES,
QUALITIES, AND CHARACTERS.

BY

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Third Edition.

MANCHESTER:

CAVE AND SEVER, PRINTERS BY STEAM POWER,
HUNT'S BANK.

1861.



P R E F A C E .

THE design of the following Work is to point out the vast importance of Science or knowledge, whether considered as to its origin, its operation, or its end. The subject seems hitherto to have been little considered, and will therefore probably, at first view, appear strange to many readers. Yet it must be acknowledged that no subject can be of more interesting or more general moment, since every man is gifted with a measure of Science, greater or less, and his happiness, both here and hereafter, is intimately connected with his use of it.

It is the hope and devout prayer of the Author of the following pages, that they may be blessed to the reader's edification, by conducting him, in the first place, to a right apprehension of the immense value of the scientific talent which he possesses, and, in the second place, to its right application, until it be instrumental, under the Divine Providence, as it was intended to be, in introducing him to all the blessings of purification and regeneration, through the pure love of God and his neighbour.

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ON SCIENCE.

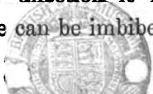
SECTION 1.—*What is meant by Science?*

THE term *Science* is derived from the Latin *scio*, signifying *to know*, and according to the sense of this derivation we mean to apply it in the following work, as denoting, in general, *whatsoever a man knows*. Common usage, indeed, has circumscribed the signification of this term within narrower limits, and nothing is thought to deserve the name of science but abstruse speculations on abstruse subjects. Thus we talk of the science of mathematics, of astronomy, of geography, of mechanics, of optics, of hydrostatics, &c. &c., and none are deemed men of science except such as are adepts in those subjects. But why may not we talk of the science of husbandry, of building, of planting, of manufacture, of merchandise, or of any other employment? Certainly every business in which any man is engaged, implies something *to be known*, and is therefore properly a *science*; and as every man may be supposed to follow some employment, and therefore *to know* something, every man is, properly speaking, a *man of science*, and none appears to have an exclusive right to this title.

Besides, every man may be supposed to have some knowledge, more or less, concerning God, His law, His kingdom, and a future life, which alone is sufficient to constitute him a scientific man. In short, whatsoever a man *knows*, that is his *science*, and since every man *knows* something, every man must needs be a *man of science*. It is the infinite importance of *science*, regarded in this general view, which we propose to consider in the following pages.

SECTION 2.—*The Birth of Science.*

Science, it is manifest, is born from that *affection of knowing* with which every man is gifted from his birth, and which properly constitutes him man; for man, it is well known, consists of two distinct parts or principles, *will* and *understanding*, and all affection is of the will, as all science is of the understanding. But the understanding of man, at his birth, is not formed, being nothing more than *the faculty to understand*, which faculty is derived continually from the will and its love, and is continually forming according to the activity and operation of its parent principle. Its first formation is what is called *science*, which is nothing more than the first rudiment of understanding, derived from the objects of sense. But as the understanding^o is the perpetual offspring of the will or love, in like manner science is the perpetual offspring of the will's desire or affection, since without desire or affection it is impossible to conceive that any science can be imbibed and received.



It is, nevertheless, to be understood that all the *affection of knowing* is not of man alone, but continually of God operating in man, and that, consequently, all science is not the creature of mere human exertion, industry, and talent, separate from God, but is rather to be regarded as the blessed fruit of God's continual operation in man, tending to produce that heavenly birth of *knowledge* without which man would be utterly incapable of enjoying his proper happiness, because utterly incapable either of loving God or of connecting himself with God.

It deserves further to be considered, that the birth of science is an indefinite or unlimited effect, capable of advancing to any degree short of infinite, and that in this consists the perfection of man above the inferior creatures. For the inferior creatures, it is well known, are born into the science of all things necessary for them to know; but then they are incapable of further progress: whereas man, though born in ignorance, has the faculty of growing in science to all eternity.

Thus, then, all science has its birth properly from God, because from *the affection of knowing*, which God inspires; and thus man, as to science, is the perpetual child of the Most High, and possesses besides, in himself, a continual testimony of the Divine presence and operation, resulting from the continual existence and exercise of the astonishing faculty of science thence derived.

SECTION 3.—*The Growth of Science.*

Science, like everything else derived from God and proper to man, has its growth, and this growth is *gradual*, according to the operation of the affection from which it is first born, and the *exercise* of that operation. It commences in the state of infancy, and is continued through every successive period of man's life, receiving perpetual increments, until it attains to the full maturity of its growth. It therefore has its ages, which may be compared with the ages of man himself, called *youth*, *manhood*, and *old age*, and its state is various according to those ages; for in *youth* it is comparatively tender and infirm, in its *manhood* it acquires a greater firmness and stability, and in its *old age* it becomes more tranquil and composed.

There is, then, no part of man's life in which the growth of science is not continued; and, since neither science, nor the affection by which it is introduced, are of man, but entirely of the Lord, therefore there is no part of man's life in which he is not a subject of the Divine presence, operation, and formation, for the purpose of preparing him to become an instrument of use, both in this world and in the other: the law of which preparation is, that he shall imbibe and grow in all that science which is necessary to make him such an instrument, and thus increase his blessedness both here and hereafter.

SECTION 4.—*The Extent of Science.*

The extent of science may be considered both in regard to the things of this world and of another, for man has knowledge respecting both worlds, which knowledge may be extended to an unlimited degree. The science of the things of this world is derived from an acquaintance with what is commonly called human learning, and also from observation, and is extended accordingly. The science of the things of another world is derived from revelation, and is more or less extended, in proportion as man studies the Word of God, and suffers its holy truths to influence his understanding. That science respecting the things of both worlds has no boundaries, but is unlimited in its extent, must be obvious to every one who reflects on the immensity of the works of God, and on the numberless truths contained in the Word of God. For there is not a single object of creation which is not a subject of human science; neither is there a single truth contained in the Word of God, which was not intended for the formation of man's intellectual mind, and to enlarge the sphere of its knowledge respecting the vast realities of another world.

Thus man is gifted, by his great and good Creator, with the vast capacity of attaining endless knowledge, and he is moreover placed in a state adapted to such attainment, having the glorious works of God continually before his eyes, and the Holy Word of God continually

within his reach. It is his own fault, therefore, if he does not enrich his mind with endless stores of the most sublime and extended knowledge, because it is his own fault if he does not acquaint himself with the Word and works of the Great and Glorious God, and thereby ascend to the eternal world and its Divine Author, and thus connecting himself with the Infinite and Eternal, discover, to his unutterable joy, that the extent of science is unlimited, since it is impossible that what is infinite and eternal can ever be fully comprehended by what is finite and temporal.

SECTION 5.—*The Degrees of Science.*

By the *degrees* of science are not meant the degrees of its extent in the kingdoms of nature, or of the visible things of this outward world, which are called natural; for all those degrees make properly but one degree, viz., the natural degree of science. But by the degrees of science are to be understood its degrees as estimated on a scale ascending from the outermost principles of natural things to the inmost principles of things spiritual, which degrees are four in number, viz., *natural*, *spiritual*, *celestial*, and *divine*. By the *natural* degree of science, is meant science employed in the contemplation of the lower things of this world, for all such things are called *natural*; by the *spiritual* degree of science, is meant science employed in the contemplation of the interior truths of God's Holy Word and kingdom, for all

such truths are called *spiritual*; by the *celestial* degree of science, is meant science employed in the contemplation of the good things of heavenly love and charity, for all such things are called *celestial*; and by the *divine* degree of science, is meant science employed in the contemplation of things purely divine. Thus, the several degrees of science are similar to the degrees of the several principles of man's life or love, which also are *natural, spiritual, celestial, and divine*. For when man loves only the things of this world, his life or love then is merely *natural*, and he lives in the *natural* degree; but when he rises out of this degree of life, and begins to be affected with the truths of God's most Holy Word in his understanding, his life or love then becomes *spiritual*, and he lives in the spiritual degree. Again, when he ascends out of this degree, so as to be affected by the good things of love and charity in his will, his life or love then becomes *celestial*, and he lives in the celestial degree: all above this degree is *divine*, and may be called the divine degree of man's life; but this degree, as being infinite, is incomprehensible both to angels and men.

Adored, then, be the divine mercy of the Great Father of the universe, who has been pleased to gift His creature, man, with the wonderful talent of science in all its degrees, and thus to distinguish him from all the inferior creatures whatsoever! For the inferior creatures have no science but what concerns their temporal or natural life, and are utterly incapable of attaining

science of any higher degree. But man, as being a child of immortality, and born to the noble purposes of loving his Maker, and living with Him for ever in His heavenly kingdom, is endowed with the high faculty of knowing whatsoever concerns this his grand destination, and is thus capable of cultivating every degree of science, from the lowest natural degree even to the superior spiritual and celestial degrees, and so on to the supreme, which is divine.

SECTION 6.—*The Genera and Species of Science.*

Every degree of science spoken of in the foregoing section has its several *genera* and *species*, which are indefinite in number, answering to the genera and species of created subjects in the three kingdoms of nature. Thus, there are genera and species of science in the natural degree, in the spiritual, in the celestial, and in the divine. The genera and species of science in the natural degree are well known to philosophers,—the genera including the several general distinctions of science as employed on subjects of theology, of history, of law, of physic, of morals, of anatomy, of astronomy, of geometry, of arithmetic, of mechanics, of hydrostatics, of optics, of poetry, of painting, of architecture, &c. &c.; whilst the species include the numberless divisions of each of these general subjects into their several component parts, and parts of parts. If similar corresponding genera and species of science have not been discovered in the higher degrees, called spiritual, celestial, and

divine, it is owing, not to the non-existence of such genera and species, but to the non-attention of mankind in regard to those degrees. For, were it well considered, as it ought to be, that the spiritual degree of science involves in it all things appertaining to a *true faith*; and that the celestial degree involves in it all things appertaining to *true charity*; and were the doctrines of faith and charity held in as high estimation, and thought as worthy of cultivation, as the doctrines of mere natural science, it would in such case be presently seen that they also are distinguishable into their genera and species, and that it is a thing of the first importance to attend to such distinctions. Thus, for instance, the doctrine of faith is distinguishable into the several genera of *true faith*, *false faith*, *living faith*, *dead faith*, *genuine faith*, *spurious faith*, *hypocritical faith*, &c. &c.; and it is impossible to form a full and clear idea of faith until those distinctions are attended to. The same also is true respecting charity, the genera and species of which are in like manner indefinite.

Man, then, it appears, is not only capable of *attaining* science, but also of *arranging* it, and thus of increasing its force, and extending its powers. For science unarranged, as it needs must be until it is distinguished into its genera and species, is comparatively weak, defenceless, and without energy, like a mixed and undisciplined rabble, compared with an orderly and well-disciplined army: whereas, by arrangement under its several genera and species, it acquires, at once, both strength and

activity. This is remarkably the case with spiritual and celestial science, or that science of faith and charity on which depend man's salvation and eternal life. For unless this science be well distinguished, by arranging it under its proper genera and species, it supplies man with little or no strength against his spiritual adversaries, the devil, the world, and the flesh; but in proportion to its arrangement it becomes impregnable, and administers to man also the heavenly power of victory, whereby he is enabled, if he be so disposed, to tread all enemies under his feet, and through the divine aid to rise in the eternal world as a mighty conqueror and triumphant hero.

SECTION 7.—*The Ascent of Science.*

The ascent of science is not to be estimated merely by its elevation from one degree of natural knowledge to another, nor yet by its elevation out of a natural degree into a spiritual and celestial one, for it is possible that in each of those degrees the science may be low, degraded, and depressed. But the ascent of science is to be estimated by the degree in which it is conjoined with a pure and holy love; and is thus elevated out of all that defiled and unholy love in which it is by nature, and admitted to a blessed communication and conjunction with the God of peace and purity. For, according to the proper and genuine idea of *ascending*, nothing can be said to do so, but in proportion as it moves towards the Great Father of the universe, and His heavenly

kingdom. This Great Father, therefore, is called the Highest, and is said to dwell On High, because He is the *inmost* of all beings, and dwells *within*. Whatsoever, then, doth not respect this High Being, and is not conjoined in life with Him, is comparatively *low*, and dwells in what is *low, degraded, and base*. This is the case with science of every degree, so long as it remains conjoined to an inordinate love of self and of the world; for as the love of God is the *highest* love, because it points and leads to the Highest, so the love of self and of the world is the *lowest* love, because it turns itself downwards from God into the deep abyss of its own corruptions and defilements. Science, then, whilst it is conjoined to self-love and to the love of the world, is depressed and sunk; but in proportion as it is elevated to conjunction with Jesus Christ and His kingdom, it arises out of defilement into purity, out of hell and death into heaven and life.

It is greatly to be lamented that the above ascent of science is a subject, at this day, little considered, and less experienced, by the generality of Christians. The learned, therefore, fondly imagine that they have attained the *heights* of science, provided they have read many books with attention and observation. But they forget that science has no height unless it is conjoined with the love of God, and that it then only becomes exalted when it ascends towards heaven, and is made to administer to heavenly life and purity. In this blessed state of ascent, science may be compared to the

beautiful and winged butterfly, soaring aloft and feeding on the fragrance of a pure and balmy atmosphere; whereas, in its state of descent, it may be compared to the loathsome caterpillar, devouring with greediness the leaves of the most unclean and noxious plants.

SECTION 8.—*The Purification of Science.*

The purification of science always keeps pace with the ascent of science above spoken of; for whilst science is low and degraded it must, of necessity, be proportionably filthy and defiled; but in the degree in which it is elevated and exalted, in the same degree it is rendered clean and pure. Not that science, *in itself*, can properly be called either filthy and defiled, or clean and pure, but it becomes the subject of such appellations in consequence of the love to which it is conjoined. In this respect, science is like the man in whom it abides, and of whom, also, it may be said that he has neither purity nor defilement but what he receives from the love by which he is influenced.

The purification of science, then, is similar to the purification of man and his love, and is effected by similar means. As, therefore, man and his love can never be rendered clean from defilement only so far as he enters into a state of repentance, by a vigorous renunciation of his corruptions and sincere conversion to the God of heaven, in like manner his science can never be purified but by a like purifying process. But the

defilement of man and his love consists principally in this: that he loves to believe that his life and all its faculties are *his own, independent of God*. His purification from defilement, therefore, consists in his being willing to acknowledge that his life and its faculties are derived continually from God, and are no further *his own* than as lent to him for use and enjoyment.

Here, then, may be seen clearly, at one view, the nature both of the defilement and the purification of science. Science is defiled so long as it is believed by man to be *his own*, and not God's; and it is purified in proportion as it is seen and gladly acknowledged to be continually the property and the gift of God.

Let the children then of this world tremble whilst they pride themselves on the possession of knowledge which they are unwilling to confess to be the perpetual gift of the Most High; for, in this unhappy case, their science is most filthy and polluted, and, in consequence of its separation from its Divine Source, tends to widen the gulph interposed between them and the habitations of peace and purity. But let the children of God rejoice and be comforted, whilst they are wise and willing to acknowledge that both their science and their faculty of science are from above, since, in this case, all their acquirements of knowledge being connected with the Divine Fountain of purity, are proportionably pure, and, according to the degree of their purification, yield, to their favoured possessor, a rich and abundant harvest of joy, of peace, and of security.

SECTION 9.—*The Use of Science.*

Science has its important uses with regard both to man's temporal and eternal life, for, without science, it is impossible that man can exercise, in the smallest degree, the faculties of either life; indeed, without science it is impossible he should be a man. The use of science, in regard to man's temporal life, is principally this—to instruct him how he may best attain the end of temporal happiness which he has in view; for science tends to promote the comforts and conveniences of temporal life, which, without science, would be very imperfect, as husbandry, architecture, mechanics, navigation, and all the useful arts may testify. The use of science, in regard to man's eternal life, is similar in its operation, since without the science of what is conducive to eternal life, it would be absolutely impossible for man to put himself in any motion towards it.

Science then is the light of the mind, directing the affections to the attainment of their respective ends, whether those ends be temporal or eternal. The affections so directed are capable of moving towards, and of securing their favourite objects, but without such direction they would be totally blind, consequently incapable of accomplishing their purposes.

It is not, however, to be understood, that any merely human science, howsoever deep and mysterious it may be, can conduct man to the knowledge of God, and of eternal life, for such knowledge is only attainable by

revelation. Nevertheless, human science has its important uses on this occasion, in enabling man both to conform more fully, and to illustrate more clearly, the truths of revealed wisdom, when they have been received into his mind from the superior principle of faith.

It is a further important use of science to supply the understanding of man with its proper food and nourishment, and thus to form and perfect it, by replenishing it with all that variety of truth and knowledge, without which it can neither exist nor grow. For the scientific principle of man is as a rich storehouse, from which, and out of which, the intellectual principle continually selects the materials necessary for its existence and subsistence, deriving its character and quality accordingly.

Thus the grand use of science is, *first*, to form the mind of man for the right discharge of the duties of temporal life, and thereby to increase his temporal enjoyments; and, *secondly*, to receive and confirm the great truths of revelation, whereby man is rendered capable of ascending from earth to heaven, and of enjoying eternal blessedness in an everlasting conjunction of life and love with the God of heaven.

SECTION 10.—*The Abuse of Science.*

Science, like all other precious gifts of heaven to man, may be abused, and it is so abused, when man, by his perverseness, separates it from the great ends for which it was given. This separation is effected principally in

these three ways, *first*, when man rests satisfied with the science of what is right and good, without advancing to the love and practice of it; *secondly*, when science, instead of confirming what is right and good, is perverted to confirm what is evil and false; *thirdly*, when man elevates himself in the pride of science, by exalting it above revealed truth, and thus above God and heaven, and the eternally blessed life of love and charity.

In regard to the *first* of these separations it may be proper to observe, that all science is given to man with a view, principally, to direct his love and practice, since man is born to *love* and to *do*, and becomes a man by *loving* and *doing*, and not by *knowing*, separate from loving and doing. Whensoever, then, a man rests satisfied with the mere science of what is right and good, whether it regards things temporal or things eternal, and stops short of the love and practice of that science, he then manifestly abuses that science, because he separates it from the end for which it was given, and in so doing, renders it, to himself, totally useless and insignificant.

In regard to the *second* of the above separations, it must be obvious to every one, that when science is perverted to confirm what is evil and false, instead of being applied, according to the intention of God, to confirm what is good and true, it must then needs be grossly abused, and the abuse will be proportioned to the degree of such confirmation. For science, in all cases, was originally designed of the Divine Providence

to be the handmaid of virtue, of wisdom, of piety, and of every excellence, both human and divine; and, consequently, in whatsoever instance it is diverted from this end, and especially when it is prostituted to favour opposite principles and persuasions, it is rendered the unhappy and defiled subject of an abuse, the more criminal and the more dangerous in the degree of its deviation from its grand original purpose and intention.

Nor can the abuse be deemed of less magnitude when considered in respect to the *third* instance of separation above adverted to. For what instance of the abuse of science can be supposed more tremendous than when it is made the instrument of separating man from God, from heaven, and from the eternally blessed life of love and charity, by being exalted above revealed truth, and thus, by elevating man, in his own foolish pride and preëminence, above God, and all the graces and virtues of His angelic kingdom?

It deserves further to be noted on this interesting subject, that as science, when directed to its proper end, is instrumental in perfecting man's life, and promoting his happiness, so, when diverted from that end by abuse, it becomes the fruitful source of his misery, and the powerful instrument of his greater destruction, agreeable to those words of the eternal wisdom—"That servant which knew his Lord's will, and prepared not himself, neither did according to his will, shall be beaten with many stripes." (Luke xii. 47.) It is therefore far better and safer to be in ignorance, than to abuse science,—to

know nothing, than to have all knowledge, and yet not live accordingly. Let every one, therefore, take heed to his scientific attainments, of whatsoever kind they be, that they may always be directed to their proper end; recollecting, that as the right use of science makes an angel, and conducts man to the temple of wisdom, of peace and of bliss, so the abuse of it makes an infernal, and plunges man into the dark abodes of insanity, of restlessness, and of eternal misery.

SECTION 11.—*The Property of Science, or to whom it belongs.*

All science properly belongs unto God alone, because, being derived from Him, He must needs be its continual and sole proprietor. But God has given, and continually gives, science unto man; and therefore man may, in one sense, be called its proprietor, as receiving it from God. Nevertheless, God gives science to man, not for individual benefit only, but for public use; and therefore science, according to this view, is the property of the public, and not of the individual who possesses it, only so far as he applies it to the public good for which it was given. For such is the nature of all the gifts of heaven to man, that being designed for general use, their excellence perishes, and is totally lost to the unhappy possessor, whensoever he seeks to appropriate them to himself, and by a sordid self-love, to apply them to the promotion of his own glory, rather than to the

general welfare. This truth is awfully illustrated and confirmed by the sentence denounced on the unprofitable servant in the Gospel, where it is said—"Take therefore the talent from him, and give it unto him that hath ten talents." (Matt. xxv. 28.) For the unprofitable servant is he who *hides his Lord's talent in the earth* of his own selfishness, instead of regarding it as the appointed instrument of promoting the benefit of his fellow-creatures and adding to the stock of general happiness.

The *politician*, therefore, who wraps up his political science *in the napkin* of his own selfish purposes, when he ought rather to devote it to his country's service; the *philosopher*, who studies the mysteries of nature to indulge his own vanity more than to enrich the world with philosophical discovery; the *scholar*, who prides himself in the pedantry of learning, and is unconcerned about its benefits to society; the *theologian*, who speculates on abstruse articles of faith with greater ardour and scrupulousness than he maintains the laws of charity and the universal extension of its heavenly influence;—all these are alike unwise; because, by the selfish misapplication of their respective sciences, they draw down upon their own heads the thunder of the tremendous sentence—"Take therefore the talent from him, and give it unto him that hath ten talents."

Woe, then, to the man, whosoever he be, who regards science (that valuable gift of heaven) as bestowed for the gratification of his own pride, avarice, or ambition, saying thus, with Pharaoh of old—"My river is mine own,

and I have made it for myself." (Ezek. xxix. 3.) For the more eagerly he seeks thus to adorn himself in the trappings of his own fancied talents, the more certainly he will divest himself of all its real use, benefit, and excellence, until there be left none remaining. But blessed be the man, whosoever he be, who regards all his science as the property of God and of the public, and applies it, accordingly, in promoting the glory of God, the good of society, and the general interest of his fellow-creatures! For, whilst the sordid and the selfish, in *seeking* the life of science, *lose it*, he, on the contrary, in *losing*, *gains it*; because, sacrificing it on the altar of the divine mercy of that adorable Being who gave it, and consecrating it thus to the sublime ends of public benefit for which it was given, he never fails to receive it back again, fructified and multiplied by its connection with the fountain of life, of wisdom, and of blessing.

SECTION 12.—*The Order of Science, and its Disorder.*

Every created subject stands and operates according to *order*, when it respects and promotes the end of its creation; and it falls into *disorder*, in proportion as it departs from that end. This is the case with man himself, the end of whose creation is that he should respect his Great Creator, His Word, His kingdom, His providence and divine operation, and should form his life accordingly. Man, therefore, stands and operates according to order, when he has respect unto God, His Word,

His kingdom, His providence and divine operation, and forms his life in agreement with such respect; and man falls into disorder, in proportion as he departs from such respect, and from the rule of life which it prescribes.

What is thus true of man, and of every other created subject, is true also of man's science, or of the knowledge which has been admitted into his mind. All such science, therefore, stands and operates according to order, when it has respect unto the end for which it was given; and it falls into disorder, when it departs from that end. Now, the great end of science, it is plain, is to conduct man to the knowledge and love of his Creator, and to a life in agreement with all the precepts of such love, thus to heaven and eternal happiness. Science, then, stands and operates according to order, when man suffers himself to be conducted by it to this its proper end; and it falls into disorder, in proportion as that end is neglected and disregarded.

Science, when standing and operating according to order, may be compared to a beautiful garden, planted with all variety of choice and delicate plants, yielding both flowers and fruits to its happy possessor, and exposed to the influences of the rain and sun of heaven, from which it derives continual fruitfulness and increase. But science, when standing and operating in disorder, may be compared to a terrible wilderness, abounding with poisonous plants and noxious animals, which bring destruction and death upon its miserable possessor, whilst the whole surrounding atmosphere is contaminated with its infectious damps and vapours.

Let everyone, then, take heed to himself, and to the science which he has imbibed, that both he and his science may be found in the order for which they were created; and may thus escape the disorder, which is only another name for destruction and death. For this purpose, let him be wise to have respect unto *the end of science*, that so he may suffer it to conduct him to the blessed knowledge and love of God and of his fellow-creatures, and to a life of innocence, purity, charity, humility, and well-doing, in agreement with such knowledge and love. So shall his scientific mind become a rich and beautiful garden, abounding with all heavenly plants and shrubs, yielding the most delicious flowers and fruits, and exposed to the rain and sunshine of heaven; and thus delighting himself with the paradise provided for him by his heavenly Father, and feeding continually on all its paradisiacal produce, he will give unceasing praise to the Divine Source of such blessedness, and will never experience the horrors and mischiefs of that terrible wilderness which never fails to desolate the mind wherein disorderly science has established her ruinous and destructive kingdom.

SECTION 13.—*The Blessing and the Curse of Science.*

There is but one source of *blessing*, properly so called, and that is, conjunction with God and His life; as, on the other hand, there is but one source of the *curse*, properly so called, and that is, separation from God and

His life. Man, therefore, is *blessed*, in proportion as he attains the above conjunction; and he becomes *cursed*, in proportion as he does not attain it. But the sole reason why man does not attain the blessing of conjunction with God and His life, is, because he doth not form his life in agreement with that science or knowledge of God which is imparted to him from above, and which teaches him to shun all evil as sin against God. For man cannot be conjoined with God and His life by the mere science or knowledge of God only, but by the life of such science or knowledge; and the life of such science or knowledge consists in shunning all those evils of the heart and life which are contrary to God and His ever-blessed life of love and charity.

From this view, then, of the true nature of the *blessing* and the *curse*, it may be clearly seen in what case science may be said to be *blessed*, and in what case it may be called *cursed*. It is *blessed* and a *blessing*, when it is instrumental in conducting its possessor to conjunction with the great and glorious God, His Word, and His kingdom; and it becomes instrumental in effecting this happy purpose, when it leads man to forsake his sins, and to become a true convert to Jesus Christ, as the only true God of heaven and earth, the Alpha and Omega, the Beginning and the Ending (Rev. i. 8, 11.) of all life, wisdom, peace, benediction, and salvation. But it is *cursed*, and a *curse*, when it is instrumental in separating its possessor from the above happy conjunction; and it becomes instrumental in effecting this terrible mischief,

whosoever it exalts itself above Jesus Christ and His Holy Word, and, in so doing, renders man careless about his sins, and the necessity of a good life, by leading him to suppose that he may be saved by a mere act of speculative faith in the blood and merits of Christ, without any regard to repentance and real amendment of the heart and life.

Science thus perverted from its proper end, and by perversion, *cursed*, may be compared to the subtle serpent of *the tree of knowledge of good and evil*, which is ever tempting man to eat of the forbidden fruit, and thus to banish himself from Paradise and turn his back on the *tree of life*. But science directed to its proper end, and by such direction *blessed*, may be compared to an angelic being, commissioned by the Almighty to take man by the hand and conduct him through all the intricacies and perils of the wilderness of this world back again to Paradise, to eat again of the *tree of life*, and to live for ever in an eternal and blessed conjunction with Jesus Christ, His Word, His life, and His kingdom.

SECTION 14.—*The Glorification of Science.*

There are two sources of *glory*, the opinion or judgment of God and His angels, which is always according to the eternal truth, and the opinions or judgments of men, which may either be in agreement with the eternal truth, or in opposition to it. The glory derived from the opinion and judgment of God and His angels, and

also from the opinions and judgments of men which are in agreement with the eternal truth, is *true* glory ; but the glory derived from the opinions and judgments of men which are in opposition to the eternal truth, is *false* glory.

From this idea of glory, it may be clearly seen what is meant by the *glorification of science*, or in what case science may be said to be *glorified*. It is *glorified* in proportion as it is in agreement with the eternal truth, but it is *inglorious* in proportion to its disagreement. The loudest plaudits, therefore, of human reputation cannot alone make any addition to the true glory of science, neither are we to look for that glory only on the laureled brows of the deep-read scholar, the profound philosopher, the splendid writer, the learned critic, or the sage historian. For if science does not receive from the eternal truth the deep stamp and impression of its glory, which is the only true glory, all its other marks and characters of honour are vain and fallacious, because superficial and perishable. . On the other hand, if human science be in connection and agreement with the eternal truth, the bright image of glory, which it thence receives, is as splendid and as durable as the divine source from which it proceeds.

Is it asked how science may attain its proper *glorification* ? The answer is plain—let it attach itself to its Eternal Father, and learn to bow down and submit itself to His sovereign truth. Let it thus seek no longer its own glory, or suppose that it possesses any

glory of its own, independent of the Divine Source of all its splendour, its activity, and its life. Let it labour to confirm in itself all the grand documents of revealed wisdom; and learn to call nothing wise, nothing glorious, nothing happy, but as it is in connection with that wisdom. Thus will it attain the glory for which it was originally designed, by entering into a participation of the divine glory, through communication and conjunction with the Eternal Word, the only source of all true glory.

Is it asked again, who, amongst the children of men, is most *glorious*, or possesses the highest degree of *glory*? The answer again is equally plain,—it is not he who possesses the *greatest quantity* of science, but whose science is of the *best quality*; and his science is of the best quality who most submits it to the eternal truth. True glory, therefore, does not belong to men of great natural talents, or of extensive acquirements of human learning, merely as such, but it belongs to that humble Christian, howsoever moderate his talents may be, or howsoever limited his science, who submits all that he knows to the Divine Parent of all knowledge, and labours thus by humility, purity, and a good life, to connect it with the source of all true glory, the eternal truth and wisdom of the Most High God.

SECTION 15.—*On Vain Science, False Science, and True Science.*

All science is *vain* when it is either exercised on vain and frivolous objects, which have no tendency to promote the well-being of man, or, when being exercised on interesting and important objects, it is not suffered to direct its possessor to the attainment of them. For instance, all science conversant in the arts of luxury and excessive refinement of manners, or in the more seducing, but not less frivolous discoveries of an abstruse and useless philosophy, may be called *vain* science, because it is employed on trifling objects; as, on the other hand, all science conversant about the great objects of religion, the true worship of God, and the attainment of everlasting happiness, may be equally *vain*, if it does not conduct man to the acquisition of those objects.

False science differs from vain science in this—that it is not only not conducive to the well-being of man, but it is also destructive of it, by opposing the eternal truth, and whatsoever opposes the eternal truth, is called *false*. Under the head of *false science* may be ranked all heterodox opinions and sentiments of religion which are grounded in misinterpretation of the Word of God; likewise all philosophical principles of the knowledge of nature which are contrary to true philosophy; together with all moral and political principles which are opposed to sound morality and civil policy.

True science is that which is founded in truth, and

all truth is of God, and is manifested in His Word and His works. True science, therefore, is never employed on vain and trifling objects, because the truth in which it is founded is always grand and sublime both in its principles and derivatives. Neither doth true science ever oppose the eternal truth, because it is impossible that a derivative can oppose the principle from which it receives its existence. *True* science thus is ever on the side of undefiled religion, pure morality, enlightened philosophy, sound policy, virtuous conduct, and all the graces and decencies of human life. It is ever conversant with great and interesting objects, because it is ever pointing towards God, ever asserting His providence, vindicating His laws, defending His rights, bowing down before His authority, ministering to His counsels, and justifying His wisdom, as displayed both in His Word and in His works.

Whilst *vain* science, then, like a morbid humour, paralyzes all the powers of the human mind, by binding them down to trifling and frivolous objects; and whilst *false* science, like an *ignis fatuus*, misleads the judgment, and diverting the deluded understanding from attention to the light of truth, plunges it into the deep abyss of intellectual error and darkness; *true* science, on the contrary, like a minister of heaven, counteracts all their mischievous effects, and setting the mind at liberty to pursue the grand ends and objects for which it was created, enlightens it at the same time to see what those objects are, and how they may most effectually be

attained. True science thus conducts man to heaven, guarding him from the dissipations of folly, strengthening all his faculties in the pursuit of wisdom, correcting his judgment, checking the violence of his passions, and, above all, enabling him to confirm, to illustrate, and to pursue the grand conclusions of the eternal truth, as manifested in the Book of the revealed will of the Most High God.

SECTION 16.—*On Borrowed Science, and Proper Science.*

Borrowed science is that which a man receives from another, without making it *his own*, and it consists, therefore, of all such truth as is admitted on the authority of others, but receives no confirmation in a man's own mind, either by seeing it in his understanding to be true, or by feeling its effect on his will. *Proper* science, on the other hand, is that which a man makes *his own*, both by understanding it and being affected by it, and which, therefore, is not admitted merely on the testimony of others, but is confirmed by a man's own reflection and experience.

On *borrowed* science it may be useful to remark, that let it be, in itself, ever so interesting, important, and beneficial, it is of no manner of interest, importance, or benefit to him who admits it, only so far as he proceeds to make it *his own*, by examining, approving, confirming, and being affected by it. For in no other case can science obtain entrance into the *life* of man; and until

it obtains entrance into the life, it abides only in the external memory, and makes no part of the man. Thus religious science, the most interesting, the most important, and the most beneficial of all others, because intended to conduct man to the knowledge and love of God, and so to prepare him for heaven and immortality, never gains admission into the life of man until he makes it *his own*, and he never can make it *his own*, only in the degree in which he examines, approves, confirms, and is affected by it. Until this is the case, he receives it on the testimony and credit of others, and the creed which he repeats may rather be called the exposition and declaration of another's faith than of his own.

It is otherwise with *proper science*, which being attentively examined by the understanding, and cherished in the will, no longer remains in the outer court of the memory only, but being exalted thence into the interior chambers of the intellectual mind, incorporates itself with the life of man, which it at once enlightens, recreates, modifies, ennobles, and blesses. This is particularly the case with the science of religion, when it is rendered man's *own* by his examination, confirmation, and approbation of the important truths which it developes and teaches. From that moment his religious creed is no longer admitted merely on the testimony of others, but on its own bright evidence, manifesting itself by the splendour of its light, by the power of its consolations, by the blessed hopes which it inspires, by the

joyous prospects which it presents, and, above all, by the purity, the charity, the zeal, the piety, and humility which it at once begets and strengthens, forms and nourishes, creates and animates.

Whilst *borrowed science*, then, may be compared with the iron of the axe of the son of the prophet, which fell from the wood and sunk in the waters, and over which the owner poured forth his bitter lamentation because it was borrowed, (see 2 Kings, vi. 1—8.) *proper science* may be compared with the same iron in conjunction with the wood, which, at the prophet's command, was thrown into the waters and caused the iron to swim. For *borrowed science* is endowed with no power to elevate it above the waters of trouble and temptation, and the sad consequence is, that when the waves of trial begin to swell and rage, it presently sinks beneath them, to the unutterable distress of its suffering and disappointed owner; whereas *proper science*, being in conjunction with its proper life, and acknowledging that life to be from God, is gifted with an interior strength to bear it up against all the storms and tempests of adversity, and at the same time to elevate its happy possessor into all the joy and consolation of the most blessed tranquillity and security.



SECTION 17.—*On Living Science, and Dead Science.*

Everything is *living* or *alive* which has connection with the life of God, which is love and charity; and

everything is *dead* which is separated from that connection. *Living* science, therefore, is that which being acknowledged to be from God, and being operative according to such acknowledgment, is continually influenced by the life of the love of God, and neighbourly love, and kept in conjunction with that life. *Dead science*, on the other hand, is that which *not* being acknowledged to be from God, and *not* being operative according to such acknowledgment, is continually influenced by selfish and worldly love, and is thus separated from the fountain of true life and all its blessedness.

It is much to be lamented that this distinction of science into *living* and *dead*, is, at this day, so little attended to and thought of, that few, comparatively, are aware of the ruling principle by which their science is influenced, being in complete ignorance whether that principle be from heaven or hell, from God or from the powers of darkness. Hence it comes to pass that many persons, the most renowned for their scientific attainments, convert their learning into a *dead carcass*, and by a fatal ignorance and inattention to their own conduct, embrace, in their pursuit of science, a *putrid body*, instead of a *living and animated soul*. For science, when separated from its proper life, which is the love of God, is a mere *husk*, rendered *rotten* and *offensive* in proportion as its possessor is influenced by self-love and by the love of the world more than by the love of God and of his neighbour.

It is not, then, the *fame* of science, nor its *extent*, nor its *trophies*, be they ever so multiplied and splendid,

which can preserve it and its owner from *decay* and *death*; still less is it the *vanity* which it nourishes, or the *ambition* by which it stimulates; for if self-love and the love of the world be the idols before which it bows, and at whose altars it sacrifices; if it has never yet acknowledged the God of heaven as its parent, and has never yet submitted all its attainments to the guidance and government of His mercy, truth, and righteousness; its *fame*, its *extent*, and its *trophies* are, in such case, only the symptoms of a more terrible *dissolution*, rendering it continually more *putrid* and *offensive*, in proportion to their multiplication, their magnitude, and their splendour.

On the other hand, *living science*, though undistinguished either by glory or by its pretensions, as estimated on the scale of worldly judgment, is nevertheless always preserved from decay by the vigour and activity of that divine principle of life with which it is connected, and to which it refers both its existence and subsistence. It is always, therefore, in the spring of its youth, consequently ever blooming, and ever emitting the sweet perfume of that heavenly virtue which quickens it, to the delight of its possessor, and the recreation of all who come within the sphere of its odours and of its life.

SECTION 18.—*On the End of Science.*

It has already been shown that the *birth* or *beginning* of science is from God, because it is from that affection

which God inspires continually, and every moment, into the mind of man. And as the beginning of science is thus eternal and divine, so likewise is its *end*, because whatsoever comes from God must needs come for the accomplishment of His purpose or intention, and the purpose or intention of God must needs be divine and eternal. But the purpose or intention of God, in all cases, is manifestly this, to communicate blessedness to all His creatures, according to the degree in which they are capable of receiving it, consequently to conduct them to conjunction with Himself, since no creature can be blessed but according to the degree of that conjunction. The *end* of science, then, is evidently to lead man to conjunction with his God, and in so doing to make him an angel, capable of enjoying everlasting happiness in the kingdom of heaven.

No subject of contemplation can be grander or more sublime than this of science, when viewed with respect to its *divine end* or *intention*. No subject also can be more curious or more edifying than to trace it through all the various processes and operations by which its divine end or intention is accomplished. We have already taken occasion to notice the *growth*, the *ascent*, the *purification*, and the *glorification* of science. From the observations made on each of those subjects, it plainly appears that the reformation and regeneration of man are effected by the instrumentality of science, and that without science it is impossible to stir a single step towards renovation of life, thus towards heaven and

eternal bliss. But renovation of life, which is reformation and regeneration, is no sudden or instantaneous operation, but is effected during every period of man's life, from infancy, through youth and manhood, to old age. The process of science, then, in accomplishing this effect, is thus gradual and continual with man, manifesting itself, in *infancy* by the external forms of truth stored up in the *memory*; in *youth* and *manhood*, by an elevation of those forms into the *intellectual mind*, where they are seen and confirmed to be truths; and in *old age*, by the vivification of those forms through the influence of heavenly love and charity in the *will*, connecting them with the divine Source from which they originally descended. Thus science, like a minister of heaven, attends man through every stage of his existence, opening his mind gradually to the light of the eternal world, and enabling him to ascend, at the same time, into its blessed life, until, through the divine power with which it is ever aided, it conducts him safe to his final destination, in an everlasting conjunction with Jesus Christ, the supreme Love and the supreme Wisdom, in an eternity of bliss and peace, of security and protection, of holiness and happiness.

Such is the *end* of science, and such is the *circle of its uses* in promoting that end, each calculated to prove the divinity of its origin, the importance of its services, the variety of its objects, and the sublimity of its mediation in respect to man, whilst it conducts him from a state of ignorance, of incapacity, of defilement, and

of death, to the possession of all the eternal blessings of heavenly wisdom, power, purity, and life, which result from conjunction with the Divine Source of every good.

Adored, then, O merciful Lord, be Thy Most Holy Name, who hast been pleased thus to let down from heaven a *golden ladder*, on which man may ascend continually from the temporal world to the eternal,—from the abodes of men to those of angels,—from the gross external objects of time and sense to the pure internal things of spirit and of everlasting duration! May Thy divine grace and mercy ever dispose the hearts of Thy creatures to make the proper and profitable use of this Thine unmerited favour! May they, for this purpose, be wise to regard all science as the offspring of Thy bounty; and to apply it accordingly, by suffering it to raise their thoughts and affections from themselves to Thee,—from the perishable goods of this lower world to the durable and everlasting realities of Thy kingdom! May this admirable talent which Thou hast committed to their care be thus ever glorified in the accomplishment of Thy gracious purposes, until it returns back to Thyself, the Divine Giver, bringing along with it its purified, renovated, and regenerated possessor, who, having attained to this happy *end* of science, will be enabled to praise and glorify Thy Holy Name to all eternity! Amen.