

**The
Journal
of
Radical History**

No.2. Vol.1. 1986



Thomas Paine Society

The Journal of Radical History

£3.00 (\$8.00)

CONTENTS

Care of the Continental Army.....	27
The Illuminati; Secret Societies in 18th Century Radical Politics.....	31
Book Review.....	36
Science and Thomas Paine.....	37
Book Reviews.....	46

© 1986. Thomas Paine Society.

Thomas Paine Society

43, Eugene Gardens, Nottingham, NG2 3LF, England.



(Founded 1963)

CARE OF THE CONTINENTAL ARMY

R. G. DANIELS

THE impressions we have of fighting in the American War of Independence are largely gathered from romanticised films made in Hollywood. Indeed much of how we imagine events to have been in any particular historical period will be coloured by what we have seen in films. It could be taken even further and demonstrated that every-day life, this present historical period, is taken from films that are seen nightly in our homes.

However, the times of Thomas Paine are more remote and perspective often focuses more accurately on individuals and events. Paine knew the battlefields of the war and must have been familiar with the death and suffering common to all such conflicts. the Continental Army was subject, as all armies were and are, to sickness as well as injury and the former disabled an average of 18% of the forces for the duration of the war. Several epidemics also scourged the army and severely decreased its fighting ability.

An article in the Tenth Anniversary of the *Annals of Emergency Medicine* draws together facts and impressions from the writings of the time, in particular, the Medical Inquiries and Observations, Vol.3, of Benjamin Rush, who knew Paine and with whom Paine had many discussions.

In civilian life major injuries (trauma is the modern term) were infrequent and when they occurred were usually the result of accidents with horses. There were no tall buildings, speed of travel was slow, machinery was primitive (the Industrial Revolution was only beginning), drunkenness, muggings, rape, armed robbery, the social signs of the present times, although they undoubtedly occurred they did not give rise to any appreciable load on medical or nursing services. Most illness and death was the result of disease rather than injury.

So it was the war that brought the heavy burden and toll of life and limb. War brought the primary case-load of surgeons. But even then the injuries were the result of low-velocity, close quarter fighting weapons. Firearms and artillery were cumbersome and inaccurate and only unusually caused injury. Swords, bayonets, arrows and blunter

weapons caused the majority of wounds. Occasionally overturning wagons and, less frequently, burning by fire, gave rise to injury. Indian arrows, tomahawks and scalping were also occasionally the cause of injury.

Hospitals as we know them had not developed; care of the injured was most often undertaken in private homes, barns and churches. Surgical treatment took place on the battlefield - and gave better results than surgery undertaken at a later stage.

It is recorded that men bore operations of every kind immediately after a battle with more fortitude than they did at any time thereafter. Probably the commonest operation was the amputation of a limb, undertaken for multiple fractures, infection and gangrene, and reputedly taking only twenty seconds to accomplish! This often led to the recovery of the patient. Other operations were for the removal of bullets, trepanning (trephining a hole in the skull) and the suturing of wounds. The setting of fractures was simple and crude.

Every doctor carried lancets for blood-letting. Pleurisy, for example, typically required the removal of twelve ounces of blood from the jugular vein.

The surgeons themselves (every British regiment had its own surgeon and the Americans soon followed) were not trained doctors; rather they were technicians trained to do certain jobs, and these they performed with skill and speed.

For a number of reasons medicines were in short supply. The medicines used relied on homeopathic and naturopathic principles for whatever efficacy they had. There were of course no anaesthetics although opium and its relative laudanum were available; mostly alcohol (as in American 'westerns') was the only anaesthetic, otherwise the soldier had to 'bite the bullet'. Other medicines, often made or compounded in the field, were concerned with emesis, purgation or counter-irritation. Venereal disease, upon developing which a soldier would suffer a deduction from pay, was treated with spring water, sunac root, gunpowder and fresh milk. Snake bites were treated with olive oil and mercury ointment, while horse-radish and mustard seed in gin were the standby for kidney stones. Medicine chests thus might contain eighty or more such remedies.

The organisation of medical services was undertaken by the Hospital Department, a government agency set up on July 27, 1775, after the battle of Bunker hill. It supervised all aspects of medical care and

the person who controlled it achieved immense power, sometimes indeed abusing it. So much did this occur with the first four Directors that Congress intervened, taking overall command until a more suitable Director General could be found. The Hospital Department was the nearest thing to a system for the management of war casualties that existed during the Revolutionary War and the Director had the same task, and power, that a Managing Director of the National Health Service now has.

Hospitals as such were of three kinds. There were General Hospitals, established at first in homes, barns, churches, colleges and public buildings, but later in purpose-built large buildings which would be recognisable as hospitals today. Secondly there were Flying Hospitals - often tented or in huts, which followed the troops in the campaigns. By their nature they were fine-weather, spring and summer affairs. Thirdly, the regimental surgeon and his mates formed the Regimental hospital, closest to the men, carrying out all the immediate treatment and often saving lives on the battlefield. The compound where this took place usually contained twenty-five new or minor cases prior to evacuation. Many soldiers dreaded admission to the more developed hospitals because of their reputation. "Hospitals are the sinks of human life in an army. They robbed the United States of more citizens than the sword".² Often men suffered in silence rather than complain and be admitted.

Ambulances were yet to be invented, by D.J.Larrey, a French surgeon, in 1790, some time after the end of the Revolutionary War, so that at this time transport to and between hospitals was hazardous. Half of the wounded would die on the way, partly of course from the effects of their injuries but mostly by the manner of their transportation. And when the injured arrived at the established hospitals the risks of succumbing were great. Dr. Rush himself estimated that a soldier going to the war had a 98% chance of survival (what soldier today has such a chance?). His chances were reduced to 75% when he found himself in hospital. "Humanity, economy and philosophy, all concur in giving preference to the convenience and wholesome air of private houses; and should war continue to be the absurd and unchristian mode of deciding national disputes, it is hoped that the progress of science will so far mitigate one of its greatest calamities, as to produce an abolition of hospitals for acute diseases".

In hospital, typhus, louse-borne, especially in winter, dysentery - the so-called 'hospital fever', and sepsis spread like wild-fire, for this was a hundred years before ideas of contagion and infection were realised.

Over and above all the suffering and death there was the extraordinary camaraderie of war, in civilians and soldiers alike, a fact that society ought to explore, a camaraderie that is not so obvious in peace time.

Sources:

1. *Annals of Emergency Medicine*, 2,1.
2. Rush, Benjamin. *Medical Inquiries and Observations*, Vol.1.
Peterson,H,L. *The Book of the Continental Soldier*,

THE ILLUMINATI : SECRET SOCIETIES IN 18th CENTURY RADICAL POLITICS.

TERRY LIDDLE

IN 1738 Pope Clement XIII issued an Encyclical, *In Eminentis*, in which "for the sake of the peace and safety of civil governments and the spiritual safety of souls..." he condemned Freemasonry and other secret societies. At first sight, this seemed an odd thing to do as many Catholics, including such prominent figures as Francois, the holy Roman Emperor were Freemasons. However, in a letter which was not published until 1962 the pope stated that he not only thought that the masterminds behind Freemasonry were the same as those behind the Lutheran Reformation, but also that Freemasons denied the divinity of Jesus. The pope may well have been paranoid, but it remains a fact that within little more than half a century all the old powers of Europe, both spiritual and temporal, would be under threat from new social forces, forces which would be anti-clerical and atheist, revolutionary and republican. And as in more recent times these forces organised themselves into political parties so in the late 18th century they found their expression in conspiratorial secret societies. In 1751, throughout the 19th century, and even as late as 1917 the popes would condemn such societies.

One such society which to this day still excites much speculation was the Bavarian Illuminati. Founded on May 1, 1776 by Adam Weishaupt, a professor of religious law at the University of Ingolstadt, it originally had only five members; by 1780 it had sixty members in five cities. Weishaupt had become a mason in Munich in 1777 and two years later had control of the Lodge of Theodore of Good Counsel there.

However, it was the recruitment in 1780 of Adolf Francis, Baron Knigge, which enabled the Illuminati to expand its influence. Within a few months of his joining membership was 300 and by 1784 had grown to 3,000. At a masonic congress in Wilhelmsbad in 1782 Knigge recruited most of the delegates thus blocking an attempt by the Strict Observance sect, which had connections with the Jacobites, to take over. While the Illuminati maintained all the ritualistic trappings and mumbo-jumbo of masonry, their real aim was the overthrow of the feudal state and the Roman Catholic church which they saw as stumbling blocks to progress. According to the Catholic writer on occult matters, Montague Summers, a number of masons, including Illuminati member Christian Bode, who was

recruited in 1782 by Knigge, met in Frankfurt in 1786 to plot the deaths of Louis XVI of France and Gustavus III of Sweden. The Austrian publication, *Weiner Zeitschrift*, further accused Bode of secret meetings with Mirabeau, who in 1791 would become President of the French Assembly. The fact that as late as 1946 Summers could attack Weishaupt as "one of the greatest criminals and most evil minds known in the history of the human race",² shows how much Catholicism feared and hated such societies as the Illuminati. This hatred is echoed by such right-wing pseudohistorians and conspiracy theorists as Nesta Webster and Gary Allen,³

According to John Robison, himself a Mason, the Illuminati "abjured Christianity, advocated sensual pleasure, believed in annihilation, and called patriotism and loyalty narrow-minded prejudices incompatible with universal benevolence". Furthermore, "they accounted all princes usurpers and tyrants, and all privileged orders as their abettors; they meant to abolish the laws which protected property....and to prevent for the future and such accumulation, they intended to establish universal liberty and equality, the imprescriptible rights of man....".⁴ No wonder, then, they should attract the unfriendly attentions of both church and state.

As the influence of the Illuminati grew, complaints were made that it was subversive of political and religious authority and was attempting to influence education and the press. In October 1783 a former member, Joseph Utzschneider sent a letter to denouncing the Illuminati to the Duchess Maria Anna, who in turn aroused the suspicions of the monarch, Carl Theodore. In April 1784 Knigge withdrew from the Illuminati and in June of that year Carl Theodore issued an edict outlawing all secret societies in his realm. This was followed in 1785 by a further edict banning the Illuminati and offering rewards for those willing to inform on it. In July of that year a member named Lanz was killed by lightning and the police found on his body incriminating papers which they placed in the hands of Carl Theodore. Raids on the homes of members uncovered more "subversive" documents. Many former members now turned state's evidence and gave lurid accounts of the organisation's activities which further fuelled the fear and hate of the ruling powers.

Weishaupt had already fled in 1785 to Gotha where he attempted to defend himself against the charges of procuring an abortion for his sister-in-law. Bode attempted to carry on, but in 1787 the Duke of Bavaria issued a final edict. However, as late as 1790 the police were still harrassing people they thought to be members of the organisation. Officially the days of the Illuminati were done, but according to some sources it was reorganised as the German Union and members of it were

to play a leading role in the events of 1789 which led to the downfall of the Capetian dynasty in France and plunged Europe into an epoch of war and revolution.

It should not be forgotten that 1776, the year the Illuminati was founded, was a year of revolution in America. While the charges of belonging to the Illuminati made against them by their opponents were unfounded, it cannot be denied that many of the American revolutionaries were active Freemasons. Jefferson, for example, praised Weishaupt's "rationalistic philosophy" and said that had he written in America he would have had no need to act conspiratorially. Franklin had become a Mason in 1731 and had helped with the initiation of Voltaire into the Lodge of the Nine Sisters in Paris. Washington was initiated into a Virginia lodge in 1752, and was a close friend of fellow-Mason, Lafayette, who played a leading role in both the American and French revolutions. It should also be noted that the Great Seal of the United States and the Illuminati symbol are almost identical.

However, it was in the French Revolution that masons, some of them like Mirabeau with links with the Illuminati, were most active. The Jacobin Club appears to have its origins in part in Mirabeau's Lodge of Philalthes, while Lafayette was a member of the political committee of the Social Contract Lodge. Other members of the Illuminati such as Cloutz, Zimmerman and Buonarroti, a leading figure in Babeuf's, Society of Equals, were in the vanguard of the spread of revolutionary ideas in France and beyond. It was during the French Revolution that popular societies such as the Cercle Sociale, to which Karl Marx paid homage, began to criticise capitalism, just then coming into being. In doing so they echoed Weishaupt's attack on "the mercantile tribe". It would, however, be wrong to see the French revolutionary movement as merely a Masonic conspiracy. If Masonry had never existed the popular masses would still have fought to break out of the straight-jacket of feudal society.

As the 18th century gave way to the 19th., those in revolt against the old order in Europe and beyond continued to form Mason-like secret political societies. In 1809 in Geneva, Buonarroti formed the first international secret political society, the Sublime Maitres Parfaits, and the following year, Father Hidalgo, both a Jesuit and a Mason, who was fond of quoting Voltaire and decorating his churches with the Illuminati symbol, led the revolt of the people of Mexico against Spain under the slogan of "Long Live Our Lady of Guadalupe and death to bad government" (it was under the banner of Our Lady of Guadalupe that the Zapatistas would fight a century later). In Russia Masons were organising secret societies which would become the Decembrist movement,

which in 1825 would attempt to overthrow the tsar. In Poland under the flag of National Freemasonry the foundations for the long struggle against Russian domination were being laid.

In Britain the radical poet Burns joined the Scottish Masons, while the early trade unions, forbidden by law from organising openly, adopted much of the secrecy and ritual of masonry. To this day, branches of the National Union of Miners are known as lodges.

In Italy, the Carbonari, denounced by Pius VII in 1821, were struggling for national liberation. Members of this society addressed each other as Good Cousin and took as their symbol a red, blue and black tricolour. In 1820 they attempted uprisings all over Italy. When these failed their Grand Lodge moved to Paris where it helped work towards the revolution of July 1830. Mazzini joined the Carbonari in 1827.

Attempts have been made to link Marx with the Illuminati via the League of the Just, a secret society founded by German exiles in Paris. Among its members were Carl Schapper and Heinrich Bauer. After an unsuccessful revolt, these two moved to London where they formed the Communist Workers' Educational Society. This eventually became the Communist League for which Marx and Engels wrote the *Communist Manifesto*. There is no mention of the Illuminati in the work of Marx, but Trotsky in his autobiography describes them as "forerunners of the revolution".⁵

It is with the formation of the Communist League that there begins the type of mass working class politics we know today. However, secret political societies continued to be active, the Philadelphians, for example, helped found the First International,⁶ and the banners of the Masons flew beside the red flag during the Paris Commune. Many socialist leaders, including Proudhon, Allende and Attlee, were also Masons. Although today Masonry is mostly a reactionary society of the rich and corrupt, we all owe a debt to the radical pioneers who organised clandestinely, not because they had awful occult secrets to hide, but because given the circumstances of their time it was the only way they could.

References

1. Peyrefitte, R. "La Lettre Secret". *Le Symbolisme*, Paris, April-June, 1962.
2. Summers, M. *Witchcraft and Black Magic*. Rider & Co., London, 1946.
3. See the former's, *The french Revolution*, and the latter's, *None Dare Call It Conspiracy*.

4. Robison, J. *Proofs of a Conspiracy*. First published in Scotland in 1794. The current edition is by Western Islands Press, Belmont, Mass., USA.
5. Trotsky, L. *My Life*. Penguin, Harmondsworth, 1975.
6. See B. Nicolaevsky, "Secret Societies and the First International" in M. Drachkovitch (ed.), *The Revolutionary Internationals 1864-1943*. Stanford University Press, Stanford, California, 1968. The Philadelphians had links with Bradlaugh who was an active Mason.

BOOK REVIEW

THE AGE OF REASON. Thomas Paine. 190pp.
Paperback. Prometheus Books, Buffalo, N.Y.,
1984. \$9.95

YOU do not, I feel, need to review this book here. Indeed there should be no need to review a book first published one hundred and ninety two years ago, unless it comes with a scholarly introduction which examines the current status of the work, but this is not present here for the new edition is exactly what it is stated to be, the text of *The Age of Reason* and nothing more.

The revival in biblical fundamentalism, more marked in the United States than anywhere else, perhaps due to the vast wealth fundamentalist sects and preachers have attracted in many instances, makes the general message of Paine's celebrated book very relevant today with its emphasis on the importance of a reasoned examination of supernaturalistic claims.

The book is unabridged, large sized and the print easy to read. It is the ideal edition for anyone wishing to have a copy of this famous work either for reading or reference. Incidentally, on a bibliographical note, the book was published on May 24, 1985 not 1984 as printed on the rear of the title page.

R.W.M.

SCIENCE AND THOMAS PAINE

R. W. MORRELL

To most people the name of Thomas Paine conjures up thoughts of the political struggle for American independence or his defence of the revolution in France against Edmund Burke's savage and prejudiced, if not ill-informed, attack on it. Many were attracted by his programme of social and political reforms; however, to others Paine's name is recalled as a critic of revealed religion, and it was this part of his thought which presented his many political enemies with a weapon they used effectively against him. Nor did Paine's attack on George Washington for failing to assist him when imprisoned in France help, for the reaction this produced revealed to Paine the degree to which the public had forgotten his key role in the American revolution, and also had permitted themselves to be influenced by emotive irrationalism. Paine himself did not realise the extent to which Americans had accorded their first president an almost divine status, and those who criticised him did so at their peril. Of course Washington may have been unaware of the dangerous situation his fellow patriot had found himself in, though in fairness to Paine we cannot be certain Washington was really in the state of ignorance his supporters claim'.

Paine, the man of reason, must have been both astonished and hurt when on arrival back in the United States he discovered the extent to which his enemies had whipped up opposition to him, largely because of his authorship of *The Age of Reason*, but also because of the letter to Washington. Both were gifts to his enemies, and they made the most of them, as the newspapers of the time show.² Chapman Cohen may seem to have exaggerated when he asked what was the real cause of the hatred manifested against Paine and answered it as being his authorship of *The Age of Reason*,³ but reading much the contemporary press treatment of Paine demonstrates all too clearly the truth of Cohen's claim. These reactions to Paine have coloured the understanding and appreciation of him, and he has been recognised as primarily a political or religious figure, but there is an important feature of his work which has long been neglected, his interest in science. *The Age of Reason* brings this out vividly, and while Jim Herrick⁴ is right in his recent book to stress the biblical criticism in *The Age of Reason* was not original, even if new to many of its readers, he, should have taken note of the fact, as I did in 1968.⁵ of Paine's use of

science to undermine theological assumptions. Others had hinted at it, but Paine was the first writer to systematically use arguments drawn from science to support his case, and even if he failed to recognise what this would eventually lead to, perhaps because it ran directly counter to the stated aim of his book, which was to promote deism as against atheism, he nevertheless fully grasped the power scientific facts gave him. The revolution in thinking this led to is still very evident.

"The natural bent of my mind was to science", wrote Paine,⁶ but this tells us nothing about when and where this interest arose, and any search for information is hindered both by Paine's own reluctance to tell us much about his early days as was the loss in a fire after his death of many of his papers. Nevertheless, there are some tenuous clues to be found in *The Age of Reason*, for here Paine mentions his father's Quaker beliefs which resulted in him obtaining, "a tolerable stock of useful learning"; he was also sent to the local grammar school, though leaving early.⁷ It would be interesting to have known what books Paine's father possessed, particularly those of a scientific character, and also whether there were any teachers at the school rather more enthusiastic about science than classics. Regretably Paine gives no information on these points; however we can deduce from his comments a hint at the possible origin of his interest in matters scientific.

The elder Paine's trade was staymaking, so it was perhaps inevitable his son would be apprenticed in this trade; the youngster, though, does not appear to have relished the prospect of a life of staymaking, and an adventurous spirit is suggested from the fact of his running away to sea. It was a short-lived rebellion brought to a rapid conclusion after Paine senior intervened and brought his son back to Thetford. Paine was to try his hand at seafaring for a second time some years later, but this time discovered for himself its shortcomings, nevertheless, he always took an interest in maritime matters and wrote on the subject.

While employed as a staymaker in London, Paine attended lectures in astronomy and natural philosophy, and from his small salary purchased a pair of globes, a deed which illustrates the depth of his interest in science. One wonders what type of people his fellow students were, and the suspicion cannot be escaped from that they came from what in economic terms would be described as middle or upper classes. In such company Paine, as a manual worker, may have felt inferior, and this could have been the stimulus to prompt him to look for employment which conferred in social terms a higher status, even if the pay was hardly much to shout about. So Thomas Paine, one-time staymaker became Thomas

Paine, Exciseman and what we would now term, civil servant. This change in social status would have certainly brought him into contact with even more people who shared his interest in science, and it was through a member of the Excise Board, G.L.Scott, another enthusiastic amateur scientist, that Paine was introduced to Benjamin Franklin, who has been described as "the first guardian angel of Paine's life", and who was to dramatically change the course of it.⁸ In later years when Paine had achieved fame, caricaturists like James Gillray were quick to call attention to his original trade.⁹

The lectures Paine attended in London were given by Benjamin Martin and James Ferguson, and he later became acquainted with Dr. John Bevis, a Fellow of the Royal Society. Martin was a mathematician and instrument maker, and, as Daniels has noted,¹⁰ a "general compiler of information" with thirty major publications to his name. Ferguson was an astronomical lecturer and, like Martin, an instrument maker as well as author of various books, notably, *Astronomy Explained upon Sir Isaac Newton's Principles*, first published in 1756, and followed by many more editions. An active lecturer, much in demand, he was elected a Fellow of the Royal Society in 1763. John Bevis was a medical man but astronomy was his real passion. He assisted Edward Halley, and, according to Daniels,¹¹ his favourite reading material was Newton's, *Opticks*. These lectures, probable discussions and reading books recommended by the lecturers, ensured Paine becoming, like his teachers, a follower of Newton, whose vision of a systematic and harmonious universe governed by laws discoverable by human reason was incorporated into *The Age of Reason*. But Paine was not satisfied to limit Newton's ideas to the scientific view of the universe and went on to extend them into the social, political and religious fields where, I doubt, neither Newton or most of his followers imagined they applied. But as far as Paine was concerned, they most certainly did, and he strongly maintained the study of "natural philosophy, mathematical and mechanical sciences" to be "the study of true theology".¹²

When Paine departed for what were then still England's American colonies, he took with him a letter of recommendation from Dr. Benjamin Franklin. This is an interesting document for it clearly presents Paine as a person well versed in matters scientific. The recommendation suggests Paine could be employed, among other things, as an assistant surveyor. A surveyor in the 18th century could well be a geologist, for this was not then a recognised profession. William Smith, who has been dubbed, "the Father of English Geology", serves as an example, for he was a surveyor. The actual name 'geology' was itself not coined until

1778 by J.A. de Luc. Survey work, then, could imply some geological knowledge, and we know Paine took an interest in the subject for he published an article in the *Pennsylvania Magazine* in February 1775 under the title, "Useful and Entertaining Hints on the Internal Riches of the Colonies", which discussed the potential mineral wealth available to America if the nation expanded. Aldridge,¹³ says this article was written after Paine had paid a visit to "the fossil collection" in the Library Company of Philadelphia. At the time, though, the terms 'fossil' and 'mineral' were treated synonymously, and it was not until the 19th century before the two terms were fully divorced.¹⁴ Paine refers to the collection as being mainly European in origin, with the American specimens consisting of "earth, clay, sand," etc., along with descriptive information and locations.¹⁵

The text of *The Age of Reason* shows Paine to entertain a vision of a long period of geological time. His list of friends and acquaintances included most of the scientific luminaries of the new nation, and he discussed science as well as conducted experiments with a number of individuals, including George Washington, when the two of them did some work on marsh gas. Whether he met J.D. Schopf,¹⁶ who wrote the first important work devoted to the geology of part of the United States, we do not know. Schopf, who as a Hessian fought on the British side during the war, stayed on for some time after, but as the book was written in German and published in Germany in 1787, it is to be doubted if Paine knew of it, for he certainly did not read German. He was not alone in being unfamiliar with this important work for it was not until the first English translation appeared in 1972 did many American geologists wake up to the book's existence. As an editor, Paine published articles on salt, soil and saltpeter. It was an article on the latter, written jointly with Thomas Prior, and published in the *Pennsylvania Journal* on November 22, 1775, which was the first in America to carry Paine's own name. The next issue carried a further article on the subject by the two writers. Saltpeter, important in the manufacture of gunpowder, occurs generally in frost-like crusts on the surface, and it was the scarcity of these natural deposits which concerned Paine and Prior, and their joint articles gave particulars of experiments they conducted to produce it. Prior was an army officer, as, indeed, was Paine for a time. Paine knew Charles Wilson Peale, who established the first important public museum in the United States, which was opened in Philadelphia in 1786,¹⁷ the year before Paine departed for Europe to promote his iron bridge scheme. He also knew C.F. Volney, who was the author of an important work on the United States which included many observations of a geological character, and who had formed a collection of geological specimens which he took with him when he

returned to France. Fossils included in the collection, which were termed 'petrifications', excited great interest amongst a number of French scholars. Paine met Volney many times in France and it would be odd indeed if the two, who were both radical in politics, did not discuss geology.

Paine invented what he maintained was a smokeless candle, sending samples to Benjamin Franklin along with an enthusiastic covering letter describing the invention. Hawke claims the invention stimulated no commercial interest and nothing more was heard of them.¹⁸ However, smokeless candles made according to the method devised by Thomas Paine were sold in shops in Britain until just after the 1914-18 war, for the late Ernest Smedley, a retired miner living in Hucknall, Nottinghamshire, who collected books on Paine, had preserved one of the labels from the packets of candles and showed me it, so unless there was another Thomas Paine who invented a smokeless candle, there was a very definite commercial interest. Whether the candles were actually more efficient than the none-smokeless variety is uncertain. Paine's candles had holes in it to permit the passage of air, which, he told Franklin, allowed the smoke to leave at the opposite end to the flame. Paine's biographer, W.E. Woodward, conducted some experiments with candles made to Paine's design but found they possessed no advantage over solid candles.¹⁹

Another of Paine's scientific interests, which probably followed from his research into the manufacture of saltpeter, was testing the explosive power of gunpowder harnessed to an engine designed to drive paddles on a boat. This 'internal combustion engine' was not a success.

Perhaps Paine's most notable scientific, or technological, project was the promotion of the use of iron in bridge building. Most of Paine's biographers, not excluding his critics, attribute the second iron bridge to have been erected in England his design, as set out in his patent. This bridge, which was built to span the river Tyne at Monkwearthmouth, was demolished in the 1920s, but many illustrations of it exist. It was sponsored by a local Member of Parliament, Rowland Burdon, who, like Paine, had taken out a patent for the use of iron for bridge building. Recent examination of the Paine and Burdon patents have established the specifications in both differed fundamentally. Those in Burdon's patent describe the use of metal blocks for the construction of bridges, indeed, the title of the patent reads: "Application of Metal Blocks etc., to the Construction of Arches", and in his specifications Burdon notes his invention consists in applying metal on "the same principle as stone is now employed, by a subdivision into blocks easily portable". Paine, in

contrast, and in far less precise terms than Burdon, as Stuart T. Miller noted,²⁰ compares his design to the web of a spider, presumably having in mind an orb web, and goes on to refer to refer to the curved bars of the arch as being composed "of pieces of any length." Burdon's voussoirs, as his blocks are technically termed, have a specific length. Paine, it seems, was fully aware of the difference between his ideas and those of Burdon, for he discusses the differences between his system and the one used in erecting arches in stone in a letter he wrote to to Sir George Staunton on May 25, 1789.

Paine's patient specifications show his ideas to have been far more advanced than most of those who have discussed the second iron bridge seem aware. Burdon's bridge, as we have seen, was based on iron used as though it was stone; the first iron bridge, the still extant structure at Ironbridge in Shropshire, duplicated in iron the principles of wood construction. Miller, quite rightly holds Paine's ideas to reveal "a far greater appreciation of the potential of iron in civil engineering", a point which allows him to call into question the claim that parts of an iron bridge made for Paine were incorporated into the Monkswearmouth structure.²¹ He argues that the type of iron used in Burdon's bridge was of the cast variety whereas malleable iron would be required for Paine's, had it been built. In 1905, Charles Sneider, in his presidential lecture before the American Society of Civil Engineers, summarised the situation when he called Paine's bridge "the prototype of the modern steel bridge".

But where did Paine first get an introduction to the possibilities for the use of iron in bridge building? His training as a staymaker would have given him an early introduction to the use of tools, and we know at least two of the science lecturers he was acquainted with in London made implements out of metal, something most would-be scientists had little option but to do themselves. Paine knew and cooperated in America with John Hall, a skilled metal worker originally from Leicester. However, perhaps we must look towards the Sussex town of Lewes as being the place where Paine received his introduction to the potentials inherent in the use of iron, for here a local schoolmaster, Cater Rand, resided and conducted his school at 160 High Street, almost opposite Paine's own home. But Rand was not only a schoolmaster, he was also an engineer and mechanic, who included the subject amongst a series of lectures he gave in the town. As these classes are not recorded before 1775, the year after Paine left Lewes, it seems unlikely he could have attended, however, Paine was a close friend of the Verral family, who ran the White Hart, which seems to have been one of the intellectual gathering points in the small town. Lucy Verral, the

daughter of the landlord of the White Hart was Cater Rand's mother. So an introduction through the Verrals was possible. Perhaps, then, it was Rand who first planted the idea for the use of iron in bridge building into Paine's receptive brain.

What may be claimed as Paine's most important scientific work, though not without social, hence political, content, was his essay on the cause and elimination of yellow fever, entitled, "*Of the Cause of the Yellow Fever; And the Means of Preventing it in Places not yet effected with it.*" The work was very well received by medical and other scientific opinion and ran to several editions, and despite the general ban on Paine's works in Britain there was no restriction placed on its publication here. Paine did not discover the cause of yellow fever, which was carried by infected mosquitoes, though in a letter to Thomas Jefferson written in 1803, he suggested it came "barrelled up" in ships from the West Indies, which was near the mark as infected insects were brought into America this way; the discovery that mosquitoes were responsible did not take place until 1887, many years after Paine's death. But he did accurately identify the breeding habitat of the mosquitoes without, of course, knowing this to be the case, and the introduction of methods to increase the volume of water flow, which would have flooded the stagnant, muddy areas, would have destroyed these breeding grounds thus limiting the number of infected mosquitoes, consequently Paine's ideas if put into effect, could have played a significant role in helping to control the disease, though perhaps not to eliminate it completely. It is interesting to note his ideas were similar, if not identical, to those of Sir Patrick Manson, an authority on the disease, in his famous textbook on tropical diseases.²³

I do not think anyone would wish to present Thomas Paine as being an outstanding figure in the history of science. His scientific work, varied and interesting, even original, as in the case of his observations on yellow fever, was rather in the nature of grasping the practical implications of ideas. Thus Paine recognised, but did not discover, the value of the use of iron for the construction of bridges, and here his vision was far more advanced than any of his contemporaries. No, Paine's greatness in the history of science rests more with his literary ability than anything else, for he was the inventor of popular scientific journalism. Many a writer had produced popular books on scientific subjects, at least two have been mentioned earlier in this paper, but where Paine differed from them was in the broad scope of his science and in the presentation of it in a style understandable by the common man. He was, too, the first to fully grasp the dangerous implications scientific discoveries presented in

respect to theological claims, and he applied this discovery tellingly in *The Age of Reason*, however, this fact was lost sight of in the fury of the later dispute between Darwinian evolution and biblical creationism, which has been seen wrongly as the first major dispute between science and religion. Paine laid the foundations of popular scientific journalism and is worthy of being remembered for this, even if his other claims to fame are of far greater consequence.

References

1. Hawke, David Freeman. *Paine*. Harper & Row, N.Y., 1974. p.320.
2. *ibid*, p.353.
3. Cohen, Chapman. *Thomas Paine, Pioneer of Two Worlds*. Pioneer Press, London, Nd, pp.50-52.
4. Herrick, Jim. *Against the Faith. Some Deists, Sceptics and Atheists*. Glover & Blair, London, 1985. p.124.
5. Morrell, R.W. "The Relevance of *The Age of Reason* for Today". *TPS Bulletin* (1968), 2, 3. 10-14.
6. Foner, Philip S. Editor. *The Life and Major Writings of Thomas Paine*. Citadel Press, Secaucus, N.J., 1974. p.496 (hereafter Foner).
7. Foner, *ibid*. p.496.
8. Williamson, Audrey. *Thomas Paine, His Life, Work and Times*. George Allen & Unwin, London, 1973. p.62.
9. Gillray's, *Fashion before Ease; - or, - A good Constitution sacrificed, for a Fantastick Form*, of January 2, 1793 illustrates Paine pulling the stay laces of Britannia. Another is, *Rights of Man - or - Tommy Paine, the little American Taylor, taking the Measure of the Crown, for a new Pair of Revolution Breeches*, which was published on May 23, 1791.
10. Daniels, R.G. "Thomas Paine's Astronomy". *TPS Bulletin* (1975), 2, 5. 29-31.
11. *ibid*.
13. Aldridge, Alfred Owen. *Man of Reason, The Life of Thomas Paine*. The Cresset Press, London, 1960. p.31.
14. Edwards, W.N. *The Early History of Palaeontology*. British Museum (Natural History), London, 1967. pp.40-41.
15. Paine, Thomas. *Miscellaneous Letters and Essays on Various Subjects*. Sherwin, London, 1817. p.9.
16. W.A.S. Sarjeant (*Geologists and the History of Geology*. Macmillan, London, 1980) renders the name as Schoepf (Vol.3. p.2068).
17. In his book, *Mammoths, Mastodons and Man*, (Scientific Book Club, 1972, p.85), Robert Silverberg gives the year the museum opened as being 1785. More recently, Rudolph H. Weingartner, in a paper, "What Museums Are Good For" (*Field Museum of Natural History Bulletin*

(1984), 55, 8, 17-25), gives the opening date as 1786, which I accept here.

18. Hawke, *ibid.*, p.163.

19. Woodward, W.E. *America's Godfather*, Secker & Warburg, London, 1946.

20. S.T. Miller, "The Second Iron Bridge", *TPS Bulletin* (1975), 2, 5, 5-11. See also the same writer's, "The Second Iron Bridge at Sunderland: A Revision", *Industrial Archaeology Review* (1976), 1, 1, 70-72.

21. Miller, *ibid.*

22. R.G. Daniels, "Thomas Paine on Yellow Fever", *TPS Bulletin* (1971), 2, 4.

BOOK REVIEWS

THE ADAM OF A NEW WORLD. Documents illustrating radical political activity in England, 1789-1805. Helio Osvaldo Alves. 334pp. Paperback. University of Minho, 1985.

THE sub-title of this work indicates its nature and scope, for by far the bulk of the book is taken up with extracts from the literature which charts the political ferment in Britain, rather than simply England, as the author states, generated by the revolution in France. Many of the writers of these works are well known, or should be, to students of social and political change in Britain, and their influence, although here offered in a geographically restricted context, was far more widespread than many readers may think to be the case. Paine looms large in these pages, as rightly he should for his works had an enormous popular impact, but the first extract offered is taken from a letter written by Burke, and this is followed by a galaxy of the famed and the not so famous, indeed some of their names we may never know as they wrote anonymously. One and all, though, they contributed to what was a furious debate and in some instances reflect what we might now term "grass-roots" opinion.

Of course debate and action went hand in hand, with the authorities taking most of the action through the application of bans, prescriptions and harsh laws which penalised open discussion at a popular level, for it was the mass of the people being influenced to demand change which authority most feared, Paine would never have been prosecuted had his work been restricted in circulation to a certain strata of society and written in intellectual jargon, perhaps even latin. The "feel" of the debate comes over to the reader from Professor Alves pages, and one also sees how relevant much of it still is when reading of events in certain nations today, notably South Africa. In some respects despite the harsh penal laws of 18th century Britain the governmental response to popular agitation for reform, though harsh, could be said to be rather more humane than in the South Africa of the 1980s.

The extracts given bring out the complexity of the agitation for

change, and the material presented in the book gives the stance taken by the opposing factions. The issues being argued over were not simple for in many respects the demands being made for change were quite drastic, as can be seen by glancing at some of Thomas Spence's ideas. If Paine was seen by the establishment as a dangerous radical he was moderate by Spence's standards, indeed Spence did not spare Paine any criticism. Whatever else it was the debate reflects deep human feelings - in most instances there was nothing artificial about it, though the sincerity of certain individuals, notably Burke, is suspect.

The book is divided into eight sections, each having a brief but adequate introduction, which chart the development of the debate. The section titles are worth noting: *The Impact of the French Revolution; 1789-1791, The Spring is Begun; 1791-1792, The Conservative Backlash; 1792-1793, The Radical Response; 1792-1793, The Treason Trials and Beyond; 1794-1795, The Age of Reason; 1794-1800, Transition; 1796-1798, The Adam of a New World; 1797-1805.*

There is a valuable set of chronological tables dated from 1789 through to 1805 (pp.297-308) followed by a series of biographical sketches which commence with Joel Barlow (1754-1812) and finish with William Wordsworth (1770-1850), the whole section taking up eight pages. The book is completed by a select bibliography and an index.

Of course the work leaves off with the debate unresolved, thus making the final extract, from Blake's poem beginning, "And did these feet in ancient time" rather apt, for it suggests further conflict, and as students of British social history well know, this came in plenty before many of the radical reforms being promoted became realities; some still remain to be achieved

It would be difficult, if not impossible, to present within a single volume fully comprehensive coverage of the literature which the French Revolution generated in Britain, and Professor Alves himself draws attention to the exclusion of most examples of Whig radicalism on the grounds that this material is relatively easy to find in modern printed form, though also noting the focus of his book to be popular radicalism. The selection of material for inclusion in a book of this character must, in the last analysis, be a rather subjective process. Personally I find the material Professor Alves selects offers a very balanced group which serves to introduce its readers not simply to the debate itself, but perhaps even propel them further. Unquestionably this is an

important work not just of value to university students, for which it is intended, but also to historians, educationalists and the general reader. It deserves a wide circulation, and as the text is all in English it should hopefully achieve this.

R.W.M.

THE ENCYCLOPEDIA OF UNBELIEF. Edited by Gordon Stein. 2 vols. viii & 819pp. Roy8vo. Prometheus Books, Buffalo, N.Y., 1985. £75.

A work of this character invites comparison with Joseph McCabe's, *Rationalist Encyclopedia*, published in 1948 and long out of print; but whereas his book was very much a "one man show", with many of the defects expected in a work which covers subjects about which its author lacked essential specialist knowledge. When dealing with church history McCabe wrote with authority, but on other subjects his treatment was often superficial. In contrast this new workembodies contributions from over a hundred scholars, many internationally known authorities in their fields and all specialists in the subjects they write on. The degree of specialisation this to the *Encyclopedia* is evident in the detail presented in most of the individual items, many being substantial pieces, some even, I suggest, major contributions to scholarship not just simply encyclopedia entries. On the other hand a few do not quite come up to expectation in that they should contain more material than they do, an example being the entry entitled "Evolution and Unbelief".

Although very detailed, this particular essay gives the impression of being an example more of the "great man history" school of writing than a fully comprehensive analysis of the debate which prepared the ground for the impact of Darwinian evolutionary propositions. I do not denigrate great men, and they need to be considered biographically as much as in terms of their ideas, and the writer of the article does this, but he also omits any discussion of some of the crucial matters which can be said to have destroyed the status of the bible as a determining factor in the interpretation of natural phenomenon. For example, the reception in the 18th and early 19th centuries of an increasing flood of geological knowledge which was found to be totally incompatible with biblical writ except by theological contortions of the most extraordinary and obvious type, is ignored, though it gave rise to the furious conflict between biblical catastrophists and supporters of what was to become eventually the uniformitarianism of Charles Lyell, which so influenced Darwin and Huxley. We find no

mention, or even reference to, such a key figure as James Hutton, an outstanding geologist and noted religious sceptic, yet the clash of Huttonian ideas and those of A.G. Werner was to be a major contribution in making both informed public and scientific opinion favourable towards the idea of evolution. Absent, too, is any reference to the controversy caused by the discovery of animal and human remains in cave deposits which could not be interpreted in terms of catastrophism, namely seen as the biblical flood. The frequently bitter debate the new ideas gave rise to smashed the theological domination over scientific thinking and, incidentally, covered and destroyed many of the ideas now being advanced by our contemporary exponents of so-called "scientific creationism", who do not appear aware that their "new" data was worked over and destroyed over a hundred and forty years ago.

The term unbelief used in the title of this work is, in the words of the editor, "not an easy job to define", but he then suggests that the "the closest synonyma for *unbelief*, " is *heterodoxy*", which Dr. Stein says can be taken as meaning, "not holding orthodox or traditional opinions - on religious matters, in the context of the encyclopedia". This allows for the incorporation of many ideas and individuals in the work which to some readers may not be readily seen as representative of unbelief viewed from a more narrow standpoint, however, the broad interpretation of unbelief is welcome and adds to the strength and standing of the *Encyclopedia*. Nevertheless, despite this the emphasis upon unbelief in terms of religious unbelief can pose some difficulties about what should be included and what was to be left out, and not everyone will concur with the editor's choice one way or another even if agreeing that some might be covered in detail in other readily available reference sources. It is difficult to understand why, say, Karl Marx gets a lengthy entry while Frederick Engels, despite ten references in the index, is ignored. So, too, are the Marxists, Karl Kautsky, who wrote a history of Christianity from a materialist and atheist viewpoint, and Rosa Luxemburg.

Contributions include surveys covering unbelief in various geographical areas, including Latin America, the United Kingdom, the United States, Scandinavia, the Soviet Union (closeted with Russia for some reason), China, the Netherlands, and other countries. There is a most interesting contribution on unbelief within Christianity, which may well startle not a few Christian readers. The paranormal is subjected to a well balanced critical analysis, while there is a telling contribution from James Randi on "Conjuring and Unbelief in the Supernatural".

Mention has already been made of the contribution on evolution, but I

cannot help wonder why Teilhard de Chardin is termed a "geopaleontologist", which is, I confess, a singularly unusual description for the Jesuit, who is best described, when wearing his scientific biretta, simply as a palaeontologist.

Important as he was in the history of unbelief, I did find the entry on Voltaire rather more extensive than it need be, although it makes fascinating reading. G.A.Wells presents a summary of the case against the historicity of Jesus, though without entering into any detailed presentation of the history of this hypothesis, which frankly I found disappointing, as did the failure to include in the *Encyclopedia* an entry for Herbert Cutner, a notable promoter of the myth theory and excellent freethought writer.

There is much in this work which you would find difficult to locate elsewhere, while the insights into some subjects and individuals make refreshing reading and could well lead to scholarly reappraisals of some in due course. Unfortunately there are also some glaring omissions, particularly in the biographical field. I was sorry to see no biographical notes on F.A.Ridley, G.H.Taylor and F.A.Hornibrook, to name but three which spring to mind; such omissions notwithstanding, I have no hesitation in stressing the fact that this is a very important work, perhaps the most important in the field of freethought published for many years, which will become an essential reference tool not just to those associated with organised unbelief but all serious scholars and researchers interested in the fields the work covers. Dr.Stein is to be congratulated on a job well done, and not an easy job at that. I would hope that all university libraries obtain copies and also the libraries of all theological colleges. The students (and staff) at the latter should find much to stimulate their thinking in the *Encyclopedia*, even if they do not share the outlook and attitudes of many of the contributors. It may seem an expensive work to purchase, but in terms of the prices being asked for many academic works at the present time this is not really so. It is to be hoped that the editor will eventually be able to have a supplementary volume published which will, perhaps, give biographical notes in respect of some of the individuals excluded from the *Encyclopedia*, as well as expand upon certain other issues, not least the scientific debate referred to above.

R.W.M.

AGAINST THE FAITH. Some Deists, Sceptics and Atheists. Jim Herrick. 250pp. Paperback. Glover & Blair, London, 1985. £5.95

THERE are some books it is not easy to put down once you start reading them. This, I found, was one. Written by the former editor of *The Freethinker*, the book takes a penetrating look at the conflict between the dictates of religious authority and dogma and free inquiry, not as a chronicle of theories or philosophical precepts, but rather in terms of the how the individuals who advanced "dangerous" thoughts lived and responded to the ideas and pressures placed upon them. It is thus a tale of heroism, for it is difficult for us, or most of us, to grasp how really dangerous it was for many of those who dared criticise "established authority" in the field of religious notions, particularly as religion was used as an instrument of government, and to challenge it was also to challenge the political structure of the various states. The tale goes back to ancient times, though these are of necessity only touched upon in brief outline by Mr. Herrick.

Against the Faith is full of obscure facts, thus we learn that the celebrated saying of Marx about religion being the opium of the people may well have originated not so much with Charles Kingsley, as some of us thought, but with Heinrich Heine, while Georg Buchner made Thomas Paine a spokesman for atheism in one of his works, despite the fact Paine never subscribed to atheism and wrote *The Age of Reason* to combat it.

Discussing Thomas Paine, Jim Herrick says it "is perhaps surprising that he (Paine) did not become an atheist". But is it? Paine was steeped in nonconformity and his liberal religion was both humane and reasonable, in terms of current knowledge, moreover, he had seen and experienced the extremes of political fanaticism in France and perhaps this influenced his thinking more than we might realise. The discussion on Paine in this book is interesting, but tells us nothing new, however, as an introduction to Paine, his ideas and their status, in so far as his religious notions go, readers unfamiliar with him will learn much of value.

The main individuals singled out in this book held a variety of viewpoints, and it is fascinating to see these woven into an evolutionary pattern, yet strictly speaking the root is atheistic as much as the apex, so there is not so much an evolution of thought rather an underlying account of the development within society of a reluctant toleration in some parts of the western world of opinions,

which if generally adopted, could pose problems to ruling establishments in that they could not of necessity count upon the general public to blindly follow emotive nationalistic policies if such ideas gained predominance. Individuality seems the central characteristic of most of the leading characters featuring in this book, even if several sought to keep out of the public gaze, often for reasons of personal safety. But a nation of gadflies! No ruling establishment wants this for throughout history it is conformity which is presented as a virtue, and religion inculcates conformity.

A theme of his book, the author states, citing the title of a book by Toland, *Christianity Not Mysterious* (1697), is the removal of mystery from Christianity, a task which Paine would have approved of, but sadly the intellectual labours of the many individuals we meet with in this book have not shown that the public as a whole is prone to a generalised demystification, and the mental development of mankind is in large measure the story of how one mythical system has gained domination over another, even when such a system set out to eradicate what was seen as the grossly superstitious. The first Christians were a sect within Judaism but when they attracted gentile converts it was not long before the mysticism in Judaism was being blended with that of non Jewish cults and out of this stew there emerged the Christianity we now know.

In his first chapter Jim Herrick notes the view of Pierre Bayle that people have a tendency towards being credulous. By the time we reach the final chapter one cannot help but conclude him to have been correct. With the exception of Bradlaugh and Ingersoll, none of those covered by the book can be said to have established any sort of movement. Paine attempted to but failed, so what we have are essentially individuals who for all their influence never of themselves changed society. What did make a telling impact on religious domination was science, so of the people covered in the book one might think T.H. Huxley to stand out, but outside his scientific work Huxley tends towards orthodoxy in most important matters. Here, to, we find a point Jim Herrick fails to discuss when he writes of Paine, for one of the striking things about *The Age of Reason* is the use of science to combat superstition. This was an innovation and the first time we find science openly used to combat religious belief. Paine's critique of religion might not have been original, though Mr. Herrick is right to say many of his readers may have found it so, but this use of science in so clear-cut a manner was and it ushered in a new chapter in religious controversy. But the all too evident fact is that what was contended against in the past

is still basically dominant now. We may have a more tolerant society but the old battles have still to be refought, as witness the expansion of fundamentalistic cults and so-called scientific creationism, which is noteworthy for its unscientific nature, though strange to say those promoting this belief include a number of scientists. It is almost as though *The Age of Reason* had never been written.

This is a thoughtful and informative book; well written and researched. I do not agree with some of its exclusions, for if contending against the faith was the primary reason for inclusion then Paine, who was more concerned with politics than religion, and who wrote *The Age of Reason* as much with a political intent as an expression of religious criticism - to him church and state were each a side of the same coin, should have been excluded. But I suppose this is not all that important and quibbles cannot distract from the fact that this is a very good book.

W.L.

BRITAIN'S UNKNOWN GENIUS. THE LIFE-WORK OF J.M.ROBERTSON. Martin Page. 112pp. Paperback. South Place Ethical Society, London, 1984. £2.25

THE author of this book has been working on a full length biographical study of J.M.Robertson for several years, and one can say without qualification that having read this tantalising introduction to the man and his work such a biography is required, for without a doubt he was a towering figure in British scholarship, yet he was not a professional academic but rather, in the author's own words, "arguably the greatest self-educated scholar of plebeian origins ever born and bred in the British Isles, certainly since the Renaissance."

In common with many figures associated with the freethought movement, Robertson has remained without a biographical work, so in a strictly limited manner this book serves as one, though the primary aim of the author is to give an introduction to Robertson's ideas, political, economic, sociological, religious and literary.

Politically Robertson was a Liberal, being elected a Member of Parliament in 1906, and in 1911 was appointed Parliamentary Secretary to the Board of Trade, which he held until 1915. He was also made a Privy Councillor. He lost his parliamentary seat in the election of

1918. Mr. Page gives the background to Robertson's life and what motivated his thinking on various political and economic matters, and one can but conclude that the loss of his parliamentary seat may well have stemmed from his humane attitude to Germany.

Robertson's masterly, *Thomas Paine: An Investigation*, published in 1888, is rightly singled out as vindicating Paine and paving the way for Conway's major biography, yet few people now recall this vivid reply to a particularly uninformed attack on Paine's character made by Leslie Stephenson. Another aspect of Robertson's work was his studies in the history of freethought, and these remain standard and essential works on the subject.

A great many scholars are unaware just how weak the evidence is for a historic Jesus, probably because serious historians prefer to leave religious mythology to theologians rather than become involved in what they privately consider to be matters of no consequence, and if they do address themselves to such matters it is the social and political consequences of the cult's establishment which usually concerns them. The poverty of the case for a historic Jesus and the events concerning him are brought out in a series of books by Robertson, which were the outcome of years of study and thought on the subject. Such books were obviously controversial, and while many Christian scholars are aware of the strength of the myth theory of Christian origins they display an anxiety to keep away from it and usually ignore works on the subject, or pass them over without comment (which is an easy way to avoid answering difficult problems), however, as Robertson was politically prominent his works on the subject were not so easily ignored.

Robertson was a formidable literary critic who recognised the value of several rising writers long before many a professional critic, and was acknowledged as a leading Shakespearean scholar. It is a sad fact, though, with his many works now out of print he is largely neglected and his ideas often credited to others. However, I do not think Mr. Page adequately covers of the ground here, even allowing for his limited space, thus one is left wondering, for he fails to describe some items which need clarification, for example, exactly what is "Rufus W. Griswold's falsification perpetrated in his scurrilous memoir of Edgar Allan Poe" was for we are not told, presumably because the author assumes us all to be familiar with the tale?

Britain's Unknown Genius is an adequate introduction to its subject, though there is tendency on part of the author to being over defensive about his hero and not too willing to admit he was wrong on a number of points, this tendency is well illustrated in a footnote page 52 which

reacts sharply to a charge that Anthony Collins was an atheist and not, as Robertson maintained, a deist. On this Robertson was in error, and there seems little point in not admitting the fact,

W.L.