

FACTS FOR FREETHINKERS

By Heinrich Schunck
Translated by Isabel McHugh

PART I

The Universe Demands a God

Free thinking is good but right thinking is better.

There is a God! It is not just I who say that to you. The whole Universe says it if you will but hear its voice. Just listen now, and if you are really a freethinker, that is, free from bias and prejudice, you must surely allow yourself to be convinced by the following facts.

There is no masterpiece without a master, and from the work we know the master as the tree is known by its fruit.

The existence of a statue presupposes the existence of a sculptor. Here is a watch. There must, therefore, be a clever watchmaker somewhere, who has fashioned it. Before us is a dainty meal; that means that a good cook has been here, who prepared it. These things are self-evident.

Since we find, then, that a watch, an engine, a motor, a vase, or any other object points to the existence of an artist or an artisan, who has made it, how much more does that most wonderful thing which we call the world demand the existence of a Creator.

Aristotle, one of the greatest minds of antiquity, recognized this very clearly. "When one considers the earth, the sea, and the heavens," he said, "how can one doubt that there is a great God, and that all these things are His works?"

What a stupendous triumph of power, wisdom, and supreme intelligence the universe is! If we only try, however ineffectively, to contemplate its wonders, we are inevitably forced to conclude that behind it all there must be an infinitely wise and powerful Creator.

First let us consider the earth. It is nearly 93 million miles from the sun and moves round it through space at a rate of 181 miles each second; that is, over 66,000 miles an hour. No aeroplane or motor will ever approach this speed-record!

Now think of the sun. It is more than a million times bigger than our earth and by its gravitational attraction keeps in their orbits all the planets and their satellites, even Neptune, whose average distance from it is 2,793 millions of miles. It is the source of all power and motion throughout the earth and all the solar system.

But that is not all! Let us imagine that we are on the sun and that we feel inclined to make a trip to the nearest fixed star. If we had an express train travelling at the rate of sixty miles an hour we should still need more than 45 million years for our journey of some 24 billion miles.

There are yet other stars which are a hundred times farther away from the sun than that one; and there are, we must remember, billions of stars. Our great modern telescopes can detect millions of nebulae, each of which is an isolated "universe" containing as many stars as all those that we can see.

We must remember that the so-called fixed stars are not really fixed but move far more rapidly through space than does our little earth. But they are so far from the earth that ordinary observation does not suffice to detect their motion, which is, however, at the rate of several miles per second. Contemplating them one must think of the mighty Intelligence which has flung these billions of fiery bodies into space and has ordained the laws of motion according to which they move with unceasing mathematical regularity.

Yes, the universe is an appalling theme, which beggars the imagination. But it compels us to think of the infinitely wise Architect its Creator, whom we call God. "The heavens shew forth the glory of God, and the firmament declareth the work of His hands" (Psalm XVIII, 1.).

The Lesson of Our Own Bodies

Here again we are met with wonders of creative power and wisdom.

I bear within my body a number of little power-stations or chemical factories which work away without my own

volition. They are: my digestive system, my breathing apparatus, my blood-system. Normally, they all work unerringly and unceasingly day and night without my even troubling to think about them. Each minutest part is assigned its definite work, and each part is designed to work in perfect harmony with the whole.

I have eyes which work better than the best photographic apparatus. Each is a little camera, fitted with a lens and a sensitive plate (the retina). Here an endless succession of pictures is received and focused, causing chemical changes which the optic nerve detects and reports to the brain.

My ears are the most marvellous little harps, each fitted with some 6,000 strings the longest of which measures a fiftieth of an inch and the shortest a five-hundredth of an inch in length. These little harps are so finely tuned that they can pick up sounds and noises in seven different scales.

I have a heart, that is to say, a powerful suction and pressure pump which makes 100,000 strokes each day and sends all my blood through every part of my body hundreds of times a day. Each of the millions of cells of which my body is composed takes unerringly from this journeying blood just the nourishment which it needs, no more and no less. And all this work goes on so quietly that only the beating of my heart reminds me of its ceaseless labour.

Involuntarily we must ask ourselves whether indeed the greatest and richest man in the world, having at his disposal the most skilled men of his day, could command the production of one tiniest item so wonderful as the things which every child takes into the world from the hands of its Creator.

We think ourselves very wise and clever because we have invented the aeroplane, the camera, or the violin. But we quite forget that in all these inventions we have only thought out and copied what the great Creator and Thinker first thought out and made. All inventions, wonderful as they admittedly are, are yet merely close copies of something in Nature and can never surpass Nature. No flying "ace" will ever fly as safely and unerringly as a bird. No violin will ever sound so sweetly as the nightingale. Photography, even, is the exact copying of nature.

The greater the work, the greater the artist. We must, therefore, conclude that the Creator of these masterpieces must be a very great Master indeed.

What of the Objectors?

First comes the common or garden atheist. He does not believe in God, he says. Who, then, has designed and created the Universe and all that it contains? Listen and marvel!

(1) He says that what men call God is nothing more than the result of the interplay of matter and energy. What, then, becomes of that first axiom of philosophy, namely, that nothing can give what it has not first got? How can lifeless, mindless matter call into being life and mind? If life did not first exist in a higher, eternal, and essential Being, how could it ever have come to us?

(2) Then there is the Evolution Theory. Evolution is all very well, but it brings you back to exactly the same point—that you must have in the beginning something to evolve, something, moreover, in which the urge towards development is innate. In other words, Evolution definitely demands a Creator. Lamarck, one of the originators of the Transformation Theory, himself recognized this very clearly. "People imagine Nature is God," he said. "That is rather odd—confusing the watch with the watchmaker!"

Darwin was of precisely the same mind. "I have never been an atheist," he said, "I have never denied the existence of God. The theory of evolution is perfectly compatible with belief in God." Or, as that great biologist, the late Fr. Erich Wasmann, S. J., put it: "One must not speak of 'creation or evolution,' for nothing can evolve before it is created. A wheel cannot turn before it exists. One must say rather 'creation and evolution'; creation first, then evolution."

(3) The Chance Theory. There are actually those who say that the universe and all its perfectly harmonised wonders came into existence through mere inexplicable chance. This is certainly a little too much! To the atheist who thinks in this way I would say: "Get a sack of sand and throw it into a barrel. Stir it up energetically and then see what you will draw out—beautiful pictures, vases, flower-pots, even a violin, perhaps? Or throw the letters of the alphabet into the air so that they fall down on paper, on which they will sort themselves into an up-to-date news-sheet with reports from the whole

wide world." Quite as intelligent a possibility as the "chance" school of belief, or rather, of unbelief! So enough of this particular nonsense.

"If you travel from end to end of the earth you can find towns with or without walls, with or without houses, with or without laws, even with or without money. But a people without prayer, a people without divine worship, a people without God, has never yet been found anywhere." Thus spoke Plutarch of old; and we of today, with all our immeasurably wider knowledge of tribes and peoples, must admit the same age-old truth. All peoples, in all times and in all lands, have believed in a God.

Yet one hears this sort of drivel from the atheistical school: "Yes, quite so. People have believed in God because they found that it served them to do so." The history of the ages tells us a very different tale. People have ever had to deny themselves and overcome their passions when they confessed God. For believing, countless numbers in every age have been persecuted cruelly and have lost all, even life itself. No. Let us be candid. The real reason for this persistent belief in God is that there exist genuine, compelling, undeniable reasons for believing in God. As the freethinker, Berthelot, put it, "Mankind has always had the feeling that behind the True, the Good, and the Beautiful, a Supreme Being stands, who is in Himself the living Embodiment of the Ideal. And this Being is God."

Science Demands a God

Sound reason and philosophy assure us that there is a God. But what of Science? When I say "Science" I refer to the collective opinion and belief of those genuinely learned persons who in their lifetime were members of recognized Universities or Schools of Science—prominent scholars and discoverers in the fields of astronomy, electricity, biology, and so on. What have they to say in the matter? Let us see.

Especially in our days, when Science means everything, it is at least interesting to hear their opinion. If it is found to be on the side of belief, then those freethinkers who deny God are rather to be suspected of being, to say the least of it, on the wrong track, if not, indeed, of being the victims of serious mental aberrations. For mental experts are of the opinion that disbelief in what obviously exists is a recognized symptom of mental derangement.

Let us, therefore, see what these men of learning have got to say.

Telling Figures

The well-known scholar, Dr. Dennart of Godesberg, himself a believing Protestant, published in 1908 a paper entitled "The Religion of Scientists." This symposium was the outcome of his researches into the religious beliefs of the 300 greatest scientific geniuses and scholars of the last three centuries. In 38 out of the 300 cases he could ascertain nothing, for no testimony had been left behind or preserved, but of the remaining 262 persons, 242 were definitely believers and only 20 unbelieving or indifferent in their attitude towards religion. The proportion was, therefore, 92 to 8.

Is not this comparison of numbers rather a crushing indictment of Unbelief?

But perhaps you will say that this proportion has been gradually changing, that the really modern man of science knows "better"? Not at all. The figures for the last century show exactly the same results. Out of 136 nineteenth century men of learning whose religious beliefs were examined, 124 were found to be believers and only 12 unbelievers. Again a proportion of 92 to 8.

Are not these telling figures? But we shall examine the facts more closely.

Modern Scientists

N. Copernicus (1473-1543), a doctor who later became a priest and who died as Canon of Frauenburg, was the first to publish definite calculations, accompanied by a chart, concerning the revolution of the earth and other planets round the sun. This epoch-making work he dedicated to Pope Paul III. The traveller of today may read on his tomb in Frauenburg the epitaph which he himself composed: "I ask not the grace granted to Peter, nor that given to Paul; I only ask the favour Thou didst show the thief on the cross."

Kepler (d. 1630) wrote: "Oh, my God and my Creator, I thank Thee for all the rapture and delight which I have been permitted to find in contemplating the omnipotence of Thy works!" And Linnaeus said once, "The eternal and infinite God has been very near to me. I have not seen His Face, but the mere reflection of His Countenance has filled me with awe and wonder!"

Herschel, one of the greatest astronomers of all ages, said, "The more Science progresses the more the omnipotence of God is proved, and so the initiated render in the Temple of Science their meed of praise to the Almighty God."

Volta (1745-1827), to whom we are to a great extent indebted for the discovery of electricity and its wonders, made the following well-known confession of faith: "I am ready to declare that I have at all times held and will always hold the holy Catholic Faith as the only true and infallible one."

Ampere (1775-1836), one of the greatest scientific men of his century, said, "Faith and Science go essentially hand in hand." And, as he lay dying, the watchers by his bedside marvelled that in the midst of his pain his eyes glowed with supernatural rapture and joyful expectation. Someone offered to read him the "Imitation of Christ," but that was not necessary—he knew it by heart.

Clerk Maxwell (d. 1879), the Cambridge professor, and the only scientist of his period whose theories regarding electrical phenomena have stood the test of time, likewise died a most saintly Christian death. "My Lord and my God," he prayed, "I do not ask for life or death, but only for the grace to live and die Thy faithful servant."

Backhuys Roozeboom, for many years, until his death in 1906, Professor of Chemistry at Amsterdam, used to refer to the wonders of natural science as "revelations of the sublime thoughts of the Creator." And his colleague, Fresenius, likewise a man of deeply reverential spirit, whose works have been translated even into Chinese, left behind a like testimony of religious faith.

J. B. Dumas (d. 1884), the great French physicist, realized profoundly that all the complicated laws of physical science have their origin in the Divine Wisdom, and to illustrate this fact he used to quote those words of Holy Scripture, "The Lord God . . . hath meted out the heavens with a span, comprehended the dust of the earth in a measure, and weighed the mountains in scales and the hills in a balance." "These words were written thousands of years ago," he commented, "but the modern physicist is being daily more and more struck with their meaning and truth."

Karl Gauss, called by the eminent Laplace "the greatest mathematician in Europe," was a man of profoundly religious outlook. "What would we mortals be," he cried, "without our hope for a better future, without our hope of Eternal Life!"

The brilliant Charles Young was also a deeply religious man; in fact, he originally intended to be a missionary. The great astronomer, Heis of Cologne, was a most devout Catholic, particularly noted for his life-long devotion to the Rosary. And yet another distinguished astronomer, Francis Perry, who engaged in many scientific expeditions at the instance of the British Government, was a Jesuit Father.

A list of such touching and sincere confessions of faith might be added to indefinitely if one were to quote the testimonies of the many other great scientists, such as Newton, Reaumur, Faraday, Jussieu, Buffon, Fraunhofer, Fresnel, Fizeau, and Lavoisier, who were also great believers.

But we shall now turn to the three great seers of the nineteenth century, namely, Darwin, Bernard, and Pasteur.

Darwin stated definitely, as we have already seen, "I have never been an atheist; I have never denied God." Bernard said on his death-bed, "I die in the Catholic Faith which my mother taught me." And Pasteur declared, "Because I have thought and studied so much my faith is like the faith of a Breton peasant. If I had thought and studied more I would doubtless have the faith of a Breton peasant's wife."

No Contradiction Exists

The great Lord Lister,⁽¹⁾ discoverer of the antiseptic principle, and one of the greatest scientists of his age, wrote: "I have no hesitation in saying that in my opinion there is no antagonism between the religion of Jesus Christ and any fact scientifically established."

1 N.B.-The testimony of Lord Lister has been inserted by the translator.-I. McH.

Sir George Stokes,(2) one-time President of the Royal Society, and Lucasian Professor of Mathematics at Cambridge for over fifty years, when asked whether there was any contradiction between Science and the Christian Religion, wrote : "As to the statements that 'recent scientific research has shown the Bible and Religion to be untrue,' the answer I should give is simply that the statement is altogether untrue. I know of no sound conclusions of science that are opposed to the Christian Religion."

Henri Fabre, the incomparable naturalist, on being asked whether he believed in God, replied characteristically, "I cannot say that I believe in God, because I see Him. Every century brings its freaks and whims, and I, for my part, consider atheism a whim—the fashionable malady of our day. But as for myself—one could about as easily pull off my skin as take from me my Catholic Faith."

Arnold Foerster, another great authority on entomology, was likewise a most devout Catholic. Professor Van Beneden of Louvain used to say that he found the light and help of the Faith necessary .to enable him to understand the wonders of the animal world.

Laennec (inventor of the stethoscope) has often been called the greatest of medical scientists. He lived and died a faithful son of the Catholic Church in thought, word, and deed. It has been said of him that in his researches into the wonders of the human organism he found constant food for meditation on the Divine Wisdom. And the great biologist, Cuvier, who has been styled "the modern Aristotle," said, "the study of Nature leads to God."

At the funeral oration of the great physicist and mathematician, Le Verrier, an eminent fellow-scientist said of him that his profound studies of the universe and the firmament had deepened and confirmed his faith in God. And Gladstone, (3) one of the pioneers of optical science, used to organize and deliver lectures and readings to combat the then growing fallacy, that a contradiction exists between science and religion.

Eminent Unbelievers

But the unbelieving men of learning—what of them?

In the first place, are they really so very numerous? We have already seen the proportion—8 in 100—certainly not an overwhelming number. And, if it is a question of weight and worth of opinion, surely the testimonies of Kepler, Newton, and Pasteur are at least as valuable as are those of Comte and Berthelot.

Secondly, are they genuine atheists? For unfortunately, or rather, fortunately, just when one thinks one has found one's arch-atheist, he makes a complete right-about and leaves his party in the lurch. The most apparently irreconcilable of them have done this.

Voltaire, for instance, violent enemy though he was to what he was pleased to call the superstition of Christianity, yet retained belief in God, as many pages of his writings bear witness.

One May morning in 1774, when he was eighty-one years old, he witnessed the glories of the sunrise from one of the heights around Verney. He uncovered his head: he fell on his knees. "I believe" he cried, "I believe in Thee." Dieu Puissant! Je crois!

Mézeray, (4) too, returned to the Faith before life's close. "Mézeray on his death-bed is more believing than Mézeray in his days of health," he said.

And these words of Renan, the high-priest of modern agnosticism, spoken shortly before his death, tell their own tale of sorrow and repentance. They are indeed heart-piercing. "Oh, God of my youth!" he prayed, "I have always cherished the

2 N.B.-The testimony of Sir George Stokes has been inserted by the translator.-I. McH.

3 John Hall Gladstone, F.R.S. (1827-1902), will always be remembered for his collaboration with Sir D. Brewster in the early days of spectroscopy. He studied chiefly the relation of chemistry to optics, was lecturer to many learned institutions, and held important consultative posts under government.

4 Mézeray, an historian patronised by Cardinal Richelieu; becoming a political hack-writer, he drew a good many pensions. Later on, so Voltaire asserts, he lost them all through telling what he thought was the truth.

hope of returning to Thee—and perhaps I shall yet return, humble and subdued. Ah, how I would beat my breast if I could hear Thy Voice once more—that Voice which used to make me tremble so. Oh, God of my youth! Perhaps Thou wilt yet be the God of my death-bed, too!”

Arthur Schopenhauer, the well-known atheist of the past century, as he lay dying called again and again on the God whom he had denied all his life. "For in suffering," he said, "it is impossible to do without God." The prominent Dutch freemason and atheist who founded the rationalist paper, *Morgenrote*, renounced on his death-bed all that he had said and written in favour of godlessness. And Berthelot, towards the end of his life, sadly admitted: "In a life without faith in God too many doubts and speculations keep arising—in my case bringing that unrest and sadness of heart which has never left me all my life." One might continue such a catalogue indefinitely. Every day the list grows longer of men and women who call themselves atheists and stoutly preach the creed of godlessness, but who, as they approach death's door, humbly retrace their steps and turn to the God to whom they have so long denied allegiance.

For godlessness is all too easy in life, but crushing in the hour of death.

Atheism and Self

But were the atheistical men of learning quite disinterested in their denial of God, where it was a question of worldly distinction or eminence? Consider, for instance, whether or not it was of material advantage to Renan and Berthelot to be distinguished as agnostics.

And then, where the weaknesses of the flesh are concerned, how many atheists must admit with Bouguer, (5): "I was a denier of God because I was an evil liver. My unbelief was a malady of the heart, not of the mind." What Bruyère said on this point is also illuminating. "I should like to find one simple, chaste, and temperate man who wants to contest the existence of God. He would certainly be a very impartial person. But such impartial people simply do not exist."

Finally, let us remember that though atheists are certainly well qualified to pass judgment in matters pertaining to their branch of learning, they may not have studied religion quite so deeply. This was certainly the case with an eminent French atheist of the old school, who, when asked why he was an atheist, gave the brilliant reply: "Because I do not believe in God!"

In contrast to this take the testimony of Cauchi, king of mathematicians in his day. "I am a Christian," he wrote in the introduction to his works. "That is, I believe in the Godhead of Christ in company with most of the learned men of all times. And, like the majority of them, I am a Catholic; but this not merely because my parents were Catholics, but because I have convinced myself by a thorough examination of the facts, that the Catholic religion is the only true one."

As we know by now, many of the greatest geniuses of the race have given like testimony. They found for themselves ample proof of the existence of God. And shall our puny minds be more difficult to satisfy than were these great and searching intellects? That would be rather strange.

Conscience Demands a God

The Universe demands a God. From the starry heavens to the tiniest blade of grass, all things created speak the praise of God, the Creator. Science, too, demands a God. What now of the psychological and moral world? Yes, this world also, this wonderful world within us, tells us that God lives. For Conscience demands a God.

Every normal being recognizes in his own consciousness a law which commands good and forbids evil. Even if nobody sees or knows of his misdeeds he yet feels covered with shame on account of them. He experiences a highly unpleasant sensation when he has done wrong—feels in some indefinable way that he has hurt or offended someone, even when no fellow-mortal is in the least concerned or injured by his act. He has, in short, a feeling of anxiety and guilt, a feeling that there is something to be made good, a feeling that justice has been injured. Is not that so? Is not that your own experience?

5 Bouguer: an 18th-century explorer and mathematician, associated with La Condamine and others in the determination of the earth's curvature.

Mark well that when someone else does evil your feelings are altogether different. You are not ashamed if your neighbour has drunk too much, nor have you a sense of guilt when someone else commits a murder. Therefore it is patent that this inward voice concerns itself only with what you do, whether good or evil. Is that not so?

What, then, does this prove? It proves that there is Someone whose voice makes itself felt in your inmost being and whose law you feel in your heart—and that this Someone is not yourself.

In the first place, there is that sense of shame. Now, nobody can feel ashamed before a thing, but only before a person. Then there is that feeling of having hurt somebody. This feeling is quite correct. Someone has been hurt, someone has been offended. Thus it follows that the inward voice of which you are aware is the voice of a person, for one cannot offend things. Besides, there is that sense of guilt. But guilt towards whom? Again, one cannot feel guilty towards things nor towards oneself. Therefore, there must be some Person to whom we are answerable for our works. And it is in relation to this Person that we feel oppressed with a sense of guilt and misery in wrong-doing.

No Fellow-Mortal

Therefore, it is obvious that the Voice of Conscience is the voice of another person, and this other person can be no fellow-mortal. Human beings cannot command and coerce us as this Voice does. We can, in a certain sense, ignore or observe human laws as we will, but no living mortal can ignore or escape from the Voice of his own conscience. Human laws have been made by human beings and can, therefore, be repealed by human beings. But no living mortal can rescind or annul this law of our inmost being.

If the Person whose voice speaks in our conscience and whose law commands us so imperiously, is no human being, nor yet an angel, then he can only be God Himself. For only the God who created us could make such demands, covering as they do the whole of our existence. Only a God, who called us into life, can make these laws from which no mortal has ever been able to claim exemption, and which bind us rather as expressing the voice, the will, the law of a Supreme Being, than because of their, or our, relation to human society. Our Conscience, therefore, proves that God lives and rules.

Just as the wonderful world about us demands a God, so too does the equally wonderful world within us. The scent of the tiniest flower breathes forth the power of the Creator just as convincingly as does the mightiest wonder of the starry heavens. So also, the smallest breath of peace which gladdens our conscience when we do a kind act proves as surely the existence of God as does the feeling of misery which as inevitably follows the most momentary fall from grace. The scorching, consuming pangs of Cain's conscience and the great serene peace of Abel's, tell with equal eloquence that God lives. For His is the Voice of Conscience.

Man Without the Divine Law

But let us for argument's sake try to imagine for a moment that there is no God, no Voice in our Conscience.

Then all the great men and women of all times, who followed, shall we say, their finer instincts, and not their own desires and fleshly passions, must have been misguided creatures. All the great, noble minds of the race were merely victims of illusion. And the slaves of the senses, the worshippers of Mammon, the tempters and despoilers of youth, the cowards and the traitors—all these wretched people were the really wise and enlightened members of the human family!

If, indeed, it is not God who speaks in our conscience, then conscience itself is nothing better than a wretched instrument of torture which pursues and persecutes those who follow their lower instincts. If it is not God who guides us through the Voice of Conscience, then the Voice of Conscience loses its meaning, and the so-called immutable moral laws are nothing more than mere arrangements of expediency, which humanity has instinctively evolved for its own preservation.

Without conscience moral values cease to exist. Good and evil stand on the same footing. Unselfish service becomes foolishness; self-sacrificing love, a mere softness; devotion to one's neighbour, just a fad; all faithfulness, mere stupidity; purity of heart, a habit or convention. Then the chaste virgin soul is no more beautiful than the soul of the libertine.

Conclusion

Reason recoils before this picture of the human race without God, without the Divine law of Conscience. If God did not reign in the human conscience humanity would be long since bankrupt of virtue and justice, vice and vulgarity would reign supreme, and all ideals would be shattered. But there is a Law of Conscience, a Divine law planted immutably in the soul of man, and this Law is the reason and source of all virtue. As Renan so truly put it: "The virtue of the human race is the best final proof of the existence of God."

Reason, then, proves to us that there is a God who is the Creator of the world and the Lawgiver of Mankind, the Father of his children and the Preserver of the race of men. He is the final judge who will right all wrongs, avenge all injustice, and render to everyone according to his works.

What a reasonable, happy, and comforting outlook; how different from the barren desert of thought in which the Atheist lives. Only those whose consciences are utterly spoiled by the spirit of Untruth can still dare to doubt.

Listen to the voice, to the cry, of your Conscience:

"THERE IS A GOD!"

APPENDIX

By REV. P. DE TERNANT

There is an excellent little work by Fr. Kneller, S.J.,

"Christianity and the Leaders of Modern Science," which goes steadily through the history of science in the nineteenth century alone, and shows what an enormous number of real scientific discoverers believed in God, and said that in studying the facts of nature they were worshipping the Creator. This work has been translated into English, and is full of quotations from their speeches and writings. The following names will be of special interest to English readers:-

Humphrey Davy, Brewster, Faraday, Lord Kelvin; Dalton, founder of the chemical theory of atoms; Buckland, Lyell, Murchison, Conybeare, and Sedgwick, geologists of the first rank; Owen, perhaps the equal of Cuvier in comparative anatomy, and first director of our own Natural History Museum; Lord Rayleigh, chemist, discoverer of the gas argon in the atmosphere; Rankine and Joule, well-known in connection with engines. This may look like a mere list of names, but it is impossible to compress into the space here available the substantial portion of scientific history that they represent. Some of these will be recognized by anyone as having achieved universal fame. There are many others. One cannot comment here on the still longer list of continental names, largely Catholic ones. The subject can be pursued in Fr. Kneller's book, and also in the following:- Catholic Churchmen in Science," J. J. Walsh, two series; "Religious Belief of Scientists," A. Tebrum; various works by the late Professor Windle; all of which, if still in print, can be procured to order. One might take the opportunity of reminding readers that the C.T.S. pamphlets are only intended as introductions, and the information they contain is nothing more than a pointer in the direction of more extended study.

To return to the scientists; Fr. Kneller has some striking passages concerning the religious belief of Sir Charles Bell (died 1842), one of the founders of nerve physiology, but he does not mention Sir James Paget, the great Victorian surgeon and pathologist, who was largely responsible for raising the medical profession from something rather disreputable to its present high position. His incessant activity as a lecturer and as an organiser of medical education and administration forms part of the real history of the nineteenth century. The lofty moral tone that pervaded his whole life was the direct outcome of his religious conviction. Here are just three extracts, out of many, from "The Memoirs and Letters of Sir James Paget, 1901."

In April, 1837, as a lonely student in Paris, he wrote to his fiancée:-

"Among all the blessings of this life I can indeed thank God for you." The marriage was a happy one. In 1880 he wrote:—"Forty-four years since we were engaged! May God grant us peace to the end, and then order all things mercifully for us, that our end may be according to His will." During his last illness, in 1899, he roused himself once a week at 6.30 in the morning to receive the Church of England Communion from one of his sons, who was a clergyman; and just before his death he received it from another son who was a bishop.

The greatest public event of his life was his presidency of the International Medical Congress, 1881. In the presence of the Prince of Wales (later King Edward VII), the Crown Prince Frederick of Germany, Cardinal Manning, the Archbishop of York, and over 3,000 medical delegates of all nations, he wound up his inaugural speech in these words :

"Let us resolve, then, to devote ourselves to the whole science, art, and charity of medicine. Let this resolve be to us as a vow of brotherhood; and may God help us in our work."

Sir James Clark Ross, discoverer of the North Magnetic Pole, and leader of the celebrated "Erebus and Terror" Expedition to the Antarctic, 1839, wrote in his narrative that some of the dreadful dangers through which he passed were "sufficient to fill the stoutest heart, that was not supported by trust in Him who controls all events, with dismay ... Each of us secured our hold, waiting the issue with resignation to the will of Him who alone could preserve us."

And the following anecdote may be new to many English readers. Telford, the famous engineer, who constructed the suspension-bridge over the Menai Strait, was in a great state of anxiety when the time came to raise the first chain into position. He could hardly keep still, and disappeared from the scene. When the chain was safely in position his friends ran to congratulate him, and found him on his knees giving thanks to God.

Thus we see that the study of this world does not necessarily lead us away from the other. Rather, natural science is calculated to rouse in us the spirit expressed in the beautiful memorial in Kew church to Sir J. D. Hooker, for many years director of Kew Gardens, whose advice on medicinal and economic botany has been of incalculable value to the Empire and to the world:

THE WORKS OF THE LORD ARE GREAT
SOUGHT OUT OF ALL THAT HAVE PLEASURE THEREIN

In Captain Scott's last letters, found with his body between the South Pole and his base, we read:-"The Great God has called me. But take comfort in that I die in peace with the world and myself—not afraid." and his Diary concludes: "We shall stick it out to the end, but we are getting weaker, of course, and the end cannot be far. It seems a pity, but I do not think I can write more:-

R. SCOTT.

Last Entry:- **"For God's sake look after our people."**
