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JOURNAL OF THE TRANSACTIONS
OF
THE VICTORIA INSTITUTE.

VOL. XLVIII.

JOURNAL OF
THE TRANSACTIONS
OF
The Victoria Institute,
OR,
Philosophical Society of Great Britain.

SECRETARY: E. WALTER MAUNDER, F.R.A.S.

VOL. XLVIII.



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1916.

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PREFACE.

THE present Volume of the Transactions of the Victoria Institute is one of the smallest which has been issued. This is due to the influence of the War, which has seriously diminished the resources of the Institute, and has increased the cost of printing, paper, and binding. The Council, therefore, considered it advisable, for reasons of economy, to depart this year from its old-established practice of circulating in advance proofs of the papers to be read; but, as the lack of such advance proofs has been felt to be a loss to the discussions, it has been resolved to revert to the old practice during the forthcoming Session.

The record of the past Session gives deep cause for thankfulness. The liberal response made to the appeal for a Special Fund has relieved for the time the serious financial difficulty in which the War placed the Institute. The attendances at the Meetings have been very good, remarkably so when it is remembered how closely everyone has been occupied. The interest in the papers has been fully maintained, and the tone and spirit of the Meetings have been most encouraging.

The subjects discussed include two papers dealing with questions of physical science:—"The Tides" and "The Movements of the Stars," and a third paper, that on "The Spectra of Stars and Nebulæ," a brief abstract of which appeared in Vol. XLVII, is given here in full. Six papers have dealt directly or indirectly with Holy Scripture. Two of them supplement each other in striking fashion, the one treating of "The Principles of Bible Translation," the other of "The Connection between the Vulgate Version and the Theology of the Western Church." "The Unity of Isaiah" has been maintained by a minute analysis of the words

and phrases of that great prophecy ; and an analysis of "The Psychology of St. Paul" has shown him to be a trustworthy witness to the event which he recorded as having taken place on his journey to Damascus. "Inscriptions and Drawings from Roman Catacombs" illustrate the faith and hope of Christians in the first four centuries of our era ; and in its Twentieth Century our own faith and hope are stirred up anew by the study of "The Fulfilment of Prophecy."

Two papers were directly concerned with the Great War: the one looked backward, to ascertain, if possible, what perversion of right principles had brought the conflict about; the other looked forward, to forecast whether we might hope that the War would issue in the return of men to the true principles from which they had wandered.

The past year, the second of the Great War, has been also the Jubilee year of the Victoria Institute; and on May 24th last, it celebrated the Fiftieth Anniversary of its first General Meeting. A short Thanksgiving Service was then held, in which the Members of the Institute gathered together to worship God, and especially to acknowledge His goodness for the light which He has caused to be thrown upon Holy Scripture in these our days. At the Meeting which followed, several speakers expounded the principles and objects of the Institute—faith in One Eternal God Who created all things very good, and the investigation in a reverent spirit of questions of Philosophy and Science, especially those bearing upon Holy Scripture.

E. WALTER MAUNDER, *Editor.*

October, 1916.

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*** The object of the Institute being to investigate, it must not be held to endorse the various views expressed, either in the Papers or in the Discussions.*

VICTORIA INSTITUTE.

REPORT OF THE COUNCIL FOR THE YEAR 1915.

READ AT THE ANNUAL GENERAL MEETING, FEBRUARY 21ST, 1916.

1. *Progress of the Institute.*

In presenting to the Members of the Victoria Institute the Forty-seventh Annual Report, the Council would congratulate them on the large attendances secured at all the Meetings of the year. This has been the more gratifying as a contrary result might well have been feared; since the War has imposed duties upon many which have prevented their coming, and the increased difficulties of travel might well have deterred others. The interest in the work of the Institute and in the subjects discussed at its Meetings has been well maintained.

2. *Meetings.*

Thirteen meetings were held during the year 1915. The papers read were as follows:—

- “The Life and Work of Homer.” By Prof. D. S. MARGOLIOUTH, D.Litt.; Laudian Professor of Arabic in the University of Oxford.
- “Modernism and Traditional Christianity.” By the Rev. Canon E. McCLURE, M.A., M.R.I.A.
- “Present Position of the Theory of Organic Evolution.” By Prof. ERNEST W. MACBRIDE, M.A., F.R.S.
- “Traces of a Religious Belief of Primeval Man.” By the Rev. D. GATH WHITLEY.
- “The Spectra of Stars and Nebulæ.” By Prof. A. FOWLER, F.R.S. (*Illustrated by Lantern Slides.*)
- “The Determination of Easter Day.” By Dr. A. M. W. DOWNING, M.A., F.R.S.
- “Astronomical Allusions in Sacred Books of the East.” By Mrs. WALTER MAUNDER.
- “The Zoroastrian Conception of a Future Life.” By Prof. J. HOPE MOULTON, M.A., D.Litt.
- “Mahâyâna Buddhism and Christianity.” By the Rev. W. ST. CLAIR TISDALL, M.A., D.D.

- “Weights and Measures of the Hebrews.” By Prof. ARCHIBALD R. S. KENNEDY, M.A., D.D.
 “The Old and New Versions of the Babylonian Creation and Flood Stories.” By T. G. PINCHES, Esq., LL.D., M.R.A.S.
 The Annual Address was delivered by Prof. H. EDOUARD NAVILLE, D.C.L., LL.D., Professor of Egyptology in the University of Geneva, on “The Unity of Genesis.”
 “The Movements of the Stars.” By Prof. A. S. EDDINGTON, M.A., F.R.S., Plumian Professor of Astronomy in the University of Cambridge. (*Illustrated by Lantern Slides.*)

3. *The Journal of Transactions.*

Volume XLVII of the Transactions was issued early in November, and, as it was unusually large, containing nearly 100 more pages than either of the two preceding volumes, the General Index to the earlier volumes was not included in it. It is hoped that an early opportunity may be found for publishing a new edition of this General Index, brought up to date.

4. *Council and Officers.*

The following is the list of the Council and Officers for the year 1915:—

President.

The Right Honourable The Earl of Halsbury, M.A., D.C.L., F.R.S.

Vice-Presidents.

David Howard, Esq., D.L., F.C.S. (*Trustee*).
 Lieut.-Gen. Sir H. L. Geary, R.A., K.C.B.
 Professor Edward Hull, M.A., LL.D., F.R.S., F.G.S.
 Rev. Canon R. B. Girdlestone, M.A.
 General Halliday.
 Very Rev. H. Wace, D.D., *Dean of Canterbury (Trustee)*.

Honorary Correspondents.

Professor Sir Gaston Maspero, D.C.L. (*Paris*). Professor Warren Upham, D.Sc.
 Professor E. Naville, Ph.D. (*Geneva*). His Excellency Herr Fridtjof Nansen, D.Sc.
 Professor A. H. Sayce, D.D., LL.D.

Honorary Auditors.

E. J. Sewell, Esq. | H. Lance Gray, Esq.

Honorary Treasurer.

Arthur W. Sutton, Esq., J.P., F.L.S.

Secretary and Editor of the Journal.

E. Walter Maunder, Esq., F.R.A.S.

Council.

(In Order of Original Election.)

Rev. Chancellor J. J. Lias, M.A.	Heywood Smith, Esq., M.A., M.D.
Theo. G. Pinches, Esq., LL.D., M.R.A.S.	Rev. H. J. R. Marston, M.A.
Rev. John Tuckwell, M.R.A.S.	Ven. Archdeacon Beresford Potter, M.A.
Lieut.-Colonel G. Mackinlay (<i>Chairman</i>).	J. W. Thirtle, Esq., LL.D., M.R.A.S.
Arthur W. Sutton, Esq., F.L.S., J.P.	E. J. Sewell, Esq.
Rev. Prebendary H. E. Fox, M.A.	Lt.-Col. M. A. Alves, B.E.
Professor H. Langhorne Orchard, M.A., B.Sc.	Alfred William Oke, Esq., B.A., LL.M.
Rt. Rev. Bishop J. E. Welldon, M.A., D.D.	Rev. Professor D. S. Margoliouth, D.Litt.
Sydney T. Klein, Esq., F.L.S., F.R.A.S., M.R.I.	B. W. Dibdin, Esq., F.G.S.
William J. Horner, Esq.	Joseph Graham, Esq.
A. T. Schofield, Esq., M.D.	Rev. G. Harold Lancaster, M.A., F.R.A.S.

5. *Election of Council and Officers.*

In accordance with the rules the following members of the Council retire by rotation.

The Rev. J. Tuckwell.
 Lieut.-Colonel G. Mackinlay.
 Professor H. Langhorne Orchard, M.A., B.Sc.
 The Rt. Rev. Bishop J. E. Welldon, M.A., D.D.
 Sydney T. Klein, Esq., F.L.S., F.R.A.S., M.R.I.
 William J. Horner, Esq.
 A. T. Schofield, Esq., M.D.
 Heywood Smith, Esq., M.A., M.D.

The Rev. J. Tuckwell, Lieut.-Colonel Mackinlay, Prof. Orchard, the Rt. Rev. Bishop Welldon, Mr. Klein, and Dr. Schofield offer themselves and are nominated by the Council for re-election.

The Council nominate also T. B. Bishop, Esq., for election on the Council.

6. *Obituary.*

The Council regret to have to record the death of Sir T. Fowell Buxton, Bart., K.C.M.G., and of the following Members and Associates:—

The Rev. Edward Atkinson, D.D., the Rev. J. C. Clyde, D.D., the Rev. J. Cockin, Prof. J. Geikie, F.R.S., J. L. Feilden, Esq., the Rev. Prebendary Hellier, J. M. Head, Esq., Sir Frederick Howard, J.P., the Rev. T. W. Jex-Blake, D.D., Robert Kerr, Esq., Colonel A. F. Laughton, C.B., Herr F. W. Lonnbeck, W. H. S. Monck, Esq., M.A., Josiah Mullens, Esq., the Rt. Rev. Bishop Royston, D.D., the Rev. W. P. Schuster, M.A., Judge George H. Smith, the Rev. John Urquhart, Colonel G. J. van Someren, the Rev. J. Bradford Whiting, M.A., the Rev. Charles Young, M.A.

7. *New Members and Associates.*

The following are the names of new Members and Associates elected up to the end of the year 1915 :—

MEMBERS.—The Rev. Martin Anstey, M.A., B.D., William Barnett, Esq., the Rev. G. Campbell Morgan D.D.

ASSOCIATES.—Benjamin Akhurst, Esq., Walter H. Bacon, Esq., C. E. Buckland, Esq., C.I.E., William Doman, Esq., the Rev. J. L. Evans, M.A., the Rev. J. W. Fall, M.A., Maurice Gregory, Esq., Dr. A. Withers Green, J. Norman Holmes, Esq., John Lee, Esq., Miss Jessie Little, R. Maconachie, Esq., B.A., The Lady Jane Taylor, the Rev. D. H. D. Wilkinson, M.A., the Rev. W. E. Woodhams Denham.

8. *Numbers of Members and Associates.*

The following statement shows the number of supporters of the Institute at the end of December, 1915 :—

Life Members	...	...	...	24
Annual Members	...	...	...	81
Life Associates	...	...	...	65
Annual Associates	...	...	...	277
Missionary Associates	...	...	...	14
Library Associates	...	...	...	29
			Total	490

showing a net decrease of 38, as compared with the total number of subscribers under the same headings reported in last year's return.

There are also 87 names on the roll of Honorary Corresponding Members.

9. *Finance.*

The decrease shown above has been due partly to resignations due to the economic effects of the War, and partly to the difficulty of securing new subscribers in a time of such general preoccupation. But it has seriously diminished the financial resources of the Institute, so that, though the expenditure incurred during the past year was nearly £80 less than in 1914, there was a debit against the Institute—after allowing for a cheque not presented—of £12 6s. 3d. at the end of the year, as compared with a credit in its favour of £15 0s. 2d. at the close of 1914. There is the further grave consideration that 1916 opens with a list of subscribers already seriously diminished.

10. *Special Fund.*

Under these circumstances the Council have, most reluctantly, felt obliged to urge again the claims of the Special Fund for which they issued an Appeal in December, 1913. As they stated in their last Annual Report, "while gratefully acknowledging the generosity of those who have thus contributed to the Special Fund, the Council regret that the total amount received is only one-third of that for which they had ventured to ask," and they expressed the hope that "the friends of the Institute will not relax their efforts, nor consider the subscription list closed; but that the Special Fund will continue to receive support." The Council propose, therefore, to send out a circular to all subscribers bringing the financial position of the Institute directly before them. They desire to acknowledge most gratefully the following donations received during the year, together with promises amounting in all to £29 18s. 6d.

Donations received:—Rev. Prebendary Fox, £5; the Rev. Canon Girdlestone, £5; A. Greenlees, Esq., £1 1s.; the Rev. H. C. Lees, 10s. 6d.; Col. G. Mackinlay, £2 2s.; H. P. Rudd, Esq., £1. Total £14 13s. 6d.

Donations promised:—D. Howard, Esq., £10; Arthur W. Sutton, Esq., £5 5s. Total £15 5s.

Total donations received and promised, £29 18s. 6d.

11. *Auditors.*

The Council desire again to thank Messrs. Sewell and Lance Gray most cordially for their services as Auditors.

12. *Conclusion.*

The Victoria Institute has now entered upon its fiftieth year of work, and hopes to keep its Jubilee in the course of the present session. In those fifty years it has passed through three chief phases. First one of heated controversy, for it was founded to combat the materialistic interpretation which was, in many quarters, attached to the latest discoveries of science. Later came a time when controversy slackened, and indifference became the chief enemy to faith. For, as the advances of mechanical science increased wealth and promoted luxury, it was assumed that the real hope for the human race was to be found in further progress in this direction. Materialism became not merely an abstract creed, but a practical hope; and

Christianity was looked upon as something which cultured minds could tolerantly disregard as superseded and outworn. The third phase is now upon us. The nation which more than any other had adopted the creed and spirit of materialism has justified to the full the protest against that creed and spirit which this Institute raised fifty years ago. The inevitable result of a science and a philosophy from which the Living God and His Revelation of Himself were excluded has been seen and felt in wrong, cruelty, and suffering on a scale unprecedented in history. There is no path to the salvation of humanity through denial or forgetfulness of God.

The awakening of many to this truth, and to an earnest seeking after Him in Whom alone is salvation, is the most hopeful sign of these days of trouble. Surely this then is a time when the Institute may find an opportunity for fresh usefulness. Its present need is not chiefly for the restoration of its finances, but for more men: young men of earnestness and faith. And seeing the unbounded self-sacrifice and devotion of so many of our young men, who have given up all things at the call of duty, it cannot be doubted that such men will be forthcoming when their present duty has been fulfilled.

Signed on behalf of the Council,

HALSBURY.

CASH STATEMENT *for the year ending December 31st, 1915.*

RECEIPTS.				EXPENDITURE.					
				£	s.	d.	£	s.	d.
Cash Balance from 1914				15		0			
Subscriptions :—									
1 Member	1913	..	2 2 0						
3 Members	1914	..	6 6 0						
77 "	1915	..	161 14 0						
3 "	1916	..	6 6 0						
1 Associate	1912	..	1 1 0						
10 Associates	1914	..	10 10 0						
251 "	1915	..	263 11 0						
7 "	1916	..	7 7 0						
				458		17			
Sales				44		18			
Dividends				11		1			
Donations				14		13			
Deficit, being cheque not yet presented—									
£16 2s. 6d., less cash at Bank, £3 16s. 3d. ..				12		6			
				£556		16			6

Printing							144		9		0
Binding							27		5		3
Stationery							17		11		5
Salaries							228		13		4
Rent							62		9		10
" (cheque for rent not yet presented)							16		2		6
Postage							43		9		1
Expenses of Meetings							7		12		9
Life Assurance							2		9		0
Library							2		6		4
Fire Insurance							0		12		0
Bank Charges							1		5		6
Sundries							2		10		6

There is a Capital sum of £500 2½ per cent. Consols, also the Capital of the Gunning Trust Fund, £508 Great India Peninsular Railway Stock.

There are unpaid bills carried forward amounting to £186 2s. 5d.

GUNNING PRIZE FUND.

				£	s.	d.
Balance from 1914				62		13
Jan. 2nd, 1915, Dividend..				6		17
July 2nd, 1915 "				7		9
				£77		0

Dec. 31st, 1915. Balance at Bank				77		0			8
				£77		0			8

We have verified all the accounts and compared them with the books and vouchers and found them correct.

January 12th, 1916.

H. LANCE GRAY }
E. J. SEWELL } *Auditors.*

THE ANNUAL GENERAL MEETING

OF THE

VICTORIA INSTITUTE

WAS HELD IN COMMITTEE ROOM B, THE CENTRAL HALL,
WESTMINSTER, ON MONDAY, FEBRUARY 21st, 1916,
AT 4 O'CLOCK.

DAVID HOWARD, Esq., D.L., F.C.S., *Vice-President*, took the Chair.

The Minutes of the Last Annual General Meeting, held on February 15th, 1915, were read and confirmed.

The SECRETARY read the Notice calling the Meeting, and the Report and Statement of Accounts, presented by the Council, having been circulated among the Members present, were taken as read.

Mr. E. J. SEWELL moved—

“That the Report and Statement of Accounts for the year 1915, presented by the Council, be received and adopted, and that the thanks of the Meeting be given to the Council, Officers and Auditors, for their efficient conduct of the business of the Victoria Institute during the past year.”

Mr. E. J. SEWELL, in proposing the above resolution, desired to call attention to what was said in the Report about the full attendance at the meetings, as well as the discussions which followed them, which were both very encouraging. He also drew attention to the falling off in membership, and consequently in subscriptions, which the Victoria Institute, like many other societies, was experiencing. The Council were making every effort in their power to economize in expenditure. Among other steps in this direction they had resolved to refrain for the present from printing the papers read so as to circulate them before the meeting. Though this would save a sum which could not be neglected, he felt that the

action could only be justified by necessity, and that it might very probably detract a good deal from the value and interest of the discussions following the papers. He hoped that all who felt with him in this matter would do their utmost to help in improving the financial position of the Institute so that they might soon be able to return to their former practice in this respect.

The Rev. P. ROSE seconded the Resolution, which was carried unanimously.

Mr. J. O. CORRIE proposed and the Rev. R. WRIGHT HAY seconded—

“That the Council and Officers named in the Report be elected, and that the thanks of the Meeting be passed to the retiring Members of Council, Mr. W. J. Horner and Dr. Heywood Smith, M.A.”

The Resolution was carried unanimously.

The Right Rev. Bishop THORNTON proposed, and the Rev. JOHN TUCKWELL seconded—

“That the cordial thanks of this Meeting be passed to the Vice-President, Mr. David Howard, D.L., F.C.S., for presiding on this occasion.”

The Resolution was carried unanimously.

The CHAIRMAN, in acknowledging the vote, said :—“It is a great pleasure to be present at the Annual Meeting of the Victoria Institute. I have watched its work for many years, and am more and more convinced of the soundness of its principles.

“We still need, perhaps more than ever, a patient and careful investigation of new problems to see what is really the truth; and experience shows that a seeming contradiction to what we believe may be really no contradiction at all. Take, for instance, Evolution: fortuitous Evolution is given up and we hear of the laws of Evolution; where there is a law there must be a lawgiver, and we are back on the old ground, and with a change of statement. Paley's arguments hold still. Above all, let us beware of asking despairingly with Pilate, ‘What is Truth?’ If only he could have known that the answer was the Man Who stood before him.”

The Meeting closed at 4.30 p.m.

565TH ORDINARY GENERAL MEETING,
HELD IN THE CONFERENCE HALL, THE CENTRAL HALL
WESTMINSTER, ON MONDAY, MARCH 1st, 1915,
AT 4.30 P.M.

THE REV. PREBENDARY H. E. FOX OCCUPIED THE CHAIR AT
THE OPENING OF THE MEETING, AND WAS FOLLOWED BY
SIR FRANK W. DYSON, F.R.S., ASTRONOMER ROYAL, AT 4.45 P.M.

The Minutes of the preceding Meeting were read and confirmed.

The SECRETARY announced the election of the Rev. Martin Anstey, M.A., B.D., and of the Rev. George Campbell Morgan, D.D., as Members of the Institute.

The CHAIRMAN, the Rev. Prebendary Fox, invited Professor Alfred Fowler, F.R.S., Secretary of the Royal Astronomical Society, and Professor of Physics in the Royal College of Science, to address them on the subject of "The Spectra of Stars and Nebulæ."

The lecture was illustrated throughout by lantern slides.

THE SPECTRA OF STARS AND NEBULÆ.

By PROFESSOR A. FOWLER, F.R.S.

IN this lecture it will be my endeavour to give some indication of the way in which the wonderful power of the spectroscope has been utilized in investigations of the chemistry of stars and nebulæ, and of the bearing of such knowledge on the question of celestial evolution.

The only intelligible message that a star sends to the earth is borne on its rays of light, and if we are to learn anything at all of the composition and physical state of the star, it must be by the analysis of that light. The spectroscope is an instrument which enables us to make such an analysis, by taking advantage of the dispersive power of a prism or diffraction grating, whereby a complex beam of light is separated into its component parts.

Before we can understand the language of the spectroscope it is necessary to study very carefully the sources of light which can be artificially produced. If we examine the light from an incandescent solid body, such as a gas mantle or the filament of

a glow lamp, we find that the spectroscope spreads it out into a band showing the glorious colours of the rainbow in their greatest purity. The colours from red to violet merge into each other by insensible gradations, and we say that the spectrum is a *continuous* one, because there are no interruptions of any kind. All incandescent solid bodies give precisely the same result, and it follows that we cannot distinguish between one luminous substance and another so long as they remain in the solid state. The same is true of incandescent liquids.

The effects are very different when the substances examined are in the state of luminous gas or vapour. They then emit special kinds of light by which they can be identified, and it does not matter in the least whether they are in our laboratories or far away in the depths of space, so long as their light reaches our instruments with sufficient intensity. The spectra are no longer continuous, but consist of a number of bright lines of different colours, which are really a succession of images of the narrow slit through which the light is admitted to the spectroscope. Thus, hydrogen is characterized by a line in the red, another in the blue-green, and others in the blue and violet, and since these lines are exhibited by nothing but hydrogen, they serve to indicate the presence of hydrogen wherever it occurs in the luminous state. Similarly, helium signifies its presence by a number of lines, of which one in the yellow is especially conspicuous. Each of the other elements also has its own distinctive family of spectrum lines, some consisting of a few members only, but others, such as iron, occurring in hundreds.

Many compounds which can be excited to luminosity without decomposition also exhibit characteristic spectra, which are quite different from those of the elements of which they are composed.

The luminosity necessary for spectroscopical analysis may be artificially produced in various ways. Gases are usually enclosed in vacuum tubes containing the gases at reduced pressures, and are illuminated by electrical discharges. Substances which are solid at ordinary temperatures may be vaporized and rendered luminous by the oxy-hydrogen flame, the electric arc, the electric spark, and in a variety of other ways which need not now be specified.

It is most important to study the spectra in as many different ways as possible, because, in opposition to early ideas, it has been found that the same substance may give different spectra when excited in different ways. Thus, at flame temperature, or

under the action of gentle electric discharges, many substances give spectra consisting of broad bands, or flutings, such bands consisting of a multitude of very fine lines closely packed together. At the higher temperature of the electric arc these bands are replaced by lines which occupy quite different positions in the spectrum.

Further modifications, involving the weakening of some lines appearing in the flame or arc, the brightening of others, or even the appearance of new lines, are often found when the substance is submitted to the violent action of the condensed electric discharge.

Lines which are intensified, or only appear under spark conditions, have been called "enhanced lines," and it is by the study of such lines, initiated by Sir Norman Lockyer, that much of the recent progress in the interpretation of solar and stellar spectra has been due.

We see, then, that the same substance may give widely different spectra under different experimental conditions, but the spectrum is nevertheless always the same under the same conditions, and no two substances ever give the same spectrum. This multiplicity of spectra might at first sight appear to be an undesirable complication in spectrum analysis, but in reality it enormously increases the interest of observations of the celestial bodies, because it enables us to learn something of the physical conditions which prevail as well as of their chemical constitution.

We do not yet know the precise cause of the variations in the spectrum of a substance, but it is generally believed that, while band spectra are produced by the vibrations of molecules, or of electrons which form part of molecular systems, line spectra are only produced when the applied energy is sufficient to break up the molecules into atoms. As to the change in the line spectrum which is often observed on passing from the arc to the spark spectrum, modern theories of atomic structure suggest that further dissociation takes the form of the removal of one or more electrons from each of the atoms involved. Whatever the ultimate cause may be, we do know that the change from bands to lines, and from ordinary flame to arc lines, and again from arc to enhanced (spark) lines, accompanies the application of greater energy to the molecules and atoms, whether it be in the form of heat or electricity.

So far, reference has been made to emission spectra only. Kirchhoff's famous experiment of 1859 proved that a luminous vapour has the property of absorbing precisely the same kind of

light that it emits, so that if such a vapour lies in front of a source at higher temperature giving a continuous spectrum, the result is a continuous spectrum crossed by *dark* lines. This is called an absorption spectrum, and Kirchhoff's observation is of fundamental importance in astronomy, because the spectrum of the sun and the spectra of nearly all the stars show dark lines on a bright, continuous background. The experiment shows that we can identify the substances which produce such dark lines, just as surely as if they were bright, by the process of matching them by emission spectra artificially produced.

Such, then, are the main principles of spectrum analysis. We may next consider their application to celestial bodies, beginning with the sun, which may properly be regarded as the nearest star.

The dark lines which are characteristic of the spectrum of sunlight were first accurately mapped by the German physicist Fraunhofer in 1814, and have since been known as the Fraunhofer lines. In more recent times the magnificent photographs obtained by Rowland exhibit not less than 20,000 of these lines, which have been carefully entered in a great catalogue, showing their relative intensities and their positions on the scale of wave-lengths of the vibrations which produce them. The chemical significance of a great number of these lines has been determined by the application of Kirchhoff's principle of the reversal of lines, by Kirchhoff himself, and subsequently by Lockyer, Rowland, and others. The great majority of the more prominent lines have, in fact, already been matched by spectra produced in the laboratory, largely from common substances such as hydrogen, sodium, magnesium, iron, and calcium.

In accordance with Kirchhoff's experiment, we interpret the dark lines of the solar spectrum as indicating that the bright central ball of the sun—which of itself would give a continuous spectrum—is surrounded by luminous gases and vapours which produce the dark lines by their absorption. At ordinary times this atmosphere is not visible, because it is not so bright as the diffused light of the sky, but its existence is fully confirmed by observations during total eclipses of the sun, when the glare of the surrounding sky is shut off by the moon's shadow. Under these conditions the direct emission spectrum of the sun's atmosphere may be observed or photographed. In place of the usual dark Fraunhofer lines the expected multitude of *bright* lines is then observed in the spectrum at the sun's edge during the few seconds that this comparatively shallow "reversing layer" or "flash stratum" remains uncovered by the moon. It

is now generally agreed that this "flash" spectrum observed during total eclipses corresponds essentially with the dark line spectrum ordinarily observed. There are, it is true, certain divergences between the intensities of the dark and bright lines arising from the apparently undue brightness of enhanced lines in the flash spectrum, but it would take too long to discuss them and to indicate how the differences may be explained.

The reversing layer, as ordinarily understood, is about 500 miles in depth and is situated close to the sun's surface, at the base of the chromosphere, which extends to a height of about 5000 miles. The upper part of the chromosphere may be observed any time that the sun shines. The bright lines thus observed indicate that the chief gases in this region are hydrogen and helium, but during solar eruptions the lines of various elements, projected into it from the reversing layer below, are also observed. The bright helium lines of the chromosphere do not ordinarily occur among the Fraunhofer lines, but they are occasionally observed as absorption lines in the neighbourhood of sun-spots, where, it may be supposed, there are special accumulations of this gas.

It should be mentioned that the solar corona, which is the most striking feature of a total eclipse of the sun, has apparently nothing to do with the production of Fraunhofer lines. The greater part of the corona gives a feeble continuous spectrum, and it is only the inner corona which gives distinctive bright lines. The chief line is usually one in the middle green, and has been attributed to a hypothetical element, "coronium," which is not yet known in terrestrial chemistry. Strangely enough, this line was not observed in the corona of last August, but was replaced by a bright line in the red, which is also at present of unknown origin. There are no Fraunhofer lines corresponding to these unknown emissions of the corona.

From the point of view of the chemical composition of the sun, very little advance has been made on the work of Kirchhoff, Lockyer, and Rowland. Very substantial progress has been made, however, in the identification of additional Fraunhofer lines with lines of elements previously known to exist in the sun. The unidentified lines are mostly of low intensities, and it is too early to conclude that they may represent forms of matter which are special to the sun. They may, in part, correspond to still uncharted faint lines of the various metals; or, with equal probability, they may represent the constituent lines of a complex band spectrum, the origin of which has not yet been traced. It has sometimes been supposed that these unidentified lines

may represent the products of the dissociation of the ordinary chemical elements under the influence of solar temperatures, but the circumstances that nearly all the stronger lines, and many of the faint ones, have been reproduced under laboratory conditions renders this very improbable.

In the present state of our knowledge of spectroscopy, we are certainly not entitled to conclude that any unknown forms of matter are represented by the unidentified Fraunhofer lines. The only strong indication of elements not known on the earth is given by the corona, and the discovery of terrestrial helium encourages the hope that even these may yet be run to earth.

Another side of this question calls for a few remarks. Many of the known elements have not yet been recognized in the sun, and some explanation of their seeming absence is called for if we are to suppose the sun and earth to be composed of the same materials. Some of the non-metallic elements are especially notable among the missing elements, but it is a common experience of the laboratory that such elements often fail to show their spectra when they are admixed with metallic vapours. Also, the Count de Gramont has shown that in the case of several of the missing elements, non-metallic and metallic, the most sensitive lines are situated in the ultra-violet, in a part of the solar spectrum which is cut off by the absorption of our own atmosphere. Another indication that we must not too hastily conclude that elements not represented by Fraunhofer lines are absent from the sun is afforded by the detection of lithium in the spectra of sun-spots, where the physical conditions are apparently more favourable for the exhibition of this element. Further, it is quite reasonable to suppose that some of the heavier metals which fail to give spectroscopic indications of their presence may exist in the interior of the sun, where our spectroscopes are unable to penetrate.

The outcome of the spectroscopic analysis of the sun, therefore, is to indicate that although there is no complete proof of absolute identity, we should not be justified in supposing that there is any material difference in the composition of the sun and that of the earth. As Rowland expressed it, if the earth were heated to the temperature of the sun it would probably show the same spectrum.

The sun has been dealt with at some length, because it may be regarded as a typical specimen of the thousands of stars which present us with spectra which cannot be distinguished from that of the sun itself, when sunlight is taken as a whole,

and because it has the advantage of being nearer to us, so that it can be analysed more completely than the stars.

When we reflect that the stars which can be observed or photographed with the large telescopes now in use are to be counted by hundreds of millions, it will be evident that the field of investigation is practically unlimited. It is neither possible nor necessary, however, to observe the spectra of all the stars. The two or three hundred thousand which have actually been observed to the present time may surely be taken as representative examples.

Our present knowledge of stellar spectra has been made possible through the application of photographic methods. By the use of prismatic cameras with prisms of small angle, it is now possible to record the spectra of hundreds of stars with a single exposure of the photographic plate, and we are indebted to the Harvard College Observatory for a descriptive catalogue of the spectra of many thousands of stars obtained in this manner.

Such photographs only reveal the more general features of the spectra, but detailed studies of individual stars have been made with more powerful instruments by Huggins, Lockyer, and many other astronomers in various parts of the world. From the specimens exhibited it will be realized that a marvellous amount of detailed information is obtainable by this spectroscopic analysis of even the feeble light of a star, if we are skilled enough to interpret its message.

All stars are alike in the sense that they are highly-heated self-luminous bodies, but the spectroscope shows that they are not all alike in the character of the light which they emit. As already remarked, many of them are indistinguishable from the sun.

What we have already learned about the sun is therefore applicable to all stars of this class, and the presence of helium and "coronium" in such stars, for example, may reasonably be inferred, though there are no direct indications of their presence.

It was early found that, although there are many stars which are unlike the sun, the number of distinct varieties is by no means great. The first systematic investigation of a large number of stellar spectra was made in 1864 by the Italian astronomer Father Secchi, who found that the great majority of the stars could be classed in one or other of four types, numbered from I to IV, which were associated with well-marked differences of colour. This classification still serves to mark the broad features of the different classes of spectra.

It was not long before this classification of stellar spectra came to be regarded as representing something more than a mere convenience of description. If we look at a few stars at random we might see no obvious relation between their spectra, but when there is a sufficient number to choose from, it is found that the spectra can be arranged in a continuous series in which the successive types merge into each other. That is to say, the different types of stellar spectra are not abruptly divided, but are connected by spectra representing well-marked transition stages.

Here we get a definite indication of an evolution of the stars somewhat analogous to that which Darwin enunciated for organic life. The differences in the spectra of the stars are not believed to be due primarily to differences in chemical composition, but to their having reached different stages in an orderly development from masses of similar materials. The continuity of the spectral series practically compels us to believe, for example, that our sun was once a star like Sirius, and that Sirius will in due course become a star like the sun, the sun meanwhile having become a red star with a spectrum of bands. The order in which Secchi numbered his types is accordingly regarded as representing the general sequence of spectra as a star passes through different stages in its evolution, and we now speak quite freely of young, or early-type, stars, and of old, or late-type, stars.

This idea of a celestial evolution is the foundation of all subsequent attempts to classify the stars on a rational basis. While there is nearly unanimous agreement as to the sequence of the various spectral classes, different systems of naming them have been suggested. Secchi's numeration is by no means obsolete, but on the ground of greater adaptability for the distinction of intermediate types, the Harvard classification is now most widely adopted, though it is recognized that it may not be final. Here the designations are alphabetical, but it is rather unfortunate that the sequence of the letters is not in entire accordance with the order of types.

The relation of the Harvard to the Secchi classification is shown in the appended table, which also gives the chief characteristics of the spectra and indicates the names of typical examples. Intermediate stars on the Harvard system are indicated by such symbols as F 5 G, indicating that such a star is five-tenths advanced from type F to type G. It will be noted that a few classes of stars not adequately provided for in Secchi's system are recognized in the Harvard scheme. Attention should especially be drawn to the group at the head of the

series, which includes the "Wolf-Rayet" stars, showing spectra chiefly distinguished by bright lines.

This sequence of various types has been arrived at entirely

CLASSIFICATION OF STELLAR SPECTRA.

Harvard.	Secchi.	Other titles.	Special features.	Examples.
O		Wolf-Rayet	<i>Bright</i> lines of H, He, and unknown.	γ Argûs.
B		Orion	Dark lines of H and He predominant; lines of Si, C, O, N; enhanced lines of Mg and Ca.	β , γ , δ , ϵ Orionis and Virginis.
A	I	Sirian	Lines of H predominant; enhanced and arc lines of metals.	Sirius, Castor, Vega.
F	I-II	Procyonian	Lines of H less prominent than in A; metallic lines stronger.	Procyon, Canopus.
G	II	Solar	Arc lines of metals, with some enhanced lines.	Sun, Capella.
K	II	Arcturian	Enhanced lines weaker, and flame lines stronger than in G.	Arcturus, Pollux.
M	III	Antarian	Flutings of titanium oxide; flame lines of metals.	Antares, Mira, Betelgeuse, and Hercules.
N	IV	Piscian	Flutings of carbon; flame lines of metals.	19 Piscium, 152 Schjellerup.

from considerations of the spectral phenomena. It is strongly supported, however, by spectro-photometric observations which lead to approximate estimates of the surface temperatures of the stars. Thus, the Potsdam astronomers have estimated that the temperature of the N or 4th type stars is about 3300 degrees C., of the M or 3rd type 4200 degrees C., and so on to 10,300 degrees C. for the A or 1st type stars and 11,600 degrees C. for the B stars. These figures may be considerably

in error as absolute measurements, as the observations are extremely difficult, but the important thing is that the sequence of temperatures is in satisfactory agreement with that derived from the spectral lines.

There is not time to go into much detail, but it will be interesting to see what progress has been made in the interpretation of the spectral phenomena. The inclusion of solar, or second type, stars in the evolutionary scheme necessarily implies that all the stars are similar to the sun in chemical constitution, but we shall see that independent evidence of the universal distribution of terrestrial kinds of matter is to be found in abundance in the analysis of individual stars.

It will be most instructive to begin at the lower end of the series, where there is every reason to believe that the temperatures of the stars involved are relatively low, so that the reproduction in our laboratories of the lines and bands by which they are characterized should present the minimum of difficulty, provided we have the same substances to deal with.

In the type IV, or N, stars, which are all faint, Secchi himself recognized that the principal dark bands were identical with those seen in the blue base of a candle flame, and attributed to carbon. This has been beautifully confirmed by Professor Hale's photographic studies of these stars, which also proved the presence of other dark bands, due to cyanogen, in the violet region beyond the range of visual observations. Many of the numerous lines which accompany the bands are traceable to various metals, such lines being capable of production at relatively low temperatures in our laboratories. Professor Hale's photographs also show a gradual progression from stars in which the carbon bands are very strong to stars in which these bands are very weak, as would be expected on the hypothesis of evolution.

The bands which are characteristic of stars of the third, or M, type, were not traced to their source until 1904, when they were identified by the lecturer with bands of titanium oxide. There is no obvious reason why this substance should be selected for such striking manifestation in stars at this stage of their evolution, and we have just to accept it as a fact of observation and experiment; it is a significant fact, however, that the strongest of these bands occur also in the spectra of sun-spots, which we have other reasons for believing to be at a lower temperature than the solar surface in general. The *lines* which occur in the M stars are generally similar to those of the N stars.

The second, or solar, type (G, K) stars present us with the same problems as the sun, from which many of them are not distinguishable. If we look, for example, at a photograph comparing the spectrum of Capella with that of the sun, even an expert would find it very difficult to say which was which if they had not been labelled. The Harvard classification recognizes two slightly different varieties, G and K. Arc lines of the various elements are the chief features in both, but there is evidence of a greater general absorption in the violet region in the K than in the G stars. Also, the enhanced or spark lines of various known elements, to which reference has already been made as requiring greater energy than arc lines for their production, are somewhat stronger in the G than in the K stars.

The F stars of the Harvard classification are intermediate between the second and first types of Secchi. Hydrogen lines are now much stronger than in the solar spectrum, while metallic lines, as a whole, are somewhat enfeebled. A fact of special significance, however, is that the enhanced lines of various metals have gained in intensity relatively to the arc lines.

As a typical specimen of type I, or A, stars we may look at the spectrum of Sirius. The lines of hydrogen now dominate the spectrum, but among the fainter lines we recognize that the enhanced metallic lines occupy the most prominent place. A most beautiful illustration of the gradual replacement of arc lines by enhanced lines has been given by Professor Hale in a series of photographs of several stars showing the behaviour of two titanium lines which are almost side by side; the arc line occurs alone and with great intensity in the fourth type spectrum and gradually thins out in passing through the series, while the enhanced line appears about the middle of the series and remains alone when the Sirian stars are reached.

In the B stars there are a few enhanced lines of magnesium and calcium, but for the most part we find lines of non-metallic elements. Helium, which does not show its absorption lines in any of the previous types, now appears prominently in association with hydrogen. Among the remaining lines, the majority have been traced to oxygen, nitrogen, carbon, silicon, and sulphur. The change from metallic lines of previous types to non-metallic lines in B stars is especially striking.

In some of the B stars there are certain lines of nitrogen and carbon which can only be produced in the laboratory by

specially strong spark discharges, as first shown by Lockyer and his assistants.

A few of the B stars are further distinguished by a set of lines of exceptional interest. They were first noted in the spectrum of the star Zeta Puppis by Professor Pickering, who attributed them to hydrogen, although they were not found in the laboratory spectrum of this gas. The ground for this interpretation was that the "Zeta Puppis lines," or "Pickering series," appeared to have a numerical relation to the ordinary lines of hydrogen, such as had been found to exist between different systems of lines in the spectra of other elements. This view was strengthened later by Rydberg's calculation of a third, or "principal," series of associated lines, the first of which, at wave-length 4686, was also found in stars in company with the Pickering lines; the other members of this series occur in the ultra-violet beyond the range transmitted by our atmosphere, and therefore could not be observed.

On the basis of these observations and calculations, there was for many years a widespread belief in the existence of a form of hydrogen which was beyond the reach of laboratory experiments. It was frequently called "cosmic hydrogen," or "proto-hydrogen," and was thought to be a simplified form of hydrogen produced only under the extraordinary conditions which might be supposed to prevail in the hottest stars. About two years ago, however, it was found by the lecturer that these lines could be obtained by passing very strong discharges through helium, the strongest discharges in fact that glass or quartz tubes will bear.

In these experiments it is almost impossible to remove all traces of hydrogen, and in the first instance the new lines were attributed to hydrogen, in accordance with previous deductions. Numerically, the lines were closely related to the hydrogen series, and had no apparent connection with the known lines of helium.

Later work, however, has shown, in accordance with certain theoretical deductions made by Dr. Bohr, that the Zeta Puppis lines are really due to a simplified form of helium, and do not belong to hydrogen at all. They are now designated spark lines of helium, or lines of "proto-helium."

These lines, first observed in the stars, are of great importance in connection with theories of the structure of atoms, and Dr. Bohr has given what appears to be a very satisfactory explanation of the close agreement of some of them with the lines calculated for "cosmic hydrogen" by Rydberg. The point

of immediate interest is that the experimental resources of our laboratories are already sufficient for the reproduction of some of the lines which appear in the spectra of stars which are believed to be among the hottest in the heavens. It has not been necessary to discover new elements to match these celestial spectra, but only to develop new lines from old elements by increasing the energy of excitation.

The lines of proto-helium, as we may now call them, are of further importance as a connecting link between the B stars and the Wolf-Rayet stars, which present us with spectra consisting chiefly of bright lines. The familiar lines of hydrogen, and sometimes those of ordinary helium, are prominent as bright lines in these spectra, and are accompanied by several other lines among which only those of proto-helium have yet been identified. These stars seem to fall naturally just before the B stars in the order of development, and are so placed in the Harvard classification.

Nearly all the stars which have been spectroscopically examined fall into one or other of the classes which have been described, and in seeking for the antecedents of stars we naturally look to nebulae, which were regarded as representatives of the parent masses from which stars had been developed, long before the spectroscope was thought of.

Nebulae take many varied and beautiful forms, and are spectroscopically divisible into two great classes. One of these classes includes the spiral nebulae, of which several thousands are now known, and the spectra have in recent years been found to consist of dark lines very similar to those of the sun or of the F type of stars. Where to place these nebulae in a scheme of celestial evolution is a difficult problem. The supposition that they represent universes exterior to our own would, perhaps, be in best accordance with the spectra, but, as Herbert Spencer pointed out long ago, their peculiar distribution in the heavens is a serious obstacle to the adoption of this view. Any doubt which might have remained as to their consisting of the same kinds of matter as the sun and stars has now been removed, but why they should all present the same spectrum as star clusters is still mysterious.

The second class of nebulae, exemplified by the Great Nebula in Orion and the Ring Nebula in Lyra, show spectra consisting of a comparatively small number of bright lines. The chief line in the visible spectrum, in the green, has not yet been found in any terrestrial source, and has been attributed to a hypothetical element, "nebulium." Several other lines are also

of unknown origin, but others are definitely identified as belonging to hydrogen and helium. In some cases the chief line of proto-helium at wave-length 4686 is also present and serves, with helium and hydrogen, as a connection between the nebulæ and Wolf-Rayet stars.

Very important evidence in this connection has quite lately been obtained at the Lick Observatory, where some of the most characteristic lines of nebulæ have been found in the atmosphere round one of the Wolf-Rayet stars, while the chief lines of these stars have been proved to occur in the nuclei of several planetary nebulæ. It can scarcely be doubted, therefore, that the Wolf-Rayet stars of class O represent the first results of the condensation of the gaseous nebulæ to stellar forms, and, as we have seen, they stand at the head of the stellar sequence.

The spectral sequence from nebulæ, through the Wolf-Rayet stars to the various classes of white and yellow stars, to the red stars, and presumably onward to a stage where luminosity ceases, thus seems to be complete. It cannot be claimed that every star falls into this scheme, but only that this is in all probability the normal course of the evolutionary process. There are a few stars which for the present we must be content to regard as "peculiar."

The widely accepted view that the ancestors of stars are represented by the gaseous nebulæ would seem to require that these bodies should contain all the materials, of which stars are known to be composed, and it has been quite properly felt that some further explanation of the simplicity of the nebular spectrum is called for. The explanation given by Tait, and advocated by Sir Norman Lockyer in connection with the Meteoritic Hypothesis, is that nebulæ are swarms of meteorites, in which gases released by collisions are rendered luminous by electrical discharges, thus accounting for the bright line spectrum, while the metallic elements remain in the solid form and consequently exhibit no spectrum at all.

Another view is that in the nebulæ most of the chemical elements do not exist in the finished state, but are gradually evolved from the nebular substance as condensation proceeds.

Remarkable mathematical work has been done in this connection by Professor Nicholson, who has found close agreements between the theoretical vibrations of atoms of assumed simple structure and those which are represented by the nebular and other lines actually observed in nebulæ. He concludes that the nebulæ must be largely composed of a set of chemical forms, not found in the Periodic Table, which are the simplest forms in

which matter can exist; and that these are the atomic structures from which all the heavier elements have been derived by an evolutionary process which must be the exact converse of radio-activity. Since the modifications of atoms which occur in radioactive processes consist of the expulsion of α and β particles from the nuclei of the atoms, it may be supposed that change of stellar condition proceeds by a progressive modification of the atomic nuclei. Professor Nicholson has ventured so far as to give the name "Archonium" to the hypothetical element which he holds responsible for a strong nebular line in the ultra-violet (wave-length 3729), and has even calculated its atomic weight as 2.95. Very substantial support of his deductions is afforded by the work of Fabry and Buisson in quite a different direction, their measurements of the breadth of the line in question having led them to a value also approximating to 3 for the atomic weight of the element producing it. For the other hypothetical element, nebulium, the deduced atomic weight is 1.3.

Professor Nicholson has further found that some of the unknown lines which are observed in the Wolf-Rayet stars may be calculated from some of the constants relating to nebulium, such lines representing atoms which are the first products of an evolution from the still simpler atoms of the nebulae. Hydrogen, and perhaps helium, may be the next in order of development.

The spectrum of a nebula has been aptly described by Professor Nicholson as the "spectrum of chaos." He tells us that, whatever may be the case with terrestrial atoms, the electrons in a nebula are not held firmly in the atoms, and that a continual interchange of electrons must be taking place, with a necessary bombardment of atoms by free electrons, to which the luminosity of nebulae is probably due. The physical state of a nebula must be analogous to that of a highly exhausted vacuum tube of enormous extent.

If time had permitted I should have referred to the changing spectra of "new stars," which seem to me to give pretty definite evidence that, in spite of its simple spectrum, a nebula either actually contains such substances as iron or the materials from which such elements can be evolved.

The subject of this lecture is a very large one and could hardly be dealt with adequately in the course of an hour. I hope, however, that I have been able to give some indication of the nature of the evidence in favour of celestial evolution, and of the way in which the efforts of astronomers, experimentalists, and mathematical physicists have been combined in the attempt to trace its course.

Further investigations in many directions are still needed to complete the story, but all the modern work tends to strengthen our belief in the chemical unity of the universe, and in an evolutionary development of stars from the primitive condition represented by nebulæ.

DISCUSSION.

The CHAIRMAN (Sir FRANK W. DYSON, Astronomer Royal) regretted that he had not been present at the opening of the Meeting, as he had been delayed by an accident on the railway line. It would have given him great pleasure to have introduced Professor Fowler to the Meeting. A large part of the recent progress in the application of the spectroscope to astronomy had been due to Professor Fowler's own work; he it was who had been successful in identifying the dark bands in the orange stars, with bands given by the oxide of titanium; similarly he had identified the elements giving rise to the dark bands seen in the spectra of sun-spots; he had obtained photographs of the spectra of the tails of comets, and identified the corresponding elements; he had also identified some of the most interesting hydrogen lines in stellar spectra. In many ways the Lecturer had made contributions to science in this department of the very greatest importance.

The subject of stellar spectra is one of great complexity, for the stars present us with differences, not only in the substances shown, but in the temperatures at which they exist, and these may be so high that we are not able to work with them in our laboratories. The result of between 50 and 60 years' work has been to show how the spectra of stars may be classified, and that they can be arranged in a continuous sequence. In chemical constitution they are very like the sun, and they differ from it in that some are hotter and some are cooler, the temperatures ranging from about 3000 degrees C. up to 12,000 degrees C. When we notice that these two lines of observation agree—that is to say that we get the same order of sequence when we group the stars according to their temperatures as when we group the stars according to their spectra, we must conclude that we are watching stars that are in the process of cooling. It is difficult to take any

other view than that we see the stars in order of temperature, and that our sun once had a higher temperature, and that that temperature is gradually and slowly falling.

The subject thus presented to us is one of the greatest philosophic interest. We find in the stars, in the main, the same substances which are found upon the earth, and we have good hope that we shall yet find—perhaps in Professor Fowler's laboratory—the remainder of the unknown substances represented in the spectra of the stars and nebulae. The final conclusion is that the stars differ from one another greatly in temperature, but are composed of the same substances as the sun and earth.

Mr. WALTER MAUNDER rose to propose a vote of thanks to Professor Fowler not only for the high value of the lecture, but for the personal sacrifice which had been involved in his delivering it to them. Professor Fowler was a very busy man, and of his two assistants, one had recently enlisted and the other was ill at the present time, so that Professor Fowler was single-handed. He has himself borne a large and very important part in the marvellous discoveries which have been made by means of the spectroscope, and only a fortnight ago the Royal Astronomical Society gave him its gold medal; nor has that medal ever been more worthily bestowed. Of all the discoveries made during the last hundred years, those made in connection with the spectrum have been the most fascinating and romantic of all, if, perhaps, we except the decipherment by Rawlinson and others of the cuneiform inscriptions, whereby a crowded mass of wedge-shaped dents were revealed as written languages, and made to yield up their meaning. The reading of the language of the lines of the spectrum is not less striking; indeed, in one respect it is more striking still, for the rainbow, which is the typical example of the spectrum as we find it in nature, shows no lines—these had to be discovered. The story, therefore, reminds us of the romance of the "Gold Bug," told by Edgar Allan Poe. There the cryptogram to be interpreted was written in invisible writing, which had first to be brought to light and afterwards deciphered.

One research of great interest in which Professor Fowler had borne an important part was the interpretation of a series of hydrogen lines first noted in the spectrum of a somewhat faint star in the southern hemisphere. The hydrogen lines given by the great

white or bluish stars, such as Sirius or Vega, here were supplemented by a second series interpolated between them, and the establishment of the significance of the relationship of the two series has been partly Professor Fowler's work.

A research of enthralling interest has been carried out within the last few years by Professor Nicholson, and the work is still being carried on. If we may so express it, he has been constructing artificial elements in his study; that is to say he has been computing the spectrum which an atom of a given type of structure would yield. In this way he has been able to show that lines in the spectra of nebulæ, of the sun's corona, and of certain peculiar stars generally known from the names of their discoverers as Wolf-Rayet, are typical of elements more simple in structure than any with which we are acquainted in our laboratories. The structure of such an atom may be imagined by likening it to a sort of solar system in the infinitesimal. Round a sphere of positive electricity of relatively great mass a few electrons of negative charge but very small mass revolve rapidly; it is from their vibrations that the lines of the spectrum proceed. Thus the rainbow has given us a clue as to the most intimate structure of elements, some of which we have never yet met with on our own planet.

Colonel MACKINLAY had great pleasure in seconding the vote of thanks to Professor Fowler. There was one question which he would like to ask Professor Fowler. It was well known that there were some double stars of which one was visible to us and the other invisible; would it be possible to get the spectrum of the invisible star?

Professor FOWLER said that it was possible to detect the movements of stars in the line of sight by the displacement of the lines in their spectra, and in that way, in some cases, they had obtained evidence of the existence of non-luminous stars in association with visible stars. It was theoretically possible that such a non-luminous star might be hot enough to produce some thermal effect, to yield a spectrum in the invisible region in the infra-red, and such spectrum might give traces of absorption. At present, however, this was an excursion into the realms of romance; it was not within our present powers.

Mr. SUTTON proposed a hearty vote of thanks to the Astronomer Royal for presiding that afternoon. They had heard that afternoon

about the possibility that an evolutionary process was going on in the starry universe. He would like to ask whether the evidence for that evolution was positive or merely negative; that is to say, had we direct evidence that this process was going on at the present time, or did the ascertained facts merely show that astronomical science revealed nothing which would render such a belief untenable?

Colonel ALVES seconded the vote of thanks to the Chairman.

The CHAIRMAN, in acknowledging the vote of thanks, said that unless we assumed an evolutionary process, we could give no explanation of the order that we recognized in stellar spectra.

The Meeting adjourned at 6.10 p.m.

573RD ORDINARY GENERAL MEETING,
HELD IN THE CONFERENCE HALL, THE CENTRAL HALL,
WESTMINSTER, ON MONDAY, DECEMBER 13TH, 1915,
AT 4.30 P.M.

SIR FRANK W. DYSON, F.R.S., ASTRONOMER ROYAL,
IN THE CHAIR.

The Minutes of the preceding Meeting were read and confirmed.

The SECRETARY announced the election of Mr. William Barnett, F.R.A.S., as a Member of the Institute, and of Mr. Maurice Gregory and Dr. A. Withers Green as Associates.

The CHAIRMAN introduced Professor A. S. Eddington, F.R.S., Plumian Professor of Astronomy in the University of Cambridge, and invited him to deliver his lecture on "The Movements of the Stars."

The lecture was illustrated throughout by lantern slides.

THE MOVEMENTS OF THE STARS. BY PROFESSOR
A. S. EDDINGTON, F.R.S., Plumian Professor of Astronomy
in the University of Cambridge.

WHEN you come to hear an astronomical lecture, you come prepared to quit this earth for a time and to take a long journey out into the vast territories of the sky. But the lecturer may lead you a comparatively short journey, or a long one. He may only ask you to accompany him a paltry distance of a few hundred million miles in order to show you Mars or Jupiter or the other planets of the solar system; or perhaps the comets that wander among them may be the subject of his discourse. In that case you are still more or less at home; the same sun which we see in England—sometimes—will light you on your journey, and you do not seek to quit his small empire where he rules supreme.

On the other hand, the lecturer may presume further on your acquiescence. He may lead you through the midst of the universe of stars as far as the mind can conceive. That is where I ask you to accompany me to-day. As we pass through their midst, the constellations dissolve into unfamiliar forms. The sun has shrunk to a point of light, and is just one star among the crowd. As for the earth, perhaps it would be best for our sense of proportion if we could forget that so insignificant a globe ever existed.

Our journey must be somewhat hurried; if we moved with the speed of light, the exploration of the universe of stars would take thousands of years. We should take four years to reach the nearest star—other than the sun. But we shall move with the speed of thought and leave the laggard light-waves far behind.

We are going, then, to consider the stars—the fixed stars they are often called to distinguish them from the planets; but the name is a particularly unfortunate one, since our subject is the movements of these “fixed stars.” It is a numerous company with which we have to deal. A photograph of the sky shows it crowded with these tiny points of light, and each point means a body of the same character as our sun—a globe of fire which may be anything from a million times the size of the earth upwards. Many of the stars are even bigger and brighter than the sun, only they are so far off as to be reduced to mere points. We can scarcely doubt that some at least of them have families of planets circulating round them, to which they give light and heat as the sun warms and illuminates the earth, but there is no evidence whatever on this point.

We ought to begin by getting some idea of the scale of this stellar universe. The stars number some hundreds of millions—a number that is quite inconceivable. I am sure that no astronomer can grasp such numbers, and I doubt whether even the Chancellor of the Exchequer can do so. But, though the number of the stars is vast, it is not a number beyond experience. If we took every star that has been seen or photographed, or indeed every star which could be photographed with the most powerful telescope yet built, and divided them among the inhabitants of the British Empire, it is unlikely that there would be enough stars to go round.

But when we come to the distances of the stars, the numbers are—to say the least—unusual. The nearest star is distant 24,000,000,000,000 miles, and that is only the beginning, because we must consider some of the most distant stars. However, if I were to add three more noughts on to that last number, that would represent a limit beyond which we shall not attempt to penetrate; in fact, we should be getting near the limits of the stellar system, at least in certain directions.

The distance which separates the sun from the nearest star is much the same as that which separates any typical star from its nearest neighbour. To form some idea of the sparsity of the stars in space, take a sphere with the sun as centre and radius a hundred billion miles (four times the distance of the nearest

star); this would contain about thirty stars—we actually know the identical stars contained, or most of them. On a smaller scale this would be represented by thirty tennis-balls distributed through a volume of space as large as the earth. Imagine thirty tennis-balls wandering about in the whole interior of the earth; that represents the fine-grainedness and sparsity of stars in a typical portion of space. There is plenty of room for the stars to move without much fear of collisions. We are often inclined to think of the celestial bodies as moving under nicely-balanced forces, each with its own path arranged to prevent disaster; however that may be in the solar system, there is no need for regulation of the traffic in interstellar space. There is any amount of room for each star to take its own course, and the duty of a look-out man would be a sinecure.

That being the case, are we to regard each star as an independent islet in space, unrelated to any other? That is the grand question of stellar astronomy. With thirty tennis-balls distributed through the whole terrestrial globe, can we imagine anything more unlikely than that any connection should bind one to another? Is each star an independent entity; its birth, its motion and its history having no relation to any other? Or are there signs of some community of origin by which we can group the stars into relationship? In fact, is the universe a chaos or a system? I use the word *chaos* in no depreciatory sense, for it is one of the beautiful discoveries of science that out of chaos proceed some of the most simple and uniform laws of Nature.

Various suggestions were at one time made that the stars revolved around some central sun. Alcyone in the Pleiades was suggested for this centre, for reasons which seem to have been more sentimental than scientific; but we now know there is no simple arrangement of that sort. Very recently, however, there have been discovered anomalies in the way stars are moving, which, however they may be interpreted, forbid us to think of the universe as a pure chaos of stars. There seems to be some sort of association between even the most widely separated stars.

The clue to these associations is in the movements of the stars. In the early days of astronomy the fixed stars were regarded as marking out a definite background against which we could record the movements of the wandering stars or planets. They were like the figures on the dial of a clock by which we tell how the hands are moving. But in 1718 Halley, just before he became Astronomer Royal, made the discovery that

some at least of the fixed stars were in motion. The star on which in particular he based this conclusion was Arcturus; there was no doubt that this star was changing its position with respect to the surrounding stars. It is interesting that this famous old star—mentioned, as we know, in the Book of Job—should be the one to open up a new branch of astronomy.

Now what does the change of position amount to? We now know that Arcturus is exceptionally fast-moving, but not the fastest; in fact, about twenty stars are known to exceed it in speed. I am speaking here of apparent rate of progress across the sky, not the actual velocity in miles per hour. The apparent rate is, of course, influenced by the nearness or distance of the star. The quickest of all is a telescopic star in the Southern Hemisphere (C.Z. 5h. 243), which travels at the rate of nine seconds of arc per year. As that may not convey much impression to you, I will put it another way. You know Orion and the three stars that form his belt. I will use the belt as a sort of standard race-track in the sky. The fastest star would take 1,050 years to travel from one end to the other of Orion's belt. That does not seem a very rapid rate, but still it is something quite appreciable without need for specially refined measures. Arcturus would take about 3,000 years to do the same course. But speeds so great as this are quite exceptional; a sort of average motion would be about one-twentieth of a second per year, or Orion's belt in 180,000 years. That is getting down to something very minute, but still it is quite practicable to detect this and even considerably smaller movements with certainty.

We have now at our disposal the measured movements of some thousands of stars, which we may proceed to examine.

There are a number of cases in which these motions reveal at once connections between stars which are certainly widely separated from one another, and between which we should scarcely have expected that any relation could exist. Incidentally we find that many pairs of stars near together in the sky move along together, and in such a group as the Pleiades all the stars have a common motion; but this tendency to a common motion is found in some much more widely scattered stars. If we select a certain region of the sky comprising Perseus and parts of the surrounding constellations, and take, not all the stars, but those characterized as particularly white-hot—as we should say, stars of the helium type of spectrum—it is found that these stars by their movements are sorted out into two distinct groups. The stars of one set are moving moderately

fast, and the motion is the same in amount and direction for all of them (within the limits of observational error); these must clearly be associated. When we have picked out the stars of this group by their characteristic movements, and turn to see where they really are in the sky, we find that they form a long, rather open, chain stretching over quite a large arc in the sky—like a row of skirmishers advancing together.

Turning for a moment to the other set, we find that they are characterised by extremely small motions, scarcely detectable. We cannot infer that there is any relationship between these. The small motion may, and probably does, mean that all of these stars are extremely distant; the actual movements may be quite diverse and unconnected, but distance has diminished the scale so that we can scarcely observe their differences of motion. We have, therefore, detected a “moving cluster” of helium stars in the Perseus region, each moving with the same velocity across a background of much more distant stars of the same type.

Another case of this kind is afforded by the Great Bear. Of the well-known stars forming the Plough, the five middle ones share just the same motion. The tip star of the tail and one of the Pointers do not belong—their presence is only accidental—but the other five are moving in exactly the same direction with the same speed as accurately as we can detect. But there is a still more curious fact: the Dog-star, Sirius, is also a member of this system. We happen to know the motion of Sirius thoroughly—not merely its apparent progress across the sky, but its actual linear motion in three-dimensional space—and it fits in exactly. The evidence is the more convincing because the system happens to be proceeding in a direction which is very unusual. (We shall see later that some directions of motion are much more common than others.) Very few stars are taking a course at all approximating to that of the Great Bear system; so when we find Sirius going in just this direction with just the right speed it is a pretty clear case. There are a few other stars in different parts of the sky which also seem to belong to this system, but we are not so certain of them as we are of Sirius. You now see that the constellations in the sky do not correspond well with the real relations of the stars. Taking the Great Bear, we have had to cut off two stars which are not really of that system, whereas Sirius, which is quite the other side of the sky, apparently in the Great Dog, must really (according to physical relations) count as part of the Great Bear. If only this had been known to the old mythologists I am sure they would

have given us an entertaining legend as to how so important a part of the Great Bear has come to be situated between the teeth of the Great Dog.

In this connection you may be interested to know that the constellation Orion, except for one corner star (Betelgeuse), is probably a real physical system of stars, and not just an accidental configuration.

This Great Bear system extends our ideas of associations of stars enormously. The sun is more or less between Sirius and the stars of the Plough, so that the sun, and in fact many other stars, must be actually interloping in the Great Bear system. The tie is not between neighbouring stars, but between stars almost arbitrarily picked out from the crowd, with numbers of unassociated stars interspersed between. What may be the nature of the tie admits, I think, of only one opinion—the members must have started off from a common origin. Very slight deviations from truly parallel motions have in the course of ages made them spread wide apart; but they still preserve their common velocity almost unaltered, because nothing has ever happened which could disturb them.

But the flock of stars which has been most extensively studied is in the constellation Taurus. Our knowledge of this system is due to the late Professor Lewis Boss. Thirty-nine stars have been recognized as belonging to the group, and no doubt many fainter stars belonging to it will ultimately be detected. These stars cover a considerable area in the sky. If we mark their motions on a map or globe, we find that the motions all converge to a definite point or vertex. By the theory of perspective we know that that is what would happen if the actual motions in space were along parallel lines. Further, the apparent motions (which are rather large) are nearly equal for all these stars. We conclude that they form a moving cluster of the kind we have been considering.

Now, from this fact we are able to measure the distances of all the thirty-nine stars.* The distances range from 600 to 900 billion miles; so that the cluster is about 300 billion miles deep; light would take fifty years to cross it from side to side. We could not have measured the distances of these stars by the ordinary method of parallax—they are too remote for that;

* This piece of geometry was described in the lecture with diagrams. It is only necessary to know the position of the convergent point, the positions and proper motions (in angular measure) of the stars, and the spectroscopic radial velocity of *one* of the stars.

but by this roundabout argument it is possible to plumb depths inaccessible to the usual method.

Also now that we know the distances we can calculate the actual brightnesses of these bodies. It turns out that all of them are more brilliant than the sun:—

5	have a brightness from 5 to 10 times that of the sun.
18	” ” ” 10 to 20 ” ” ”
11	” ” ” 20 to 50 ” ” ”
5	” ” ” 50 to 100 ” ” ”

I do not want to give you the impression from this that our sun is a very inferior star. The sun really occupies a very respectably high position among the stars. But there is a very natural tendency for us (in making these researches) to notice the very bright exceptional stars and overlook the vast multitudes of lesser bodies. I have little doubt that in this cluster the thirty-nine stars that have been found are just the exceptionally bright lights, and there will be a whole host of fainter ones to be picked out some day.

It is possible to trace the past and future of this interesting group; 800,000 years ago it made its nearest approach to us, being then about one-half its present distance. It is now receding, and as it becomes more distant it will contract and become more concentrated. At the same time the stars will grow fainter. In 60 million years, if the motion is not disturbed, it will look like a globular cluster about 20' in diameter.

It would be interesting to know if the well-known globular clusters seen with the telescope are really groups like this. It is rather doubtful, but there is a great deal to be said for this view. If that is so, we can form a fair idea of what globular clusters are like, now that we have fairly full knowledge of one specimen. The very nearness of this Taurus cluster makes it lose effect as a picture; the stars are brighter, but the concentration is lost. A globular cluster is like an impressionist picture: you must stand well away from it to see it to advantage.

We must now leave these special groups of intimately related, though widely-scattered, stars, and turn to certain vaguer but much more widespread laws of stellar movement. If you take a region of the sky at random, and map out the principal stars with arrows showing the way they are moving, it is usually quite conspicuous that the arrows tend to point in one special direction. Not all the stars are moving

the same way ; but, as a matter of averages, there is a large preponderance of arrows in a particular direction. This general motion of the stars is a most conspicuous phenomenon. The first man who detected it was Sir William Herschel, and, although at that time he had only seven stars of known motion to work with, he detected even in those few stars the systematic movement, and (no doubt rather luckily) he pointed out quite closely the point towards which the motion was directed.

At first sight this seems a remarkable bond between the stars, widely scattered as they are ; but a little consideration shows that it is illusory. When you are in a train, waiting at a station with another train alongside, if one train starts it is often difficult to tell whether it is your own train or the other that is moving. For some reason, I believe, there is a tendency to guess wrong ; you think it is the other train moving backwards when it is really your own train moving forwards. Now, in the stellar universe we are in an even worse position : not only is it impossible to tell whether the effect which we see is really the whole system of the stars moving towards Canis Major, or our own sun, carrying the earth with it, moving in the opposite direction towards Lyra—not only is it impossible to find out which of these is taking place, but even the distinction between the two ideas disappears. Relative to the sun, the stars are moving towards Canis Major ; relative to the stars, the sun is moving towards Lyra—either phrase expresses the same fact, and it is impossible to go behind it and say which, if either, is at rest.

But the point of immediate importance is that, if the whole effect can be attributed to a motion of the sun, it clearly cannot imply any particular bond among the stars. To find any trace of organization we must look further, and, making allowance for this solar motion, as it is called, see if the residual movements of the stars show any peculiarities, or if they are haphazard.

It was in 1904–5 that Professor J. C. Kapteyn, of Groningen, first examined this question thoroughly and showed that the stars are not moving in a haphazard way. He arrived at the startling result that the stars form two great streams moving through one another. What an amazing conception this is ! I have tried to show the enormous scale of the universe of stars ; and now we find that they are ordered in two mighty streams. If you will follow me through a somewhat elaborate argument I will show how these two streams manifest themselves.

[The evidence was shown by means of a number of diagrams summarizing the statistics of the proper motions of the stars, each diagram corresponding to a different region of the sky. The diagrams show that in each case there are two favoured directions of motion along which the stars tend to move more predominantly than in other directions. For comparison, it was shown what kind of a diagram we should obtain if the stars were moving haphazard (except for the solar motion already mentioned); and it was pointed out that this was entirely different from the diagrams representing what is actually observed. Finally, a method of dissection was explained by which we can show that the observed motions would correspond very closely to two streams moving in definite directions.]

I have shown you diagrams for eight different regions of the sky, and in this particular case the whole sky was divided into seventeen equal regions. I daresay there may be some even in this audience, cynical observers of human nature, who may suspect that I have picked out the best examples to support what I am trying to persuade you, and that the other nine regions might not look quite so convincing. You know the frailties of scientists. Well, you are right. Three of the remaining regions show the effect well enough; but in the other six there is very little that suggests two streams. But if I hold out my arms to represent two streams, from in front you see them plainly separated; imagine them looked at from all points, above, below, to one side and the other—as we look at the star-streams in different parts of the sky. There are some points of view from which the two arms would come into line and not be seen separated. The six remaining regions of the sky are just those regions where the point of view necessarily confuses the two star-streams—where they come more or less into line. The fact that we do not separate them plainly in these regions is all in favour of the theory, and confirms us in believing we are on the right track.

It is interesting to plot on a globe the directions of the two streams, found in the different regions of the sky discussed in these investigations. If we pick out one of the streams—Stream I—the directions found for it all converge to a point on the globe. That means that the Stream I directions are parallel, or nearly so, in all parts of the sky. Similarly the directions of Stream II are found to converge. In other words, the different parts of the sky agree in showing the *same* two favoured directions of motion.

The result of a number of discussions of different series of

proper motions, as well as some work on radial velocities, is to give a fairly definite knowledge of these two streams. Stream I is moving faster relative to us than Stream II, and it contains rather more stars than the latter in the proportion of 3 to 2. The two motions are inclined to one another at an angle of about 100 degrees. But these motions are distorted by our own arbitrary point of view, since we are looking at them from the sun, or—what comes to the same thing—the earth. If we clear out the solar motion we shall find that the two streams are moving, not at an obtuse angle, but in exactly opposite directions. (That sounds like a remarkable fact, but in reality it is only a truism.) Further, the line along which they move (in opposite directions) is exactly in the fundamental plane of the stellar universe, viz., the plane of the Milky Way. The stars are not scattered in a globular form, but flattened something like a bun. The plane of the bun is marked conspicuously in the sky by the Milky Way, and it is interesting to find that the two great streams of stars move in that plane.

We are led then to a conception of the stellar universe in which there are two vast streams of stars sweeping through one another in opposite directions. They are thoroughly intermixed and interpenetrating. Of course the stars do not move exclusively in the two directions; but they are two preponderating tendencies. I do not think that any objection can be taken to this *description*; it is, I believe, an inevitable conclusion from the observations. But we need not jump to the conclusion that these two streams—these two opposing tendencies—really indicate that two great systems of stars have come together and are rushing through one another. That may be the case, and it is the most obvious and direct interpretation of what we see. But I think most astronomers would rather cling to the idea of some essential unity in the stellar system, believing that the two streams arise in some natural way as parts of one whole. However that may be, it is safe to *describe* what is going on as a streaming of the stars in two directions; we are introducing some amount of speculation when we *account* for these streams as two definite systems.

There is yet another remarkable thing that we have recently learnt about the movements of the stars. You know that by the spectroscope a minute examination of the quality of a star's light can be made, and important conclusions as to its physical condition deduced. The spectroscope, like a prism, spreads out the different constituents of the star's light

side by side for detailed examination. Without going into technicalities we may say that the appearances of these "spectra" are sufficiently distinctive to enable us to group the stars into different classes according to the quality of their light. Those who have studied these questions are pretty well agreed that these classes or "types" represent different stages in the life of a star, and we may class the stars in this way as young, middle-aged or old. Now the remarkable result has been found that on the average the older a star is the faster it moves. I refer now not merely to its apparent displacement across the sky but to its actual speed in miles per second. There is a steady increase in the speed from about 6 km. per second for the youngest stars to 17 km. per second for the oldest.* That is true provided that you take the average of a considerable number of stars; of course, speeds of individual stars may differ widely from the average of their type.

I have only described to you our studies of the *movements* of the stars. In another branch of the subject parallel investigations are being made of the distribution and magnitudes of the stars, which are also extending our knowledge of the stellar universe. It appears from these that we are in the midst of a great mass of stars arranged in an oblate or flattened shape, something like a bun, or perhaps a lens. We are somewhere towards the middle of this distribution. In its thinnest direction our telescopes penetrate quite easily to the limits, or rather to the place where the stars thin out very much, for we cannot suppose there is a definite edge. Round the circumference of this mass, and continuing its plane, are coiled a great series of star-clouds which appear to us as the Milky Way. The whole structure would probably bear some resemblance to one of the flat spiral nebulae which form such remarkable objects in the sky.

We know scarcely anything about these spiral nebulae, but the question suggests itself, may they not be replicas of our own stellar system? That is to say, island universes, not contained among the stars but separated from them at a much greater distance than any we have yet spoken of? There are some hundreds of thousands of these spiral nebulae, so that the conception is almost appalling in its vastness. Suppose that

* I have given, in accordance with the usual practice, the average value of one component of the motion, *e.g.*, the velocity of recession or approach. The three-dimensional speeds are twice the values given.

each one of them is a great system, equal to the great system of hundreds of millions of stars that we have hitherto considered. The name "nebula" has been used to denote a number of celestial objects having entirely different characters; the great gaseous irregular nebulae, such as that in Orion, are undoubtedly within the stellar system; but the spiral nebulae are not at all of the same character, and we have as yet no evidence as to whether they are within or without the system.

The spiral nebulae are a great puzzle; if they are not other universes, it is hard to say what they are. Many astronomers consider that we should not let our imaginations run to such grandiose ideas until we have some clear evidence that they cannot be within our own system. The stellar system is vast enough beyond conception. Can we not be content with it? Must we still run on

"From star to star, from kindred sphere to sphere,
From system on to system without end"?

I do not agree with this prohibition; it seems to me that in the absence of definite information we may, nay we must, keep both alternatives before us. And for the moment the idea that the nebulae are stellar universes co-equal with our own seems to present great advantages as a working hypothesis. It suggests a model of our own system which we can try to follow out and test. For instance, Mr. Easton has discussed how the Milky Way works out in detail on the assumption that it is the outer part of a spiral. Again, all the spiral nebulae known are double spirals, that is to say, they have two arms. We do not understand the dynamics of spiral nebulae, but I think it is clear that matter must be flowing in along the two arms, or flowing out—it does not matter which. Let us suppose it is flowing in. Now, taking the stars in our own neighbourhood, will there not be some trace there of the two opposing currents which flow in from opposite directions? That gives us a possible interpretation of the two star-streams as due to the two arms of the spiral. Moreover, the line of flow is—as it should be—exactly in the plane of the spiral, *i.e.*, of the Milky Way. That is at least one point in favour of the island universe theory.

Marcus Aurelius wrote in his "Meditations"—

"Now among them that were yet of a more excellent nature, as the starres and planets, though by their nature farre distant from one another, even among them beganne some mutual correspondencie and unities." (Casaubon's translation.)

We have long ago learnt to recognize that the planets are mutually related and form a system governed by a simple physical law; but among the stars the "mutual correspondance and unities" has been hard to find. I do not think we shall ever see in the great stellar universe that harmony of movement which prevails in our own little system; there will be no music of the spheres; but we are learning that there are associations, vague though they may be, which bind star to star and unite even the most distant of them into some kind of an organization.

DISCUSSION.

The CHAIRMAN invited the Meeting to return their cordial thanks to Professor Eddington for the admirable Lecture to which they had just listened. They were particularly grateful to him for taking their minds away from the War and all its sorrows and anxieties and turning their thoughts to so lofty and attractive a subject.

Professor Eddington had referred to the researches of several other astronomers in this particular field of astronomy, but he had been silent as to his own work. But this enquiry into the existence and relationships of stellar systems, as evidenced by the movements of stars, was one in which Professor Eddington had done especially valuable work. Earlier in the year Professor Fowler had shown the Institute how the evidence of the spectroscope as to the constitution of the stars pointed to the unity of the stellar universe; now, from a line of evidence quite distinct in character, that unity was shown from the mutual correspondences in the movements of the stars.

Mr. MAUNDER said: A well-known astronomer not very long ago expressed the fear that the progress of the science would inevitably slacken because the number of data which were being accumulated would greatly exceed the power of scientific men to discuss them. Fortunately, we possess men who are able enough and bold enough to tackle these problems. Thus in three succeeding Sessions of the Victoria Institute we have been favoured by addresses from Dr. Chapman, Professor Fowler and Professor Eddington, each dealing with a special aspect of the problem of the sidereal universe; each a chief worker in the department which he expounded. Dr. Chapman showed the Institute how the number of the stars had been determined; Professor Fowler placed before us

the evidence of the chemical unity of the stars, and the course of the successive changes through which they passed. And now Professor Eddington has revealed to us the evidence which the movements of the stars supply as to the form and structure of the sidereal universe. These three remarkable addresses, all in different ways from different lines of evidence, lead up to one and the same conclusion: the whole celestial universe forms but a single organic structure. I have great pleasure in seconding the vote of thanks to Professor Eddington.

The CHAIRMAN said that the lecture to which they had listened was scarcely one for discussion in the ordinary sense, but if any members present had any questions which they wished to ask, he was sure that Professor Eddington would be pleased to answer them.

A number of questions were accordingly asked by the Rev. J. J. B. COLES, the Rev. Canon E. MCCLURE, Professor LANGHORNE ORCHARD, Mr. M. L. ROUSE, and others.

Professor EDDINGTON, in replying to these enquiries, stated that some of the eighteen observatories engaged on the Astrographic Chart had completed their share of the work; others were very much in arrear, and it was to be feared that the war would greatly postpone its completion. With regard to variation in the law of gravitation throughout the universe, it was difficult to determine what would be the relation between the particles of matter in a nebula. With regard to the suggestion made by Mr. Shaw in a recent paper before the Royal Society as to the possibility of the constant of gravitation changing with the temperature, he felt it very unlikely that astronomers would accept it. As to the place of the sun, it did not appear to be a member of either of the two streams which he had described. In reply to Professor Langhorne Orchard, astronomers of course meant by "the age of the sun" the stage of development which it appeared to have attained. To Mr. Rouse the reply was that there was no significant relation between the poles of the Milky Way and of the Ecliptic. The pole of the Milky Way appeared to be in the constellation Coma Berenices.

A very hearty vote of thanks was returned by the Meeting to the Lecturer, and the Meeting adjourned at 6 p.m.

574TH ORDINARY GENERAL MEETING.

HELD IN COMMITTEE ROOM B, THE CENTRAL HALL,
WESTMINSTER, ON MONDAY, JANUARY 17TH, 1916,
AT 4.30 P.M.

A. W. OKE, ESQ., B.A., LL.M., IN THE CHAIR.

The Minutes of the preceding Meeting were read and confirmed.

The SECRETARY announced the election of Mr. Benjamin Akhurst, the Rev. John William Fairhurst, the Rev. Matthew Butterworth Moorhouse, and the Rev. P. Rose, as Associates of the Institute, and of the Rev. Isaac Levinson as Missionary Associate.

The CHAIRMAN asked Mr. E. J. Sewell to address the Meeting on the subject of "The Principles governing Bible Translation."

THE PRINCIPLES GOVERNING BIBLE TRANSLATION. By E. J. SEWELL, Esq.

TRANSLATION of the Bible is a special case of the problem of translation from one language into another; it would be quite logical, therefore, to begin by setting out the general principles of translation and then discussing the limitations or qualifications of these general principles required when they are applied to translations of the Bible. The writer proposes almost to reverse this order, for it appears to him that by so doing not only will the paper be shortened but we shall come at once to close quarters with the really crucial questions which are raised when we come to consider the character of the Bible and the purposes for which translations of it are required.

It is usual to begin discussions either of the interpretation or translation of the Bible by the statement that the Bible is a book and must be dealt with like other books. To the writer this sentence seems to contain a serious misstatement and a fallacy. The Bible is not a book: The Old Testament is itself a literature—nearly all that is left of ancient Hebrew literature—and even the New Testament contains, beside straightforward narrative, hymns, parables, closely reasoned argument, passionate pleading, and the poetical and highly imaginative prose of the Apocalypse; all these are

the work of many very different writers. The first clause, therefore, viz., that the Bible is a book—is a mis-statement.

It may be thought that even though it be a mis-statement, that is a matter which has no bearing on the business of translation. But this is not so. Let us substitute in the original phrase the true description. The Bible is the remains of an ancient literature by many different authors, and therefore it ought to be dealt with in the matter of translation like—like what? like other ancient literatures by many different authors. But who has ever translated a literature? And it will in practice be found that whenever anyone proposes to lay down rules for translating the Bible borrowed from the experience of other translators, the rules are derived from the translation of some one book, or, at least, of the works of some one author, Plato or Homer or Dante. Now let us suppose the case of a man translating into Chinese. If he had to deal with a straightforward prose narrative, he might have no great difficulty, and the principles on which he should work would be fairly simple and straightforward. But let him next have to take in hand a passage of imaginative and impassioned prose from the writings of Milton or Burke or De Quincey. I need not occupy your time by quoting them: the kind of passage I mean will be familiar to you all. Now, the questions that would arise for settlement in deciding how to render such passages as these into Chinese would be far more numerous and more complicated than in the case of a plain narrative. And if our imaginary translator went on to render a poetical passage—for instance, one of Shakespeare's sonnets, such as that beginning—

Full many a glorious morning have I seen
Flatter the mountain-top with sovereign eye,
Kissing with golden face the meadows green,
Gilding pale streams with heavenly alchemy.

and so on—after, I say, our translator had rendered this into Chinese or Swahili, he would have been compelled to find answers to a number of questions as to principles and methods of translation which would not arise in dealing with a single book or even with a single author.

It will, I think, follow that the rules laid down even by very eminent and successful translators who have dealt only with a single book or a single author will by no means necessarily apply, as general principles, in dealing with matter of such great variety as the contents of all the books of the Old and New Testaments.

The second statement that the Bible should be dealt with exactly as other books are dealt with is, in my opinion, a fallacy. The Bible should only *be dealt with* like other books if it *is* like other books, and this it is not. The books of which it is composed are the work of men who claim that they spoke under the special guidance and control of the Holy Spirit. This is the lowest statement of their claim: many would go much further in describing it, but even so stated it is sufficient to make the Bible unique and *not* like other books. For it must be borne in mind that the great majority of those who desire and use translations of the Bible either accept, or at least do not reject, this claim on its behalf, and that the Bible therefore possesses for them an authority which rules out many freedoms in translating quite admissible in ordinary cases. A translation in which such freedoms are used cannot but contain much of the opinion of the particular translator as to the meaning of many passages and, in so far as it does that, it is vitiated as a representative of the authoritative character of the work. Now, a translation of the Bible which is made upon general lines which render it unacceptable to the great majority of Christian readers may be an interesting experiment, a literary curiosity, or a work valuable for suggesting and stimulating thought, but it can take no permanent place as a solution of the problem of Bible translation.

The two points just considered are general considerations and are applicable to all translations of the Bible. The next case to be dealt with is that of versions like Luther's German Bible or our Authorized Version. Both these have become classics in the literature of Germany and England respectively, and their language has, in the centuries during which they have been current, been thoroughly incorporated in the thought and literature of their respective countries. Many words and phrases taken from our English Bible have become embedded in poetry, sermons, speeches, and devotional literature, and have taken a permanent place in the English language. To this must be added the hold which the well-known language of the English Bible has obtained in the hearts of all religious men and women by its constant use in public worship and private devotion until a proposal to change it seems almost sacrilegious.

This state of affairs must necessarily exercise an enormous influence on any proposal for a fresh translation or even for any further revision of the Authorized Version. The Revised Version took many years to complete: it was the work of all the chief Biblical scholars of the time when it was made; it corrects

many acknowledged errors and defects in the Authorized Version; it has been in the hands of Englishmen for thirty years, but it is very far from taking the place of the Authorized Version; on the contrary, the number of copies of the Revised Version sold is said to be rather decreasing than increasing and the Version itself has not anywhere come into general use. There is therefore little ground for supposing that a new version which should still further depart from the language of the Authorized Version could hope for general acceptance. And yet many scholars and many ordinary readers of the Bible have felt that the Elizabethan English of the Authorized Version, dignified and beautiful as it is, is a great obstacle to the full and easy comprehension of its contents, more especially in primary and even secondary schools and among labourers and artizans and other such persons whose scanty leisure gives them little time or inclination for learning the meaning of unfamiliar phraseology.

It is quite probable that the antiquated language of the Bible is a hindrance to the understanding of its meaning in the case of classes more extensive than those just specified.

This hindrance has been so widely realized, that many translations, more especially of the New Testament, in "modern English" have been put forward. Where this has been done by competent scholars, the result has been of such great interest and value that it compels us to face the question whether, in the case of the English Version (and of other versions, the conditions of which are similar), the true principle is that adopted by these scholars, or that laid down for the revisers who produced the Revised Version, viz., "to limit, as far as possible, the expression of alterations of the text of the Authorized Version to the language of the Authorized and earlier English Versions." In other words, should the language of the Authorized Version be scrupulously preserved and imitated in alterations (where alterations are necessary) or should it be freely altered by the introduction of modern phraseology wherever the old language is not at once and easily intelligible to a modern reader who has no acquaintance (or very little) with the English of three or four hundred years ago?

The problem has been stated as it bears on the English Version, because that is the version most familiar to an English audience. But it has equally to be solved in dealing with Luther's version in German, and it arises, in a modified degree, in several European languages where a translation made

centuries ago lies at the basis of nearly every translation or revision made since.

The answer to the question formulated above depends, to a great extent, upon the object for which an English translation of the Bible is desired. If it is desired in order to bring to the minds of the largest number of English men, women and children, with as little difficulty as possible, the real teaching which the authors of the various books of the Bible desired to convey, a translation into good modern English would be generally admitted to be far the best means of attaining this object. The very qualities of style for which the Authorized Version is praised have a tendency to conceal the meaning; a man who feels a profound admiration for the rhythm or stately beauty of a phrase is apt to be satisfied by admiring it and to omit going on to inquire exactly what it means.

It cannot, I think, be alleged that it was the aim of the translators of 1611 to produce a literary classic. If they had had any such purpose it is probable that the style of Sir Philip Sydney's *Arcadia* would have been that adopted. They seem to have tried to translate into good, simple, and generally intelligible English of their own day, and they did this so thoroughly and well that their work has become one of the literary treasures of the language. But, in 300 years, their language is becoming archaic and in many instances an obstacle rather than an aid to the understanding of the meaning. As time goes on this process will continue and increase.

Is it not time that we followed the example of the translators of 1611 instead of clinging blindly to their results? Some recent efforts as regards the New Testament seem to show that the matter is in the air.* The results are so helpful, so informing and stimulating in private reading that it is impossible to avoid longing for the time when such help may become available to all the world from the production of a version of the whole Bible into good and dignified modern English by the co-operation of scholars who, in addition to possessing a thorough knowledge of Hebrew and Greek, know and can use all the resources of the English language.

It is of course freely admitted that in the present state of opinion such a version could not hope to replace the Authorized Version, but if it were well and successfully executed it would

* *E.g.*, Dr. Weymouth's *New Testament in Modern Speech. The New Testament: A New Translation.* By Jas. Moffatt, D.D., D.Lit.

have a powerful effect in changing public opinion, which already shows some signs of modification on this subject. And the effect of such a version in making the Bible a more vivid and interesting book would be nearly incalculable.

The subject just discussed is one relating only to versions in certain languages and is not of general application. But it leads directly to the consideration of a question which has to be solved in the case of all versions of the Bible made into languages which have reached any stage of literary culture. As instances there may be mentioned Chinese, the literary languages of India, Arabic, and other languages. In all these cases, the literary cultivation of the language and the existence of a class of scholars has brought into being two forms of the language, one the literary form used by and familiar to scholars, and the other the language of everyday life. And, by the language of everyday life, I do not mean rustic or merely colloquial forms of speech, but the language of ordinary educated people in letters, sermons, speeches in law-courts, as well as in the ordinary transactions of everyday life. There are, we are told, many cases in which these two forms of the language are entirely different, not merely in vocabulary but also in the grammatical forms adopted in connecting words and phrases into sentences. And here, the question at once arises—which form of the language is to be adopted for the translation of the Bible? The one form of the language is the literary standard; it is that used in works considered to be masterpieces of the language; to have acquired it and to use it is the mark of a scholar, and a book couched in any other language is liable to provoke dislike and contempt among scholars. On the other hand, since the overwhelming majority of people in every country are not scholars, to them a translation into the language of scholars is not easily understood, its form is an obstacle to its being accepted by them and is likely to lead to its being admired for its learned character—and neglected—a result the very opposite of that which is the aim of all translations of the Bible. We have to choose between the disapproval of scholars and literary authorities, if the one be adopted, and neglect on the part of people in general if we select the other.

In Chinese, the solution adopted has been to have two translations, one (Wenli) into the language of scholars and the other (Mandarin) into what is, by comparison, the language of the people. And, in other cases, the same result, though not formally adopted and carried out, is beginning to develop. In some of the Indian languages where the standard style set by

the Universities for writing in the vernacular has been adopted for the translation, those who work among the people have found it necessary to make and circulate translations into what is called "colloquial language." The same course has been adopted, because it was found necessary, in Arabic: at present it is confined to the New Testament and to the Gospels in the New Testament, but it is not very likely that it will stop there. In proportion to the extent to which the "colloquial" translation is found easy and intelligible by those to whom the standard translation is difficult and unintelligible, will be their demand that the process should, for their benefit, be extended to other books of the New Testament and after that to at least the principal books of the Old Testament.

But this cannot be regarded as a satisfactory solution. It has always been the aim of all engaged in translation of the Bible to have only one version current in each language. The fact of the general use of the Bible in public worship makes this highly desirable, and so the question inevitably arises: which Bible is to be read in church—that one which is generally understood or that one which is admired but not generally understood? The answer can hardly be doubtful. In China it is, I believe, the Mandarin version which is used in public worship. And if this be so, then that version which is so used must be the standard version. It follows that the principle governing the production of the version which is intended to be the standard version must be that the style to be adopted in it must be one that makes it easily intelligible to the people in general who speak the language into which the translation is being made.

If ever a translation is to be made which shall effect a compromise between the two styles, it will have to be the work of native scholars and not of foreigners.

The questions dealt with hitherto have been somewhat of the nature of subsidiary or preliminary questions, inasmuch as they deal with cases which, though very important, are still special cases. But the Bible has been translated into all the principal languages spoken in the world, and in considering these translations we come to the main question which faces every translator of the Bible—*i.e.*, the extent to which what is called "freedom" in translation is admissible. There is such a thing as a paraphrase as distinguished from a translation. Where does the dividing line fall, and is it possible to lay down any definite principle as to what constitutes a translation and distinguishes it from a paraphrase?

On the one hand, all translators from the days of Jerome have agreed with him in rejecting the rule expressed in the phrase, *verbum verbo reddere*. Even as regards words, it is impossible to find in any language single words exactly equivalent to single words in another language; and, beside this, the idioms of one language differ altogether from those of another. We are told that the Hebrew words in Genesis ii, 17, are, if literally translated, "dying, thou shalt die." But this is not a translation of the phrase. The Hebrew idiom makes the phrase convey to anyone who knows Hebrew what is represented in English and other languages by the phrase "thou shalt surely die," because this is what the phrase means.

Can we then adopt as a sufficient statement of the rule to be followed in such cases, that the thought must be translated and not the words, that is to say that if a translation of the words does not convey the real meaning of the phrase, we should depart from the words in order to keep to the thought which those who used them intended them to convey. All translators, or at all events all modern translators, have, in many instances, followed this rule, but it is not difficult to show that if it is proposed to lay it down as a fundamental rule of translation, it requires, on the one hand, some further limitation and, on the other, a distinction to be drawn dependent upon the particular cause which prevents the actual words from conveying the thought.

The maxim requires some limitation: take, for instance, the magnificent description of the Deity in the 46th Psalm:—"He breaketh the bow, and cutteth the spear in sunder; He burneth the chariot in the fire."

To those to whom these words were addressed, the bow, the spear, the chariot, were the chief representatives of the weapons and instruments of war, and the destruction of each one of them in a way appropriate to each one, conveyed in a very forcible manner the idea of a complete stoppage of war by the destruction of the instruments of war.

But many millions of men (say, in Europe, now) have never seen a chariot, and bows and spears are only known as warlike weapons to those who have read about them or seen pictures of them as such. So far from forcibly conveying the meaning, the use of the names of these weapons, etc., has itself to be explained before the meaning is grasped. Would it then be permissible to translate: "He bursteth the rifle and bendeth back the bayonet, He bloweth up the battle cruiser with dynamite!"? The question answers itself; no one would propose or accept.

that as a translation, and yet it conforms to the letter of the rule of translating the thought and not the words. It would be easy to multiply examples:—We are forbidden in the tenth Commandment to covet our neighbour's ox or his ass. Who, in these days, would covet an ox or an ass? The one represented to the Hebrew valuable property available for exchange, and the other the means of locomotion. Would it therefore be a translation of the Commandment to prohibit the coveting of gilt-edged stocks or a motor-car?

The fact is that there are two elements of difficulty to be overcome in making a phrase or passage in any language intelligible to a man ignorant of that language—one is the words and idioms of the language itself, another is the manner of thought, habits, customs and surroundings which often give their point to the words used. To take the first instance given above: when the Hebrew words for bow, spear and chariot have had their English equivalents substituted for them they have been translated as far as the language is concerned, but to convey the meaning of the passage in which they are used, their employment as the names of the principal weapons of war, and therefore symbolizing warlike operations, must be explained; this, however, is the function of the expositor or commentator, not of the translator.

This illustration will, I trust, make clear what I mean when I say that, in my opinion, the duty of a translator is to put his reader who is ignorant of the language translated, as far as possible, in the position of one who knows *the language*, and that when he has done that, he has done all that is required of a translator. If he goes further, he passes beyond the function of a translator and undertakes the duty of explanation and comment.

One or two examples may make the application of this principle clearer. Some translators have held that in the phrase—"Behold the Lamb of God!" the word—Lamb—is so connected with the sacrificial system of the Jews, that a literal translation will, to the minds of people to whom a lamb is just the young of a sheep and nothing else, convey nothing of the meaning which it had in the mouth of John the Baptist. They would therefore propose to translate in some such way as this: "Behold the sacrificial victim appointed by God." Now, apart from the objection that such a version omits the element of purity and innocence connected with the idea of a lamb, it will, I think, be generally admitted that it is an explanation rather than a translation. The most intimate knowledge of Greek

would not lead any man to give this meaning to the Greek words 'Ο Ἄμνος τοῦ Θεοῦ, it must be derived from a knowledge of the special circumstances in the history of the speaker and his hearers which gave the words that meaning to their minds. It is admitted that the full meaning of the name—Lamb of God—cannot be conveyed without such knowledge, but so to give the meaning is the business of the expositor, not of the translator; and accordingly the rule proposed would exclude such a translation.

On the other hand, the translation:—"Behold Him who is the Lamb of God"—meets much if not all of the difficulty and is quite admissible under the rule stated. For a knowledge of Greek combined with ordinary intelligence would show that the speaker did not intend the assertion that the Person addressed was in fact the actual young of a sheep, but that the name was used metaphorically; that is a fact inherent in the original and it is therefore permissible to convey it in a translation in the manner specified, or in any other manner which is permitted by the idiom of the language into which the translation is being made. Many languages have special grammatical forms for indicating that a word is used metaphorically.

Another example may be found in a passage taken from the 46th Psalm: "Hope thou in God who is the health of my countenance and my God." The phrase—health of my countenance—is rhythmical and the ideas of countenance and health have a superficial connection, so that many who read or hear the phrase let it pass without any close consideration of its meaning. But if we stop and ask ourselves what precisely the Psalmist can be supposed to have meant by calling God—the health of his countenance—we shall realize that the words hardly convey to us any definite meaning. If, however, we turn to the recent French translation known as the "Version Synodale," or to Dr. Segond's translation, we find the phrase rendered—"Il est mon salut et mon Dieu"—and the translation is justified in this way. The Hebrew word—my face—is said in the dictionaries to mean also—my presence, my person—and therefore to be equivalent to myself. The word translated—health—is almost everywhere else, both in the A.V. and the R.V., rendered salvation, so that the health of my countenance becomes the salvation of myself, *i.e.*, my salvation.

These are purely questions of language, and if the statements as to the usage and meaning of the Hebrew words are correct, the translation is, so far, fully justified under the proposed principle.

But some translators have gone further and rendered the phrase:—"He is my Saviour and my God." In so doing, it appears to me that they have stepped over the boundary line between the result of translation and that of explanation or commentary. No doubt the statement—"He is my salvation" can be explained—"He is the author or cause of my salvation"—*i.e.*, my Saviour, but this *is* an explanation. No doubt, "He is my Saviour and my God" is clearer and more striking than "He is my salvation and my God," but this clearness and emphasis is obtained not by rendering but by improving the original.

To sum up:—It is quite true that it is the business of a translator to translate the thought rather than the words, but he is concerned with the language and with that only. So far as the thought is conveyed by the words, it is his business to convey it, but it is not his business to try and get into his translation everything that the words convey, and to that extent the maxim cannot be adopted as a safe guide.

Much less is it possible to adopt the principle which has sometimes been laid down that it should be the object of a translator to furnish what we may suppose that the original author would have said if he had been writing in our age and country. To do this would not only be more than a translation, more than a paraphrase, more than a commentary, it would be nothing less than to re-write the book.

A matter cognate to that just discussed is the subject of the insertion of words necessary in one language though not in another for the completion of the sense. A familiar example is that of the copula—*is*—which is very frequently required in most languages where it is not expressed in Hebrew and Greek. It is, of course, common knowledge that the translators of the English Bible have been very scrupulous in indicating all such additions by printing the words so added in italic type. A comparison of the Authorized and Revised Versions with regard to this matter shows at once that the revisers of the English version did not think it necessary to indicate, in this way, the addition of words absolutely required by English idiom to make the sentence good English. They have inserted the words just as the translators of 1611 did, but they have not in any way indicated their insertion. And this is, no doubt, right. The words which they have added are, according to the practice to which they have scrupulously adhered, not really additions. They are latent in the original languages, the idiom of which did not permit, or did not require, their expression. Their

expression in other languages is due to the idiom of the language in which their expression is required. And the device of indicating such words by printing them in italic type has not been at all generally adopted, even in languages printed in Roman character in which it is easily possible.

In languages printed in other than Roman characters, however, such a device as this can seldom be adopted, and in most Oriental languages any difference of type is impossible. The printing of such words in brackets or in lighter type has, in these languages, the result of calling special attention to them. As they are usually decidedly unimportant words, that is exactly the effect which it is *not* desired to produce.

In the great majority of versions there is no indication at all of the fact that words are, for this reason, inserted. This is of no practical importance so long as the rule of only inserting such words as are really inherent in the original is observed. But many translators have given very considerable extension to this rule, and as there is nothing at all in the text to show what part absolutely and expressly represents the original, and what is added for one reason or another, it seems very desirable to have, if possible, some rule regulating such additions.

One fertile source of such additions is the use of the genitive case in Greek to indicate a great variety of relations between the words so connected, contrasted with the very restricted use of the same case in a great many languages. Thus the phrase—the love of God—can both in Greek and in English be used either for the love of God for man or for the love felt by man for God. But there are very many languages in which neither of these two ideas can be conveyed by the mere use of the genitive: it is necessary to insert words showing clearly which is meant.

Again, St. Paul speaks in the Epistle to the Romans ii, 16, of “my Gospel.” There are many languages in which this must be expanded into—the gospel which I preach or the gospel which I teach—or some such phrase. In them the only meaning of—my gospel—would be the Gospel which I own. Our translators have usually acted on the supposition that the use of our English genitive was as wide as that of the Greek genitive, but it is doubtful whether they have always been justified in the supposition. In the verse (Hebrews xiii, 20):—“Now the God of peace, that brought again from the dead Lord Jesus, that great Shepherd of the sheep, through the blood of the everlasting covenant . . .,” if we were not so used to the words, we should, I think, realize that the phrase—the blood of the

covenant—was not English, and that it needed the addition of several words to express the relation intended between “the blood” and “the covenant.”

The additions in these cases are made necessary by difference of idiom in the two languages in question, but the danger attending them is obvious; the additional words fix upon the passage one of several possible meanings: that meaning is the one chosen by the translator, but it passes into the text, and where (as is generally the case) there is nothing to distinguish this part of the text from any other the reader has no means of knowing that part of what he finds in the book is merely the translator's opinion on a point on which opinions may well differ.

It seems to follow that, while such additions may be, and indeed must be, admitted into the text, there should always be a marginal note giving a literal translation of the original.

The considerations which have just been described make it necessary that such additions of words should be rigidly limited to the cases in which they are really inherent in the original. But, in fact, they have often been made in cases in which they merely help to make the meaning clearer or more definite. Such additions appear to be quite illegitimate. The following instances may serve to illustrate the writer's meaning:—Dr. Weymouth (*The New Testament in Modern Speech*) translates Mark i, 38: “He replied, ‘Let us go elsewhere to the neighbouring country towns, that I may proclaim my errand there also: for for that purpose I came from God.’” The words—from God—are an addition. The A.V. and R.V. have:—“For therefore (R.V. to this end) came I forth.”

It is possible that Dr. Weymouth has given the true meaning, but it is certainly not inherent in the Greek word (*ἐξῆλθον*).

Dr. Moffatt (*The New Testament: A New Translation*) translates it:—“That is why I came out here,” so that competent scholars differ on the point, and this seems to make the insertion inadmissible.

Another instance is the case of Abraham looking upon the scene of the destruction of Sodom and Gomorrah. The narrative says (Genesis xix, 28), “And Abraham looked toward Sodom and Gomorrah.” We are told that the Hebrew word means “looked down,” and a translator has therefore rendered the passage, “Abraham looked down from a mountain,” inserting the words “from a mountain.” No doubt if Abraham looked down upon the plain where Sodom and Gomorrah stood, he

could only have done so from a height above the plain, but this is a mere inference from the geographical position and not inherent in the language. It is therefore an explanation and not a translation.

The distinction seems clear, and one that ought to be observed.

There has already been occasion to give some consideration to the rival claims of accuracy and intelligibility. A very similar question arises in connection with the use, to express Christian ideas, of words in very general use, but tainted with heathen associations. This is a difficulty which faces almost every translator at the outset of his work when he has to find a word for God. But it occurs in many other connections also. Many heathen religions have a system of sacrifices and words for sacrifice; they also have words corresponding to "heaven" and "hell" to describe the world inhabited after death by the pious and the wicked. But the sacrifices in question are very often sacrifices to evil demons to avert their wrath, and the word in common use for sacrifice cannot be freed from the association of such ideas. The same objection applies in the other case mentioned; the words commonly used to represent "heaven" and "hell" are the names of some specific heaven or hell of the mythology of the country, and convey to the people ideas quite foreign to the conception which Christian teachers would desire to convey.

There are two methods which have been adopted for dealing with this case, and they differ so fundamentally that the difference may be described as a difference of principle. One is to adopt some neutral or colourless term *into* which Christian converts and those under instruction can be taught to read the Christian idea. The principal objection to this course is that such words are nearly always unfamiliar, and not in general use. The other course is to use the heathen word with all its undesirable associations as a word thoroughly familiar to the people, and to trust to Christian instruction to lead those who use it to read *out* of the word all those ideas which it connotes which are in conflict with Christian ideas.

Both these courses have strong advocates and opponents. As far as my knowledge goes, the majority of *foreign* translators favour the use of the familiar word in spite of its associations, while the objections to that method have usually been put forward by natives of the country, themselves converts from heathenism, and therefore specially sensitive to the distinctively heathen ideas which such words connote.

The decision may be said to lie between intelligibility marred by the danger of erroneous teaching, and freedom from error marred by the danger of obscurity. There is evidently room for difference of opinion, and either principle can be supported by weighty argument. For my own part, I would allow the opinion of Christian converts from heathenism to govern the decision. Foreigners, even though they are missionaries, are apt to regard the objects of heathen worship too much from their grotesque or merely revolting side. Only those who have been under the sway of the dark superstitions connected with their former gods and goddesses can realize the foreboding fear which they still arouse, or the remains of a lurking belief in them, at least as evil demons, which it is so difficult entirely to eradicate. Men to whom a language is vernacular are not likely to undervalue the advantage words derive from familiarity and easy intelligibility. If they are willing to forego such advantages, the reason must be a strong one. I would advocate, therefore, that in such questions as have been described the decision should be governed by the prevailing opinion among Christian converts from heathenism, and would follow their opinion whether or not it commended itself to foreign students of the language.

We pass now to the question of the principle which should guide a translator who can find in the language into which he is translating no equivalent at all (or no satisfactory equivalent) for ideas or words in the original language. In such a case there can be no translation in the strict sense of the word. People who are absolutely without a particular idea cannot have framed words which convey that idea. Still more is it true in the case of material objects, that in a country where they do not and never have existed the language can have no name for them. In all such cases recourse must be had to one of several devices other than true translation. Among these are transliteration of the original, the borrowing of words from another cognate language or a language recognized as a standard, such as, for instance, Sanscrit for Indian languages, Arabic for languages of that stock, and English for countries under the influence of England, whose languages are in a low state of development.

In default of these plans, it is necessary to have recourse to paraphrase or explanatory phrases. Where tents are unknown, the word has been rendered by "cloth-house," and in countries where there are no bees and therefore honey is unknown, some descriptive phrase such as "exceedingly sweet food" is the only possible rendering.

Perhaps I may be allowed a short digression here. There is a story which has gained wide circulation with regard to the rendering into the Eskimo language of the phrase "Lamb of God." It is to the effect that since sheep are unknown among these people, the translation of the New Testament in their language renders this phrase "the young seal of God," seals being one of the few animals known familiarly to them. I have read the story in an article in the *Quarterly Review*, and it has been told on the platform by a bishop. There is, however, excellent authority for saying that there is not a word of truth in the statement. In the different dialects of Eskimo, the words for sheep and lamb are in one dialect *sava* and *savärkap*, in another *saugak* and *saugarsuk*.

These words are said to be derived from Icelandic, for sheep exist in Iceland. On the other hand, the common word for "seal" in Eskimo is "puije"; the smaller variety is called "netsek," the diminutive of which is *netsiak* (used of a very young seal whose hair is still quite white). Other forms are used to describe the seal at various stages of its life, but none of them has the most distant connection with the root "sau," which is the basis of the words used for "lamb" in translating the New Testament into all the Eskimo dialects. The story may therefore be dismissed as an absolute fable.

There are some other problems of Bible translation to which reference might be made, but enough has probably been said on the subject. The main contentions which I have endeavoured to put forward are these.

The Bible is unique as the work of men writing under the guidance of the Holy Spirit; being, for that reason, regarded as authoritative, the freedom allowable in the translation of other books is inadmissible here.

Literal translation is as impossible in the case of the Bible as in other cases. The maxim that the thought should be translated rather than the words is, to a certain extent, an excellent guide, but if adopted and followed to the full, it would authorize an amount of freedom to which few people would consent, and therefore requires limitation and definition.

In dealing with any passage in the Bible, we must all desire that its full and true meaning should be conveyed to the reader, but to do this goes beyond the duty of a translator, and the effort to make a translation serve as a commentary and exposition as well as a translation is an attempt to combine distinct and inconsistent aims.

A translator is concerned with language, and the guiding

principle of his work should be to put his reader, as far as such a thing is possible, in the position of one to whom the language of the original is thoroughly known. So far as the vocabulary and idiom of the language are concerned, he *should* translate the thought and not the words: so far as the thought depends upon elements outside the language, he should not attempt to embody it in his translation. Least of all should he attempt to re-write his original as it may be supposed that the author would have written it if he had produced it at the time and place in which the translation comes into existence.

I am far from supposing that these conclusions will as a whole meet with general acceptance. Probably no one who hears or reads them will agree with them all, while every single contention put forward will be likely to find some who disapprove in that particular.

But the work of the translation of the Bible is one of the most vital importance: there are many hundreds of languages into which no part of the Bible has yet been translated; in very many of those in which something has been done, many more books remain to be dealt with; and even in those many languages of the world into which the whole Bible, or at least the New Testament, has been translated, need is constantly felt for the revision and improvement of existing versions.

It results that many hundreds of men all over the world are at work on this business, often in small bodies isolated from one another, and dealing over and over again with the same problems, in ignorance of the general character of the results which have been arrived at elsewhere. It is therefore very desirable that an attempt should be made to arrive at some general principles which may be accepted as governing all such undertakings, and it is to the attainment of that object as a result of full consideration and discussion that this paper is intended to contribute.

DISCUSSION.

The CHAIRMAN agreed with the Lecturer that the Bible was a unique book; it had indeed been fittingly called "The sacred library." Those who forgot that it was not a single book but a literature missed much. Mr. Sewell had rightly emphasized the difficulties of translation, difficulties which threw into relief the wonderful character of the translation made by Tyndale. In 1845, Bagster brought out a New Testament in which five English

versions were seen side by side. The old translations possessed one great advantage in that they were usually the work of one man. Luther's Bible was a case in point, and Wycliffe's was generally assumed to be such, though latterly it had been thought that Wycliffe's Bible was the work of a Committee.

Professor MARGOLIOUTH said that translators were in the main careful and conscientious in reproducing the meaning of the original. But sometimes they allowed themselves to give a paraphrase rather than a literal translation, and under such circumstances an expression or phrase might be used which conveyed an idea not in the original, and that idea was sure to be taken up. Thus he had himself in translating Aristotle used the word "torso." The phrase was not in the original, but his translation had given rise to the impression that it was. The older translations tended to be verbal. Thus there were five or six Syriac versions and each was more faithful than its predecessor, so much so that the original Greek texts could be largely restored from the last versions. But at the same time the later versions became more clumsy and to some extent unintelligible; there seemed no way of avoiding the dilemma; if the translation was absolutely literal it would not suit an ordinary audience; if the translation were free it might be misunderstood and be cited as a support for doctrines which were not in the original. Thus the expression concerning Joseph in the Psalms, "the iron entered into his soul," was graphic and powerful, but it was not in the original: the passage simply meant that he was put into chains. There seemed but one solution, a double translation, one for scholars and one for the people; that for scholars should be absolutely literal, since scholars could understand it.

One fact had not been alluded to by the Lecturer which, nevertheless, was much felt by Biblical scholars. In several places in the New Testament, in many more in the Old Testament, we had no certain knowledge of the meaning of the text. In many cases we find words that occur but once only. There is no known method of discovering the meaning of a word unless it is told elsewhere. Other sources of information are therefore eagerly seized upon. Thus in the ninth and tenth centuries the Jews thought that they could get help from Arabic, since that was a kindred language. Much more recently Assyrian has been referred to for a similar

purpose. But kindred races use allied words in different senses, and no one now would look out a Hebrew word in an Arabic dictionary, and Assyriologists were now much soberer than they were twenty or thirty years ago.

Dr. KILGOUR desired to express his appreciation of a most excellent paper. He had not often an opportunity of saying anything about Mr. Sewell, as usually, when they were associated, Mr. Sewell was in the Chair and he was at his side.

The paper dealt with questions with which the Bible House was continually familiar. The Committee had prepared and printed a pamphlet of rules for the guidance of translators and revisers based upon principles derived from the experience of over a hundred years. These rules were not absolute, as in practice difficult cases would arise, but the main principle was that the translation should be intelligible to the readers; not so much beneath the ordinary spoken language as to lose dignity, nor so much above the heads of the reader as to be misunderstood. In general it was felt that it was safest for the translation to be as literal as the idiom of the language permitted. Even ordinary people would eventually be able to understand the meaning to be conveyed, though perhaps they might not grasp it at first. It was not the common experience that a double version, one for the scholar and another in colloquial language, was necessary; though there were a few exceptions, as, for example, in China and some parts of India. Translations which at first might appear to be too learned in style were not necessarily beyond the reader. Thus, for example, the translation of the New Testament in Nepali had sometimes been criticized as too scholarly. One young missionary had complained of a particular word, saying he had never heard it used. That very afternoon he heard it in a bazaar; he had simply not come across it earlier. After a translation was finished (and translators should merely translate, they must not comment or give their own ideas), the reader must be left to receive, with the Spirit's help, the deeper meanings of the Word. He believed that from the East especially there would come back to us of the West marvellous experiences of the riches of the Eternal Message. No Bible translation, even though prepared by a committee of natives, could be alone absolutely unmistakable, or at once perfectly understood. We should remember how much we ourselves had learned by trying to understand passages which at

first appeared obscure. We ought not to deprive young nations of the benefits of a similar experience.

Mr. J. C. DICK desired to thank the Lecturer for a most suggestive paper and expressed regret that it was not already in print. Two points seemed to him to require a little more consideration than had been accorded to them in the lecture. First, as to the rendering of metaphor. Words like "horn," "mountain," "bowels," so frequently found in the English translations, ought to have been rendered either by appropriate English metaphors or by words representing the ideas. Second, as to the supplying of the various parts of the verb "to be." There were some six passages* similar in structure in the New Testament, where the copula was omitted in the Greek. They consisted of a subject followed by two attributes connected by *καί*. The revisers had inserted the copula in all the instances save one. Thus: "All things *are* naked and laid open before the eyes of him with whom we have to do," and so with all the others save one, which was thus rendered: "Every Scripture inspired of God is also profitable." This rendering was simply bad grammar, and even nonsense. Scripture (*γραφή*) meant what was contained in the Old and New Testaments and nothing more nor less. But the assertion that anything was "ALSO useful" implied a *previous* assertion, and this the revisers had suppressed. Why were they not consistent in translating the first passage, "All naked things are also laid open before the eyes of him with whom we have to do"? Why did they confine themselves to the omission of the copula in only one of the six instances? Because they had a certain motive which can be easily guessed.

The Rev. J. THOMAS, in expressing his high appreciation of the paper, desired to put in a plea for accepting thankfully, under certain circumstances, translations made into classic forms. Reference had been made to the "Chinese language." There is no such thing as "the Chinese language." In Europe there are more than eighty different languages. It would be a linguistic miracle if China, which is one-third as large again, only spoke one. Classical Chinese was a script, not a vernacular, and by rendering the Scriptures into Classical Chinese, they gave it to all the *literati* of

* Romans vii, 12; I Corinthians xi, 30; II Timothy iii, 16; Hebrews iv, 13; II Corinthians x, 10; I Timothy i, 15.

China. It was therefore of the greatest possible service, and it was understood by all scholars in Korea and Japan; the Korean scholar would read Classical Chinese, but would turn with scorn from the Korean vulgar tongue.

The Rev. GRAHAM BARTON had listened with the utmost pleasure to a most informing paper. There were, however, three points which he should have liked to have been emphasized. First, the necessity of the Bible translation being impersonal. Next, that ambiguous renderings should be avoided. Third, the danger of giving a sectarian tendency to the translation. Reference had already been made to Wycliffe and Tyndale; Wycliffe systematically used the word "penance," whereas Tyndale, being a Protestant Reformer, used the word "repentance."

Was it possible that all thought could be reduced to the simple language of the people? Some thoughts could only be rendered by the thinker himself; many idioms were untranslatable.

The LECTURER, in reply, said that it was not often that a writer could enjoy the privilege of hearing his work criticized (and that so favourably) by men at whose feet he would be ready to sit as a learner.

Nevertheless, as the principles that he put forward had not been attacked, he felt inclined to adhere to them, and, so far as that adherence justified him, to remain "of the same opinion still." For example, with all deference to the great authority of Professor Margoliouth, he ventured to think that the introduction of the word "torso" into a translation of Aristotle, if the idea was not inherent in the Greek phrase translated, was not in accordance with true principles of translation, and he felt certain that, even if the Professor thought such a liberty permissible in a translation of Aristotle, he would hesitate in taking it in a translation of the Bible.

To Dr. Kilgour, with his great authority as himself a translator of the Bible, and completely conversant with the work of so many other translators, he would not venture to reply, but would leave what he had written to be judged in the light of Dr. Kilgour's criticisms.

With respect to Mr. Dick's comment, he would only say that he thought the principle he had laid down met the case cited. If, to those acquainted with Hebrew, the words "horn" and "mountain"

had necessarily a metaphorical meaning, the translator was at liberty to let that appear in the translation of the particular passage in which that was the case ; but if they had not, he was not. The business of the translator was to put the reader as nearly as possible in the position of a man who understood the original *language*.

He had been much interested by the remarks of Mr. Thomas on Classical Chinese. Mr. Thomas said that Chinese scholars simply would not look at a book unless it was written in Classical Chinese. His contention was the Bible used in public worship should be in the language of the common people, and that the Bible used in public worship must be the standard translation, whatever subsidiary versions might be made for other classes of readers.

He had not quite followed the questions that had been raised as to the possibility of mistakes. No principles could be laid down which would avoid any possibility of mistakes. If in Greek the copula was, in any phrase, inherent, and might therefore be either expressed or omitted, then the question of its insertion or omission in any translation must depend on the rules governing the language in which the translation was being made and must be decided by those having a competent knowledge of that language.

He returned his grateful thanks to the Meeting for their kind reception of his paper.

The Meeting adjourned at 6.10 p.m.

575TH ORDINARY GENERAL MEETING,

HELD IN COMMITTEE ROOM B, THE CENTRAL HALL,
WESTMINSTER, ON MONDAY, FEBRUARY 7TH, 1916,
AT 4.30 P.M.

THE REV. PREBENDARY H. E. FOX, M.A., TOOK THE CHAIR.

The Minutes of the last Meeting were read and confirmed.

The SECRETARY announced the election of Sir T. Victor Buxton, Bart., M.A., and the Rev. Herbert Parry Thornton, M.A., as Members of the Institute, and of Miss K. M. Bond, Mr. W. J. Canter, C.I.M., R.N., and of the Rev. R. Wright Hay as Associates.

The CHAIRMAN regretted to have to announce that Chancellor Lias would not be able to be present in person. In view of the inclemency of the season, and of his advanced age and delicate health, it would certainly have been unwise for the venerable Lecturer to have undertaken the journey. But he had sent his paper, and he would ask the Secretary to read it.

*THE UNITY OF ISAIAH.** By the Rev. J. J. LIAS, M.A.,
Chancellor of Llandaff Cathedral.

GROUND S WHEREON THE UNITY OF THE BOOK HAS BEEN
CHALLENGED.

THE Germanic schools of criticism of the Scriptures which have met with so much acceptance here in England have owed their influence to many causes, of which I consider the principal to be the unwillingness of believers in the authority and inspiration of Scripture to discuss minute details of evidence when they base their belief in revealed religion upon arguments of a much higher order and wider range. It seems to such persons a waste of time to enquire whether the fact of revelation

* For a much fuller treatment of this subject, see my paper in the number for October, 1915, of *Bibliotheca Sacra*, published quarterly at Oberlin, Ohio, U.S.A.

supported by arguments so cogent could possibly have been transmitted on insufficient authority. If God, they say, has revealed the secrets of His will to mankind, no doubt He has also taken care that this revelation shall have been unmistakably proclaimed by competent witnesses. But, on the other hand, we have to remember that the prominence which the criticism destructive of the testimony of those witnesses has attained has been reached by ignoring that testimony and by attaching undeserved importance to a number of minute details lying in quite a different plane from the great and important arguments above referred to. That prominence cannot be safely ignored. Investigation along these lines of secondary importance has obtained control of the universities and great public schools, and is still spreading. I fear that it cannot be prevented from spreading still further, unless it is met upon its own ground.

One point comes to the front when we study this criticism. It takes high ground. It declares that its conclusions are "irreversible," and that they are "scientific." But they are reached through the medium of history and literature, and it is only fair to ask whether, in the strict sense of the word, historical and literary criticism can really be scientific. Science means knowledge involving exactness in the comprehension of facts. In historical and literary criticism there is large room for the influence of mere opinion. Scientific certainty is far from being attained in those lines of research. The critic's conclusions are at best only probable, and "probability" does not mean certainty.

One more preliminary observation. What are the methods of the literary and historical criticism which has thus seated itself in the chair of infallibility? They are these. Certain principles are laid down and conclusions drawn from them. But these conclusions are at variance with the facts, as those facts have been handed down to us. To the ordinary mind, and much more in the case of the scientific inquirer, this would seem to invalidate the conclusions. Not so to the critic: *Tant pis pour les faits*, he replies, and proceeds to strike out of his documents everything which conflicts with them, and to assign it to authorities of a later date.

This method proves too much. On such lines the earth could be proved to be flat or the sun to revolve round it. Yet this, and this only, as the works of the critics themselves demonstrate, is their method of "scientific" investigation—a method received in so many quarters as irrefragable.

Another alleged "scientific" ground for laying down the principles mentioned above is the following. The narratives in question presuppose a revelation attested by miracles and supported by prophecy. But science has shown that miracles and prophecy are impossible; therefore the narratives cannot have been authentic. The miracles related could never have occurred, and the prophecies must have been uttered after the event. Here is the real reason for repudiating the histories and splitting up the prophecies, as we shall see they have been split up. There is, however, no justification for this attitude. Men of science do not nowadays, as a rule, pronounce miracles and prophecy to be impossible, and the bitter antagonism between religion and science which existed fifty or sixty years ago no longer prevails.

The Unity of Isaiah was not denied at first altogether on account of the supposed opposition between religion and science.

It was largely due to the distinction in character between the former part of the writings of the prophet and the last twenty-seven chapters, which are separated from the former part by four chapters purely historical. Not only is the earlier portion of Isaiah for the most part a vision of calamity and ruin, and the latter a glowing one of prosperity and hope, but the latter seems to have a Babylonian atmosphere about it—or so at least the German school of critics among us believed until the present Professor of Hebrew at Cambridge expressed the opinion that its atmosphere was Maccabæan. The earlier portion of the prophet's writings contained prophecies which, if they were his, were beyond the capacity of man's unassisted ideas. The later critics have therefore split up this portion into nearly a dozen parts, since they must, of course, have been written after the event. Why they should have been written in the prophetic, and not in the historic, form, the critics do not think it necessary to explain.

There are, indeed, many points in the critical theories which seem to need explanation, but for which explanation is seldom given. Professor Sir George Adam Smith, in his fascinating volume on Isaiah, has given the most intelligible account of the principles upon which the investigation is grounded. "Our study," he says, "completely dispels, on the *authority of the Bible itself*, that view of inspiration and prediction so long held in the Church." He then describes what the "view" is in language which certainly does not describe it accurately; indeed, I may venture to say that nothing like it has ever been seen in any treatise on prophecy. The view of the believer may

possibly be as the Professor confesses, "difficult to understand, but this is a strange way to describe it :—

"The prophet beheld a vision of the future in its actual detail, and read this off as a man may read the history of the past out of a book or a clear memory."

This description will, I think, seem to most of those present the exact opposite of that presented by prophetic writings, except, perhaps, in a few passages such as we find in the 22nd and 69th Psalms.

But to proceed :—

"Isaiah prophesied as he did from loyalty to two simple truths . . . that sin must be punished, and the people of God must be saved."

He is credited with "wonderful knowledge of human nature and ceaseless vigilance of affairs." He had "no magical means for foretelling the future, but simply his own spiritual convictions and his observations of history."

It will be noted that Professor Smith does not tell us whether the above character of Isaiah is based upon the whole book as we have it now, or only upon the few chapters left us after the critical dissection has been effected. Further, the use of the word "magical" in describing prophecy is surely begging the question. And lastly, if this criticism is scientific, these assertions should surely have been accompanied by some demonstration. There is, however, this difference between the "science" of criticism and other sciences, that the latter are founded upon demonstration, but the former is content with very little or none at all.

DR. SKINNER'S DISSECTION OF THE BOOK.

According to the analysis given by Dr. Skinner, in the Cambridge Bible for Schools, the following is the dissection of Isaiah, chaps. i-xxxv: Isaiah is credited with the first ten chapters, and with xi to the end of verse 9, or, as some say, verse 10. The rest of the chapter is not supposed to be his. Neither are chaps. xii-xiv, verse 23; xv; xvi (though to this last Isaiah is asserted to have written two verses as a *postscript*); xxi, xxiv-xxvii, xxxii-xxxv. It seems to me most unfortunate that young people in colleges and schools should be given insufficiently digested theories of this kind for their intellectual nourishment, instead of a straightforward exegesis of the prophet's writings.

Dr. Skinner, himself, calls the result "somewhat surprising," but instead of furnishing the full and formal demonstration necessary for a scientific enquiry, attempts to defend it in some paragraphs in which figure prominently such phrases as "may be," "appear to," "probably," "must have," "might have," and the like. In the physical sciences, such for example as astronomy, how would a theory or treatise be received if it were based upon such uncertain premisses as these?

This analysis leaves to Isaiah only some 24½ chapters, yet the critics constantly speak of Isaiah's characteristics and style, as if these could be fully deduced from such slight material.*

CHARACTERISTICS COMMON TO THE ENTIRE BOOK.

I proceed to certain striking characteristics of the whole of the book that bears the name of Isaiah, many of which may be seen at a glance and plead strongly for its essential unity.

(1) The marked detachment of Isaiah's personality from his prophecies. If we examine the books of Jeremiah, Ezekiel and Daniel, we find that in these we cannot get rid of the personality of the writer. Jeremiah is pessimistic, sensitive, anxious, and frequently shrinks from delivering the message with which he is entrusted. Ezekiel constantly sees visions, and introduces himself into his prophecies; the personality of Daniel is even more prominent; but Isaiah relates only one vision, and only once describes the circumstances under which his prophecy was delivered. In the four historical chapters, no doubt, Isaiah appears as a prominent actor, but these four chapters are history, not prophecy; they are his contribution to the Jewish national records. In all the rest he goes his solitary way: his own personality completely lost in the wondrous message with which he is commissioned.

(2) The majestic imagery in which the writer revels, the poetic elevation of style, the love of nature, all of which characterize every chapter, almost every verse of the whole book. The Isaiah of the critics, who wrote but 24½ chapters or less, has no monopoly of these remarkable qualities, as every genuine student of the book knows, even though he be limited to our English translation. The style of the book throughout is unique

* Professor Skinner, in his *Commentary*, intended for immature minds, makes the admission (p. lxxi) that a considerable number of recent critics "deny several other passages to Isaiah," while others "dispute the genuineness of all the promises of salvation found in a particular section."

in literature. A well-known critic of the German school says of chap. vii, 2,

“And the heart (of King Abaz) was moved, and the heart of his people, as the trees of the wood are moved with the wind,”

that “this fine simile is sufficient to prove that Isaiah himself is the narrator.” I may safely challenge him or anyone who agrees with him to show me any chapter in the entire book, no matter to what author the critics may have assigned it, in which the same acute sensitiveness to the beauties of nature is not found. It is not even absent from the four chapters of the historical fragment.*

The critics draw a distinction between the “genuine” and the “second” Isaiah from the alleged fact that the more gloomy and terrible passages are to be found in the former, and the more alluring and peaceful in the latter. But the distinction is as great between the “second” Isaiah and the eight or ten “fragments” (not written, according to the critics, either by the genuine or by the “second” Isaiah), with the exception of chap. xxxv, which, though a “fragment,” far transcends anything else in the whole book as a picture of radiant beauty and prosperity. The critic forgets, conveniently, such passages as these when he endeavours to establish a distinguishing contrast between the genuine and the “second” Isaiah.

(3) The tendency to repetition, of which we find instances in the undisputed Isaiah in twelve instances, one of them being a fourfold repetition of a whole sentence. It is also repeatedly found throughout the whole volume. The use of the phrase, “woe unto you,” in chap. v, is an instance. The same phrase occurs in chap. xlv, ascribed to the “second” Isaiah. In the “second” Isaiah repetition often assumes such forms as “Awake, awake,” “cast ye up, cast ye up.” All these are for the sake of emphasis.

(4) There is an analogous tendency of the prophet to quote his own words, a habit not quite peculiar to Isaiah but much more common with him than with any other prophet. Thus

* I may mention that the three most striking and sustained descriptions of natural phenomena in the whole book are chaps. ii and xi, 1-9, in the undisputed Isaiah and chap. xxxv in the “fragments.” The first is one of the finest descriptions to be found in any author, illustrating Nature in her awfulness, and may be compared with the powerful passage of the desolation of Moab, chaps. xv and xvi, in the “fragments.” Hundreds of shorter passages of the same character can be found in the whole book.

there is the reappearance in the "second" Isaiah of portions of that beautiful description of a land of peace given in chap. xxxv, beginning :

"The wilderness and the solitary place shall be glad for them ;
And the desert shall rejoice, and blossom as the rose,"

and ending :

"The ransomed of the Lord shall return,
And come to Sion with songs
And everlasting joy upon their heads :
They shall obtain joy and gladness,
And sorrow and sighing shall flee away."

This seems to show that Isaiah revelled in the word-picture he has drawn, which has no superior in the whole range of literature.

This language is often quoted in what is called the "second" Isaiah ; sometimes at length, sometimes in allusion, but at least nine times in all.

Similarly the almost equally beautiful picture in chap. xi, 6-9—

"The wolf also shall dwell with the lamb,
And the leopard shall lie down with the kid ;

.

They shall not hurt nor destroy in all My holy mountain :"

is reproduced in chap. lxxv, 25—

"The wolf and the lamb shall feed together,
And the lion shall eat straw like the bullock :
And dust shall be the serpent's meat.

They shall not hurt nor destroy in all My holy mountain, saith the Lord."*

Continual allusions are made to Lebanon, Carmel, Sharon and the Forest, often associated together, though these are frequently obscured in our versions by the translation of Carmel† as "fruitful field." Such allusions are found in chaps. x, 18 ; xvi, 10 ;

* Jeremiah and Ezekiel have their own special peculiarities of expression, but they never quote passages of their own at length, as Isaiah does.

† Carmel is used ten times in Isaiah as meaning "fruitful field" ; it occurs twice in Jeremiah, but one of these cases refers to Mount Carmel. Elsewhere it is apparently not used at all. It occurs in this sense and context seven times in the undisputed Isaiah, once in the historical chapters, and twice in the other portions of the book.

xxxii, 15, 16; xxxiii, 9; xxxv, 2; xxxvii, 24; lxxv, 10, and in a dozen or more other passages distributed amongst nearly all the writers to whom the book has been ascribed. The foregoing are only examples of similar repetitions and quotations from undisputed and disputed passages alike, of which I have published elsewhere a lengthy list. If such repetitions do not appear in every one of these supposed writers, it must be remembered that some of them contribute only a chapter or even half a chapter.

Two more instances of the kind deserve special notice. We have "treacherous dealers," a phrase which occurs repeatedly in several of the writers among whom the book is divided. The words "treacherous" and "treacherously" occur amongst the other prophets, but never together, and they are never repeated twice, as in Isaiah xxi, 2—

"The treacherous dealer dealeth treacherously,
And the spoiler spoileth."

And again in chap. xxiv, 16, we have—

"But I said,
My leanness, my leanness, woe unto me!
The treacherous dealers have dealt treacherously;
Yea, the treacherous dealers have dealt very treacherously."

And in chap. xxxiii, 1, we have—

"Woe to thee that spoilest and thou wast not spoiled,
And dealest treacherously, and they dealt not treacherously
with thee!
When thou shalt cease to spoil, thou shalt be spoiled;
And when thou shalt make an end to deal treacherously, they
shall deal treacherously with thee."

And these three passages are assigned to three different authors.

The phrase "in that day" occurs nearly forty times in Isaiah i—xxxv—chapters ascribed to the undisputed Isaiah and some eight other authors. If we include analogous phrases such as "the day of the Lord," "the day of the Lord's vengeance," "the day," and other similar expressions, they occur more than fifty times. In the "second" Isaiah they occur only once—in chap. lii, 6—but the reason is obvious. The words are invariably used of a day of vengeance and judgment, but the last twenty-seven chapters of the book are devoted exclusively to God's promises.

(5) The abundant use of *paronomasia* or the repetition of the same sound. Thus we have *hoi* (ah), *goi* (nation), in i, 4;

enachem (ease) and *anakmah* (avenge), in i, 24. In v, 7, we have *nishpat* (judgment) paired with *nispach* (iniquity), and *tzedakah* (righteousness) with *tzeghakah* (cry). In the second Isaiah *mal'ah tzeba'ah* (xl, 2); also xl, 12, *maim w'shamaim*; (21) *halo tedghu*, and *halo yishmaghu*; *yaggishu w'yaggidu* (xli, 22); and in the other alleged "pseudo-Isaiahs" *habbogēd bogēd* and *hashodēd shōdēd* (xxi, 2, see xxiv, 16, xxxiii, 1). Also xxiv, 3, *hibbōk h'bbōk . . . hibbōz h'bbōz* and *pachad w'pachath w'pach* (verse 17). These are merely specimens of what is found everywhere throughout all the *whole* prophecy, and though it may be occasionally found in other writings, it stamps the whole Book of Isaiah as one written by a man who has the ear as well as the mind and heart of a poet.

(6) Expressions peculiar to Isaiah. The most remarkable of these is "the Holy One of Israel." This occurs twenty-eight times in the book, twelve being in the undisputed portion, fourteen in the "second" Isaiah, one in the "fragments," and one in the historical part. It is almost entirely confined to Isaiah, occurring only six times elsewhere in the Old Testament, the passage in II Kings xix, 22, being Isaiah's contribution to his country's history. The late Dr. Kennedy connected it with the ineffaceable impression made upon the prophet by that awe-inspiring vision given to him, "in the year that King Uzziah died." The cumulative force of such minute touches is very great.

"Lord of Hosts." This occurs in Isaiah's vision, just referred to. It is found in a few of David's Psalms, and twice in II Samuel, among books written before Isaiah's time; in the later prophets it is found infrequently, except in Haggai, but it occurs very often in the undisputed Isaiah, and also in the "fragments," and occasionally in the "second" Isaiah. The critics deal very cautiously with the agreements between what they have left of Isaiah and the "fragments,"—a good deal more cautiously than they are accustomed to deal with Hebrew literature generally.

"Mighty God of Jacob" or "Israel." These words are almost peculiar to the Book of Isaiah, occurring elsewhere only once in Genesis and once in the Psalms. They do not occur in the "fragments," but are found once in the undisputed chapters and twice in "second" Isaiah.

"The mouth of the Lord hath spoken it." The expression occurs once in the undisputed and twice in the "second" Isaiah, but very similar expressions are found in the undisputed Isaiah and four times in the "fragments."

The phrases "Holy Mountain," "Mountain of the Lord,"

“Mountain of the Lord’s House,” are common in Isaiah and Micah. One passage occurs in both prophets; but, as usual, every conceivable explanation of the coincidence is defended. Some think that Isaiah quoted Micah; others that Micah quoted Isaiah; and others again that both quoted some older prophet. What is of importance is that the expressions are not common elsewhere, and that Micah and Isaiah were contemporaries.

“Set up an ensign” (or “banner” or “standard”). It is found four times in the undisputed Isaiah, three times in the “fragments,” twice in the “second” Isaiah. It occurs very seldom elsewhere in the prophets, and is used in the Pentateuch in a different sense.

We are all familiar with the words “creep” and “creeping thing” in Genesis i. The same word occurs in Isaiah, where it means “to trample.” It occurs seven times in the undisputed chapters and twice in the “fragments.” Here, then, we have a sign of identity of authorship between Isaiah and the “fragments.” In Genesis i the word is spelt differently and has a different meaning. It is therefore certain that Isaiah is not quoting Genesis in this case, nor can Genesis be quoting Isaiah; but there is evidence that Isaiah does quote Genesis i, and in such a way that his quotation of it disposes of the theory that Genesis i and ii are by different authors. The use of the three Hebrew words translated “create,” “make,” “form,” in Genesis i and ii has been used to prove a difference in the authorship of the two chapters, but in Isaiah xlv, 18, *both Genesis i and ii are quoted*:—

“For thus saith the Lord that created the heavens;
 God Himself that formed the earth and made it;
 He hath established it,
 He created it not in vain,
 He formed it to be inhabited:
 I am the Lord; and there is none else.”

The words translated “created,” “formed,” “made,” are the words used in Genesis i and ii; and the word (*tohu*) translated “void” in Genesis i, 2, is also used in Isaiah xlv, 18 (translated “in vain”). If they do not involve a different author in the last passage, neither can they in the former. The date of the “second” Isaiah is, it is true, brought down by the critics to the same period as that which they assign to Genesis i, but Genesis i and ii are now supposed to have been combined together in one volume at a later date still. Critics have not explained how it is that the “second” Isaiah quotes them as though they had already been combined at the time he wrote.

(7) The tendency to break suddenly into song. This is another feature common to all the portions of the book and altogether peculiar to Isaiah. It is true that Habakkuk has a song at the end of his poetry, but it does not break out in the midst of it. In the undisputed Isaiah there is a song in chap. v, 1-7—

“Now will I sing to my well beloved
A song of my beloved touching his vineyard.”

In the “fragments” we have (chap. xii, 1-6)—

“The Lord Jehovah is my strength and my song ;
He also is become my salvation.”

And chap. xxvi, 1-4—

“In that day shall this song be sung in the Land of Judah ;
We have a strong city ;
Salvation will God appoint for walls and bulwarks.”

while in the “second” Isaiah invitations to break into singing occur and many songs. Even the historical portion breaks out into poetry in Isaiah’s message to Hezekiah, and it includes Hezekiah’s song of thanksgiving, and this in the space of four chapters.

(8) The piling up of ideas or imagery is a peculiarly Isaianic feature—the building up of ideas, sometimes of a similar and sometimes of a contrary nature, with a most powerful effect. Take the three following instances from the undisputed Isaiah, from the “fragments,” and from the “second” Isaiah respectively:—

“The day of the Lord of Hosts shall be
Upon every one that is proud and lofty,
And upon every one that is lifted up ;
And he shall be brought low ;
And upon all the cedars of Lebanon, that are high and
lifted up,
And upon all the oaks of Bashan,” etc. (chap. ii, 10-17).

“It shall be
As with the people, so with the priest ;
As with the servant, so with his master ;
As with the maid, so with her mistress” (chap. xxiv, 2).

“Behold my servants shall eat, but ye shall be hungry ;
Behold my servants shall drink, but ye shall be thirsty ;
Behold my servants shall rejoice, but ye shall be ashamed”
(chap. lxxv, 13-14).

Shorter passages of a similar kind occur in every page. No other writer but Isaiah supplies us with such examples.

(9) Closely connected with the above is the unique way in which parallelism, a characteristic of Hebrew poetry in general, is used by Isaiah.

Usually poetic parallelism consists simply in the repetition of the same idea in different words. But in Isaiah's hands parallelism is a most powerful instrument of emphasis. Two or three examples out of a thousand must content us here. We will take from the undisputed Isaiah, chap. ii, 10-12:—

“Enter into the rock, and hide thee in the dust,
For fear of the Lord, and for the glory of His majesty.
The lofty looks of man shall be humbled,
And the haughtiness of men shall be bowed down,
And the Lord alone shall be exalted in that day.
For the day of the Lord of Hosts
Shall be upon every one that is proud and lofty,
And upon every one that is lifted up ;
And he shall be brought low.”

And from the “fragments,” chap. xxiv, 3-5:—

“The land shall be utterly emptied,
And utterly spoiled :
For the Lord hath spoken this word.
The earth mourneth and fadeth away,
The world languisheth and fadeth away,
The haughty people of the earth do languish.
The earth also is defiled under the inhabitants thereof ;
Because they have transgressed the laws,
Changed the ordinance,
Broken the everlasting covenant.”

And from the “second” Isaiah, chap. liii, 3-5:—

“He is despised and rejected of men ;
A man of sorrows, and acquainted with grief :
And we hid as it were our faces from Him ;
He was despised, and we esteemed Him not.
Surely He hath borne our griefs,
And carried our sorrows :
Yet we did esteem Him stricken,
Smitten of God, and afflicted.”

It is absolutely impossible, in the space allotted to me, to convey the cumulative force of this line of study to my hearers and readers. A most convincing treatise might be written on the subject of the use of parallelism in Isaiah as compared with

its use by the other writers of the Old Testament; but it would be open to the drawback that few would read it; some would pass it by because they had never doubted the unity of Isaiah, and others because they would not attend to an investigation which might prove in conflict with conclusions at which they had already arrived.

Some of my hearers may ask, "What is the use of these discussions of mere words?" My answer is that the critical argument is for the most part comprised in just this dissection of words and phrases. The only other argument offered, if argument it can be called, is one that we must reject; it is the assumption that miracles and prophesy are both impossible.

TWO ARGUMENTS FROM HISTORY.

In conclusion let me offer two arguments based on historical facts. The first is to be found in one of the latest sermons of Canon Liddon. He is speaking of Isaiah's prophecies of the bringing in of the Gentiles. I will quote the passage:—

"Before our Lord came, the force and beauty of this teaching was warped and withered by the intense and, it must be added, narrow feeling of nationality which set in after the Captivity. The close contact with the heathen in the Captivity did more than anything else towards limiting the range of love in Jewish hearts by the idea of the nation. The law said, 'Love thy neighbour,' but the later Jew answered the question, 'Who is my neighbour?' in the narrowest sense. He even excluded the Samaritan."

The four great evangelical prophets, and most of the minor prophets, insist on the superiority of the spirit of the Law to its letter, the spread of the knowledge of the truth far and wide among the Gentiles, and the coming of One Who by stripes and suffering should bring in the long-promised dispensation of the Spirit. The cruel oppression of the Captivity made the later Jews lose sight of these bright prospects for humanity, and they hardened themselves into a bitter hatred of all nationalities but their own, a hatred which, as Juvenal, Tacitus, and other Gentile writers record, was repaid with interest.

A consideration which has occurred to myself, looks in the same direction. The critics of the Wellhausen school refer the "second" Isaiah to the period of the Captivity; the present Regius Professor at Cambridge to that of the Maccabees. But after the Return, the Jews had become so narrow in their national spirit that the glowing pictures of a glorious future

for all the peoples of the world would have repelled them, and have found no acceptance. As for such condemnations of the worship of idols as we find in many passages of "second" Isaiah, they could not have been written in post-exilic times. They would have been regarded as unfounded and unjust attacks upon a blameless and suffering people. For the outward observances of idolatry had become utterly abhorrent to the Jews of the Return.

It is but fair to add that some of the characteristics ascribed to the book of Isaiah are to be found—though not to the same extent—in other prophetic writings. It was inevitable that Isaiah, who was not only the greatest of the prophets, but one of the earliest, should influence those who came after him. The most striking example of this is found in the forty-eighth chapter of the prophecy of Jeremiah, the denunciation of Moab, in which he largely quotes the Burden of Moab recorded in Isaiah xv and xvi. Much of it is verbal quotation, some of it an amplification of Isaiah's words.

CONCLUSION.

The effect of German destructive criticism is to lower the general credit of the Scriptures. The critics divide by centuries the various authors from the events they profess to describe; the authors, according to them, are not men intimately acquainted with the events they record, and their sources of information are vague traditions, true or false—probably false, except when they are assertions having no particular religious value. Historical statements are supposed to have been "worked over" by men of later date; prophecies must have been written after the event.

But the Bible, throughout all its books, professes to be the communication by God to man of His Divine Will. The Pentateuch may not be all the work of Moses, but it must either have been written under his direction, or be a deliberate and indefensible forgery. The historical books were clearly the work of members of the schools of the prophets, who became the government scribes; the books of Chronicles speak of the works of Nathan and Gad, of Jehu the son of Hanani, and other persons well known in Jewish history. I cannot stop to quote any of the prophecies contained in Holy Writ, not connected directly with revelation, which could not have been written after the event. I can only refer to the one great fact that the prophecies of the setting aside of the Mosaic

Covenant in favour of one which would be written in the hearts of God's people; the description of the entry of the Gentile world into that New Covenant; the picture of the Servant of the Lord, Who should be "despised and rejected of men," and yet exalted above them all;—that all these are fulfilled in the history of Christ and His Church, and in no one and nothing else. And so the Christian Church continues to spread, in fair weather and in foul, and the world, in spite of all drawbacks, does become more and more conformed to the teaching of Jesus Christ. His "sound has gone out into all lands, and His words unto the ends of the world." The days are drawing nearer when "the wolf shall dwell with the lamb, and the leopard lie down with the kid, and a little child shall lead them."

Yes, in spite of this terrific war, in which the last trace of Christ's morality has disappeared from the country which for years has been dishonouring the Scriptures, we may still venture to say this. Europe, which for many hundreds of years had been an armed camp, has, as a whole, had peace for a century. And when this terrible outbreak of the hosts of anti-Christ has been brought to an end, it may well have peace for a century more.

Our criticism is truly scientific. We find our belief in Scripture supported by a comparison with facts. He Whom we preach and in Whom we have believed is truly the Lord from heaven and the King of all the earth. Therefore, we cannot be among those who teach others to look down on the sacred Volume and belittle its contents. From the beginning of the world to the last days,—from the Fall of man to this present hour,—it witnesses to the Lord Whom we worship. We therefore cannot treat it like any other book. We must recognize it as one which from one end to the other testifies authoritatively to the work and to the coming of the Judge and Saviour of the world.

Was there ever a prophecy which, when it was uttered, seemed less likely to be fulfilled than this:—

"Arise, shine; for thy light hath come,
And the glory of the Lord is risen upon thee.
For, behold, the darkness shall cover the earth,
And gross darkness the people:
But the Lord shall arise upon thee,
And His glory shall be seen upon thee.
And the Gentiles shall come to thy light,
And kings to the brightness of thy rising"?

And was there ever a prophecy which, even already, has received so glorious—and so unexpected—a fulfilment?

DISCUSSION.

The CHAIRMAN said that they had listened to a remarkable paper, one which, when it appeared in print, he would like to study carefully point by point. He did not know whether anyone there had had his mind unsettled by higher critical theories; for himself he had been kept to the view as to the authorship of the book of Isaiah which had been held by the Christian Church from the earliest times. The Jews had also always in the past considered the prophecies of Isaiah to be a single book; if it were not so, then there was the strange fact that the greatest of all the prophetic writers was an unknown and nameless man, and his work tacked on to the prophecies of another writer. The Jewish Canon included sixteen prophets, and each prophecy began with the name of the prophet. But on the new theory the rule was broken in the case of the greatest prophet of all.

The critics refuse to accept the latter part of the book as genuine, because Cyrus was mentioned by name before his birth; yet Ezra mentions and quotes Isaiah in this very connection.

He had been greatly indebted to a little book by a learned and venerable lady, Mrs. L. D. Jeffreys, entitled *The Unity of Isaiah*, and published by Deighton Bell and Co., Cambridge. The book points out that three objections had been brought against the Isaiah authorship of chapters xl–lxvi. It had been assumed that the historical background of the early part of the book had been Palestine, but of the last part Babylon, but here critics differed hopelessly among themselves as to details. A second difficulty was the change in the theological aspect, which appeared to be different in the earlier and later portions of the book; that simply meant, however, that emphasis was laid on different doctrines or topics as the occasion required, and a similar change might be found in most of the Epistles of St. Paul, as, for example, the Romans and the Ephesians. Lastly, there was the difficulty of the alleged differences of vocabulary and style, but a writer might vary his style from time to time, especially when he wrote under different conditions.

The Rev. MARTIN ANSTEY wished to be allowed to make three remarks. First, there was one phrase which should be written across all the higher critical arguments: *non sequitur*. Their conclusions did not follow their premisses; nothing more remained to be said. Secondly, if the point under discussion was "Did Isaiah write the whole of this book, or did he not?", the discussion must be decided by testimony. The one unbroken historical testimony—and this was evidence—was that the book was written by one man, Isaiah. Third, there was the question of the difference in tone of the two parts in Isaiah: there was the despondent tone and the triumphant. The critics dissected the book on these lines, giving the despondent portions to Isaiah, the triumphant to another author. But for himself, in his own study of Isaiah, he found that the two tones did not divide the book into two main portions as the critics asserted. Isaiah began with a survey of the facts of life, which were depressing, but in chapters vi, xi–xii, xxiv–xxvii, and xxxiii–xxxv he rose above the depressing facts, and saw in prophetic vision the glorious Messianic conclusion in which they were destined to culminate, and in chapters xl–lxvi he reached the grand climax and the triumphant Messianic conclusion of the whole revelation vouchsafed to him. Isaiah had seen Samaria carried away into captivity; he saw that Judah would be carried away to Babylon also, but beyond the Captivity in Babylon he saw the Return, and beyond the Return he saw, and saw from the very first, that the whole earth should be full of "the Glory of the Lord" (Isaiah vi, 3; xi, 9; xxv, 8; xxxv, 10; lxvi, 22, 23).

Mr. SIDNEY COLLETT said that there was one piece of evidence which had not been mentioned yet, but which appeared to him to be both simple and conclusive. There was a passage in the New Testament in which both portions of Isaiah were quoted, and both ascribed to one man. It was in the Gospel of St. John, chapter xii, 38–41. In verse 38 chapter liii of Isaiah was quoted—that was Isaiah No. 2, while in verse 40 the sixth chapter was quoted, which is supposed to be Isaiah No. 1. But here both quotations were ascribed by the Holy Spirit to one and the same Isaiah.

Moreover, the true division of the prophecy was not a twofold one, but a threefold, which in a wonderful way confirmed the unity of the book. Thus, each section began with a call and ended with a warning. The first division began with chapter i, 2, "Hear, O

heavens, and give ear, O earth," and ended with chapter xlvi, 22, "There is no peace, saith the Lord, unto the wicked." The second division commenced at chapter xlix, "Listen, O isles, unto me; and hearken, ye people, from far;" and ended at chapter lvii, 21, "There is no peace, saith my God, to the wicked." The third section began with chapter lviii, 1, "Cry aloud, spare not," and ended at lxvi, 24, "Their worm shall not die, neither shall their fire be quenched." It was also interesting to note that the first call was addressed to the Jews, the second to the Gentiles, the last to the Jews again.

This wonderful prophecy thus contained, in a kind of acrostic form, a revelation of God's plan in His dealings with men through the ages. He first called out the Jews (Genesis xvii) to be His witnesses in the earth. They, proving themselves unworthy, the call was then sent to the Gentiles (Acts xiii, 46). But, "God hath not (finally) cast away his people which He foreknew" (Romans xi, 2); and therefore the third call was again to the Jews, who are yet to be restored: "For the gifts and calling of God are without repentance" (Romans xi, 29).

The Rev. JOHN TUCKWELL said: The learned Chancellor's paper is very timely. Many of the evils of the higher criticism arise from attempting to study the Bible as *literature*. It cannot be done without ignoring its purpose and destroying its Divine vitality.

At the back of the higher criticism is the theory of Evolution, and you cannot treat the Bible along the lines of Evolution without rejecting the supernatural. In the prophecies of Isaiah we have the name of Cyrus the Persian mentioned 150 years before his time. How do the critics get over that fact? By the simple expedient of adopting the theory that there were two or ten Isaiahs, the author of Isaiah xlv living nearly 200 years later than the first Isaiah, writing history under the garb of prophecy, and getting the world to accept the fraud. They cannot understand any supernatural inspiration mentioning a man by name 200 years beforehand. But a similar case occurs in I Kings xiii, 2, where a prophet prophesies against the idolatrous altar of Jeroboam, and says: "O altar, altar, thus saith the Lord; Behold, a child shall be born unto the house of David, Josiah by name; and upon thee shall he offer the priests of the high places that burn incense upon thee." That was fulfilled 350 years later.

But another way suggested out of the difficulty is to tamper with

the Hebrew text under the pretence that somebody else has tampered with it before. The name Cyrus is spelled כִּרְשֻׁשׁ or כִּרְשֻׁשׁ (Koresesh). Now, the ingenious suggestion is made that somebody in early times found the word spelt with the initial letter ח (*cheth*) instead of כ (*caph*), and meaning "a workman," so that the objectionable verse would read: "Thus saith the Lord to His anointed, to the workman whose right hand I have holden," etc. But verse 4 is a very awkward one for this interpretation: "I have even called thee by thy name: I have surnamed thee, though thou hast not known me." Another awkward fact is that the name of Cyrus is found in the previous chapter, vv. 27 and 28, but that is got over by the familiar device of calling those verses an "interpolation," without the least evidence from Hebrew MSS. Josephus knows nothing of any such faking of the text, for he tells us that the passage in Isaiah was shown to Cyrus, and the fact of his own name being in the text greatly encouraged him to carry out the prediction. Such are the shifts to which modern criticism resorts to evade the evidence for the supernatural element in Holy Scripture, and yet this criticism calls itself scientific!

A hearty vote of thanks was passed to the learned and venerable author of the paper, and the meeting adjourned at 6 p.m.

In comment on the discussion the LECTURER wrote:—

I should like to thank the hearers of my paper for their extremely kind reception of it. There are no criticisms. I should like, however, to give the explanation of some of its deficiencies.

1. I desire to say that I was specially asked to confine my paper within as narrow limits as possible on account of the increased cost of printing brought about by the War. It therefore contains barely half what I could have put into it. I trust that those interested in the subject will do me the favour of referring to my fuller paper on this subject, written, as already mentioned in the footnote on p. 65, for the American *Bibliotheca Sacra*, which may be obtained of Messrs. Higham and Company, Farringdon Street, London, E.C.

2. Prebendary Fox (whom I beg to thank for his kind words) has mentioned his indebtedness to Mrs. Jeffreys' little book on *The Unity of Isaiah*. Only want of space prevented me from saying that I am also greatly indebted to that book, as Prebendary Fox must have perceived. I am happy now to be able to make amends

for my previous silence. I have had the honour of an introduction to Mrs. Jeffreys, whose accurate knowledge of Hebrew is vouched for by authorities so competent as Professor Margoliouth of Oxford and my late valued friend, the Rev. Dr. Sinker, Librarian of Trinity College, Cambridge. I had the opportunity of discovering that Mrs. Jeffreys was as careful and accurate in her knowledge of New Testament Greek as of Hebrew. Her book on Isaiah should be in the hands of every one who wishes to do justice to the subject. As is usual with the Germanizing critics, no reply has been made to her arguments. Their own arguments, which largely consist of mere assumptions and assertions, are simply repeated. Such methods are not only unfair to their antagonists, but to the general public; and especially to the young, who are led to believe that no reply has been attempted.

3. I am deeply concerned at the curtailment of the activities of the Victoria Institute which the War imposes. I trust that every one who values the work which it has done, and is still doing, will exert themselves to bring visitors to its debates and subscribers to its funds. Years ago the assaults of sceptics were chiefly directed against the possibility of the existence of supernatural, or perhaps we had better say spiritual, forces. These attacks have now largely ceased. They never were raised by our greatest scientific discoverers, who were mostly reverent and humble, but came rather from those who were endeavouring to popularize the study of physical sciences. The present generation has been brought face to face with indirect attacks, endeavouring to undermine the authority of the records, which are based on the existence of such forces. The ground of these attacks is therefore not scientific, but literary; and the methods of defence must consequently take a different form. The existence of such a society as the Victoria Institute is therefore as necessary as ever, and no effort should be esteemed too great to ensure its continued activity.

576TH ORDINARY GENERAL MEETING,

HELD IN COMMITTEE ROOM B, THE CENTRAL HALL,
WESTMINSTER, ON MONDAY, FEBRUARY 21st, 1916,
AT 4.30 P.M.

THE VENERABLE ARCHDEACON BERESFORD POTTER, M.A.,
TOOK THE CHAIR:

The Minutes of the preceding Meeting were read and confirmed.

The SECRETARY announced the election of Sir Charles Thomas Dyke Acland, Bart., M.A., M.P., and Mrs. Adelaide E. Piesse as Associates of the Institute.

The CHAIRMAN introduced the Rev. A. H. T. Clarke, M.A., and invited him to address the Meeting on "The Fulfilment of Prophecy."

THE FULFILMENT OF PROPHECY. By the Rev.
A. H. T. CLARKE, M.A.

(*Abstract.*)

WHAT is PROPHECY? *How* is it FULFILLED?

1. It is essentially *insight* into God's dealings with mankind and therefore issues in *foresight* as to their natural outcome. *God is always the same*: "I am, Who am"; "I am the Lord, I change not." *And man is always the same.* His "history," therefore, "is ever repeating itself." The first Man was a type and prophecy of all men. The Jewish Church was a type (*τύπος*, 1 Cor. x, 11) and prophecy of the Christian Church of all time ("the Israel of God," Gal. vi, 16). And the special gift of prophecy lies in declaring the issues of God's eternal counsels as they appear in the midst of time. It is the result of the illumination of the spirit of man by the Spirit of God (1 Cor. ii, 9-12; II Pet. i, 20, 21). "He spake by the Prophets." "When He is come . . . He will shew you things to come," cp. Rev. i, 1-3.

2. As every nation has its special gift of law, science, art, rulership, poetry or philosophy, held in trust for the world, so God chose the Jews for the special gift of Revelation. "Salvation is of the Jews." "Unto them were committed the oracles of God." Their whole race and fortunes were a prophecy of

Messiah to come (Hos. xi, 1, with Matt. ii, 15). "To Him bore all their Prophets witness." "The testimony to Jesus is the spirit of Prophecy." The Desire of Nations was specially and exclusively revealed to them in any distinctness. It was "of them Christ came, Who is God," "It is evident that our Lord sprang out of Judah." The temporal promises to Abraham, to Solomon, to Hezekiah, even to Cyrus, were only to be revealed through them. They alone were God's elect vessels and chosen channels, the sole organs of His revealed will (Isa. xlix, 6, cp. Acts xiii, 47, and Rom. ii, 17, 18). They alone supplied the "men of revelation" (Dillmann). Hence, also, all Prophecy becomes essentially Messianic (Augustine). Christ is its goal (τέλος, Rom. x, 4) both in His first coming and His second (Eph. i, 10).

3. Hence Prophecy, expanding with the growing experience of the Jewish nation, never exhausts itself in a single fulfilment (*ἰδιὰς ἐπιλύσεως οὐ γίνεται*, II Pet. i, 20). Prophecy, like history, repeats itself in cycles of analogous experiences, *e.g.*, Ahitophel's treachery to the Messianic King David (Pss. lxix and cix) repeats itself in principle in the treachery of Judas to Christ (Acts i, 16-20); later, in the treachery of the Jewish Church to the Christian Church (Acts v, 17; vi, 9; xv, 1; Gal. ii, 11; iv, 17); last of all, in the treachery of the apostate Christian Church to the Truth itself (I John ii, 18, 19). This is the ANTICHRIST foreshadowed in all St. John's writings. "The day of the Lord," always at hand in the rise and fall of nations, will culminate in one final great "DAY" of Judgment.

4. But are there to be no final fulfilments before the end? Is there no open vision of the whole without this complicated cross-reference to all time? Are there no definite stepping-stones in time to ease us in this march of God across history? Yes, there are, it is true, certain historical fulfilments of doom upon ancient nations like Tyre, Babylon, Egypt, Edom, Nineveh, fulfilled to the very letter. But that letter is to be reinterpreted *by analogy* so as to apply to all nations who shall take up the same standpoint and represent the same principles. These nations were picked out by the bold hand of prophecy that they might be a warning to future nations whose principles they represented.

5. The application of this to modern Europe, *e.g.*:—

(a) *Business fraud.* See Hos. xii, 7-8; Amos viii, 4-10.

(b) *Treachery.* See Amos v, 3, 4, and 10-13 (repeated by our Lord over Jerusalem in His day and by St. John over the Church of the future).

(c) *Over Prosperity* requiring the surgeon's knife of War. See Amos vi, 1-11, 13-14.

(d) *Worship of Wealth*. Zeph. i, 4-12, 17-19.

(e) *Spiritual indifference among the Clergy for their duties*. See Mal. i, 6-ii, 9; iii, 7-10.

(f) *Picture of the modern Prussian character in the ancient Chaldeans*. See Hab. i, 2-17 and ii, 4-17.

6. We are witnessing now the break-up of old Europe—the Europe of Cæsar, of Charlemagne, of the Papacy and old Feudalism. The German nation is once more employed in the process, as it was in the days before Cæsar's Empire fell. May we not see in these things the exhaustion of the Gentile power “in order that the way of the Kings of the East”—that is, the empires of China and Japan, of India and Africa—“may be prepared,” and that the Jews may return to their own land once more as the head of the nations before the end come?

DISCUSSION.

The CHAIRMAN said that he thought the Lecturer had rendered them a service by pointing out the constantly recurring fulfilments of prophecy. Past writers on prophecy had spoken of the “double sense,” but there was more than a “double sense.” The Hebrew words used to denote a prophet indicated the real meaning of prophecy, just as the Greek words used in the New Testament for miracle made clear the true meaning to be attached to that word. One Hebrew word used meant “a seer,” and was translated in the Septuagint by a Greek word derived from the verb which means “to see.” Consequently a prophet was a man inspired above his fellows to see the laws regulating God's control of the universe. Another Hebrew word translated prophet signified “to proclaim,” and was translated in the Septuagint by a word which means “to speak forth” or “proclaim.” So the prophet proclaimed to the world what he was inspired to see, viz., the great principles of God's governance of man and the world. These were constantly being fulfilled in the past, the present, and the future. For God never changes. He is the same yesterday, to-day, and for ever. And prophets still exist—men who see deep spiritual realities and laws, and consequently can foretell what will inevitably happen if certain courses are pursued. God speaks through them now as in the olden time.

Mr. ROUSE agreed with the Lecturer that some prophecies of the Old Testament had, and were intended to have, two fulfilments, the more distant one being the more important. This was the case with the fate of Ahitophel, foretold in Psalm lxxix and elsewhere, and of Judas Iscariot, for like treachery. But the Lecturer further claimed that prophecies were usually of a comprehensive character, with many possible fulfilments. In his survey of the subject, however, he had passed without notice numerous examples of prophecy which had a specific and individual reference only, such as the information which Samuel gave to Saul about the discovery of his father's asses, and the prophecy of Elisha that food should be plentiful in Samaria the next day. The Lecturer further made unnecessary difficulty in finding the fulfilment of the Lord's prophecies recorded in Matthew xxiv, Mark xiii, and Luke xxi. A careful perusal of the passages would show that our Lord was replying to three questions which His disciples had asked him, and that Luke recorded the answer to one question and described the siege of Jerusalem under Titus, while Matthew and Mark recorded His prophecy of the final siege of Jerusalem and the tribulation which had been foretold in Zechariah xii and xiv.

Mr. MAUNDER differed from Mr. Rouse in his criticism of the Lecturer for omitting all allusion to unimportant details of prophecy. The subject before them that afternoon was a very wide one, and the Lecturer had been wise in seeking to avoid minor details and confining himself to broad principles.

There were two elements in prophecy, the Divine and the human. God Himself was the Origin and Fount of prophecy, but He used men to speak it forth, and men were able to lend themselves to this Divine usage.

He would invite the Meeting to consider how the three subjects which they had discussed at this and the two previous Meetings illustrated each other. Philosophers had told us that one man, speaking to another and using certain words, had no security that those words had the same meaning to his hearer that they had to himself. As a matter of logic this might be true; as a matter of practice, we do unquestionably have intercourse and communion with each other. So the miracle is continually being repeated that a little child, with its budding intelligence, learns to understand and to speak a language no word of which it understands by nature, and

an analogous miracle is performed when the Bible is translated into languages that do not contain words to express many of its meanings, and it is understood by races that had no such ideas before. May we not carry the analogy further? Prophecy is God speaking through men to men, but His thoughts are higher than our thoughts. Necessarily, therefore, prophecy must always present difficulties to us: it calls for the exertion of spiritual intelligence on the part of the recipient; we have to learn a language which is foreign to us, conveying ideas which have had no previous part in us. Then at our last Meeting we had brought before us the unity of the spirit of prophecy from beginning to end of the book of Isaiah brought out in a wonderful fashion, and it was shown how God had revealed His purpose with mankind so many generations ago.

Mr. GRAHAM supported the view of the Lecturer that God revealed *through* the prophet—not *to* the prophet—that which concerned His will in times to come. In its germinative nature prophecy was capable of various fulfilments. But the key to all was the knowledge of the intention of God to reveal Himself to the creature He made for the purpose by the incarnation of His only begotten Son. That purpose was apart from redemption, but as redemption had been made necessary by Adam's fall, so God's purpose was wrought out in it. Hence all prophecy must point to Jesus Christ, and will eventually find its full accomplishment at His coming again.

Mr. SIDNEY COLLETT said: The Lecturer first told us that we were entirely dependent upon German theologians for a right understanding of the prophecies of the Bible.

It is very difficult to comprehend how such a statement could be made, in view of the fact that it was that very German theology, which was probably more responsible than anything else for the lack of faith and materialism which was blighting our land to-day.

No, the truth is, we are not dependent upon any human teachers in such matters. The Divine Author of the prophecies is also our Divine Teacher, see 1 John ii, 27: "The anointing which ye have received of Him abideth in you, and *ye need not that any man teach you.*"

Then, I could not agree with the Lecturer's remark that: "the writers of the Bible had more than their ordinary share of human

failings!" It is true that the Holy Spirit, in His Word, has given us a Divinely faithful record of their lives, without any attempt at "hushing up" their faults, as a merely human writer would have done. But, that same Holy Spirit gives us their true character in II Peter i, 21, as "*holy men of God*"!

Nor could I follow Mr. Clarke in, what seemed to be the essence of his Lecture, that prophecy was to be traced to some "insight" on the part of the prophets.

This seems to me, if I may humbly say so, altogether wrong. For, in the first place, the prophets did not always understand their own prophecies! and apparently had, at times, to study their own writings, in order to understand the meaning of the Spirit's message through themselves. See I Peter i, 10, 11.

But, more than that, we are clearly told in II Peter i, 21, just how prophecy *did* come, viz:—"holy men of God spake as *they were moved by the Holy Ghost.*" And the word rendered "moved" really means swept along as by an irresistible torrent! which is the very opposite of anything in the nature of personal "insight."

I am sorry to have to say that,—as it seemed to me,—the Lecturer failed to give due importance to the work of the Holy Spirit in the inspiration of the Scriptures, and that lies at the very foundation of our faith. (See II Timothy iii, 16.)

The Rev. JOHN TUCKWELL said: I am sure we must all be grateful for the very able paper to which we have just listened. At the same time there were one or two details upon which we could not all quite agree.

First of all, I do not think the Lecturer did full justice to II Peter i, 20. The word which is rendered "private" (*ἰδιος*) means that which is "a man's own," and the word "personal" would beyond all dispute quite correctly represent it. The word rendered "interpretation" is nowhere else used in the New Testament. It is derived from the verb *ἐπιλύω*, meaning "to release," "to loose," "to untie." The noun here used would thus carry in it the meaning of "a release," "a loosening," "a setting free," and in the matter of speech "an utterance," "an expression." The sense of the passage is thus, "no prophecy of the Scripture is of any private or personal utterance." This is fully borne out by the next verse, which reads: "For the prophecy came not in old time by the will of

man, but holy men of God spake as they were borne up by the Holy Ghost."

Again, I do not think the Lecturer made enough of the fact that prophecy in Scripture is distinctly represented as that which is supernatural and Divine. Moses in the book of Deuteronomy, xviii, 22, said "when a prophet speaketh in the name of the Lord, if the thing follow not, nor come to pass, that is the thing which the Lord hath not spoken."

Scripture prophecy is thus something far more than the shrewd guess of a political prophet. We have an illustration in Daniel ii, where we are told how Nebuchadnezzar had a dream of the three great kingdoms that should succeed that of Babylon. After the last of these, we are told that "the God of heaven will set up a kingdom which shall never be destroyed," and we may be sure that that prophecy will be fulfilled, even as the prophecy of the preceding kingdoms was. This surely is supernatural knowledge, and not merely the foresight of political sagacity.

A hearty vote of thanks was passed to the Lecturer, who replied briefly to the criticisms which had been made, and the Meeting adjourned at 6 p.m.

577TH ORDINARY GENERAL MEETING,
HELD IN COMMITTEE ROOM B, THE CENTRAL HALL,
WESTMINSTER, ON MONDAY, MARCH 6TH, 1916,
AT 4.30 P.M.

THE VERY REV. HENRY WACE, D.D., DEAN OF CANTERBURY,
VICE-PRESIDENT, TOOK THE CHAIR.

The Minutes of the preceding Meeting were read and confirmed.

The SECRETARY announced the election of Mr. F. T. Lewis as an Associate of the Institute.

The CHAIRMAN said that the Rev. H. J. R. Marston, to whose thoughtful and eloquent addresses they had had the privilege of listening on previous occasions, needed no introduction to that Meeting. He would therefore, without further preliminary, ask him to give his address on "The Psychology of St. Paul."

THE PSYCHOLOGY OF ST. PAUL. By the Rev. H. J. R.
MARSTON, M.A., Rector of Lydford-on-Fosse, Somerset.

I DEFINE psychology to be the science of the soul; or the ordered and ascertained knowledge of the facts of human consciousness. Perception, imagination, memory, appear to be the principal exertions of the faculties which we have within. Of these, imagination alone is not much noticed by St. Paul; indeed, there is perhaps only one passage in his recorded utterances which can be directly referred to this superb faculty.

Christianity is not a school of psychology, yet it cannot fail to give a powerful impulse to that study. I may even hazard the opinion that Christianity created the atmosphere in which psychology breathes its most spontaneous and deepest inspirations. St. Paul was not a psychologist in the technical sense of that term; but his sympathy with the human frame in its mysterious inward working can be proved to have been profound and comprehensive. His handling of the problems of the soul can be proved to have been eminently sane, competent and masterly. To exhibit the method of St. Paul's psychology is the first object of this lecture. To argue from what we shall

discover of his psychological gifts that he is a credible witness to certain wonderful experiences in himself and others, and so to demonstrate the truth of some points of his teaching, is the second object of my lecture.

I cannot carry through this investigation without traversing some of the conclusions of what I may call the "Impressionist Interpreters" of St. Paul. Not without a touch of arrogance, they assert that until the present century St. Paul was not understood. They then proceed to reduce the apostle, who has according to them eluded the grasp of commentators from Jerome to Lightfoot, to the dimensions of a wandering Jew with an epileptic tendency and a mystical piety; a person strangely inadequate to have become the framer of the religious life of fifty generations. It is easy to see why these impressionists strive thus to reduce St. Paul. By that process they are able to reduce the supernatural to very meagre proportions. But by the same process they reduce the apostle to a figure strangely different from the noble personality with whom St. Luke has made us all familiar, and who may easily be discerned behind and within the epistles which he bequeathed to the Church. The materials on which they have to work are small and unsatisfactory, for the details of St. Paul's life are almost wanting until the time of his conversion. After that date he is the author of such fragmentary information as we do possess. I, therefore, prefer to take the apostle at his own valuation. I see him as he was: ecumenical and humane; large hearted, lofty in mind; blending with admirable sanity and poise elements in religion often thought to be incompatible. I discern in him the genuine author of the psalm of love, the man who was all things to all men, strong in weakness, in humility, at once teacher of nations and chief of sinners, the vessel of election and less than the least of all saints. This is the St. Paul of whose psychology I purpose to treat.

The writings of the apostle furnish a fruitful field for this inquiry. In the first epistle to the Thessalonians occurs the famous tripartite description of human nature as spirit, soul and body which attaches the teaching of St. Paul to the modern school of psychologists who insist so strenuously on the physical element in the science. In the seventh chapter of the Romans occurs the passage which, as an analysis of human experiences, stands alone in literature for depth and subtlety. But it is in the second epistle to the Corinthians that the psychological genius of St. Paul reaches the zenith. In this opinion I have the happiness to be supported by the learned Warden of Keble

College. As a human document, this epistle has no rival in St. Paul's writings. As in that to the Romans his mind was fixed on the history of Redemption. As in the first epistle to the Corinthians his mind is fixed on the order and disorder of the Church, so in the second his mind is engrossed by the inner life of souls. By bearing this in mind we are able to allow for the difficulties of interpretation. We can understand the sudden and sometimes violent alternation of feeling; the abrupt transition from topic to topic, from temper to temper. The cause of this lay in the conditions under which the epistle was produced. Circumstances the most trying harassed his body; and influences the most agitating and confused perturbed his spirit. The epistle reflects them all; and the correspondence is at once just, natural and edifying.

“Without were fightings, within were fears”; “I despaired even of life”; “I found no rest in my spirit”; “I wrote amidst many tears”; “who is sufficient for these things.”

In phrases such as these we discern the conditions under which the epistle took its motley but beautiful shaping.

A critic of eminence has pronounced that the language of St. Paul in this epistle is as eloquent as that of Demosthenes, and I agree with him. All the grades and variations of human feeling are clothed with just and affecting diction. It is, indeed, impossible to gather this from the crude and irregular translation of the Authorized Version. But the fact is indisputable. And the fact is important, for it is another proof of the stupidity of the critics, who cannot see how great St. Paul was. They who can resist the evidence of the Greek of this epistle in favour of the grandeur and veracity of the apostle can resist anything and may be guilty of any freak of interpretation. At least forty-seven terms expressing the emotions of the soul or their expression in actions or states can be quoted from this epistle. The list is copious, but I do not claim that it is exhaustive.

I have thrown into a note at the end of the lecture the details. Here it suffices to say that the list covers the whole area of experience. Passions, moods, habits, virtues, vices, emotions and their manifestations, the seats of emotions and the effects of them—all are touched in this wonderful letter with a delicacy, a firmness, a deliberation which declare the master hand. We rise from the perusal of the epistle with a conviction that its author was one who was in deep sympathy with human nature. He knew it well; he shared its feelings;

but he was neither alienated from it by its faults nor soured by its follies. He left it neither in disgust nor in anger, but moved with a divine pity and a divine hopefulness; he was conscious that it was originally good, and that even in its decay and ignominy it was potentially a thing of glory and exquisite efficiency.

It would have been well for the Church if divines and expositors had always caught from St. Paul the infection of so gracious a regard for their fellows. The epistle is a counterpoise to the letter to the Romans, and from a blending of the two we obtain the true theology of St. Paul. I am sure that our belief in the credibility of St. Paul as a witness to the divine elements in his Gospel must be, and rightly be, qualified by our belief in his sanity as a man. I believe that the epistle to the Corinthians which I have just summarised proves that sanity in the most complete and satisfactory manner. But that epistle also contains passages of surpassing interest to the Christian as such, passages which are one thing to us if we believe St. Paul to have been sane and sympathetic, and quite another thing if we believe that he was an epileptic Jew obsessed by the current illusions of the Jews of his day. I have shown cause for rejecting this latter view. Of the great Christian verities which loom large in this epistle, four present commanding claims to our notice. The limits of this lecture preclude me from entering into each of the four; but I may name them as I pass, and then devote what space remains to the examination of two.

These four subjects are: (1) the reality of grace, or the conflict with Naturalism; (2) the reality of reconciliation, or the conflict with Pantheism; (3) the supremacy of spirit, or the conflict with Materialism; (4) the reality of vision and revelation, or the conflict with Rationalism. Each of these four topics comes up in the course of the second epistle to the Corinthians. Each is handled by St. Paul with that masterly skill to which I have devoted the first portion of this lecture. The four together may be said to comprise the fundamental elements of Christianity in all ages, and to be things that matter. If on these points St. Paul can be discredited, Christianity has suffered a blow from which it can hardly recover. If on these points Christians can maintain the credibility and capacity of St. Paul, the Naturalist, the Pantheist, the Materialist, and the Rationalist must quit the arena sadder and, let us hope, wiser men. I select two of these subjects for closer and fuller examination. The first of the two is the reality of the vision of

Jesus which, though not specially mentioned in this epistle, yet plainly underlies it. This point brings me into collision with the Rationalist. The second is the doctrine of reconciliation, which has its *locus classicus* in the close of the fifth chapter of our epistle, and which brings me into collision with the Pantheist.

The seeing of Jesus by Saul of Tarsus at noon on a certain day near the gate of Damascus is a point of capital import. On that account it is three times recorded in the book of the Acts. It was twice narrated by the apostle in the most public and circumstantial manner, once in Jerusalem, once in Cæsarea. It made on his mind, memory, and heart an indelible and profound impression. Its importance is much more than belongs to an incident in his development: it affects vitally the character of the Christian religion as an historic and world-wide scheme. It cannot be shown, in fact, that St. Paul was converted by the seeing of Jesus or by the words that then passed between the chief of sinners and the ascended Lord. But what can be proved is that the kernel of the transaction consists in the words "I am Jesus." These words form the link between the Old Testament and the New. They echo the I AM of the burning bush. They imply identity between the manger of Bethlehem and the invisible throne. They created in St. Paul the conviction that the faith of Jesus was free of all ties in time and place.

Accordingly, then, when St. Paul uses in his epistles the simple name Jesus in speaking of our Lord, we are to think of his first interview with his Master. That use recalls vividly the event that made so awful and blessed a difference to himself and to the whole human family. About twenty times in the epistles as a whole does St. Paul thus write. In the pastoral epistles and in the epistle to the Colossians, and that to Philemon, the use does not appear. But in all the rest it does. It appears in every sort of connection. Jesus was to St. Paul the heart of Christianity: no part of it could be complete without Him. As the object of faith; as the measure of truth; as the object of sight; as the author of life; as the topic of preaching; as the name above every thing; Jesus—the Jesus of the Damascus interview—was all in all.

In our epistle the use is abundant and significant, and may be traced as a golden thread running through the whole texture and tissue of the letter. St. Paul did not always speak of his Lord as Christ or as the Christ, or as the Lord Jesus; or in other terms of greater or less majesty and ambiguity. He let all men

know that He to Whom he owed his all and for Whom he was ready to yield his all, was the Jesus of the human name and the human voice: the very Man of whom Cephas and John bore earthly and personal witness; and to Whom he, no less than they, would bear his human witness too. Thus by using the name Jesus so perpetually and so confidently, he established the solidarity of apostolic Christianity, and the historical character of Christianity itself.

No rationalising, whether sentimentally pious or clamorously hostile, can get away from these findings; and Christians are entitled to hold fast to the doctrine of St. Paul as a witness no less than as an apostle.

The Pantheist fares no better than his brother the Rationalist. The language of the apostle presents an insuperable bar to him. Nowhere has the apostle stated more clearly the gulf fixed between man and God by sin than in this epistle. Nowhere has he stated with equal power and tenderness the fulness and pathos of the reconciliation by which God has bridged that gulf. The circumstances under which he was writing made that doctrine very dear to his own soul. He was acutely conscious of the divisions between men, even between good men; between races and sects; within the Christian community itself. He was charged by an absurd and fanatical clique with being beside himself; with being "an irreconcilable." He replied in the finest passage of all his writings by exhibiting the glory of God as the Reconciler. God became a World-reconciler in Christ, not attributing to men their trespasses; and committing to chosen men the word and function of reconciliation. The reconciliation was effected by an august Person in an august transaction: "He made Him to be sin for us that we might become the righteousness of God in Him."

The task of the Pantheist is to convince the human conscience that everything is good: that there is no evil and therefore no sin. That task he has tried to execute without success for many ages. One of the chief obstacles in his way is the language of St. Paul and the experience that lies within that language. I have no doubt that the human conscience is on the whole too sincerely faithful to truth, ever to adopt the vagaries of Pantheism. It will at last come round to the solid and awful realities so faithfully portrayed by the apostle.

The way out of the tangle of sin is by the door of reconciliation with God; and St. Paul, more than any other man, has

been employed by God to write that truth large on the page of human nature.

NOTE ON THE TERMS AND PHRASES USED BY ST. PAUL IN THE SECOND EPISTLE TO THE CORINTHIANS.

The collection of terms and phrases in this note is copious, but not exhaustive. It comprises more than fifty expressions. I have distributed them under certain obvious but useful heads. I have translated the original Greek of the expressions into modern equivalents as far as I can. The Greek, however, will repay careful investigation; and, indeed, no translation is really adequate.

1. *Mental processes*.—Thoughts, Reasonings, Volition, Purpose, Deliberation, Attribution.

2. *Natural emotions*.—Eager solicitude, Confidence, Praise, Grief, Fear, Repulsion, Ambition, Jealousy.

3. *Departments of nature*.—Conscience, Spirit, Soul, Body, Flesh. (Soul is used in its plural, but Spirit and Body are not.)

4. *Seats of emotion*.—Heart, Flesh, Vitals. (Heart is used in the plural.)

5. *Outward signs of emotion*.—"Through many tears," "With fear and trembling," "Weakly presence of the body," "Whether in the body or apart from it God knows." Two phrases occur which are like these, namely: "Lest I should become exalted" and "Constraint of heart."

6. *Vices*.—Levity, Nonsense, Chicanery, Trickery, Pollution, Impurity, Wantonness, Harlotry.

7. *Christian graces*.—Faith, Hope, Love, Peace, Joy, Patience, Tolerance, Earnestness, Sincerity, Kindliness, Simplicity, Righteousness, Truth, Obedience, Meekness, Reasonableness, Liberty, Wisdom, Knowledge, Sanctity, Sanctification.

This survey demonstrates the richness of St. Paul's vocabulary, the delicate precision of his use of terms, his alert and vivid interest in the whole structure of man.

Such a writer could not have been the Jewish globe-trotter obsessed with the illusion that the world was about to vanish in a debacle precipitated by the Advent of Jesus. Such a writer was and is worthy of much higher credit than are those critics who interpret him thus.

DISCUSSION.

Dr. A. WITHERS GREEN : A few years ago I heard a celebrated Nonconformist minister in an evening Gospel Service declare that the road of the Damascus journey and interview was not that of a real transaction, but of an imaginary mental one. Now comes in print from an Anglican divine in high status a similar trifling with the wonderful account. To our forefathers the event was very real, for you may see on the pediments over the western entrance of St. Paul's Cathedral the facts depicted in stone in plain detail. To them all was as certain as the cock which crowed thrice, which is also to be found behind St. Peter to the north, and by the side of St. Paul. Those who suggest that Saul of Tarsus was the subject of an epileptic trance display their ignorance. St. Luke doubtless knew that in epilepsy consciousness is lost and that at the end of a seizure, when reason returns, the past fit remains a perfect blank with no memory to record it. So that the *medicus carissimus* and companion of St. Paul and author of the Acts of the Apostles would know how true and substantial was his friend St. Paul's graphic description.

Mr. M. L. ROUSE thought that though it might seem as if Paul was compelled to become a Christian by the blinding heavenly light and the Divine voice and words, they ought not to forget that he afterwards said to Festus and Agrippa, "I was not disobedient to the heavenly vision." So, had he chosen, there was a possibility of his rejecting the mercy and grace which the Lord had offered him. Paul's "thorn in the flesh" was, he thought, defective eyesight, but Sir William Ramsay considered that it was epilepsy.

Mr. JOHN TENNANT wished to correct Mr. Rouse. Prof. Ramsay had suggested that St. Paul was afflicted with malaria, not epilepsy.

Prof. LANGHORNE ORCHARD reminded the Meeting that St. Paul, alluding to his sight of Our Lord on the way to Damascus, associated it with historical facts. He points out that Christ died for our sins, that He was buried, that He rose again the third day, and that He was seen by many witnesses on different occasions. Last of all St. Paul records, "He was seen of me also, as of one born out of due time." He adds this as an historical fact to the four historical facts just mentioned. He was not the man to base a serious faith upon an imaginary foundation. And his great knowledge

and correct use of psychological terms show St. Paul to have been specially qualified to describe a psychological experience.

The Rev. A. GRAHAM BARTON thought of the words of Victor Hugo, "the road to Damascus is one of the highroads of humanity." The Lecturer referred to St. Paul's treatment of man's nature as tripartite, consisting of spirit, soul, and body. Many psychologists did not believe in the tripartite nature of man, but considered that man was dual. Mr. Marston assumed the tripartite division of man's nature, whereas this was in dispute.

Lieut.-Colonel ALVES considered that the character of the Apostle Paul could very well take care of itself, the only difficulty relating to him being the nature of the "thorn in the flesh."

As to the nature of the "soul" in the "spirit and soul and body" of I Thessalonians v, 23, there was much dishonest teaching, notably on the part of the nineteenth-century revisions of the Old Testament, in their following the original translators, who were naturally prejudiced by early Romish training.

In Genesis i and ii, besides the man of ii, 7, being a "living soul," the inferior animate creation is five times called "living soul," in the Hebrew, the Greek Septuagint, and the Latin Vulgate. In Genesis vii, 21-23, man is again linked with that creation as to his "breath of the spirit of lives." Whatever was the result of the God-breathing in man's case, he would seem, as regards the substance of his spirit, as well as of his body, to be the same as the lower animals; albeit, it must be remembered, a distinct creation. Man's likeness to his Maker appears to be mental and bodily, not moral and spiritual, as Genesis iii reveals. This is also taught by both Moses and Paul, who give the male likeness as being nearer the Divine than is the female.

Dead bodies of men are, certainly ten, possibly eleven, times, called "souls" in the Hebrew Old Testament.

Man's nature seems to be revealed as twofold before regeneration, and what may be called threefold after, two spirits acting on the same body, and producing two diverse soul-feelings. The Apostle's remark, in I Thessalonians v, seems to mean that, through orderly and holy walk of life, the spirit overcoming the "flesh," the new "soul" thus generated may overcome the old; and that what was irksome at first may, through conflict, become instinctive.

Like other branches of theology, our psychology has been based

on isolated texts divorced from their context and foundation, passages of Scripture, and some of those texts mistranslations.

Archdeacon POTTER said that it seemed to him that one of the principal causes of the conversion of St. Paul was the fact that he had come into contact with followers of our Lord who showed in their lives the influence of His teaching and life (as, *e.g.*, St. Stephen). Previously to such experience we can imagine him in all seriousness thinking of the early Christians, as Tacitus and Suetonius wrote of them: "a class hated for their abominations," "a most mischievous (*exsecrabilis*) superstition," "hating mankind," "a new and impious superstition" (*nova et malefica*). But that the Apostle's heart was ready for conviction, when evidence appealing to it was forthcoming, we see in his broadhearted and noble speech later at Athens.

The CHAIRMAN thanked Mr. Marston for the new and interesting confirmation which he had placed before them of the fact that St. Paul was sane. St. Paul's sanity could indeed take care of itself as well as his character. It was difficult to read with patience much that was written about St. Paul. The article in the *Quarterly Review* to which Mr. Marston referred was an outrage, not only on St. Paul, but also on all those who had ever written about him. If no one had understood St. Paul until that article was written, then certainly no one at the present day could be said to understand him either. A simple way in which to decide whether St. Paul was sane or no was to read his Epistles. In his (the Chairman's) opinion no controversial literature could be put on a level with the Pauline Epistles, so straight and forcible and with arguments so powerful concentrated into such small space.

There was one other thought which he would wish to lay before them. Christian theology was alleged to be Pauline; it was suggested that Christianity was originated by St. Paul. But this was to forget that St. Paul did not come after the cult of Christianity had been started and divert it into new lines. He was a contemporary of Christ. When he was converted, he was converted into the belief that a contemporary of his own, a Man of his own generation, was God Incarnate. It was not only on the Damascus road that he held interviews with our Lord and received instruction from Him. Witness what he received from our Lord with respect to the Communion. He received instruction and revelation from Him many times. It had been urged that there was a great difference

between the theology of the Epistles and the simple teaching of our Lord Himself as recorded in the Gospels. How could it be otherwise? The Epistles were written after our Lord's Passion, therefore they dealt with deeper truths. As Canon Barnard had pointed out, there was a growth from the Gospels to the last Epistles. The pattern of our Lord must have had an increasing effect. Someone was once asked how to express in a word the effect of Christianity; he replied: "St. Paul," and he could not have expressed it better.

A vote of thanks to the Lecturer was passed unanimously, and the Meeting adjourned at 6.10 p.m.

578TH ORDINARY GENERAL MEETING,

HELD IN COMMITTEE ROOM B, THE CENTRAL HALL,
WESTMINSTER, ON MONDAY, MARCH 20TH, 1916,
AT 4.30 P.M.

E. J. SEWELL, ESQ., IN THE CHAIR.

The Minutes of the preceding Meeting were read and confirmed.

The SECRETARY announced the election of the Rev. J. W. Hayes, Miss M. K. Purcell, and Mrs. Katherine Tod as Associates of the Institute.

The CHAIRMAN invited the Rev. Prebendary H. E. Fox, M.A., to deliver his lecture descriptive of "Inscriptions and Drawings from Roman Catacombs."

The lecture was illustrated throughout by lantern slides.

*INSCRIPTIONS AND DRAWINGS FROM ROMAN
CATACOMBS.* By the Rev. Prebendary H. E. Fox, M.A.

THE value of the Inscriptions in the Catacombs, especially those around and near Rome, has long been recognized as illustrating the religious and social life of Early Christianity. Though a large number were probably destroyed before the discovery of these burying places in the sixteenth century, sufficient remain and are preserved in various galleries to enable students to gain a good general idea of the conditions of the first four or five centuries. So many visitors to Rome have at least looked into the old burial places that it is hardly necessary to describe the branching galleries with their chapels, sometimes in two or three stories below ground, where, cut in the soft rock and closed with large earthenware tablets, were the resting places of countless bodies.

For the Christians followed the example of the Jews in burying their dead. The pagans disposed of theirs by cremation, placing the ashes in urns which were deposited in chambers just below the level of the soil, known as columbaria from the resemblance of the rows of niches to pigeon holes. Two of these ancient places close to one another are still in excellent condition. They are on the Appian Way and are believed, on authorities given by Bishop Lightfoot, to have belonged to the

“household of Cæsar.” In his Commentary on the Epistle to the Philippians the Bishop gives twelve names found there which are those of persons mentioned in the Pauline Epistles. Though it is impossible to prove the identity, the appearance of such names together, in connection with the place where they would naturally be found, creates at least a strong probability. The Bishop quotes one to Tryphena, erected by her daughter and Valerius Futianus her son-in-law. The lecturer had the great satisfaction immediately after copying the inscription *in situ* to come across one in the adjoining Columbarium where Tryphosa is mentioned. He believes that it has never been published in England. It is as follows:

D.M.
 VARIA TRYPHOSAE
 PATRONA ET
 M. EPIIUS CLEMENS
 CONJUGI BENE
 MERENTI · FEC
 VARIAE PRIMAE
 VIXIT ANN XXX

The introduction of Tryphosa's name beside that of her mistress in the inscription to the elder sister, suggests that she was a long trusted servant in the family, perhaps the nurse of the two girls, and had remained with the younger when the elder sister married. It is all the more interesting, as the first two letters D.M. (Dis Manibus) imply that the family by whom Tryphosa was so valued was heathen, or at least obliged to conform to heathen usage.

Inscriptions bearing two other Pauline names were also copied by the lecturer in the same Columbaria.

* AMPLIATVS RESTITVTO FRATRI SVO FECIT
 MERENTI
 DOMITIAE L FAVSTILLAE PETRONIO ARISTONIS L
 EPAPHRAS

In contrast with the scanty material of the Columbaria the mass of inscriptions from the Catacombs is so great that in the limits of a single paper only a few prominent features can be referred to.

* Ampliatius has placed this for his own brother Restitutus who was worthy—Epaphras to Faustilla freed woman of Domitia (and) Petronius freed man of Ariston. *Cp.* Romans xvi, 8; Colossians i, 7; iv, 12.

I. In the variety of religions which it tolerated, provided they acknowledged the divine supremacy of Cæsar, Rome was perhaps the most polytheistic city that has ever existed. Into this "sentina gentium" came the strict monotheism which the Christians fearlessly acknowledged and the purity of life which they practised. An early inscription in the Catacomb of Domatilla runs, "May the only God guard thy soul." The Pagan letters D.M. were used with a new interpretation, "Deo Maximo," and this was applied to Christ. Another inscription refers to the "Divine Kingdom of Jesus Christ." He is frequently represented as the Good Shepherd watching sheep and goats. The familiar symbol of the Fish spoke of Him as "Son of God, Saviour." In several cases He is figured in the act of calling Lazarus from the grave. And the Johannine emblem of Alpha and Omega is common. Though references to the Holy Spirit are rare, a beautiful Greek inscription in the National Museum speaks of one who "lies here in the Holy Spirit of God."

II. References to the character which Christian faith produced are very frequent, and making all allowances for the exaggeration of love, are very suggestive.

In the Cemetery of Callistus a Greek inscription represents one Septimius using the Pauline phrase "Servant of God," and saying "Having lived worthily (also Pauline) I do not regret that I have served Thee, and I shall give thanks to Thy Name."

Another in Latin from the same place, with a date in the 4th century, runs: "To Secunda, well deserving, of wondrous goodness, who lived chastely in the pure faith twenty years. She died in peace, a faithful maiden, on the Ides of July. She will be at rest. A dove without gall."

Another about the same date is described as "of wondrous innocence and of the old faith, as God wills."

Sometimes the stone bears an inscribed figure with uplifted hands in the attitude of prayer.

III. Invariably the thought of the after life is that of peace, rest, and refreshment, and such brief inscriptions as the following are very common:—

"Agape, thou shalt live for ever."
 "God shall refresh thy spirit."
 "Gemella sleeps in peace."
 "Arethusa is in God."

Other instances are characteristic of many—

“In Jesus Christ (is) Carpus the servant of God.”

“Athenodorus my son thy spirit (has entered) into rest ” (the word used in St. Matt. xi, 29).

Some give evidence of belief in the Communion of Saints still uniting dead and living. One, for instance, in the Vatican Gallery, ends with the request: “And in thy prayers do thou ask for us, for we know that thou art in Christ.”

Another, in Greek to a “blameless babe,” who “lies here with the Saints,” has the words: “Remember us in thy holy prayers,” to which a postscript is added in smaller letters “Yea and the sculptor and scribe also.”

IV. Inscriptions to martyrs are few, but the following have special interest. The first two are in Latin. Under a cross with equal limbs (the earliest which the Lecturer could discover) are the words “Lannus, Christ’s Martyr, rests here, having suffered under Diocletian.” There were two persecutions in this reign, one at the close of the third century, another at the beginning of the fourth.

“Primitius is in peace, who after many tortures (died) a most brave martyr. He lived thirty-eight years more or less. To (her) very dearest husband well deserving—placed (this).” With exquisite pathos the poor widow omits her own name as if unworthy to stand beside her brave man.

The next is unique. The letters are somewhat rudely Greek, but the words are Latin. It runs as follows: “Here lies Gordian, an envoy from Gaul, slain for his faith with all his family, they rest in peace. Theophila a handmaid placed (this).”

This inscription was discovered in A.D. 1659 by Aringhi in the Catacomb of Sta. Agnese. Maitland (page 134) quotes a statement by Julius Cæsar (*De Bello Gallico*, lib. vi) to the effect that the Gallic Druids were accustomed to use Greek letters in secular transactions and that they had charge of the education of the young. It is probable, therefore, that though Theophila, who had come from Gaul, had learned Latin by ear, she had only learned to write in Greek. The stone cutter, ignorant of letters, required a written inscription. The poor servant did her best, but could only express Latin words in Druidical Greek letters, naturally very irregular.

V. Inscriptions to Church officers show that ecclesiastical order was highly developed: though there is no evidence that an Apostle was ever Bishop of Rome. A well-known tablet in the Lateran Gallery bears what are perhaps the portraits of Peter and Paul, and the names of various bishops from the

second to the fourth century have been recorded. Inscriptions to Presbyters and their wives and children, to deacons, readers, and exorcists are frequent. A large stone in the Lateran Gallery marked the tomb of "Dionysius physician Presbyter."

The grave-diggers seem to have formed a sort of guild, and several inscriptions record the bargains made with them in the life-time of those who were to occupy the tombs.

VI. Professor Orr has lately pointed out, as others have done before, that it is a mistake to suppose that Christianity attracted only the lowest classes of the city. It is well known that members of the Imperial Household and even Family were among the converts. The inscriptions confirm the fact that the new religion reached all classes.

An officer of the Pretorian Guard places a tablet to his wife.

A lady, who adds the letters C. F. ("Clarissima femina") to her name, describes her "most dear" husband by the letters V. E., which mean that he was of Equestrian rank. Another, C. F., who calls her husband "incomparable," adds that he was V. P. ("Vir Patricius").

Tradesmen and artisans are well represented in the inscriptions, and trusted servants have their virtues recorded. A master, for example, places the inscription in Latin: "Here lies Notatus, a most faithful slave." Another in Greek runs: "To my sweetest and faithful servant" (the word describes one born of slave parents and brought up in the house) "her mistress, Artonia has placed this." Another, using the same word, speaks of "Our sweetest Peter."

VII. It is in the allusions to family life that naturally the influence of Christianity is most fully shown. Inscriptions of parents to their children, and children to fathers and mothers, brothers and sisters to each other, all breathe tenderness, affection and hope. Thus a husband and son describe the "incomparable wife, a woman of genuine purity, who lived twenty-five years two months four days two hours." The pathetic exactness in recording the age occurs again in several cases. "To a holy and most honoured wife," "To his revered and sweetest consort," "To a most excellent sister," "Bonosa to Bonosus her son. We are sleeping in our Lord," are typical instances out of many. In every case they speak of deep affection, unbroken by death, and the comforting consciousness that the loved ones are in peace and rest.

VIII. Besides Christian cemeteries, another, discovered by Bosio, has been with good reason assigned to Jews. No signs of Christian terms have been found, but several features point to

Hebrew use, such as the seven-branched lamp and oil jar, the word "synagogue" and occasionally Hebrew characters.

A very fine stone, now in the Lateran Museum, has the lamp, oil jar, and ivy leaf in duplicate, with an inscription which might be either Jewish or Christian. The words are in Greek: "Here lies Primitiva with her child Euphrainon, their sleep is in peace." Another, also in Greek, has the touch of a pagan spirit, "Here lies Nicodemus the ruler of the Suburrans and beloved by all, aged thirty years and forty-two days. Be of good cheer, blameless youth, no one is deathless."

The Suburra might be described as the Whitechapel of Rome, and Nicodemus held the same office there that his famous namesake held in Jerusalem.

Another is interesting as combining the same three languages as those in the inscription on the Cross of our Lord:

"Here lies Faustina. Peace."

The first words are in Greek, including Faustina, which is a Latin name. The last is in illiterate Hebrew script. There are also rude figures of the branching lamp and oil jar.

IX The Lapidarian Gallery in the Vatican makes no attempt at any arrangement of inscriptions indicating date or locality, but places the Christian on one side and the pagan on the other. The contrast is very striking; the Christian all bearing witness to the peace and hope of the after life; the other breathing bitterness and remorse, or selfishly agnostic. A few taken at random illustrate the soil into which the seeds of Christianity fell and from which so marvellous a harvest sprung.

"To a most sweet babe whom the angry gods have committed to eternal sleep."

"What I ate and drank I have with me, what I left I lost."

"No animal is more ungrateful than man."

"I, Procope, lift up my hands against the angry gods who carried me off in my innocence."

"While I lived I lived well. Now my play is over, soon yours will be acted. Farewell and applaud me."

This is not an occasion for moralizing, but the earnest wish may be expressed that the Antiqua Fides of the first centuries may be the Perpetua Fides of our later days, and bear the same noble fruits of character and service.

DISCUSSION.

The CHAIRMAN said that they had listened to a most delightful lecture and one of absorbing interest. Those who had not had the good fortune to visit Rome owed an especial debt of gratitude to the Lecturer, for he had shown them many things that afternoon, things of the utmost interest, that in probability they would miss if they themselves were to visit that city. He felt sure that all there present would unite in returning their cordial thanks to the Lecturer.

It would be noticed from what the Lecturer had told them that the favourite representation of our Lord in the Catacombs was as the Good Shepherd. But in the literary remains which had come down to us from the second and third centuries, our Lord was hardly ever mentioned under this figure. He was spoken of as the Son of God, as the future Judge, and in many other relations and offices, but not as the Good Shepherd. For those who wrote books and treatises were the theologians, the literary men, but the inscriptions in the Catacombs gave us the thoughts of the parents, the children, the slaves. The theologian spoke of the Trinity and of the Incarnation; the child thought of Jesus as the Good Shepherd, Who carried the lambs in His arms.

It should be further borne in mind that no representation of our Lord found in the Catacombs pretended to be a portrait of Him. They were merely symbolical representations. The Roman Christians had been too recently converted from idolatry to attempt to represent our Lord's Person.

Mr. MAURICE GREGORY said that he should like to emphasize the remark of the Chairman as to the symbols in the little chapels in the Catacombs. They were all of a deeply spiritual character, the very frequent "fish," for instance, as a type of feeding on Christ, as the central object of a supper scene, the common food of the slaves who formed such a large proportion of many of the early congregations, with its anagrammatic signification in the Greek "Jesus Christ, Son of God, Saviour," a simple and most inclusive creed. Then there was the frequent symbol of Jonah and the whale, reminding them of the Resurrection, and many others. Few of these early worshippers could read, but they heard the Scriptures continuously read from one end of the year to the other, as

the hundreds of Church Lectionaries, belonging to practically all the Churches, Eastern and Western, bear eloquent witness. The little pictures were memory signs of great significance of the great spiritual truths by which they lived and died.

The Lecture had been listened to throughout with the greatest attention and interest, and at its close, after the remarks of the Chairman and of Mr. Gregory, there was no disposition on the part of the audience to enter into any critical discussion, but a somewhat informal conversation ensued. In its course, Professor LANGHORNE ORCHARD pointed out that the symbol of the Cross did not appear in the inscriptions until after the second century. Archdeacon BERESFORD POTTER made the comment that it seemed to him natural that the early Roman Christians should avoid the mention of the Cross. To them, it was the symbol of heathen cruelty and of the loss of life of One Who, to them, was above all other.

The thanks of the Meeting were returned to the Lecturer by acclamation, and the Meeting adjourned at 6.0 p.m.

579TH ORDINARY GENERAL MEETING.

HELD IN COMMITTEE ROOM B, THE CENTRAL HALL,
WESTMINSTER, ON MONDAY, APRIL 3RD, 1916,
AT 4.30 P.M.

THE REV. H. J. R. MARSTON, M.A., IN THE CHAIR.

The Minutes of the preceding Meeting were read and confirmed.

The SECRETARY announced that Col. J. E. Broadbent, C.B., R.E., Associate of the Institute, had been elected a Member.

The CHAIRMAN asked the Rev. D. S. Margoliouth, Laudian Professor of Arabic in the University of Oxford, to address the Meeting on "The Influence of German Philosophy in bringing about the Great War."

THE INFLUENCE OF GERMAN PHILOSOPHY IN BRINGING ABOUT THE GREAT WAR. By the Rev. D. S. MARGOLIOUTH, D.Litt., F.B.A., Laudian Professor of Arabic in the University of Oxford.

WHEN some unexpected disaster befalls the world there is a general desire to find a reason for it, and men are often for a time satisfied with causes which are not really adequate to the result. Thus Carlyle tells us* that the French Revolution was attributed by some thinkers to Queen Marie Antoinette's want of etiquette; once, when her carriage broke down, she entered a hackney-coach; she would walk, too, at Trianon in mere straw hat and perhaps muslin gown. Hence, the knot of etiquette being loosed, the frame of society broke up, and those astonishing horrors of the French Revolution supervened. The Reign of Terror, according to this, was produced by Marie Antoinette's straw hat and muslin gown! Now the Kaiser's ultimatum, which transformed a peaceful and progressive world into a scene of internecine strife and desolation, with a general relapse into savagery, was expected to about the same extent as the French Revolution was expected; only to the furthest sighted and the best informed did it fail to come as a complete surprise. Among the causes popularly assigned is the corruption of the German mind by philosophers, of whom three have been generally named—Bernhardi, the

* *The Diamond Necklace in Miscellaneous Essays.*

apostle of German militarism; Treitschke, the prophet of Prussian Imperialism; and Nietzsche, the inventor of the Superman, the champion of unrestrained passion. Booksellers inform us that the interest in these personages and their opinions has of late cooled in this country; possibly their guilt is so thoroughly ascertained that further discussion of the matter is unnecessary; and, indeed, in a book which is likely to count as one of the curiosities of the War, called *War Letters from a Living Dead Man*,* the ghost of Nietzsche is introduced confessing as follows: *I have corrupted a whole people, and led them to their ruin; I thought to remedy their spinelessness, and, following me with characteristic thoroughness, they have become all spine; they have neither heart nor bowels. I preached Beyond Man; they have practised below man.* After severe handling by his cross-examiner, Nietzsche's ghost is dismissed with an order to be born again and teach a different gospel. It should be added that the authoress does not assert positively that this order will be obeyed. In the following interview the Prince of Darkness acknowledges that it was he who inspired Nietzsche to preach Beyond Man to the Germans, who could only choose evil when they believed themselves to be strong. In the most recent treatise which I have seen on this subject (*Religion in Europe and the World Crisis*, by the Rev. C. E. Osborne) Nietzsche, with Treitschke and Bernhardt, plays an important part, but the author states expressly that "Nietzsche was in reality no direct cause of the War, even in the sense in which a man's ideals cause a nation's action, for he disliked the present Kaiser; he wrote rudely of Treitschke, the real protagonist of the Hohenzollerns; he hated Bismarck; he loathed Prussia, and was by race partly a Slav." This author then shifts the blame from Nietzsche's shoulders to those of Treitschke. In another publication of the last few weeks (*Degenerate Germany*, by Henry de Halsalle) neither of these writers obtains more than a passing mention, the author being concerned with demonstrating the general depravity of the German character, so far as it can be historically traced. Possibly most of us have got to regard the War so much as our normal environment that we have ceased to trouble about its causes; the beginning now lies in the almost-forgotten past, and our interest is concentrated on the possibility of an end. Still, as the *Philosophical Society of Great Britain*, this Institute desired to have a discus-

* By Elsa Barker Rider, 1915, p. 276.

sion on this subject this session, and invited me to open it. The form which my remarks will take is that of considerations on two works of authority which are before the public, the treatise by Professor Muirhead of Birmingham, called *German Philosophy and the War*, and the account of the same which is to be found in the popular work of Dr. Thomas Smith, called *The Soul of Germany*. Both these writers furnish valuable guidance; and Dr. Smith, besides profound acquaintance with German literature, has the advantage of having lived for many years in Germany as a university professor, whence he is better able than most to judge what works have really influenced German opinion. He evidently agrees besides with those of the ancients who rejected the maxim which bids us treat our friends as potential enemies and our enemies as potential friends. For his account of the German soul is painted in the blackest colours.

These two authorities agree in eliminating the name of Bernhardi as the spokesman of the military party, and as in general little read or regarded in Germany outside that party; and in the powerfully written work *J'Accuse* extracts were given from this author's books as a semi-official statement of the intentions and aims of the German Government. Dr. Smith observes that Bernhardi's book was regarded in German military circles as a clumsy betrayal of official designs, and he doubts whether one in a thousand Germans had heard Bernhardi's name before the War. A story was current in its early months that a neutral who was present at a meeting of theologians in Berlin found the name of Bernhardi, so familiar then in England, was unknown to men of high eminence in the literary world of the German capital.

The name of Treitschke, who died in 1896, was indeed known in historical circles throughout Europe before the War, and though in these quickly moving times it might seem something like an anachronism to make a man responsible for a War that broke out eighteen years after his demise, Dr. Smith points out that Treitschke's works are used as class-books in the schools, whence every educated German comes under his influence. The figures which he gives are interesting: in 1911 there were over 300,000 German boys between the ages of ten and twenty in the State secondary schools and 212,000 pupils in secondary schools for girls. If Treitschke's works were put into the hands of all these students, it is reasonable to suppose that his influence spread widely over the German nation. Still, in his case, as in that of Bernhardi, we have rather an exponent of official

opinions than the originator of a system.* Treitschke's opinions have reference to a state of affairs resulting from the Franco-Prussian War rather than to the problems of our own time. He was the apostle of German unity under Prussian hegemony and of Hohenzollern autocracy. In a recently translated volume of Treitschke's essays we have what may be presumed to be his mature opinions, of which a specimen may be quoted: *The new German Imperialism has renounced the theocratic claim to world dominion which was made by the Holy Roman Empire, but in the actual world of every day it has established more firmly than ever the monarchical powers that attached to the old Imperial rule. In a monarchy the will of the State finds direct expression in the determinations of an independent head of the executive, whereas in a republic it finds expression as the outcome of the struggles of parties and of the estates of the realm. An application of these considerations to modern German conditions renders incontestable the monarchical character of the German Empire; every fresh political task imposed upon our people by the progress of history inevitably strengthens the monarchical authority of our Emperor. Now, a man may at once be the spokesman of a Government, and be expressing opinions in which he himself sincerely believes; yet in any case it is the Government rather than he who is responsible for them. And the impression which these essays leave on the mind is that their author is putting forward matter which his Government desired him to put forward, and its interest is mainly for the home politics of Germany. He expressly distinguishes the German Empire from such federations as those of Switzerland and the United States on the ground that the constitution of these two Federal States rests upon the equality of all members of the Federal Union, but the German Imperial constitution rests upon inequality, the preponderant power of Prussia. To the Crown of this leading State is attached an hereditary right to the Imperial throne, and there is attached also a monarchical dominion which, though still incomplete in form, grows stronger daily under our very eyes. In all matters of decisive importance Prussia has the determining voice. This is because the Prussian eagle alone is able to keep his grip of what he has once pounced on. But both in the passage cited above and elsewhere Treitschke, doubtless in accordance*

* In Dr. Smith's more recent work, called *What Germany Thinks*, he insists, with knowledge based on experience, upon the fact that the German professor of history, such as Treitschke was, is merely a mouthpiece for the Government.

with official instruction, disclaims the idea of a German world-Empire. *We desire to renew the power and glory of the Hohenstaufens and the Ottos, but not their world-Empire. The intention of our new State is to be an honest neighbour to every foreign nationality, a grasping adversary to none.*

The matter contained in this volume is mainly of a sort whereon it is unnecessary for an outsider to have an opinion; though the author's political wisdom may be doubted, if wisdom means accurate calculation of the effects to be produced by certain lines of action. Thus he foresees that *the people of Alsace will learn to love us (the Prussians) when the strong hand of Prussia has educated them*; it may be doubted whether that prophecy even began to be fulfilled. *Prussia, he said, has offered peace to the continent not by means of the panacea of the pacifists, disarming, but by the exact opposite—universal arming; Germany's example compelled nations to become armies, and consequently war to become a dangerous experiment.* The result has unfortunately not been the abolition of war, but an increase in its horrors; just as if a man with the view of avoiding fire should pile up explosives. And indeed, in his lectures on Politics, he asserted with justice that the real war wherein Germany engaged would be the first war of nations, and would in consequence of that fact and of the scientific developments of the military engines be more terrible in its results than any preceding war. What he, Treitschke, further maintained is that force must keep what force has won, and Germany was forced to arm to the teeth and remain so armed for fear lest the provinces which she had torn from her neighbours should be reclaimed. The view taken by the inhabitants of those provinces did not seem to Treitschke to matter. *In view of our obligation to secure the peace of the world, who will venture to object that the people of Alsace and Lorraine do not want to belong to us? We Germans, who know Germany and France, know better than these unfortunates themselves what is good for the people of Alsace; against their will we will restore them to their true selves. We appeal from the mistaken wishes of the men who are there to-day to the wishes of those who were there before them.* Treitschke, however, proceeds to add that it is not the object of this national policy to force every strip of German soil which they ever gave up in the days of their weakness back again into their new empire. It would seem to follow logically from his principles that this should be done; yet in the essays he disclaims the idea of annexing Holland and German Switzerland, and in the lectures is prepared to leave Switzerland alone, though he

hopes Holland may at some time or other again become German. Clearly here as elsewhere Treitschke is speaking not as a political philosopher, who aims at the enucleation of general principles, but as a politician, whose business it is to defend the action which his government for the time wishes to be defended.

Some years after Treitschke's death his lectures on politics were collected and published. Attempts have been made to show that these lectures, which, owing to their author's great powers as a speaker, were very well attended during his lifetime, contain immoral doctrines. It is from this work that Dr. Smith quotes the maxim that treaties are made with the tacit understanding that they are only to be observed rigidly *rebus sic stantibus*, while the conditions under which they were made remain unchanged. It is worthy of note that precisely this doctrine is asserted by Bismarck in his *Personal Reminiscences*. The context wherein Treitschke formulates the principle has reference to the case wherein humiliating conditions have been imposed by one nation on a defeated foe; and it is urged that a treaty containing such conditions should be denounced by the latter so soon as he finds himself strong enough to do so. Treitschke, who so earnestly demanded the annexation of Alsace and Lorraine, urges in his lectures the undesirability of enforcing humiliating conditions on the conquered; and recommends the maintenance of strict good faith on the part of a State in international dealings with a view to inspiring confidence. It seems, then, very doubtful whether his authority can be quoted for the treatment of state contracts as scraps of paper. To denounce a treaty is not the same as to violate it.

On the whole it would not be easy for an impartial reader of this treatise to condemn it as seriously immoral or likely to corrupt the hearer, though complete agreement with all the propositions which it contains might not be expected from those whose patriotism attaches them to some other constitution than that of Imperial Germany. Treitschke is an admirer of Hohenzollern absolutism, and ridicules the limited monarchy of Britain; an English lecturer on politics would probably take the converse view. He is an admirer of the great as opposed to the small state on a variety of grounds; a Swiss or Dutch lecturer might think otherwise. He vehemently attacks the British theory of maritime law, but ascribes this to no inborn wickedness on the part of the British; the Germans, he admits, would in the like circumstances have adopted a similar line. He is a believer in the need of colonies for a really great empire, and holds that such a colonial empire can only be maintained by the aid of a fleet.

With regard to the passages in this book which have been quoted in glorification of war, it does not appear that Treitschke does much more than assert what seems at least a tenable view, viz., that so long as human nature is radically unchanged, wars will not cease. It would, however, be easy to quote passages from his work wherein this fact is regarded not as welcome but as disastrous; and when he speaks of war as an ordinance of God, this appears to be an inference from the fact that mankind has had no respite from war, or only brief respite, for the period wherein history is recorded. To say that this condition of things is divinely ordained need not be interpreted as a justification of it, or as implying that it is desirable; it follows from Treitschke's belief that a single world-state is impossible, and that separate States must have conflicting interests which can only be settled by war.

One who takes the trouble to verify the quotations from the politics of Treitschke which are given by Dr. Smith will find that the English writer has weakened his case by quoting unfairly; though it may be admitted that Treitschke cannot be exculpated completely from the charge of unduly glorifying war. It may also be admitted that he harboured—probably owing to instructions from his government—ambitions which could not fail at some time to lead to European war; for he openly expresses the hope that Germany may ultimately become supreme at sea, and he holds that Holland must be forced somehow into the German *Zollverein*, so that the whole Rhine may be German. One, however, who reads what Treitschke has to say about the relation between political and civil morality will find little difference between the line which he takes and that taken by other writers who have dealt with this difficult subject. The morality of a State is not the same as the morality of the individual, and the individual must, according to most systems, subordinate his conscience frequently to that of the State; the difficulty lies in determining the degree of violation which justifies rebellion or even passive resistance. It may well be the case that Treitschke has permitted the State too much licence, and unreasonably restricted the liberty of the individual. Nor does the reader quite savour the appreciation of Machiavelli with which his system starts.

We approach more nearly to the field of philosophy when we come to the name of Friedrich Nietzsche. In making him responsible for the war we are confronted at the outset by a difficulty noticed by Professor Muirhead, viz., that his works have probably had as many admirers in England as in Germany.

To what circumstance they owe their popularity it might be hard to say; possibly the mode of expression has something to do with it: many of the volumes take the form of fairly brief aphorisms, which Bacon appears to have thought the correct form for philosophical utterances; the intellectual effort required for their perusal is certainly smaller than that demanded by what is continuous and systematic; and they contain a judicious mixture of the paradoxical with the commonplace. But it is difficult to suppose that they have had any serious political influence in either the one country or the other.

It is further to be noticed that Nietzsche is by no means an apostle of either German Kultur or German aggression. He appears to be in favour of a united Europe and to regard nationalism as a serious mistake. His words on the subject are as follows: (*Jenseits von Gut und Bose* 228): *Thanks to the feverish estrangement which the nationalist craze has set and is still setting between the nations of Europe, thanks moreover to shortsighted politicians who at present by the aid of hasty methods have the upper hand and have no notion that the separatist policy which they favour can only be a temporary policy—thanks to all this and much which may not now be expressed, men overlook or arbitrarily and mendaciously misinterpret the most unambiguous signs wherein it is clearly expressed that Europe means to be one. With all the deeper and more comprehensive personages of this century the actual and common tendency in the secret labour of the soul has been to prepare the way for that new synthesis and anticipate tentatively what the future European is to execute; only ostensibly or in their weaker hours, or in their old age did they belong to their fatherlands; if ever they became patriots, they were taking a holiday from their real selves.* In the same passage Nietzsche admits that the Germans are nearer the barbarous state than the French, and asserts that France is still the seat of the most spiritual and the most refined European culture. The axiom of historic justice which, he says, must be firmly maintained and defended against illusion is this: European noblesse, of sentiment, taste and morals, in short in every sense of the word, is the work and the discovery of France; whereas European vulgarity, the plebeianism of modern ideas, is that of England. Treitschke is mentioned by him in a context which indicates anything but approval: *One must be prepared, he says, to find many a cloud and many a disturbance, and many a slight attack of stultification pass over a nation which suffers and wishes to suffer from national nervous fever and political ambition; as, for example, among the Germans of to-day, now the anti-French craze, now the anti-Polish, now the*

Christian-romantic, now the Wagnerian, now the Teutonic, now the Prussian; only look at these poor historians, the Sybels, Treitschkes, and their thickly tied-up heads; these are all slight overcloudings of the German mind and conscience. The very cause which is associated with the teaching of Treitschke is, then, in the opinion of this philosopher, an overclouding of the German mind and conscience, and Treitschke himself a poor creature, a Prusso-maniac. It seems hard, then, to associate Nietzsche with the very ideas which, in his opinion, were stupid and criminal, and contrary to what in his view had been the common aim of the great men of Germany and France.

To find any passage in Nietzsche's works wherein the domination by Germany of Europe and the world is either foretold or desired might be difficult. One sentence which is of some interest may be quoted. *The deep, icy mistrust which is aroused by the German so soon as he comes to power, even in these days, is an echo of that inextinguishable horror wherewith Europe for centuries looked on at the raging of the German monster—though between the ancient Germans and the Germans of to-day there is scarcely any relationship of ideas, not to speak of a relationship of blood.* Had Nietzsche lived to see the present war and retained his mental power sufficiently to watch its progress, he would have thought better of his countrymen. His main political theory appears to be that what he calls the "slave morality"—i.e., the introduction of a system of order and justice to which all have to submit, and which reduces the wild noble to the condition of the tame plebeian or slave—is the work of the Jews; they represent that false slave morality which has hitherto triumphed. Now he regards the Germans of his time as possessed of kindred gifts with the Jews; *the Jews were the priestly nation of resentment par excellence in whom dwelt an incomparable genius for popular morality; you have only to compare with them the nations with kindred gifts—e.g., the Chinese or the Germans, to perceive what is of the first and what of the fifth rank.* The work in which these ideas are stated most forcibly ends with a confession that he desires to see something, but he leaves it to his reader to guess what.

In another of his works Nietzsche expresses the hope that the Germans might yet have the honour to be the first un-Christian nation in Europe, pointing out how Schopenhauer had already remarked that they possessed in a high degree the necessary qualifications, and honoured them on that account. And one most noteworthy difference between Nietzsche and Treitschke is their attitude on the subject of religion. Treitschke

in his writings regularly speaks as a Christian and a Protestant ; one of the recently translated essays is an appreciation of the work of Luther. A sentence or two may be quoted, not in order to ridicule what they contain, but rather to indicate the historian's views. *We have to thank the Reformation for enabling the German to think both piously and independently, for permitting not one of our great thinkers, however bold his flight, to fall into the blasphemous mockery of a Voltaire and for causing the mortal sin of hypocrisy to be almost unknown amongst us. Herein lies the greatness of Protestantism : it will not suffer a contradiction to exist between thinking and willing, between religion and moral life.* According to this Nietzsche should not count among the great thinkers of Germany, for in his blasphemous mockery he is certainly not inferior to Voltaire. He expresses himself as follows concerning Luther and the Reformation: *that Luther's reformation succeeded in the North is a sign that the North was backward as compared with the South of Europe, and, indeed, no Christianization of Europe would have taken place had not the culture of the old southern world been barbarized by an excessive mixture of barbarous German blood, and so lost its preponderant civilization.* So far as he has any religious sympathy it is with paganism. It would, however, shock the audience to quote much of what this writer says on the subject of religious belief. One paragraph may, perhaps, be translated : *The most important of recent events, that God is dead, that the belief in the Christian deity has become incredible—has already begun to cast its shadow over Europe. For the few at least whose eyes and the suspicion therein are strong and subtle enough for this spectacle some sort of sun seems to have gone down, some old and profound conviction to have been transformed into a doubt ; to them our old world must seem daily more eveninglike, suspicious, strange and old. In the main, however, we may say: the event itself is far too great, distant, removed from the comprehension of many, for even the news thereof to be correctly described as having reached them : far less can it be said that many already know the import of this event, or all that must now collapse owing to that belief having been undermined ; as having been built on that belief, supported thereby and grown thereinto—e.g., the whole system of European morals. Of this long series and combination of breach, destruction, ruin, collapse, which awaits us, who can to-day guess enough to count as the teacher and harbinger of this monstrous logic of terrors, as the prophet of a darkness and a solar eclipse the like of which has never yet taken place on earth ? . . . In fact we philosophers and freethinkers at this news that the old God is dead feel as though a new dawn*

beamed upon us; our heart overflows thereby with thankfulness, astonishment, anticipation, expectation; at last our horizon appears free, and even though it be not bright, our ships can at last take to the sea ready for any enterprise; every adventure is permitted to the researcher; the sea, our sea lies open before us; never, perhaps, was there such freedom of the seas.

One almost wonders that it did not occur to a classical scholar, such as Nietzsche was to a certain extent, that all this had been said before. Long before the Christian era men dilated on the wonderful consequences which would arise from the liberation of men's minds from the fear of the gods; the consequences were never realised, because, on the one hand, they never were liberated from that fear, and, on the other, nature has provided that without the observation of a certain code of morals no community can subsist; the members of a society must have rights, and these rights are correlative with duties. The days when scientific inquiry was hampered in any way whatever by religious belief had passed away long before Nietzsche entered the world. It is not, therefore, clear either what was the catastrophe which he claimed to announce or what was the brilliant prospect which dawned on his horizon. The general break-up of European morality could not very well lead to that union of Europe which he desired.

It seems true that, so far as anything consistent can be made out of Nietzsche's ravings, they tend to the glorification of unbridled force and to the ridicule of the subordination of force to other considerations. His notion of the *superman*, a kind of Achilles who denies that laws were meant for him, and claims everything for armed might, has attracted a good deal of attention, and just as it has been exploited to the detriment of Christianity, so it has been exploited to the detriment of Islam; yet the superman appears to be as much a creature of the imagination as Rousseau's noble savage. In order to obtain from Nietzsche's superman the theory of an aggressive and all-absorbing empire, Mr. Muirhead admits that a step has to be taken. *Let Nietzsche's ego be interpreted in terms of the nation and clothed with the power of the State; let it come to be taught in high places with all the fervour of prophecy that it was from the German nation that the Superman was destined to appear, while upon its chief enemies in the direction in which its hopes were set decay had already set her mark; finally, let it be announced, with all the authority of expert knowledge, that the hour was about to strike, and it is not difficult to see what the harvest of this long sowing was likely to be.*

Professor Muirhead brings Nietzsche's ideas into the war by substituting a super-nation for a super-man. Dr. Smith's method is different. While making Treitschke responsible for the public acts of Germany, he makes Nietzsche responsible for the private degeneration of the people: "his moral philosophy is anti-altruistic, indeed a morality of self, a veritable self-cult." In his chapters on German life and institutions he shows, he says, how this poison has permeated modern Germany. The chief detail which he quotes from Nietzsche is the philosopher's treatment of womankind, but it is not quite clear that Dr. Smith can prove that Nietzsche's influence has been very considerable or even bad. His wisdom is in this case that of the East: woman is to be treated as a possession, as property that should be locked up, as something destined to servitude and finding its fulfilment therein. Now, that woman is more domestic in Germany than in this country is certainly not due to Nietzsche: this was a matter of common knowledge long before Nietzsche's name was ever heard. In his half a dozen pages of raving on the subject of the emancipation of woman he approaches the commonplace at one point; this is where he complains that though women for thousands of years have been in charge of the kitchen, yet they cannot cook; the carelessness wherewith they look after the family commissariat is, he says, horrible. A woman does not understand what is meant by food, and yet pretends to be a cook! This philosophical utterance is dated 1895. Dr. Smith, writing twenty years later, asserts that the German woman is better equipped for the kitchen than the drawing-room, the former being destined to be her realm, outside which she seldom shines. His words certainly imply that she shines in that, in which case Nietzsche may be credited with having produced an improvement in the standard of German domestic cookery. If this be so, it is certainly the only improvement produced by him in any region whatever.

His attack on womankind is probably no sillier than the bulk of his aphorisms, which are practically useless owing to the author taking no account of actuality, and making no endeavour to grapple with the real problems of society. If any of the ancient philosophers were equally immoral, they were at any rate vastly wiser. But the matter to which attention is here being drawn is that the mode wherein Dr. Smith conceives Nietzsche's influence to have made itself felt is different from that supposed by Professor Muirhead. Dr. Smith finds the results of Nietzsche's teaching in a variety of social evils characteristic of German life; taught by him that the

indulgence of passion is more noble than the restraint of it, the German behaves like a savage; if a Prussian finds a Bavarian train five minutes late, he, without considering the feelings of his fellow-travellers, talks of "this Bavarian pig-sty." This result would then seem to be like the dividing of Beelzebub's house against itself, which would cause his kingdom to fall. But that is a very different result from the organization of an empire into a vast military machine bent on crushing other empires and dominating the world. That attempt will, we hope and believe, fail, but the failure will not be a shameful one; its initial success and its ultimate failure will be both due to the fact that Nietzsche's absurdities have had no effect; that discipline and self-restraint, the virtues which he condemns, have on the one side and on the other enabled not only whole nations, but whole groups of nations to organize themselves, to subordinate not only personal but even national ambitions and aspirations to a common end. When Treitschke quotes the gospel in favour of his glorification of war, *greater love hath no man than this, that a man lay down his life for his friend*, urging that such love is displayed by the soldier, we can follow him thus far, that the virtues which render success in war possible are encouraged by the Christian system, discouraged and ridiculed by the aphorisms of Nietzsche. The historian of materialism says with truth of the egoistic philosophy: *while the enormous development of material interests appears to constitute the predominating characteristic of our time; while the theory of that development has distinctly brought the principle of egoism into the foreground of the general consciousness: still there has simultaneously been an enhancement of the need for national unity, for social co-operation and for the fraternization of previously isolated elements; we can at present only guess which of these factors—the egoism or the co-operation—is destined to impress its character on the future. For the present we must maintain that if the egoism should at some time get the upper hand, this would not furnish a new constructive principle, but only a source of continuous disintegration.*

There is another noticeable difference between the views of Mr. Smith and Professor Muirhead. The latter distinguishes between the influence of the earlier philosophers and that of Nietzsche; "it is not in Hegelianism, but in the violent reaction against the whole Idealist philosophy that set in shortly after his death, that we have to look for philosophical foundations of present-day materialism." This writer's analysis then assumes an idealistic period beginning with Kant

and ending with Hegel, followed by a reaction, commencing with Schopenhauer and culminating in Nietzsche. Mr. Smith, on the other hand, traces the whole movement in its various phases to the first German philosopher of note—Immanuel Kant. The whole trend of his system, he says, is the freeing of the human mind, or *ego*, from the trammels of tradition and custom; and it may be certainly noted that Strauss, famous or notorious for the mythical theory of the Gospel history, compares the work which he had achieved with that of the founder of the so-called critical school. It had been the task of the one as of the other to convince the world that a certain number of supposed assets were worthless.

What rather appears from the history of thought in Germany as told by able expounders is on the one hand that great intellectual movements are international, and on the other that the practice and conduct of nations are affected by historical events and circumstances more than they are by speculative works. The development of industry, commerce, and the study of the physical sciences in Germany in the nineteenth century was parallel to the same in England and other countries, and had similar effects. That development, if it has not turned all mankind into materialists, has at least rendered the division between the physical and the metaphysical obscure, and the treatment which was possible in the days of Kant became out of date half-a-century later than his time. Kant's four metaphysical questions—the infinity of space and time, the ultimate divisibility of matter, the freedom of the will, and the existence of a first cause—even if they cannot be settled by experimental science, at any rate can no longer be discussed on purely *a priori* grounds when such sciences as palæontology, geology, anthropology, and statistics have been introduced, but the development of these studies has been international, and the histories of modern philosophy are forced to take account of the works and systems which simultaneously arose in many lands. Mr. Muirhead naturally and rightly assigns to the work of Darwin great influence on German thought; and the same is likely to be true of Herbert Spencer, who was perhaps more appreciated outside his own country than in it. Nietzsche himself goes so far as to state that these two, Darwin and Herbert Spencer, with a third English writer also in his opinion of moderate ability, John Stuart Mill, had come to dominate in the middle region of European taste. He also held that the domination of men of such moderate capacity had occasionally its utility. A genius of the first order (like

himself) could not be expected to ascertain the truth of a number of details, put them together and draw conclusions; such geniuses have something better to do than to ascertain anything—they have to be and signify something new, and present new values. The gulf between knowledge and ability is, he says, greater and more mysterious than is ordinarily supposed; the man of ability on a great scale, the creator, must possibly be ignorant, whereas for scientific discoveries such as Darwin's a certain narrowness, dryness, and industrious carefulness, in short something English, may well be of use.

This may be so; but though in Nietzsche's works the absence of accurate study and observation is very marked, the influence on his mind of the methods and results of Darwin and Herbert Spencer is very apparent, the chief difference being that whereas the English writers, like men of moderate ability, take some trouble to ascertain the facts whereon they base their generalizations, Nietzsche, like a man of genius, gets his facts out of his own consciousness. The notion, however, of a history of moral ideas in the animal world is certainly founded on the work of the English evolutionists.

But in the second place we are much more likely to overrate than to underrate the effect exercised on human conduct by speculative works, however popular. It appears to be true that occasionally the young are led to take serious or even fatal steps by what they read; thus attempted suicides have been justified by the teaching of Schopenhauer and von Hartmann; and the enormous sales of works by the latter, whose name in England is known only by specialists in philosophy, certainly indicate that in Germany there is a far greater taste for purely speculative works than there is in this country; this is a difference of national idiosyncrasy which does not admit of analysis. But the notion that any of these persons have by their writings and teachings affected the policy of the government and its bureaux cannot easily be admitted. In so instructive a work as *The Reflections and Reminiscences of Prince Bismarck* this element is left altogether out of account. The saying which Macaulay quotes from Frederick the Great that there was a satisfactory arrangement between the sovereign and his people whereby the latter might say what they liked, whereas the former might do what he liked, suits the facts so far as the philosophers are concerned. It is natural enough that men of ability such as Treitschke should be pressed into the service of the government, if they showed with their ability a readiness to defend Prussian absolutism in the first place and

the policy which the Prussian government adopted in the second place; but that absolutism and that policy are to be traced to causes far deeper than metaphysical speculations. And, as we have seen, if idealism gave way to materialism, it was not because speculation had taken of itself a particular direction, but because the advance of discovery in other fields had rendered the speculative systems inadequate and antiquated.

I hold, then, that the charge of having caused the war, brought against German philosophy, in the main breaks down. If Treitschke has corrupted the German mind, he has done so as the agent of the German government, whose views he officially expounded; there is little reason to suppose that the views were impressed by him on the government; the influence was the other way. It has not been shown that Nietzsche's doctrines bear any close relation to his, or that the works of this dreamer exercised any real influence on those persons in authority who are responsible for bringing on the war. There is, however, some importance in the statement quoted from the work of Mr. Smith, who traces to Kant the anti-ecclesiastical and indeed anti-Christian spirit which we associate with Germany. That Kant's chief work should have appealed to a wide audience is a strange fact, because in many ways it is repellent, and can scarcely be understood at all without a teacher's aid. It is reasonable to suppose that the comparative ease whereby it acquired the dignity of a classic was due to its claim to have upset all possible arguments for the existence of God. It did this, moreover, with an appearance of reverence and even of a strong bias in favour of religious belief which rendered it far more effective than works which display a bias in the contrary direction. Kant's editor, von Kirchmann, observes that he was alarmed by his own conclusions and endeavoured in subsequent works, which he to a certain extent promises in his first and chief work, to remedy this defect; if he had destroyed the traditional arguments for the belief in the existence of God, he hoped to supply one that was new; and he also urged that whereas he had shown that belief in God could not be grounded on *pure reason*, *disbelief could also not be grounded thereon*. It would seem that his attempt in a later work to repair this disaster at first met with some success, and according to contemporary accounts, Kant's theory, whereby the existence of God was to be proved from the conscience, became for a time a commonplace of the pulpit; ultimately it came to be regarded as a failure, whereas the original work retained its high

place in general estimation. The theory that philosophy is antagonistic to morality and religion cannot then very well be separated from the name of Kant, unwilling as he would have been to let that be said. His philosophy of religion when he attempted something positive was excessively feeble, and unworthy of the intellectual ability displayed in his chief work.

Probably, then, Mr. Smith is correct in tracing the negative attitude in matters of religion which is associated with Germany to the work of Kant; the notion that the conscience could be made a substitute for nature as a source of the knowledge of the creator was little calculated to be permanently maintained, and the Kantian metaphysics were supposed to have excluded the possibility of employing the old argument from the order of nature. *In a way, then*, the doctrines of Nietzsche are traceable to Kant, but whereas Nietzsche supposed that morality would collapse with the fall of religion, Kant supposed the basis of morality to be so firm that religion, and to some extent Christianity, could be built upon it.

We have, as has been seen, the high authority of Treitschke for the statement that the Prussian autocracy has steadily grown since the establishment of the German Empire; for the foreign policy of that empire the Prussian autocrat is directly responsible. Further, it is a maxim of Oriental statecraft, which if it knows little of other forms of government knows much about autocracies, that subjects are of the religion of their kings; that right and wrong have in such cases for the subjects the values which the autocrat assigns the words. The glorification of all sorts of outrages which has marked the German conduct of the war must also be laid to the Kaiser's charge. And it is noteworthy that the morality of Nietzsche himself would apparently have been scandalized by one characteristic of German foreign policy: this philosopher holds that his superman will scorn to lie. We have seen that the political theories of Treitschke exclude the erection of a world-empire; he holds such a notion to be chimerical, and bases his belief in the persistence of war on the fact that rival powers must always exist simultaneously, with conflicting interests incapable of being always harmonized by peaceful methods; and Nietzsche apparently wished nationality to be merged not in Germanism but in Europeanism, wherein the culture not of Germany but of France should be dominant. The idea then to which these philosophers give no countenance cannot be laid to

their charge; but may well have arisen in the mind of an autocrat, dissatisfied with the empire which he had inherited, however large, and intolerant of rival states. So many an autocrat has been led by his ambition to shed rivers of blood and bring ruin on his own and other peoples, that the recurrence of this phenomenon where the environment is favourable need occasion no surprise. Nor, indeed, if the history of Prussia from the time of Frederick the Great be studied, is there anything discordant with its traditional policy in what has occurred. Nevertheless, it must be admitted that those writers who have been sedulously employed in destroying all moral sanctions have been playing with fire and so cannot be freed from all responsibility for the conflagration.

DISCUSSION.

Professor LANGHORNE ORCHARD: Our very cordial thanks are due to the Author of this able Paper upon a subject of extraordinary interest and importance. In his helpful company, we have been able to make careful investigation into the cause or the causes of one of the gigantic Wars of History.

We shall probably conclude that the chief cause has been the false teaching of Nietzsche acting upon the love of dominance fostered by the Crown Prince and the German Military Party. This teaching had its way prepared by the so-called "Higher Criticism," which undermined in the belief of many people the spiritual and moral authority of the Bible. Then came the disparagement of conscience and the reception of a "philosophy" which is the negation of Christianity, which by its maxim—Do your enemy all the harm you can in every way, for the end justifies the means—enjoins falsehood and atrocities. Where the two writers, Professor Muirhead and Dr. Smith, cited by the Author, are at variance, it appears to me that the former is right. The attack on Kant must fail. The German Plato stood for GOD—the omniscient, almighty, moral Judge—and unswervingly advocated the absolute authority, the "Categorical Imperative," of Conscience.

Dr. SCHOFIELD: I should much like to ask Professor Margoliouth one question. He dismissed Bernhardt as a negligible quantity in this war, and spoke chiefly of Treitschke and Nietzsche. He will agree that the former is the one who outwardly most fostered the war, and particularly in its extraordinary animus against this

country, where, indeed, he himself resided for many years. He is the ostensible provocative agent most in evidence, and as the Professor regards him as practically the mouthpiece of the Government, this is only what could be expected. But the question I wished to ask was about Nietzsche. While we must agree that his writings are not especially addressed to Germany, and that he himself was not a German professor at all, nor an admirer of Treitschke, may not his remarkable works be a powerful, though indirect, cause of this war? He was an anti-socialist and did not trouble about the masses at all. His plan was to create a dominant race of absolutely anti-Christian and non-moral supermen, who by brute force should possess at any rate Europe, and it would appear that in Germany alone was this concept swallowed with avidity. These world-rulers of Nietzsche, being anti-Christian, can be called nothing but "world-rulers of darkness," and, as we know, this expression is found in St. Paul's Ephesian letter; there are those in this room who, like myself, believe that for the real cause and power behind this war we must look to the spirit world, and I would ask the Professor whether, looking at it even behind the visible, the very spirit that energized Nietzsche may not be the spirit that is prosecuting this war, using the Kaiser and others as its tools?

The Rev. GRAHAM BARTON urged that the philosophers had no very great effect upon the nations at large. Thus when philosophers like Seneca were teaching, the nations amongst whom they taught were sunk in barbarism. Nietzsche was an iconoclast, desirous of destroying Christianity and civilization, and of bringing in a new condition of things. But the doctrine of force was inherent in the German people: it had been a potential energy for more than forty years, and had now become dynamic.

The Rev. J. J. B. COLES said that we had no adequate explanation of the time in which we were now living. We believed that God overruled events, even when He did not directly interfere with the actions of men. In the last hundred years they had seen a great break-up of European society, a break-up which had extended to America. It seemed to him that this had been prefigured in the prophecy of the fourth beast, which was contained in the seventh chapter of the book of Daniel.

Archdeacon POTTER said that they were much indebted to the Lecturer for throwing light on this important subject.

The War was not caused by the need for German expansion. She had colonies, and sent a very small German population to them. In the five years between 1908 and 1913 her total emigration averaged 23,000 per annum, while that of other nations from her ports was 215,000.

Nietzsche, as the Lecturer said, had not a large influence in his time in Germany. He was a professor in Switzerland, yet he led the anti-Christian philosophy which fitted in with German materialism. He perverted Darwinism, and established as the motive force which produces the superman the principle of the Will to Power, which Germans had now adopted as their dominating guide. Nietzsche was confessedly anti-Christian, and rejoiced in making war, not only against Christian dogma, but Christian morals.

Treitschke, however, was much more the paid exponent of Imperial and militarist views, having been Professor at Freiburg, Heidelberg, and Berlin from 1863 to 1896. He enunciated clearly the principle which he was paid to put forth: "that we must distinguish between private and public morality," "that duties obligatory for the individual are not to be thought of by the State," the same teaching as was enunciated by the Kaiser to his soldiers at Bremerhaven on July 27, 1900, when he said: "Quarter is not to be given, prisoners are not to be made." Treitschke called himself religious, but clearly stated that he considered religion useful mainly in keeping the "under dog" down, by holding before him the hope of compensation in a future life.

The real causes of the War were (1) German materialism, fostered by commercial success and by non-moral teaching; (2) the Kaiser willed the War from the time when he dismissed Bismarck. A year after, he refused to renew the entente between Germany and Russia; and Bismarck then foretold that this would eventually lead to a union against Germany of England, France and Russia.

The Kaiser and his militarist clique deliberately poisoned the German mind, with the aid of men like Treitschke. "One must seek," said Baron Beyens, "the origin and permanence of the German feeling of hatred against England and France in the historical education given in the universities at the instigation of the Prussian historical school from Niebuhr, Ranken, Mommsen, Sybel, to Treitschke, Giesebrecht, Häusser, Droysen, Lamprecht, and Delbrück."

The Rev. MARTIN ANSTEY pointed out that ideas were the precursors of history. Thus the idea of the equality of men led up to the French Revolution. So Nietzsche's doctrine of the will to power had brought about the present cataclysm. There was a necessary reciprocity between thought and action, and thought was determined by the will.

Mr. M. L. ROUSE remarked that the meaning frequently attached to "Deutschland ueber Alles" was unfair to the Germans. That motto did not mean that Germany was to be over all other nations, but that Germany was to be considered by Germans before all their private interests: in itself a noble sentiment for a German to entertain.

Mr. Rouse then proceeded to give a number of instances from his own experience of Germany to show how in the last fifty years there had been a great falling off from the Christian faith and a great spread of rationalism and indifference to religion.

The CHAIRMAN expressed his great regret that the Lecturer had been obliged to leave before the Discussion. They were indebted to him for a most thoughtful and instructive paper, and he would ask the Meeting to return their warmest thanks.

The vote was carried by acclamation, and the Meeting adjourned at 6.10 p.m.

WRITTEN COMMUNICATION.

Mr. EDWARD J. G. TITTERINGTON writes: The attempt has been made in some quarters (though not in this lecture) to fix the responsibility for the Great War upon the philosophers of modern Germany. If it is meant by this that the German spirit is the creation of their philosophers, the attempt seems to be in the highest degree unhistorical. We have only to read our daily press to be reminded of the Prussian excesses in warfare and diplomacy in centuries past; and even the commercial policy and business methods of Germany are no new thing. Have we quite forgotten—or are we ignorant of—the Hanseatic League?

Even if the War could successfully be brought home to the philosophers, we have not yet found the origin of the War. For the philosophers themselves require an explanation. We have the phenomenon that Germany has produced, not one, but a number of materialistic teachers, who, while differing in many important

respects, yet agree in this, that there is a common trend, or perhaps rather a common spirit, pervading their teachings. If there were one or two only, they could be explained away as a kind of philosophical sport, or *lusus naturæ*; but this is not the case. Are we not compelled to the conclusion that the philosophers of Germany are a product of the spirit of Germany, and not its cause: a natural outgrowth from among the people themselves, but reacting in greater or less degree, both directly and indirectly, upon the mass of which they form a part?

What, then, is the precise measure of this reaction? A young German once informed me that the influence of Nietzsche, Treitschke, and Bernhardi was quite misconceived and exaggerated in England. Bernhardi was, until quite recently, unknown in his own country. Nietzsche appealed only to a small intellectual class. Treitschke was a "mere Prussian," the mouthpiece of a political party. Perhaps this statement errs in the other direction. Is it not true that at all times the philosophers of the world appeal directly to a limited class, and that to the mass of the people they are unintelligible? But it is those who pass their teachings on in a digested form, and popularize them, who succeed in giving them publicity, and the teachings are thus imbibed indirectly by a very large number who would never think of reading the originals. Especially is this the case when—as there seems to be some evidence has happened in Germany—systematic means are taken, through the schools and universities especially, to produce precisely this effect.

If these conclusions are sound, the real influence of German philosophers would seem to be in the direction, not of the *creation* of a German spirit, but of giving expression to a spirit which was already in existence, and of furnishing the powers in authority with a ready tool for furthering their own ends. And this is, I think, the conclusion to which Professor Margoliouth has tried to bring us.

580TH ORDINARY GENERAL MEETING.

HELD IN COMMITTEE ROOM B, THE CENTRAL HALL,
WESTMINSTER, ON MONDAY, MAY 1ST, 1916, AT 4.30 P.M.

THE REV. PREBENDARY H. E. FOX, M.A., IN THE CHAIR.

The Minutes of the preceding Meeting were read and confirmed.

The CHAIRMAN introduced the Rev. H. J. White, M.A., Professor of New Testament Exegesis, King's College, London, and invited him to deliver his address on "The Connection between the Vulgate Version of the Bible and the Theology of the Western Church."

*THE CONNECTION BETWEEN THE VULGATE
VERSION OF THE BIBLE AND THE THEOLOGY
OF THE WESTERN CHURCH.* By the Rev. H. J.
WHITE, M.A., D.D., Professor of New Testament Exegesis,
King's College, London.

I HAVE ventured to speak of the *connection* between these two facts rather than of the *influence* of one upon the other; for it is difficult to say how far the Vulgate has influenced Western theology, and how far Western theology has influenced the Vulgate. Each has influenced the other; each has reacted upon the other; a translation will affect doctrine, and doctrine will affect translators. The main point to which I wish to draw attention is the intimate connection between the two; the fact that some distinctive features of Latin theology are bound up with the Latin version of the Bible, and bound up with texts where that version differs from the original, or at any rate gives but one out of several possible translations.

When we speak of the Vulgate, or of Latin theology, we must bear in mind what a vast realm is embraced by the words. For more than a thousand years the Vulgate was the sole form in which the Bible was known to Western Christendom; it is still the official version of the Roman Church, and is carried by her missionaries over the whole world, and employed by them in teaching; directly or indirectly, it is the parent of all the vernacular versions of Western Europe, the Gothic version of Ulfilas

alone excepted, for Ulfilas translated the Old Testament from the Septuagint, and the New Testament from the Greek.* Its influence was felt on Luther's translation and on our own Authorized Version; and the Vulgate may claim to have had a larger circulation, and to have been more widely studied, than any other version of the Bible, and even than the original Hebrew and Greek. If, therefore, we are to understand Western theology we must study it with the Vulgate Bible at our sides; if we are to understand Dante, we must refer constantly to the Vulgate; even when working at the Latin theologians who wrote before Jerome's time, we shall do well to have our Vulgate at hand, for that version was, in the New Testament, largely an emendation of earlier Latin versions, and many of their distinctive readings passed over into the Vulgate text.

May I remind you very briefly of the main points in the history of Jerome's work? It was in A.D. 382 that he received the commission from Pope Damasus to make a revised translation of the whole New Testament; not so much to translate it anew from the Greek as to judge among the numerous existing translations and select throughout that rendering which best represented the Greek.† In the following year, 383, Jerome brought out the first instalment of his work, the Four Gospels. These were succeeded in the next year, 384, by the rest of the New Testament, which was, however, much more hastily done; indeed, some scholars have doubted whether Jerome ever did revise the rest of the New Testament; but my study of the Acts and Epistles has made it clear, to me at any rate, that tradition is correct. Somewhere also about this time, though the exact date is not known, he made his first emendation of the Psalter, revising the Old Latin text from the Greek of the LXX; this is the *Psalterium Romanum*, still in use in S. Peter's at Rome. In 385 Jerome left Rome and, after a short period of travel, settled for the rest of his life at Bethlehem. In or about 387 he revised the *Psalterium Romanum*, using not only the LXX, but the other Greek versions and appending Origen's critical signs; this is the *Psalterium Gallicanum*, so called from the wide popularity which it attained in Gaul, apparently through the efforts of Gregory of Tours (A.D. 594); it ultimately became the current version in the Roman Church, and it is this Psalter

* Scrivener-Miller, *Introduction*, II, p. 146.

† See "Vulgate" in Murray's *Illustrated Bible Dictionary*, p. 935 f.; and the letter of Jerome to Pope Damasus, "Novum Opus facere me cogis ex veteri," printed at the beginning of most Vulgate Bibles.

(not Jerome's later translation direct from the Hebrew) which appears in the modern Vulgate Bible. The Psalter was apparently followed by revised translations of the other books of the Old Testament from the LXX, though very few of these are now extant, and gradually Jerome settled down to his biggest task of all—the translation of the Old Testament direct from the Hebrew—and this occupied him till after 404. The Vulgate Bible is therefore a composite work; in the New Testament it is a revision of existing Latin translations by the aid of the original Greek; in the Old Testament it is partly a revision of older work by reference to the LXX version, mostly, however, a translation direct from the Hebrew.

In considering any version of any book, we must bear in mind that no version can express its original exactly; everything loses by translation. That is quite true; but there is another sense in which it may be said that everything gains by translation; for every translation is also an interpretation, a commentary; it puts into the original more than it found there. Two translators, indifferent honest, but holding diametrically opposed opinions, and holding them strongly, would produce very divergent translations of a treatise on the subject about which they differed.

But in translating a book, the translator will be met by words for which he can provide no exact equivalent; it is not so much his fault as the fault of his language. Or again, the meaning of a word may alter, and what was a fair translation at the time may be a misleading one a thousand years later. Or the original may be ambiguous or vague; the translator has to select one out of several meanings of a word, or he has to interpret an expression in order to make it intelligible; sometimes an officious scribe will add a marginal note to a text, and this interprets or amplifies its meaning, and is in time incorporated into the text. Sometimes the translator with strong views goes further; he is convinced that the phrase he has to translate, *cannot, does not*, represent the author's real mind; there must be, there *is*, an obvious mistake, and he feels it his bounden duty to rectify this in his translation; in plain English he deliberately mistranslates in defence of his own theories; and he puts down not what the author said, but what he would have said had he been in the author's place. There is the case, too, of proper names, plays upon words, etc.; if these are reproduced literally in a translation they lose their meaning; but it is difficult to translate them without doing much more, *i.e.*, interpreting them. While finally,

in the case of printed editions, a good deal of alteration may be made by carelessness, or by design, in the use of capital letters, marks of punctuation, etc.

The Vulgate, take it all round, is a very good and honest translation; yet we shall find these imperfections in it, and others as well; and they have had not a little effect upon the theology of the Western Church.

To begin with, we noticed above that Jerome's revision of the Pauline Epistles was very hasty, so hasty that some scholars have doubted whether he revised them at all. Some years ago the late Bishop of Salisbury, Dr. John Wordsworth, complained of the injury done to Western theology by this hurried, superficial revision; he said, that if St. Jerome "had re-translated the New Testament with that power of expression of which he was a great master, he would have done a service to the Church higher than we could easily estimate. He would not say that the Reformation would not have been necessary, but he would say that St. Paul would have been understood by the early Christians in the Western Church, and would have been appreciated and loved and used when, owing to the fact that St. Jerome only used a very imperfect translation of St. Paul's Epistles, and did not properly revise the translation so made, St. Paul was never properly understood in the Western Church until the Reformation. He did not mean to say that there were no great men who understood him; but St. Paul's arguments and ideas did not penetrate into the masses of the people as they might have done."*

This, therefore, brings us to our first cause: when the Pauline Epistles were first translated into Latin the translators were not able to suggest adequate Latin equivalents for the Greek in some quite important cases; Jerome let much of their imperfect work pass; and Western theology was the loser in consequence.

As instances of this, we may note the translation of *χάρις* in St. Paul by *gratia*; we may perhaps be unable to think of any more adequate rendering, but still the fact is clear; they do not suggest the same things. *Χάρις* and the allied words suggest above all things the general idea of God's favour towards us, an atmosphere of kindness and benignity, resulting in an answering feeling of love and confidence on the part of

* Speech at Bristol Church Congress, October 16th, 1903; quoted in the *Life of Bishop John Wordsworth*, p. 152.

the Christian to God, and so in the free joyous performance of the Christian virtues; *χάρις* led to the outpouring of *χαρίσματα*, special gifts of grace, on the Christian. Now *gratia* and the allied words in Latin do not so much suggest this as the idea of a *free gift*, "*gratia gratis data*," as distinguished from a reward that may be claimed as matter of right; that is, it corresponds to only a part of the idea of *χάρις* instead of to the whole. Consequently the doctrine of grace in the Western Church is partial, external, hard, compared with the Eastern; and atmosphere gives way to a series of acts.

Similarly *Lex* means less than *תּוֹרָה*, and *Justitia* than *צִדְקָה*; *Testamentum* is only one half of *διαθήκη*.*

Again, *μετάνοια* signifies a change of mind, especially that change of mind by which a man turns from evil to good, abhors the sins which he has committed, and resolves to enter upon a new course of life. Lactantius thought that the best rendering of this into Latin would have been *resipiscentia* (Inst. vi, 24)† = a recovering of oneself as from a fainting fit. The translation *poenitentia*, however, only conveys part of the meaning of *μετάνοια*, the idea of sorrow for sin. Tertullian (c. Marc. ii, 24, quoted by McNeile on Matthew iii, 2) noted the same thing: "In Graeco sono poenitentiae nomen non ex delicti confessione sed ex animi demutatione compositum est."

In the Douay English translation of the Vulgate the meaning of the word has been still further narrowed down by *μετάνοια* being rendered almost always by "penance," and the verb *μετανοεῖν* by "do penance."‡

Πιστεύειν§ is another case: it implies not merely belief as "an assent to that which is credible, as credible" in Pearson's well-known definition, but also a loyal devotion of the heart; to put one's trust in a person, to give oneself up to him and to follow him absolutely. But *credere* in Latin suggests mainly the intellectual side of this, the believing that a thing is true. "To

* These and other cases of inadequate translation were pointed out in a letter of the Rev. Canon Girdlestone to me, April 26th, 1916.

† "Is enim quem facti sui poenitet, errorem suum pristinum intelligit; ideoque Graeci melius et significantius *μετάνοιαν* dicunt, quam nos latine possumus *resipiscentiam* dicere." "Resipiscant" is used as a translation of *ἀνανήψωσις* in the Vulgate of II Tim. ii, 26.

‡ The exceptions are *μετάνοια* = "repentance," Acts v, 31; xi, 18; II Tim. ii, 25; Heb. xii, 17; *μετανοεῖν* = "to be penitent," Acts iii, 19; = "to repent," Mk. i, 15; Luke xvii, 4; Rev. ii, 21 (*semel*).

§ Henslow, *The Vulgate the Source of False Doctrines*, p. 128.

believe" therefore must have inevitably meant less in Latin than it did in Greek, and the whole conception of faith got more intellectual, and less emotional, moral and spiritual, as the Latin terminology spread. No doubt the trained theologians endeavoured to rectify this; nothing better, to my mind, can be devised than their distinction between *Crede deum* (to believe that God existed), *Crede deo* (to believe that what God said was true), and *Crede in Deum* (to believe on God with all one's heart and mind and strength); but the theologians' careful distinctions are not always appreciated by the populace.

We now come to the question of alteration in meaning which words sometimes undergo; the text Ephesians v, 32, presents us with a case of translation where the Latin has in process of time acquired a specialized meaning; and the specialized meaning is not that of the original Greek. St. Paul, after speaking of the love between husband and wife, adds τὸ μυστήριον τοῦτο μέγα ἐστὶν · ἐγὼ δὲ λέγω εἰς Χριστὸν καὶ εἰς τὴν ἐκκλησίαν. As to the meaning of *μυστήριον*, few people would dissent from Dr. Hatch's verdict,* that the word in the LXX Old Testament, in the Apocryphal Books, and then in the New Testament, was used (1) of a *state secret*, the *secret purpose* of God, and (2) for the *secret sign or symbol* by which this secret purpose could be conveyed from one to the other of the initiated, without the knowledge of the outer world. Thus in the Apocalypse the *mystery* of the seven stars, the *mystery* of the woman, etc., means the *symbol* of the stars, or of the woman; the woman, the stars, are symbolical representations of certain spiritual facts. Thus in Ephesians v, 32, the *mystery* which is a great one probably means the *symbol*; "this *symbol* of marriage is a great one. I interpret it as referring to Christ and to the Church." Dr. Hatch concludes:—"The meaning of *μυστήριον* was expressed in early ecclesiastical Latin by *sacramentum*. It has hence resulted that the meaning which came to be attached to *sacramentum*... is the meaning which is proper not to the word itself but to its Greek original, *μυστήριον*." Certainly Cyprian, and later Augustine, use *sacramentum* in the sense of *symbol*; Augustine says "*Sacramentum est signum rei sacrae*"; Cyprian speaks of the many *sacraments* contained in the Lord's Prayer, etc.; he says that the Red Sea was a *sacrament* of Baptism. Quite naturally, therefore, Ephesians v, 32, was translated into Latin, "*Sacramentum hoc magnum est: ego autem dico in Christo*

* *Essays in Biblical Greek*, p. 57, ff.

et in ecclesia"; and quite naturally, as *sacramentum* gradually acquired a restricted meaning in ecclesiastical Latin, this text also altered its meaning and was claimed in defence of the position that marriage was a sacrament. Dr. Abbott, in his note on the passage,* says that though this reading undoubtedly led to matrimony being regarded as a sacrament, the best scholars in the Roman Church, Erasmus, Caietan, and Estius, reject the view. On behalf of it he only quotes, and that at second-hand, an Encyclical of 1832. But he might have quoted more. The Council of Trent (Sess. 24 *de sacramento matrimonii*) quotes this text as implying that the grace which sanctifies the marriage state was brought in by Christ. The *Catechismus Romanus* goes further (Pars ii. c. viii, qu. xv), and says that the Church holds for certain that marriage is a sacrament, on the words of St. Paul—though it goes on to explain that by "sacramentum" is meant "sacrum signum." It also affirms that this is the teaching of the Council of Trent, and that the ancient Fathers so interpreted the passage. Aquinas gives the passage as one that may be quoted on behalf of marriage being a sacrament (Summa: Suppl. III^{ae} partis: qu. xlii, art. i). Perrone clearly thinks that the passage teaches that marriage is a sacrament, though he frankly says that he prefers to be on the safe side and not to go beyond the language of Trent. Gury quotes it unhesitatingly; a Lapidé quotes it but explains *sacramentum* as "the most perfect sign of that union once formed" between Christ and His Church.

Our next class is that of variant translations of the same passage in the original. The first instance is of a translation adopted by the Vulgate from the LXX; it cannot, therefore, be included among peculiarly Vulgate readings, nor was the doctrinal use made of the text peculiar to the Western Church; but as an interesting case of a wrong interpretation of Scripture being employed to support doctrine, I venture to put it before you. In Hebrews xi, 21, it is said that Jacob when dying *ἕκαστον τῶν υἱῶν Ἰωσήφ εὐλόγησε, καὶ προσεκύνησεν ἐπὶ τὸ ἄκρον τῆς ῥάβδου αὐτοῦ*. The quotation is from the LXX version of Genesis xlvii, 31, the Hebrew being **וַיִּשְׁתַּחֲוֶה יַעֲקֹב אֶת־רֹאשׁוֹ אֶל־הַמֶּשֶׁךְ**. When Jerome came to that place in his translation of the Old Testament from the Hebrew, he rendered

* "Ephesians," in *Intern. Crit. Comm.*, p. 175.

it "Adoravit Israel Deum conversus ad lectuli caput"; our own R.V. has "And Israel bowed himself upon the bed's head." The LXX translators, according to Driver, wrongly vocalized the last word as **הַמַּטֵּה** instead of **הַמַּטֵּה** ("staff" instead of "bed"); if the word were intended to mean Jacob's staff it would have to be "*his* staff," **מַטֵּהוּ**, instead of **הַמַּטֵּה**. The original Hebrew means that Jacob turned himself over upon his bed, and bent himself towards the head of the bed, imitating actual prostration as far as possible. The LXX, however, as we have seen, translated it *προσεκύνησεν ἐπὶ τὸ ἄκρον τῆς βάρβδου αὐτοῦ*, where the *ἐπὶ*, as always with *προσκυνεῖν* (*πρ. ἐπὶ τὴν γῆν, ἐπὶ πρόσωπον, κ.τ.λ.*) must be taken *locally*; Jacob worshipped, bending over, or leaning upon the head of his staff. The Vulgate went a step further and translated it here "adoravit fastigium virgae eius," "he worshipped the top of his staff"; and consequently in this passage has been found Scriptural warrant for the worship of images; Jacob, it is said, worshipped an image which was on the top either of his own staff or of Joseph's staff. Estius imagined the latter; Jacob saw in Joseph the type of Christ, and in Joseph's staff ("virgae ejus," not "virgae suae") he acknowledged the royal dignity of Christ, and consequently worshipped it. A Lapede takes it much the same way; Jacob worshipped the staff, that is, the sceptre and power and princely dignity of Joseph; for Joseph was second in the kingdom only to Pharaoh, and Joseph also was a type of Christ.

It was, according to a Lapede, on the ground of this text that the Second Council of Nicæa (A.D. 787) approved the worship of images. Certainly, Leontius (Bishop of Neapolis in Cyprus), in his *Sermo contra Judaeos*,* defended himself against the charge of idolatry in worshipping the Cross, by this example of Jacob, it being clear that Jacob did not worship the wood, but Joseph through the wood; as we also worship Christ through the Cross. Also Pope Hadrian I., in his letter to Constantia and Irene,† refers in the same way to Jacob, who "summitatem virgae filii sui Joseph deosculatus est, fidei dilectione hoc agens . . . non virgae sed tenenti eam honoris ac dilectionis exhibuit affectum"; and both of these documents were read at the Council.

* Migne (Patr. Gr., xciii, 1601).

† Migne (Patr. Lat., xcvi, 1225). I owe these references to Dr. Stone.

Amongst passages which have been diversely translated from the very first we must number the *κεχαριτωμένη* applied by the angel to the Blessed Virgin Mary in Luke i, 28. That the translation there is not absolutely certain is shown by the margins of our own Bible; both the A.V. and the R.V. texts translate it, as I believe rightly, by "thou that art highly favoured"; but the A.V. margin gives as alternatives "thou that art graciously accepted," and "thou that art much graced," while the R.V. margin gives as an alternative "thou that art endued with grace."

The majority of the Old Latin MSS. rendered it "*gratia plena*" = "thou that art full of grace"; but the MSS. cited as *e* and *q* (representing an early African source) have *gratificata*, a literal translation of the Greek passive participle, and = "thou to whom favour is shewn"; while the famous Codex Bezae paraphrases by using "benedicte," which it has also to employ immediately afterwards for *εὐλογημένη*. The Vulgate therefore followed the *majority* of the early Latin texts in rendering *κεχαριτωμένη* "*gratia plena*"; it was not an innovation on the part of Jerome: he took the reading most current at the time, and he gave it his sanction.* The Jesuit commentator Maldonatus therefore is correct up to a point when he extols the divine inspiration which has led all ancient writers to render *κεχαριτωμένη* by *gratia plena*; all the Latin *Fathers*, so far as I know, use that term, but not all the Latin *versions*. And later, Erasmus, who can hardly be accused of Protestant prejudices, translated it *gratiosa* (which was also the rendering of the Protestant Zurich version); and in his note added "*nec est gratia plena sed, ut ad verbum reddam, gratificata*" (*i.e.*, the reading of *e* and *q*). Here, therefore, is a case where the Vulgate has one out of several possible translations of a Greek word; if anyone wishes to see the effect of this translation on Roman doctrine he need not go further than the commentaries of Maldonatus and a Lapide.

Another case of a variant translation which has affected Western theology is furnished by Romans v, 12. Here St. Paul is arguing that "as by one man sin entered into the world, and death by sin, and so death passed through unto all men *in that*

* Ep. 65 *ad Principiam*: "Nam et sancta Maria, quia conceperat eum, in quo omnis plenitudo divinitatis habitat corporaliter, plent gratia salutatur."

all sinned" ("for that," A.V. and R.V.). The Greek is ἐφ' ᾧ πάντες ἤμαρτον, and the ᾧ is certainly neuter, not masculine; it therefore="inasmuch as," ἐπὶ τούτῳ ὅτι. Origen, however, took it as masculine, and the Old Latin version, which Jerome followed, rendered it *in quo*. This is a quite possible translation, and I have noted a parallel case in II Cor. v, 4, where St. Paul says, "We that are in this tabernacle do groan, being burdened; not *for that* we would be unclothed, but clothed upon," etc.; the Greek there is ἐφ' ᾧ οὐ θέλομεν ἐκδύσασθαι, κ.τ.λ., and the Vulgate renders it *eo quod nolumus expoliari*; but the Old Latin MSS. *d e*, one Vulgate MS. (H) and Hilary and Augustine have *in quo nolumus*, etc. The Vulgate reading in Romans, however, gives a perfectly different doctrinal sense to the passage—"sicut per unum hominem peccatum in hunc mundum intravit et per peccatum mors, et ita in omnes homines mors pertransiit *in quo* omnes peccaverunt" asserts the mystical union of the whole human race with Adam, so that when he sinned all men sinned in him. This text was accordingly pressed in this sense by Ambrose, Augustine, and other of the Western Fathers, Augustine using it frequently in his controversy with the Pelagians; and undoubtedly it did much to support in the West the explanation of original sin as being due to the mystical union of the race with its first father.

The famous text of the "Three Heavenly Witnesses" in I John v, 7, is a good instance of the manner in which a marginal gloss may obtain a footing in the text of the Bible. Its presence in our A.V. was due to the Greek text published by Erasmus.* Erasmus published his first edition of the Greek Testament in 1516 without the verse; but in his third edition, published 1522, he inserted it, in accordance with a promise he had given that he would do so if he could find it in a single Greek MS. He did find it in a sixteenth-century MS.—*i.e.*, a MS. not so old as Erasmus himself—the *Codex Montfortianus*, in which the clause is clearly a translation from the Latin. As a matter of fact the text is not found in any Greek MS. at all until we get to the fourteenth or fifteenth century; it is then found in two MSS., having come into them from the Vulgate. None of the Oriental versions has it; and it is not quoted by a single Greek Father, though, *e.g.*, in the Arian controversy, it

* Westcott, *Epistles of St. John*, p. 207.

would have been a most convenient text for them.* Nor does it find place in the earliest and best MSS. of the Vulgate, nor is it referred to by the Latin Fathers, such as Hilary, Lucifer Calaritanus, Ambrose, Jerome, Leo, or Gregory the Great; while attempts to find references to it in Tertullian, Cyprian, and Augustine have proved failures. The first definite reference to it comes in the *Apology* of Priscillian, who was executed for heresy in Spain in A.D. 385. This *Apology*, which was discovered, and edited from a Würzburg MS. of the fifth or sixth century, by Dr. Scheps in 1889, was presented to a Synod of Bishops at Saragossa in the year 380; the Bishops having demanded of Priscillian and his followers an account of their belief. Priscillian, however, in quoting the verse, places the clause as to the Heavenly witnesses *after* that of the earthly witnesses, and the earliest Vulgate MSS. which contain the clause, and which are nearly all Spanish, have the same order. The earliest MS. which contains the verses in the order familiar to us dates from the eleventh century. This early order, as Dr. Künstle suggests, may explain the origin of the verse; the Heavenly witnesses are really an interpretation of the earthly. "Spirit," "blood," and "water" were referred to the three Persons of the Trinity: "Spirit" to God the Father, for God was a Spirit; "blood" to the Son Who assumed our flesh and blood; "water" to the Holy Spirit Who was given to the believer in the water of Baptism. Then afterwards the inserted clause was found to be useful as containing a clear statement of the full doctrine of the Trinity, and was retained in the text, the Heavenly witnesses being now placed before the earthly.

The instance of the text 1 John iv, 3, has been pointed out to me by Canon Girdlestone. Dr. Westcott's note on the passage† is so complete that we can do little more than reproduce its main points. All the Greek MSS., the Greek Fathers (with the one exception of Socrates the Church historian), and all the versions except the Latin, read—though with minor variations among themselves—*πάν πνεῦμα ὃ μὴ ὁμολογεῖ τὸν Ἰησοῦν* (+ *Κύριον* **Σ**, + *Χριστόν* **KL**, etc.); while **Σ** **KL** add *ἐν σαρκὶ ἐληλυθότα*; "Every spirit that confesseth not Jesus (+ Lord, or + Christ) come in the flesh" . . . "is not of God." There can be no doubt that this is the right

* See throughout K. Künstle, *Das Comma Ioaanneum*. (Freiburg, 1905.)

† *Epistles of St. John*, p. 163.

reading; the manuscript evidence alone is decisive, while the correspondence with the previous clause (*πάν πνεῦμα ὁ ὁμολογεῖ Ἰησοῦν Χριστὸν ἐν σαρκὶ ἐληλυθότα ἐκ τοῦ Θεοῦ ἔστιν*) absolutely demands it; those simple impressive repetitions are just in St. John's style. The writer is emphasizing the paramount importance for the Christian faith of outwardly confessing that our Lord Jesus Christ has appeared on earth in the flesh, and he states this first affirmatively and then negatively.

The variant reading is *πάν πνεῦμα ὁ λύει τὸν Ἰησοῦν*, *omnis spiritus qui solvit Jesum*, "Every spirit that dissolveth Jesus"; this is not found in any extant Greek MS., but is mentioned by the Church historian Socrates (fifth century) as being the reading of the "ancient MSS." in his days (H.E. vii, 32). Writing of Nestorius he says that he was ignorant that the *πάλαια ἀντίγραφα* of this passage in St. John's Epistle read *πάν πνεῦμα ὁ λύει τὸν Ἰησοῦν ἀπὸ τοῦ Θεοῦ οὐκ ἔστι*; and he also accuses those who desired to separate the deity from the humanity in Christ (*i.e.*, the Nestorians) of removing this thought from their Bibles, and notes that the ancient interpreters were aware of this. Socrates certainly wrote in Greek, but he does not say outright that the reading was found in Greek MSS., and Westcott thinks that he may be referring to some Latin MSS. and Latin commentators. For certainly the Latin evidence for *λύει*, *solvit*, is as strong as the Greek evidence is *against* it. It is found in Irenæus, Tertullian, the Latin translations of Clement of Alexandria, and of Origen, in Priscillian and in Augustine, and is the Vulgate reading. Here, of course, the sense is different; what is asserted is not the broad fact of the Lord Jesus having appeared on earth in the flesh, but the theological truth of the hypostatic union; to "dissolve Jesus" is to assert that He was not both human and Divine at the same time, so that although He be God and man, yet He is not two but One Christ. Westcott himself seems to think that *λύει* is an early gloss on *μὴ ὁμολόγει*; but I venture to suggest that it may be simply due to a scribe's error (**ΟΛΥΓΕΙ** for **ΟΛΟΓΕΙ**, the scribe's eye having passed over **ΟΜΗΟΜ** from the similarity of the letters).

We now come to cases of definite mistranslation, of actual alteration in the text. Here we must be very cautious in bringing charges against the Vulgate, for two reasons. The first is that some of the popular charges are wrong, and the second is that our own A.V. is not entirely guiltless. First,

may I remind you of one or two charges brought against the Vulgate, of which it is innocent? There was a popular superstition that the Church of Rome in uneasiness at the open contradiction between the Second Commandment and her own worship of images, had actually *removed* the Second Commandment from the decalogue. There is this amount of truth in it, that the Second Commandment in the Roman Catholic enumeration is the prohibition against taking Jehovah's name in vain; but this is simply due to a difference of arrangement, whereby our First and Second Commandments are made into one by both Roman Catholics and Lutherans, and the number Ten obtained by splitting the last Commandment into two.

Another instance where I think a charge has been brought against the Vulgate wrongly, is that of the text 1 Corinthians vi, 20. This is a case of a false reading in the Vulgate, but one which is clearly the result of a scribe's blunder; it has not been introduced to support a doctrine. St. Paul closes the chapter with the exhortation, "Glorify God therefore in your body"—*δοξάσατε δὴ τὸν Θεὸν ἐν τῷ σώματι ὑμῶν*. The *δοξάσατε δὴ* got somehow corrupted into *δοξάσατε ἀράγε*, and this into *δοξάσατε ἄρατε*; this was quite naturally translated by "Glorificate et portate"—"Glorify God and carry Him about in your bodies." The best MSS. of the Old Latin do not have it, nor does Irenæus so quote it, nor Jerome (when he refers to the passage in his other works); but a large number of Latin Fathers—Tertullian, Cyprian, Ambrose, Augustine (as a rule)—quote it in the longer form, and it is the undoubted Vulgate reading. I have heard it said that this additional clause, "et portate," was claimed by the Roman Church as referring to the Divine Presence received by the Christian in the Eucharist; but I have not yet come across any Latin Father or any Roman Catholic commentator who has employed the text for that purpose; and Dr. Stone, probably the most learned divine we have on that subject, also informs me that he has not come across any instance. We must therefore refrain from making a charge which we cannot prove.

But I have also said that we must not be too severe upon the Vulgate, for our own A.V. is not entirely guiltless in the matter. I need only remind you of the numerous cases in which *ἐπιστρέψωσι*, *ἐπιστρέψας* κ.τ.λ. were translated as passives, "be converted," by the A.V. translators, as their rigid Calvinism would not allow them to grant to the man himself any share in attaining his own salvation (see Matthew xiii, 15; Mark iv, 12; Luke xxii, 32; John xii, 40; Acts iii, 19, xxviii, 27; in all these cases the

“be converted” of the A.V. has been rightly changed into “turn again” by the revisers). A still more flagrant case, if I may say so, is the rendering of Hebrews x, 38, *ὁ δε δίκαιός μου ἐκ πίστεως ζήσεται · καὶ ἐὰν ὑποστείληται, οὐκ εὐδοκεῖ ἡ ψυχὴ μου ἐν αὐτῷ* (“my just man shall live by [his] faith; and if he draw back, my soul hath no pleasure in him”). The A.V. translators again were unwilling to assert that anyone who had once been called “just” or “righteous” in the sight of God could ever fall from grace; and so they boldly interpolated the words *any man* (“if *any man* draw back, my soul shall have no pleasure in him”), and made the man who drew back a different person from the righteous man, *i.e.*, they altered the Bible to suit their own views. This has, of course, also been corrected in the R.V.

We now come to some of the cases of deliberate alteration in the Vulgate. The first instance which meets us is that of Genesis iii, 15; there the Clementine edition of 1592—still the standard edition for the whole Roman Church—reads: “Inimicitias ponam inter te et mulierem, et semen tuum et semen illius; *ipsa* conteret caput tuum, et tu insidiaberis calcaneo eius”; “*She* shall bruise thy head.” The honour is here distinctly referred, not to the woman’s seed, but to the woman herself, and so the passage has been naturally referred by Roman Catholic commentators to the Blessed Virgin Mary. But it is a mistranslation. The reference is to the *seed* of the woman; it should be *ipse*, not *ipsa*. When the alteration was made we cannot tell. Augustine, Ambrose, and Gregory the Great apparently read *ipsa*, but the Old Latin version had *ipse*, and Vercellone gives a long list of writers who have used the correct word, though some of them have been quoted on the other side.*

Another instance has been brought to our notice since the publication of the R.V. of the Apocrypha in 1895. A striking feature in that revision is the enormous length of the 7th chapter of II Esdras; it runs to 140 verses. The reason is that more than four columns of print in the R.V. are new to us; they were not in the A.V. The transition in that version, as Mr. Bensly† pointed out, from the 35th to the 36th verse of

* *Variae Lectiones*, I, pp. 12, 13.

† *Missing Fragment of the Fourth Book of Ezra*, p. 1.

that chapter was so abrupt as to strike even the most superficial reader ; 33f. gives an account of the final judgment—“ The most high shall be revealed upon the seat of judgment and compassion shall pass away and long suffering shall be withdrawn : (34) but judgment only shall remain, truth shall stand, and faith shall wax strong ; (35) and the work shall follow, and the reward shall be shewed, and good deeds shall awake.” Verse 36 proceeds with a completely irrelevant question of Esdras to the angel : “ And I *answered* and said, How do we find now that first Abraham prayed for the people of Sodom, and Moses for the fathers that sinned in the wilderness ? ” etc. The reason of this abrupt change is that originally a long discussion occurred between Esdras and the angel, at the end of which Esdras asked the angel whether in the day of judgment (verse 102) the just will be able to intercede for the ungodly or to entreat the Most High for them. The angel returns a very decided negative : “ Never shall any one pray for another in that day, neither shall one lay a burden on another, for then shall all bear every one his own righteousness or unrighteousness.” Such a statement as this did not prove acceptable to some early theologian, and he got out of the difficulty, not by erasing the verse, but by tearing out the whole page which contained the verse. By a strange fate almost all the Latin copies of the 4th Book of Esdras were derived from this mutilated exemplar, and it was not till R. L. Bensly in 1875 published his *Missing Fragment of the Fourth Book of Ezra* that we realized what we had lost for so many centuries.

Samuel Berger* has shewn by a series of extracts from MSS. of different centuries how the text in II Maccabees xii, 46, with regard to praying for the dead, gradually increased in strength. The first group of MSS. is that of the Old Latin ; these reproduce the LXX (B) text, and simply mention with approval the fact that Judas prayed for the dead : “ Holy and godly was the thought. Wherefore he made supplication for them that had died, that they might be released from their sin ” (*Sancta et salubris excogitatio. Ideoque exorabat pro mortuis illis qui peccaverant, ut a peccato solverentur*). The Vulgate MSS. of the oldest type alter this a little ; it becomes : “ *Sancta et salubris cogitatio pro defunctis exorare ut a peccato solverentur* ” (“ It was a holy and sound thought to pray for the departed,

* *Histoire de la Vulgate pendant les premiers Siècles du Moyen Age*, p. 23.

that they might be released from sin"); but the later Vulgate MSS. and the Clementine text turn it into a general rule of faith, not a pious practice on the part of Judas mentioned with praise; it is now "Sancta ergo et salubris est cogitatio pro defunctis exorare ut a peccato solvantur" ("It is a holy and sound thought to pray for the dead, that they *may* be released from sin.").

I mentioned above that there would occasionally be a play on the words in the original which it might be next to impossible for a translator to reproduce exactly; it must be allowed, however, that Jerome here often had that good luck which only comes to very clever people. In Acts viii, 30, the question to the Ethiopian Eunuch ("understandest thou what thou readest?") γνώσκεις ἃ ἀναγινώσκεις goes exactly into Latin "intellegis quae legis," though the similar play in II Corinthians iii, 2, γινωσκομένη καὶ ἀναγινωσκομένη was not reproduced in the Vulgate; Erasmus proposed that it should be translated "quae intellegitur et legitur" (instead of "quae scitur et legitur" of the Vulgate). But in the Old Testament, Jerome cleverly translated Exodus xv, 23, "unde et congruum loco nomen imposuit, vocans illum *Mara*, id est, *amaritudinem*"; cf. Ruth i, 20, "Vocate me *Mara*, id est, *Amaram*"; also Genesis ii, 23, *Virago* quoniam de viro sumpta est."

In rendering Hebrew proper names, Jerome shewed greater freedom and common sense than our own translators; he followed the example of the LXX version, which, in the Book of Genesis, regularly *interpreted* such names. This is quite legitimate, and makes much of the Old Testament more intelligible and living. We may doubt whether the average country congregation is much the wiser for hearing that Abraham called the mountain on which he offered Isaac, "Jehovah-Jireh" (Genesis xxii, 14); but the Vulgate is perfectly intelligible with its "appellavit nomen loci illius, *Dominus videt*"; similarly in Genesis xxxi, 47, the "Jegar-Sahadutha" of the A.V. means nothing to the average layman, while the "tumulum testis" of the Vulgate is quite clear. Elsewhere Jerome made his version more clear to a popular audience by *adding* the interpretation after the proper name, as e.g., Genesis xxxii, 2, "*Mahanaim*, id est castra," and Rev. ix, 11, "*Appolyon*, Latine habens nomen *Exterminans*."

It may be thought that points of translation like these have little to do with influence on doctrine; but Jerome's

practice of interpreting in this way had considerable effect in those passages of the Old Testament where the word "Anointed," or "Messiah," comes in; here, following the LXX, he boldly put "Christus," with the result that many more passages have a Messianic reference in the Vulgate than in our own A.V. Again, it may be asked, "What else could he have done?" Very likely it was inevitable; but still the fact, and its influence, remained. Psalm ii, 2, is an obvious instance: "Principes convenerunt in unum adversus Dominum et adversus *Christum* ejus," compare Acts iv, 27, where in the A.V. it is also rendered "against the Lord, and against his Christ," though the R.V. has "against his Anointed." Equally personal is the reference in Habakkuk iii, 18,* where "I will joy in the God of my salvation" appears as "Exsultabo in Deo *Jesu* meo"; also Lamentations iv, 20, where "The breath of our nostrils, the anointed of the Lord, was taken in their pits" appears as "Spiritus oris nostri, *Christus* Dominus, captus est in peccatis nostris." In some cases anxiety to find a reference to our Saviour in the Old Testament led Jerome to force the translation of the Hebrew, as in Isaiah xi, 10, where we read of the Root of Jesse that "unto him shall the Gentiles seek, and his rest shall be glorious," but Jerome translated "Ipsum gentes deprecabuntur, et erit *sepulcrum* ejus gloriosum"; or again, Isaiah xvi, 1, "Send ye the lambs for the ruler of the land from Sela, which is towards the wilderness, unto the mount of the daughter of Sion," becomes in the Vulgate "Emitte *agnum*, Domine, *dominatorem terrae* de petra deserti ad montem filiae Sion"; again in Genesis xli, 45, it is said that Pharaoh gave to Joseph the name "Zaphenath-Paneah"; Jerome translated this "Vocavit eum lingua *Aegyptiaca, Salvatorem mundi*," which makes the passage appear distinctly Messianic; according to Driver,† however, the name means "God (or "the God") spake and he (the bearer of the name) came into life," so that Jerome has strained the interpretation here.

I should like in conclusion to draw your attention to some very small points where, by its *punctuation*, the Clementine Vulgate has altered the sense of the original Greek. Time after time St. Paul in the greetings of his Epistles speaks of "The God and Father of our Lord Jesus

* See Kaulen, *Geschichte der Vulgata*, p. 175 (Mainz, 1868).

† Commentary on Genesis (*Westminster Commentaries*), pp. 344, 345.

Christ"; this phrase is not incompatible with the fullest belief in our Lord's Divinity, and you will remember how the risen Saviour in St. John (xx, 17) said "I ascend unto my Father and your Father, and my God and your God." In some cases (*e.g.*, II Corinthians xi, 31, Ephesians i, 3, *cf.* I Peter i, 3) the phrase has been allowed to stand in the Clementine text; but in Colossians i, 3, a comma has been inserted "Gratias agimus deo, et Patri Domini nostri Iesu Christi," compare Ephesians i, 17, where the "Deus Domini nostri Iesu Christi pater gloriae" has been altered into "Deus, Domini nostri Iesu Christi pater, gloriae," in defiance of the sense; in both these passages the change has apparently been made in order to avoid speaking of "the God of our Lord Jesus Christ"; and in Colossians ii, 2, an "et" has been added after "Patris" with the same motive ("in agnitione mysterii Dei Patris *et* Christi Iesu").

I may perhaps also be allowed to mention two very small cases which shew what a different sense can be given to a sentence by the use, or omission, of capital letters; there is no doctrinal significance here; I just mention them for their interest. In Acts xvii, 6, the Jews at Thessalonica, complaining of St. Paul's preaching, cry out "hi qui orbem concitant et huc venerunt" ("those that have turned the world upside down have come here also"); *orbem* very naturally got corrupted into *urbem*—the city—in a good many MSS., and the Clementine Vulgate adopts this reading; but not contented with that, it prints the word with a capital U, and "Urbem" in a Bible printed at Rome could hardly mean anything but the Eternal City itself.

In Acts xix, 9, exactly the contrary procedure is shewn: "quotidie disputans in schola Tyranni" means that St. Paul held forth daily in the school of a man named Tyrannus; but the Clementine Vulgate prints the word with a small t, and thus makes the word an epithet, not a proper name; St. Paul disputed in the school of a certain tyrant; and this was the interpretation of the passage amongst a good many of the mediæval commentators—De Lyra, Caietan, Vatablus, etc.

I must now close this long paper; long as it is, I cannot claim to have treated the subject exhaustively or even very methodically. I have done little more than jot down and discuss the instances—mainly from the New Testament—which I have gradually collected during my years of work at the Vulgate; that work has been carried on with a different object,

and the instances have been noted by the way. No doubt a more systematic examination would detect more and more striking cases; but I trust that I have brought forward enough material to shew how interesting the study is, and to prepare the way for a fuller and more satisfactory treatment.

DISCUSSION.

The CHAIRMAN could confirm from his own experience one of the points of the lecture. Several years ago he had been brought into connection with a Roman Catholic, an Italian priest who was seeking the light. They were unable to converse, but they read the Vulgate together, and in one verse which Professor White had alluded to, the priest took a different view of the meaning of the word *poenitentia* from that which he (the Chairman) did. The priest thought that he must suffer something in order to receive the grace of God. But when the Greek word, *μετάνοια*, was pointed out to him, it gave him an entirely new thought. He asked, "Have I nothing to pay for it?" It was the moment of a change in his life; he understood then that eternal life is the *gift* of God. He is now a faithful missionary of the Church Missionary Society in India.

Mr. MAURICE GREGORY was reminded by the last word of the Chairman that he was recently present at a funeral of a poor Belgian refugee. The poor people attending the funeral were astonished to find that there was "nothing to pay" for the burial service.

He would like to ask concerning the word *ἐπιούσιος* in Matthew vi, 11, and Luke xi, 3: "Give us this day our *daily* bread." Is there any justification for translating it "daily"? ought it not to be rather "supersubstantial," thus making the petition in our Lord's Prayer wholly spiritual?

Mr. M. L. ROUSE said the Lecturer had reminded us that the Lutheran Church, equally with the Roman Catholic, so divides the Commandments as to make "Thou shalt not covet thy neighbour's wife" the ninth, and a tenth out of all the other prohibitions against coveting. But the Lutheran Reformers may simply have retained this division as a remnant of unreformed tradition deeply engrained by custom. Valid evidence as to the original form could be obtained by referring to the other branches of the historic Catholic Church—

Greek, Coptic, Abyssinian, Armenian and Nestorian, which were in accord on this point with the Anglican and Calvinistic Churches.

Mr. GRAHAM desired to express his great gratitude to the Lecturer. He had shown how much we could learn from the Roman Catholics, and how much, on the other hand, they could learn from us. A little over two years ago the Rev. T. H. Darlow, Literary Superintendent of the Bible Society, in the lecture which he gave the Institute on Versions of the Bible, showed how the spiritual power of Holy Scripture came out in languages which previously had possessed no equivalent in words for the ideas which had to be conveyed. This was present to his mind while Professor White was delivering his lecture. The inspired Word could take care of itself, and it was well for us to make ourselves acquainted with the differences which exist between the different versions, and to learn from them.

The CHAIRMAN called upon the Meeting to return their sincere thanks to the Lecturer for his most interesting and instructive paper, and the LECTURER, in acknowledging the vote, said that it was not quite certain to this day how Jerome wished to translate the word *ἐπιούσιος*, since he was not quite consistent in his usage. Probably he intended to use the word "supersubstantial" in St. Matthew. In the Vulgate, as we have it now, we get both renderings; *ἐπι* is frequently translated by "super" in the Vulgate.

The Lecturer further added, with regard to the second Commandment and to prayers for the dead, that he had restricted his paper to the Vulgate itself, and had not included in it developments which might have arisen out of the Vulgate.

The Meeting adjourned at 6 p.m.

THANKSGIVING SERVICE.

HELD IN THE COUNCIL CHAMBER, CAXTON HALL,
WESTMINSTER, S.W., ON WEDNESDAY, MAY 24TH, 1916,
AT 3 P.M.

BEING THE OCCASION OF
THE FIFTIETH ANNIVERSARY
OF THE FIRST GENERAL MEETING.

ORDER OF SERVICE.

HYMN.

“Lead, Kindly Light, amid the encircling gloom.”—*Newman*.

The Ven. Archdeacon BERESFORD POTTER read THE GENERAL CONFESSION, the congregation *following*.

COLLECT.

O GOD, whose nature and property is ever to have mercy and to forgive, receive our humble petitions; and though we be tied and bound with the chain of our sins, yet let the pitifulness of thy great mercy loose us; for the honour of Jesus Christ, our Mediator and Advocate. *Amen*.

THE LORD'S PRAYER.

O Lord, open thou our lips.
And our mouth shall shew forth thy praise.
O God, make speed to save us.
O Lord, make haste to help us.

Glory be to the Father, and to the Son.: and to the Holy Ghost;

As it was in the beginning, is now, and ever shall be : world without end. *Amen*.

Praise ye the Lord.
The Lord's Name be praised.

The Rev. JOHN TUCKWELL read the sixth Psalm, as in the Authorized Version, the congregation taking the alternate verses, and concluding with the *Gloria Patri*.

HYMN.

“God moves in a mysterious way.”—*Cowper*.

THE FIRST LESSON, Job, Chapter xxviii, was read and expounded by the Rev. HARRINGTON C. LEES, who also offered prayer.

HYMN.

“Lord of all being! throned afar.”—*Oliver Wendell Holmes*.

THE SECOND LESSON, I Corinthians, Chapter xiii, was read by the Rev. J. R. GILLIES, who followed the reading by an address upon the last verse of the chapter, and by prayer.

HYMN.

“All people that on earth do dwell.”—*Psalms C*.

A GENERAL THANKSGIVING.

ALMIGHTY God, Father of all mercies, we thine unworthy servants do give thee most humble and hearty thanks for all thy goodness and loving-kindness to us, and to all men; particularly for the increase of light upon Thy Holy Scriptures which thou hast caused to be shed forth in these our days. We bless thee for our creation, preservation, and all the blessings of this life; but above all, for thine inestimable love in the redemption of the world by our Lord Jesus Christ; for the means of grace, and for the hope of glory. And, we beseech thee, give us that due sense of all thy mercies, that our hearts may be unfeignedly thankful, and that we shew forth thy praise, not only with our lips, but in our lives; by giving up ourselves to thy service, and by walking before thee in holiness and righteousness all our days; through Jesus Christ our Lord, to whom with thee and the Holy Ghost be all honour and glory, world without end. *Amen*.

THE PRAYER OF ST. CHRYSOSTOM.

THE BENEDICTION.

After the conclusion of the Service the NATIONAL ANTHEM was sung.

The Rev. G. HAROLD LANCASTER presided at the organ.

COMMEMORATION MEETING.

HELD IN THE COUNCIL CHAMBER, CAXTON HALL,
WESTMINSTER, S.W., ON WEDNESDAY, MAY 24TH, 1916,
AT 4.30 P.M.

IN CELEBRATION OF THE FIFTIETH ANNIVERSARY OF THE
FIRST GENERAL MEETING.

DAVID HOWARD, ESQ., D.L., F.C.S., VICE-PRESIDENT,
IN THE CHAIR.

The CHAIRMAN: Ladies and Gentlemen, we will commence by singing the National Anthem.

THE NATIONAL ANTHEM was sung.

The CHAIRMAN: I will now ask the Secretary to read the minutes of the First General Meeting of the Institute.

The SECRETARY: Before reading the minutes of the first general meeting of the Victoria Institute, I should like to read one or two letters that we have received from prominent members of the Institute with regard to our Jubilee Meeting. First of all, let me say that this morning one of our Members, in order to express his sense of indebtedness to the Institute, and to signalize the fact that we are now celebrating the fiftieth anniversary of the first meeting, presented the Treasurer with a cheque for £50. (Applause.) I venture to commend that to the serious consideration and imitation of others like-minded. That is a very practical way of showing our interest in the Institute. Those who are not as well blessed with this world's goods as our generous friend, can still do something for the Institute to celebrate the occasion—that is to say, those who are Associates of the Institute should, if possible, become Members. And all of us, whether Members or Associates, should try and make the Institute widely known. One of the letters I have received is from one of our Empire builders, Sir Charles Bruce.

ARNOT TOWER,
LESLIE, FIFE,
May 19th, 1916.

DEAR MR. MAUNDER,

I very much regret that it is not possible for me to be present at the celebration of the Jubilee of the Victoria Institute. There has never been a time when the work of the Institute has been of greater national and Imperial importance.

Very sincerely yours,
CH. BRUCE.

Then our old and valued friend, Canon Girdlestone, who is not able to be with us, writes:—

SAXHOLME,
WIMBLEDON, S.W.,
May 22nd, 1916.

DEAR SECRETARY,

Just a line to say how much I am thinking of your Jubilee, thankful for the past and hopeful for the future. I lately made an Index of 19 of the V.I. vols. for my own use. This gave me an opportunity of estimating the value of the subjects, the papers, and the discussions. We Bible students owe much to the Victoria Institute, and, not least, to its present Secretary.

Yours sincerely,
R. B. GIRDLESTONE.

Then from another member, Mr. Sydney T. Klein, who is prevented from being with us by serious ill-health:

THE VICTORIA INSTITUTE.

There are few people alive now who fully realized at the time, and remember now, the bitter state of antagonism which existed in the middle of last century between Religion and Science, between what was then called Idealism and Materialism. It was fortunately at the time recognized by many lovers of the Truth that there was something radically wrong in this antagonism, and it was a little band of these well-wishers who inaugurated this great Institution to rectify this state of things.

They named it after the great Queen who for nearly a third of a century had reigned over us and ever since has been known in our hearts as Victoria the Good.

In looking back at the past fifty years one realizes what a wonderful success has crowned the fearless endeavours of the Institution, often under great difficulty, to bring Religion and Science together. No Society has ever done a better work for the peace of mind and general mental welfare of the human race. Under its influence both sides have not only given up aggressive action but have arranged their houses in the guise of homes for hospitality rather than as strong castles for offence and defence.

It is fifty-one years ago to-day that the circular which suggested the founding of the Victoria Institute was issued, and fifty years ago to-day the first general meeting of the Institute was held. The Institute was exactly a year in its inception. The following are the minutes of that first general meeting, and, curiously enough, when looking through the register I found that those minutes had never been signed, and I thought it would be an appropriate thing if our Chairman to-day were to sign them as proof that the Institute has been working for fifty years and is still in full activity.

The Minutes of the First General Meeting held on May 24th, 1866, at 32, Sackville Street, London, W., the Right Honourable the Earl of Shaftesbury, K.G., President, in the chair, were then read.

The CHAIRMAN: Is it your pleasure that I sign these minutes as correct? (Laughter.) I will now ask the Secretary to read the objects of the Institute.

The SECRETARY: It has been suggested that possibly there are some persons here who were at that first meeting fifty years ago. If so, would they put up their hands. I am afraid there do not seem to be any. I will now, with the permission of the meeting, read the Objects of the Institute as they were adopted at the first annual general meeting of members and associates on May 27th, 1867, that is to say, when the Institute had been a year in existence.

The SECRETARY then read the original statements of the "Objects" of the Institute as adopted at the First *Annual* General Meeting, held on Monday, May 27th, 1867.

The CHAIRMAN : I will now ask the Secretary to read a letter from the Dean of Canterbury.

The SECRETARY : I am sorry to say that after the cards and notices of this meeting had been printed and to some extent circulated, I received the following letter from the Dean of Canterbury :—

THE DEANERY,
CANTERBURY,
May 16th, 1916.

DEAR MR. MAUNDER,

I am sorry to say that it will not be possible for me to give the paper that I am engaged to read at the Victoria Institute next week. This morning I had a fall, and have broken my right arm, and I shall be laid aside for at least two or three weeks. I cannot send you the manuscript, for it is not yet ready, and I must reluctantly leave it to you and the Council to make such arrangements for next week as you think fit. Please express my deep regret to the Council, for I had looked forward to the pleasure of helping to celebrate the Jubilee. I should be happy to furnish the paper at some later date, but I can do nothing for the observance of the Jubilee.

Believe me,
Very truly yours,
H. WACE.
(Per M. S.)

Then on Tuesday morning I received a letter from the Countess of Halsbury, informing the Council that Lord Halsbury was suffering from an attack of influenza, and was confined to his room, so that he would be unable to be present this afternoon. In these circumstances some of the principal members of the Council have prepared a series of short addresses relating to the work and objects of the Institute, which will be delivered this afternoon, and our Vice-President, Mr. Howard, has kindly consented to take the chair in Lord Halsbury's absence.

The CHAIRMAN : Ladies and gentlemen, it has not unfrequently fallen to my lot to act as a sort of simulacrum of somebody very much more important. I do not venture to represent Lord Halsbury.

Those who have known him all the years I have done know of his intense personality, his intense earnestness, and his marvellous powers, and I should be very sorry to try and represent him worthily. I only occupy his place, and I am sure you will join with me in asking our Secretary to convey to him and also to Dr. Wace our deep regret that they cannot be present at this Jubilee meeting of a Society they have helped so very greatly. All I am going to do is to venture to be egoistic. There are disadvantages of old age, and one of them is that one is very apt to fall into what my friends call the anecdotage, and I am going to venture rather to be anecdotal than philosophical. I do want to bear testimony to the wonderful benefit the Victoria Institute has been to me personally. Fifty years is a long time, and fifty years ago I was very much in earnest about orthodoxy and science, and I profoundly believed both were true, and they appeared to be fighting violently. Well, those principles of the Institute we have just heard read came as a guiding star to me in those times of stress. Nowadays I am much more sure of the object of my orthodoxy than I was then, but perhaps not quite so sure about the exact expression of it; and as for my science, well, I was cocksure then, and now I really don't know what to be certain of. All the dear old theories (?) of atoms, vibrations of æther, and what not, where are they? One is quite sure that "Magna est veritas et prævalebit," but I suppose nowadays it is pronounced in quite a different way. We pronounce things differently—at least, other people do—but it is the same Latin, the same words. It means exactly what St. Jerome meant when he so translated the Greek. And so there are changes in expression, and before we condemn them, although we may regret them, let us make quite sure there is no change in substance. We find people sometimes expressing an old truth in a new way; do not let us be in a hurry to condemn them. I want to speak about two movements in which the Institute took a great deal of interest, and certainly helped me very much. First of all I am going to speak about evolution, and may I say that the evolution theory, like a good many other theories, has suffered very much by its followers running a great way ahead of their leaders. It is an interesting study how in matters philosophical and theological and in matters scientific public opinion has forced the leaders into a very awkward position in the attempt to make it all quite clear and simple. It is very

tempting to express oneself with absolute certainty, to leave out little difficult and doubtful points, and then the hearers or followers go a great deal further. Now, as to evolution, I am not speaking of the leaders; I am speaking of what the average person understood by the theory of evolution, which was that everything came by chance, that there was no guiding principle, and naturally from that it followed that there was no room for a Creator. Then came Weissmann, who declared that acquired characteristics could not be inherited. That knocked the whole bottom out of that theory of evolution as above stated. Then came that wonderful old monk, Mendel, who spent a lifetime studying the variations of pea plants and the constant reversion to type. Was it worth his while? If you study the results, you think it was. Unfortunately for him he came before Weissmann, and therefore people shut their eyes to what he taught them. The result is this—if I may sum it up with the vulgar inaccuracy I have accused the populace of in other things—it seems to me that, after all these years, those who patiently waited find that, whatever there be of evolution in the creation of the world, it is governed, not by chance but by fixed laws, and where there is a law there must be a lawgiver, and if the omnipotent Lawgiver was pleased to create by evolution, all I can say is that, as Kingsley wisely put it, “It is a great deal easier to make a thing than to make a thing make itself.” If God worked by evolution, it is more marvellous than if He worked by direct creation. Another example: In all the storms of criticism, higher and lower, I begin to wonder whether what Lord Bacon called “the Idol of the Den” must be allowed to govern all questions of history. I remember very well that it is only seventy years ago when Sir Henry Layard carried out excavations in Nineveh, and brought the first of those great slabs to the British Museum, and then began to study the inscriptions on them. It appears that, after all these years, these ancient inscriptions throw the most marvellous light on the accuracy of the Old Testament. They do not always agree, but do accounts from Berlin always agree with those from Paris? Learned members of the Institute have given us great enjoyment by their researches in these old inscriptions, and have certainly helped many to wait and see, and I think it is worth waiting and seeing before one gives up belief in Moses or dreams that some romantic writer invented Abraham. I want to go further. I have just touched on two points,

but I do say that nothing has been proved that can shake our faith. Don't doubt; don't let difficult questions shake your faith. You may find that you have to alter your expressions; you may realize as you go on that you cannot make Eastern men think exactly like Western men. You realize that the Hebrew writer does not express himself exactly like the Greek writer, and certainly neither express themselves with the looseness of the modern pamphleteer.

The CHAIRMAN then called upon the Rev. JOHN TUCKWELL to address the meeting on

*THE WORK OF THE INSTITUTE AND SOME
INTERPRETATIONS OF SCRIPTURE.*

THE object with which this Institute was formed was the investigation of questions of philosophy and science, more especially those that bear upon the great truths revealed in Holy Scripture, and it is a fact sometimes used in disparagement of the Institute that after fifty years' work the predominant opinion among its members in regard to Scripture truth is that which would be described as "conservative." But why are we not denying the personality of the Creator; the immediacy of His activity in the creation and government of the universe; the immortality and moral responsibility of man; the truthfulness of Holy Scripture; the supernatural character of its inspiration; the authenticity of its historical records concerning Jesus Christ, and its supreme authority over the faith and conduct of mankind? Why, if all those views of truth called "conservative" have been superseded, have fifty years of investigation left them predominant among our members? There is only one answer: the verdict has been in our favour and the non-contents have failed to prove and to sustain their case.

But let me not be misunderstood. I do not mean that we stand in all things exactly where our fathers stood fifty years ago. I do not admit that we have made no progress, nor claim that we possess all the truth even now. Those whom we may call progressives have in many cases presented to us science and philosophy in the making, and we have reason to be grateful to them for a little steam as they have reason to be grateful

to others for the brake. We have learned much, and have had to modify some of our views and qualify many of our terms in stating them. Let me select one or two illustrations.

1. Geology and Genesis. When geology first became popularized the young giant was sometimes led forth by his backers with the threat against us that he would destroy our faith in the Bible. Its cosmogony, we were told, was utterly contradicted and destroyed. But though the giant was led forth to curse, he has remained to bless. The order of the events in Genesis i is found to be so marvellously in accord with the known facts of geology that it is as certain as anything in human opinion can be that no writer writing 3000 years ago could have possessed such scientific knowledge as would have enabled him to write it. No geologist now ventures to affirm that any serious discrepancy occurs between the two records, while the incredibly legendary character of the Babylonian myths affords no explanation of the origin of a record so extraordinary.

No man witnessed the dawn of light on the First Day, or saw the seething waters of the Second, or stood amidst the gorgeous vegetation of the Third. No man saw the breaking of the sun's rays through the thick mists of the Fourth day, or confronted the mighty saurians of the Fifth or the huge mammals of the early Sixth.

We are left, therefore, with only one explanation, viz., that the writer, whoever he was, and whenever and wherever he wrote, must have written under the guidance of a supernatural knowledge.

But the adherents to the Genesis narrative have had to make some concessions to the geologist. We may not say that fossils were created and buried deep in the earth's surface in order to test our faith, nor that creatures whose remains are found in the Palæozoic strata lived, grew great, propagated their species and died within a few hours of those which lived in the Mesozoic or the Kainozoic. We have to admit the story of the "ages," and this admission has given more vivid meaning even to New Testament expressions. When the Apostle (*pace* the critics; Heb. xi, 3) says, "By faith we understand that the ages were framed by the word of God," we see at once his reference; or when he says again, "according to His own purpose and grace which was given us in Christ Jesus before the times of the ages" (II Timothy i, 9); or again, "in hope of eternal life which God that cannot lie promised before the times of the ages" (Titus i, 2), our thoughts stretch back over the long

“ages” during which the earth was becoming prepared to be the abode of man, and we may well be grateful to the science which has given us this enlarged view of our Creator’s past purposes and works.

Before leaving this subject let me refer to the invaluable address given to us by Lord Kelvin (*Transactions*, Vol. XXXI), from the careful study of which we may learn that it was not without reason based upon the facts themselves that in *v. 2* two different words, תְּהוֹם and מַיִם (*tehōm* and *mayim*), “deep” and “waters,” were used to describe the two differently constituted liquids which in two successive periods covered the surface of our globe. In that same address he quite effectively disposed of the claim made by the adherents of Scripture on the one hand for the limitation of the period of Creation to a few hours by the clock, and to that made by the evolutionist on the other for thousands of millions of years since the beginning of the Cambrian Period. To the latter Lord Kelvin curtly says in effect: “You cannot have more than from thirty to forty millions of years at the most.” In this branch of research between Scripture and science, then, the Institute has rendered invaluable service to every seeker after truth.

In the few moments left to me let me refer to one other branch of research. About the time of its formation we began to be told with increasing emphasis across the North Sea that Moses could not have written the Pentateuch because the art of writing was not sufficiently known in his day; that the prophets of Israel preceded the giving of the Law and laid the moral foundations for it, and that consequently much of the Old Testament history was legendary; that many of the Psalms were too highly spiritual for the time of David, and must be dated in the exilic period, or later; that the Book of Isaiah was a composite work by some nine or ten different authors and an unknown editor, since science forbade our belief in the miracle of prophecy; that Daniel was a fictitious work compiled about 130 years B.C., of which Daniel never wrote a line, and whose fictitious character was established not only by its pretence to prophecy but by its reference to certain musical instruments, and to a certain so-called king, Belshazzar, who never existed, and so on and so on. The time would fail me to tell of the discoveries of the excavators, and of the labours of the decipherers of the literature of Babylonia and Assyria, Palestine and Egypt. The Creation tablets, the Deluge tablets, the Tel el Amarna tablets, the Hammurabi stele and tablets, the Papyri of Elephantinē and countless other documents which have given

assurance to our faith and to the words of Him Who said, "They have Moses and the prophets, let them hear them," and added, "If they hear not Moses and the prophets neither will they be persuaded though one rose from the dead."

Thus the work of this Institute has shown us that a man may be a philosopher and a scientist without ceasing to be a Christian. It has served also to indicate that all the lines of truth converge and centre in Him who for 2,000 years has been giving incontrovertible proof of His Divine claims by the fact that He has been and still is the mightiest moral and spiritual force for the uplifting of mankind which has ever existed through all the ages, and will so remain for ever. Before Him we bow in reverent worship while we exultingly exclaim—

"THOU ART THE KING OF GLORY, O CHRIST."

The CHAIRMAN then invited Mr. J. W. THIRTLE, LL.D., M.R.A.S., to speak as to

*THE VICTORIA INSTITUTE AND ITS SERVICE TO
THE CHRISTIAN FAITH.*

THE primary and fundamental purpose of the Victoria Institute, as set forth with precision at its formation in 1865, and reiterated from time to time during the past half-century of its history, has been (in one clause) the confirmation of the Christian Faith. Named after the noble Queen whose memory the nation will ever delight to honour, the Institute, while meeting the surgings of human thought from whatsoever quarter arising, has done so with a calmness that is born of faith in God, and a conviction that, in the person of the Lord Jesus Christ, the Infinite has been revealed to finite minds. In this spirit the Institute has scrutiized the philosophies of the ancients and examined the latest theories of speculative thought. The atmosphere has been one of fair and full and patient discussion; and again and again it has been found that, from all manner of material, the fire of criticism has yielded ideas, thoughts, and conclusions worthy of a place in the treasure-house of Truth.

Two general considerations demand such an organization as the Victoria Institute: (1) There is a tendency for Christianity, like other forms of faith and doctrine, to lose the

force of its appeal through sheer familiarity. (2) With the changes that are constantly involving human thought, there is a danger that the Christian revelation shall be regarded as a back issue, which, though it performed some service in days gone by, has been discredited by modern criticism. On both these heads the Institute has made emphatic utterance before the world.

On this first head, by "working over" the thought of the day—going beneath forms to principles—the Institute has shown that, speaking generally, truth is not dependent upon familiar phrases, however precious these may have become in individual experience. In other words, the old teaching may be expressed in modern terms, even as latest versions of the Sacred Books have shown that between Tyndale's Translation (sixteenth century) and the Revised Version (nineteenth century) the difference is one of form rather than of substance. On the second head—the tendency for the Christian revelation to be left in the rear by reason of the insistence and pushfulness of new theories—it has again and again been shown that the much-vaunted novelties have little or nothing to contribute to the volume of sound and ennobling thought. At the same time, the process of investigation has consistently yielded important results, showing that, far from being "back issues," the old books and the old doctrines are invested with a Divinely-implanted vitality which refuses to go down before impatient criticism. In other words, fair and full and dispassionate discussion has demonstrated the unique character of the Christian revelation, and shown that it is designed to be an abiding factor in the present world of flux and change.

The influence of the Institute may be judged from two considerations: (1) It has brought together a thoughtful body of Members and Associates—men and women to whom the things of God and Christ come as things that concern the mind as well as the heart. Needless to say, there are many excellent Christians who never trouble themselves with the grounds of faith, who never ask what is its warrant or justifying basis. Others, however, must concern themselves with these things, and must ask questions if only in order that they may be in a position to answer the same in the hearing of others. Here, generally speaking, we find the supporters of the Victoria Institute. They are so constituted—at least many of them, as their careers in literature well show—that they can only "receive to hold" that which, in some measure, has been commended to their reason and judgment. In the whole world of

thought nothing is foreign to the minds of such : everything makes its contribution to the general body of ideas which tend to establish the truth and add richness and strength to the considered faith of a Christian believer.

(2) The other general consideration which enables us to judge the influence of the Institute is found in the fact that, in the course of the past half-century, it has given to the world an encyclopædic body of constructive thought, on things human and Divine ; on the things of nature and revelation ; on the isms and sciences, ancient and modern ; and on many great scenes and passages of world history. In all, upwards of 250 scholars—men of outstanding culture and ability—have read papers, 580 in number, at as many ordinary meetings of the Institute. These papers have been, in fact, carefully prepared essays, many of them important and original contributions to human knowledge. The volumes of *Transactions*, giving discussions as well as papers, have gone into all lands, and are to-day consulted in the great libraries of the world. Moreover, they are constantly being quoted and referred to by writers on Christian Apologetics.

From which impressive facts, with the other considerations named, it is right to conclude that, in the breadth and depth of its work, the Institute has been true to its high purpose, and now enters upon its second half-century with a record of usefulness which, in a large degree, has commanded the blessing of Almighty God.

The CHAIRMAN asked the Ven. Archdeacon BERESFORD POTTER, M.A., to give an address on

THE RELATION BETWEEN SCIENCE AND RELIGION.

SCIENCE and religion cannot conflict, because both are spheres in which the Divine Being reveals Himself. The laws of Nature are the laws of God ; and the unfolding of these laws must make God's ways more plain. The only conflict that can occur is between true science and untrue religion, or between untrue science and true religion, or where the science and religion are both untrue. True science reveals God, and dethrones untrue religion. This is a good thing, not a bad thing, for the world. The main point is that the untruth in religion should yield before the truth, as Pharisaism had to yield before our Lord's denunciations.

During the last fifty years several sciences have progressed towards truth, and led religion in the same direction.

The doctrine of Evolution has widened men's outlook on the world. It has cleared away many misconceptions. Now we understand why reason in animals resembles reason in man; why many animals come to have the elements of conscience; why the offspring of men and animals, in early stages of life, before birth, are so exactly alike. We come to look on man as the crown of creation, on Christ as the topmost stone. We see why our Lord so often appealed to lower forms of life to illustrate spiritual truth. Darwin, far from destroying faith, has widened and ennobled it. He has taught us that men lived possibly millions, not thousands, of years before Christ came; that God revealed himself before Judaism or Christianity to man; that Christ's religion does not stand alone, but is rather the highest peak among the lower summits of religious faith. It may be true that Darwinism was degraded as an instrument to destroy Christianity, as in the case of Nietzsche, but that is not the fault of Darwin, any more than our Lord can be charged with the burning of so-called heretics at the stake. Darwin did not say, nor believe, as Nietzsche implied, that natural selection was the only instrument of nature in evolving higher forms—he said exactly the opposite; nor did he, like Nietzsche, leave out everything except the material in forming a conception of higher types of men. He merely pointed out some methods apparent in Nature by which Deity develops things upwards, from the lower to the higher.

The higher criticism has also done much to eliminate error, and guide men to the truth contained in Holy Scripture; although, as is quite natural, in some of the developments of that science, serious and dangerous mistakes may have been made. But as one would not undervalue the glorious heritage of French liberty, because of the horrors of the Revolution, so we must not allow sane critics to suffer for the sins of unbalanced forerunners or contemporaries.

Criticism is saving us from the idolatry of text worship, an idolatry as dangerous to spiritual life as the worship of the golden calf. Men are now beginning to see that the Church of England was wise when she declared that Holy Scripture *contains* all things necessary to salvation, leaving it to be implied that it contains other things as well. Now we distinguish between the human and possibly erroneous medium in which Divine truth is contained, and the pearl of truth itself. We are content to believe that historically and scientifically the

thoughts and language of the writers of Holy Scripture may have erred, and yet that these contain invaluable Divine truth. Men now feel that they must use their intellects and consciences in discovering truth, instead of subordinating their intelligence to the hard and cruel dominance of the verbal infallibility doctrine, whether of scripture, creed, or Church. And it is an immense boon to be enabled to supply honest and straightforward explanations of difficulties, which, without the aid of criticism, were impossible honestly to explain, *e.g.*, why the father-in-law of Moses is sometimes called Jethro, sometimes Hobab, sometimes Reuel. Why the Sabbath is said in one place to have been instituted because God rested on that day from the work of creation ; in another (Deuteronomy v, 15), because the Lord God delivered the Israelites from the land of Egypt, and that "therefore He commanded them to keep the Sabbath day."

It explains such passages as Genesis xii, 6, where Abraham is said to have passed into Sichem, adding, "and the Canaanite was then in the land," from which we naturally infer that when this passage was written, the Canaanite was not in the land.

It explains the great differences in the accounts of Genesis i and Genesis ii and iii about the creation of the world, and the similar divergencies in the accounts of the Flood. We ought to be grateful for these things, and to recognize the boon of making the Scriptures so much easier to be understood.

Once more, archæology has done much to reveal God's truth, or at least to make it more plain. It has shown that the same conceptions which found expression in our scriptures had been current among Sumerians and Semites in earlier times. That these conceptions were a crude way in which the unscientific intelligence of the world expressed deep thoughts about God. We have learned now that the story of the making of man out of clay, and breathing life into him, was a Babylonian and Egyptian story as well as a Jewish one ; that the important element in it was the Divine agency at work, and not the particulars of the way in which it worked. Archæology tells us that the Flood story and the Creation story were current in Babylon in very early times ; that the code of Hammurabi was reported to have been given to him by Shamash, as that of Moses to him by Jehovah. Recent research tells us that Jehovah was known as a God among the Babylonians, as is made more clear in a recent book by Dr. Pinches, as early as 2000 B.C.: consequently that we may believe that at first he

was only regarded as a tribal God, but that gradually the Jews were led on to the nobler and truer belief in monotheism.

It seems to me, then, that everything which we have learned from science during the last fifty years has tended not to destroy faith, but to purify it. It has tended to banish fetishes, to clarify thought; to bring our faith into harmony with conscience, common sense, history, and reason. It has not destroyed anything valuable, but bestowed on us the boon of scattering the chaff to the four winds of heaven. Long may it stay there. It has brought out more clearly than was realized before that a moral and spiritual life based on the teaching and example of our Lord, and inspired by the Holy Spirit, is the one thing that "the Lord requires of us."

In conclusion, let me add that there may be some here who do not accept evolution, higher criticism, or the results in archæology which I have indicated. My object is not to raise any controversy on such matters, but to show that from the point of view of those who, like myself, recognize the above-mentioned results, true religion is advantaged and not injured by scientific progress.

The CHAIRMAN then invited Mr. WALTER MAUNDER, F.R.A.S., to make some remarks upon—

FIFTY YEARS' PROGRESS IN ASTRONOMY.

THE VICTORIA INSTITUTE was founded fifty years ago, chiefly because some distinguished men had made the assertion that science and religion were at issue. This assertion itself demanded investigation, and the Victoria Institute was founded largely to secure that that investigation was unprejudiced.

The particular science in which I am myself interested was not specially concerned at the time to which we are now looking back. For it, the question had been thrashed out three hundred years earlier. Then Galileo, the founder of the new astronomy, had ventured to declare that the earth moved round the sun and that the sun was at rest. The old astronomy had asserted the contrary and, as was but natural, its adherents had believed that many texts of Holy Scripture supported their cosmological ideas. The world to-day accepts one of Galileo's doctrines, that the earth moves, and rejects the other, that the sun is at rest, and it does this quite irrespective of any belief or want of belief in the inspiration of Holy Scripture. Most

intelligent men of to-day would admit that to force this or that text into the controversy, whether on one side or the other, would be an act of intellectual perversity. The Psalm which we read in our Thanksgiving Service this afternoon tells us that "the going forth" of the sun is "from the end of the heaven, and his circuit unto the ends of it," but not the most ardent upholder of the doctrine of Verbal Inspiration would now contend that this text proved the Ptolemaic theory to be correct.

We were happily spared a repetition of this experience when the Galilean theory was accepted, for no one seemed to trouble to weave this into the scriptural fabric. Had it been otherwise, then, two hundred years later, when Herschel demonstrated that the solar system as a whole was in movement, we should have had again a so-called conflict between religion and science. The progress of astronomical science during the last fifty years has been removed from the sphere of religious controversy.

Nevertheless, the Council of the Victoria Institute has felt that it was important to have addresses from time to time on subjects of pure science, delivered by men who were themselves leading workers and authorities in the several departments which they expounded. In astronomy, I may mention among these, Sir Robert Ball, Sir David Gill, Dr. Andrew Crommelin, Dr. Sydney Chapman, Professor Alfred Fowler, Professor A. S. Eddington. That these men consented to address the Institute was an evidence of real sympathy with it; indeed the first two named were pleased to join it. Nevertheless, if we examine their addresses, we shall find there is no distinctively theological note, however sincere their acceptance of Christianity. Their business when they came to address us was not to preach a sermon, but to expound scientific methods and results.

There is profit in science. The sciences are clean and sane and healthy, and in that way are of immense service to mankind. But they are not religion, and the terms that are appropriate to religion are not appropriate when applied to science. It is inexact to speak, as some do, as to science being a revelation of God. It is not so: it is an enquiry by man into the handiwork of God; but God's handiwork is not God, and man's research into it is a very different thing from God's revelation of His own nature and character. It is inexact to speak, as some do, of the truths of science. Truth, strictly speaking, is an attribute of God; it belongs to personality, to character; not to the relation of thing to thing. We have a right to speak of the facts of science, the

conclusions of science. The great man of science whom France lost a few years ago, Poincaré, cousin of the President of the French Republic, said, "There are no true hypotheses in science; there are convenient hypotheses, and that hypothesis is the most convenient which best accords with the facts." There is no moral or spiritual superiority in holding one scientific hypothesis rather than another. The man who follows Galileo is not made thereby a better man than the man who follows Ptolemy: he may be better instructed or of better intelligence, but his superior knowledge does not bring him nearer to the Divine Image.

Is there then no advantage, for those special purposes which the Victoria Institute has in view, in the lectures and addresses which we have had from time to time from such leading astronomers as those whom I have mentioned? I think the advantage has been great. The progress of astronomy during the last sixty years has been so remarkable, so revolutionary, that it requires a very serious effort to realize the conditions that existed before. Sixty years ago, astronomy was limited to the repeated determination of the apparent positions of sun, moon and stars and planets, and by such repeated observations their movements were ascertained. Questions as to the composition and physical condition of the heavenly bodies were barely entertained.

How great is the difference now! The application of the spectroscope to the analysis of the light of the sun and of the stars founded what may be called Celestial Chemistry, and we have learnt to recognize many elements familiar to us here as existing not only in the sun, but in the distant stars. We have ascertained the temperature of the sun's surface to be about $12,000^{\circ}$ Fahr., so that metals like iron, here normally solid, there always exist as glowing gases. The spectroscope has further enabled us to group the stars according to their temperature conditions, and they have been arranged in order of stellar evolution.

It is worth while noting that the word "evolution," which is so prominent in the philosophy of Herbert Spencer, has many different and independent meanings which are not as carefully distinguished as they ought to be. Stellar evolution practically means that a celestial body in the process of cooling undergoes changes of condition which are evidenced in its spectrum. Organic evolution, so intimately connected with the name of Charles Darwin, differs in its conceptions so widely from the ideas involved in stellar evolution that an astronomer and a

biologist when speaking of "evolution" are speaking in two different languages.

The spectroscope proved competent to attack a problem which had seemed for ever beyond our reach, namely the determination of the speed with which a luminous object is approaching or receding from us, and in this way we have learnt that many stars that, even in our most powerful telescopes, appear as single, are really double, the one star revolving rapidly round the other.

The application of photography to astronomy has immensely increased our knowledge. By means of the photographic plate we have been able to secure the positions of millions of stars, where formerly with the same expenditure of time and trouble we could barely have registered thousands. And from these new sources of information as well as from the further development of old methods, our conceptions of the stellar universe are growing continually in definiteness and magnificence.

Our old Scandinavian forefathers had their myth of a great Mitgard Snake, the Serpent of the Middle World, which encircled and upheld the universe. The old myth has its counterpart in the astronomical conception of the Galaxy, the convolutions of which encircle the whole sidereal universe so far as we can penetrate it. Stars of different orders of magnitude, stars of specific colours, stars of specific types of spectra, are distributed through space, not at haphazard, but with distinct subordination to the position of the Galaxy. So also with the different orders of nebulae and star clusters. So, more remarkable still, are those evanescent lights which occasionally burst out upon our view, the New or Temporary Stars.

The stellar universe is therefore *one*: one in the materials which compose it; one in the physical laws which condition it; one in the evident fact that it constitutes a single structure. And the evidence of its unity is bringing us to discoveries more remarkable still. Our conception of the scale of the sidereal universe is continually increasing; fifty years ago we knew of the distances of but a mere handful of stars; the nearest being a mere 250 thousand times the distance of the sun, and two million times the sun's distance was the utmost extent of our sounding line into space. Now we have secured indications, subtle and indirect and capable of much modification in the future, that hint at stellar distances one thousand times as great as the most distant which we were able to determine

fifty years ago. And one or two greatly daring astronomers have put on record their reasons for considering that even this limit must be exceeded a hundred times further still.

From these conceptions of immensity that dizzy and confound the utmost stretch of our imagination to apprehend, we are brought back instantly to the contemplation of a no less wonderful cosmos in the infinitesimal. I am old enough to have been taught when I was a boy at school that we knew two things, and two things only, concerning the atom: the first that it was indivisible, the second that it was immutable. To-day we know about the atom that it is not indivisible, but complex; that it is not immutable, but subject to change. And in part we have learnt that from the evidence afforded us by celestial chemistry. Helium was recognized on the sun before it was recognized on the earth; that was a striking achievement. Coronium and nebulium have not yet been recognized on the earth, but the lines of their spectra have afforded the indication of the way in which the constituent atoms of those elements are built up; a more striking achievement still.

Have these items of progress in our scientific knowledge and a thousand other items of progress, also made in the last fifty years, at which I cannot even glance, have these any bearing upon our knowledge of God, upon theology? Yes, they have. They teach the lesson which St. Paul preached two thousand years ago: "The invisible things of God from the creation of the world are clearly seen, being understood by the things that are made, even His eternal power and Godhead." The lesson is therefore no new one, but science brings it home to us with ever-increasing force and power. Science shows us in nature unity of material, unity of law, unity of structure and plan, and therefore unity of Creator and Lawgiver. And the vastness of the structure of the cosmos, and the unimaginable complexity and variety of its detail, and the indescribable finish and perfection of its most infinitesimal portions, justify the conclusion of the Apostle: "That His eternal power and Godhead are clearly seen by the things which are made."

Nor is this quite all. "God has not left Himself without witness, inasmuch as He has done us good and has given us rain from heaven and fruitful seasons, filling our hearts with food and gladness." God is good and doeth good.

So far natural religion can take us, but not further. And I would ask you to note the reserve, clearly marked in all the addresses of all the astronomers to whom I have referred, as to philosophical or theological inferences that some might

try to draw from the scientific facts which they laid before you.

There are two errors against which we should be on our guard. We may misuse God's revelation to us in Holy Scripture, which was given for our instruction in righteousness, by using it as if it were for our instruction in the physical sciences. We may misuse the book of nature which was given us for our enquiry, for our intellectual development and our material help and comfort, and may use it as if it were a key to that knowledge of God which is everlasting life, which lies only in Himself and in Jesus Christ, Whom He hath sent. The first school would render to God the things which are Cæsar's; the second to Cæsar the things which are God's. Be it in the future, as in the past, the work of the Victoria Institute to insist that we render to Cæsar the things that be Cæsar's, and to God the things that be God's.

The CHAIRMAN then called upon the Rev. H. J. R. MARSTON, M.A., to deliver an address upon

*THE ADVANCE IN THE KNOWLEDGE OF THE
GREEK TESTAMENT, MADE IN THE LAST
FIFTY YEARS.*

ABOUT three years before the inception of the Victoria Institute, J. B. Lightfoot published his famous edition of St. Paul's Epistle to the Galatians. B. F. Westcott had already some years earlier published writings on the Bible. Henry Alford finished his valuable career of honest and faithful work on the elucidation of the New Testament a few years after the Institute began its career. F. J. A. Hort was occupied with similar tasks during the years which mark our era. Dr. Moulton was a contemporary scholar; and later the names of Sanday, Headlam and Meyer became famous. Meyer among the Germans, and Godet in Switzerland, must be mentioned as illustrating how wide an interest was spread over the Christian Church in the work of exact scholarship in the department of the Greek Testament. The principle which governed the investigations and researches of these eminent men was that of a belief in the sacred force of words. The splendid Cambridge triad in particular had learned from their great teacher, Prince Lee, the value of language when employed by a master mind with honesty and sincerity. They had been

disciplined in the doctrines of Hermann, that "language is the image of thought; and that whatever is impossible in thought is impossible in language."

It may be said that the result of their labours has been to enable us to understand the New Testament in a way that has not been possible to the same degree since the days of the Apostolic writers themselves.

To me the principles on which these great scholars have worked appear to offer some important suggestions. The first is: that on these principles may be raised a reasoned and sober theory of verbal inspiration. Secondly: the method and the spirit of these scholars disposes me to look with scepticism on many of the conclusions of the Higher Critics. A reverent treatment of the very words of Scripture such as these scholars manifest, and a close adherence to the text, is a strong prophylactic against the lawless and romancing spirit too often characteristic of the mere Higher Critic, so called.

Thirdly: the same considerations lead to a rigorous attitude towards the school of what I may call "papyrology" as ably represented by Dr. Moulton, of Didsbury. I learn from Lightfoot and Westcott to treat St. Paul and St. John with scientific and scrupulous reverence in their very language. I cannot, therefore, regard the language of the Apostles as a patois such as may be interpreted by fragments of stray documents picked up among the debris of Asia Minor or the valley of the Nile.

The language of the New Testament is Greek, not a jargon of cooks and apothecaries, without law or stability.

The CHAIRMAN asked Mr. JOSEPH GRAHAM to speak, and in response he urged upon the Meeting the great importance of a diligent study of the Holy Scriptures and a reverent attitude towards them.

The CHAIRMAN: After this series of admirable addresses I have only one thing further that I wish to say, one thing that impresses me more and more as I get older. Remember that the past belongs to us old men, the future belongs to the young. Take care that the young are encouraged and brought forward to do the work and take up the charge which is falling from our hands.

The Rev. Chancellor LIAS, M.A.: Ladies and Gentlemen, if you have listened as I have for the last hour and a half to a series of most interesting, most intelligent and helpful addresses, I am sure

you will heartily accord a vote of thanks, first to our Chairman for his charming opening, and then to each one of the speakers. It would be invidious for me to distinguish between them. I hope those here who are not yet members or associates of the Institute, having had a sample of what the Institute does, how it thinks and how it works, will come forward and join us as soon as they can. I have great pleasure in proposing a vote of thanks to the Chairman and speakers.

The Rev. Prebendary H. E. Fox, M.A., seconded the vote, which was carried with great applause.

The CHAIRMAN : I can only thank you for coming in such good numbers and for your attention and appreciation of the addresses.

Professor H. LANGHORNE ORCHARD : I am sure we should not like to separate without another vote of thanks, and that is to our Secretary. It is not too much to say that he is worthy of the line of secretaries who preceded him, and the success and prosperity of this Society is very much due to his foresight and never-failing diligence. He has conducted this Meeting under great difficulties, and with what success we can testify. (Applause.)

The SECRETARY : I beg to thank you, Mr. Chairman, Ladies and Gentlemen, for the very kind way in which you have greeted me this afternoon. I may say I felt rather taken aback a few days ago when first one thing and then another went wrong, but the way in which the Council has supported me in the arrangements I had to make and has fallen in with my suggestions has taken all the trouble off my shoulders. I feel much happier than I did a few hours ago. Our next Meeting will take place in the usual room at the Central Buildings, on Monday week, June 5th, when Professor Hull will give an address on "The Tides."

The Meeting adjourned at 6.5 p.m.

581ST ORDINARY GENERAL MEETING.

HELD IN COMMITTEE ROOM B, THE CENTRAL HALL,
WESTMINSTER, ON MONDAY, JUNE 5TH, 1916,
AT 4.30 P.M.

COLONEL CHAS. EDWARD YATE, C.S.I., C.M.G., M.P. FOR THE
MELTON DIVISION OF LEICESTERSHIRE, TOOK THE CHAIR.

The Minutes of the preceding Meeting were read and confirmed.

The SECRETARY announced the election of Miss Caroline J. Crawford and of Mrs. Marston as Associates of the Institute.

The SECRETARY read the following letter* from the Rt. Hon. the Secretary of State for War:—

“ War Office, Whitehall, S.W.
3rd June, 1916.

“ Lord Kitchener desires to thank Professor Hull for the card of invitation which he was so good as to send him, but regrets that his engagements will not permit of his being present at the Central Hall, Westminster, on Monday, the 5th instant, on the occasion of his lecture on ‘The Tides.’

“ Professor Edward Hull, M.A., LL.D., F.R.S.”

The CHAIRMAN said that it gave him great pleasure to preside at a Meeting of the Victoria Institute, of which he had been at one time an Associate, until the pressure of other duties obliged him to retire. And it was an especial pleasure to preside on the occasion of a lecture by his old and valued friend, Professor Hull, whom he would now ask to address them on the subject of “The Tides.”

*THE TIDAL WAVE ON THE OFF SIDE OF THE
EARTH FROM THE MOON.* By Prof. EDWARD HULL,
LL.D., F.R.S.

IT is remarkable that one of the most generally recognized of the physical phenomena belonging to our globe—that of the double tides—is still a subject under discussion, and that we may say of it “*tot homines quot sententiae.*” It is universally recognized that the tidal wave which visits our coasts twice in

* At the moment when this letter was read, Lord Kitchener had already started on his last voyage.

the twenty-four hours, is due to the attraction of the moon, augmented, under certain conditions, by that of the sun, by which the ocean waters are raised to a small extent above the normal level in the form of a wave which, owing to the rotation of the earth, moves along from east to west till, obstructed by some barrier of land thrown across its path, such as that of Africa or America, its course is deflected or destroyed. This elevatory force is applied within the plane of the Ecliptic, and has its maximum effect along a line drawn from the centre of the moon to that of the globe, but diminishes towards the great circle which has the moon at its pole where the force ultimately becomes tangential. Of the several great oceans on the Earth's surface, only one, the Pacific—as it covers nearly half the globe at the equator—offers sufficient expanse for the formation of a full tidal wave. The other oceans, such as the Atlantic and Indian, present insufficient surfaces towards the moon for the full development of the tidal wave; and still less does the Mediterranean, though both are influenced to some small extent.

Existing Theories.—The solution of the problem for the existence of a tidal wave on opposite sides of the globe has been often attempted, but with unsuccessful results, as admitted by writers themselves. The favourite theory, and one generally adopted, may thus be stated: “The attraction of the moon is strongest on the earth's surface next the moon, less at the centre, and less again on the parts beyond; so that the solid body of the earth, which is attracted as though it was condensed into its own centre, is more powerfully attracted than the ocean water on the off side from the moon, and is drawn away from the water.”

A recent writer on this subject, Mr. J. A. Hardcastle, rejects the theory that “on the side towards the moon the water is drawn away from the earth, while on the other side the earth is drawn away from the water.”*

The latest writer I have met with is Mr. Arthur R. Hinks, recently Chief Astronomical Assistant at Cambridge Observatory,† but he skips rather lightly over the subject of the double tides, and apparently does not accept any of the accepted theories, or give one by himself. He merely remarks that “the subject is

* *Journ. Brit. Astron. Assoc.*, Dec., 1912, p. 141. Mr. Hardcastle's letter is misleading; for, although headed “Tide on the other side,” it deals with “tide on this side,” as the last paragraph of it shows.

† “Astronomy,” *Home University Library*, p. 58.

complex and difficult; and that the well-known figure of high water under the moon, where the moon drags the water away from the earth, and another high water on the opposite side where the moon drags the earth away from the water, is responsible for not a little misconception." I entirely agree.

The last work to which I shall refer is by Sir George H. Darwin on *The Tides*.* I had hoped that I should have here a clear and intelligible theory of the origin of the second tidal wave on the side opposite from the moon, but in this I have been disappointed. The cause of this may, I admit, lie with myself, but from the statement made on this subject by Mr. A. R. Hinks—who cannot have been ignorant of Darwin's investigations—I gather that he also was unable to accept his reasoning, otherwise he would have quoted him with approval. Darwin's reasoning is certainly obscure, and I venture to say incorrect, as he makes the moon's attraction to act in opposite directions on opposite sides of the earth at the same time. This I cannot admit.† Further references are unnecessary; and as there seems to be no generally recognized explanation available, this is my apology for offering one. Before proceeding further, I may here state explicitly that I do not consider the *direct* attraction of the moon to have any appreciable influence on the formation of the antipodal tide wave. This will appear in the sequel.

Proposed Solution of the Problem.—Let us take the simplest of possible representations of our globe—an orange. This fruit consists of an enclosing rind formed of a solid but flexible material resting on a semi-fluid interior. Squeeze the orange between the finger and thumb, with the result that the fruit will bulge outward at both the intermediate sides between the points of pressure. To compare small things with great is a favourite expression, and may be used in the present case if it can be shown that the lateral pressure on the orange has its counterpart in the lateral pressure exercised by the moon in the case of the globe, of which we must now consider the structure.

The Structure of the Globe.—The globe consists of a solid, but flexible, envelope called "the crust," of variable and unknown

* Third edition (1911). The substance of lectures delivered in 1897, at the Lowell Institute, Boston.

† The reader is referred to chapter 5, p. 94, on "The tide generating force," and figs. 22 and 23, pp. 103 and 108. Darwin's views are repeated in the *Encyclopædia Britannica*, 11th edition, article "Tides," with great elaboration.

thickness, ultimately resting on a semi-fluid interior of lava, rock in a molten condition due to heat, such as is erupted from volcanoes in action. That this is the condition of the interior immediately under the crust may be inferred from experiments carried out over large portions of the land areas, which go to show that the temperature increases with the depth at an average rate of about 1° Fahr. for every 60 feet of depth. These experiments only reach to about 3,500 feet from the "invariable stratum," only a short distance downwards.* There is no indication that the temperature tends to decrease as the depth increases, and the molten condition of liquid lava extruded from great depths by volcanic action indicates the contrary. We may feel confident that the mass of matter enveloping the centre of the globe nearly retains the temperature of its original condition owing to the exceedingly slow radiation of heat from the surface.

With a continuance of this increasing heat a depth must be eventually reached at which there will be a temperature equal to that of rock fusion at the surface: though the pressure at those depths may affect the conditions of fluidity tending to the solidity of the crust. Taking the rate of increase at 1° Fahr. for every 60 feet below the invariable stratum, the following will be the heat at various depths:—†

<i>Depth.</i>		<i>Temperature.</i>	
50 feet	...	50° Fahr.	
1,000 "	...	63°	"
4,000 "	...	116°	"
7,826 "	...	212°	" Boiling point of water.
34,752 "	...	773°	" Critical point of water.
150,000 "	...	$3,174^{\circ}$	" Approximate fusion point of rocks.

the last case, about 28 miles, being the minimum thickness of the crust.

Assuming this to be the composition of the globe, it is clear that it can give way to lateral pressure exerted at opposite

* The invariable stratum is the depth of the annual mean temperature of the locality—a few feet from the surface.

† Prestwich, *Geology, Chemical, Physical and Stratigraphical*, vol. ii, p. 537. The question of a solid mobile crust resting on a viscous interior of molten matter due to heat, is ably dealt with, and is one I myself hold strongly in opposition to the theory of a solid interior.

points of the surface where it will yield, while causing the intermediate areas to bulge out from the normal form; and that this is the case can be shown from a consideration of the moon's action on the side of the earth immediately opposed to it.

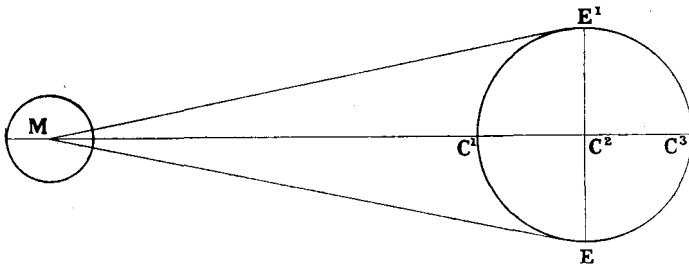
If we draw a line from the centre of the moon to that of the earth we have the position of maximum attraction between the two bodies; but the attraction of the moon extends over the whole of the side of the globe presented to it.

Proposed Solution of the Problem.—Assuming the earth to consist of a solid, but flexible, envelope of a minimum thickness of 28 miles, but which owing to gravitation may be twice this amount, enclosing a molten or viscous mass of matter due to primeval heat, and revolving on an axis with a velocity of a thousand miles an hour at the equator.

The effect of attraction of the moon on the globe will be greatest in a line joining the centre of the former with that of the latter—a distance of 240,000 miles—and whatever may be its force at the surface of the earth directly opposite to it along this line it will be less at the centre of the globe, according to the Newtonian law of “inversely as the square of the distance.” Both the moon and the globe are mutually attracting each other; but as the latter is much larger than the former the centre of gravity of the joint system will not be the centre of the globe, but in a position between the centre and edge of the globe itself. This is of little consequence to my argument. According to the Newtonian law, the attractive force of the moon will be decreased at the off side of the globe as compared with that at the centre, and the attraction at the centre again will be less than at the surface immediately under the moon. But, beside the force of the moon's attraction on that part of the globe directly opposite to itself, its force is spread over the entire hemisphere, decreasing with the distance from the central axis in all directions towards the great circle which has the moon at its pole. At that circle a portion of the moon's attraction acts as a lateral pressure directed from opposite sides towards the centre of the earth. It is this lateral pressure which (as I contend) produces the second (or antipodal) bulging, resulting in the tidal wave on the off side of the globe from the moon.

This lateral pressure affects the whole mass of the globe, and necessarily produces a bulging of the surface over the region intermediate between the regions of pressure. As the whole of the interior mass which I infer, on grounds already stated, to

be in a fluid or viscous condition, is in continuous contact, there is no other way in which the displaced lateral matter can remain in a state of equilibrium. Where water occupies the surface, the effect is to produce, on both sides, a wave following the course of the moon, owing to the rotation of the earth once every 24 hours, which has its fullest development when the great Pacific is the scene of operations. But the bulging due to compression also necessarily adds to the magnitude of the tidal wave directly opposite the moon. These conditions may be illustrated by the annexed figure. (*See diagram.*)



Let M be the centre of the Moon and C^2 the centre of the Earth. By joining these the line MC^2 traverses the surface of the Earth at C^1 , and, if prolonged, the antipodal surface at C^3 . The attraction of the Moon is greatest along this line, and least at E and E^1 , where the tangents to the Earth's surface from M meet it. The triangle MEE^1 , which represents the forces of attraction to the Moon's centre, may be resolved into two triangles MC^2E and MC^2E^1 . In MC^2E the line EC^2 represents the component of the Moon's attraction that acts towards the centre of the Earth; and similarly E^1C^2 in the triangle MC^2E^1 . The action of the Moon's attraction at E and E^1 has in part, therefore, a compressing effect upon the surface of the Earth, producing bulging at C^1 and C^3 , as already explained. These bulgings produce on oceanic waters a tidal wave at C^3 and augment the direct tidal wave at C^1 .

Now, I wish to protest most sincerely that I have no intention of contesting the theories of professed astronomers, who may naturally hesitate to accept my views. On the contrary, I hold that this problem of the antitidal wave may not be inconsistent with theirs. You will observe that my own branch of science, Geology, is here specially called into service, and I venture to call this paper "A Geological Theory of the Tidal Wave on the Off Side of the Moon," and I may add that outside the "astronomic group" of scientists I have found supporters for my views.

The LECTURER here asked for a few minutes' indulgence, as his voice was far from strong. His son, Dr. E. G. HULL, read some notes on the same subject during the interval, and Colonel YATE having been called away by his Parliamentary duties, Lieut.-Colonel G. MACKINLAY succeeded him in the Chair.

The LECTURER then exhibited a number of slides illustrating the form of the cotidal lines round the British Isles.

DISCUSSION.

Colonel MACKINLAY (as Chairman) said that he had not been quite able to follow the first part of Professor Hull's lecture, and saw no reason for giving up the usual explanation of the antipodal tide; namely, that the moon, acting upon the waters of the ocean, attracted those on the nearer side somewhat more strongly than it attracted the earth as a whole, so that the waters on that side were heaped up towards the moon; while its attraction on the waters on the far side being less than on the earth, those waters were, in effect, left behind. He found the second part of Professor Hull's lecture very interesting, and especially his description of the troubled state of the waters where the co-tidal waves round the British Isles meet each other.

Mr. MAUNDER said that the subject with which Professor Hull had dealt was interesting to all. But he could not agree with the Lecturer that there were many divergent theories as to the cause of the tides. The Newtonian law of gravitation held good, and the main cause of the tides was the attraction of the moon. But the working out of the details of tidal movements was very complex, as those who had seen Lord Kelvin's tide machine would quite appreciate. The differences between various writers upon the subject had been differences as to the method that should be adopted in order to give the young student or general reader an idea of the actual effect upon the waters of the moon's attraction that should be at one and the same time readily intelligible and sufficiently full and sound.

Professor Hull, if he had correctly followed him, had taken up a point which had sometimes been omitted from these popular explanations. Referring to the diagram, Professor Hull had shown that the action of the moon at the point E might be resolved into two forces, EC^2 and C^2M , of which EC^2 was directed towards the

centre of the earth, and C^2M towards the centre of the moon. Similarly with E^1 . It was clear, therefore, that part of the effect of the moon's attraction at E and at E^1 must tend to produce a low tide at those points, and therefore a high tide at the intermediate points; not only at C^1 but also at C^3 . The problem, however, might be considered, as Mr. J. A. Hardcastle had done in his papers read before the British Astronomical Association, as one of water moving forward in response to the moon's attraction, rather than as one of water directly raised or depressed by it.

The Rev. JOHN TUCKWELL said that Lord Kelvin had stated that unless the earth were more rigid than a cannon ball, it would bulge more at the equator than was found to be actually the case. He regarded the earth as a body that had been rendered solid by the immense pressure.

After some questions and remarks from Colonel ALVES, Professor LANGHORNE ORCHARD and others, a vote of thanks was passed by the Meeting to the Lecturer, who in acknowledging it again pointed out that the moon would cause a lateral pressure on the earth at the points lettered E and E^1 on the diagram.

The Meeting adjourned at 6.15 p.m.

582ND ORDINARY GENERAL MEETING.

HELD IN COMMITTEE ROOM B, THE CENTRAL HALL,
WESTMINSTER, ON TUESDAY, JULY 11TH, 1916,
AT 4.30 P.M.

THE VERY REV. HENRY WACE, D.D., DEAN OF CANTERBURY,
VICE-PRESIDENT, TOOK THE CHAIR.

The Minutes of the preceding Meeting were read and confirmed.

Also the Minutes of the Meeting held on May 24th, 1916, in Commemoration of the Fiftieth Anniversary of the First Ordinary General Meeting of the Victoria Institute, which had been held on May 24th, 1866 ; exactly one year after the publication of the circular suggesting the founding of such a Society.

The SECRETARY announced the election of Sir Henry H. Howorth, K.C.I.E., D.C.L., F.R.S., as a Vice-President of the Victoria Institute, and of Mr. C. E. Miller as an Associate.

The SECRETARY also announced that a Committee of three judges had been appointed to consider the essays sent in for the Gunning Competition, and that they had unanimously selected as the best in scholarship and research the one bearing a motto which afterwards proved to have been that adopted by the Rev. W. St. Clair Tisdall, M.A., D.D. The Council had therefore awarded to Dr. Tisdall the prize of £40.

The CHAIRMAN said that he was glad to see that the winner of the Gunning Prize was a man of such ripe scholarship as Dr. Tisdall. It was an honour to the Victoria Institute that a man of such learning should have taken part in the competition established under the bequest of the late Dr. Gunning. He had great pleasure in handing the sum of £40 to the Secretary for transmission to Dr. Tisdall with their congratulations.

The CHAIRMAN said they were honoured by the presence with them that afternoon of the Right Rev. Bishop Welldon, Dean of Manchester, who had kindly promised to address them on "The Influence of the War on Religious Life in Great Britain."

ANNUAL ADDRESS.

THE INFLUENCE OF THE WAR ON RELIGIOUS LIFE IN GREAT BRITAIN. By the Right Rev. Bishop J. E. C. WELLDON, D.D., Dean of Manchester.

THE Christian view of human history is not the same as the secular view. It does not accept or expect, as an historical law, the continuous evolution of humanity from a lower to a

higher plane of sentiment and conduct. On the contrary, it looks for certain great periodic convulsions which involve, according to the Scriptural language, "the removing of those things that are shaken . . . that those things which cannot be shaken may remain." There must, in fact, as Christians hold, be from time to time a dissolution, and then a reconstruction, of society. Thus human history is Scripturally divisible into æons or eras or periods, each of them beginning and each ending with some striking and dominating event. Such events in Jewish history were the Exodus from Egypt, the Captivity, the siege and fall of Jerusalem under Titus. Such, too, in Christian history were the destruction of the Roman Empire, the Reformation, the French Revolution. Such, it may be, is the world-wide warfare of the present day. Nor is there any one of these historical events which has not profoundly modified the character and influence of religion in the world. For every catastrophic occurrence in human history is properly regarded as a Day of God.

The Christian differs, then, from the secular historian, as he differs from the scientific explorer, not in rejecting or disputing any fact which falls within the range of observation or induction, but because among or beyond these facts he is always looking for the hand of God. He believes in God not only as the Creator, but as the Sustainer and Director, of the Universe. He waits humbly upon the authority of Divine Providence. It seems to him that mankind is half unconsciously working out the solution of problems, which are ultimately decided by the will of Heaven. In his eyes God controls the main issues of history: man can do no more than by filling in the details. The essential severance between the white and the coloured races, or between Oriental and Occidental countries; the ordered progress of civilization from the East to the West; the gradual submission of monarchical and aristocratical governments to democracy—these are facts harmonious with the Will of God, but ultimately independent of human theory or policy. Nor does it lie within the power of human intellect or effort to determine when or how the war now raging over the world shall be brought to a conclusion. Man knows, and can know, only that the war will end; God alone knows what the end will be. Yet it is indisputable that the war, alike in its process and in its issue, must vitally and permanently affect religion.

It is worth while, then, to consider what are and will be, as results of the war, the disturbing influences upon the faith of Christendom.

To many Christians Christianity itself is an accident of time and place. They are Christians because they were born in a Christian country ; because they were educated in Christian homes and schools ; because they have never been compelled to make a choice between the Christian and other religions, or even between one Christian Church and other Christian Churches. Sometimes it is argued that people find themselves, by their birth or education, members of a particular Church, and that, where God has set them, they are justified in remaining, if they are not indeed bound there to remain. Belief is comparatively easy, so long as it is not confronted by other beliefs or by negations. But it tends to become more difficult as soon as it is known to be contradicted. A person who spends his life in a rural village may spend it more happily and peacefully than in a great city. For every man is strengthened in his belief, whether political or religious, so long as he lives among people who agree with him. He is, or is apt to be, weakened in such measure as he is brought into contact with disagreement. Accordingly, experience may, and often does, make him more tolerant and more charitable, but it does not make him more firmly convinced of his own opinions.

It is probable, then, that one reason of the laxity or flexibility in religion during the last half century has lain in the familiarity of men and women with such ways of thought, of habit and of worship as were unknown to any earlier generation. The means of locomotion and of information, as they have brought the nations of the world more closely together, have, in some degree, impaired the force of national character and of individual faith. Travellers, who have known the life of Mohammedan and pagan nations, have realized the possibility of a civilization widely different from the Christian ; and this civilization may have seemed to them, at least in some aspects—as in temperance among orthodox Mohammedans—to be superior to Christian civilization. But foreign travel upon a large scale has, until recently, been the exclusive privilege of the rich, and consequently of the few. Never, I think, in English history, until the outbreak of the present war, except perhaps in the case of the British Army in India, have a large number of citizens been transplanted from their homes in Great Britain to countries where every, or nearly every, usage must have given an abrupt shock to their own prejudices and prepossessions. Private soldiers who have served, not only in India, but in Egypt, in the Dardanelles, and in Africa, cannot have failed to be deeply impressed by their contact with the

alien peoples, who were sometimes their friends, sometimes their enemies, but always and everywhere representatives of a civilization alien from their own, or of sheer idolatry and barbarism. When these soldiers come home at the end of the war, they will come with the knowledge that Christianity is not, and, still more, that their own form of Christianity is not, the one religion in the world; that it cannot be taken for granted as the absolute, unique revelation of God; but that it must prove its claim to the allegiance of mankind by the intrinsic superiority of the doctrines which it inculcates, and of the virtues which it creates and fosters in its votaries. In a word, the truth of Christianity has at all times been challenged; but it has never, perhaps, been so widely or so gravely challenged as it will be in many minds, owing to the experiences, voluntarily or involuntarily, gained in the present war.

But apart from the effect of contact with foreign life, both secular and spiritual, the men who come back after the war will have passed through deep, crucial times. They will have been emancipated from the bonds of routine at home; they will have spent weeks and months, even years, in the open air; they will have undergone privation and suffering; they will have realized how social inequalities vanish in the trenches and on the battlefield; for it may not seldom have happened that the employer, as a private soldier, has obeyed the orders of a man who, until the war broke out, was serving him in his works and drawing weekly wages from him. These men will have been face to face with death; they will have seen their comrades wounded, crippled, slaughtered on every side; they will have asked themselves, with an intensity unknown before, What is the meaning or value of life? Is death the end of life, and, if not, what lies beyond the river, dark and narrow, which is called death?

It is certain that the men, who have so lived and so fought, will never contentedly acquiesce in the old conditions of life. For good or for evil, they will have broken with the limitations of shop or office or factory. It is probable that many of them, when the war is over, will seek the large, free area of the colonies. They will hope and claim to do more, and to be more, than they were of old; to pursue more various careers, and to enjoy more generous opportunities. Nor is there any sphere in which the bracing influence of the war will tell more vividly than in religion. Not a few men, it may be, will have gained a new sense of religion at the Front. It may be an all-

mastering and all-compensating sense. How pathetically significant was the saying of the wounded soldier, who had lost a leg and an eye in the war, that he had gained more than he had lost; for he had found God! Men such as he will have penetrated to the heart of religion. Henceforth they will disdain and despise the trivialities which have so largely occupied the minds of clergymen and Churchmen, in ritual and even in doctrine. If the Church is still concerned, when they come home, with questions of vesture and posture, they will, not improbably, turn their backs upon her. Even the differences which part one Christian Church from another, they will have come to regard as insignificant. It is the relation of the individual soul to God through Christ, which, as they will feel, alone matters in religion. They will look for a Church more practical, more serviceable, more beneficent to human bodies as well as souls—a Church at once more divine and more human. The wonderful success of the Young Men's Christian Association in all parts of the world, where men of British birth and blood have fought, is a witness to the correspondence between the spirit of man, when it is deeply moved, and the clear, simple, practical, dogmatic presentation of the Christian faith. It has been sometimes thought that the Church of Rome would gain an influence over Protestants, and even over Anglicans, who, in countries such as France, have been brought under the shadow of her organization. But the revelation of the Churches of the East will, I think, more powerfully affect the future of Christendom than familiarity with the Church of Rome. Still, the war has tended to mitigate, if not, in some cases, to obliterate, the distinction between Christian Churches; it has afforded occasions for sympathy and courtesy, even between the Church of Rome and other Churches; and, when it is over, there will be a general demand for a Christianity more catholic than Roman Catholic, such as accords with the spirit of Christ's own words, "By this shall all men know that ye are my disciples, if ye have love one to another."

But it is impossible that the war should not awaken reflections, painfully distressing and confusing, in many Christian hearts. What is to be said, for instance, of the contrast between Germany and France? Germany has posed as a great Protestant power in the world. France has, officially, cast off, not only the Church of Rome, but the Church of Christ Himself. The Kaiser has in the past been held to be the champion of reformed Christianity: he has been a man of exemplary personal and domestic virtues; he has spoken out boldly and

strongly for the faith of Jesus Christ. His addresses to his sons at their Confirmations were, I think, models of a father's Christian piety. He has been himself on his yacht the preacher of Christian sermons. Yet it is he who has debauched and debased the German people, or allowed them to be debauched and debased under his auspices, by the lust of bloodshed and conquest, until they have broken all the laws of God and man, to say nothing of their own recent and solemn pledges, and until there is no crime of which an impartial judge could say that Germany would not commit it, if it offered her the promise or the prospect of victory in the war. Republican France, on the other hand, has been, if not atheistic, yet professedly agnostic and anti-Christian. She has built, or rebuilt, her social life upon a purely secular basis. That the Church is fully as responsible as the State in France for the alienation and the antagonism between them is a lamentable truth. Too long she has fought against the principles of truth, freedom and charity. She has associated the pure faith of Jesus Christ with beliefs and teachings which the honest reason of cultivated humanity rejects. She has stood on the wrong side in the critical hours of moral decision. France will never forget that the Church left the defence of the Calas to Voltaire and the defence of Dreyfus to Zola. But the sad truth remains that, while France was ostensibly Christian under the monarchy or the Empire, she was warlike, aggressive and immoral, and that under the secular Republic she has been pacific and honourable, in the relations of public life. Whatever may be justly alleged against the condition of private morals in France, it must be surpassed by the statistics of "degenerate Germany," as they are recited in the book of Mr. de Halsalle.

Again, in regard to the ethics of warfare, Mohammedan Turkey has fought with cleaner hands than Christian Germany. Soldiers who have confronted the Turks at Gallipoli or in Mesopotamia may be tempted to forget the atrocities in Armenia.

There are many Christians who have prayed and hoped that they might see the day when the great Church of S. Sofia in Constantinople—now a mosque—would be reconsecrated to Christian worship. They have longed to see a Christian Sovereign receiving the sacrament of Christ's body and blood on the very spot where the last of the Roman Emperors received it a few hours before the Sultan Mohammed II., dismounting from his horse at the western door of the church, marched to the high altar, and, as he sat upon it, summoned the

votaries of Islam to worship there. But who would feel that Christianity was vindicated, or the world itself redeemed from the ignominy of a degenerate religion, if the Kaiser should become the master of S. Sofia ?

It is right to appreciate as sympathetically as possible the causes lying behind the militarism of Germany, or at least of Prussia. The Germans have made an idol of "Kultur," or efficiency. Their worship of "Kultur" has been a worship of the State; for it seemed to them, not perhaps without some reason, that in Great Britain the nation was enervated by the individualism which ran, as they thought, through all the veins and arteries of the national life. But the supremacy of the State depended upon force; the embodiment of force lay in the army; and so it came to pass that in German eyes the army could do no wrong, as appeared in the notorious incident of Zabern, and every individual must sacrifice his pleasure, his freedom, and his honour—nay, if need be, his life itself—to the interest and dignity of the army.

How is it possible that men in England, and especially working men, who have seen what must appear to them the complete failure of Christianity, should not after the war be gravely and greatly exercised in their minds upon the claim of Jesus Christ ?

There has of late been a happy amelioration in the attitude of the people towards the Church and towards Christianity. The spirit of Voltaire's *Écrasez l'Infâme* was never, perhaps, rife in England. But within the memory of living men and women the secularism of which the late Mr. Bradlaugh was the most prominent representative was a powerful force hostile to Christianity. In the last thirty years *The National Reformer*, which was his organ, has died. The Halls of Science, in which he was always a popular controversialist, have been shut up.

One who lives, as I live, amidst a vast operative population must gratefully acknowledge that whether working men, as they are called, are, or are not, Church-goers, they are, at least, generally not ill-disposed to a clergyman or to the Church which he serves. What will happen in the face of the present heartrending warfare ? The question is serious and anxious. May I quote a letter which I received a short time ago, on the occasion of a visit which I paid to one of the great works in the city of Manchester ? I often go to speak to the operatives in such works during their dinner-hour. The letter which I quote I did not, unfortunately, receive until I came back from the

meeting, but I hope I may reply to it when I next visit the works. It ran as follows:—

SIR,

You are announced to address the workmen of these works to-morrow. A number of us would like to know, What has Christianity done to benefit humanity? After 1,900 years of Christianity, Christian Europe is at present a veritable hell. Lord Bryce said some time ago that Christianity had not done what was expected of it to prevent strife among nations. We have seen no reply to that serious charge. Can you give any explanation to-morrow?

The letter is signed by "A workman in behalf of several workmates." It is, I think, indicative of a danger which the Church will be called to meet, not only during the war, but still more when the war is over. What will men in Christian Europe think of the Christianity which allows or fails to prevent the infinite cost of bloodshed, horror, and anguish in the present war among Christian nations? What will men think of it in heathen lands, *e.g.*, in India, where the Hindu and Mohammedan natives see Christian missionaries interned and deported as enemies of the Christian Government under which they live? No doubt there is a difference which must never be ignored between Christendom and Christ, between the Christian nations and Him Whose name they bear. If Christendom has failed, if organized Christianity has failed, He has not failed. The war rages, not because Christian nations are fulfilling His command, but because they are disobeying His command: not because of the Christian spirit, but in spite of it. The new society which will be born after the war will find no hope of security or felicity except in allegiance to Him. But is this the lesson which critical observers will draw from the present state of Christendom? and can they be honestly and forcibly blamed if they do not draw it?

It is evident, however, that, if the war, in its origin and character, may be regarded as a defeat of organized Christianity, yet, while it lasts, it will naturally incline the hearts of men to religion and to the Cross of Jesus Christ. The paradox of human nature has become in effect a truism, that men are less religious in prosperity than in adversity. The Psalmist of old could say, "Before I was afflicted I went astray, but now have I kept thy word"; and again, "It is good for me that I have been afflicted, that I may learn thy statutes." Every chaplain who has visited the trenches in France or Flanders or in Gallipoli, must have noticed the simple faith and penitence, the spontaneous impulse to religious worship, among the troops. It

is not so much during, as after the war, that the critical opportunity of the Church will occur. In the presence of pain and suffering, bereavement and death, humanity turns with instinctive reverence to the strength and solace of religion. The movement of spirituality at home may not of late have kept pace with the movement at the Front. Yet the memorial services which have been held in many churches and cathedrals have at once attested and inspired the deep religious sentiment of the people. For nineteen Christian centuries innumerable hearts have turned in suffering and desolation to the Cross, and they have turned to it with all the old yearning during the last two years. The immemorial qualities of the British character—that “right pious, right honest, and right hardy nation,” as Milton describes it—have asserted themselves once more in the crisis of the present war.

It is almost my daily fortune to converse with the working men in Lancashire. I know that many of these men are estranged from the public profession of Christianity. But deep in their hearts the Cross of Jesus Christ holds sway. In solemn hours, as after the great explosion in the colliery at Atherton, or after the death of Lord Kitchener in the stormy waters of the northern sea, I have seen them doff their caps and bow their heads in prayer; and I have felt that religion was everywhere still a real and integral part of human nature. Everywhere I have found a great reverence for the Person of Jesus Christ. It is not unnatural, then, that once, as the quarters of the hour were sounded before the signal for attack was given at Gallipoli, when the last quarter came, there was not, as I was told by an eye-witness, in a certain battalion of the Manchester Regiment, a soldier who did not offer a silent prayer, leaning upon the rifle which reminded him of his imminent peril and probable death. Letters written by soldiers in France have recorded in awestruck language the impression made upon them now and again by the spectacle of the crucifix hanging uninjured upon the wall of a house, where all else was ruin and destruction. I have quoted elsewhere, but I think I may repeat, the story of the Canadian Roman Catholic who said to me in France, “There are four crosses to be won, your honour, in this war.” “Which are they?” I said. He replied, “There is the Victoria Cross, there is the Military Cross, there is the Cross of the Legion of Honour—and,” after a pause, “there is the little wooden cross above a fellow’s grave.”

The war has done much to create a new sympathy between the Church and the Navy or Army. Alike on sea and on land

the chaplains have proved themselves the friends of the sailors and soldiers. They have lived with them from day to day; they have shared their hardships and their perils; they have been wounded at their side; sometimes, alas, they have laid down their lives with them and for them. No fewer than eight naval chaplains perished in the battle of Horn Reef. The men have borne willing testimony to the gallantry of the chaplains. The Reverend E. N. Mellish, who won the Victoria Cross the other day, represents only the highest example of the spirit which has actuated the ministers of religion through the war. It is just because the soldiers and sailors have seen how much the ministers of religion can do, that, when they come home, they will expect much of them. Amidst the horrors of the war the one redeeming feature, which has been everywhere respected, is the Red Cross. To one who has visited a Military or a Red Cross Hospital, there can be little wonder that the angels of Mons should be said, in play or in truth, to have been the nurses. If the spirit of Christ in His Church has not been strong enough to prevent the outbreak of the war, yet it is that spirit which has chiefly atoned for the sorrows and horrors accompanying the war. There has been no sight more impressive or more beautiful than a hospital ship.

The war has drawn many hearts to the Cross; nay, it will be found to have drawn many minds too, as it has revealed the full accordance of the Christian doctrines with the supreme verities of human life. The self-sacrifice of the rich and the noble is the shadow of the self-sacrifice shown by Him Who was rich yet became poor; Who was enthroned in Heaven, but chose to live, as not having where to lay His head, and to suffer and die upon earth. It is by the shedding of blood that the soldiers and sailors of the King have saved their country and their empire. So, too, it is the blood of Jesus Christ which, in Christian theology, cleanses men from all sin; "Without shedding of blood is no remission." The men who come back when the war is over will have learnt the supreme lesson of the Cross, and it is a lesson which, please God, they will never forget.

In these strangely mingled circumstances of anxiety and yet of hopefulness, the Archbishops and Bishops of the Church of England have conceived the idea of organizing a National Mission.

It is called The National Mission of Repentance and Hope. It is plainly designed to evoke a general sentiment of penitence for the sins, whether personal or national, of the past, and of courage in facing the moral and spiritual difficulties of the

future. Such a Mission, whatever may be its exact character, must do some good, and can do no harm. It may be confidently believed, then, to deserve and command the sympathy of the Church as a whole. No Churchman is entitled to oppose or disparage it. For of all persons none are so vain as the critics who say that they are eager to see a thing done, so long as it is not done in the only way in which it will or can be done at all.

But happy as the project of the National Mission is, it might perhaps be made happier. As it is now conceived it must be incomplete. For a Mission which takes place in England, while the war is going on, will clearly not affect the people whose lives and minds have undergone the most revolutionary experience as a consequence of the war. The citizens who have stayed at home, have, no doubt, been moved to new thoughts and new actions by the war; but they have not been moved in the same degree as the citizens who have seen active service by sea or by land. These citizens the transference from life at home to life abroad has tried in one way, and the re-transference from life abroad to life at home will try them still more keenly in another. If there were ever Christians who, upon returning to their homes, will need an intelligent and sympathetic welcome from the Church of their fathers, they are the men, who, after two or three years of campaigning under conditions wholly different from any they could have known or dreamt of before, will be called to resume, as far as possible, their old lives in the beaten and rather humdrum tracks of peace.

There may have been some ambiguity about the scope of the National Mission. But it now seems to be practically defined as a Mission of the Church to Churchmen and Churchwomen. It does not directly aim at evangelizing the mass of the people who stand outside the regular ministries of the Church. The idea lying behind it is that, if the spiritual awakening of Churchmen and Churchwomen is achieved, it will gradually make itself felt over all, or a large part of, the general secular unchristianized society which encompasses the Church.

That the more spiritual the Church becomes in the persons and lives of her members, the stronger and deeper will be her influence upon the world, is a proposition which cannot be denied. But a Mission of the Church, if it is directed primarily or exclusively to Church people, is not, perhaps, in the strict sense a Mission at all. It may pass over a country, as over a city, and, in passing, may scarcely raise a ripple on the general surface of the country's life. Churchmen and Churchwomen

will attend a number of services during the Mission, as they are already in the habit of attending such services, and all gain a certain spiritual exaltation; but it is idle, or worse than idle, to multiply religious services in churches for the sake of people who do not yet attend such services at all. Nor is it possible that the nation should be spiritually uplifted by the elevation of the existing Church-life in the same measure as by the evangelization of the masses who have hitherto lived outside the range of the Church and of Christianity itself. The Methodist Revival in the eighteenth century shows historically what a true National Mission may be, and how much it depends upon the personality of its leaders.

There is a danger, too, that the proposed National Mission may dissipate itself in mere words. The working people of the North, so far as I may claim to speak for them, are apt to be impatient and intolerant of professions. If it is true, as the Bishop of London said more than once when he was making his pilgrimage in anticipation of the National Mission, that the Labour Party never looks to the Church for guidance, the reason, if I do not misconceive it, is, in part at least, that the class, which somewhat unfairly arrogates to itself the name of Labour, looks, and perhaps looks not unjustly, for a greater accordance between principle and practice in the Church. They do not, indeed, generally find fault with the ill-paid and hardly worked parochial clergy. But they hold, rightly or wrongly, that the highly-paid and highly-placed clergy might more nearly imitate the example of their Divine Master. I do not wish altogether to justify their point of view. It takes little account of the sensitive generosity which suffers not the left hand to know what the right hand does. But when the nation is called to Repentance, when it is summoned to a National Mission, they ask, Are the authors of the Mission satisfied with Quiet Days, Retreats and Conferences, or even with public prayer and worship? Have they made, or are they prepared and resolved to make, a considerable surrender of their incomes and comforts for the sake of inspiring the nation as a whole with a sense of reality in the Mission? The King has set an example of self-sacrifice not only in abstinence from alcoholic drinks, but in a large contribution of money to the public good. Would it not be well that the Bishops and the other well-paid clergy should inaugurate the National Mission by some collective action after the King's example?

The Gospel of self-sacrifice without inconvenience, or of words without works, does not commend itself to the English

people. Rather they think that the preaching of self-sacrifice, so far from being necessarily a motive to self-sacrificing action, may sometimes be treated as a substitute for it. The aristocracy has rehabilitated itself in the eyes of the people by the spirit in which so many of its members have laid down their lives for the country and the empire. The demagogues who were wont to declaim against the House of Lords, and against all special privilege or dignity, have been practically reduced to silence by the spectacle of nearly a hundred heirs to titles, and many hundreds of youths before whom lay wealth, pleasure and luxury in the world, throwing their lives away with a reckless magnanimity in the crisis of the national history. These young heroes have not preached self-sacrifice, but they have practised it. It is gravely asked whether the leaders of the Church, when they call the nation to self-sacrifice, are themselves prepared, so far as they are able, to practise it.

The Church of England has, indeed, produced an admirable type of character among her clergy. They have upon the whole been, in the past, men wise, upright, moderate, sympathetic and devout. Their homes have been the nurseries of many gifts and graces which have distinguished the highest and noblest Englishmen and Englishwomen. But among the clergy the element of romance has not always been visible. They have been, or have been thought to be, too much like good average Christian laymen. The Church of Rome, by her demand of clerical celibacy, has imposed upon all her clergy a definite, unmistakable self-restraint. The Nonconformist, or Free, Churches, without making the same official demand, have come to expect that their ministers will be teetotallers. I am far from saying that it is wise to impose the law of celibacy upon a great body of men at an early period in their lives, or that it is always wrong to drink a glass of wine or beer. But the principle that the clerical life should be, in some respects, different from the secular, and lifted above the secular, is essentially sound; and it has, perhaps, been less widely recognized in the Church of England than it ought to be. The National Mission affords the opportunity, as it enforces the responsibility, of justifying the teaching which is given from the pulpits by the example of the clergy who give it. If the Mission fails, it will fail because the English-speaking world is in some degree sensible of a contrast between the language and the conduct which precede or accompany the Mission.

It may be not unfairly argued that the chief religious need of the present day is sympathy between the Church and the

people. There is strong reason, then, why the Mission should be conducted in such a manner as will extend the range of that sympathy. No doubt two different conceptions of a Church, and of the function pertaining to a Church, in the twentieth Christian century are possible. The Church may be a narrow body of men and women holding the same ecclesiastical views and practising the same religious observances, but scarcely at all affecting the general course or tenour of the national life. Such a Church is the Church of Rome in most so-called Roman Catholic countries, except where the ignorance of the people, as in Spain, stays, for the present, the danger of a widely spread revolt against the authority of the Church. But in the public national life of these countries the Church counts for little or nothing. The Church goes one way, the State goes another; and except in the rare hours of deep popular emotion they seldom meet, or they meet only as enemies. It has been the good fortune of the Church of England that she has never lost her touch with the national life. To-day, in spite of the undeniable movement towards secularism in some departments of the national life, she is still the greatest moral and spiritual power in the nation. One of the consequences, whether it be good or bad, issuing from the sacerdotal or ritualistic movement in the Church of England, has been a loss of sympathy between the Church or the clergy and a considerable number of the laity. It has happened to me at different times, to be associated in intimate relation with a body of laymen who were working together for a high educational end. They were men of strong religious principle, but they were not theologians or ecclesiastical historians: questions of vesture or posture, of ritual and ceremonial, left them, largely, if not wholly, unaffected; and in listening to the disputations of the clergy, they seemed to feel as though they were Englishmen living in a foreign country, where it was difficult, if not impossible, to understand a word of the language spoken by the natives. Such men were not then, and are not now, opposed to the Church. They are regular worshippers; they are often regular communicants; but they are bewildered at the matters which interest, or appear to interest, the clergy, and from public activity in the work of the Church they are more and more disposed to hold aloof. If the chief, or one of the chief, objects of the National Mission is, as has been suggested, to set up the duty of attendance at Holy Communion as the central obligation of every Sunday upon all Churchmen and Churchwomen, there can be little doubt that the Church, after the

Mission, will be still more ecclesiastical, and less national, than she is now. That this alienation of the Church from the people may be spiritually a gain as well as a loss, I do not deny; but beyond all questions it will be the fact.

For myself, I cannot refuse or forgo the conception of the Church as a leaven permeating the whole national and, in the end, the whole international, life of Christendom. The general sentiment of Christendom has, I think, risen, and will rise still more highly after the war, against the teaching of Treitschke and Bernhardi, that Christianity possesses no rightful place in the history of the nations. Christians, far from agreeing with these German writers, will see more clearly, and feel more acutely, that the only hope of the nations lies in obedience to the Will of Jesus Christ. But if the Church is entitled or qualified to control the international relations of mankind, she must first vitally Christianize the spirit and the conscience of the several nations themselves.

It seems, then, that the war will afford the Church an opportunity such as she has not enjoyed for many years, but that, at the same time, it will impose upon her a responsibility more searching and more trying. It will turn the hearts of all men and classes of men, and of women too, in Great Britain, but especially of men who have served at the Front, to the eternal strength and solace of religion. But at the same time it will create a strong intellectual anxiety as to the function or value of religion, and still more of Christianity. It is natural, although it is not, perhaps, wholly reasonable, that men, when they are occupied with religious questions, should closely and almost fiercely scrutinize the example of the clergy. There will be need of a highly educated clergy; for the Church is called to face the serious fact that, while education is rising in the nation generally, the number of highly intellectual men who take Holy Orders has been, for nearly half a century, and still is, diminishing. There will be even more need of Christians, and above all, of clergymen and ministers, who will evince, by the sacrifice and the sanctity of their lives, that the truths which they officially teach are, to them, the supreme verities. The Church of the greatest holiness and the largest self-sacrifice is the Church which will probably win the day.

It is certain that the experience of the war has raised, and will raise, a demand for a religion at once more practical and more spiritual. The eager, impatient world will refuse to tolerate a Church which occupies herself, in any large degree, with other questions than such as immediately affect the

social and spiritual welfare of humanity. In the ecclesiastical life of England, as in the political life of Ireland, subordinate interests, however important, and subordinate differences, however acute, must yield place to the common national good. If the Church does not justify herself by her present utility, the great body of citizens will, or may, feel and show that they have no need of her in their daily lives.

The war will necessarily incline Christians towards reunion. But the policy of reunion will not apply to Western Christendom alone. Churchmen are beginning to realize the significance of the Orthodox Churches of the East. These Churches, with the Church of Russia, as the best known among them, at their head are, like the Church of England, national and episcopal Churches; and like her, they do not acknowledge—in fact they never have acknowledged—the supremacy of the Pope. They are parted from the Church of England by many differences of custom and ritual, and by a positive difference of doctrine. Yet between the Church of England and the Church of Russia there has been, for some time past, a growing sympathy which asserts itself, not only in the friendly interchange of official letters and visits, but, from time to time, in actual intercommunion. The Churches of the East, in fact, and the Church of England display the Christian spirit, which the Church of Rome unhappily disowns and disdains. It is probably the fear inspired by the prowess of Russia in arms, promising, as it does, a wide extension of the Orthodox Church, that has lain behind the pretence of impartiality by which the Pope has sought to hide what must, I am afraid, be called his moral cowardice in the war.

But if the Church of England can enter, and is entering, into sympathetic relation with the Churches of the East, it will be felt that she cannot logically refuse to show some evidence of sympathy with the Reformed Churches of Great Britain itself. The possibility of a good understanding between all the Reformed Churches, including the Church of England, has already been demonstrated by the war. But the men, who have realized the fellowship of Christians at the Front, will no longer accept as inevitable their severance at home. It is my deliberate opinion that, apart from historical and social prejudices, there is nothing which ought to keep the Reformed Churches, I will not say from union at the present time, but from such a federation as would make it possible to utilize much of the power, now wasted upon controversial antagonism, in the Christian regeneration of society. Already the Missionary Conference at Edinburgh

and the Students' Christian Union at Swanwick, have shown how much can be done, without sacrifice of principle, to foster sympathy of spirit and conduct. A new world will be born after the war. It will be a world in which the duty of the individual to the State will be far more keenly felt than it has been hitherto. The idea that a citizen, although he owes his safety and prosperity in life to the civilized society which is called the State, is entitled to get as much as he can for himself from the State, and to give it as little as he can in return, will have come to seem an anachronism, if not an absurdity. It will be the office of the Church to sanctify the new conception of citizenship. If she brings any message to the nation, it must be that the claims, whether of the State or of the individual citizen, must be determined by the mind of Jesus Christ. The clergy will need, by the revision of the Prayer Book, and, still more, by some mitigation of the terms of subscription, to be set free from the barriers which now exclude a number of the most religiously minded sons of the Church from Holy Orders. For the influence of the Church upon the nation will be proportionate to her success in enlisting the service of the most intellectual and the most spiritual Churchmen in her ministry. In particular she will be called to define the limits of a just and true socialism. For the war will have done much to abolish social inequalities; but it will afford no guarantee for the safe rebuilding of society upon anything like a basis of equal opportunity.

It is possible that the war will, directly or indirectly, affect the educational problem. For as the unity of the nation becomes more and more a commanding ideal, it will be felt that whatever forces tend to segregate children, during their most impressionable years, in different theological or ecclesiastical camps are more or less hostile to the true interest of the State. The State cannot, indeed, justly require its citizens to ignore their theological differences, but it may require them not to ignore their national unity. For it is not, and cannot be, conducive to the strength and safety of the State that any one body of citizens should be taught and trained to regard other bodies, on religious grounds, with any sentiment but respect and sympathy.

But whatever the issue of the educational problem may be, there can be little doubt that in the Church, as in the State, the position of womanhood will be vitally affected by the war. "The Christian religion," as the Comte de Montalembert says, "has been the true country of woman"; and after the war it will no longer be tolerable that women, who have in all the ages been the loyal and faithful servants of Jesus Christ, should be

excluded from active and fruitful participation in the councils of His Church.

The Church is entering upon an age when experiments in Divine worship will be not only valuable, but essential. The freer the clergy are, under due episcopal control, to harmonize their ministrations with the ever-varying needs of the people, the more potent and the more beneficent will their influence become. If the man in the street is the power that rules to-day, then it is necessary to bring him out of the street into the Church. So long as men and women are strangers to the sanctuary of God, neither the most artistic beauty of ritual nor the most inspiring eloquence of the pulpit can do them any good. Somehow or other they must be brought under the influence of the Church before they can be made good Churchmen and Churchwomen.

The Church of England has become, in some sense, the Church of the British Empire. She will not, indeed, attain that lofty ideal until she has succeeded in associating with herself all, or nearly all, the Reformed Christian Churches which live at her side. But the Imperial spirit will rule the future of the Church. It is clear that the colonies and dependencies of the Empire will play an ever-increasing part in Imperial policy. Commerce, indeed—at least, within a certain period after the war—will probably cease to be guided by sentiment. Merchants will sell and buy goods where it is profitable to sell and buy them, whether from the friends or from the enemies of a hundred, or fifty, or twenty years before. The permanent rivalry of two great mutual exclusive federations in the realm of international commerce would ill exemplify the Christian spirit, which will, as all Christians must hope, soon or late heal the festering wounds of the present war.

But it may be hoped that the Church will play her part in creating what may be called the United States of Europe—the only organization which seems capable, even in the far distant future, of putting an end to the continual prospect or menace of international war. To unite the whole Empire in the closest bonds of material and moral sympathy, and then to make that Empire the protagonist in the great causes of truth, freedom, progress and charity—that is the opportunity set before Great Britain and her sons and daughters beyond the seas and all the subjects and constituents of her power, and it is a mission which will never be accomplished except under the influence of the Cross of Jesus Christ.

All good citizens in Great Britain, and not least of all

Churchmen and Churchwomen, must wish that the war may be prosecuted by all legitimate means until victory is won ; but that, when the war is over, nothing may be done to infect the international future with the vices of the past or the present. German militarism must, I think, be slain. They who have taken the sword must perish with the sword. The German navy, if it survives the war, must be wrested from the Kaiser. Krupp's works at Essen must be destroyed. But God has ordained in the drama of human history a part for the Germans as much as for Britons or Frenchmen or Russians ; and so long as they will play that part pacifically without indulging in wild and wicked dreams of universal conquest, it will be the wisdom of all the nations to let Germany accomplish her legitimate destiny. But Great Britain will never have stood higher in the judgment of the world than she will stand at the conclusion of the war. She will have fought an honourable fight ; she will have fought in redemption of her own solemn pledges ; she will have fought for the lofty moral and spiritual interests of humanity. It must be the prayer of all who "because of the House of the Lord their God, would seek her good," that, high and holy as shall be the office of Great Britain among the nations, not less high and not less holy shall be the office of the Church in Great Britain and in all the British Empire.

The CHAIRMAN, in offering the most cordial thanks of the Meeting for the interesting and inspiring Address of the Dean of Manchester, said that the Annual Meeting differed from the other Meetings in that there was no discussion : they were there to listen, not to discuss. And perhaps this was fortunate, as the Meeting would have to be a very long one if it entered in the numerous matters of controversy touched upon in the Dean's Address, and he, for one, might have ventured to break more than one lance with the Lecturer.

The Rev. Prebendary FOX, on behalf of the Council, proposed a hearty vote of thanks to the Bishop for his valuable Address.

Archdeacon BERESFORD POTTER, in seconding the vote of thanks to the Lecturer, said that in two directions he considered that the war was tending to our good : (1) in that it had caused us to look into and check our intellectual conceptions of what Christianity is and of its relation to Science and to Archæology ; and (2), as the Bishop had pointed out, it was showing us that Christianity must be

moral in its effects. At the present time the speaker was engaged in writing an article on the attitude of the Christian nations towards subject races : and the terrible fact seemed clear that, notwithstanding the guarantee of the Powers at Berlin in 1885 that they would aid in the moral uplifting of the natives of the Congo State, its population, which in 1884 could hardly be put lower than 30 millions, had dwindled to $7\frac{3}{4}$ millions in the year before the war. This showed that materialism and the worship of force had been manifesting itself in other nations as well as in Germany.

Bishop WELLDON, in acknowledging the vote of thanks, said that he had too much respect for Dean Wace's power in controversy to have risked some of the statements he had made, if he had not known that there would be no discussion.

Professor MARGOLIOUTH moved a vote of thanks to Dean Wace, and especially he would wish to voice the thankfulness of the Meeting that he was able to be present with them, and again to use his hand in writing.

The Rev. JOHN TUCKWELL seconded this vote of thanks. He remarked that among the previous speakers there had been four clergymen of the Church of England, and he presumed that as this was an undenominational Society it was because he was a minister outside that Denomination that he had been asked to second this vote. All regretted the absence of Lord Halsbury, but all were glad to welcome and congratulate the Dean of Canterbury on his recovery from his recent accident. He had the highest regard for him both as a Churchman and as a Christian, and he begged to commend to the cordial acceptance of the Meeting the resolution which he had been asked to second. He then put the resolution to the Meeting and it was carried unanimously.

The CHAIRMAN briefly responded and the Meeting adjourned at 5.50 p.m.

GENERAL INDEX TO THE TRANSACTIONS OF THE
VICTORIA INSTITUTE.

A GENERAL INDEX to the first forty-three volumes of the Journal of Transactions of the Institute (No. I, 1865, to No. XLIII, 1911), arranged alphabetically under both the names of the Authors and the Subjects, was issued with volume XLIV, and can also be obtained from the Secretary in separate form, bound in cloth, for one shilling the copy.

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The Conditions of Habitability of a Planet, with Special Reference to the Planet Mars. By E. WALTER MAUNDER, Esq., F.R.A.S.
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 The Fulfilment of Prophecy. By the Rev. A. H. T. CLARKE, M.A. (*Abstract.*)
 The Psychology of St. Paul. By the Rev. H. J. R. MARSTON, M.A.
 Inscriptions and Drawings from Roman Catacombs. By the Rev. Prebendary H. E. FOX, M.A.
 The Influence of German Philosophy in bringing about the Great War. By Professor D. S. MARGOLIOUTH, D.Litt., Laudian Professor of Arabic in the University of Oxford.
 The Connection between the Vulgate Version of the Bible and the Theology of the Western Church. By the Rev. H. J. WHITE, M.A., Professor of New Testament Exegesis, King's College, London.
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 The Tidal Wave on the Off Side of the Earth from the Moon. By Professor EDWARD HULL, M.A., LL.D., F.R.S.