

Theology on the Web.org.uk

Making Biblical Scholarship Accessible

This document was supplied for free educational purposes. Unless it is in the public domain, it may not be sold for profit or hosted on a webserver without the permission of the copyright holder.

If you find it of help to you and would like to support the ministry of Theology on the Web, please consider using the links below:



Buy me a coffee

<https://www.buymeacoffee.com/theology>



PATREON

<https://patreon.com/theologyontheweb>

[PayPal](#)

<https://paypal.me/robbradshaw>

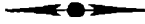
A table of contents for the *Calcutta Christian Observer* can be found here:

https://missiology.org.uk/journal_calcutta-christian-observer-01.php

THE

CALCUTTA

CHRISTIAN OBSERVER.



EDITED BY

CHRISTIAN MINISTERS OF VARIOUS DENOMINATIONS.

VOL. V.

JANUARY TO DECEMBER,
1836.

Calcutta:

PRINTED AT THE BAPTIST MISSION PRESS, CIRCULAR ROAD;

AND SOLD

BY MESSRS. THACKER AND CO. AND ALL OTHER BOOKSELLERS.

1836.

CONTENTS.

ESSAYS, &c.

	<i>Page</i>
Alphabet of Scripture Passages for the Young,	527
America : Missionary Efforts of Christians, United States,	280, 321
—, Maternal Associations,	489
Appeal on behalf of the Calcutta Christian Tract and Book Society,	463
A'sám : Appeal on behalf of the Lalongs, Mikirs, and other Tribes,	157
—, Journal of a tour through the Mikír Hills,	164
Barmáh : Additional Notices regarding the Karens,	105
—, Letter from a Missionary to a Friend,	461
Bible and Tract Societies, Union and Universality of practice recommended, ..	573
—, Subjects for their consideration,	647
Bráhmans, Kúlin, Polygamy amongst them,	57
—, Satisfactory results of the above and other notices,	150
—, Instances of eight to sixty-four wives,	257
Bhrátridwitiyá, Ceremony amongst the Nágpurians,	251
Boarding-Schools for Natives—Usefulness of them,	305
Chhotá Nágpur, Sketch of,	433, 567
Christianity and Idolatry, Blessings and Evils,	617
Christians, Responsibility to remain in India,	174
— Hints as to proper disposal of money amassed in India,	574
— Obligations to labor for the Salvation of the Heathen,	630
Conversion, Education not necessary to,	29
—, On the means of, by the Rev. W. Buyers,	34
—, On teaching as a means of. By the same,	198
— Note on the above, by the Rev. W. S. Mackay,	201
— of a Native Preacher of Katak, Ráma Chandra Jáchak, ..	224
Critical Observations on Colossians i. 15—20,	626
Dúrgá Pújá, Impropriety of attendance at,	505
Education not necessary to Conversion,	29
—, Progress of, in India—the Rev. A. Duff's exertions in Scotland, ..	144
—, Central India, Lodiáná, Mirat, Agrá, Lakhnau,	145
—, Native Hints on economy of means,	249
—, Hints for introduction of parts of Scripture,	256
Emblematic Morals "Qáun-i-Islam," by Cinsurensis,	125
Enigmatical Composition in Bengálí,	456
Faith, its influence in furtherance of the Gospel,	444
Fashionable Amusements, Lawfulness of Christians attending, by "Phila-	
lethes,"	85
— Reply to the Foregoing : by "Philo-Philaletes,"	119
— Rejoinder,	188
— Attendance of Christians indefensible, "A Friend,"	202
— "J. B. C." in reply to "Philaletes,"	85, 238
— "Philo-Philaletes" in reply to "Philaletes,"	188, 292
Festivals, Hindu,	38, 91, 135, 195, 253, 310, 350, 401, 462, 524, 591,
— Impropriety of attendance at the Dúrgá Pújá,	505
France, Efforts of the Ministry in the promotion of religious instruction,	347
General Assembly's Mission, Vindicated by the Rev. W. S. Mackay,	78, 138
Geology and Natural Religion, Connection between,	6
— and the Mosaic History connected,	329, 401, 449,
Germany, Interesting custom in calling the Night-watches, ..	278
Gospel, Progress of, dependant on Prayer and the Holy Spirit,	337
— Influence of Faith in its furtherance,	444
Government Servants precluded, or not, from religiously instructing private	
servants,	576

	<i>Page</i>
<i>Hindu Festivals</i> ,	38, 91, 135, 195, 253, 310, 350, 401, 462, 524, 591,
— Impropropriety of attending the Dúrgá Pújá,	646
— <i>Sacrifices</i> , Translations from the Sanskrit, by M. W. W.	505
— <i>Sacrifices</i> , Translations from the Sanskrit, by M. W. W.	27
<i>Hindustáni</i> , Want of tracts and scriptures in simple language,	647
<i>Hitchcock</i> , Rev. E. on Geology and Natural Religion,	6
— on the connection between Geology and Mosaic History,	329,
401, 449,	493
<i>Hottentot</i> Mission, Influence of, in diminishing crime,	124
<i>Idolatry</i> and Christianity, Evils and blessings,	617
<i>India</i> , Duty of Christians to fix their residence in,	174
—, On the best means of communicating European learning, &c.	179
—, On doing good in,	613
<i>Indian Correspondence</i> , Chapter IV. 458—Chapter V.	573
<i>Infanticide</i> , (Female,) No. III. 233, No. IV.	392
<i>Introductory Observations</i> , 1836,	1
<i>Invisible World</i> , Essay founded, on Isaiah xxviii. 18,	439
—, Sequel to the above,	513
<i>Karens</i> of Barmáh, Additional Notices,	105
—, Satisfactory Progress amongst these People,	620
<i>Kol</i> Vocabulary, notice by Spectator,	23
<i>Kúlin</i> Bráhmans, Polygamy,	57
—, Satisfactory result of the above and other notices,	150
—, Instances of eight to sixty-two wives,	257
<i>Lodiána</i> , Intelligence from a Native Correspondent,	460
<i>Madura</i> , Sketch of the City, by the Rev. A. C. Hall,	129
<i>Muhammadan</i> Superstition; by "Cinsurensis,"	93
<i>Mahánadi</i> River, Missionary Excursion, by the Rev. R. Brown,	385
<i>Manipúr</i> Intelligence, Education of the Rajá and Regent's two sons,	111
<i>Maternal Associations</i> in America,	489
<i>Memento</i> , "A God! a Moment! an Eternity!"	33
<i>Missionary Labor</i> , Discussion as to its proper sphere, "A looker on,"	131
—, Observations on the foregoing, by "one present"	299
—, Excursion up the Mahánadi, by the Rev. R. Brown,	385
—, Statistics, suggestions for Annual Publications,	573
<i>Murshidábád</i> , Origin and present state of the Nizámát College,	84
<i>Nágpúrians</i> , Ceremony of the Bhrátridwitiyá,	251
<i>Native Education</i> , Hints on economy of means,	249
— On Introduction of parts of Scripture,	256
— Usefulness of Boarding Schools,	305
<i>Natural Religion</i> , Connection with Geology,	6
— Science and Revealed Truth, Harmony of,	67
<i>Ne</i> , The Hindustáni Particle, Q? on Y Z,	343
<i>North Eastern Frontier</i> , Notice of Captain Pemberton's Work,	213, 269
<i>Obituary</i> Notice, Mrs. Hall, Madura,	193
— Dr. Vos of Calcutta,	377
— Rev. J. T. Reichardt,	549
<i>Pemberton</i> , Captain, Notice of his work regarding N. E. Frontier,	213, 269
<i>Permanent Residence</i> in India, Responsibility of Christians,	174
<i>Political Excitement</i> allayed by the Power of the Gospel,	96
<i>Polygamy</i> of the Kúlin Bráhmans,	57
— Satisfactory Effects of the above Paper and others,	150
— Instances of eight to sixty-two wives,	257
<i>Púrniyá</i> , Prospects in regard to Education, from a Native Teacher,	459
<i>Ráma Chandra Jáchak</i> , Account of his Conversion,	224
<i>Reichardt</i> , Rev. J. T., Short Memoir of,	549
<i>Religion</i> , Natural, Connection with Geology,	6
— Revival in Switzerland,	396
— of the Natives, whether non-interference is incumbent on Government Officers as individuals,	577
<i>Religious Instruction</i> , Influence of,	124
<i>Revelation</i> , Harmony of, with Natural Science,	67
<i>Revival</i> of Religion in Switzerland,	396
<i>Roman Character</i> and English Language,	416, 519,
<i>Sabbath</i> , "Esther" on its observance in India,	345
—, Colonial Prosperity identified with its observance,	629
<i>Salvation</i> by Faith, Notes on the Doctrine, "A Lover of Truth,"	555
— Observations on the above paper by "Cinsurensis,"	559

Contents.

v

	Page
<i>Sermons, Sketches by the Rev. J. Foster, No. I. 43, II. 287, III. 586, IV.....</i>	633
<i>Switzerland, Revival in, Religion,</i>	396
<i>Temperance Question, by "φίλος,"</i>	70
General Aspect of the Cause, by the same, ..	241
A Convert by "Mitra,"	624
<i>The Past Year,</i>	637
<i>Tract and Bible Societies, Union and Universality of practice advised,.....</i>	573
Subjects for consideration,	647
<i>Tract and Book Society, (Christian) Appeal on its behalf,</i>	463
<i>Tracts, Suggestions for embodying grammatical instruction,.....</i>	130
<i>United States, Missionary Efforts of Christians,</i>	280, 321
<i>Vocabulary of Scriptural terms, Necessity for,</i>	575
<i>Vos, Dr. J. R., Obituary Sermon by Rev. T. Boaz,.....</i>	377

REVIEW

AND BRIEF NOTICES OF INDIAN PUBLICATIONS.

<i>Calcutta Courier—Regarding Suspensions of Revenue, 24-Pergunnahs,</i>	480
<i>"Christianity and Hinduism Contrasted," by G. Mundy, "φίλος,"</i>	422
<i>"Constantinople and its Environs,"</i>	467, 594
<i>"Discourse on Natural Theology," by Lord Brougham. "E."</i>	203
<i>"----- the Government of the Tongue," by the Rev. W. Morton,.....</i>	473
<i>"Drunkenness reprov'd," a Sermon by G. Mundy, "φίλος,"</i>	359
<i>"Indian Journal of Medical Science," "φίλος,"</i>	359
Another Notice,	477
<i>"Indian Review," Notice of,.....</i>	479
<i>"Indirect benefits of Missionary Enterprise," "φίλος,"</i>	151
<i>"Letters on the Government Religion of British India,"</i>	258, 653
<i>"Native papers on the claims to the Ráj of Bardwán,</i>	480
<i>"Prospectus," of a Branch Horticultural Society at Hughli,</i>	479
<i>Publications of the Religious Tract Society,</i>	481
<i>"Ramaseena," or Thug Slang Vocabulary, "Cinsurensis,"</i>	528
<i>School-Books, Marshman's "India," and Leechman's "Logic,"</i>	650
<i>"Visit to the American Churches," "Banáras,"</i>	359

POETRY.

<i>"Hymn of Prudentius," by "M."</i>	210
<i>"India's Resurrection," by "J. M."</i>	360
<i>"Metrical Paraphrase of the XCth Psalm," "Cinsurensis,"</i>	482
<i>"Mount Horeb," by "C. M."</i>	646
<i>"On Providence," From Filicaja by Stafford,.....</i>	547
<i>"The Aged Pilgrim,"</i>	546
<i>"The Macedonian Cry," by the Rev. A. Sutton,</i>	210
<i>"To Religion," by "Anne,"</i>	420
<i>"What is life?" by "φίλος,"</i>	47

MISSIONARY AND RELIGIOUS INTELLIGENCE.

PRESIDENCY OF FORT WILLIAM.

Calcutta Societies and Associations.

<i>Baptist Missionary Society, Baptisms, School examinations,</i>	49
Sixteenth Anniversary, 18th February,	157
Extracts from the Report,.....	263, 311
<i>Bengal Auxiliary Missionary Society, Seventeenth Report,.....</i>	48
Eighteenth Annual Meeting, 26th Oct. ..	663
<i>Bethel Society, Tenth Annual Meeting, June 29th,.....</i>	425
Tenth Report,.....	665
<i>Bible Association, Fourteenth Annual Meeting, 15th January,.....</i>	97
<i>General Assembly's School, Sixth Annual Examination,.....</i>	659
<i>Ladies' Society and Assoc. Examination of Schools and Fancy Sales,</i>	97
<i>Native Female School Society, notice regarding it,</i>	666
<i>Religious Tract and Book Society, Anniversary 20th September,</i>	662
<i>Seaman's Friend Society, Special Appeal, ..</i>	658

Miscellaneous.

<i>Aracan, Progress of English Education, ..</i>	427
<i>Arrivals,</i>	102, 162, 266, 319, 373, 430, 487, 610, 670

	Page
<i>Arrivals of Missionaries, Mr. and Mrs. Day, Mr. and Mrs. Noyes, Mr. and Mrs. Phillips, Mr. and Mrs. Sutton, Mrs. Tomlin, Mr. and Mrs. Ingols, Mr. and Mrs. Haswell, Mr. Abbott, Mr. and Mrs. Reed, Mr. and Mrs. Stuck, Miss Maycomber, Mr. Malcom, and Mr. and Mrs. Devonport,</i>	157
— from America, Messrs. McEwen, Campbell, Rogers, Jamieson and Porter, with their wives,	262
— from England, Messrs. DeRodd, Legros, and McCallum,	262
— The Rev. Mr. and Mrs. Dwight, and Mr. Winslow, for Ceylon,	312
— In connection with Mr. Groves, Mr. and Mrs. Groves, Mr. and Mrs. John Groves, Dr. Gundert, Miss Julia DeBois, Miss Mary Monnard, Mr. and Mrs. Bowden, Mr. and Mrs. Beer, Mr. N. Brice, Mr. T. J. Kalpberer,	425
— Mr. and Mrs. Pickance, and Misses Thompsons and Carter,	665
Banáras, Progress of Education,	262
Baptisms, nine persons, Baptist Mission,	49
— Three persons, Katak Mission,	49
— The Report of the year (Baptist Mission) shewed thirty,	157
— Of six converts in April, one at Salkiyá, five at Chitpur,	262
— One hundred and twenty in Barmáh in 1635,	263
— Brajanáth Ghos,	425
Baxter's Call. The means of conversion of a Sailor,	667
Births, 160, 265, 317, 370, 428, 485, 607,	668
Brajanáth Ghos, Baptism of,	425
Calcutta Notice of seven Baptisms in 1835, (Baptist Mission,)	157
— Seamen's Cause, Interesting Account of the " Charles Wharton,"	426
Chitpur Examination of Schools,	49
— Notice of seven Baptisms in the past year, (B. M.)	157
— Baptism of five Converts in April,	262
Deaths, 161, 265, 318, 371, 429, 486, 608,	669
— of Mr. W. C. Sampson of Bombay,	314
— of Mrs. Mackay, and the Rev. J. T. Reichardt,	483
Departure, 103, 163, 267, 319, 374, 431, 488, 611,	671
— of Missionaries, Rev. G. Gogerly, G. F. F. Anderson, and Mr. Lowrie,	157
Dharantallah Chapel, Interesting Service,	426
— Twentieth Anniversary of the Mission,	606
Dúrgá Pújá, Christian Efforts at this season,	663
Haura, Notice of three Baptisms in 1835 (Baptist Mission,)	157
Katak, Orisá, Missionary intelligence,	50
— Return of the Rev. A. Sutton,	157
Kbári Baptist Mission, Notice of ten baptisms in 1835,	157
Kidderpúr Christian Institution, Annual Examination, 17th Nov. 1835,	101
Kishanpúr Schools, Chhota Nágpúr, Progress, chiefly Kols,	606
Lakhiyantipúr Baptist Mission, Notice of three Baptisms in 1835,	157
—, Opening of the New Chapel,	426
Marriages, 160, 265, 317, 370, 428, 485, 607,	668
Meteorological Register, 56, 104, 164, 212, 268, 320, 376, 432, 488, 548, 612,	672
Salkiyá Baptism of a Moghal Convert,	262
Sati at Gyah prevented,	362
Seamen's Cause, Calcutta, Interesting Service at Dharamtallah Chapel,	426
Sonámukhi New Mission in connection with Mr. Groves,	362
Táki Academy, Examination, 26th July 1836,	483
MADRAS PRESIDENCY.	
Telingá Country, a New Mission,	362
Tinnevely, Account of the German Mission,	312
BOMBAY PRESIDENCY.	
American Mission, accession of strength,	50
Death of Mr. W. C. Sampson,	314
Rev. Mr. Wilson, elected President of the Branch of the Roy. As. Soc.	158
Scottish Mission, United with the General Assembly,	158
CEYLON.	
Arrival of the Rev. Mr. Winslow and Mr. and Mrs. Dwight,	312
GREAT BRITAIN.	
British and Foreign Bible Society, Anniversary, 4th May,	598
Colonial Missionary Society established for Canada, Australia, &c.	605
Congregational Union, Remonstrance with America on Slavery,	605
General Intelligence, from a Calcutta Merchant,	50
Ladies' Institution for Education in the East,	606

	<i>Page</i>
London Missionary Society, speech of the Rev. J. Campbell, of Bangalor, ..	600
Scotland, Exertions of the Rev. A. Duff,	365
————, Degree of D. D. conferred on the Rev. R. Vaughan, at Glasgow,...	605
FOREIGN.	
AFRICA, Intelligence from Liberia,	55
————, Dr. Philip consulted as to the Caffree insurrection,	365
BANKOK, Siam, Distribution of Tracts,	159
Barmáh, Missionary Intelligence, Death of Roshan Lun,	50
————, Arrival of Mr. and Mrs. Simons, at Avn,	50
————, Additional Notices regarding the Karens,	105
————, 120 Baptisms in 1835, tracts, completion of the Bible,	263
————, Religious Persecution in,	664
GERMANY, Revival of Religion,	211
TAVOY, Progress of the Gospel, Instruction of the Karens,	158
————, Gratifying Progress of the Karens Mission,	363
UNITED STATES, Miscellaneous Missionary Intelligence,	52
————, American Tract Society, China,	53
————, General Progress of the Gospel,	159
————, Baptist Deputation to,	367
————, Remonstrance of the Congregational Union, regarding Slavery,	605
WEST INDIES, Missionary Proceedings, Emancipation,	314
————, Satisfactory working of the Emancipation Act,	365

INDEX TO SIGNATURES OF ORIGINAL PAPERS.

A. 85.	F. 597.
Abigail Whittledry, 493.	F. B. 646.
A Constant Reader, 131.	φίλος, 47, 77, 156, 249, 359, 400, 424, 513, 641.
Adelphos, 343.	H. 66.
A Friend, 202.	I. B. C. 241.
A Layman, 574.	J. M. 251, 361.
A Looker-on, 135.	L. 33, 42, 93, 137, 198, 255, 352, 401, 527, 593, 647, 658.
A Lover of Truth, 555.	Laic, 647.
Anne, 421.	L. W. 524.
A Roman, 420.	M. 210, 238.
A Soldier, 575.	Mitra, 626.
A Subscriber, 577.	M. W. W. 29.
B. 309.	One Present, 305.
Banâras, 359.	Philalethes, 90, 193.
Beta, 459.	Philo-Philalethes, 124, 299.
C. 178, 617.	Philo-Pâhâras, 252.
C. E. T. 585.	P. S. 448.
Cinsurensis, 96, 125, 280, 444, 456, 483, 519, 546, 559, 628, 629.	Q? 345.
Cin. 567.	S. 97, 463.
C. M. 649.	Selima, 576.
Crites. 661.	Spectator, 26, 70, 223, 257, 277.
Δ 653.	W. F. Mackay, 202.
Delta, 150.	X. 633.
Esther, 346.	

THE
CALCUTTA CHRISTIAN OBSERVER.

January, 1836.

I.—*Introductory Observations.*

The CALCUTTA CHRISTIAN OBSERVER has now reached the commencement of its *fifth volume*, without any departure from the principles on which it was established, and with a considerable and steady influx of new subscribers. The Editors have endeavoured always to keep in view, that the grand object of the work is to aid in the moral and spiritual regeneration of India ; and they trust, that, in the variety and extent of information which it affords, and in the vital importance of the questions discussed in its pages, the volume for the past year will bear a favorable comparison with any of its predecessors. The difficulties which oppose the Conversion of the Natives, the intricate subject of Marriage and Divorce, the various systems of Education, and the uses to which the Indigenous Literature may be turned, the Romanizing System, and a variety of other topics of national interest, have either originated or been revived in this journal ; public attention has been again forcibly directed to the horrors of Female Infanticide ; and ample information regarding the establishment of new Missions and Schools, the progress of English literature and opinions among the natives, and the gradual but evident preparation for the reception of Christianity, may be gathered from its pages. For the ensuing year, the Editors look forward with confidence to the able correspondents, to whom they are already so much indebted ; and it will be their endeavour, as it is their earnest desire, to make the CALCUTTA CHRISTIAN OBSERVER more worthy of the

patronage which it has received, and more and more useful to that cause, for the support of which it was established.

And, in this season of hope and anticipation, it is grateful to believe, that the general aspect of the cause of CHRIST and of humanity is such as to encourage the hearts of its well-wishers. In our native land, not many years ago, the Christian Church seemed fast sinking into a state of lukewarm and worldly indolence, and the reproach was but too just in many cases, that it was hopeless to look for life amidst old and worn-out forms. Already ENGLAND was claimed by the infidels of FRANCE, and the Neologists of GERMANY, as one of a Godless triumvirate ; and already a time of trial and persecution was predicted,—almost wished for, by many who sought the spiritual welfare of our Zion. And it has arrived ; not indeed from *without*, (as was expected) so much as from *within* ; not so much in the form of persecution, as in that of strife and hatred ; “ brother has risen up against brother,” and, in a more enlarged sense, “ a man’s foes are those of his own household.” In the mean time, the enemies of Christianity were not idle. The infidel held up his face unblushing to the light ; and availing himself of the discord within the camp, by the offer of insidious aid, and feigned sympathy, prevailed but too far with all parties, while he in secret scoffed at their impious attempts to reconcile Christ with Belial.

Is religion then on the decline in England ? We answer, No ! There is much ignorance, not a little indifference, much sin to mourn over and lament ; but never at any period of their history, were the people of Great Britain more generally, sincerely, evangelically Christian, than they are now. This important truth is established by the unequivocal evidence of facts ; by the hundreds of thousands of pounds annually and cheerfully given for the support of missions, for the dissemination of the Scriptures and of scriptural truth, for the relief of the destitute, for the instruction of the ignorant, and for other benevolent purposes, unknown to pagan antiquity, but unfolded and enjoined in the word of God. It is established by the national grant of Twenty Millions, not for the building of pyramids, but for the Emancipation of the Slave—a measure unparalleled in history or,—fable ; but originated, carried forward, and completed by Christian philanthropy. There is still more evidence : new

churches and chapels are rising in every corner of the land ; laymen vie with ministers in preaching the glad tidings of salvation ; pious and self-denying missionaries select as their field the obscure lanes of great cities, and the distant and thinly-peopled portions of the country ; and exertions, on a scale of vastness never before imagined, are made and making for the moral and religious instruction of the rising generation. And God has not left himself without a witness even in our high places. He has given us an instructive lesson of lowly and confiding faith from the death-beds of Coleridge and Macintosh ; and it is not without interest to see Lord Brougham leaving the stormy sea of politics to give his unsought and decided testimony to the truth of revelation, and Lord John Russel returning from the senate to join in humble and devout prayer with his own domestics. But over and above all these, we look, with feelings of deep thankfulness, to the new impulse, the revival of life and energy, the serious and earnest devotion, which very generally pervade every sect and denomination in the Christian community. The flame burns, but it purifies ; for, though strife still rages, each party bears willing evidence to the spiritual improvement of the others. We have dwelt on this, because we have heard it questioned ; and we repeat, that though still far—very far from having due influence, Christianity, in spite of every sort of opposition, is marching forward in her majestic and heaven-ordained progress, and was never more firmly rooted in the hearts of the people of ENGLAND, than she is now.

But ENGLAND, though first, is not alone in the race ; FRANCE (*Infidel* FRANCE, as she has long been termed), has now her Bible and Tract Societies, her Missionaries, and her pious and evangelical Pastors, few, but fast increasing, burning with zeal in the good cause, and labouring with a blessing from on high. In GERMANY, Neology, like other systems of irreligion, is on the wane ; the soil of LUTHER has no abiding place for such poisonous weeds ; and her numerous and valuable contributions to critical and practical theology encourage us to hope, that she is again returning to the spirit of the sixteenth century. From her came the ablest, the most devoted, and the most successful Missionaries that ever laboured in these lands ; and even now the Germans are second to none in the

field. There is movement also, and in the right direction, over a considerable part of Roman Catholic Europe ; and, though the greater portion is shrouded in the horror of thick darkness, we know that the Sun of Righteousness will arise and shine in his own good time. AMERICA sends *her* testimony to the Truth in the many good and able men whom she is pouring, year after year, into Burmah, Ceylon, and Hindustán ; but for a more particular notice of the progress of Christianity in that interesting country we refer to another part of our work.

The field of missions during the past year presents nothing particularly striking, but it is bright with promise. The blessed effects of the Gospel in New Zealand ; the progress of Christianity in the South Sea Islands, now freed from the mis-statements of enemies and the over-statements of friends, and brought out into the common light of day ; the dangers averted by a gracious Providence from the Missionary settlements in South Africa ; the inspiring, the glorious tidings from the West Indies ; China lifting up her gates, that the Lord of Glory may enter in ; and the noble efforts of our American brethren in Burmah,—all must be well known to our readers, and all seem like a voice from Heaven saying to Christian countries, “Go ye up, and take possession of the land ; for ye are well able !” And we have reason to know that the voice is heard, and that the hearts of many are stirred up to set themselves apart for the service of Christ among the Heathen.

IN INDIA we have gained little in direct accession of strength ; but indirectly the success has been very considerable. In this city alone, more than two thousand young Hindus, male and female, enjoy the benefits of a sound Christian education, conducted or superintended by Missionaries themselves ; our native chapels are crowded with silent and attentive hearers ; and many of the most intelligent of the native youth are regularly present at a series of lectures on Christian truth. Christian Boarding Schools have also lately come more under the notice of the public, and they are now slowly assuming that important station which so justly belongs to them. To meet the wants of the more advanced pupils in the English seminaries, the munificence of the London Tract Society has furnished

us with an English Library of great excellence, selected from the writings of the most popular divines in ancient and modern times, some of which are being translated into the vernacular languages, for the benefit of the great body of the people. But the most striking circumstance, in the course of the past year, is the rapid increase of English schools. They spring up every day, and almost every one feels or expresses the warmest interest in their success*. In a field where so many now distinguish themselves, it may seem somewhat invidious to particularize; yet the names of Messrs. TREVELYAN, WILKINSON and PATON, and of Capt. JENKINS in *Asám*, ought not to be passed over in silence. The cause of Education is deeply indebted to them, not only for their support and countenance, but for their unsparing personal exertions in those hours which many devote to rest or amusement. We wish them no higher reward than to see their labours successful. But we should ill discharge our duty, were we not to express our fears, whether, any where, and most of all in India, any education is safe, which is not founded on religion; and we earnestly call upon our readers for their prayers, and for their utmost endeavours, that Christianity may go hand in hand with Knowledge, and that Education may be an inlet, not to Doubt, but to Faith. There is no insuperable difficulty on the side of the Natives; the "lion by the way" is the apathy of the Christian Church. No less than four new schools have been lately offered for the superintendance of the General Assembly's Mission, in all of which the natives made no objection to the introduction of the Christian Scriptures.

To conclude, at the close of the year, it is pleasant to look back with gratitude upon the past, and to reflect, that, as Missionaries, our intercourse with each other has been like that of brethren, a communion of unmingled peace and harmony; our

* In connection with this, we may mention, that a gentleman has lately sent the munificent donation of 1000 Rupees to the School-Book Society, to be divided into two prizes, one for the best work in English, and the other for the best translation into *Hinduí*, of a work exhibiting the advantages of knowledge, as a means of improving a nation in a condition like that of India. Many other instances might be mentioned of the general interest felt amongst every class of society for the welfare of the Natives.

monthly meetings for prayer and conversation have been pleasant, and, we trust, profitable to ourselves personally, and not without a corresponding influence upon our labours. Each is benefitted by the experience of his neighbour, and, though differing conscientiously on certain points, we have learned to feel that we are engaged together in one cause, and the servants of the same blessed and glorious Master. We regret the unhappy disputes in Southern India, and more recently among the clergy of this Presidency. It is to be hoped, that the bad effects will be temporary, and that they will not long be permitted to interrupt the harmony which has hitherto obtained among the people of Christ.

If we seem to have dwelt too long on the bright side of things, we would remind our readers, that there is a time for gladness, as well as for mourning; and that thankfulness is not less a duty than repentance. There is enough, and more than enough, of vice and misery around us; enough for despondence, and, were it not that the Lord is on our side, even for despair. Conscious of our own unworthiness and inefficiency, and, from the very vastness of the work, feeling more deeply our own insignificance, we *need* to encourage our hearts by the undoubted evidences of God's graciousness, and by anticipations of that success, which we know sooner or later awaits us, and for the progress of which we request the fervent prayers of every follower of the Redeemer.

II.—*The Connection between Geology and Natural Religion, by the Rev. E. Hitchcock, Professor of Chemistry and Natural Philosophy, Amherst College, U. S. A.*

We lately received from the United States the only copy, we believe, in this country, of the following Essay on a highly interesting subject. Geology is a noble science, and we are happy to find, that it is receiving in so rich a field as India* the attention which it deserves. It is however yet in its infancy, and a much more extensive collection of facts and observations is needed, ere any consistent and permanent theory can be formed.

* See recent Nos. of the Asiatic Journal for much interesting information on this subject.—Ed.

Were any of those hitherto published, therefore, found to favour Atheism, it would give us but little concern. We should recommend further research; and, in the mean time, rest in the persuasion, that, like other branches of science, Geology, when better understood, would prove the handmaid to Piety. Still, however, it is satisfactory to notice, that even now Atheism can derive no aid from Geology, which, like her sister Astronomy, not only evidences the existence, but also greatly enlarges our conceptions of the wisdom and goodness, of the great First Cause. The following able and interesting Essay gives abundant evidence of this fact, and therefore, though not pledging ourselves for the accuracy of every statement it contains, particularly in relation to Astronomy, we transfer it to our pages entire. It is very short, and contains matter to enchain the attention, and to stir up thought and reflection; and appears well-fitted by its interesting and original details to become popular amongst every class of our readers.

We may probably again revert to the subject; and availing ourselves of the labours of the present writer, or our correspondents, hereafter consider Geology in its relation to Divine Revelation.—ED.

“The principles of geology have long been regarded not only as hostile to revealed truth, but as favourable to atheism. ‘It is manifest,’ says a very able and violent assailant of this science, ‘that the mineral geology, considered as a science, can do as well without God, (though in a question concerning the origin of the earth,) as Lucretius did*.’ And the geologists must indeed confess, that a number of their ablest writers some time ago, such for example as Hutton, did, intentionally or unintentionally, give a quite atheistical aspect to some of their most famous theories. And some of them, at the present day, exhibit in their works so entire a neglect of every allusion of a religious character, as to excite pain in every pious mind, and lead many to the conclusion that geology must be the favourite resort of irreligion: for, if, in this department of creation, the same evidence of Divine Wisdom is exhibited, as in other parts of the temple of nature, how is it possible that a man should devote his life to a description of its beautiful arches and columns, and yet make no allusion to the great Master Builder!

“Under such circumstances, it would do no good for geologists to deny the irreligious tendency of their favourite science, unless they can show positively that it contains principles of a contrary tendency. Hitherto they seem almost without exception to have felt, that nothing was required of them, but to show that atheism and infidelity do not naturally and necessarily spring from its principles. But it seems to us to be high time for them to show that inferences favourable to religion may be derived from their science. And we apprehend, that it will be no difficult matter thus to invert the tables. We propose to undertake the task: and hope to show, that the student of natural theology will find the records of geology no unfruitful source of evidence as to the existence, perfections, and plans of Jehovah. The bearings of this science upon revelation we

* Penn's Comparative Estimate of the Mineral and Mosaical Geologies.

pass by for the present, and propose to consider only its relation to natural theology.

"The evidence of the Divine Existence, that strikes most minds with the greatest force, is the mathematical adaptation to one another of the various parts of creation, and the consequent proportion and harmony of action between them. Hence geology cannot be regarded as affording at first view much palpable evidence of a Deity. For we are struck, on examining its records, with the marks of disorder and ruin which the crust of the earth and its surface exhibit. Every where is seen the evidence of violent agencies in former times, now dislocating the solid strata, elevating mountains, and pouring forth volcanic matter over the surface, and then anon sweeping that surface with deluge after deluge of tremendous power. The observer, who is accustomed to look on the regularity and harmony of the heavenly bodies, and their perfect adaptation to one another, and the harmonious action of the organs of plants and animals, as proof of the existence and wisdom of a First Cause, fancies almost that he sees, in the irregularity and unbridled violence of geological phenomena, the agency of an antagonist cause; or rather, the operation of blind chance. Hence it is that geologists have found it necessary to vindicate their science from the charge of atheistical tendencies. But, as has often been the case in other sciences, a more thorough acquaintance with geology is beginning to make it manifest, that the confusion and violence apparent in the strata are only necessary parts of a great and beautiful system of order, by which the universe is sustained. We are beginning to find, that disorder and confusion respecting this subject exist rather in our own limited understandings than in the crust of the globe: or rather, we begin to see how in the vast plans of the Deity, he brings order and harmony out of apparent confusion and chance.

'From seeming evil still educing good,
And better thence again, and better still,
In infinite progression.'

"Some unexpected revolutions of this kind we hope to be able to point out in geology: and if they furnish less striking proofs of the divine existence, they afford more striking illustrations of the attributes and plans of the Deity, than those cases where design and harmonious adaptation are obvious at first sight.

"*In the first place, geology furnishes evidence of direct and repeated acts of creative power.*

"That the temperature of our globe, in early times, was much higher than at present, is a fact most firmly established. Indeed, very few geologists now doubt but that this heat was then so great as to melt the great mass of the globe. In the progress of ages, this high temperature has been reduced to its present condition, and other changes have been meanwhile advancing. Nor can it be admitted, as some theorists suppose, that these changes constitute a revolving series, to which there is no proof of a beginning, no prospect of an end. For the crust of the globe does not exhibit evidence of more than two or three permanent states before the present: while the history of extinct animal and vegetable natures shows, in these successive conditions of the globe, a progress towards perfection. Hence we reasonably infer, that our planet had a beginning. And we infer the same from the fact, that an intensely heated globe could not have existed eternally in that condition; since it must have begun to radiate heat at the first. True, the existence of the matter of the globe in a different condition, previous to the time when all the changes which it now presents commenced, is possible. But until the evidence of such

a previous state can be discovered, it is certainly philosophical to infer that it was then created out of nothing.

"This inference derives support from another fact, which seems to be too clearly established to admit of doubt; viz., that during the changes which the globe has undergone, since its original production out of nothing, several destructions and subsequent new creations of animals and plants have taken place. Most geologists suppose, that they can trace in the organic remains contained in the rocks as many as four or five distinct epochs of ruin and renewal; that is, whole groups have been at once swept from existence by some powerful catastrophe, and their places supplied by other races called into existence by the creative fiat of the Almighty. Some geologists, however, suppose, that the species have gradually become extinct, without a special catastrophe, just as species do now occasionally disappear from particular countries, and even from the face of the globe: an example of which is the *Dodo* of New Holland. But all writers agree, that a vast number of species of plants and animals, some of them of enormous size, which formerly flourished, have disappeared. Imperfect and limited as our knowledge of organic remains must yet be, the most recent catalogues contain not far from 6000 species; not more than 600 of which can now be found alive on the earth. And indeed, it is rare to find a single species, and but few genera, identical with those now living, as low down in the series of rocks as the secondary class: so that it is only in the superficial gravels and clay beds which cover the earth's surface, that we find existing species; while nearly all those found in the solid rocks, have disappeared, and other tribes have taken their place. And although there is some disagreement among geologists, as to the number of entire changes that have taken place in the earth's inhabitants, yet all agree that some such renewals of animal and vegetable life have occurred. The tertiary formations, for instance, contain not a single species that is found in the secondary rocks immediately beneath them. And some of the secondary groups of rocks that are somewhat separated from one another, contain not one species that is common to both.

"Now is it possible to explain these facts without admitting repeated acts of creative power to have taken place since the original production of the earth out of nothing? If the present races of animals and plants existed on the globe from the earliest times, it is incredible that none of their remains should occur in a petrified state. The fact is, as the records of geology abundantly testify, that such was the condition of the globe in those early times, as to temperature, and in other respects, that our present races of animals and plants could not have existed then. On the other hand, such was the nature of these primeval beings, that they could not live now: so that there is no probability that many of them, if any, will yet be found in the deep recesses of the ocean, and of unexplored continents. We are forced then to the conclusion, that new creations of plants and animals must have taken place in past ages; their natures being adapted to the different conditions of the globe at different periods.

"The recently developed principles of comparative anatomy—an indispensable auxiliary to geology—throw new light upon the subject of successive creations, and establish the conclusions above made. They teach us that so exactly balanced are the different species of animals among themselves, and so nicely adapted are their constitutions and habits to the surrounding elements, that such as are found entombed in the rocks, being so unlike in their structure and habits to those now living, could not have had a contemporaneous existence; but must have formed several distinct groups; living on the globe while it was in widely different conditions as to temperature, surface, and vegetation. Whether we make the most superficial or most profound examination of animals in their

natural state,' says Sir Charles Bell, 'we shall find that the varieties are so balanced as to ensure the existence of all. This, we think, goes far to explain, first, why the remains of certain animals are found in certain strata, which imply a peculiar condition of the earth's surface; and secondly, why these animals are found grouped together. For, as we may express it, if there had been an error in the grouping, there must have been a destruction of the whole; the balance which is necessary to their existence having been destroyed*.'

"Language is sometimes used by distinguished naturalists of the present day, which may be understood to imply (though I exceedingly doubt whether such is their actual belief), that there is in the laws of nature a power for the production or creation of new species of animals and plants, as well as for the extinction of old ones. 'The hypothesis of the gradual extinction of certain animals and plants, and the successive introduction of new species,' says one, 'is quite consistent with all that is known of the existing economy of the animate world†.' 'The obliteration of certain forms of animal life, (and perhaps the creation of new ones,) says another, 'appears to be dependent on a law in the economy of nature, which is still in active operation‡.' No special Divine Agency is represented in such passages as any more necessary for the production of new species, than for the extinction of old ones, which we know may be the result of natural operations: and here lies our objection to such statements. For the production of new forms of animal and vegetable life must be regarded, as it ever has been, as the highest and most astonishing exercise of creative power: and if that power can be supposed to reside in the laws of nature, it seems to us that there is no phenomenon in the universe that will require a higher power: and we are reduced at once to materialism and atheism. We are aware, indeed, that modern researches concerning the production of some of the lowest tribes of animals and plants, show a very remarkable connection between the play of chemical affinities and the mode of existence; so that the same matter subjected to different chemical agencies, will produce different forms of existence§. But in all these cases, both vegetable and animal life are in their lowest forms of development; and even here (much less in more perfect animals and plants) there is not the least evidence that the vital principle is ever communicated by any other power than that of Almighty God. The kind of life which He imparts may vary with the chemical constitution of the material organization, without proving at all that he has resigned the power of bestowing vitality into the hands of nature. 'Every thing,' says the distinguished anatomist whom we have already quoted, 'declares the species to have its origin in a distinct creation, not in a gradual variation from some original type; and any other hypothesis than that of a new creation of animals suited to the successive changes in the inorganic matter of the globe—the condition of the water, atmosphere and temperature—brings with it only an accumulation of difficulties||.'

"It is the opinion of not a few distinguished naturalists, that the history of the distribution of the species of animals and plants on the earth, renders it certain, that if over the whole globe they were destroyed (except those in the ark) by the last deluge, a large proportion of those now existing must have been created subsequent to that event. And we really do not see how such a conclusion can be avoided; although we have

* *Mechanism of the Hand*, p. 39.

† *Lyell's Principles of Geology*, vol. iii. p. 30. London, 1833.

‡ *Mantell's Geology of the S. East of England*, p. 357. London, 1833.

§ *Lindley's Natural System of Botany*, p. 325 et seq. New-York, 1831.

|| *Mechanism of the hand*, p. 115.

no time to develop the subject in this place. Nor can we stop here, even were it relevant to the subject, to show that such a view is easily reconcilable with the Mosaic history. We only remark, that the numerous extinctions and renewals of animal and vegetable life, that had taken place on the globe previous to this last catastrophe, afford an analogical argument that this also might have been succeeded by a similar exhibition of creative energy. The cases, already adduced from the earlier history of the globe, of successive creative acts, render it unnecessary, however, to resort to any example at all problematical. The subject, however, is so full of interest that we may resume it at a future time.

“The mathematician, Dr. Hutton, could see nothing in the revolutions which the crust of the globe has undergone, but an eternal series of changes, where the two antagonist principles of fire and water have been in ceaseless operation; the latter to wear down continents, and convey their detritus to the ocean, and the former, to elevate new continents from the deep. In the mechanism of the heavens, he thought he saw a correspondent series of revolutions, in which those very disturbing forces that seemed to threaten ruin to the system, by acting periodically in different directions, are made to give to the movement of the planets unending permanency. Thus he excluded all evidence of a creative and superintending agency from astronomy and geology; and this atheistical view of these sciences seems to have been but too generally admitted. But in the powerful language of Dr. Macculloch, ‘the mathematician, accustomed to the sole contemplation of his own science, has forgotten that the laws of mechanics comprise but one of the two great powers in the universe. Chemistry is the other right hand of the Creator: the sources of change, the joint governor with mechanics; the opposing power, when its power is required. This mathematician, writing on geology, should not have forgotten that: as a mere astronomer, he ought not; for that Chemistry is acting in the comets and in the sun, as it has acted and is acting in every planetary and solar body throughout the universe*.’ Nor was this mathematician aware of what geologists now admit, that the successive changes to which the earth has been subject, have been improvements in its condition as a habitable world; nor that there has been a correspondent advance towards perfection in the natures of the animals and plants which have been placed on it; nor that these races have been several times destroyed and renewed. In astronomy too, recent discoveries have rendered it extremely probable that there exist disturbing causes in the planetary spaces, which must inevitably produce ultimate derangement and ruin among the heavenly bodies; and, therefore, the present order among the heavenly bodies had a beginning†. Thus have the tables been completely turned on this subject; and astronomy and geology, especially the latter, conduct us back to the very act of creative power by which the universe was produced. And this is what no other science can do.

“2. *Geology furnishes proof, both of the general superintending providence of God over our globe, and also of special interference from time to time with the usual order of things upon its surface.*

“In spite of all the catastrophes and changes which the crust of the globe has undergone, the disturbing agencies have never been permitted to pass certain limits, nor to interrupt the general order, nor to interfere with the general good. Every change, however sudden and violent, appears to have been adapted to promote some important end in relation to the

* Macculloch's System of Geology, vol. i. p. 510, London, 1831.

† Whewell's Bridgewater Treatise.

animals and plants which have flourished on our planet. To preserve a proper balance among such powerful agencies, and to make apparent disorder and confusion subserve the general good, is surely evidence of a divine superintendence, which only infinite wisdom, directing infinite power, can exercise. When events follow their causes with mathematical certainty, and we can see the infallible connection between antecedent and consequent, we are apt to feel as if we need look to no higher power than that which resides in nature, to explain phenomena, and the idea of a Divine Superintendence fails to impress us, because we see no need of such an over-ruling power. But when we see the powerful agencies of nature breaking forth at irregular intervals, as if for the destruction of the world, and ruin actually follows, yet on more thorough research we find these destructive agencies to have their limits assigned them, and to be subservient to important ends, our sense of the need of a superintending Providence greatly increases, as well as our admiration of the wisdom which can employ instruments of destruction for the preservation, security, and happiness of the universe.

“Now such a view of Divine Providence as this, geology presents. It does more. It furnishes us with examples of a special or particular Providence. It shows us that the regular order of events on this globe has been repeatedly interfered with. It informs us of several successive conditions of the globe, each different from that which preceded it, and furnished with new and peculiar races of animals and plants. The fact seems to have been, that the changes which the globe underwent from epoch to epoch, rendered it necessary to repeople it from time to time with new races, whose natures were adapted to a new condition of things. Now it is not difficult to conceive how these variations in the condition of the globe should have gradually destroyed the races of plants and animals that were adapted only to a particular state, as to temperature, climate, water, &c. even without the aid of such sudden and violent catastrophes as we have reason to believe did actually occur. But how, without falling into the grossest materialism, can we account for the re-peopling of the renovated earth, without admitting a new and special act of creation? Sir Isaac Newton has said, that ‘the growth of new systems out of old ones, without the mediation of a Divine Power, is absurd:’ superlatively absurd, we may add, if the new system be stocked by new races of plants and animals. Even if we admit what some geologists maintain, (although we think incorrectly,) that species become *gradually* extinct, and are from time to time, replaced by new ones, still we perceive, that the same necessity exists for Divine interference; nay, according to this view, a new creation takes place a thousand times more frequently than the other supposition renders necessary.

“If these views are correct, they exhibit to us a more impressive exhibition of a special Divine Providence than can be derived from any other department of science. They carry us back to the period when the universe was produced out of nothing, and present the Deity to us, not as withdrawing from the vast machine of nature, as if it contained within itself the power to regulate and sustain, but watching over it, directing all its movements, and from time to time fitting it up anew for new purposes, just as really and assiduously as any human artist does in relation to a machine of his own contrivance and construction. And these we think are fair inferences from a science, which many good men have regarded, and still regard, as favourable to atheism! It is curious too, that those very revolutions on the globe, disclosed by this science, behind which atheistical minds once entrenched themselves, should be found on a nearer inspection to be inscribed all over with the doctrine of a Special Providence!

"It ought not to be forgotten too, that the past special interference of the Deity, with the regular sequence of events on the globe, is an earnest of a similar interference in future, should His purposes require. And since we now see in slow progress the same causes which preceded former revolutions, we derive from hence a presumption in favor of the opinion, that God may hereafter put forth the like renovating and new creating energy. The presumption extends too, to other acts of special interference, such as miracles and revelations. So that the legitimate effect of geology is to prepare the mind for the disclosures of the Bible.

"3. *Geology furnishes numerous illustrations of the Divine Benevolence.*

"1. It is illustrated by the nature of the soil resulting from the decomposition of the various rocks. Such decomposition, it is well known, is the origin of all soil: and we can see no reason in the nature of things, why the materials furnished by this process of disintegration should be adapted to the growth of those plants that are necessary for the sustenance and comfort of animals. But such is almost universally the case. True, there are wide deserts: but other causes, (the chief of which is a periodical deficiency of moisture,) besides the want of power to sustain vegetation, mainly contribute to make them such. And in this adaptedness of soils for so great a variety of plants as are necessary for the support of a far greater variety of animal natures, we think we see a clear indication of Divine Benevolence.

"2. We discover similar indications in the disruption, elevation, dislocation, and overturning of the rocks in the crust of the globe. With few exceptions, the stratified rocks were originally deposited in a nearly horizontal position. But we now find them, the older strata especially, tilted up at all angles, and divided by numerous fissures, along which extensive lateral, vertical, and oblique movements have taken place; whereby the continuity of their layers has been destroyed, their edges made to overlap, and often whole mountains to exhibit the appearance of a mighty ruin. Into these fissures the unstratified rocks have been protruded in every possible mode, and are often piled up in the most irregular manner upon the stratified rocks; so that the impression made upon the mind of the observer is altogether one of the wildest disorder and desolation. We can hardly avoid the inference, that when we compare all this confusion with the beautiful order and harmony which nature in all her other productions exhibits, that we have at length got into the region of 'chaos and old night;' and that it is the wreck of creation which we see; the terrific mementos perhaps of some former penal infliction upon a guilty race*. But our impressions and inferences are hasty and erroneous. The scene before us is only a new mode for the exhibition of Divine skill and benevolence. Suppose the strata had been left in a horizontal position. One of the consequences would have been, that all, or nearly all those beds and veins of limestone, coal, and metallic ores, that are now so extensively wrought in almost every country, would have remained for ever hidden in the depths of the earth. But the elevation and dislocation of the strata bring them to view, and facilitate their exploration. Now consider what would be the condition of man, if deprived of lime, coal, and the metals! Was there no design, no benevolence, then, in the means by which they were brought within the reach of man?

"3. Design and benevolence are exhibited in the production and arrangement of the valleys that chequer the earth's surface. And most

* Such is the view taken of these facts in Gisborne's otherwise excellent treatise, entitled 'The Testimony of Natural Theology to Christianity.' All this confusion he imputes to the Noachian deluge: an opinion which is entirely disproved by the whole records of geology.

of these valleys were originally produced by the same elevating and dislocating agency which we have seen to be so serviceable in other respects. For had the strata never been thrown up and disarranged, the earth's surface must have remained a dead level; and the sea would have covered the whole of it. Or, if we suppose dry land to have existed, yet without valleys, water could have existed on it only in stagnant ponds and lakes. Morasses and the rank vegetation of low and wet regions would have filled the atmosphere with pestilential miasms; and, indeed, have rendered the globe uninhabitable by such natures as now dwell upon it. In consequence of the existence of valleys, the water, raised by evaporation, and falling upon the mountains, finds its way to the great ocean; keeping itself and the atmosphere pure by its agitations, affording a wholesome beverage to all classes of animals, and sustenance to the whole vegetable kingdom; and aiding in a thousand ways to fill the world with beauty, life, and happiness. But without such an arrangement of valleys as now diversify its surface, this great system of circulation could not be carried on.

"All existing valleys, however, cannot be imputed to the original elevation and disruption of the strata. But in this mode were most of them commenced: though without subsequent modification, they would have been only frightful rocky chasms. Powerful diluvial and fluvial action, therefore, has been repeatedly permitted to operate upon the sides and bottoms of these valleys, to wear away their angular projections, and fill up their deep and irregular cavities with soil, so as to give them those pleasing curves which most of them now exhibit, and to render them capable of cultivation. In most level countries this diluvial and fluvial agency has produced all the valleys that exist, and which are generally sufficient to form the beds of rivers, and redeem their banks from waste and desolation.

"We find then, that we are indebted to the volcanic power within the earth, and to the aqueous agency that has so repeatedly and powerfully swept over its surface, not only for bringing to the light of day the mineral resources of the globe, but for all that diversity of surface which gives so much beauty and grandeur to the landscape, and is indispensable for the circulation of a fluid whose motion is prolific of beauty and life, but whose stagnation is death. Can we any longer doubt, that there is design and benevolence in the apparent disorder and ruin of the crust of our globe? Surely here is design in the midst of confusion; beauty spreads over a scene, which, under another aspect, seemed but desolation and ruin, and the kind visage of benevolence beams upon us, where just before we saw only the flashes of an avenging Deity's wrath.

"4. We derive another evidence of Divine Benevolence from the mode in which metallic ores are distributed among the rocks. If the great mass of the globe has been formerly in a state of fusion, as nearly all geologists now admit, the useful metals, being for the most part the heaviest materials of the earth, would have occupied the centre, and become enveloped by rocks and earth, so as to be for ever inaccessible to man. But either through the expansive force of internal fires, or by sublimation from the same cause, or by the operation of galvanic agents, or in some other unknown method, a portion of these metals is disposed in the form of veins in nearly all the rocks at the surface. That the great mass of these metals is actually accumulated in the central parts of the globe is probable from the very great specific gravity (about twice that of granite) of the internal portions of the earth. Now what but Divine Benevolence should thus, in apparent opposition to gravity, have forced towards the surface just enough of the metals to serve the important purposes of human society for which they are employed? They might have been thrown in immense

masses, and in a metallic state, over that surface; but the fact that industry alone can now obtain them, is another proof of design and benevolence; since this virtue is of more importance to human happiness than even the metals.

“And is not the relative proportion as to quantity in which the different metals are found, another evidence of the provident foresight and benevolent care of the Deity? Iron, by far the most useful, is far the most abundant, and most easily accessible. Of lead and copper, which are extremely important, but not so indispensable as iron, there is no lack at a moderate price. And as we proceed along the scale of the useful metals, we shall find for the most part, that the quantity of the metal is proportioned to its utility. The very scarcity of gold and silver gives them their value: for were they as abundant as iron, their use as a circulating medium must be abandoned. Yet scarce as they are, their astonishing ductility and malleability enable the artist to spread them over an immense extent of surface, and thus to employ their most valuable property, that of resisting oxidation, on a scale nearly commensurate with the wishes of man. In all these facts, can we fail to recognize a wisdom and benevolence which God only can possess?”

“5. The accumulation of rock salt, gypsum, limestone, and coal in the earth, in past ages, affords another exhibition of Divine Foresight and Benevolence. Geologists are agreed, that all these substances were produced in a gradual manner; though as to the mode in which the two former were accumulated, they have not the most satisfactory evidence: but the origin of the various species of coal—lignite, bituminous coal, and anthracite—seems now to be clearly understood. All of it had a vegetable origin. The dense tropical forests that covered all parts of the globe in the earliest times have become converted, in the course of ages, into this most useful substance. If a superior but finite being had beheld this world, while yet only a sparse population of animals of inferior grade inhabited it, he might have thought it strange that such a vast superfluity of vegetation should cover its surface. But God was thus providing for the wants of future and superior races of beings. When man should in after times be multiplied in all lands, and forests should be swept away to make room for him, a supply of other fuel than the existing vegetation would be necessary for his comfort, and the perfection of society. God, therefore, provided beforehand for this exigency, by rendering the earth prolific in such a vegetation as would be converted into coal by the slow processes of nature. He buried this treasure in the earth, by means of aqueous and volcanic agencies, and permitted these same agencies to place it within the reach of human industry against the proper time. Who can doubt but this is an example of Divine prospective Benevolence? We see in it the providence of a kind Father, laying up a store for the support of his future offspring. And we learn from it, not to judge hastily of the ultimate designs of the Deity from present appearances. What seems superfluous now, or ill adapted to our present condition, may be intended for the comfort and happiness of other beings millions of ages hence.

‘In human works, though laboured on with pain,
A thousand movements scarce one object gain:
In God's one single can its end produce,
Yet seems to second too some other use.’

“The history of the formation of limestone conducts us to similar conclusions. For the most part this substance appears to be originally produced by marine animals; God having given them the power, either to obtain it by decomposing those salts of lime which the waters hold in solution, or by some unknown chemistry to form it anew out of more simple elements. With the lime obtained in this mysterious manner, these animals construct their habitations; the most remarkable of which

are the coral reefs which at present stretch over so many degrees of latitude and longitude, forming the basis of numerous islands in the Pacific Ocean, and are the work of certain minute polyparia. Forsaken at length by the animals, these coral structures become buried in the earth, and there in the course of ages are mixed with other substances, and subjected sometimes to partial or complete fusion, whereby they become converted into the different varieties of limestone now found in the earth's crust. And it is a curious fact, that the quantity of limestone in the earth seems to have been gradually increasing from the earliest times; so that the accumulated store is now abundantly sufficient for the fullest population that the globe can sustain.

"6. We regard the existence of volcanoes as evidential of Divine Benevolence. We have already pointed out incidentally several important objects that have been accomplished in past ages by volcanic power, in the elevation of continents, the formation of valleys, and protrusion to the surface of useful minerals. But we refer now to the active and not extinct volcanoes. And these, we are aware, are almost universally regarded as exhibitions of the displeasure of God, rather than of his benevolence. It is, indeed, true, that they are often terrific exhibitions of his power; and when He employs them as penal inflictions, they signally manifest the sterner features of the Divine character. Yet we maintain, that the design of volcanoes is to preserve and not to destroy. They have been denominated 'the safety valves of our globe:' and this quaint expression conveys a forcible idea of what we mean by the benevolent design of this mighty agency. If it be indeed true, as most geologists now admit, that even at this day, the earth contains extensive accumulations of intensely heated matter, embracing perhaps all its central parts; then may it be literally true that volcanoes are the safety valves of the globe. For if such molten reservoirs do not occasionally have vent, the vapour and gases generated within them would burst the globe asunder. The phenomena of earthquakes admonish us of the consequences of closing these valves: for they are produced by the struggles of these vapours and gases to escape; and until they do escape through volcanic vents, they heave and fissure the solid strata over whole continents; and in past days, they have been far more destructive to property and life than volcanoes. But so soon as the force is sufficient to lift the safety valve, that is, to uncap the volcano, the earthquake ceases. Let the valve be heavy enough, and the earth would ere long be blown to atoms. To prevent such a catastrophe, God has scattered more than two hundred of these safety valves over its surface.

It will probably be asked, why God could not have put in operation an agency that would have afforded the requisite security, unattended by that terrific waste of life and comfort which has followed in the track of volcanoes. We see no reason, indeed, why he could not have secured the good without the evil. But the same difficulty meets the student of natural theology at every step of his progress. To solve it, is to do nothing else than to determine why God permits evil at all: a question that has hitherto proved too deep for the human understanding. But in every case where any contrivance is adapted to produce more good than evil, we reasonably infer the benevolence of the design. And even in the case of volcanoes, no one can imagine that the occasional loss of a few lives is a matter of so much importance as the security of the whole globe, which is thereby obtained. When we can ascertain why God permits evil at all, we can answer the question, why in this case he does not afford the security without the attendant mischief.

"7. Finally, the adaptation of the natures of different groups of animals to the different states of the globe, in past times, affords evidence of Divine Benevolence.

“ So peculiar was the structure, and in many cases, so enormous was the size, of the animals found in a fossil state, that we are apt to regard them as exceptions to the usual beauty and proportion of nature, a sort of half-formed and monstrous creation, corresponding rather to the ancient opinions of chaos than to the order and harmony of the existing world. The alligators and crocodiles of these times are mere pigmies when compared with the plesiosaurus, the ichthysaurus, the megalosaurus, and the iguanodon of the ancient world. ‘ Imagine an animal of the lizard tribe,’ says Mr. Mantell, ‘ three or four times as large as the largest crocodile, having jaws, with teeth equal in size to the incisors of the rhinoceros, and crested with horns;—such a creature must have been the iguanodon! Nor were the inhabitants of the waters much less wonderful: witness the plesiosaurus, which only required wings to be a flying dragon.’—Yet, one of the most distinguished anatomists of the present day says on this subject, that ‘ the animals of the antediluvian world were not monsters; there was no *lusus* or extravagance. Hideous as they appear to us, and like the phantoms of a dream, they were adapted to the condition of the earth when they existed*.’ ‘ Judging by these indications of the habits of the animals, we acquire a knowledge of the condition of the earth during their period of existence; that it was suited at one time to the scaly tribe of the lacertæ, with languid motion; at another, to animals of higher organization, with more varied and lively habits; and finally, we learn, that at any period previous to man’s creation, the surface of the earth would have been unsuitable to him†.’

“ Here then do we see the overflowing benevolence of the Deity. He was fitting up this world for the future residence of intellectual and moral beings; and he chose to do it, not by a miracle, but by the sole agency of natural causes. But must the world during this immense period remain an uninhabited waste? Benevolence could not permit it; and infinite power put forth its energies, under the guidance of infinite wisdom, to create we know not how many myriads of beings, with natures adapted to the semi-chaotic condition of the earth: and when that condition had become so altered that the first group of animals could no longer flourish, or be happy upon it, he suffered them to become extinct, and put forth again the creative energies of the Godhead to produce a second and more perfect race: then succeeded a third, and probably a fourth; more and more perfect in their organization, until at last man, with the existing inferior tribes, was brought into being; because creation around him had assumed such a condition as was fitted to their natures.

“ Such are the beautiful displays of Divine Benevolence that meet us in that ancient field of geological research, which scepticism has heretofore described as covered over with the formless monuments of blind chance and fate; and which piety has supposed to be consecrated to atheism!

“ 4. *Geology enlarges our conceptions of the plans of the Deity.*

“ Here we must admit in the outset, that a belief in periods of time immensely long, during which geological changes have been developing, is the fundamental idea that enlarges our conceptions of the plans of Jehovah. But what man, acquainted with the present state of geology, doubts that such periods of duration have actually intervened since the earth’s creation? In whatever other respects geologists disagree, all, we believe, who are practically acquainted with the subject, coincide in this opinion. We can conceive how a man should persuade himself from the study of geology in the cabinet, that the revolutions of the globe have demanded but a few thousand years for their development; or that all the rocks should have been created in a moment in the condition in

* Bell’s *Bridgewater Treatise*, p. 35.

† *Idem*, p. 31.

which we now find them : but we cannot imagine how any intelligent man should maintain such opinions, after having examined the strata in the mountains, and compared the strata which are now accumulating on the earth's surface with those that are consolidated. The conclusion from such an examination seems to us irresistible, that periods of time, almost too great for human powers to estimate, have been employed since the original creation of our globe, to bring it into its present state. 'Let us contemplate time,' says Dr. Macculloch, 'as it relates to the creation, and not to ourselves, and we shall no longer be alarmed at that which the history of the earth demands. Every change which it has undergone has required time: every new deposition of rocks has been the work of ages, and the sum of these is the duration which has been reviewed; although this is possibly but a small space compared to that through which it has existed as a planetary globe.'—'Who indeed can sum these series? the data are not in our power; yet we can aid conjectures. The great tract of peat near Stirling has demanded two thousand years; for its registry is preserved by the Roman works below it. It is but a single bed of coal; shall we multiply it by a hundred? we shall not exceed, far from it, did we allow two hundred thousand years for the production of the coal series of Newcastle, with all its rocky strata. A Scottish lake does not shoal at the rate of half a foot in a century; and that country presents a vertical depth of far more than three thousand feet, in the single series of the oldest sandstone. No sound geologist will accuse a computer of exceeding, if he allows six hundred thousand years for the production of this series alone. And yet what are the coal deposits, and what the oldest sandstone compared to the entire mass of the strata? Let the computer measure the Appenine and the Jura; let him, if he can trust Pallas, measure the successive strata of sixty miles in depth, which he believes himself to have ascertained, and then he may renew his computations, while, when he has summed the whole, his labour is not terminated*.'

This is not the place to consider the supposed interference of such views as these with revealed chronology; though we may remark in passing, that many of the most distinguished commentators and theologians of modern times are of opinion that there is no interference†; and should life be spared, we may hereafter present to our readers our views of this subject. But admitting the existence of these immense periods of terrestrial existence, it at once produces an astonishing enlargement of our views of the plans of the Deity. It shows us that the brief space of man's first existence on the globe is but one of the units of a vast series of chronological periods that have gone before. And yet, the whole series is so linked together as to prove it all to be but a single system. A single system do we say? Perhaps—vast as it is—it is only a single link of a system. The records of past eternity may contain the history of other links vastly more extended, and the roll of coming eternity may develop others still more astonishing, and illustrative of the perfections of an infinite God.

"Are these immense conclusions alarming to any, because they so far surpass their previous apprehensions? But why should they be unwilling to have geology thus extend their vision as far into the arcana of time, as astronomy does into the regions of space? Why unwilling to have their souls enlarged and refreshed by the mighty plans of the Deity, which

* *System of Geology*, vol. i. p. 506.

† We may here remark, that whatever may be the age of the world as a mass of chaotic matter, or the residence of inferior animals, no Geologist of emience believes, that man has existed more than six thousand years.—ED. C. C. O.

these now kindred sciences develop? Long has astronomy been celebrated for its power of liberalizing the mind and correcting the judgment as to the extent of the universe. But geology opens fields equally wide and magnificent; and when the days of prejudice have passed by, it will be regarded equally with astronomy, as the favourite field of the truly noble and pious soul.

"We admit that some geological writers have used language in respect to the past duration of the globe that is objectionable; because it seems at first view to favour the idea of its eternity. Very recently, for example, a geologist terminates his elaborate and able treatise on this science, by saying, that 'to assume that the evidence of the beginning or end of so vast a scheme lies within the reach of our philosophical inquiries, or even of our speculations, appears to us inconsistent with a just estimate of the relations which subsist between the finite powers of man and the attributes of an Infinite and Eternal Being*.' Yet this same writer, in the preceding paragraph, had said, that 'in whatever direction we pursue our researches, whether in time or space, we discover every where the clear proofs of a Creative Intelligence, and of his foresight, wisdom, and power,' and thus we see that he was not a believer in the earth's eternity.

"Again, when we maintain that our globe had existed through an immense period of time anterior to the creation of man, we do not mean that its condition was that of a chaos, as that term was understood by the ancient heathen philosophers. They do not, indeed, seem to have had very definite notions of a chaos. Sometimes they understood by the term only a void space: but usually they considered it as a confused and disorderly mixture of all sorts of particles, uncontrolled by the laws that at present regulate matter, and indeed, scarcely possessed of the properties that now inhere in matter. Now we maintain, that from the very moment when the fiat of creation was uttered, the matter of the globe was as perfectly and as entirely subject to natural laws as at this hour. Gravity and cohesion bound the particles together as firmly as it now does; although probably their antagonist caloric, was more energetic in its repellency. Chemical affinities too were in as active and powerful play as in subsequent times: nor were electrical and magnetic phenomena different in kind from what we now witness. And as soon as animals and plants were created, the laws of life were the same as now controul the animated world. The condition of the globe was then, indeed, widely different from its present state, as to the forms of organized and unorganized matter: and in general those forms were then more simple, and of course there was less of exquisite beauty and nice proportion than nature now presents. But order and system as truly reigned through all creation, and things were mutually adapted to one another as exactly, as at this hour. There was a greater simplicity of organization and proportion at that period, not because the laws of nature were less perfect, or matter was less under their control; but just because the circumstances of the world and the plans of the Deity made it the result of the highest wisdom to adopt such simplicity.

"Such was the chaos which we believe in: and we apprehend that it corresponds with the opinions of most modern geologists. It is in fact only an exhibition of Divine Wisdom and Benevolence, under a form somewhat modified from the picture which creation now exhibits. We believe too, that the forms and condition of the globe have been changed by no other laws or causes than those now in operation: and that God chose to employ these, rather than the special interposition of miraculous power, because it seems to be a fixed principle of his government to put forth no unnecessary exercise of miraculous power. Man may call all this chaos if he will; but it is a bright manifestation of Divine Wisdom.

* Lyell's Principles of Geology, vol. iii. p. 385.

† Idem, p. 384.

“ The progressive improvement which the state of the globe seems to have undergone in past ages, and is now undergoing, presents the plans of the Deity to our contemplation in an interesting light. In the earliest condition of the earth, the soils on its surface must have been meagre, and scarcely adapted to the support of vegetable life. But the processes of degradation, that have always been going on, and the accumulation of animal and vegetable matter, must improve their quality, and increase their quantity. It appears too, that there has been a constant increase of limestone since the stratified rocks began to be deposited. Now the calcareous are the richest of all soils, and the most prolific in vegetation. From this cause, then, we see progressive fertility produced. Accordingly, there are some reasons for supposing that each successive creation of animals and vegetables has been more numerous than the one that preceded it ; and we know, that there has been a progression in the complication and curious structure of their natures.

“ These facts teach us that the same admirable adaptation of the different parts and processes of nature, which we observe in the present creation, has always been prominent in every previous condition of the globe, indicating the untiring and ceaseless exercise of the same infinite wisdom in all ages. We see, secondly, in these facts, evidence that the plans of the Deity have always been devised with such admirable skill, that from apparent evil real good is always produced in the end. At first view we cannot but regard the tremendous revolutions which the earth appears to have undergone with painful emotions, and as evidence either of penal inflictions, or of a defect of contrivance on the part of the Creator. But here we learn that every revolution of this kind is improvement, and that its object was to fit the world for more numerous and perfect beings. This view of the subject changes the penal aspect of these revolutions into displays of benevolence, and defect of skill and contrivance into a demonstration of infinite wisdom.

“ Upon the whole, however, geology gives the greatest expansion to our views of the plans of Deity, by furnishing us with a clue to one of the grand conservative and controlling principles of the universe. But two of these principles have yet been discovered. Newton developed the great Mechanical Power by which the universe is sustained, when he unfolded and demonstrated his theory of gravitation. The other, the Chemical Power,—the second right hand of the Creator—it was reserved for geology to bring to light. A third, perhaps, the Electrical Power, may yet be disclosed by some future Newton. Gravitation binds the universe together, and controls the movements of its larger masses. But were no chemistry at work in these masses, to transmute their elements into successive forms of beauty and life, it would be literally the bands of death which gravity would impose. But chemistry is at work unceasingly through all the dominions of nature, and perpetual change is the result. This perpetual change is the great conservative and controlling principle to which we referred. On the surface of the globe, and especially among animals and plants, this constant change, this perpetual increase and diminution, renovation and destruction, have always been most obvious ; and it is usually regarded as a defect or penal infliction, rather than a wise and universal law, of nature. Especially do diminution and decay affect us with painful emotions. And we would not deny that such may be the circumstances under which these changes occur, as to make them real penal inflictions. Indeed, natural theology cannot but regard in this light the diseases and dissolution to which man is subject. Still geology, in connection with astronomy, shows us that perpetual change of form and condition is a universal law of nature ; that it is not limited to the organized creation, but extends an equal dominion over suns and planets.

“ We see it, in the first place, in the geological history of our globe. There is an increasing agency at work all around us to wear down the mountains, and to fill up the valleys ; and we see the evidence of powerful diluvial action in comparatively modern times, in the accumulation of detritus, and in the grooves and furrows which the surfaces of rocks exhibit. As we descend into the solid strata, we meet with perpetual proof, in the chemical and mechanical characters of the rocks, and in their organic remains, that a multitude of changes have been going on during their deposition ; or rather, that there has been unceasing change.

“ At this point, geology connects itself with astronomy ; and the two sciences are made to reflect mutual light upon each other. Astronomy discloses to us certain facts in respect to other worlds, that lead the geologist strongly to suspect, that they too are undergoing those changes, and that progressive improvement, which the earth has experienced. The comets appear to be in the very earliest stages of those transmutations. They appear to be even in a gaseous condition, through excessive internal heat ; and are not yet brought into such a state that any animal or vegetable natures with which we are acquainted could inhabit them : though the remarkable history of the extinct organized beings of our own globe should lead us not to be very confident on this point. To become the fit residence of such natures as ours, by the operation of natural laws, will surely require periods of almost incalculable length. Still further removed from the condition of our globe appears to be that of the nebulæ ; consisting apparently of the materials out of which comets might be formed : though here too, uncertain conjecture is our only guide. But the point which we wish to be borne in mind is, that these bodies, as well as the comets, seem to be in a condition analogous to what the records of geology lead us to conjecture might have been the state of our globe at some period of the immense past. The moon, we may reasonably conjecture, seems to be so far redeemed from the excessive violence of volcanic agency, as to be adapted, perhaps, to the natures of some organized beings : though it is doubtful whether that globe has such an element as water, or any atmosphere, upon its surface. This fact, however, by no means militates against the idea that it may contain living beings. For to infer, that water and air are essential to all organized existence, because such is the case on this globe, would be the conclusion of a narrow-minded philosophy. Jupiter, on the other hand, it would seem, may be covered as yet with one shoreless ocean : and there perhaps such leviathans may now be playing as once sported in the earlier seas of our globe.

“ Such are the motions and orbits of the asteroids of the solar system, that ingenious men have been led to conjecture that they once constituted a single planet between Mars and Jupiter, which was hurst asunder by some internal force. And if such a process of refrigeration has taken place in other planets as in our own, might we not admit, that under possible circumstances, such a terrific disruption might have taken place ? and that too in exact accordance with the most wise and benevolent plans of the Deity ?

“ Those solid meteors that sometimes fall to the earth appear to have been in a state of fusion ; and, indeed, they are usually intensely heated when they descend. May we not regard these facts too, as perfectly consonant with the idea, that all the bodies of the universe are undergoing important changes by powerful agents, not the least of which is heat ?

“ Is it not most natural and philosophical to regard the sun as an immense globe of heated matter, constantly radiating heat into space, and therefore gradually cooling ? And what are the spots on its surface, but the incipient crust ? And what is the zodiacal light, but elastic vapours, driven by heat from the sun's surface, and made to assume an oblate and almost lenticular form ?

" Shall we regard those fixed stars that have in past ages disappeared from the heavens, and those which now shine only periodically, as evidence of disorder and ruin among the works of God? Rather let the analogies at which we have hinted lead us to view them as worlds in particular stages of those mighty changes to which we have reason to believe the universe is subject, and without which all would be stagnation and death.

" We acknowledge that these astronomical facts afford us but faint glimpses of the geology of other worlds. Nevertheless, they seem to us to lead the mind that is conversant with the geological history of our globe irresistibly to the conclusions, that similar causes are in operation, and similar changes are in progress, in other worlds: and that perpetual change is not an anomaly peculiar to our planet, but the very essence of a vast system embracing the wide universe.

" Faint as is the light that is yet thrown upon this subject, yet what an immense field for contemplation does it disclose to our view! and how do the plans of the Infinite Mind enlarge and ramify, as we gaze upon them, until we see them connecting past eternity with that which is to come; the two extremities being lost in the dimness of distance! God is here exhibited to us as employing the same matter, under successive forms, for a great variety of different purposes; all, however, connected into one vast system; and all bearing upon the happiness of animated natures. How much more of grandeur and moral sublimity does such a view of creation exhibit, than the common opinion, which supposes this world, and even a large proportion of the whole universe, created to subserve the wants of man, and to be destroyed when man ceases to exist. The latter plan might, indeed, be worthy of a man, or an angel; but the former is worthy of the Deity*.

" And in what a new aspect does the view we have taken of this all-pervading principle of change, exhibit the tendency to decay and ruin so deeply marked on the whole material world! Poets and sentimentalists have ever taken a melancholy interest in depicting the perishable nature of all created things:

' What does not fade? The tower that long had stood
The crush of thunder and the warring winds,
Shook by the slow but sure destroyer Time,
Now hangs in doubtful ruins o'er its base;
And flinty pyramids and walls of brass
Descend: the Babylonian spires are sunk;
Achaia, Rome, and Egypt moulder down.
Time shakes the stable tyranny of thrones,
And tottering empires rush by their own weight.
This huge rotundity we tread grows old,
And all those worlds that roll around the sun.
The sun himself shall die, and ancient Night
Again involve the desolate abyss.'

" But let this tendency to dissolution be regarded only as one of the necessary forms through which matter passes, in its progress towards improvement, and as necessary to the preservation and happiness of the universe; as in fact an essential feature of a sublime and far-reaching plan

* — Sed cum eæ rationes, quibus inductus Universum condidit, intellectui divino semper observarentur, cur mihi non persuadeam, Deum infinite potentem ac bonum jam multis retro sæculis mundi systemata produxisse, cur vin ejus creaturam angustis terræ nostræ, ejus existentiam sex mille circiter annos non excedere lubens fateor, terminis circumscribam?

' Since the reasons that led the Deity to found the Universe always exhibit a Divine Intelligence, why should I not believe, that a God, infinitely powerful and good, created the system of the world many ages ago? Why should I confine his creating power to the narrow limits of our earth, whose duration I willingly confess does not exceed six thousand years?—*Doederléinii Theologia*, p. 477. Note by the commentator, C. Godofr. Junge.

of the Deity ; and when we see nature thus apparently descending into her grave, we shall look upon her drooping form as a sure presage of her speedy resurrection in renovated strength and beauty. The decay and dissolution of our own bodies (in which there is something evidently penal) have thrown a melancholy aspect over the great and salutary changes which take place in nature, only for the good of the universe. But the view of the subject which we have taken dissolves this unhappy association, and leads us to connect all the revolutions of the material world with its improvement, and with the vast plans of Jehovah.

“ But we will dwell no longer on this great theme. Our only hope is, that we have thrown light enough into this almost unexplored field, to satisfy noble minds that here they may obtain such glimpses of the purposes of the Deity, as will fill and overwhelm the loftiest intellect, and excite the strongest emotions of reverence and love towards the Infinite Mind that is capable of contriving and executing such plans.

“ Such is the religion of geology. Prejudice may call it atheism, because it presents before us views so new and peculiar ; and scepticism may pervert these views to suit an unsubdued and unholy heart. But we call this religion a transcript of the Divine perfections. And if there be one spot in the whole circle of science, where the student of natural theology can find fuel to kindle up the flame of devotion, it is, as it seems to us, when he secures a live coal from the altar of geology.

III.—*Vocabulary of one of the Kol Dialects, with Proposal for a Comparative Vocabulary of all the Mountain Tribes.*

To the Editors of the Calcutta Christian Observer.

GENTLEMEN,

In common with an increasing number of friends to India, I view with the deepest interest and hope the vigorous efforts now making to secure the use of the Roman character in all the languages of the East ; and feel well persuaded, from the encouraging progress already made, that the effort will be in good time abundantly successful. More than one of my immediate friends engaged in the instruction of native pupils, who from the statements of others had been formerly prejudiced against the introduction of the system, have been persuaded to try it ; and on witnessing the effect, have become its zealous patrons. Let but its friends persevere in the effort, and remembering that great masses of men are moved but by slow degrees, be content with steady, though it be not very astounding, progress ; let them supply suitable publications, invite teachers to use them, and publish the result ; and in a few years, they may live to be themselves surprised at the wide expanse of country over which their beneficial influence has extended itself.

One subordinate, but by no means unimportant, result of the efforts alluded to, is the aid which the friends of Oriental Literature must derive from the use of an uniform system of orthography, in the expression of the different languages

of the East. I feel highly gratified by the efforts now making to procure a comparative vocabulary of all the Indo-Chinese dialects, as detailed in a late No. of your work ; and earnestly hope, that for the assistance of Oriental students, it may be fully supplied. It is a disgrace to us, as the paramount power in India, that long ere this, complete vocabularies of all the more important languages of the neighbouring nations have not been compiled and published ; and that even as regards so important a language as the Tibetan, it is to a learned *Hungarian* that we are indebted for the only vocabulary that can with any confidence be relied on. But this is not all. Even in our own territories, there are numerous mountain tribes, of whose language we are almost entirely ignorant, so that we can form no judgment whether they are intimately or remotely connected, or are perfectly independent of each other. I am given to understand, that by the exertions of your friends in *Assam*, you have procured vocabularies of the numerous mountain tribes inhabiting the districts on our N. E. frontier. I have been long hoping that you would give so interesting a document a place in your pages, and trust it will not much longer be withheld*. Meanwhile, it has appeared to me a problem deserving of solution, how far the mountaineers, inhabiting the great *Vindya* range, are connected in language with each other, and with the inhabitants of other parts ; and with a view to contribute what I can towards settling the question, I beg to send you the following list of words spoken by a class of the *Kol* tribe inhabiting *Chhotá Nágpur*, a few months ago the scene of warlike operations. It was communicated by an intelligent native, who was formerly a pupil in the General Assembly's School, and is now labouring among the *Kols* as a teacher. The accompanying remarks, extracted from a recent letter which contained the vocabulary, give satisfactory evidence of his thirst for knowledge, and may shew European scholars the use which may be made of native agency (an agency hitherto too much neglected) in their search after useful information.

After much inquiry and investigation, I have been given to understand, that the *Kols* have no *letters* of themselves. They have no way of communicating their ideas to a distant friend ; nay, not even *hieroglyphics* ; so that in this, as well as in many other points, they are perfectly barbarous. There are amongst them perhaps one in some hundreds who can write ; but then he writes his own language in *Nágarí* characters. This therefore is a fine field for the introduction of the *Roman Characters*, which will at any rate be conferring a great boon on these uncivilized and benighted people.

* We have placed the papers referred to by our correspondent in the hands of a gentleman eminently qualified to elicit from them the most valuable results, and are promised at an early period a communication on the subject, which shall have immediate insertion.—*Ed.*

As to the affinity which their language, denominated the *Kol-pársi*, bears either to the Hindustáni or Bangáli, I cannot at present give correct information; I should rather think that there is hardly any resemblance between it and either of them. However, that a matter of so great moment may be properly examined and investigated, I take the liberty of sending you the enclosed list of a few of their words. I shall lose no opportunity to gather as much information as I possibly can, respecting their language, manners, customs, religion, &c.

I should add, that the following words are spoken by the Uraón, one of the two classes of the *Kols*; but that these are hardly understood, far less spoken, by the Mundá, the other class.

N. B.—Those words which resemble Bengáli, I have marked with *B.* and those Hindustáni, with *H.*

<i>English.</i>	<i>Kol-pársi.</i>	<i>English.</i>	<i>Kol-pársi.</i>
God,	Biri dharam.	Fish,	Injo.
Horse,	Ghoro, H. B.	Bird,	Orá.
Cow,	Gái, Do.	Buffalo,	Mankhá.
Bullock,	Adáo.	Female buffalo,	Bhaiús.
He-goat,	Erá.	Young of ditto,	Kadrá.
She-goat,	Paíhiá epa.	Man,	Metar.
Elephant,	Hátí, H.	Woman,	Mukkar.
Tiger,	Lakrá, H.	Son,	Engdas.
Bear,	Mendho.	Daughter,	Engdá.
Deer,	Mák.	Father,	Embas.
Hare,	Muián.	Mother,	Inggio.
Camel,	Upt, H.	Elder brother,	Eng-dadas.
Ass,	Gádhi, Do.	Younger ditto,	Ing-dis.
Cat,	Berkhá.	Elder sister,	Eng-dai.
Dog,	Allá.	Younger ditto,	Ing-dí.
Sheep,	Mendho, B.	Tree,	Man.
Peacock,	Chubbá.	Wine,	Arkhí.
Snake,	Ner.	House,	Erpá.
Cock or hen,	Kher.	Cloth,	Kichrí.
Crow,	Khá khá.	To-morrow,	Nelá.
Dove,	Panrkí, H.	To-day,	Inná.
Monkey,	Bandrá, Do.	Month,	Onchando.
Baboon,	Hanumán, B. H.	Year,	Idná.
Rice,	Tinkhíl.	Our,	Emphái.
Boiled rice,	Mandí.	Your,	Nimphái.
Corn,	Khesso.	I,	Eu.

Sentences.

En kaun nighá erpá.
 I will go thy house.
 I will go to thy house.
 En inná mandí onon.
 I to-day rice will eat.
 I will eat rice to day.

While looking over this list of words from my Native friend, it has occurred to me, Messrs. Editors, that were you to invite the aid of Officers of Government, Missionaries, and others, we might in time secure through your pages a vocabulary of all the hill dialects in India. Mr. Leslie, who, as I saw by

your publication some time ago, has acquired the dialect of the Bhágalpur hill people, might favour us with the corresponding words in that language; the Missionaries in Orisá might readily supply the corresponding words of the tribes inhabiting the mountains in their district; Mr. Schmid will doubtless give us those of the tribes in the Nilgiris; and others, if encouraged, will doubtless aid you with other tribes. We might thus at once see, by the result of a comparison of the languages even so far as the preceding list would permit, to what extent any common origin or evident similarity may be traced, and then proceed or not in any further investigation as might seem to be warranted by the specimen first prepared.

I need not say, that in a missionary, as well as literary point of view, the question is worth deciding. If one language is intelligible to tribes extending through a great extent of country, the translation of school-books, tracts, and scriptures into that dialect may be highly important; whereas, if each dialect is understood by only a few people, such an apparatus may be quite unnecessary, and the cultivation of the dialect may prove a great loss of time, and labour, and expence. In the latter case, as a better plan, the more intelligent youth may be instructed in English, if possible, in which information of all kinds is available, and thus made the means in the most effectual way of teaching their countrymen by the living voice, till they, like the Scottish Highlanders, amalgamate with their neighbours in the plains, possessed of better means of mental and spiritual improvement.

SPECTATOR.

[The Comparative Vocabulary of the English and Shán languages, spoken of in our November No. is now printed, at the expence of a friend, by whom we have been supplied with a number of copies. It contains upwards of 500 words and 50 sentences, well adapted to elicit the derivation and structure of a language. It is printed with blank columns, for the reception of corresponding words in other dialects; and we shall be most happy to supply the gentlemen referred to above, or any others, with copies, for the purpose of filling up the whole in any hill or other dialect with which they may be acquainted. We will then publish them as soon as sent us for that purpose. This appears to present a most effectual way of eliciting the information desired by our correspondent, and which he justly deems of great importance in both a literary and missionary point of view.—ED.]

IV.—*Hindu Sacrifices, translated from the original Sanskrit.*

To the Editors of the Christian Observer.

The following is an account of *Hindu sacrifices*, literally translated from the original Sanskrit, in a work entitled the *Tithi Tatwan*, which consists of extracts taken from the eighteen *Puránas* and other sacred writings of the Hindus.

The following is from the *Káli Purána*, and is attributed to *Bhagaván*. The original may be found in page 51 of the *Hindu Institutes of Religion*, published at *Srírámpur*.

Having brought the victim (a man), let the priest offer up a prayer, and present flowers and sandal-wood to the goddess, with oft-repeated mantras. Let the priest stand towards the north, and the victim with his head facing the east. Then looking at the sacrifice, let the priest repeat this mantra: "O man, thou art my sacrifice; thou art here present for my benefit. Thee, who art like *Sivá*, who art a true victim, I reverence. By offering thee to *Bhágavat*, all evil will be removed from the offerer. O victim, who art like *Bhágavat*, I reverence thee. *Swayambhu*, the self-existent, has himself created animals for sacrifice; therefore I, this day take thy life, for there is no crime in killing thee in sacrifice."

Then uttering these words अंगं द्रियं श्रियं *ang, dring, shring*, let the priest, regarding the victim as the image of *Shiva*, place flowers on his head, saying, "O *Blairab*;" then presenting himself before the goddess, let the priest make known his request; then sprinkling the victim, let him worship the sacrificial knife, saying, "Thou art like the tongue of *Bhagavati*, thou sendest men to heaven;" then repeating the words अंगि, श्रियं, let the priest again worship the knife, saying, "Thou art like *Shivá*;" then let him sprinkle the victim with the water from the sacrificial vessels. Another mantra is now repeated, taken from the *Káliká Purána*: "Thou art black, O thou sword deity! in thy hand is a bow; thou art the destroyer; thy face is blood-red, thy garland is red, and thy sandal-wood is red; thou wearest garments dyed in blood, thou holdest a snake in thy hand, and thou hast many kindred; thou drinkest blood; thou devourest flesh in large quantities; thy name is *Asi*; thou art a slayer; thou art a sword with a sharp edge; thou art insupportable; thou art shining and victorious, and the preserver of religion, and as such, I reverence thee. These eight names *Brahmá* has given thee. Thou art the constellation *Kritiká*; thou art *Guru*; a God; *Maheswará*; thy body is like gold; thou art the upholder; the divine *Vishnu*; thou art father and grandfather, do thou ever protect me. Thou art clear as the blue sky; thy teeth are sharp; thy body lean; thy nature is excellent; though thou art fierce, thou art very bright: by thee the world is upheld, and by thee were the great *Maheswarás* destroyed. I reverence thee, O thou pure and sharp sword deity."

Having performed this worship, let the priest grasp the knife, and after repeating the mantrá "अंगं रथिं पुरं," let him slay the pure victim. The priest then, repeating the words *ang rthing shring*, presents the blood, and says, "O *Kausiki*, be propitiated with this blood." Let the blood be placed in a bason in a place before the goddess, and the head also with a light or candle upon it. Thus, the offerer of the sacrifice obtains full benefit. Should he fail in any part (of the ceremony), the benefit will be proportionally less, and if it be done in a manner contrary to the prescrib-

ed one, no benefit will accrue. The *body* of the victim, whatever it be, is always unclean ; Shivá accepts only the blood. Whatever is offered to other deities, let it be first sanctified with water, and then offered. The rules for the sacrifice to Durgá are observed in all sacrifices. The victim may be slain with his head towards the east, or the sacrifice being in the east, the victim's head may be opposite to the north.

The Durgá Bhattí Tarangiñi and the Krityamabanata, which is copied from Devi Purána, declare that there are distinct benefits arising from the slaughter of the victim, and the offering itself. As it is said, " They who with faith in the goddess, and with meditation and prayer, offer the victim at midnight, on the eighth day of the moon, are called *mahábatu* (powerful). They who offer what is prescribed, afford the goddess delight for a whole *Kalpa* of Sankara. It is written in the Káli Purana, " The blood and the head which are consecrated by mantras, are like Amrita, and therefore worthy to be offered to the goddess. The blood, O Bhairab, should be sprinkled with a mixture of fruit (plantain), water, sugar, and honey, and then offered to the goddess with her appropriate mantra. The sacrificer must now offer the boiled flesh of the victim. This without the blood and head is like Amrita."

It is written in the Bhabisyat Purána, that Durgá is propitiated by killing goats, buffaloes, and sheep, and by offering the blood and flesh and water, according to rules ; it is a holy act to behold Durgá, more holy to pray to her, holier still to touch her, still holier to make offerings than to touch, to bathe than to make offerings, to offer gifts and libations than to bathe, and to offer victims than libations.

As it is said in the above Purána, " O king, by the blood of rams, Bhagavati is satisfied for one year, and fulfils our desires ; and by that of goats, ten years ; and by that of buffaloes, one hundred years ; and by the blood of one's own body, one thousand years ; that is to say, by blood taken from the hand or knee or thigh ; but if a man offer his own head, Durgá is enraptured for a lakh of years."

In offering the deer called Krishnasár, this mantra must be repeated, " O Krishnasár, who art like the image of Brahma, and the promoter of the glory of Bráhmans, who art like the four Vedas, and wise, give me knowledge, fame, and glory."

An animal must always be offered, either to obtain the object of some desire, or the favor of Durgá ; wherefore, let the priest say, " May thy favor rest upon this person for 10 years ; and then he presents the blood of the victim ; then putting a lighted wick on the goat's forehead, he offers the head, and requests the sacrificer to bestow the good gifts which are due to beholding, worshipping, touching, bathing, and offering gifts, &c. to Durgá.

(*Káli Purána.*) " O great illusion ! O mother of the world ! O fulfiller of our desires, I offer to thee my blood. Be thou propitious, and grant me my request." Having said this, and repeated other principal mantras, with deep humility and profound meditation, let the devotee offer some blood taken from some part of his body. This is an acceptable oblation from a man. No female can ever be offered in sacrifice. The person who presumes to offer such will go to hell. Nor is any animal to be offered that is less than three months old, nor any bird less than three *pakshis*, or 45 days old. Nor let any animal or fowl be offered which is blind, or defective in a limb, or otherwise faulty, or an animal whose tail is cut, or ear torn, or horn broken.

A pumpkin, or sugar-cane, or wine, or other vinous mixture may be offered with the same advantage as the sacrifice of an animal, and will afford equal satisfaction. The slaying with a *chandrâhas* (a crooked knife) and a *kâtára* is the most acceptable method ; for, if the sacrificer destroy

the consecrated animal or bird with his hands, he, O Rajendra, deserves the punishment due to a Bráhmañ-slayer. It is declared in the Matrya-sakta, "Let the intelligent sacrificer slay the victim with a sharp sword at one blow."

It is declared in the Brahmana Purána of the work called Yajñawalkya Dipakáliká, "that in the Káli Yuga, neither man, nor horse sacrifices, nor offerings of wine, are to be made."

Usana has declared this more explicitly in the following words: *अदातृपशुदत्तव(िस्तृष्ट)*. (Anglice:) "Wine is neither to be drunk, nor given to any person, nor received by any person." It is also written in the *Káliká Purána*, "that if a person offer his own blood, he will incur the guilt of suicide." Also, "if a Bráhmañ give wine to any person, his Bráhmañical authority shall be forfeited; and that in this Yuga only, Bráhmañs can sacrifice the Krishnasár (a species of deer), and if any other person do so, he will incur the guilt of Bráhmañ-slaughter." It is also declared, that "if the wine or principal thing be forbidden, (*a fortiori*) the substitute or subordinate thing is forbidden."

The above is the entire portion of the text regarding sacrifices. There is added a commentary of some length; but it can be of little interest, compared with the text. A more detailed account of sacrifices may be found in Rádhiákánt Deb's Dictionary, or Encyclopedia, which I shall be happy to furnish, if the subject be deemed sufficiently interesting*.

I have instituted several inquiries relative to the origin and design of the Hindu sacrifices; but have not hitherto been able to obtain, even from the most respectable Pandits, any satisfactory account.

M. W. W.

V.—*Education not necessary to Conversion.*

To the Editors of the Calcutta Christian Observer.

MR. EDITORS.—Much has recently been said as to the necessity of education, in order to enable the Hindoos and others to judge of the nature of the evidence usually produced by Christian writers in behalf of the truth of the Bible: and if we do not mistake Mr. Duff, he pretty broadly intimates his belief, that little or nothing is to be hoped for, in the way of the conversion of the people of India, until they have been made capable of perceiving the force of the arguments commonly adduced from miracles, prophecy, history, &c. &c. to establish the truth of the gospel.

* The subject is one of great interest to the scholar and the Missionary, and if our correspondent find any thing of importance in addition to, or correction of, the account of Sacrifices in Mr. Ward's History of the Hindus, we shall feel greatly obliged by his transmitting it to us for publication.—ED.

Far be it from me to depreciate education, or to say a word which would intimate a single doubt as to the soundness of the arguments usually derived from the above-mentioned sources ; but it may be permitted me to doubt, whether either of these ought to be reckoned as matters of any great moment by the Missionary in his dealings with the heathen, or by the Christian minister in his making known the gospel to the people of any denomination whatever.

Alas ! for the Missionaries, if they are to wait until, by education, the heathen are made capable of perceiving the force of the arguments used by Paley, Chalmers, and a host of others. Rather than this, they had better retire from the country to regions more congenial with their habits and inclinations, and where they may live out the remainder of their days in greater comfort than can ever be their portion in this enervating clime. Missionary success, is now, for some ages to come, if not forever, altogether a hopeless concern ! But where, in the whole world, did ever a people exist, who delayed receiving the gospel, until they were capable of appreciating the evidences of Christianity as detailed in the majority of our books ? or, where, at this moment, are the Christians now living, whose reasons for belief are our boasted evidences ?

Nothing less, in my humble opinion, can afford any man full satisfaction, that the Scriptures are indeed the true and very word of the living God, than a conviction inwrought into him by the Almighty Spirit. And we fearlessly maintain, that to every real believer a conviction is thus imparted. The man is made to *feel* that the Bible is true. A power comes upon him that renders him wretched and miserable in himself, and without any other comfort in the prospect of futurity, but what the Bible affords. And such is the state of mind into which he is brought that all he can say is, and it is enough, “ I *feel* that this is indeed the word of God.” We are not going to say, that even after this he is never the subject of any doubts and fears ; lest after all he should be mistaken. Yes ; if he be a man of education, he may have his doubts and fears ; and to dissipate these he may have recourse, and he has often recourse with advantage, to the books of evidences ; but these alone never create the conviction. The power upon him, and these together, bring him to the one great result ; but these of themselves never do so. The other, however, does so of itself ; and has done so in the vast majority of instances.

Where, we ask, were the books of the evidences in the days of the Reformation, when so many laid down their lives for the faith ? If any such books had then an existence, certain are we that they had nothing to do in the heroism often at that time displayed by numbers of young children, and by crowds

of illiterate but godly men and women. And upon what grounds, we ask again, did the Kingswood colliers in the days of Whitefield and Wesley; the American Indians in the days of Brainerd; the Greenlanders, South Sea Islanders, and Hottentots, in our own days: and indeed almost all the people that ever in any age received the truth in the love of it,—upon what grounds did they rest their faith? It may be fairly questioned, if any one of the above classes ever heard of, or if they did hear, ever comprehended, an iota of the evidences of Christianity. The truth is, that the evidences of Christianity have hardly ever, even as a means, done anything towards conversion. It is a melancholy fact, that even in some of the most distinguished advocates of revelation, there has appeared a total absence of every thing like the influence of personal religion.

Why, then, all this insisting upon the necessity of rendering the people of India capable of comprehending the arguments usually adduced in favour of Christianity, in order to their conversion? Sure am I, that even amidst the little success that has attended Missionary labours in India, I have seen some Hindus, and these, too, not of the lowest or the most ignorant of the people, who have in deed and in truth received the Lord Jesus, but who are as ignorant of the arguments from prophecy, history, miracles, &c. as they are of the language of China. God has operated on their minds, they have been made to feel their lost and ruined state, their eyes have been opened to behold the glory of Christ, and they have been divinely constrained to receive into their hearts the gospel as true.

It is not at all necessary, in dealing with the heathen, to touch in any way on the evidences of Christianity. Let only the wretched state of man as a sinner, and the glorious remedy provided in the gospel, be opened to them, and the truth will win its own way. There is a character, and an impress, and a power about God's word that speaks to the heart of man, and leaves him internally without excuse. What need is there of arguments to convince us that the works of creation are not the productions of a human being? They bear the stamp of divinity on themselves. And is it possible that the Bible is also the work of God, and that it bears no obvious marks of its original? No one could mistake the writings of a Hall, a Chalmers, or a Foster, for those of a Bunyan, or even confound them the one with the other. Each bears its own individual and perfectly distinct impress. And is it possible, we ask again, that the Bible should be God's own handy work, and that it should be destitute of every distinctive mark of its authorship? No; never. It has its marks; and these are as palpable as the marks of creation. Besides all this, is there a man in existence who

could bring himself to believe, that eternal damnation would ever be suspended upon our disbelief of a testimony, which contained no evidence in itself of its authority and its truth? Were this the case, hard indeed would be our lot. But it is not so. There is a light shining over the sacred record which singles it out amidst all the pretenders to inspiration with which it is surrounded: and so obvious is this light, that you may with as much propriety contend that a farthing candle is necessary to enable a seeing man to behold the sun, as contend that education is essential to convince a man that the Bible is from God. But here is the difficulty: men by nature are spiritually blind; and their blindness is such that nothing less than the Almighty energy is requisite to open their eyes. To the Divine Spirit we must therefore look; and when he appears with his disclosing power, his subject will require neither Paley, nor Chalmers, nor any one else, to convince him that the Bible is of God. He will see for himself. And it has rarely or never been by a statement of the evidences of Christianity that the Spirit has come down upon men. We therefore declare our belief, that all this hue and cry about the necessity of education, and the power to perceive the force of arguments, is useless noise, and perhaps worse.

Indeed, we leave the perhaps out of the case. This contention appears to me, in fact, a plain crying out against the declarations of God himself. He himself maintains, that his word carries in it the evidence of its own origin. Speaking of false prophets, and these stand on the same parallel with the Hindu shastras, &c., he says, "How long shall this be in the heart of the prophets that prophesy lies? yea, they are prophets of the deceit of their own heart; who think to cause my people to forget my name by their dreams which they tell every man to his neighbour, as their fathers have forgotten my name for Baal. The prophet that hath a dream, let him tell a dream; and he that hath my word, let him speak my word faithfully. What is the chaff to the wheat? saith the Lord. Is not my word like as a fire? saith the Lord; and like a hammer that breaketh the rock in pieces?" Now, here a criterion is given, a criterion neither consisting of history, miracles, nor prophecy, but yet a criterion by which all may judge of what is of God, and of what is only of men. That which is of the latter is as mere chaff, while the words of the former are as wheat; and that which is of deceivers is entirely powerless as to any sanctifying effect, whilst that which is of the Lord is mighty, even like a hammer which breaketh the rock in pieces. The most common observer cannot fail to see how all this applies to the shastras, &c. as compared with the word of God. Bring both of them to the test, and the qualities of each will be perfectly apparent.

Let not, then, the Missionary, nor any one else, be in the least anxious as to the grounds on which he is to present the gospel to the heathen. Let him simply and confidently wield the sword of the Spirit, bringing it down in all its nakedness upon men; and whatever they may say, and however they may cavil, they will not fail to feel, that the gospel is the power of God; that it is the rod of Christ's strength; and that it is quick, and powerful, and sharper than any two-edged sword, piercing even to the dividing asunder of soul and spirit, and of the joints and marrow, and is a discerner of the thoughts and intents of the heart. Hear how the Apostle speaks of it: "I am debtor both to the Greeks, and to the Barbarians; both to the wise and the unwise. So, as much as in me is, I am ready to preach the gospel to you that are at Rome also. For I am not ashamed of the gospel of Christ; for it is the power of God unto salvation to every one that believeth; to the Jew first, and also to the Greek." Now this is just as if he had said, "Having preached the gospel from Jerusalem round about unto Illyricum, and having tried the power of the word of God among the polished and the rude, among the learned and the illiterate, I have become so convinced of its mightiness and its efficacy, that I am no longer ashamed of it; I know what it can do; and I am so satisfied of its power, that I am ready to come with it even to the metropolis of the world itself, assured that there also it will perform the same wonders it has accomplished in so many other places." Where is there anything like this in what has been so recently said? Some of the Missionaries appear to lack confidence in the power of their metal, and hence they are now making such a mighty fuss about education, and European literature, as being next to necessary to bring the Hindus to a knowledge of the truth. *Let them henceforth be ashamed of this conduct!* Convinced am I, that the word of God has such power in itself, that no man after having had it once fairly explained to him, will continue to be the same being as he was before. He may not indeed become converted: but never will he be able to obliterate the marks that may have been left on his heart by the falling down upon him of the sword of God's spirit.

L.

VI.—*Important Memento.*

A traveller, passing through Savoy, came to an inn, and saw the following admonition printed on a folio sheet, and hanging in its public room:—

"Understand well the force of the words—A GOD! A MOMENT! AN ETERNITY! A God who sees thee,—a *moment* which flies from thee,—an *eternity* which awaits thee!"

V.

F

VII.—On the Means of Conversion.

[Our last No. contained an account of the conference of Missionaries of different denominations in Calcutta, at which was discussed the following question: *Has the success of the Gospel in India been equal to what might reasonably have been expected, considering the extent of means used; and if not, to what causes may the deficiency be justly attributed?*

In introducing the paper, we expressed our hope, that Missionaries from a distance would favour us with their sentiments on the subject, and have now therefore great pleasure in presenting our readers with the following remarks from the pen of Rev. Mr. BUYERS, of BANARAS.—We trust that others will follow his example, so that, on a subject of such importance, we may have the opinions of the great majority of our Brethren.—ED.]

I have seen the report of your Missionary conference, in the last *OBSERVER*, of which you wished me to let you know our opinions. As one of my colleagues is from home, and the other very much engaged, I can only at present let you know my own sentiments on the subject of your discussion.

I am glad you have published the report, as it will enable those at a distance to learn the result of the varied experience of their brethren. If we really think that in this country we have not been so successful as Missionaries have been in some other countries, we should be the first to point out the fact, and fairly and honestly to point out what we may believe to have been the cause. By this means truth will be elicited, and our plans corrected.

My own opinion is, that the progress of the gospel in Northern India has been very far short of the proportion of success usually attending the same amount of means nominally employed; but whether or not it has been disproportioned to the amount of the direct means employed for the conversion of the people, as compared with other countries, is a point much more difficult to determine. The indirect means have been considerable, and I will not say that they have been unsuccessful, because though their results may not have quite answered expectation, it is impossible fully to estimate what is so indirect in its influence and slow in its operation, as the general system hitherto pursued in the labors of a large proportion of the Missionary body. But the direct means of conversion have been comparatively small in proportion to the indirect, and their success, though not great, has not in my opinion been very far short of that exhibited in the early history of most Missions in other countries. By the direct means of conversion, I understand preaching, including conversations and discussions, either public or private, on religious subjects; by indirect means, the preparation of translations, school-books, tracts, &c. and the teaching or superintending of schools. The latter, or indirect means, however important in their place, are not, in my opinion, to be looked to for more than occasional conversions. The whole of ecclesiastical history, ancient as well as modern, supports this view of the case. Preaching has in all ages and in every country, been not only the principal means of conversion, but almost the only means whose results have been great or permanent. There is no example on record of any country or nation being brought to the profession of Christianity, but by the labors of living preachers: even among ourselves at the present day, while almost all our literature is mixed up with Christianity, and our language teems with the most excellent works on every religious subject to be found in any tongue, how few in proportion, even of the educated classes, are converted to serious piety by books: but if the voice of the living preacher is the principal instrument of conversion among the reading classes, it is almost the only one among the great mass of the people.

Now the amount of public preaching to the heathen in this country has been very small, when compared with the more indirect means employed; and hence, though we have been doing much in various ways to benefit

the people, we have not yet done very much for their conversion, in that way which has generally been effectual for this object in other countries. Yet there are some who think we have not been more successful, merely because we have spent too much of our strength in preaching, and too little on education, &c. But it is a fact of which no man who knows anything of the history of our Missions is ignorant, that the only successful Missionaries in the Bengal presidency, have been the men who have preached well in the native language, and the most unsuccessful have been those who either did not or could not preach; not only so, but there has scarcely been a Missionary yet in the country possessed of the requisite preaching talents, and who has spent most of his time in this species of labor among the heathen for upwards of ten years, who has not baptized a very considerable number of converts.

To preach well in the native language is doubtless by no means an easy task, and hence many from various causes have never been able to do it. A large proportion of the European Missionaries have died, or been obliged to leave the country, before they could be efficient in this, the highest department of their work. About one half of those now in the country have come to it since I came, which is only about four years ago. Under five years' residence in the country, it is not to be expected that any man will be so very familiar with the language, opinions, and habits of the people as to render him an efficient preacher. For this a greater command of the language is necessary than is required by any other European in the country. Before he can command their affections and convince their judgments, his own thoughts and feelings must flow in the same channel; and this power of thinking and speaking like themselves, can be acquired only by a man of talent after he has resided among them, and had familiar intercourse with them for years. But though I think it requires several years before one can become an accomplished preacher, I entirely dissent from the opinion expressed by one of my Calcutta brethren, viz. that some begin to preach too soon. I think the error usually fallen into is quite the contrary. As we can only learn to swim by going into the water, we can only learn to preach well in the language by actual practice. The more one speaks the better. He may make mistakes, but these will be best found out as he goes along; whereas if he sits down in his study to learn the language perfectly before he attempts to address the people in it, he will have all the same difficulties to encounter when he does actually begin, with the disadvantage that all his errors will have become settled habits. We cannot expect indeed that the preaching of juniors will do a great deal of good, but still it will do some, and it is the only way in which they can attain such a facility of public address as will prepare them for more extensive usefulness.

Though it is cause of great regret that there has not been a greater amount of preaching, it is not difficult to account for it. Half and more than half of our laborers have not lived long enough in India to be efficient in this department. Of the others it could not be expected that every one should succeed in a task so difficult. Some have been entirely taken up with schools, others with English preaching, and a few with translations; so that there have been only a very few individuals, who have staid a considerable time in the country, whose entire attention has been devoted to direct labors for the conversion of the heathen. I am far from regarding indirect means either as unnecessary or unimportant; but when we are considering whether or not the actual converts have been equal to the amount of the means employed, the direct means by which in other countries converts are usually made, can only be taken into our account.

Of the means of carrying on the propagation of Christianity, you will perceive, that I regard preaching as the chief. I would place the trans-

lation of the Scriptures and the preparation of books and tracts, purely religious, as the second ; and the teaching and superintending of schools as the third and last. To preaching in the native languages, the principal energies of all should be given ; and this being a work to which no man can give more than a portion of his time, as it is impossible to speak for long at once, there will be time for writing, &c. when bodily strength will not permit of preaching. All the secondary or indirect efforts might be accomplished without interfering with the more direct. The preachers will always be the best translators and writers, as they will be most familiar with the people, and know best what language they understand.

This second department should therefore occupy their spare time. Our translations are still to correct and improve ; every edition should undergo a revision, till they are rendered as complete as possible. We want a great many small books and tracts of a practical and didactic nature, not addressed to the heathen, as most of our present tracts are, but to Christians ; as our doctrines and practices well expounded for the edification of native converts, would not only tend greatly to improve them, but the heathen would see more fully from such books the excellence of our religion, as explained and enforced among ourselves. All our present tracts should likewise be improved, and others prepared, so that we may be able to present a much greater variety to the people.

As far as conversion is concerned, I expect very little from schools. A good education is doubtless exceedingly favorable to the Christian cause, from the simple fact, that it produces habits of thought and reflection, and enables those who have received it to examine the Scriptures and such books as contain the doctrines and evidences of the Christian faith ; but in no country have common day-schools, such as almost all our Missionary schools in India are, been successful as an instrument of conversion. I am as much an advocate for schools as any man ; but how in defiance of all experience we should look on them as the most promising means of turning men from the power of Satan to God, seems to me exceedingly strange. As far as religion is concerned, schools are only valuable in as far as they will gradually produce a class of more intelligent hearers or readers of the word of God ; but without preaching I am convinced these Missionary schools, will do very little more for the spread of Christianity than those of the Government, from which it is excluded. Unless in a boarding-school, which partakes much of the nature of a family, religion can never be effectually taught. Religion must come home to the affections as well as to the understanding, and it is vain to expect such a result in a noisy school, where it comes in, as in the following order, " Arithmetic, Geography, Mathematics, and Christianity !" The gospel is thus brought down from its high and holy elevation as a direct revelation from God, claiming the heart and affections of every creature, and asserting its undivided influence on the understanding and conduct, to the mere level of a human science. *Christianity* is studied with the same feelings as *geography*, but not with the same results. The latter is well enough learned when it is clearly understood and remembered ; it has nothing to do with the heart and conduct : but religion, unless it can be taught in a grave impressive manner, detached from secular subjects, and addressing every power of the human mind, the passions through the understanding, and the understanding through the passions and feelings, may almost as well be left untaught. For such a process of religious instruction, a common day-school, however well conducted, is absolutely unfit ; and hence the attempt to convert men to serious piety in this way has been scarcely ever made, save in India, and here it has been a complete failure.

The General Assembly's School has been much talked of, and as an institution for the advancement of general education, it has been most

successful; but its success in making converts has just been about the same as its predecessors, that is, next to nothing*. But it has, says Mr. Duff, made a great many disbelievers in the Hindu shastras, &c. So has the Hindu College, and some of these said disbelievers from both institutions I have seen in Banáras, but here they became at once very orthodox Hindus. There are perhaps more disbelievers in the Puráns among the bráhmans of Banáras than Mr. Duff's school will produce for twenty years to come. Our sciences will no doubt do much to overturn Hinduism, but their power even in this respect has been, in my opinion, vastly overrated. We may correct their Geography and Astronomy, &c. but all the essential principles of their religion remain untouched. A man may be as good a philosopher as Hume or Dugald Stewart, and yet a Hindu in religion. The pandits do not regard their books as infallible in the sense we use the term, but as the records of the opinions of ancient sages. You may disprove any part without its being supposed to affect the whole; and after you have disproved all that European science can overturn, you will find ten times more behind of the immense conglomeration of different systems known by the name of Hinduism than all that you have destroyed, and which can only be gradually rooted out by a purer system of religious truth taking hold on the conscience and common sense of the people.

I think the only schools that Missionaries should carry on directly should be for the children of native Christians, and likewise native boarding schools and orphan Asylums, where the children can be brought entirely under the control of their teachers, and altogether separated from heathen influence. Such pupils being educated entirely as Christians, whether taught by the Missionary or not directly, would form part of our congregations, the same as children in our churches at home. The functions of the Missionary would thus be entirely of a spiritual nature, the mere teaching being in the hands of laymen, unless what is purely religious. Men who have spent years in hard study in order to qualify themselves to act as public preachers and expounders of religion, should in no case be set down to teach little boys to read, write, and cast accounts. Men equally well qualified for such duties may easily be obtained, without turning regular ministers of the gospel aside from their higher and more important functions.

If we are to take upon us the labor of education, it should be only of such pupils as we hope to bring forward as agents in spreading Christianity. These of course should be Christian youths of some promise. All other children connected with our churches should be educated under our superintendence, by proper school-masters, not ministers:—and as it respects general plans of education, I think we should have no official connection with them, but merely, like other friends of native improvement, do what we can as members of general society to advance science and literature. As we came to the country for the express purpose of spreading the gospel, not human learning, we ought not surely to be reproached, if like other Europeans in the country, we give our entire energies to this object, as long as we are willing in our private capacity to do all we can for the good of the people in their temporal concerns. No military man would be blamed because he did not leave his military duties, to teach schools, nor ought a Missionary whose office is to preach the gospel. Let us labor with all our might in this great work, and look and pray for the Spirit of God to give effect to our efforts.

* We cannot allow this assertion to pass unchallenged. The school alluded to has not been in operation for more than five years; so far as regards the system pursued in it, it never had any predecessors in India; and, at this moment, so far from being a failure, it holds out the most encouraging prospects of success. We have been promised a paper for next month in defence of Christian education, to which we shall most willingly give a place; for on a question of such importance, it is most desirable that truth should be elicited.—*Ed.*

VIII.—*Notices regarding Hindu Festivals, occurring in different Months.—No. 1. January.*

To the Editors of the Calcutta Christian Observer.

GENTLEMEN,

If you think a few short notices of the principal festivals kept by the Hindus of Bengal worth insertion in the *OBSERVER*, I will with pleasure furnish you monthly with such, as they occur. Those of your readers who are unacquainted with the Hindu religion, may by means of these notices obtain some idea of that system of superstition, whose basis is craft and error, and whose tendency is the intellectual and moral degradation of its followers. And I indulge the hope, that, in consequence, they may be induced to exert themselves in spreading the knowledge of the blessed Gospel among the poor people around them, who are literally perishing for lack of knowledge, and who in too many instances, adhere to the absurdities detailed below, only because no one interests himself in their behalf, or takes the trouble to teach them better.

JAN. 12.—*Bathing at Sagar Island.*

This festival is the first in this month. It is held on the south-east side of the Island, where the Ganges runs into the sea, and commences on the last day of the month of *Paus*, which corresponds with the 12th of January. Immense crowds from all parts of Bengal resort to this place. The greatest proportion of pilgrims, however, are females. The reason why men are fewer in number is the impossibility, in such a locality, of their avoiding breaking the rules of the shastras, chiefly as these refer to the attending to the functions of nature, which transgressions in women are winked at and more easily forgiven. Religious mendicants, attracted by the hope of gifts, are always to be found here in swarms, and disgust one by their indecent exterior and their harpy-like deportment to the pilgrims.

The spot where the people assemble is a sandy beach, extending about a mile and half in length and half a mile in breadth. Frequently above 100,000 persons are here congregated, who during their stay reside in small temporary sheds, made of mats, which they bring with them. Shop-keepers from Calcutta and other places also erect numberless booths, where they dispose of all kinds of commodities. This extensive encampment, with the large fleet of boats on the sea-shore, adorned with signs and gaudy flags of every description, forms a tout-ensemble of a most singular and unique appearance.

The festival continues three days. On the 1st day, besides bathing, all the pilgrims sacrifice to the manes of their deceased ancestors, and usually choose the evening for that purpose. They then light on the shore a great number of *cherágs* or small lamps, which causes a general illumination, and produces a very

picturesque effect when viewed from a distance. The pilgrimage is not accounted complete, unless every person visits and worships *Kapil Muní*. This is a coarsely sculptured idol, representing a Hindu ascetic in the attitude of meditation. It is placed in a temple situated on the very borders of the jungle, and now much dilapidated; but the surrounding ruins show it to have been formerly in flourishing circumstances. There was attached to it a large convent of *Sanyásis*, several of whom resided there permanently, and often became the prey of tigers and other wild beasts; at present they resort thither only at the time of the festival. *Kapil Muní* was a Hindu sage, founder of the *Shánkyá* philosophy, who in days of yore cursed and sent to Tartarus the 60,000 sons of a great potentate named *Sagar*, because they had rudely disturbed him in his devotions. He is therefore much feared, and thought to be an incarnation of *Vishnu*.

The benefits accruing from bathing at *Ságar* are very great. The Hindus are taught that by performing this ceremony, they are purified from every sin however heinous, even the sin of killing a *bráhma*n, which in their estimation transcends all others in enormity. He who bathes at *Ságar*, or dies there, obtains the highest degree of bliss in the next world, and is absolved from the necessity of being born again on earth in any shape whatever.

It is to obtain these imaginary advantages that multitudes of deluded beings, especially women and children, leave their dwellings at the coldest period of the year, and huddled together in boats, under the most uncomfortable circumstances, perform a long journey to the inhospitable jungles of *Ságar*; and after enduring numerous privations and sufferings, and being exposed to many dangers, return home just as they went, unpardoned and unsanctified sinners; yea, it is to be feared, even farther from God than they were before they set out! O! where is the Christian who does not feel for them, and who can refuse stretching out a helping hand to lead his poor deluded fellow-creatures to the true Friend of sinners—to *Him* who alone can deliver them from the guilt and the power of sin?

Owing to different causes, the number of pilgrims has of late years much diminished. The writer of this article, who has repeatedly visited *Ságar* at the time of the bathing festival, for the purpose of preaching the Gospel and distributing religious tracts, saw there, five or six years ago, not less than 80,000 human beings assembled; whilst two years ago not more perhaps than 20,000 were present.

Formerly women who had made a vow, used, at this place, to cast their children into the water, where they were soon devoured by the sharks and alligators. However, since Lord Wellesley

issued an order against this horrible practice, it has been entirely discontinued. Public order is maintained at Sagar Melá by two darogahs and 30 or 40 peons, sent by the Magistrate of the 24 pargannahs, of whose district the island forms a part.

JAN. 17.—*Ratantí Chaturdashí.*

This festival takes place on the day before the new moon, viz. the 17th January. The goddess *Káli* is worshipped, and the same offerings made and sacrifices offered as at the *Kálicá pujá*. There are two sects of Hindus who worship this deity, the *Pashwáchar* and the *Biráchar*. The former commence the worship at 9 o'clock in the evening, and the latter at 10. A great number of Hindus, however, do not celebrate this festival at all.

JAN. 23.—*Sri Panchamí or Sarashwatí Pujá*—

Is held on the 5th day of the increase of the moon, falling this year on the 23rd January, and lasts two days. *Sarashwatí* is the goddess of learning, and is represented as a white female, with a white lotus in her hand, and sitting on a flower of the same colour. The *pujá* is performed in the forenoon by every Hindu who can read and write. The offerings consist of rice, sweetmeats, &c. which, as in all cases of a similar nature, are appropriated by the officiating priests.

Those who cannot afford, or who do not choose to make an image of *Sarashwatí*, worship her by placing before them either a book, a pen, or an inkstand, as emblems of the goddess, and on that day they most carefully abstain from reading, writing, or attending to any kind of studies. The only reason for this practice is, that the *shástras* command it: why they command it, many do not pretend to say; but some pandits explain the matter in two ways: 1st, they say that the day ought to be altogether devoted to the goddess, and hence the prohibition from attending to any business which would distract the mind, and draw away the attention from this important duty; and 2ndly, that a book, pen and inkstand having been used as representatives of *Sarashwatí*, and worshipped accordingly, it would be very unbecoming, on the same day, to use these articles in an inferior capacity and for meaner purposes.

Sarashwatí is very much revered, because she is the giver of knowledge; and knowledge, the Hindus say, is the source of the four best things that can ever be possessed by men, viz. *religious merit, wealth, good desires, and salvation*. Every one who worships this goddess is sure to become learned and wise, and every thing which he attempts by means of his pen will be successful.

JAN. 24.—*Sitala Shastí.*

This festival is held on the 6th day of the increase of the moon, or the 24th January. *Shastí* is the wife of *Kártika*, and

the protectress of children. No image of this goddess is made. The worship, in which women chiefly are engaged, is performed by grinding a flower on the curry-stone. No warm food is allowed during the whole day; the rice cooked on the previous day alone is used. The Hindu women are fully persuaded that if they worship *Sitala Shas'ti*, she will preserve them from all the troubles and sorrows to which their sex is subject; and though they have repeatedly seen the contrary, these poor deluded creatures, alas! do not learn by experience, nor lose the least part of their infatuation.

JAN. 25.—*Arun Uday.*

Is held on the 7th day of the increase of the moon, falling on the 25th January. *Arun* is the charioteer of the sun. This day all Hindus who are able, bathe at sunrise, and worship the great luminary. The advantages derived from bathing on this occasion are considerable. He who bathes in common water, as for instance, a tank, pool, &c. obtains the same benefits as if he had bathed at the time of a sun eclipse, or had made a present of many cows to the bráhmans, that is, he is delivered from all sins, except the four mortal ones, which are *killing a bráhman, drinking spirituous liquors, stealing gold, and seducing the wife of one's spiritual guide*: and he who on this day bathes in the Ganges, is blessed beyond all description. He derives all the benefits which would have accrued to him if he had bathed in the sacred stream at innumerable sun eclipses, and these are too many to enumerate: among others, he is sure that he will be preserved from all kinds of sicknesses, ailments, diseases; and besides, he gets rid of all the sins he has committed, not during this life only, but in seven preceding births.

JAN. 26.—*Bhishmástami.*

This festival is held on the 8th day of the increase of the moon, viz. the 26th January, in honor of *Bhishmástami*, a son of Rájá *Shántanu* and the goddess *Gangá*. He was so valiant and excellent a king, that his name has become proverbial among the natives, when they wish to express a powerful and good man. *Bhishmástami* had no son to attend to his funeral rites, and therefore all Hindus perform in his honor the ceremony of *tarpan*, which is used at the *Shráddhas*, when they present offerings to the manes of their ancestors, and which consists in a libation of a little water with the hollow of the hand, at the same time pronouncing peculiar formulas. Those who attend to this duty are promised in the shástras remission of all the sins they have committed during the year; and those who omit it, lose all the merit of their good actions during the same period.

V. c

JAN. 30.—*Gobinda Dwádashí.*

Gobinda is a name of Vishnu, and *Dwádashí* means the 12th day of the moon, when this festival is held (30th January). The Hindu shastras give accounts of ten incarnations of Vishnu in the character of preserver, nine of which are said to be past. The third of them, the *Baráha* (Boar) *Avatár* took place on the present day. The reason of this incarnation is told in the shástras in two different ways. One is, that at a periodical destruction of the world, when the earth sunk into the waters, Vishnu appearing in the form of a boar, descended into the waters, and with his tusks drew up the earth. The other is, that a certain powerful and wicked giant named *Hiranákya*, who had caused much mischief on the earth, had retired to *Pátál* or the lower regions; and to get at him and destroy him, Vishnu took the form of a boar, rent the earth with his tusks, accomplished his purpose, and after having done so, previous to re-assuming his proper form, amused himself by sporting with the females of the ignoble animal whose shape he had borrowed!!! Such are the monstrous and contemptible doctrines of the Hindu system. Seeing these, can anyone wonder at the want of moral sense and the degradation of its adherents?

The benefits derived from bathing in the Ganges at the *Gobinda Dwádashí*, are deliverance from all kinds of sins; and the merit of those who bestow alms on this day can never be obliterated by any future offences. The orthodox Hindus therefore at this feast, more than at other times, are particularly generous and liberal.

These are the principal festivals kept by the Hindus of Bengál during the month of January. On one of them only, *Srí Pauchamí*, are the Government offices closed.

Should these brief notices prove of any interest to your readers, I purpose to continue them next month, and regularly to the end of the year*.

L.

* We trust our intelligent correspondent will continue the notices, as proposed. We are persuaded they will interest our readers, as well as ourselves; and we trust may lead to deeper interest in the moral and spiritual improvement of our Hindu fellow subjects, thus lamentably trusting in "refuges of lies."—ED.

IX.—*Sketches of Sermons, by Rev. J. Foster. No. I.*

[All classes of society are familiar with the writings of JOHN FOSTER, whose "Essays," as it regards originality and depth of thought, have been pronounced by competent judges some of the first productions of the age. We doubt not therefore that the following Sketches of four Sermons, preached by that gentleman, (we believe at Bristol,) and never before published, will be read with peculiar interest—we trust it will also be with eminent profit—by many of our readers.—ED.]

COL. iii. 2. "Set your affections on things above, not on things on the earth."

How momentous a charge is it that is imposed in the injunction to dispose rightly of the affections of a human soul! A charge which we cannot, at our choice, take upon us, or decline. Since we *have* the soul, the charge is inseparable.

Sometimes when we looked at some affair of a mere worldly nature, it may have been with self-gratulation that *we* were not obliged to undertake it. So much skill, such continual attention, such hazard, such sad consequences in the event of failure! happily the business is *not mine!* It were well that, in such a case, the thought should occur, "But there *may* be a business of mine! Where have my affections been to-day? where are they at this hour? Where all my life? Where will they if I let them alone?" Affection is the *going out* of the soul (so to speak) in sentiments of interest and desire towards objects within its view. Now, how happy were it if the case were *thus* with us, viz. that the affection of the soul *might go out just at its own pleasure*, and all be right and safe. This is supposing that a comprehensive, discriminating, and indeed infallible perception accompanied, necessarily, all the going out of affection; and also, that the *moral taste* (shall we call it?) of the soul, always strictly agreed with its intellectual discernment,—in short, was a grand moral instinct.

The consequence would be that all things affecting the soul, in the way of *attracting it*, would affect it right. Nothing would attract it which ought not, and those which did, and justly might, would do so in the right degrees and proportion. What a glorious condition is this! And this *must* be the state of good men in a future world, without temptations, trial, hazard, or the possibility of falling. But what a dreadful contrast to all this is our present state, in which our nature, composed of two kinds of being, places us in relation, strict relation, to two quite different economies.

It is true, the combination, the union, of the two, *does*, in many respects, make them, to a wonderful degree, feel and *act like one*. But still, it is no such union of the two kinds of being as to combine perfectly into *one harmonious interest* the relation to the two economies. The *man* is not *so one*,—his combined nature does not *so act as one*—as to reduce the two diverse classes of interest to one blended inseparable order, so that each movement of the soul with respect to either, should necessarily have due respect to both. No—no;—the relations stand distinct, separate, and, in a very great degree, foreign to each other. Therefore is there great difficulty and hazard as to the apportioning of the regards to these classes respectively—great difficulty of maintaining such a state and exercise of the affections as should comprehend in due order and proportion both these great classes. By the one part of our nature, our relation to the one class of interest is immediate and sensible; while our *other* grand relation, being to things far less palpable—to things spiritual, invisible, and as it were

remote—is to be apprehended only through the medium of serious thought and faith. This is a circumstance of formidable omen, even under the *best supposable* condition of our nature, thus compounded and situated. Even in that case, there would seem to be required a *VERY* special, unremitting Divine influence to preserve it right. How should there *not* be a constant mighty *tendency* to a wrong preponderance!

But this is not all! Our nature is immeasurably far from being in that "*best supposable state.*" Our nature is sunk into such a state, that it has a most mighty and obstinate tendency to give itself *wholly to the inferior, temporal, class of its interests.* And the effect of this tendency uncounteracted, is to throw the supreme interests and the soul itself away.

This is a fearful predicament! One should imagine it could not be thought of without terror. One would imagine too that the terror of it (if any reason or right feeling were left in man), would make the doctrine of divine, transforming, assisting grace to be welcomed with enthusiasm. Except in reliance on this, we should hear with utter despair the injunction—"Set your affections, &c.," given as the sovereign duty, the comprehensive precept, to us sojourners on earth.—Let us attend a few moments to the subject and application of this command.

In the first place, an indiscreet language may have sometimes been used by pious men and teachers—not maintaining exactly a due regard to the *limitations* on the latter part of the precept—a language to the effect almost, of requiring an absolute, entire indifference or contempt to all terrestrial things, inasmuch, that the considerate reader or hearer has been saying within himself, "Now that is *strictly* impossible or absurd."

Sometimes this language of excess has been, we may venture to say, a rather unthinking repetition of a kind of common-places; but it has often a better origin, as in the retired, contemplative, devout life of some good men. The language of religion has had a particular advantage even in this sense, when it has come from enlightened and pious men who have had much to do in the world (Hale for instance), or from short, occasional seasons of peculiarly elevated feeling, such as that produced in good men by affliction, calamity, or persecution. But it is disserviceable to religion thus to preach, as if it were an annihilation of our interests in this world. They *have* claims—and they will make them good in our defiance. And what is more, these claims must be *allowed.*

Think in how many ways we are made susceptible of pleasure and pain from "the things on the earth," and to what an *amount*, in passing 50, 60, 70 years upon it! Now we may surely believe that, fallen and guilty as we are, our Creator does not will pleasure denied, or pain endured, more than is inevitable to our mortal condition, or disciplinary toward our future life: and therefore we may, in regulated measure, desire the pleasing, be anxious to avoid the painful. Again, think how much we need of interest, and attention, and care, to avoid the ills of this mortal life; how much concern and study, applied directly to temporal things, in order that, on the whole, we may have the most benefit of our relations to this terrestrial scene. The particulars that might be specified will occur to every one. Health is deservedly an object of great interest and care, and "*affection*" must be inevitably, and justly set on it. It is the same with a person's near relatives in life. And then, as a matter concerning both himself and them, his temporal condition, in the plainest sense of that epithet—no small interest, that is to say, "*affection*" is necessarily "*set*" on competence, especially in times, when this is very difficult and precarious of attainment. As we have referred to the "*times*"—we may add, that a man who looks on the conduct of public affairs, by which his own and his family's and his fellow citizens' welfare are deeply affected

—will necessarily feel very considerable interest in that direction ; and “set some affection” on what he is convinced would be the best, or at least a better, state of things. Again, if he is a man of cultivated intellect and taste, the beauties and wonders of nature—the great works of human intellect and genius—the discoveries of science become objects of “affection.”

Now in such points, it is seen how intimate is our relation to this world. And in some *proportion* to the intimacy and the number of our relations to this world, it will inevitably be that “affections” must be set on it, unless there were some kind of continual moral miracle.

But how striking and how sad it is here to consider, that the relations to this present world are the *only* ones practically recognized by the far greater number of mankind ! As if they took the sole force of the text to consist in these limitations of the injunction.

Let us turn to the other view of the subject. By the nobler part of our nature, we are placed in the most solemn relations to another economy ; and not to have a deep sense of this fact, implies that something is enormously wrong. This immortal spirit was appointed but for a few years to this earth, but *eternally* to another state. And it is placed in relations, *comporting* with its eternity of existence, to God,—the one infinite Being, the one sole perfect and independent essence ; to the Redeemer,—the Lord, and the Life, of the new economy ; to an unseen state—to an order of exalted holy and happy beings in that state—and to a pure and exalted and endless felicity in that state. And do I give, in conformity to *one* law of my nature, a great measure of my affections to the things to which I have a subordinate temporary relation, and *refuse* affection towards objects of eternal importance and interest, although led to this by another law of my being ? !!! It is right that the soul’s welfare should depend on its setting its affections on those glorious objects ;—right that to be carnally-minded should be death—spiritually-minded, life. But still, again, how marvellous and how lamentable, that the soul *can* consent to stay in the dust, when invited above the stars ! when it has in its own experience the demonstration, that this is *not its* world—knows, *that even if it were*, the possession will soon cease—and has a glorious revelation, and a continual loud call from above !

But it is on the duty, as considered not absolutely, but comparatively, of setting the affection above, that we would insist.

What should be the *comparative state* of the affections, towards the one and the other ? And what can the answer be but, plainly and briefly, that there must be at the lowest account a *decided preponderance* in favor of spiritual and eternal things ? *At the lowest state of the case*, we repeat—for alas ! this is but little to say for the feeling towards things so contrasted, so immensely different in value ! This is the lowest ground on which a man can justly deem himself a Christian. And consider, if no more than barely this is attained, how often *this itself is likely to be put in doubt*. On all accounts, therefore, how clearly it is a duty and an interest to aspire to every attainable degree *beyond* a mere positive preponderance ! We may even assert, that this aspiration is an indispensable sign or symptom.

And this may lead to the question,—what may be safely taken as indications, or proofs, that there is the required preponderance ? Now in most cases of comparison and preference, a man has no need to seek or think about the evidence of his preference—it is a matter of prompt and *unquivocal consciousness*. And if in any case in the universe, it should be so here. How happy to have it thus ! But even with good men, the case is not always such (far from it), as to make a reference to tests and proofs unnecessary or useless.

There is however nothing mysterious in the matter and operation of these tests—nothing like the Urim and Thummin—nothing like the ordeals ; it is an affair of plain, serious, faithful thought. For example,—let a man take the occasion to examine, when he is very strongly interested by some one temporal object or concern, whether he can realize—“more than all this is the interest I feel in the hope of everlasting holiness and joy?” When he is greatly pleased with some one temporal possession, or success, or prospect, and his thoughts suddenly turn to the higher object, is he then decidedly *more pleased*? or, does he feel a deep and earnest solicitude that this temporal good may not injure him in his higher interest? or, again, in such a case, does he feel a strong overbalancing consolation from “things above?” Is he more pleased to give the earnest application of his mind to the higher objects and interests than to any inferior ones? Does he feel that, on the whole, he would *do more*, or *sacrifice more* for the one, than for the other? While greatly interested in a temporal pursuit, does he habitually charge it upon his soul, and actually endeavour, that he do with still greater intentness prosecute a higher object? If he perceive that his pursuit of a temporal object is beginning to *outrun* (if we may so speak), his pursuit of the nobler,—does he solemnly *intermit*, in order that he may still keep us his affectionate interest in the things above? Is he constantly, or very often, impelled to the Divine throne to implore grace and strength, that there *may* be a decided preponderance—the witness for him “above,” that there is *that* proof at least of his affections there? If, by the advance of life, he is sensible he is *fast going out of the things on the earth*, does he rise above all regret at this in the view of the sublime objects “above?” We will only add, in his occupation and transactions with “the things on the earth,” has he acquired the habit of imparting even to *those* concerns a principle and reference still bearing toward the higher object? Such questions as these would be the points for placing and keeping the subject in a state of trial and proof—would be an admonition, too, of the necessity of applying all the force in the higher direction.

Now, how happy to be in such a state of decided preference in the devotement of the affections! Happy, considering, that to those higher things we are in a constant permanent relation, whereas our relation to the terrestrial is varying and transient! Reflect how many things “on the earth” we have been in relation to, but are no longer, and shall no more. Happy! because a right state of the affections towards the superior objects is the sole security for our having the greatest benefit of those on earth! Happy! because every step of the progress which we *must* make is leaving the one, in an advance towards a blessed and eternal conjunction of the other. And, then, finally, (what we adverted to at the beginning,) that circumstance of transcendent happiness, that in the superior state of good men, there will be no contrary attractions, no diverse and opposed relations, to put their choice and their souls in difficulty or peril!

[Sermon, No. II. in our next.]

Poetry.

WHAT IS LIFE?

1.

Life's a *bubble*, glistening brightly
 With the rainbow's beauteous hues,
 Ever rising, never resting,
 Which fond man in vain pursues—
 Ever snatching, never reaching,
 Vexed and tired, involved in trouble,
 Finds that life is but a bubble.

Life's a *vapour*, gently rising
 With the beams of morning light,
 Which the clearer rays of noonday
 Scatter with effulgence bright—
 Youth's the morning; manhood's day;
 Age the time we pass away;
 Rising from the tomb, we see
 Life join'd with immortality.

Life's a *pathway*, strewed with flowers,
 Beauteous tints and fragrant odours,
 Mingled here and there with briars
 Which impede the pilgrim's progress;
 But this pathway leads us on
 Far beyond the darksome tomb,
 Where flowers immortal ever springing,
 Streams eternal ever flowing,
 Angel bands for ever singing,
 Spirits just their anthems hymning
 Show the *bubble* burst, the *vapour* past,
 ——— The *pathway* trod:
 Their rest is heaven, their fulness God.

Calcutta, Dec. 20, 1835.

Φίλος.

Missionary and Religious Intelligence.

ASIA.

I.—BENGA'L AUXILIARY MISSIONARY SOCIETY, CALCUTTA.

The Seventeenth Report of this Institution has just been published, and will doubtless afford much satisfaction to those who take an interest in Missionary operations. There are many passages we would gladly transfer to our pages, but must content ourselves with the following:—

In such a field as British India, where so many difficulties present themselves to the spread of truth, it is cheering to reflect on the fact, that the simple and faithful exhibition of Christ crucified has and can effect that which the combined wisdom of men could not accomplish.—It is the power and wisdom of God unto the salvation of the soul. Nor is it less exhilarating to witness, notwithstanding the cavillings of the enemies of our faith, and the gloomy predictions of timid friends, the immense mass of good which has been accomplished by our brethren who *now* sleep in Jesus, and of whose works it may, with truth, be said, *that they do follow them*. They appear to have been preparing the armour for those who are now called upon to use it in the struggle with the powers of darkness. In this country, it is true we cannot indulge in lofty flights of imagery, as it regards the success of the Gospel in the conversion of souls; but we can with confidence, point to fruits which philosophy could not obtain, or science secure.

When we look around us, and witness the prejudice of caste weakening, a taste for European literature excited, education on Christian principles receiving the sanction of natives, the respectful attention paid by large auditories to the preaching of the Gospel, the spirit of enquiry on almost every subject which has been excited, and the eagerness manifested to obtain religious publications—when we view these things, and compare them with the former feelings, and the gloomy suspicions with which the labors of missionaries were at first viewed—we are constrained to say, “What hath God wrought!” If so much has been effected in such a field, with so few laborers, what may we not expect when the religious sympathies of Britain shall be fully enlisted on the behalf of this naturally beautiful, but morally disfigured, country.

In enumerating the advantages which have flowed to the native population, those, which religion has conferred upon our own countrymen, have not been alluded to: it is not saying too much, perhaps, to assert, that since the commencement of Missions, the tone of morals has been raised, the social enjoyments of life much more rigidly attended to, and intemperance has not only been deemed immoral, but to a great extent unfashionable; and it has become a part of a man's moral character, that he should be attached to some one of the many sanctuaries which adorn our city.

These tokens of divine favor call us to anticipate the arrival of that day when the saints shall rule the earth, and every power opposing itself to truth, be vanquished, and piety with all its attendant blessings, be conferred on the family of man; in a word, we will thank God and take courage.

In the close of the Report, the Committee state, that

There are, in connexion with this Society, 11 European Missionaries, one East Indian, and three Native Assistants. They engage in about 90 weekly preaching services, independent of scholastic and other duties. Supposing their congregations to average 50, at each service, this will afford them an opportunity of addressing weekly, 4,500; monthly, 18,000; and annually, 216,000 individuals, on the subject of salvation. If each of these persons but speak to one of their acquaintance on the subject to which they have listened, we have the Gospel made known annually to nearly 500,000 souls. We have been thus explicit on the subject of preaching, since it has, and we trust will form a principal feature in the operations of our Society.

There are 9 schools in Calcutta, conducted by the Missionaries, or their wives, containing 445 Boys, and 65 girls. In Chinsurah is a Portuguese female school, which is said to be steadily progressing, but the number in attendance is not stated. An orphan asylum at Barhampur contains 14 boys and 2 girls; and a Girls' school under the care of Mrs. Hill, has 20 in regular attendance; another under the superintendance of Mrs. Paterson, has 30 names on the list, of whom 24 attend regularly. There

is also a Bangáli boys' school, in which the older classes learn the Roman system, as well as the native character; twelve young men have lately been studying English. At Banáras are four schools for boys in English; two Hindui, and one Urdú and Persian. Mrs. Buyers and Mrs. Mather have also each a small girls' school, established during the past year.

2.—BAPTIST MISSIONARY SOCIETY.

1. *Baptism of Native converts.*

The Brethren labouring in connection with this society, have been cheered by several accessions to the churches under their care. On the 7th Nov. two persons, a man and a woman, were baptized on a profession of faith at Salkiyá near Haurah. On the 22nd, three more, two men and a female, were baptized in Calcutta; and on the 6th ult. four others were received by the same rite into the Christian church at Chitpur. The baptism of several other hopeful converts is expected shortly to take place.

2. *Examination of Schools.*

A public examination of the youths in the *Hindu* and *Native Christian Boys' Boarding Schools*, located at Chitpur, was held on the 7th ultimo, in the premises belonging to the Benevolent Institution, in Calcutta, and afforded great satisfaction to the ladies and gentlemen present on the occasion. The following "Order of the Examination" will show the *kind* of instruction imparted in these excellent institutions, while the proficiency made in them, especially by the higher classes, as elicited at the examination, bears honorable testimony to the diligence of the scholars, and the ability and application with which their studies have been conducted by the superintendent and his assistants.

ORDER OF THE EXAMINATION.

Third Class Christian Boys,....	Old Testament History.
Fifth ditto ditto,.....	Bangáli New Testament.
Fifth Class Hindu Boys,.....	Bákyábali.
Fourth ditto ditto,.....	New Testament History.
Second Class Christian Boys,..	Geography of Europe and Asia.
Third Class Hindu Boys,.....	English Reader, No. IV.
First Class Christian Boys,....	Bangáli Hitopodesh.
Second ditto ditto,.....	Bangáli New Testament, in the Roman character.
First Class Hindu Boys,.....	Clift's Political Economy.
Second ditto ditto,.....	Mechanics, Hydrostatics, and Pneumatics.
First Class Christian Boys,....	Astronomy.
First Class Hindu Boys,.....	Geology,—150 pages of De la Beeche's Manual.
Second Class Hindu and Christian Boys,.....	History of the World to the Death of Alexander.
First Class Hindu Boys,.....	History of England to the present time.
First Class Christian Boys,....	Geography of the Old and New Testament.
First Class Hindu and Christian Boys,.....	History, Analysis, and Design of the Old Test.
First Class Christian Boys,....	The Scripture Evidence of Prophecy.
First Class Hindu and Christian Boys,.....	Elements of Scripture Doctrine.

The *Hindu School* at present contains about 160 boys, but it is intended immediately to increase it to 300, and an enlarged school room for the accommodation of that number, is being erected. The *Christian Boys Boarding School* contains 35 youths.

3.—KATAK, ORISA'.

We are delighted to learn that our brethren labouring in Orisá, amidst some trials and discouragements, meet with much to encourage them. In a letter recently received from one of their number, the writer says:—"I expect the largest increase this year we have had since the arrival of our Missionaries in this province." Another letter contains the following paragraph, which will be read with mingled emotions. We had an addition

of three to our number yesterday (Sept. 8th.) An East Indian, an old woman, and a youth of eighteen. Thus the Lord is blessing our feeble labours; we have beside one candidate, an East Indian. I hope things are going on pretty well: we are, however, considerably troubled about some of our native members, who seem too much under the influence of the old Gúrú Sundara Dás, whose disciples many of the Christians were. He gives it out that he is a second incarnation of Jesus Christ, and makes great pretensions. He knows a good deal about religion, but he must be a leader, and have disciples.

4.—BARMAL.

We understand that some considerable changes have taken place in Rangoon, since the date of our last intelligence: but how they will affect the advance of the Redeemer's Kingdom there is yet uncertain. Koshan Lun, the native assistant, who was called to suffer for righteousness' sake, has gone to receive his reward. He left the most convincing evidence of his having passed from death unto life; and while we regret his loss to the cause of our Redeemer, we rejoice that he is beyond the reach of persecution, where the wicked cease from troubling and the weary are at rest. About five days after his death the Governor of Rangoon, who was his persecutor, also died, and was burned, according to Burman custom.

The new Governor has arrived, but what his course will be, in reference to the Christian religion, remains yet to be developed; clouds of darkness seem to rest upon the cause there, but we *hope* they will soon be dispelled, though it be hoping against hope.

We have heard of the arrival of Mr. and Mrs. Simons at Ava; but nothing particular respecting the progress of inquiry about the religion of Christ. At Maulmein God has been pouring out his spirit in a glorious manner; five have been baptised from among the heathen, and fifteen or sixteen from among the Europeans, and an anxious spirit of enquiry still pervades all classes.

5.—BOMBAY PRESIDENCY.

We are happy to find, that there has been lately an accession to the number of Missionary labourers at the Bombay Presidency. On the 9th of October, the Rev. Mr. Ballantine, and Mr. Webster (printer), with their wives, arrived from Boston, to strengthen the American Mission at Bombay; and a few weeks ago, the Rev. Mr. Fyvie and his wife, after a voyage to England, rendered necessary by illness, returned in safety to Bombay, in progress to Surát, their former station. May much usefulness attend the exertions of all these brethren, and may they be followed by many more zealous and efficient labourers.

We notice with pleasure, that by a resolution equally honourable to the Society and the object of their choice, the Rev. Mr. Wilson, of the Scottish Missionary Society, has been unanimously elected President of the Bombay branch of the Royal Asiatic Society.

6.—EUROPE.

ENGLAND.

Having been favoured with the perusal of a letter recently received from a gentleman, lately a highly respected Merchant of this City, now in England, we have requested permission to make a few extracts for the gratification of our readers; being persuaded that they will be read with considerable interest, and if we mistake not, profit, by many: and should any be induced, by the example of the respected writer, or by the representation he gives of the active exertions of British Christians, "to go and do likewise," much good will result from their publication. The writer having

had a good deal to do, in the way of business, in rail roads, makes the following observations respecting them, which will not be thought uninteresting.

There can be no doubt that these Railways will be highly beneficial to the commercial prosperity of the country; the improvement in the common roads has worked wonders since I was in England, by increasing the facilities of communication, and consequently the traffic, the enlargement of towns and general growth of trade: and when Railways are made all over the country, as will undoubtedly be the case eventually, a much greater revolution will take place.

There are several Railways in the north of England already, from one town to another, and one in Ireland; and there are now constructing one from London to Birmingham, one from London to Southampton; with the London and Greenwich, from which are to branch one to Gravesend and Dover, and one to Brighton. And there are two companies formed by Bills in Parliament, for one Railway, London to Bristol, to branch eventually to Exeter and Plymouth and to Wales or the Severn, so as to communicate with Bantry Bay to the south of Ireland, which when effected, an immense change is expected to be brought about in that port and others, from its great preference as a port of safety. The other company is formed for constructing a Railway from London to York.

Steam packets have also increased the facilities of communication with all places on the continent; trips to France, Belgium, up the Rhine, and even to Hamburg, St. Petersburg, and Stockholm are performed with greater ease and less time than could formerly be taken in going to the Isle of Wight or Margate.

As my new business is connected with St. Petersburg and Hamburg, it is not unlikely but I may pay them a visit some of these days. We write to Hamburg on a Tuesday, receive a reply with samples of goods in the course of the same week, send our orders back, and sometimes get the goods, the next week.

I have thus attempted to give you some idea of the advances making in the mechanical and worldly prospects of our country; I wish I could give you as full an account of the progress making in more important things, those which are connected not merely with the temporal but the eternal welfare of our countrymen. My ignorance, however, of all such matters before I left England precludes me from giving an opinion as to the *advances* made; but I can say, I have been greatly astonished at the numerous plans and associations now existing for the promotion of religion among the people, as well as for other benevolent purposes. You are probably aware of some, if not of all of them; but as some of our friends may not be, I enclose a list of the public Anniversary Meetings that have been held lately up to this time, principally during the month of May; as a knowledge of the active engagements of Christians here may stimulate to increased energy with you. I have been present at several of these meetings, (at all it is impossible, and very fatiguing to be at many,) and I can say it was a grand and interesting scene to witness about 3000 persons in one room, (Exeter Hall new building, erected for such public assemblies,) with but one gallery at the end, called the platform, on which the speakers, committees, and friends sit.

I shall add a few more lines on the subject of Christian Associations, and the constant occupation of individuals and Churches in various ways, in order to promote our Divine Redeemer's kingdom and the eternal happiness of mankind. My experience, however, as you may suppose, is but small at present; still the statement of what little I have been called upon to do, and what I see the Church I am now connected with doing, may perhaps stimulate some of our dear Christian friends (to whom you may communicate some of these particulars), and encourage them to go on, looking unto Him who alone can prosper them for his blessing on their efforts.

As mentioned, I am on the Committee of the Baptist Missionary Society, at whose rooms I have to attend *every other* Thursday from 10 o'clock till 2, and more frequently 3 o'clock, beside sometimes oftener on Sub-Committees. I am also now on the Committee of the Tract Society, where I have to attend *every* Tuesday morning from 8 o'clock until 10 o'clock, and have to go four miles to the place of meeting at an hour when public conveyances cannot be had; how I shall get through the winter I cannot at present tell, but I hope I feel such pleasure in it as to make me bear all the inconveniences. I am now obliged to be absent for two or three meetings, but I am going to town next Monday, on purpose to be there on Tuesday, and return next day.

Our good friends at Camherwell have also done me the honour lately to elect me (with Mr. M. Leopard Smith) a deacon of the church, which brings with it several duties which I shall not trouble you by enumerating; but you will thus have the satisfaction of perceiving that I have not given *all* my time to worldly pursuits, and if I do not come up to what my good friends here may have expected from your kind

introduction of me, I hope I shall not be entirely useless as a member of the Christian community.

For the information of some of our brethren of the Circular Road Church, the prosperity of which I shall always feel a deep interest in, I will state a few particulars relating to the Camberwell Baptist Church, which I hope may be interesting to them, and tend to excite them to like exertions. When Mr. Steane took the pastoral charge of the church 10 years ago, there were only 10 members; there are now above 250, besides about 100 communicants not members, principally Independents, and the chapel built since then (and paid for) holds about 600 persons, and is filled every Sabbath. We have a weekly prayer-meeting every Monday, and the Missionary prayer-meeting is held every month alternately at our chapel and Mr. John Burnet's (Independent): we have also a lecture every Thursday evening. On Sabbath day there is a prayer-meeting in the vestry at 7 o'clock A. M., from 8 till 10; and from 3 to 4 o'clock, the Sunday School of between 2 and 300 children is attended to by young men, members of the church. On the ordinance Sabbath the afternoon Sunday School gives place to an extra service for the church, in addition to the morning and evening service.

Several of our lady members give their time in superintending a school in the vestry for young females two days in the week; and a larger number of our ladies form a Beneficent Society, and meet once a month at each other's houses alternately to tea, and to make clothes for poor people, whom they visit during the month, each taking a particular district, relieving them, conversing with them on religious subjects, distributing tracts, &c. Our church meetings are always held on a distinct evening (Friday before the ordinance), and our Pastor has a Deacons' meeting on another evening previous, to consult on all matters to be brought before the church, that every thing may be done orderly.

Although not exactly connected with church duties, yet as tending to keep up a friendly intercourse among the members, I may mention, that there are two or three Book Societies, to which each member subscribes £ 1.1, entrance, and £ 1.1, annually; they meet every month to tea at some one or other of the members' houses, when absentees are fined: each member proposes a new book, and other matters of the Society are arranged, and a half yearly sale of the books by auction among themselves take place.

I have mentioned all these things, thinking some of them may be thought worthy of adoption at Circular Road. And I must not forget to mention particularly, that it is most gratifying to observe how well our weekly prayer and lecture meetings are attended, particularly the former; members who cannot generally leave their business till 8 o'clock in the evening, and others very much engaged, some from 6 and 7 o'clock in the morning, come all the way from town (without going home first) to be present. I think the great advance of Mr. Steane's church and congregation may be considered, under the blessing of God, to be owing to his having his hands held up by a praying people. I often think, my dear friend, of your discouragements; and wish I could hear of your faith being strengthened by witnessing the fervent persevering prayers of those around you for the outpouring of the Holy Spirit. I fear too many trust to what man can do, and do not look above, as they ought, for the blessing of our Heavenly Father upon the labours of his servants: I pray most sincerely that you may yet behold great things, and not have to think that you have spent your strength for nought. This indeed I know, *your own* faith will not permit you to suppose; and though you see not the fruit in your day and generation, you have the satisfaction of knowing that the Lord will not send forth his word in vain, that it shall not return to him void, but in due time, when he seeth fit, it shall accomplish that whereunto he hath sent it.

UNITED STATES.

7.—MISCELLANEOUS INTELLIGENCE.

We are indebted to the ORIENTAL CHRISTIAN SPECTATOR for December, for the following interesting extracts from letters recently received at Bombay, from Rev. W. Ramsey, late of that station.

"The spirit of Missions is on the increase in America. Yet still we cannot find men enough to go on Foreign Missions. The attention of the young men has been turned to the subject of *home missions* more of late than formerly, and this leads multitudes of the *people* and *ministers* to go out to the valley of the Mississippi. The Roman Catholics are pouring in their hundreds and thousands of ignorant and bigotted Papists into our land; it is important to counteract their influence, or they may ere long ruin the country. I have sent Mr. Wilson a copy of the *Romish New Testament*, which had not got into hands of Protestants here till lately. It is the essence of bitterness against Protestantism. Look at the notes, and you will see the spirit of popery.

"The 'Shepherdess' was to have taken out four Missionaries to Ceylon, and three to Bombay. Some of them have failed to get ready. They will go in the autumn, if well.

"A spirit of Missions has got into our Sabbath Schools, and much good is doing. One part of the instruction now given in these schools is on the subject of Missions. The world is the field; and the American churches begin to feel it.

"Every thing seems *moving on*. Sin and *holiness* increase, for the day of the Lord draws nigh. Oh may we be prepared to act our part, and receive our reward at last in the kingdom of God!

"I have lately perused a book called '*American Antiquities*,' which I hope to send you. The author endeavours to prove that America was peopled shortly after the flood; and that subsequently colonies from Europe and Asia, immediately before and after Christ, came to this country. A tribe of Indians have lately been discovered in the west, who speak the *Welsh* language. *Phylacteries* have also been dug up out of some of the old Indian mounds (or burying places); and when the pieces of parchments were opened, the usual *Hebrew verses* were found written on them. Silver and gold coins with *Persian* letters on them have also been dug up. But I hope to send you the book. The author is a layman living in New York, and holds some strange sentiments; but the *facts* which he records, are curious and interesting."

8.—AMERICAN TRACT SOCIETY.

The following extracts from an Abstract of the late Report of the American Tract Society, will give our readers some idea of the activity and zeal with which this Association is prosecuting its benevolent objects.

RUSSIA.—The friends of the Tract cause at *St. Petersburg* appear to be more active than ever before. In the year 1834, they printed 175,000 tracts in Russ, besides 5000 in Swedish, and 1000 in Mongolian. A number of new Tracts are in preparation, and they earnestly desire to issue such volumes as the Young Christian, Mother at Home, &c. Permission has been readily granted to print the Tracts presented to the Censor. The Russian Church, unlike the Roman Catholic, is friendly to the diffusion of religious knowledge through the press; religion is every where treated with external respect; and *no Russian peasant has yet been known to refuse a Tract*. Intemperance lamentably prevails, and Temperance Tracts are extensively circulated.

The communications from *St. Petersburg* are full of interest and encouragement. Friends there appear to have been governed by the most expansive benevolence. Their letters and appeals to this Society, on which they now chiefly depend for funds, are of affecting interest. They state, that from Dls. 2,000 to Dls. 3,000 annually could be well used. They express great joy in the proceedings at the Society's last anniversary for supplying foreign and pagan lands; and beg Christians of this country to go forward with unshaken confidence in God.

A number of valuable communications addressed to friends in *St. Petersburg* are inserted in the Report, all of a cheering character—from Moscow, Esthonia, Finland, Sweden, the neighbourhood of the Black Sea, Astrachan, and Siberia.

The design has even been formed of entering *China* through *Russia*; and Chinese tracts have been ordered from Canton to be sent to *St. Petersburg*, and thence by the numerous Russian traders, who meet the Chinese merchants at *Kiachta*, a town near the Chinese frontier, where all the immense trade between the two empires is conducted. The Rev. Mr. Swan, Missionary in *Siberia*, is familiar with the *Mantchu Tartar* language, which is extensively used in the north of *China*, the Emperor himself being a *Mantchu Tartar*. It is an interesting fact, that the Rev. Mr. Swan found in the Royal Library at *St. Petersburg* a copy of the Bible in *Mantchu Tartar*, and obtained permission to transcribe it.

MEDITERRANEAN.—A most interesting letter had been received from Rev. William G. Schauffler, Missionary to the Jews at *Constantinople*, and very valuable communications from Rev. J. J. Robertson, D. D., who has the direction of the American Protestant Episcopal press at *Syra* in *Greece*. Among the works he has recently printed, are *Horne* on the Internal Evidence of the Scriptures, and *Robinson's* Scripture Characters from Adam to Joseph, translated into modern Greek. He has issued, in all, 30,255 copies, or 2,703,945 pages. It is believed the recent law regulating the press in *Greece* will not very essentially retard the circulation of Tracts.

Letters from Mr. and Mrs. Hill at *Athens*, state that the king has personally visited their school, expressed his decided approbation, and that a niece of the prime minister *Colette* is now placed in their family to be educated by Mrs. Hill.

Communications from Rev. Mr. Temple and Rev. Mr. Brewer at *Smyrna* show, that much is doing in that vicinity. Rev. Mr. Brewer had personally visited *Colosse*, and other parts of *Asia Minor*, and some of the Epistles has been translated into modern Greek and Græco-Turkish, and given anew to the inhabitants of the places to which they were originally addressed.

BARMAH.—The Missions of the American Baptist Board here are prosecuted with great energy; four presses and a stereotype foundry are in operation; and every thing affords encouragement to persevere in the arduous work of Barma's conversion. The Board of the Baptist General Convention have gratefully acknowledged the co-operation of this Society, and used every means to render its appropriations in the highest degree useful. One of the presses has recently been removed to Ava, the "Golden City," and the capital of Barma, where on some days Mr. Kincaid and his brethren have had from 800 to 900 hearers in two of the Zayats. The distribution of Tracts from all the stations is active and promising. Some of the Barma's have been known to copy upon the palm leaf Tracts which had reached them in distant villages; and the Karens have sold their fowls to buy them.

An interesting history is given of the conversion of an able Buddhist preacher, entirely familiar with all their sacred books, whom, as he read the "Catechism," and "View of the Christian Religion," truth pierced to the heart. Every thing indicates the importance of vigorously pursuing Tract and Missionary operations in Barma, now while the door is open.

SOUTH-EASTERN ASIA.—At Bangkok, in Siam, Tract operations are commencing under favorable auspices by American missionaries.

The American Mission at Singapur have a type foundry, presses, and complete founts of type in several languages. It is a free port, under the protection of the English government, and is visited monthly by not far from 140 junks and other native craft, from upwards of forty different ports of China, Siam, the Malayan peninsula, and the numerous islands of the Indian Archipelago.

Valuable communications have been received from Rev. Messrs. Robinson and Johnson, from the lamented Rev. Henry Lyman, Rev. Mr. Medhurst, and Rev. Mr. Tomlin, showing the immense importance of the Indian Archipelago as a field for Tract and missionary labor, and the favorable circumstances in which many Tracts have already been distributed.

CHINA.—It is painful to reflect, that a cheering letter received a few months since from the lamented *Dr. Morrison* is the last communication the Society are to expect from that beloved man. His last suggestion to American Christians which we have observed, is the sending out from that country a ship to navigate the shores of Eastern Asia, freighted with the word of salvation on the printed page.

The report contains interesting communications from the Chinese evangelist, *Leang Afa*, who has for ten years been faithfully laboring for his idolatrous countrymen; and now has about ten Chinese converts joining him in the worship of the true God. He has been a most efficient and fearless Tract distributor; and amid the persecutions excited by the late collision with the British government was obliged to flee to Singapur, where he has a wide field of labor. It is hoped that the political embarrassments may ere long subside, and he return to labor among the millions of his native land.

The devoted *Gutzlaff* still pursues his work with quenchless ardor—making tours for distribution, preparing original Tracts, and pouring his appeals upon Christendom to rouse her from her slumber over the wants of from three to four hundred millions of souls. So entirely has he identified himself with the Chinese, that they have even supposed him to be a native feigning himself a foreigner; and his acquaintance both with their common and classic language, and their habits of thoughts, is such, that as he throws out upon the multitudes his terse and thrilling appeals, he is often interrupted by shouts of immoderate applause.

The winter of 1833-4 he spent in Fokien province, where he distributed several tens of thousands of books; and in July last he commenced another extensive tour along the Coast of China and to the Island of Formosa, where hundreds and thousands of books were from time to time scattered among the ravenous multitudes almost in a moment, till he was stripped of every leaf. A number of communications just received show that he was never more active; and with steadfast reliance upon God, was never more assured of ultimate success.

He and his fellow-laborers are confident that the three Chinese walls, material, political, and moral, as Mr. Abeel has described them, may and will be broken down, and that the churches have only to trust in God, and go forward to the conquest of this mighty nation.

Every onward movement of the Society has but shown the field of its operations to be open wider and wider. That the hand of God is in it none can doubt. Let all Christians pray, and contribute, and labor as they ought, and by His powerful blessing, ere long they shall teach no more, "every man his neighbor, and every man his brother, saying, know thou the Lord; for they shall all know him."

Many evidences of the Divine blessing on the small Tract, the evangelical volume, and the labours and prayers of Christians, connected with Tract distribution, are added, which we are compelled to omit.

AFRICA.

9.—LIBERIA.

The following letter gives on the whole a very pleasing account of the moral and religious condition of the interesting colony of Liberia, which, it will be recollected, consists of colored persons and liberated slaves from the United States. It is written by Dr. Skinner, a Baptist Missionary, to his friends in America.

I arrived at this place on the first day of this month, and you are aware of the appalling intelligence we met, when we arrived, in the death of the Missionaries who were on the ground before us. Since our arrival, brother Waring is dead; he died on the 13th, and was buried on the 14th of the month. In him, I have lost a friend, his family an affectionate husband and father, the poor a benefactor, the First Baptist Church a beloved pastor, and Monrovia, one of her most active and valuable citizens. He died, after an illness of fourteen hours, of cholera morbus.

There are two Baptist churches in this colony, both in Monrovia, though members of the first church are spread over the colony; the second is composed of twelve members, under the pastoral charge of brother Teague. There are ninety-one members, of the first church at New Georgia or Carey Town, distant four miles from this place, all recaptured Africans, and exhibiting a glorious evidence of what Divine Grace can do, in subduing the heart and removing idolatrous superstitions from the mind. At Caldwell, distant 8 miles, there are 21 members of the same church; at Millsburg, there are 11 members; at Big Town, near Cape Mount, amongst the Vays two, one an exhorter, both natives—where brother Revey has taught a school, for a considerable time, and numbers have learned to read. The Vey language is extensively understood. The Bassau language still more so. It is believed, that more than an hundred thousand understand this language. King Boatswain wishes a school in his territories, distant from this one hundred and fifty miles. I shall visit him, if my life and health are spared, when I have selected a place for a medical and high school. It is calculated that the people, who understand this language, are about thirty thousand.

I have forwarded to you a copy of the Liberia Herald, where you will see what ought to be done, without delay—this field is an important one in every point of view. There are three ordained ministers here, of our denomination, and three licentiates. The morals of Monrovia are not so bad as I anticipated. I have not heard a profane word, since I have been here; nor seen a drunken man, nor had a drop of spirit offered me, nor seen it used by others. There is a general and strict attention to the Sabbath, and as good society here, as in New England; the extravagance of this place has evidently decreased, at which I sincerely rejoice. I bless God I am here, and that at present I enjoy good health. I do not believe that the atmosphere of this place is less salubrious than India. You may inquire then why has it been more fatal? I answer, there they bleed, and treat the disease (which is precisely the same as we have here) with calomel and the antiphlogistic course. Here they give opium and bark, and thus help on the fatal effect of the contagion. I bleed without fear, and with uncommon success.

May God send a host of laborers into this field, and our denomination not be behind-hand. There are of the Baptist denomination in this colony, 243. The meeting-house of the first church in this village should be finished. The walls are laid of stone, up to the roof. It is designed to continue the gable ends with stone. The building is 34 by 44 feet. It is calculated that it will cost 1200 dollars to complete the house. I believe that duty to God and his cause requires that our brethren in America should help us in this work, and do something towards building this house. Dear brother, I am surrounded by intelligent beings bound to the bar of God with me, who are literally worshipping the devil, a Bad Spirit; as they believe the Good Spirit to be so good, that they need not regard him. All their acts of homage are designed to make the Bad Spirit good-natured. To him they offer pipes, tobacco, and rum, when any adverse fortune attends them, or they get into any difficulty. It is but a few miles to where they worship sharks, and yearly offer up a child to them of 9 or 10 years old, who is devoured by them. My God, shall Christians be idle in such a case? Shall money and men be wanting? May God help us to do what our hands find to do, with our might. I feel as though I wanted to be at the Bight of Benin, preaching the gospel, and to stop, if possible, the sacrifice of another human being to the voracious sharks.

Meteorological Register, kept at the Surveyor General's Office, Calcutta, for the Month of November, 1835.

Day of the Month.	Minimum Temperature observed at Sunrise.					Maximum Pressure observed at 9h. 50m.					Observations made at Apparent Noon.					Max. Temp. and Dryness observed at 2h. 40m.					Minimum Pressure observed at 4h. 0m.					Observations made at Sunset.					Lower Rain Gauge (New.)	Upper Rain Gauge (Old.)
	Observed Height of the Barom.	Temper. of the Mercury.	Of the Air.	Of an Evap. Surface.	Wind. Direction.	Obsd. Ht. of Barom.	Temper. of the Mercury.	Of the Air.	Of an Evap. Surface.	Wind. Direction.	Obsd. Ht. of Barom.	Temper. of the Mercury.	Of the Air.	Of an Evap. Surface.	Wind. Direction.	Obsd. Ht. of Barom.	Temper. of the Mercury.	Of the Air.	Of an Evap. Surface.	Wind. Direction.	Obsd. Ht. of Barom.	Temper. of the Mercury.	Of the Air.	Of an Evap. Surface.	Wind. Direction.	Obsd. Ht. of Barom.	Temper. of the Mercury.	Of the Air.	Of an Evap. Surface.	Wind. Direction.		
1	29,900	72.7	70.3	71	N.	.956	77.6	80.4	75.7	N.	.934	79.4	82	77	N.	.896	78.2	83.6	79.7	N.	.882	78.4	82	78.5	N.	.892	77.6	79.7	77.6	N.		
2	.921	72.	69.8	70	Nbyw	.980	78.	81.	75.8	N.	.942	80.	82.4	77.2	N.	.894	80.3	83.4	77.9	N.W.	.890	80.2	82.6	77.8	N.	.896	79.	79.7	75.5	N.		
3	.914	72.5	71.	70.6	N.	.990	78.8	81.5	76.7	NbyE	.964	81.4	84	78.7	N. E.	.920	82.	85.	80.	N. E.	.920	82.5	84	80.	N. E.	.814	80.7	80.	78.3	N. E.		
4	.972	70.5	69.5	61	S. E.	.024	77.8	77.	75.8	S.	.996	77.8	80.3	77.5	Wbys	.970	78.	75.6	75.8	W.	.964	78.	76.2	76.	W.	.972	77.3	75.5	75.	W.		
5	.906	69.6	68.	67.5	E.	.954	74.4	72.7	72.7	EbyN	.922	75.4	73.2	73.	EbyN	.836	75.6	74.2	74.2	EbyN	.830	75.2	74.3	74.	N. E.	.836	74.	71.7	71.5	N. E.		
6	.803	74.4	73.5	73.6	N. E.	.930	77.	76.2	76.	N. E.	.794	77.7	78.5	76.7	N. E.	.730	78.7	81.	79.5	W.	.726	78.7	80.5	78.6	W.	.726	77.5	78.	76.4	N. W.	0.40	0.36
7	.750	69.6	66.8	67	N. E.	.800	73.5	72.2	72.	N.	.750	74.	72.6	72.5	N.	.760	74.	71.5	71.8	N.	.760	73.3	70.	70.2	N.	.760	72.7	69.5	69.7	N.	2.94	2.76
8	.896	70.7	68.4	69.3	N.	.952	74.	76.8	73.	N. W.	.940	75.4	79.	75.3	N. W.	.912	76.5	79.5	77.	N.	.900	76.4	78.5	76.	N.	.912	75.	74.	72.2	N.		
9	.974	71.	64.	68.2	N.	.030	74.8	77.5	73.2	N.	.988	76.	79.	75.	N. W.	.956	76.3	78.	75.7	N. W.	.946	76.5	77.5	75.	N. W.	.950	75.6	73.7	73.	N. W.		
10	.958	70.	64.5	66.	N. W.	.004	72.	73.	69.7	N.	.974	74.	77.6	73.5	N. W.	.954	75.7	79.8	74.	N. W.	.950	76.	78.7	73.	N. W.	.960	75.	74.	71.8	N.		
11	30,006	68.7	63.	63.5	N. W.	.074	71.	72.3	67.7	N. W.	.044	73.7	77.3	70.7	N. W.	.008	74.	75.8	70.8	N. W.	.996	74.	75.7	70.7	N. W.	.004	71.8	70.	70.4	N. W.		
12	.024	64.	61.	61.2	N. W.	.076	70.6	73.2	67.5	N. W.	.044	73.7	77.	70.2	N. W.	.008	75.2	77.8	73.2	N. W.	.008	75.2	77.5	72.7	N. W.	.022	74.	72.7	70.7	caln.		
13	.022	64.	62.5	62.5	N.	.080	72.5	74.7	70.	N.	.050	74.	77.8	72.5	N.	.010	75.5	79.	75.	N.	.986	75.6	78.5	74.4	Nbyw	.992	73.8	73.6	70.5	N. W.		
14	.056	63.9	65.	65.5	N. W.	.100	72.3	75.3	71.2	N. W.	.060	73.7	78.	73.8	N. W.	.016	74.8	79.3	76.	N. W.	.994	75.7	78.	75.	N. W.	.004	73.7	73.7	70.4	N.		
15	.024	66.3	65.7	66.3	N.	.074	70.2	76.3	74.5	N.	.052	72.3	78.8	76.1	N.	.022	73.	79.4	76.2	N.	.008	73.2	78.7	75.4	N.	.016	72.4	76.3	74.3	N.		
16	.030	69.	67.2	67.	N.	.086	72.3	77.	73.2	N.	.056	74.	79.	75.2	N. W.	.026	74.9	79.6	75.7	N. W.	.004	75.7	78.7	75.2	N.	.012	74.	76.	73.8	N.		
17	.018	67.9	66.4	66.4	N.	.070	72.5	76.2	72.	N. W.	.046	74.	78.	74.	N. W.	.020	74.5	78.	75.4	Nbyw	.010	74.7	77.3	74.7	N.	.018	73.2	75.	72.3	N.		
18	.022	67.8	65.3	65.2	N.	.080	72.	75.7	71.8	N.	.048	74.8	78.5	74.	N.	.016	75.2	78.9	75.3	N.	.008	75.7	78.	75.	N.	.020	74.	74.8	73.	N.		
19	.054	69.	67.	65.5	N.	.110	73.	75.	72.	N.	.064	75.3	78.6	74.7	N. E.	.038	75.9	79.2	75.8	N.	.022	75.8	77.2	74.7	N.	.028	74.3	75.	74.2	N.		
20	.040	68.2	66.2	66.	N.	.034	72.8	76.	73.	N.	.058	74.	77.7	74.7	N. W.	.030	75.2	78.8	75.6	N. W.	.010	75.	77.	75.	N.	.016	74.2	74.8	73.2	N.		
21	.012	67.3	64.6	65.2	N. W.	.076	72.	74.7	72.	W.	.046	72.8	77.	73.	N.	.020	73.5	78.1	73.3	N.	.000	74.	78.	73.	N.	.005	73.2	75.6	72.	N.		
22	.020	63.	59.5	61.8	N.	.080	68.2	70.9	68.3	N.	.034	70.5	74.	69.3	N.	.02	71.7	75.2	70.8	N.	.012	71.2	74.8	70.3	N. W.	.024	70.7	72.9	70.	N. W.		
23	.056	64.2	60.	60.9	N.	.100	69.	72.	69.	N.	.060	69.7	74.5	70.5	N.	.034	70.9	76.	72.3	N.	.024	71.1	75.	71.2	N.	.032	70.3	72.2	70.2	N.		
24	.052	66.4	61.5	62.	N.	.122	68.3	72.5	68.7	N.	.088	70.7	76.4	69.4	N.	.050	72.4	78.3	73.5	N. E.	.046	72.	77.7	72.2	N. E.	.046	71.	75.	71.	N.		
25	.098	67.3	62.7	63.	N.	.142	69.4	75.2	72.5	N.	.110	71.8	79.	73.2	N.	.08	73.2	80.2	74.	N.	.058	72.8	79.4	73.3	N. W.	.064	71.5	76.6	72.2	N.		
26	.086	67.8	62.2	62.3	N.	.138	70.3	74.3	71.2	N.	.100	71.5	76.5	72.5	N.	.050	77.5	79.0	78.0	N.	.042	77.3	78.6	77.5	N.	.056	76.1	75.3	74.8	N. W.		
27	.072	65.5	62.5	63.5	N.	.110	71.5	73.	69.5	N.	.030	73.4	77.5	71.3	N. W.	.056	73.4	77.7	72.	Nbyw	.040	73.7	77.	71.5	N.	.048	72.5	73.2	70.2	N.		
28	.020	67.3	61.5	61.6	N. W.	.078	69.6	72.6	67.4	N. W.	.032	72.5	76.2	70.	N. W.	.976	73.	76.7	70.6	N. W.	.966	72.8	75.7	70.6	N. W.	.974	71.7	70.7	69.4	N.		
29	29,990	61.5	59.5	60.3	N.	.038	68.9	72.	69.	N. W.	.018	69.5	74.5	70.	N. W.	.986	70.5	75.7	71.2	N. W.	.986	70.4	74.8	70.4	N. W.	.994	69.4	70.2	70.1	N.		
30	.996	61.	59.	59.	N.	.054	68.3	72.	68.4	N.	.024	70.7	74.7	69.5	N.	.990	72.5	76.	71.5	N.	.994	72.7	75.	71.	N.	.990	71.7	72.	70.	N.		